

06-Apr-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)- 2/25/2016 Work Order: 16021098

Dear Roger,

ALS Environmental received 6 samples on 26-Feb-2016 09:30 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 8.

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

Sincerely,

R ob Nieman

Electronically approved by: Rob Nieman

Rob Nieman Project Manager

ADDRESS 4388 Glendale Milford Rd Cincinnati, Ohio 45242- | PHONE (513) 733-5336 | FAX (513) 733-5347 ALS GROUP USA, CORP. Part of the ALS Group An ALS Limited Company

ALS Environmental Date: 06-Apr-16

Client: Pennsylvania DEP Bureau of Air Quality

Sherwood Park (SHP)- 2/25/2016 Project: **Work Order Sample Summary**

Air

Air

Work Order: 16021098

16021098-05 SHP022516-5 / Yellow

16021098-06 SHP022516-Summa

Lab Samp ID Client Sample ID	<u>Matrix</u>	Tag Number	Collection Date	Date Received Hold
16021098-01 SHP022516-1 / Red	Air		2/25/2016 11:28	2/26/2016 09:30
16021098-02 SHP022516-2 / Blue	Air		2/25/2016 11:28	2/26/2016 09:30
16021098-03 SHP022516-3 / Green	Air		2/25/2016 11:28	2/26/2016 09:30
16021098-04 SHP022516-4 / Orange	Air		2/25/2016 11:28	2/26/2016 09:30

2/25/2016 11:28 2/26/2016 09:30

2/25/2016 11:28 2/26/2016 09:30

ALS Environmental

Date: 06-Apr-16

Client: Pennsylvania DEP Bureau of Air Quality Work Order: 16021098

Project: Sherwood Park (SHP)- 2/25/2016

Analytical Results

Lab ID: 16021098-02A **Collection Date:** 2/25/2016 11:28:00 AM

Client Sample ID: SHP022516-2 / Blue Matrix: AIR

Analyses

ALDEHYDES BY HPLC		Method: ETO-11	Air Volume (L): 216	Analyst: JMB
Date Analyzed: 3/4/2016 20:31		Reporting Limit		
	µg/sample	μg/sample	mg/m3	ppb
Acetaldehyde	0.22	0.20	0.0010	0.57
Acrolein	ND	16	<0.074	<32
Formaldehyde	0.24	0.20	0.0011	0.90

Lab ID: 16021098-04A **Collection Date:** 2/25/2016 11:28:00 AM

Client Sample ID: SHP022516-4 / Orange Matrix: AIR

Analyses

METHYLAMINE BY OSHA 40		Method: O40	Air Volume (L): 10.08	Analyst: MHW
Date Analyzed: 3/31/2016		Reporting Limit		
	μg/sample	μg/sample	mg/m3	ppb
Methylamine	ND	3.0	<0.30	<230

Lab ID: 16021098-05A **Collection Date:** 2/25/2016 11:28:00 AM

Client Sample ID: SHP022516-5 / Yellow Matrix: AIR

Analyses

AMINE(S) BY OSHA PV2060 MOD.		Method: O2060	Air Volume (L): 21.6	Analyst: MHW
Date Analyzed: 3/8/2016		Reporting Limit		
	µg/sample	μg/sample	mg/m3	ppb
Triethylamine	ND	10	<0.46	<110

Note:

ALS Environmental Date: 06-Apr-16

Client: Pennsylvania DEP Bureau of Air Quality

Work Order: 16021098

Project: Sherwood Park (SHP)- 2/25/2016

QC BATCH REPORT

Batch ID: 343	30	Instrument ID: GC	5		Method	: O2060	ı						
MBLK Client ID:	Sample ID:	MBLK-34330-34330		: GC5_160308A		Units: µg/sample SeqNo: 1237506			Analysis Prep Date: 3/8	/ 2016 DF: 1			
Analyte		F	Result F	' QL	SPK Val	SPK Ref Value		%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Triethylamine			ND	10									
LCS Client ID:	Sample ID:	LCS-34330-34330	Run ID: G(Run ID: GC5_160308A		Units: µg/sample SeqNo: 1237507			-	Analysis Prep Date: 3/8	/ 2016 DF: 1		
Analyte		R	Result F	QL	SPK Val	SPK Ref Value		%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Triethylamine			95.6	10	90.75		0	105	70-130	()		
LCSD Client ID:	Sample ID:	LCSD-34330-34330		Run ID: GC5_160308A					Analysis Prep Date: 3/8	s Date: 3/8/ 3/2016	/2016 DF: 1		
Analyte		F	Result F	•QL	SPK Val	SPK Ref Value		%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Triethylamine		•	100.3	10	90.75		0	111	70-130	95.6	6 4.79	20	
The following	g samples w	ere analyzed in this	batch:	16	6021098-05A					<u> </u>			

Pennsylvania DEP Bureau of Air Quality

QC BATCH REPORT

Work Order: 16021098

Client:

