

JPI ASSOCIATES, INC.

Geotechnical & Environmental Services

jplassociates@verizon.net

September 14, 2017

PADEP

Southeast Regional Office

2 East Main Street, Norristown, PA 19401

Attn: Cherissa Dukelow, Water Quality Specialist

Re: SCR Update

Blue Bell Sunoco, 889 Dekalb Pike, Whitpain Township, Montgomery Co, PA 19422

PADEP facility #46020382

Spill date: November 19, 2016

Ms. Dukelow,

JPI Associates, Inc. [JPIA] has prepared a brief update for recent site characterization activities at the subject site. The events consist of soil borings [11], temporary well point [2] soil [13] & groundwater samples [2], laboratory analysis and PLS site sketch preparation. The soil & groundwater sample results are summarized in **Tables I – III** and sample locations shown on **Figures I & II**. The lab data for July 28, 2017 event is attached.

Based on information contained herein:

Areas [4] of shallow overburden exceedance [0.0 – 2.0ftbgs]:

- A. South of spill point [20.0ft x 10.0ft x 2.0ftbgs]
- B. SW, downgrade from spill point [5.0ft x 5.0ft x 2.0ftbgs]
- C. SW, downgrade from spill point [5.0ft x 5.0ft x 2.0ftbgs]
- D. SW, downgrade from spill point [20.0ft x 7.0ft x 2.0ftbgs]

Area [1] of deeper overburden exceedance [rock interface]:

- E. West from spill point [15.0ft x 7.0ft x 5.0ftbgs].

Area [1] of groundwater exceedance [overburden/rock interface]:

- F. South of spill point proximate to Area A [SWL@6.5ftbgs]

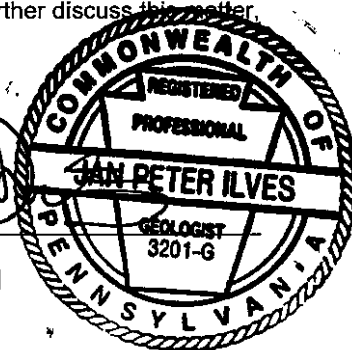
Please contact my office to further discuss this matter.

Respectfully Submitted,

JPI Associates, Inc.

Jan Peter Ilves, PG #3201G
[bluebellsunocoscrupdate091417]

Cc: PADEP, C. Dukelow
PADEP, L. Mapleton
PADEP, J. Jones
USTIF, S. Marion
Multani Bros, Bajinder Singh



Environmental • Geology • Soil • Groundwater • Tanks • Remediation • Asbestos • Phase I • Geophysics • Engineering

725 Market Street, Gloucester City, NJ 08030 T856.456.6500 F856.456.6565 Lic: AR,DE,KY,NJ,PA,TN,TX,WY

Please consider the environment before printing this document.

Tables

Table 1: Summary of Soil Sample Results for Organic Regulated Substances Location: Blue Bell Sunoco, 889 Dekalb Pike, Whitpain Township, Montgomery County, PA 19422 PADEP Facility: #46-20382 Sample date: November 23, 2016 Concentration: Soil - mg/kg									
Sample ID	S-1	S-2	S-3					PADEP Residential Soil - MSC, Iused Aquifer1	PADEP Residential GW - MSCgw Used Aquifer TDS <2500
Lab ID	460-124339-1	460-124339-2	460-124339-3						
Sample depth	0.75-1.0.0ftbgs	0.75-1.0ftbgs	0.75-1.0ftbgs						
Compound									
Benzene	17	0.29	0.043					0.50	5
Ethylbenzene	55	7.8	0.440					70	700
Cumene [isopropylb]	55	9	0.770					84	840
MTBE	<MDL	<MDL	<MDL					2	20
Naphthalene	9.1	1.9	0.60					10	100
Toluene	140	22	1.4					100	1,000
Xylenes [total]	320	48	3					1,000	10,000
1,2,4-TMB	180	19	2.9					1.5	15
1,3,5-TMB	35	6	0.830					42	420

PA Land Recycling Program [Act2], Chapter 250, Statewide Health Standards, Medium Specific Concentrations for Organic Substances in Groundwater, Appendix A, Table 1 & 3.

PA Land Recycling Program technical Guidance Manual, section IV.A.4, Vapor Intrusion into Buildings from Groundwater and Soil under the Act2, SHS.
None detected = <method detection limit

Table 2: Summary of Soil & GW Sample Results for Organic Regulated Substances

Location: Blue Bell Sunoco, 889 Dekalb Pike, Whitpain Township, Montgomery County, PA 19422
PADEP Facility: #46-20382
Sample date: January 9, 2017
Concentration: Soil - mg/kg
GW - ug/L

Sample ID	SB1-1	SB1-2	SB2-1	SB2-2	SB3-1	SB4-1		PADEP Residential Soil - MSC [used Aquifer]	PADEP Residential GW - MSCgw Used Aquifer TDS <2500
Lab ID	2201462001	2201462002	2201462003	2201462004	2201462005	2201462006			
Sample depth	1.5 - 2.0 ftbgs	4.5 - 5.0 ftbgs	1.5 - 2.0 ftbgs	4.5 - 5.0 ftbgs	1.5 - 2.0 ftbgs	1.5 - 2.0 ftbgs			
Compound									
Benzene	<MDL	8.51	1.11	<MDL	0.0732	<MDL		0.50	5
Ethylbenzene	0.845	23.7	0.653	<MDL	0.235	<MDL		70	700
Cumene [isopropylb]	1.03	21.6	0.298	<MDL	0.237	<MDL		84	840
MTBE	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL		2	20
Naphthalene	<MDL	1.44	<MDL	<MDL	<MDL	<MDL		10	100
Toluene	1.53	85.8	9.16	<MDL	1.48	<MDL		100	1,000
Xylenes [total]	7.1	1.59	3.64	<MDL	1.49	<MDL		1,000	10,000
1,2,4-TMB	0.543	32.3	0.752	<MDL	0.412	<MDL		1.5	15
1,3,5-TMB	0.367	11.1	0.246	<MDL	0.140	<MDL		42	420

PA Land Recycling Program [Act2], Chapter 250, Statewide Health Standards, Medium Specific Concentrations for Organic Substances in Groundwater, Appendix A, Table 1 & 3.

PA Land Recycling Program technical Guidance Manual, section IV.A.4, Vapor Intrusion into Buildings from Groundwater and Soil under the Act2, SHS.
None detected = <method detection limit

Table 2: Summary of Soil & GW Sample Results for Organic Regulated Substances									
Location:		Blue Bell Sunoco, 889 Dekalb Pike, Whitpain Township, Montgomery County, PA 19422							
PADEP Facility:		#46-20382							
Sample date:		January 9, 2017							
Concentration:		Soil - mg/kg GW - ug/L							
Sample ID	SB5 - 2	SB6 - 2	SB7 - 1	SB8 - 2	SB9 - 1	SB7W		PADEP Residential Soil – MSC lused Aquifer]	PADEP Residential GW - MSCgw Used Aquifer TDS <2500
Lab ID	2201462007	2201462008	2201462009	2201462010	2201462011	2201462012			
Sample depth	4.5 - 5.0 ftbgs	4.5 - 5.0 ftbgs	1.5 - 2.0 ftbgs	4.5 - 5.0 ftbgs	1.5 - 2.0 ftbgs	6.0 ftbgs [est]			
Compound									
Benzene	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL		0.50	5
Ethylbenzene	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL		70	700
Cumene [isopropylb]	<MDL	<MDL	0.384	<MDL	<MDL	<MDL		84	840
MTBE	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL		2	20
Naphthalene	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL		10	100
Toluene	0.0612	<MDL	0.0947	<MDL	<MDL	<MDL		100	1,000
Xylenes [total]	<MDL	<MDL	0.227	<MDL	<MDL	<MDL		1,000	10,000
1,2,4-TMB	<MDL	<MDL	0.0655	<MDL	<MDL	<MDL		1.5	15
1,3,5-TMB	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL		42	420

PA Land Recycling Program [Act2], Chapter 250, Statewide Health Standards, Medium Specific Concentrations for Organic Substances in Groundwater, Appendix A, Table 1 & 3.

PA Land Recycling Program technical Guidance Manual, section IV.A.4, Vapor Intrusion into Buildings from Groundwater and Soil under the Act2, SHS.
None detected = <method detection limit

Table 3: Summary of Soil & GW Sample Results for Organic Regulated Substances
Location: Blue Bell Sunoco, 889 Dekalb Pike, Whitpain Township, Montgomery County, PA 19422
PADEP Facility: #46-20382
Sample date: July 28, 2017
Concentration: Soil - mg/kg
GW - ug/L

Sample ID	SB10-2	SB11-2	SB12-2	SB13-1	SB13-2	SB14-2		PADEP Residential Soil - MSC, Iused Aquifer	PADEP Residential GW - MSCgw Used Aquifer TDS <2500
Lab ID	2249898001	2249898002	2249898003	2249898004	2249898005	2249898006			
Sample depth	4.5 – 5.0ftbgs	4.5 – 5.0ftbgs	4.5 – 5.0ftbgs	1.5 – 2.0ftbgs	4.5 – 5.0ftbgs	4.5 – 5.0ftbgs			
Compound									
Benzene	<MDL	<MDL	<MDL	<MDL	0.301	0.506		0.50	5
Ethylbenzene	1.16	<MDL	<MDL	<MDL	0.399	0.399		70	700
Cumene [isopropylb]	0.326	<MDL	<MDL	<MDL	0.201	0.201		84	840
MTBE	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL		2	20
Naphthalene	<MDL	<MDL	<MDL	<MDL	<MDL	0.253		10	100
Toluene	16.2	<MDL	<MDL	<MDL	0.0487	1.23		100	1,000
Xylenes [total]	5.38	<MDL	<MDL	460	0.147	1.24		1,000	10,000
1,2,4-TMB	0.325	<MDL	<MDL	<MDL	0.0564	0.0298		1.5	15
1,3,5-TMB	<MDL	<MDL	<MDL	<MDL	<MDL	0.098		42	420

PA Land Recycling Program [Act2], Chapter 250, Statewide Health Standards, Medium Specific Concentrations for Organic Substances in Groundwater, Appendix A, Table 1 & 3.

PA Land Recycling Program technical Guidance Manual, section IV.A.4, Vapor Intrusion into Buildings from Groundwater and Soil under the Act2, SHS.
None detected = <method detection limit

Table 3: Summary of Soil & GW Sample Results for Organic Regulated Substances
Location: Blue Bell Sunoco, 889 Dekalb Pike, Whitpain Township, Montgomery County, PA 19422
PADEP Facility: #46-20382
Sample date: July 28, 2017
Concentration: Soil - mg/kg
GW - ug/L

Sample ID	SB15-1	SB15-2	SB16-1	SB17-1	SB180-1	SB19-1		PADEP Residential Soil - MSC, Iused Aquifer	PADEP Residential GW - MSCgw Used Aquifer TDS <2500
Lab ID	2249898007	2249898008	2249898009	2249898010	2249898011	2249898012			
Sample depth	1.5 – 2.0ftbgs	4.5 – 5.0ftbgs	1.5 – 2.0ftbgs	1.5 – 2.0ftbgs	1.5 – 2.0ftbgs	1.5 – 2.0ftbgs			
Compound									
Benzene	<MDL	0.0608	2.94	<MDL	<MDL	<MDL		0.50	5
Ethylbenzene	<MDL	<MDL	18.6	<MDL	<MDL	<MDL		70	700
Cumene [isopropylb]	<MDL	<MDL	17.6	<MDL	<MDL	<MDL		84	840
MTBE	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL		2	20
Naphthalene	<MDL	<MDL	3.37	0.106	<MDL	<MDL		10	100
Toluene	<MDL	0.0608	85.8	<MDL	<MDL	<MDL		100	1,000
Xylenes [total]	<MDL	<MDL	107	<MDL	<MDL	<MDL		1,000	10,000
1,2,4-TMB	<MDL	<MDL		<MDL	<MDL	<MDL		1.5	15
1,3,5-TMB	<MDL	<MDL	9.55	<MDL	<MDL	<MDL		42	420

PA Land Recycling Program [Act2], Chapter 250, Statewide Health Standards, Medium Specific Concentrations for Organic Substances in Groundwater, Appendix A, Table 1 & 3.

PA Land Recycling Program technical Guidance Manual, section IV.A.4, Vapor Intrusion into Buildings from Groundwater and Soil under the Act2, SHS.
None detected = <method detection limit

Table 3: Summary of Soil & GW Sample Results for Organic Regulated Substances Location: Blue Bell Sunoco, 889 Dekalb Pike, Whitpain Township, Montgomery County, PA 19422 PADEP Facility: #46-20382 Sample date: July 28, 2017 Concentration: Soil - mg/kg GW - ug/L									
Sample ID	SB20-1		SB12W	SB16W	FB	TB		PADEP Residential Soil - MSC, Used Aquifer	PADEP Residential GW - MSCgw Used Aquifer TDS <2500
Lab ID	2249898013		2249898014	2249898015	2249898016	2249898017			
Sample depth	1.5 – 2.0ftbgs		7.25ftbgs	6.65ftbgs	NA	NA			
Compound									
Benzene	<MDL			<MDL	<MDL	<MDL		0.50	5
Ethylbenzene	<MDL		<MDL	<MDL	<MDL	<MDL		70	700
Cumene [isopropyl]	<MDL		2.1	<MDL	<MDL	<MDL		84	840
MTBE	<MDL		4.4	<MDL	<MDL	<MDL		2	20
Naphthalene	<MDL		<MDL	<MDL	<MDL	<MDL		10	100
Toluene	<MDL		<MDL	<MDL	<MDL	<MDL		100	1,000
Xylenes [total]	<MDL		<MDL	<MDL	<MDL	<MDL		1,000	10,000
1,2,4-TMB	<MDL		<MDL	<MDL	<MDL	<MDL		1.5	15
1,3,5-TMB	<MDL		<MDL	<MDL	<MDL	<MDL		42	420

PA Land Recycling Program [Act2], Chapter 250, Statewide Health Standards, Medium Specific Concentrations for Organic Substances in Groundwater, Appendix A, Table 1 & 3.

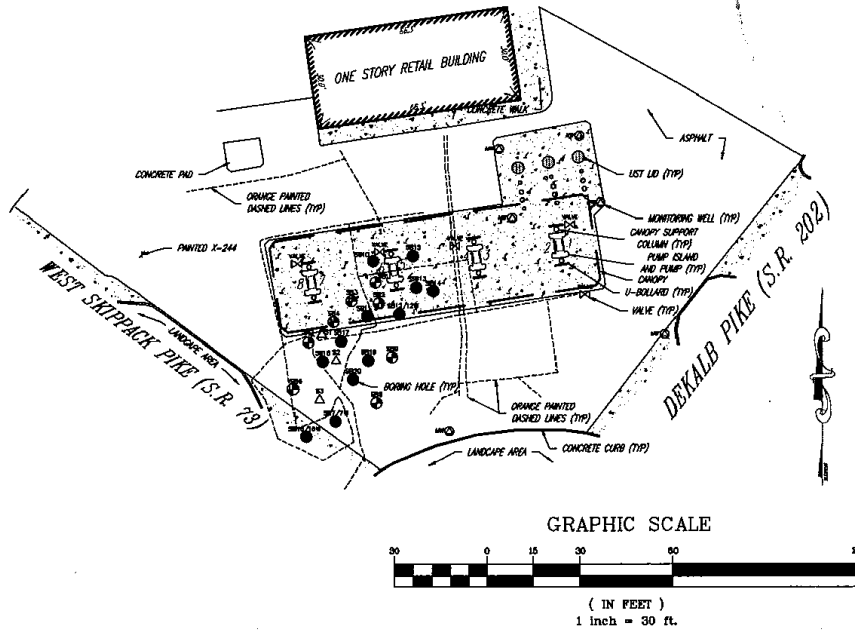
PA Land Recycling Program technical Guidance Manual, section IV.A.4, Vapor Intrusion into Buildings from Groundwater and Soil under the Act2, SHS.

None detected = <method detection limit

Figures

LEGEND & ABBREVIATIONS

EXISTING CURB	
EXISTING DEPRESSED CURB	
EXISTING MONITORING WELL	
GROUND ELEVATION	
TOP WELL CAP ELEVATION	
TOP PVC PIPE ELEVATION	
VALVE	
BORING HOLE	
ECI - NOVEMBER 23, 2016	
JPA - JANUARY 09, 2017	
JPA - JULY 28, 2017	



NOTES:

1. THIS PLAN IS BASED ON INFORMATION PROVIDED BY A SURVEY PREPARED IN THE FIELD BY CORNERSTONE CONSULTING ENGINEERS AND ARCHITECTURAL, INC., AND OTHER REFERENCE MATERIAL AS LISTED HEREON. SURVEY INFORMATION SHOWN HEREON DERIVED FROM A FIELD SURVEY PERFORMED BY CORNERSTONE CONSULTING ON AUGUST 22, 2017.
2. COPYRIGHT © 2017, CORNERSTONE CONSULTING ENGINEERS AND ARCHITECTURAL, INC. ALL RIGHTS RESERVED. NO PART OF THIS DRAWING MAY BE REPRODUCED BY PHOTOCOPYING, RECORDING OR BY ANY OTHER MEANS, OR STORED, PROCESSED, OR TRANSMITTED IN OR BY ANY COMPUTER OR OTHER SYSTEMS WITHOUT THE PRIOR WRITTEN PERMISSION OF THE SURVEYOR. COPIES OF THIS PLAN WITHOUT A RAISED OR COLORED SEAL ARE NOT VALID.
3. THIS IS NOT A BOUNDARY SURVEY.
4. ELEVATIONS BASED ON LOCAL ASSUMED DATUM.

REFERENCES:

1. TAX MAPS OF MONTGOMERY COUNTY, COMMONWEALTH OF PENNSYLVANIA.

cornerstone
Consulting Engineers & Architectural, Inc.

1176 N. Irving Street, Allentown, PA 18109
Phone: 610-420-8200 Fax: 610-420-5706
www.ccornerstone.net

Pennsylvania Region
570-459-1770

Philadelphia Region
215-562-2600

TITLE

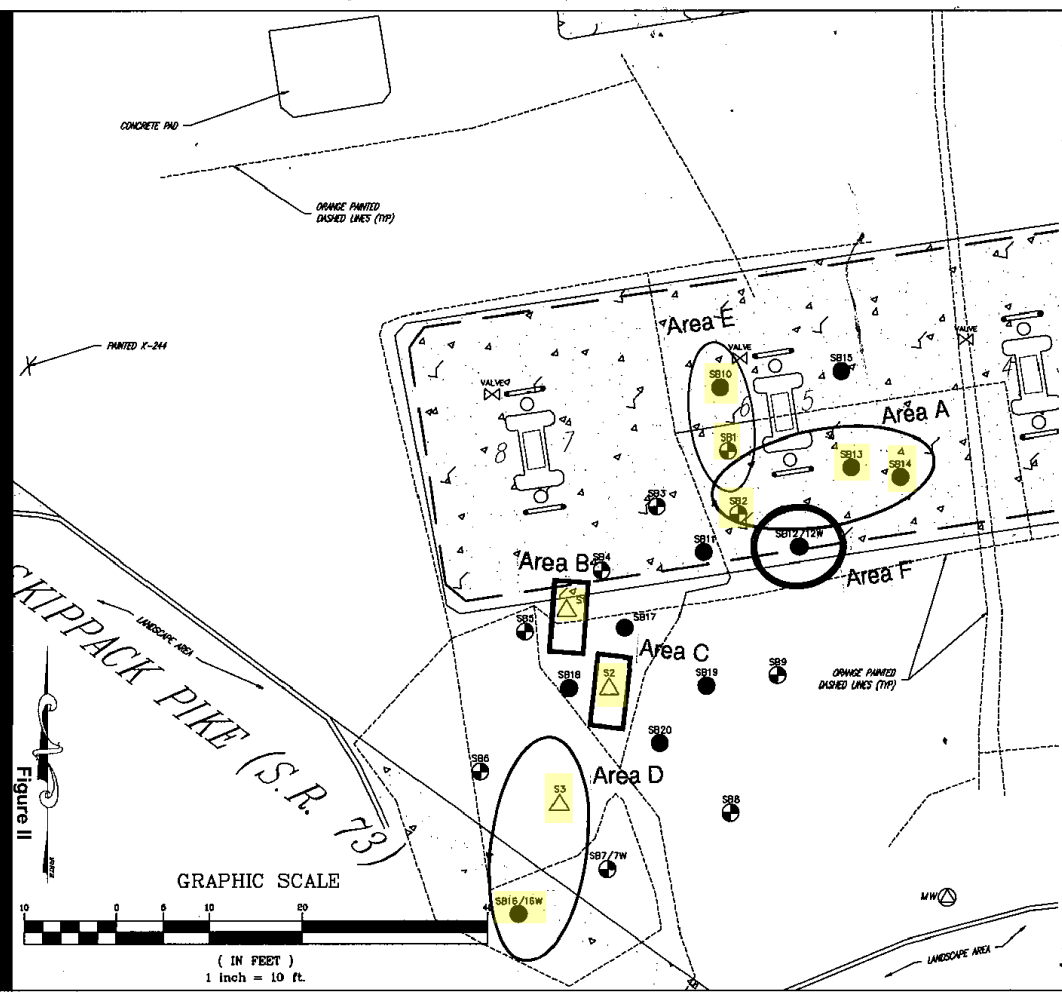
PLAN OF SOIL SAMPLES

BLUE BELL SUNOCO
889 DEKALB PIKE
WHITEPAIN TOWNSHIP
MONTGOMERY COUNTY
COMMONWEALTH OF PENNSYLVANIA

PROJ. #	17-0236	DATE	08-23-2017
CAD. ID.	SV-06	DWG. BY	CIW
SCALE	AS NOTED	CHK. BY	SR

SHEET 1 OF 2

JPI ASSOCIATES, INC.



- NOTES:**
1. THIS IS NOT A BOUNDARY SURVEY.
 2. ELEVATIONS BASED ON LOCAL ASSUMED DATUM.
- REFERENCES:**
1. TAX MAPS OF MONTGOMERY COUNTY, COMMONWEALTH OF PENNSYLVANIA.
- LEGEND & ABBREVIATIONS**
- | | |
|-----|--------------------------|
| — | EXISTING CURB |
| --- | EXISTING DEPRESSED CURB |
| ⊙ | EXISTING MONITORING WELL |
| G | GROUND ELEVATION |
| CAP | TOP WELL CAP ELEVATION |
| PVC | TOP PVC PIPE ELEVATION |
| ⊗ | VALVE |
| ⊙ | BORING HOLE |
| △ | ECI - NOVEMBER 23, 2016 |
| ⊙ | JPA - JANUARY 09, 2017 |
| ● | JPA - JULY 28, 2017 |

Cornerstone
Consulting Engineers & Architectural, Inc.

11776 N. Irving Street, Allentown, PA 18109
Phone: 610-620-8200, Fax: 610-620-3705
www.cornerstonenet.com

Pennsylvania Region
Lehigh Valley Region
Philadelphia Region

570-839-1770
610-620-8200
215-562-2600

TITLE			
PLAN OF SOIL SAMPLES			
BLUE BELL SINOCO 889 DEKALB PIKE WHITETOWN TOWNSHIP MONTGOMERY COUNTY COMMONWEALTH OF PENNSYLVANIA			
PROJ #	17-0746	DATE	08-22-2017
CAD BY	SV-00	DRAWN BY	CTW
SCALE	AS NOTED	CHECK BY	SR
SHEET 2 OF 2			

JPI ASSOCIATES, INC.

Laboratory Data

Sample events: July 28, 2017



ALS Environmental



34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010, NY 11759, PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11, MA PA0102, MD 128, VA 460157, WV 343

August 8, 2017

Mr. J.P. Ilves
JPI Associates, Inc.
725 Market Street
Gloucester City, NJ 08030

Certificate of Analysis

Project Name:	PA Samples without QC Needed	Workorder:	2249898
Purchase Order:		Workorder ID:	Blue Bell Sunoco

Dear Mr. Ilves:

Enclosed are the analytical results for samples received by the laboratory on Saturday, July 29, 2017.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Ms. Amy K Borden (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Environmental.

ALS Spring City: 10 Riverside Drive, Spring City, PA 19475 610-948-4903

Ms. Amy K Borden
Project Coordinator

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

ALS Environmental Laboratory Locations Across North America

Canada: Burlington · Calgary · Centre of Excellence · Edmonton · Fort McMurray · Fort St. John · Grande Prairie · London · Mississauga · Richmond Hill · Saskatoon · Thunder Bay
Vancouver Waterloo · Winnipeg · Yellowknife United States: Cincinnati · Everett · Fort Collins · Holland · Houston · Middletown · Salt Lake City · Spring City · York Mexico: Monterrey

**SAMPLE SUMMARY**

Workorder: 2249898 Blue Bell Sunoco

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
2249898001	SB10-2	Solid	7/28/2017 11:22	7/29/2017 12:45	Mr. J.P. Ilves
2249898002	SB11-2	Solid	7/28/2017 12:02	7/29/2017 12:45	Mr. J.P. Ilves
2249898003	SB12-2	Solid	7/28/2017 12:36	7/29/2017 12:45	Mr. J.P. Ilves
2249898004	SB13-1	Solid	7/28/2017 12:58	7/29/2017 12:45	Mr. J.P. Ilves
2249898005	SB13-2	Solid	7/28/2017 13:10	7/29/2017 12:45	Mr. J.P. Ilves
2249898006	SB14-2	Solid	7/28/2017 13:29	7/29/2017 12:45	Mr. J.P. Ilves
2249898007	SB15-1	Solid	7/28/2017 13:44	7/29/2017 12:45	Mr. J.P. Ilves
2249898008	SB15-2	Solid	7/28/2017 13:55	7/29/2017 12:45	Mr. J.P. Ilves
2249898009	SB16-1	Solid	7/28/2017 14:31	7/29/2017 12:45	Mr. J.P. Ilves
2249898010	SB17-1	Solid	7/28/2017 14:47	7/29/2017 12:45	Mr. J.P. Ilves
2249898011	SB18-1	Solid	7/28/2017 15:02	7/29/2017 12:45	Mr. J.P. Ilves
2249898012	SB19-1	Solid	7/28/2017 15:23	7/29/2017 12:45	Mr. J.P. Ilves
2249898013	SB20-1	Solid	7/28/2017 15:39	7/29/2017 12:45	Mr. J.P. Ilves
2249898014	SB12W	Water	7/28/2017 14:12	7/29/2017 12:45	Mr. J.P. Ilves
2249898015	SB16W	Water	7/28/2017 15:19	7/29/2017 12:45	Mr. J.P. Ilves
2249898016	FB	Water	7/28/2017 11:02	7/29/2017 12:45	Mr. J.P. Ilves
2249898017	Trip Blank	Water	7/28/2017 00:00	7/29/2017 12:45	Mr. J.P. Ilves

ALS Environmental Laboratory Locations Across North AmericaCanada: Burlington ■ Calgary ■ Centre of Excellence ■ Edmonton ■ Fort McMurray ■ Fort St. John ■ Grande Prairie ■ London ■ Mississauga ■ Richmond Hill ■ Saskatoon ■ Thunder Bay
Vancouver Waterloo ■ Winnipeg ■ Yellowknife United States: Cincinnati ■ Everett ■ Fort Collins ■ Holland ■ Houston ■ Middletown ■ Salt Lake City ■ Spring City ■ York Mexico: Monterrey

**SAMPLE SUMMARY**

Workorder: 2249898 Blue Bell Sunoco

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out of the incubator.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits

ALS Environmental Laboratory Locations Across North America

Canada: Burlington - Calgary - Centre of Excellence - Edmonton - Fort McMurray - Fort St. John - Grande Prairie - London - Mississauga - Richmond Hill - Saskatoon - Thunder Bay
Vancouver Waterloo - Winnipeg - Yellowknife United States: Cincinnati - Everett - Fort Collins - Holland - Houston - Middletown - Salt Lake City - Spring City - York Mexico: Monterrey

**ALS Environmental**

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010, NY 11759, PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11, MA PA0102, MD 128, VA 460157, WV 343**ANALYTICAL RESULTS**

Workorder: 2249898 Blue Bell Sunoco

Lab ID: **2249898001**
Sample ID: **SB10-2**Date Collected: 7/28/2017 11:22
Date Received: 7/29/2017 12:45

