



23-Feb-2016

Roger Bellas
Pennsylvania DEP Bureau of Air Quality
12th Floor RCSOB
400 Market Street
Harrisburg, PA 17105

Tel: (570) 826-2511
Fax:

Re: Sherwood Park (SHP)- 2/7/2016

Work Order: **1602343**

Dear Roger,

ALS Environmental received 6 samples on 09-Feb-2016 10:17 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Laboratory Group. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 11.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

Rob Nieman

Electronically approved by: Rob Nieman

Rob Nieman
Project Manager

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Environmental 

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Client: Pennsylvania DEP Bureau of Air Quality
Project: Sherwood Park (SHP)- 2/7/2016
Work Order: 1602343

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1602343-01	SHP020716-1 / Red	Air		2/7/2016	2/9/2016	<input type="checkbox"/>
1602343-02	SHP020716-2 / Blue	Air		2/7/2016	2/9/2016	<input type="checkbox"/>
1602343-03	SHP020716-3 / Green	Air		2/7/2016	2/9/2016	<input type="checkbox"/>
1602343-04	SHP020716-4 / Orange	Air		2/7/2016	2/9/2016	<input type="checkbox"/>
1602343-05	SHP020716-5 / Yellow	Air		2/7/2016	2/9/2016	<input type="checkbox"/>
1602343-06	SHP020716-Summa	Air		2/7/2016	2/9/2016	<input type="checkbox"/>

Client: Pennsylvania DEP Bureau of Air Quality

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Case Narrative

The sample condition upon receipt was acceptable except where noted.

Results relate only to the items tested and are not blank corrected unless indicated.

Client: Pennsylvania DEP Bureau of Air Quality
Project: Sherwood Park (SHP)- 2/7/2016

Work Order: 1602343

Analytical Results

Lab ID: 1602343-01A
Client Sample ID: SHP020716-1 / Red

Collection Date: 2/7/2016
Matrix: AIR

Analyses

AMMONIA BY NIOSH 6015 MOD.		Method: N6015	Air Volume (L): 94.872	Analyst: ALST
Date Analyzed: 2/15/2016		Reporting Limit		
	µg/sample	µg/sample	mg/m3	ug/m3
Ammonia	ND	1.2	<0.013	<13

Lab ID: 1602343-03A
Client Sample ID: SHP020716-3 / Green

Collection Date: 2/7/2016
Matrix: AIR

Analyses

METHANOL BY NIOSH 2000 MOD.		Method: N2000	Air Volume (L): 7.08	Analyst: MHW
Date Analyzed: 2/11/2016		Reporting Limit		
	µg/sample	µg/sample	mg/m3	ug/m3
Methanol	ND	10	<1.4	<1,400

Lab ID: 1602343-04A
Client Sample ID: SHP020716-4 / Orange

Collection Date: 2/7/2016
Matrix: AIR

Analyses

METHYLAMINE BY OSHA 40		Method: O40	Air Volume (L): 9.912	Analyst: MHW
Date Analyzed: 2/12/2016 17:09		Reporting Limit		
	ug/sample	ug/sample	mg/m3	ug/m3
Methylamine	ND	10	<1.0	<1,000

Lab ID: 1602343-05A
Client Sample ID: SHP020716-5 / Yellow

Collection Date: 2/7/2016
Matrix: AIR

Analyses

AMINE(S) BY OSHA PV2060 MOD.		Method: O2060	Air Volume (L): 21.24	Analyst: MHW
Date Analyzed: 2/11/2016		Reporting Limit		
	µg/sample	µg/sample	mg/m3	ug/m3
Triethylamine	ND	10	<0.47	<470

Note:

Client: Pennsylvania DEP Bureau of Air Quality
Work Order: 1602343
Project: Sherwood Park (SHP)- 2/7/2016

QC BATCH REPORT

Batch ID: **33775** Instrument ID: **GC5** Method: **O2060**

MBLK	Sample ID: MBLK-33775-33775			Units: µg/sample		Analysis Date: 2/11/2016				
Client ID:	Run ID: GC5_160211A			SeqNo: 1221172		Prep Date: 2/11/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Triethylamine ND 10

LCS	Sample ID: LCS-33775-33775			Units: µg/sample		Analysis Date: 2/11/2016				
Client ID:	Run ID: GC5_160211A			SeqNo: 1221173		Prep Date: 2/11/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Triethylamine 98.94 10 90.75 0 109 70-130 0

LCSD	Sample ID: LCSD-33775-33775			Units: µg/sample		Analysis Date: 2/11/2016				
Client ID:	Run ID: GC5_160211A			SeqNo: 1221181		Prep Date: 2/11/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Triethylamine 86.02 10 90.75 0 94.8 70-130 98.94 14 20

The following samples were analyzed in this batch: 1602343-05A

Client: Pennsylvania DEP Bureau of Air Quality

QC BATCH REPORT

Work Order: 1602343

Project: Sherwood Park (SHP)- 2/7/2016

Batch ID: 33779

Instrument ID: GC10

Method: N2000

MBLK	Sample ID: MBLK-33779-33779			Units: µg/sample			Analysis Date: 2/11/2016			
Client ID:	Run ID: GC10_160211A			SeqNo: 1221182			Prep Date: 2/11/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Methanol ND 10

LCS	Sample ID: LCS-33779-33779			Units: µg/sample			Analysis Date: 2/11/2016			
Client ID:	Run ID: GC10_160211A			SeqNo: 1221183			Prep Date: 2/11/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Methanol 94.26 10 79.1 0 119 64.1-145 0

LCSD	Sample ID: LCSD-33779-33779			Units: µg/sample			Analysis Date: 2/11/2016			
Client ID:	Run ID: GC10_160211A			SeqNo: 1221191			Prep Date: 2/11/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Methanol 103.2 10 79.1 0 131 64.1-145 94.26 9.1 20