Project: Sherwood Park (SHP)- 2/25/2016

Batch ID: 341	74	Instrument ID: HPI	_C1		Metho	d: ETO-11							
MBLK Client ID:	Sample ID:	ID: MBLK-34174-34174 Run ID: HPLC1_160304A			Units: μg/sample SeqNo: 1235829			Analysis Prep Date: 3/4/	//2016 08:31 PM DF: 1				
Analyte		R	esult	PQL	SPK Val	SPK Ref Value		%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acetaldehyde			ND	0.20									
Formaldehyde)		ND	0.20									
LCS Client ID:	Sample ID:	LCS-34174-34174	Run IE	D: HPLC1_	Units: µg/sample SeqNo: 1235849			Analysis Prep Date: 3/4/	/2016 08:31 PM DF: 1				
Analyte		R	esult	PQL	SPK Val	SPK Ref Value		%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acetaldehyde		1	.608	0.20	2		0	80.4	70-130	0			
Formaldehyde)		2.036	0.20	2		0	102	70-130	0			
LCSD	Sample ID:	LCSD-34174-34174					Uni	ts: µg/sar	nple	Analysis	Date: 3/4/	2016 08:31	I PM
Client ID:			Run I	: HPLC1_	_160304A	• • •		Prep Date: 3/4/	2016	DF: 1			
Analyte		R	esult	PQL	SPK Val	SPK Ref Value		%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acetaldehyde		1	.632	0.20	2		0	81.6	70-130	1.608	1.48	20	
Formaldehyde)		2.065	0.20	2		0	103	70-130	2.036	1.41	20	

Client: Pennsylvania DEP Bureau of Air Quality

Work Order: 16021098

Project: Sherwood Park (SHP)- 2/25/2016

Batch ID: R127512 Method: O40 Instrument ID: HPLC1 **MBLK** Sample ID: MB-R127512-R127512 Units: µg/sample Analysis Date: 3/31/2016 Client ID: SeqNo: 1252816 Prep Date: DF: 1 Run ID: HPLC1_160331A SPK Ref Control RPD Ref **RPD** Value Limit Value Limit Analyte Result PQL SPK Val %REC %RPD Qual Methylamine ND 3.0 LCS Sample ID: LCS-R127512-R127512 Units: µg/sample Analysis Date: 3/31/2016 Client ID: SeqNo: 1252817 Prep Date: DF: 1 Run ID: HPLC1_160331A RPD Ref SPK Ref Control **RPD** Value Limit Value Limit %REC %RPD Qual Analyte Result **PQL** SPK Val Methylamine 8.315 3.0 7.44 112 70-130 0 LCSD Sample ID: LCSD-R127512-R127512 Units: µg/sample Analysis Date: 3/31/2016 SeqNo: 1252838 Client ID: Prep Date: DF: 1 Run ID: HPLC1_160331A RPD SPK Ref RPD Ref Control Value Limit Value Limit %RPD Analyte Result **PQL** SPK Val %REC Qual

The following samples were analyzed in this batch:

4.542

Methylamine

16021098-04A

7.44

61

70-130

8.315

58.7

20

SR

3.0

QC BATCH REPORT

ALS Environmental

Date: 06-Apr-16

Client: Pennsylvania DEP Bureau of Air Quality
Project: Sherwood Park (SHP)- 2/25/2016
Work-Order: 16021008

Pennsylvania DEP Bureau of Air Quality

ACRONYMS, UNITS

WorkOrder: 16021098

ppbv ppm

```
Qualifier
                Description
                Value exceeds Regulatory Limit
                Not accredited
       a
       В
                Analyte detected in the associated Method Blank above the Reporting Limit
       Е
                Value above quantitation range
       Н
                Analyzed outside of Holding Time
       J
                Analyte detected below quantitation limit
                Not offered for accreditation
       n
      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
Acronym
                Description
     DUP
                Method Duplicate
       Ε
                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 Quantitaion Limit
     SDL
                Sample Detection Limit
      SW
                SW-846 Method
Units Reported
                      Description
      µg/sample
```

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ALS Environmental

Sample Receipt Checklist

Client Name: PADEP-HARRISBURG				Date/Time I	Received:	26-Feb-10	6 09:30	
Work Order: <u>16021098</u>				Received by	y:	<u>SNH</u>		
Checklist completed	d by: Stephanie H arring	ton 2	9-Feb-16 Date	Reviewed by:	R ob N iem	ian		02-Mar-16 Date
Matrices: Carrier name:	<u>FedEx</u>							
Shipping container/	cooler in good condition?		Yes 🗸	No 🗌	Not Prese	ent 🗌		
Custody seals intac	ct on shipping container/cooler?		Yes	No 🗌	Not Prese	ent 🗸		
Custody seals intac	ct on sample bottles?		Yes 🗸	No 🗌	Not Prese	ent 🗌		
Chain of custody pr	resent?		Yes 🗸	No 🗌				
Chain of custody si	igned when relinquished and red	ceived?	Yes 🗸	No 🗌				
Chain of custody ag	grees with sample labels?		Yes 🗸	No 🗌				
Samples in proper	container/bottle?		Yes 🗸	No 🗌				
Sample containers	intact?		Yes 🗸	No 🗌				
Sufficient sample v	olume for indicated test?		Yes 🗸	No 🗌				
All samples receive	ed within holding time?		Yes 🗸	No 🗌				
Container/Temp Bla	ank temperature in compliance	?	Yes 🗸	No 🗌				
Temperature(s)/The	ermometer(s):		4.9					
Cooler(s)/Kit(s):								
Water - VOA vials h	have zero headspace?		Yes	No 🗌	No VOA vials	submitted	✓	
Water - pH accepta	able upon receipt?		Yes	No 🗌	N/A			
pH adjusted? pH adjusted by:			Yes	No 🗌	N/A 🗸			
Login Notes:								
Client Contacted:		Date Contacted:		Person	Contacted:			
Contacted By:		Regarding:		. 0.0011				
23.1100.00 27.		g ~. ~g.						
Comments:								
CorrectiveAction:								