Matrix: ~ Solid

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	1550		ug/kg	218	SW846 8260B	7/28/17 11:22	CJG	8/3/17 23:17	CJG	A
Ethylbenzene	1160		ug/kg	218	SW846 8260B	7/28/17 11:22	CJG	8/3/17 23:17	CJG	A
Isopropylbenzene	326		ug/kg	218	SW846 8260B	7/28/17 11:22	CJG	8/3/17 23:17	CJG	A
Methyl t-Butyl Ether	ND		ug/kg	218	SW846 8260B	7/28/17 11:22	CJG	8/3/17 23:17	CJG	A
Naphthalene	ND		ug/kg	436	SW846 8260B	7/28/17 11:22	CJG	8/3/17 23:17	CJG	A
Toluene	16200		ug/kg	218	SW846 8260B	7/28/17 11:22	CJG	8/3/17 23:17	CJG	A
Total Xylenes	5380		ug/kg	654	SW846 8260B	7/28/17 11:22	CJG	8/3/17 23:17	CJG	A
1,2,4-Trimethylbenzene	325		ug/kg	218	SW846 8260B	7/28/17 11:22	CJG	8/3/17 23:17	CJG	A
1,3,5-Trimethylbenzene	ND		ug/kg	218	SW846 8260B	7/28/17 11:22	CJG	8/3/17 23:17	CJG	A
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared</i>	<i>By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
1,2-Dichloroethane-d4 (S)	101		%	71 - 146	SW846 8260B	7/28/17 11:22	CJG	8/3/17 23:17	CJG	A
4-Bromofluorobenzene (S)	110		%	46 - 138	SW846 8260B	7/28/17 11:22	CJG	8/3/17 23:17	CJG	A
Dibromofluoromethane (S)	93.7		%	42 - 143	SW846 8260B	7/28/17 11:22	CJG	8/3/17 23:17	CJG	A
Toluene-d8 (S)	108		%	54 - 141	SW846 8260B	7/28/17 11:22	CJG	8/3/17 23:17	CJG	A
WET CHEMISTRY										
Moisture	25.5		%	0.1	S2540G-11			7/31/17 15:29	AXD	
Total Solids	74.5		%	0.1	S2540G-11			7/31/17 15:29	AXD	

Ms. Amy K Borden
Project Coordinator**ALS Environmental Laboratory Locations Across North America**Canada: Burlington · Calgary · Centre of Excellence · Edmonton · Fort McMurray · Fort St. John · Grande Prairie · London · Mississauga · Richmond Hill · Saskatoon · Thunder Bay
Vancouver Waterloo · Winnipeg · Yellowknife United States: Cincinnati · Everett · Fort Collins · Holland · Houston · Middletown · Salt Lake City · Spring City · York Mexico: Monterrey



ANALYTICAL RESULTS

Workorder: 2249898 Blue Bell Sunoco

Lab ID: **2249898002**
Sample ID: **SB11-2**

Date Collected: 7/28/2017 12:02 Matrix: **Solid**
Date Received: 7/29/2017 12:45

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/kg	214	SW846 8260B	7/28/17 12:00	CJG	8/3/17 23:39	CJG	A
Ethylbenzene	ND		ug/kg	214	SW846 8260B	7/28/17 12:00	CJG	8/3/17 23:39	CJG	A
Isopropylbenzene	ND		ug/kg	214	SW846 8260B	7/28/17 12:00	CJG	8/3/17 23:39	CJG	A
Methyl t-Butyl Ether	ND		ug/kg	214	SW846 8260B	7/28/17 12:00	CJG	8/3/17 23:39	CJG	A
Naphthalene	ND	1	ug/kg	427	SW846 8260B	7/28/17 12:00	CJG	8/3/17 23:39	CJG	A
Toluene	ND		ug/kg	214	SW846 8260B	7/28/17 12:00	CJG	8/3/17 23:39	CJG	A
Total Xylenes	ND		ug/kg	641	SW846 8260B	7/28/17 12:00	CJG	8/3/17 23:39	CJG	A
1,2,4-Trimethylbenzene	ND		ug/kg	214	SW846 8260B	7/28/17 12:00	CJG	8/3/17 23:39	CJG	A
1,3,5-Trimethylbenzene	ND		ug/kg	214	SW846 8260B	7/28/17 12:00	CJG	8/3/17 23:39	CJG	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	85.4		%	71 - 146	SW846 8260B	7/28/17 12:00	CJG	8/3/17 23:39	CJG	A
4-Bromofluorobenzene (S)	83.7		%	46 - 138	SW846 8260B	7/28/17 12:00	CJG	8/3/17 23:39	CJG	A
Dibromofluoromethane (S)	77.5		%	42 - 143	SW846 8260B	7/28/17 12:00	CJG	8/3/17 23:39	CJG	A
Toluene-d8 (S)	87.4		%	54 - 141	SW846 8260B	7/28/17 12:00	CJG	8/3/17 23:39	CJG	A
WET CHEMISTRY										
Moisture	13.3		%	0.1	S2540G-11			7/31/17 15:29	AXD	
Total Solids	86.7		%	0.1	S2540G-11			7/31/17 15:29	AXD	

Amy K Borden

Ms. Amy K Borden
Project Coordinator

ALS Environmental Laboratory Locations Across North America

Canada: Burlington - Calgary - Centre of Excellence - Edmonton - Fort McMurray - Fort St. John - Grande Prairie - London - Mississauga - Richmond Hill - Saskatoon - Thunder Bay
Vancouver Waterloo - Winnipeg - Yellowknife United States: Cincinnati - Everett - Fort Collins - Holland - Houston - Middletown - Salt Lake City - Spring City - York Mexico: Monterrey



ALS Environmental



34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010, NY 11759, PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11, MA PA0102, MD 128, VA 460157, WV 343

ANALYTICAL RESULTS

Workorder: 2249898 Blue Bell Sunoco

Lab ID: 2249898003

Date Collected: 7/28/2017 12:36

Matrix: Solid

Sample ID: SB12-2

Date Received: 7/29/2017 12:45

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/kg	35.3	SW846 8260B	7/28/17 12:36	CJG	8/4/17 00:01	CJG	A
Ethylbenzene	ND		ug/kg	35.3	SW846 8260B	7/28/17 12:36	CJG	8/4/17 00:01	CJG	A
Isopropylbenzene	ND		ug/kg	35.3	SW846 8260B	7/28/17 12:36	CJG	8/4/17 00:01	CJG	A
Methyl t-Butyl Ether	ND		ug/kg	35.3	SW846 8260B	7/28/17 12:36	CJG	8/4/17 00:01	CJG	A
Naphthalene	ND		ug/kg	70.6	SW846 8260B	7/28/17 12:36	CJG	8/4/17 00:01	CJG	A
Toluene	ND		ug/kg	35.3	SW846 8260B	7/28/17 12:36	CJG	8/4/17 00:01	CJG	A
Total Xylenes	ND		ug/kg	106	SW846 8260B	7/28/17 12:36	CJG	8/4/17 00:01	CJG	A
1,2,4-Trimethylbenzene	ND		ug/kg	35.3	SW846 8260B	7/28/17 12:36	CJG	8/4/17 00:01	CJG	A
1,3,5-Trimethylbenzene	ND		ug/kg	35.3	SW846 8260B	7/28/17 12:36	CJG	8/4/17 00:01	CJG	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	116		%	71 - 146	SW846 8260B	7/28/17 12:36	CJG	8/4/17 00:01	CJG	A
4-Bromofluorobenzene (S)	123		%	46 - 138	SW846 8260B	7/28/17 12:36	CJG	8/4/17 00:01	CJG	A
Dibromofluoromethane (S)	108		%	42 - 143	SW846 8260B	7/28/17 12:36	CJG	8/4/17 00:01	CJG	A
Toluene-d8 (S)	123		%	54 - 141	SW846 8260B	7/28/17 12:36	CJG	8/4/17 00:01	CJG	A
WET CHEMISTRY										
Moisture	14.3		%	0.1	S2540G-11			7/31/17 15:29	AXD	
Total Solids	85.7		%	0.1	S2540G-11			7/31/17 15:29	AXD	