The following samples were analyzed in this batch:

1602343-03A

Client: Pennsylvania DEP Bureau of Air Quality

QC BATCH REPORT

Work Order: 1602343

Project: Sherwood Park (SHP)- 2/7/2016

Batch ID: 33823

Instrument ID: HPLC2

Method: ETO-11

MBLK		Sample ID: MBLK-33823-33823			Units: µg/sample		Analysis Date: 2/14/2016 09:35 PM			
Client ID:		Run ID: HPLC2_160214A			SeqNo: 1221974		Prep Date: 2/13/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acetaldehyde	ND	0.10								
Acrolein	ND	0.10								
Formaldehyde	ND	0.10								

LCS		Sample ID: LCS-33823-33823			Units: µg/sample		Analysis Date: 2/14/2016 09:35 PM			
Client ID:		Run ID: HPLC2_160214A			SeqNo: 1221975		Prep Date: 2/13/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Formaldehyde	2.223	0.10	2	0	111	70-130	0			

LCSD		Sample ID: LCSD-33823-33823			Units: µg/sample		Analysis Date: 2/14/2016 09:35 PM			
Client ID:		Run ID: HPLC2_160214A			SeqNo: 1221983		Prep Date: 2/13/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Formaldehyde	2.258	0.10	2	0	113	70-130	2.223	1.56	20	

The following samples were analyzed in this batch:

1602343-02A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Pennsylvania DEP Bureau of Air Quality

QC BATCH REPORT

Work Order: 1602343

Project: Sherwood Park (SHP)- 2/7/2016

Batch ID: R125951 Instrument ID: HPLC2 Method: O40

MBLK	Sample ID: MB-R125951-R125951	Units: ug/sample	Analysis Date: 2/12/2016 05:09 PM							
Client ID:	Run ID: HPLC2_160212B	SeqNo: 1222160	Prep Date: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Methylamine ND 10

LCS	Sample ID: LCS-R125951-R125951	Units: ug/sample	Analysis Date: 2/12/2016 05:09 PM							
Client ID:	Run ID: HPLC2_160212B	SeqNo: 1222161	Prep Date: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Methylamine 14.15 10 11.48 0 123 70-130 0

LCSD	Sample ID: LCSD-R125951-R125951	Units: ug/sample	Analysis Date: 2/12/2016 05:09 PM							
Client ID:	Run ID: HPLC2_160212B	SeqNo: 1222183	Prep Date: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Methylamine 14.48 10 11.48 0 126 70-130 14.15 2.33 20

The following samples were analyzed in this batch: 1602343-04A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Pennsylvania DEP Bureau of Air Quality

QC BATCH REPORT

Work Order: 1602343

Project: Sherwood Park (SHP)- 2/7/2016

Batch ID: R126029

Instrument ID: SUB

Method: N6015

MBLK	Sample ID: MB-R126029-R126029			Units: µg/sample			Analysis Date: 2/15/2016			
Client ID:	Run ID: SUB_160215E			SeqNo: 1223887			Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ammonia	ND	1.2								

LCS	Sample ID: LCS-R126029-R126029			Units: µg/sample			Analysis Date: 2/15/2016			
Client ID:	Run ID: SUB_160215E			SeqNo: 1223888			Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ammonia	23.1	2.0	24.3	0	95.1	74.3-115.2	0			

LCSD	Sample ID: LCSD-R126029			Units: µg/sample			Analysis Date: 2/15/2016			
Client ID:	Run ID: SUB_160215E			SeqNo: 1223896			Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ammonia	23.8	2.0	24.3	0	97.9	74.3-115.2	23.1	2.99	20	

The following samples were analyzed in this batch:

1602343-01A

Client: Pennsylvania DEP Bureau of Air Quality
Project: Sherwood Park (SHP)- 2/7/2016
WorkOrder: 1602343

**QUALIFIERS,
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
E	EPA Method
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SDL	Sample Detection Limit
SW	SW-846 Method

<u>Units Reported</u>	<u>Description</u>
µg/sample	
ppbv	
ppm	

Sample Receipt Checklist

Client Name: PADEP-HARRISBURG

Date/Time Received: 09-Feb-16 10:17

Work Order: 1602343

Received by: CEG

Checklist completed by: Jan Wilcox 09-Feb-16
eSignature Date

Reviewed by: Rob Nieman 10-Feb-16
eSignature Date

Matrices:

Carrier name: FedEx

- Shipping container/cooler in good condition? Yes [checked] No [] Not Present []
Custody seals intact on shipping container/cooler? Yes [] No [] Not Present [checked]
Custody seals intact on sample bottles? Yes [checked] No [] Not Present []
Chain of custody present? Yes [checked] No []
Chain of custody signed when relinquished and received? Yes [checked] No []
Chain of custody agrees with sample labels? Yes [checked] No []
Samples in proper container/bottle? Yes [checked] No []
Sample containers intact? Yes [checked] No []
Sufficient sample volume for indicated test? Yes [checked] No []
All samples received within holding time? Yes [checked] No []
Container/Temp Blank temperature in compliance? Yes [checked] No []

Temperature(s)/Thermometer(s): 11.0

Cooler(s)/Kit(s):

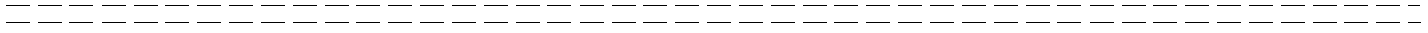
Water - VOA vials have zero headspace? Yes [] No [] No VOA vials submitted []

Water - pH acceptable upon receipt? Yes [] No [] N/A []

pH adjusted? Yes [] No [] N/A []

pH adjusted by:

Login Notes:



Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction: