



NARRATIVE REPORT FORM

Facility Name: Glenwood Drive and Walker Road

Primary Facility ID: 881609 _____

Inspection Date: 3-3-25		Inspection Time: 8:55		Lat/Long:	
Program: ECB		<input type="checkbox"/> Storage Tanks		<input type="checkbox"/> HSCA	
				<input checked="" type="checkbox"/> LRP	
Owner Name: Energy Transfer			Inspection ID:		Site ID:
Facility Location (911) Address: Glenwood Drive and Walker Road Washington Crossing, PA 18977				Municipality: Upper Makefield Twp.	
				County: Bucks	
Responsible Official Name: Brad Fish				Responsible Official Address:	
Title: Senior Environmental Specialist Emergency Response & Remediation				100 Green Street Marcus Hook, PA 19061	
Responsible Official Telephone: 610-859-6297				Interviewee Name:	
Email Address: bradford.fish@energytransfer.com				Affiliation:	
				Email Address:	

Narrative:

Olivia Budnovich and I arrived at 9:33am at 101 Spencer Avenue. We were there to sample five (5) residential potable wells. GES was scheduled to split potable well samples the Department. Olivia called Stephanie Grillo of GES to inquire if the staff was still meeting us. We were informed that GES is now contracted to use Eurofins with to analyze the potable water samples. We did not split samples with GES since we both have the same analytical laboratory.

The following residences were sampled for VOCs and unfiltered lead pre-treatment if POET system installed or the:

<u>Address</u>	<u>Sample Time</u>	<u>Comments</u>
Trip Blank	VOCs - 9:45 Lead - 10:03	
101 Spencer Road	VOCs - 9:56 Lead - 10:14	Strong smell of sulfur
114 Spencer Road	10:25	Resident filmed us sampling on their phone
██████████	10:45	
102 Crestwood Road	11:05	
126 Walker Road	12:05	Slight sulfur odor, filmed us while sampling

We followed the steps of the written sample analysis plan (SAP), which is included in this field narrative.

While at ██████████ the resident informed us that the township has well water sampling results for the neighborhood from 2004 and that their attorney has a copy. I thanked them for the information and stated that I would forward it to the Departments assigned attorney.

DEP Representative Name Rebecca Flannery	DEP Representative Signature 	Title Geoscientist	Date: 3-6-25 Telephone: 484-250-5779
<i>Signature by the person interviewed does not necessarily imply concurrence with the findings on this report, but does acknowledge that the person was shown the report or that a copy was left with the person.</i>			
Interviewee Name	Interviewee Signature	Title	Date: Telephone:



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Narrative (continued):

Since there was time between 102 Crestwood Lane and 126 Walker Road, we went to the Energy Transfer trailer, at 11:25 to talk with Nancy Sadlon. She was not there but we got to speak with Joe Massaro. He wanted to know if we have heard that some of the residents in the neighborhood have retained an attorney, I stated we did. I asked if ET had given him any directions on how communications between ET and the residents would be, he said that he had a call later that day that hopefully let him know. We left the trailer and headed back to the neighborhood to collect potable well water samples from the last address on our list, 126 Walker Road.

As we were leaving the neighborhood we noticed that several Suburban Water vehicles parked in the driveway of 105 Spencer Road. This company has been retained by ET to install the residential POET systems.