Amy K Borden

Ms. Amy K Borden

Project Coordinator

ALS Environmental Laboratory Locations Across North America

Canada: Burlington · Calgary · Centre of Excellence · Edmonton · Fort McMurray · Fort St. John · Grande Prairie · London · Mississauga · Richmond Hill · Saskatoon · Thunder Bay
Vancouver Waterloo · Winnipeg · Yellowknife United States: Cincinnati · Everett · Fort Collins · Holland · Houston · Middletown · Salt Lake City · Spring City · York Mexico: Monterrey



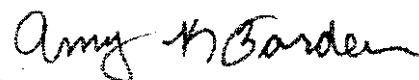
ANALYTICAL RESULTS

Workorder: 2249898 Blue Bell Sunoco

Lab ID: **2249898004**
Sample ID: **SB13-1**

Date Collected: 7/28/2017 12:58 Matrix: ~ Solid
Date Received: 7/29/2017 12:45

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	4300		ug/kg	266	SW846 8260B	7/28/17 12:58	CJG	8/4/17 00:23	CJG	A
Ethylbenzene	72000		ug/kg	1330	SW846 8260B	7/28/17 12:58	TMP	8/7/17 13:21	TMP	A
Isopropylbenzene	94200		ug/kg	1330	SW846 8260B	7/28/17 12:58	TMP	8/7/17 13:21	TMP	A
Methyl t-Butyl Ether	ND		ug/kg	266	SW846 8260B	7/28/17 12:58	CJG	8/4/17 00:23	CJG	A
Naphthalene	18300	3	ug/kg	532	SW846 8260B	7/28/17 12:58	CJG	8/4/17 00:23	CJG	A
Toluene	237000		ug/kg	1330	SW846 8260B	7/28/17 12:58	TMP	8/7/17 13:21	TMP	A
Total Xylenes	460000		ug/kg	3990	SW846 8260B	7/28/17 12:58	TMP	8/7/17 13:21	TMP	A
1,2,4-Trimethylbenzene	138000		ug/kg	1330	SW846 8260B	7/28/17 12:58	TMP	8/7/17 13:21	TMP	A
1,3,5-Trimethylbenzene	51500		ug/kg	266	SW846 8260B	7/28/17 12:58	CJG	8/4/17 00:23	CJG	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	107		%	71 - 146	SW846 8260B	7/28/17 12:58	TMP	8/7/17 13:21	TMP	A
1,2-Dichloroethane-d4 (S)	331	1	%	71 - 146	SW846 8260B	7/28/17 12:58	CJG	8/4/17 00:23	CJG	A
4-Bromofluorobenzene (S)	117		%	46 - 138	SW846 8260B	7/28/17 12:58	CJG	8/4/17 00:23	CJG	A
4-Bromofluorobenzene (S)	117		%	46 - 138	SW846 8260B	7/28/17 12:58	TMP	8/7/17 13:21	TMP	A
Dibromofluoromethane (S)	84.4		%	42 - 143	SW846 8260B	7/28/17 12:58	CJG	8/4/17 00:23	CJG	A
Dibromofluoromethane (S)	68.9		%	42 - 143	SW846 8260B	7/28/17 12:58	TMP	8/7/17 13:21	TMP	A
Toluene-d8 (S)	16.3	2	%	54 - 141	SW846 8260B	7/28/17 12:58	CJG	8/4/17 00:23	CJG	A
Toluene-d8 (S)	90		%	54 - 141	SW846 8260B	7/28/17 12:58	TMP	8/7/17 13:21	TMP	A
WET CHEMISTRY										
Moisture	6.9		%	0.1	S2540G-11			7/31/17 15:29	AXD	
Total Solids	93.1		%	0.1	S2540G-11			7/31/17 15:29	AXD	



Ms. Amy K Borden
Project Coordinator

ALS Environmental Laboratory Locations Across North America

Canada: Burlington ■ Calgary ■ Centre of Excellence ■ Edmonton ■ Fort McMurray ■ Fort St. John ■ Grande Prairie ■ London ■ Mississauga ■ Richmond Hill ■ Saskatoon ■ Thunder Bay
Vancouver ■ Waterloo ■ Winnipeg ■ Yellowknife United States: Cincinnati ■ Everett ■ Fort Collins ■ Holland ■ Houston ■ Middletown ■ Salt Lake City ■ Spring City ■ York Mexico: Monterrey



ALS Environmental



34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010, NY 11759, PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11, MA PA0102, MD 128, VA 460157, WV 343

ANALYTICAL RESULTS

Workorder: 2249898 Blue Bell Sunoco

Lab ID: **2249898005**

Date Collected: 7/28/2017 13:10

Matrix: ~ Solid

Sample ID: **SB13-2**

Date Received: 7/29/2017 12:45

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	301		ug/kg	35.4	SW846 8260B	7/28/17 13:10	TMP	8/7/17 12:59	TMP	A
Ethylbenzene	144		ug/kg	35.4	SW846 8260B	7/28/17 13:10	TMP	8/7/17 12:59	TMP	A
Isopropylbenzene	44.8		ug/kg	35.4	SW846 8260B	7/28/17 13:10	TMP	8/7/17 12:59	TMP	A
Methyl t-Butyl Ether	ND		ug/kg	35.4	SW846 8260B	7/28/17 13:10	TMP	8/7/17 12:59	TMP	A
Naphthalene	ND		ug/kg	70.8	SW846 8260B	7/28/17 13:10	TMP	8/7/17 12:59	TMP	A
Toluene	48.7		ug/kg	35.4	SW846 8260B	7/28/17 13:10	TMP	8/7/17 12:59	TMP	A
Total Xylenes	147		ug/kg	106	SW846 8260B	7/28/17 13:10	TMP	8/7/17 12:59	TMP	A
1,2,4-Trimethylbenzene	56.4		ug/kg	35.4	SW846 8260B	7/28/17 13:10	TMP	8/7/17 12:59	TMP	A
1,3,5-Trimethylbenzene	ND		ug/kg	35.4	SW846 8260B	7/28/17 13:10	TMP	8/7/17 12:59	TMP	A
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared</i>	<i>By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
1,2-Dichloroethane-d4 (S)	63.6	3	%	71 - 146	SW846 8260B	7/28/17 13:10	TMP	8/7/17 12:59	TMP	A
4-Bromofluorobenzene (S)	79.2		%	46 - 138	SW846 8260B	7/28/17 13:10	TMP	8/7/17 12:59	TMP	A
Dibromofluoromethane (S)	62.7		%	42 - 143	SW846 8260B	7/28/17 13:10	TMP	8/7/17 12:59	TMP	A
Toluene-d8 (S)	71.1		%	54 - 141	SW846 8260B	7/28/17 13:10	TMP	8/7/17 12:59	TMP	A
WET CHEMISTRY										
Moisture	16.5		%	0.1	S2540G-11			7/31/17 15:29	AXD	
Total Solids	83.5		%	0.1	S2540G-11			7/31/17 15:29	AXD	

Amy K Borden

Ms. Amy K Borden
Project Coordinator

ALS Environmental Laboratory Locations Across North America

Canada: Burlington · Calgary · Centre of Excellence · Edmonton · Fort McMurray · Fort St. John · Grande Prairie · London · Mississauga · Richmond Hill · Saskatoon · Thunder Bay
Vancouver · Waterloo · Winnipeg · Yellowknife United States: Cincinnati · Everett · Fort Collins · Holland · Houston · Middletown · Salt Lake City · Spring City · York Mexico: Monterrey



ALS Environmental



34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010, NY 11759, PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11, MA PA0102, MD 128, VA 460157, WV 343

ANALYTICAL RESULTS

Workorder: 2249898 Blue Bell Sunoco

Lab ID: 2249898006

Date Collected: 7/28/2017 13:29

Matrix: Solid

Sample ID: SB14-2

Date Received: 7/29/2017 12:45

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	506		ug/kg	37.9	SW846 8260B	7/28/17 13:29	CJG	8/4/17 01:07	CJG	A
Ethylbenzene	399		ug/kg	37.9	SW846 8260B	7/28/17 13:29	CJG	8/4/17 01:07	CJG	A
Isopropylbenzene	201		ug/kg	37.9	SW846 8260B	7/28/17 13:29	CJG	8/4/17 01:07	CJG	A
Methyl t-Butyl Ether	ND		ug/kg	37.9	SW846 8260B	7/28/17 13:29	CJG	8/4/17 01:07	CJG	A
Naphthalene	253	1	ug/kg	75.8	SW846 8260B	7/28/17 13:29	CJG	8/4/17 01:07	CJG	A
Toluene	1230		ug/kg	37.9	SW846 8260B	7/28/17 13:29	CJG	8/4/17 01:07	CJG	A
Total Xylenes	1240		ug/kg	114	SW846 8260B	7/28/17 13:29	CJG	8/4/17 01:07	CJG	A
1,2,4-Trimethylbenzene	298		ug/kg	37.9	SW846 8260B	7/28/17 13:29	CJG	8/4/17 01:07	CJG	A
1,3,5-Trimethylbenzene	98.0		ug/kg	37.9	SW846 8260B	7/28/17 13:29	CJG	8/4/17 01:07	CJG	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	102		%	71 - 146	SW846 8260B	7/28/17 13:29	CJG	8/4/17 01:07	CJG	A
4-Bromofluorobenzene (S)	113		%	46 - 138	SW846 8260B	7/28/17 13:29	CJG	8/4/17 01:07	CJG	A
Dibromofluoromethane (S)	96.1		%	42 - 143	SW846 8260B	7/28/17 13:29	CJG	8/4/17 01:07	CJG	A
Toluene-d8 (S)	113		%	54 - 141	SW846 8260B	7/28/17 13:29	CJG	8/4/17 01:07	CJG	A
WET CHEMISTRY										
Moisture	14.9		%	0.1	S2540G-11			7/31/17 15:29	AXD	
Total Solids	85.1		%	0.1	S2540G-11			7/31/17 15:29	AXD	

Amy K Borden

Ms. Amy K Borden
Project Coordinator

ALS Environmental Laboratory Locations Across North America

Canada: Burlington · Calgary · Centre of Excellence · Edmonton · Fort McMurray · Fort St. John · Grande Prairie · London · Mississauga · Richmond Hill · Saskatoon · Thunder Bay
Vancouver · Waterloo · Winnipeg · Yellowknife United States: Cincinnati · Everett · Fort Collins · Holland · Houston · Middletown · Salt Lake City · Spring City · York Mexico: Monterrey



ALS Environmental



34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010, NY 11759, PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11, MA PA0102, MD 128, VA 460157, WV 343

ANALYTICAL RESULTS

Workorder: 2249898 Blue Bell Sunoco

Lab ID: **2249898007**

Date Collected: 7/28/2017 13:44

Matrix: ~ Solid

Sample ID: **SB15-1**

Date Received: 7/29/2017 12:45

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/kg	29.4	SW846 8260B	7/28/17 13:44	CJG	8/4/17 01:29	CJG	A
Ethylbenzene	ND		ug/kg	29.4	SW846 8260B	7/28/17 13:44	CJG	8/4/17 01:29	CJG	A
Isopropylbenzene	ND		ug/kg	29.4	SW846 8260B	7/28/17 13:44	CJG	8/4/17 01:29	CJG	A
Methyl t-Butyl Ether	ND		ug/kg	29.4	SW846 8260B	7/28/17 13:44	CJG	8/4/17 01:29	CJG	A
Naphthalene	ND	1	ug/kg	58.9	SW846 8260B	7/28/17 13:44	CJG	8/4/17 01:29	CJG	A
Toluene	ND		ug/kg	29.4	SW846 8260B	7/28/17 13:44	CJG	8/4/17 01:29	CJG	A
Total Xylenes	ND		ug/kg	88.3	SW846 8260B	7/28/17 13:44	CJG	8/4/17 01:29	CJG	A
1,2,4-Trimethylbenzene	ND		ug/kg	29.4	SW846 8260B	7/28/17 13:44	CJG	8/4/17 01:29	CJG	A
1,3,5-Trimethylbenzene	ND		ug/kg	29.4	SW846 8260B	7/28/17 13:44	CJG	8/4/17 01:29	CJG	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	111		%	71 - 146	SW846 8260B	7/28/17 13:44	CJG	8/4/17 01:29	CJG	A
4-Bromofluorobenzene (S)	122		%	46 - 138	SW846 8260B	7/28/17 13:44	CJG	8/4/17 01:29	CJG	A
Dibromofluoromethane (S)	106		%	42 - 143	SW846 8260B	7/28/17 13:44	CJG	8/4/17 01:29	CJG	A
Toluene-d8 (S)	121		%	54 - 141	SW846 8260B	7/28/17 13:44	CJG	8/4/17 01:29	CJG	A
WET CHEMISTRY										
Moisture	6.1		%	0.1	S2540G-11			7/31/17 15:29	AXD	
Total Solids	93.9		%	0.1	S2540G-11			7/31/17 15:29	AXD	

Amy K Borden

Ms. Amy K Borden

Project Coordinator

ALS Environmental Laboratory Locations Across North America

Canada: Burlington · Calgary · Centre of Excellence · Edmonton · Fort McMurray · Fort St. John · Grande Prairie · London · Mississauga · Richmond Hill · Saskatoon · Thunder Bay
Vancouver · Waterloo · Winnipeg · Yellowknife United States: Cincinnati · Everett · Fort Collins · Holland · Houston · Middletown · Salt Lake City · Spring City · York Mexico: Monterrey


ALS Environmental


34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010, NY 11759, PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11, MA PA0102, MD 128, VA 460157, WV 343