We departed the site at 12:20

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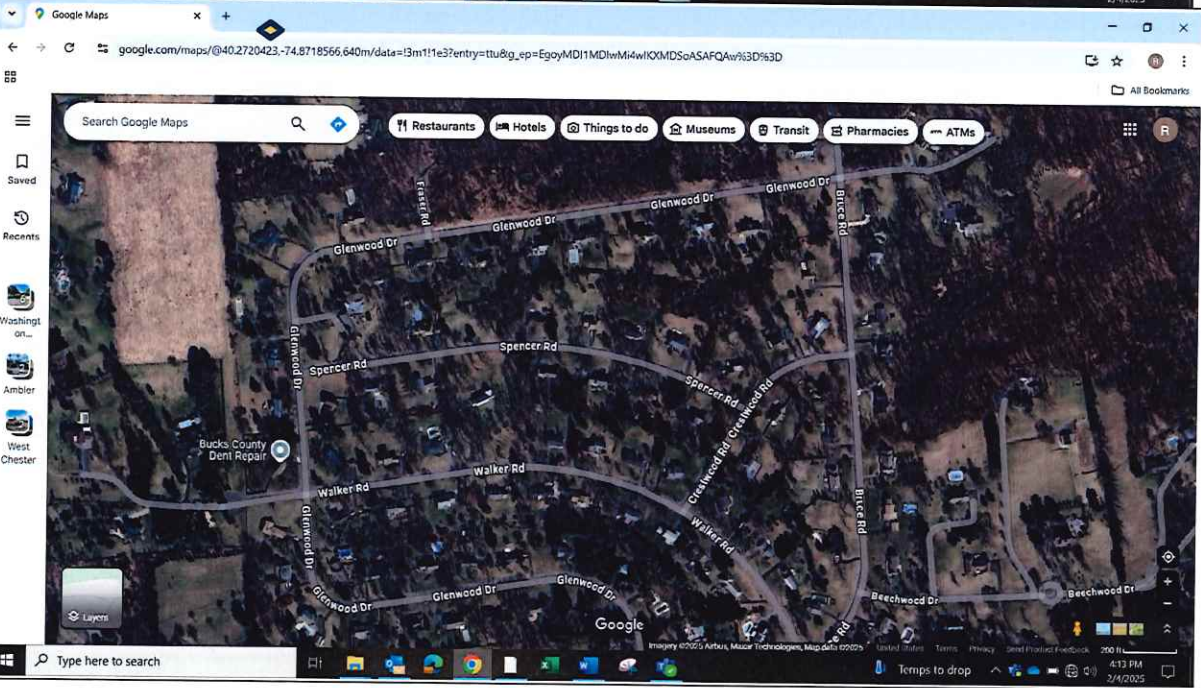
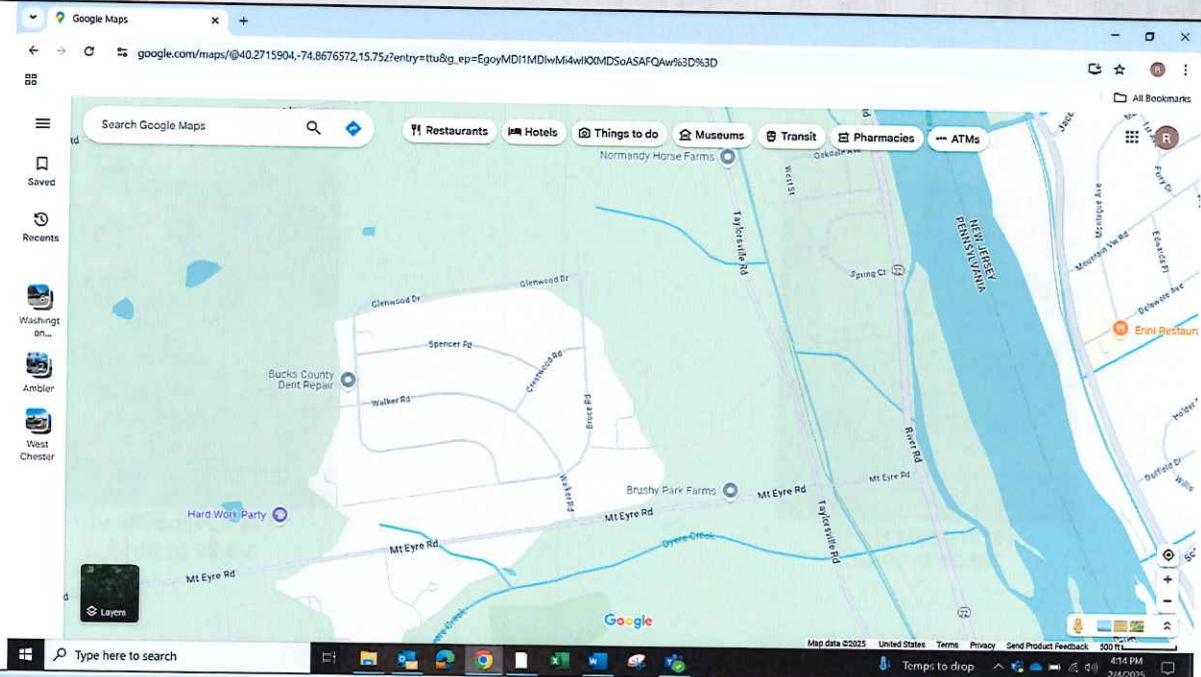


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MAPS / PHOTOGRAPHS / ATTACHMENTS



DEP Representative Name Rebecca Flannery	DEP Representative Signature <i>[Handwritten Signature]</i>	Title Geoscientist	Date: 3-6-25
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101 Spencer Road
3-3-25 @ 10:15



114 Spencer Road
3-3-25 @ 10:30



3-3-25 @ 10:50



126 Walker Road
3-3-25 @ 12:10

DEP Representative Name Rebecca Flannery	DEP Representative Signature <i>Rebecca Flannery</i>	Title Geoscientist	Date: 3-6-25 Telephone: 484-250-5779
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Interviewee Name	Interviewee Signature	Title	Date:



Washington Crossing LNAPL
Upper Makefield Township
Bucks County

SAMPLING AND ANALYSIS PLAN
Residential Sampling

February 28, 2025

Prepared by
Jenna Kokoskie
Regional Project Officer, HSCA

For
Olivia Budnovitch
Regional Project Officer, Act 2

Contents

I. INTRODUCTION/OBJECTIVE.....	3
II. SAMPLE ANALYSIS INFORMATION	3
III. SAMPLING PROCEDURES.....	4
General Sample Collection.....	4
VOA	5
Dissolved Lead	6
Sample Shipping.....	6
IV. QA/QC.....	6
V. REPORTING.....	6
VI. SAMPLING EQUIPMENT.....	7
Table 3: Sampling Equipment.....	7

I. INTRODUCTION/OBJECTIVE

This Sampling and Analysis Plan describes the procedures for sampling private, residential wells in the area referred to as Washington Crossing LNAPL. Background information is available in the regional facility file. This Sampling and Analysis Plan is intended to document the procedures to be used by DEP field staff, and to ensure that this evaluation provides useful and reproducible information. The objective of this sampling event is to replicate previous sampling events and confirm existing results.

II. SAMPLE ANALYSIS INFORMATION

DEP staff will collect samples for analysis at Pace Analytical. Pace is accredited in Pennsylvania for the analyses specified in Table 1. Accreditation information is available through the DEP’s Bureau of Laboratories (BOL) Laboratory Accreditation Program, or through Pace. Samples will be preserved in accordance with the analytical method or lab requirements. Table 1 below identifies the preservatives used for each analytical method. Bottleware will be pre-preserved and provided by the laboratory. DEP staff will follow all laboratory instructions for packing samples. Project Action Limits and Laboratory Quantitation and Detection Limits for relevant compounds are available in Table 2 for reference.

Table 1: Sample Analyses Information

Matrix	Method	Test Description	Preservative	Container	Hold times	# Bottles
DW	200.8	Dissolved* Metals Lead	HNO ₃	Plastic 250 mL	180 days	1
DW	524.2	VOC list	AA, HCl	40 mL glass VOA vial	14 days	3

*Filter sample before preservation

Key:

DW – drinking water

AA – ascorbic acid

mL -- milliliter

VOC – volatile organic compound

HNO₃ – nitric acid

Table 2: Analytical Parameters and Target Limits

Matrix/Media: Drinking water				
Analytical Parameter	Project Action Limit (µg/L)		Laboratory Limits ⁺ (µg/L)	
	EPA MCL	PA MSC	Reporting	Detection
Benzene	5.0	5.0	0.5	0.460
Ethylbenzene	700	700	0.5	0.276
Naphthalene		100	0.5	0.128
Toluene	1,000	1,000	0.5	0.377
Total Xylenes	10,000	10,000	1.50	0.778
Isopropyl benzene		840	0.5	0.269
Trimethyl benzene, 1,3,5		130	0.5	0.209
Trimethyl benzene, 1,2,4		130	0.5	0.238
Dichloroethane, 1,2-	5.0	5	0.5	0.340
Dibromoethane, 1,2	0.5	0.05	0.5	0.368
MTBE		20	0.5	0.310
Dissolved Lead (Pb)	Action Level=10	5	0.1	0.0971

+ - Laboratory quantitation limits and detection limits are those that an individual laboratory has accreditation and can achieve.

III. SAMPLING PROCEDURES

DEP staff will adhere to the following procedures for residential drinking water sample collection:

General Sample Collection

- Samples should be collected from sample locations with known or suspected contamination last to avoid cross contamination.
- Purge the well at a treated point of use (cold water from outdoor tap, kitchen faucet, etc.) for a minimum of ten minutes to clear household plumbing system of water. If an outside tap is used for purging, connect a garden hose to divert water away from the house.
- While waiting for the well to purge, label bottles accordingly. Pre-printed sample labels are provided by Pace. Samples collected should be labeled according to laboratory instructions, with the following information at a minimum:
 - the requested analysis – VOC by 524 and Lead by 200.8
 - the sampling location – residential address
 - the date and time of collection
 - name of preservative and sample matrix
 - project name and organization (Washington Crossing LNAPL, PA DEP)

- Samples will be collected from the port closest to the well's pressure tank inside each residence to be representative of the groundwater entering the residence. Samples should not be collected after any filters or similar water treatment equipment.
- Prior to sampling, the flow rate should be reduced to avoid aeration and overfilling. Excess water should be collected in a bucket to avoid spillage. Collectors shall wear nitrile gloves while collecting samples. Gloves will be changed after each sample.
- All sample information, field readings, and notes from the sampling event shall be recorded. Sample procedures may deviate from this sampling plan as necessary based on field observations. Record any deviations.
- Following collection, DEP staff shall list each sample on a chain of custody form, and promptly place the sample on ice in a cooler. When using a contract lab, follow their chain of custody procedures included in the bottle order. Samples collected will be listed on an analytical lab chain of custody (COC) form. COCs shall be filled completely per Pace guidelines with information including but not limited to:
 - sample collection times and dates
 - preservation (HCl, HNO₃, AA)
 - laboratory methods and test parameters (VOAs by 524 and lead by 200.8)
 - sample matrix (drinking water, surface water, soil)
 - number of containers (VOA-3, lead-1), type of samples (grab)
 - collector's name and signature, and any items required by the lab
 - Also list any comments that would inform the lab including but not limited to strong odors, sample color, or high PID response, and N/A unused spaces
 - Project identifying info like PO#, site name, quote #
- Once the COC is completed, the collector will sign the COC and scan a copy into the site folder for record. Place the COC in a Ziploc bag and place on cooler. Pace courier will pick up the cooler from the SERO office lobby.
- The sampling team should make every effort to leave the sampling area in the same condition as it was prior to sample collection. Any spills must be cleaned up, lights turned off, etc.

VOA

Residential sampling will require the use of 40mL VOA collection bottles preserved with ascorbic acid and HCl to be analyzed for VOCs. Three vials are needed per sample and will be labeled accordingly. Vials should be filled directly from the pressure tank port.

1. Identify which sample to take first.
2. Place an empty bucket on the ground where the water will drop. Wearing gloves, turn the spigot on and allow the water to flow for a few seconds into the bucket to get a steady stream.
3. Fill the VOA sample bottle halfway. Add two drops of HCl preservative into the bottle.
4. Fill the rest of the bottle up with no headspace. Be careful not to spill any water, to prevent loss of HCl.

5. Screw the lid and flip the bottle upside down to inspect for air bubbles. If there are no air bubbles, the sample is good. Turn the spigot off.
6. Repeat steps 3-5 with the other two VOA bottles. Place directly on ice.

Dissolved Lead

Residential sampling will require the use of 250 mL plastic bottles, preserved with HNO₃ to be analyzed for dissolved lead. Sample will be filtered prior to preservation.

1. From the spigot, collect sample in a dedicated plastic container (not the preserved sample bottle).
2. Draw sample into syringe provided by the lab.
3. Attach the 0.45µm filter onto the syringe. It should twist on easily.
4. Dispense sample into the preserved metals bottle. Repeat this until the bottle is filled to the neck. Do not draw sample into the syringe through the filter. If depressing syringe is difficult, discard and replace filter. Depress sample slowly to ensure pressure does not puncture filter. Syringes and filters are provided by the lab and are dedicated to each sample.
5. Screw the cap on and flip the bottle upside down to mix the sample with the preservative.

Sample Shipping

All samples will be kept cold at < 6°C. The sample coolers will be packed upon returning to the office and picked up at SERO by Pace laboratory courier. *Sample turnaround time will be standard 10 business days.*

IV. QA/QC

The following QA/QC samples will be collected:

1. (1) Field Blank to ensure there is no cross-contamination introduced during sample collection. An aliquot of DI will be poured into a separate VOC vial while in the field and submitted as a sample. A Field Blank will be similarly prepared into a metals bottle and submitted as a sample.

Sample labels for QA/QC samples may exclude identifying information such as sampling location and collection time to ensure unbiased sample processing. This identifying information will be recorded by DEP staff.

V. REPORTING

Upon receipt of analytical results, DEP will prepare a summary of the results in tabular format. The sample locations will be mapped using Google Earth or GIS Software. Results and findings will be reported in a technical memorandum for the site file.

The summary table and raw analytical laboratory reports (*for each sample collected from their property*) for each will also be shared with the property owner.

VI. SAMPLING EQUIPMENT

Table 3: Sampling Equipment

Quantity	Item	Notes
3	Business Cards	For each team member
1	Employee ID	For each team member
1	Sampling Plan	For each team member
1	Ultrafine Sharpie	For each team member
1	Clipboard	
2	Pens	
1	Nitrile Gloves - Box	For each team
10	Sample containers, labels, and preservatives	Provided by lab
2	Chains of custody forms/sampling paperwork	Provided by lab
2	Cooler (s)	As needed, to transport samples.
2	Ice – 10 lb. bag	For each cooler
1	Paper Towels - Package	For each team
1	Field Notebook/Logbook/Other Notes	Kept by Project Officer
5	Trash Bag	For each team
10	Small transfer bottles	Dedicated for each sample to transfer sample from spigot to preserved bottleware
10	Large transfer bottles	Dedicated for each sample to transfer sample from spigot to preserved bottleware
1	Small bucket	May be used when sampling inside residential homes
10	0.45 µm field filters	For dissolved metals analysis, provided by lab
10	Syringes	For dissolved metals analysis, provided by lab