ANALYTICAL RESULTS

Workorder: 2249898 Blue Bell Sunoco

Lab ID: 2249898008

Date Collected: 7/28/2017 13:55

Matrix: ~ Solid

Sample ID: SB15-2

Date Received: 7/29/2017 12:45

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	60.8		ug/kg	41.8	SW846 8260B	7/28/17 13:55	CJG	8/4/17 01:52	CJG	A
Ethylbenzene	ND		ug/kg	41.8	SW846 8260B	7/28/17 13:55	CJG	8/4/17 01:52	CJG	A
Isopropylbenzene	ND		ug/kg	41.8	SW846 8260B	7/28/17 13:55	CJG	8/4/17 01:52	CJG	A
Methyl t-Butyl Ether	ND		ug/kg	41.8	SW846 8260B	7/28/17 13:55	CJG	8/4/17 01:52	CJG	A
Naphthalene	ND		ug/kg	83.6	SW846 8260B	7/28/17 13:55	CJG	8/4/17 01:52	CJG	A
Toluene	60.8		ug/kg	41.8	SW846 8260B	7/28/17 13:55	CJG	8/4/17 01:52	CJG	A
Total Xylenes	ND		ug/kg	125	SW846 8260B	7/28/17 13:55	CJG	8/4/17 01:52	CJG	A
1,2,4-Trimethylbenzene	ND		ug/kg	41.8	SW846 8260B	7/28/17 13:55	CJG	8/4/17 01:52	CJG	A
1,3,5-Trimethylbenzene	ND		ug/kg	41.8	SW846 8260B	7/28/17 13:55	CJG	8/4/17 01:52	CJG	A
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared</i>	<i>By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
1,2-Dichloroethane-d4 (S)	98.8		%	71 - 146	SW846 8260B	7/28/17 13:55	CJG	8/4/17 01:52	CJG	A
4-Bromofluorobenzene (S)	107		%	46 - 138	SW846 8260B	7/28/17 13:55	CJG	8/4/17 01:52	CJG	A
Dibromofluoromethane (S)	92.3		%	42 - 143	SW846 8260B	7/28/17 13:55	CJG	8/4/17 01:52	CJG	A
Toluene-d8 (S)	109		%	54 - 141	SW846 8260B	7/28/17 13:55	CJG	8/4/17 01:52	CJG	A
WET CHEMISTRY										
Moisture	20.7		%	0.1	S2540G-11			7/31/17 15:29	AXD	
Total Solids	79.3		%	0.1	S2540G-11			7/31/17 15:29	AXD	

Ms. Amy K Borden
Project Coordinator

ALS Environmental Laboratory Locations Across North America

Canada: Burlington ■ Calgary ■ Centre of Excellence ■ Edmonton ■ Fort McMurray ■ Fort St. John ■ Grande Prairie ■ London ■ Mississauga ■ Richmond Hill ■ Saskatoon ■ Thunder Bay
Vancouver Waterloo ■ Winnipeg ■ Yellowknife United States: Cincinnati ■ Everett ■ Fort Collins ■ Holland ■ Houston ■ Middletown ■ Salt Lake City ■ Spring City ■ York Mexico: Monterrey

**ALS Environmental**

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010, NY 11759, PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11, MA PA0102, MD 128, VA 460157, WV 343**ANALYTICAL RESULTS**

Workorder: 2249898 Blue Bell Sunoco

Lab ID: 2249898009

Date Collected: 7/28/2017 14:31

Matrix: ~ Solid

Sample ID: SB16-1

Date Received: 7/29/2017 12:45

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	2940		ug/kg	373	SW846 8260B	7/28/17 14:31	CJG	8/4/17 02:14	CJG	A
Ethylbenzene	18600		ug/kg	373	SW846 8260B	7/28/17 14:31	CJG	8/4/17 02:14	CJG	A
Isopropylbenzene	17600		ug/kg	373	SW846 8260B	7/28/17 14:31	CJG	8/4/17 02:14	CJG	A
Methyl t-Butyl Ether	ND		ug/kg	373	SW846 8260B	7/28/17 14:31	CJG	8/4/17 02:14	CJG	A
Naphthalene	3370	3	ug/kg	746	SW846 8260B	7/28/17 14:31	CJG	8/4/17 02:14	CJG	A
Toluene	85800		ug/kg	746	SW846 8260B	7/28/17 14:31	TMP	8/7/17 13:43	TMP	A
Total Xylenes	107000		ug/kg	1120	SW846 8260B	7/28/17 14:31	CJG	8/4/17 02:14	CJG	A
1,2,4-Trimethylbenzene	26900		ug/kg	373	SW846 8260B	7/28/17 14:31	CJG	8/4/17 02:14	CJG	A
1,3,5-Trimethylbenzene	9550		ug/kg	373	SW846 8260B	7/28/17 14:31	CJG	8/4/17 02:14	CJG	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	151	1	%	71 - 146	SW846 8260B	7/28/17 14:31	CJG	8/4/17 02:14	CJG	A
1,2-Dichloroethane-d4 (S)	111		%	71 - 146	SW846 8260B	7/28/17 14:31	TMP	8/7/17 13:43	TMP	A
4-Bromofluorobenzene (S)	119		%	46 - 138	SW846 8260B	7/28/17 14:31	CJG	8/4/17 02:14	CJG	A
4-Bromofluorobenzene (S)	87		%	46 - 138	SW846 8260B	7/28/17 14:31	TMP	8/7/17 13:43	TMP	A
Dibromofluoromethane (S)	68.8		%	42 - 143	SW846 8260B	7/28/17 14:31	TMP	8/7/17 13:43	TMP	A
Dibromofluoromethane (S)	97.5		%	42 - 143	SW846 8260B	7/28/17 14:31	CJG	8/4/17 02:14	CJG	A
Toluene-d8 (S)	77.3		%	54 - 141	SW846 8260B	7/28/17 14:31	TMP	8/7/17 13:43	TMP	A
Toluene-d8 (S)	14.2	2	%	54 - 141	SW846 8260B	7/28/17 14:31	CJG	8/4/17 02:14	CJG	A
WET CHEMISTRY										
Moisture	16.3		%	0.1	S2540G-11			7/31/17 15:29	AXD	
Total Solids	83.7		%	0.1	S2540G-11			7/31/17 15:29	AXD	

Ms. Amy K Borden

Project Coordinator

ALS Environmental Laboratory Locations Across North AmericaCanada: Burlington - Calgary - Centre of Excellence - Edmonton - Fort McMurray - Fort St. John - Grande Prairie - London - Mississauga - Richmond Hill - Saskatoon - Thunder Bay
Vancouver Waterloo - Winnipeg - Yellowknife United States: Cincinnati - Everett - Fort Collins - Holland - Houston - Middletown - Salt Lake City - Spring City - York Mexico: Monterrey


ALS Environmental


34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010, NY 11759, PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11, MA PA0102, MD 128, VA 460157, WV 343

ANALYTICAL RESULTS

Workorder: 2249898 Blue Bell Sunoco

Lab ID: **2249898010**

Date Collected: 7/28/2017 14:47

Matrix: Solid

Sample ID: **SB17-1**

Date Received: 7/29/2017 12:45

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/kg	36.8	SW846 8260B	7/28/17 14:47	CJG	8/4/17 02:36	CJG	A
Ethylbenzene	ND		ug/kg	36.8	SW846 8260B	7/28/17 14:47	CJG	8/4/17 02:36	CJG	A
Isopropylbenzene	ND		ug/kg	36.8	SW846 8260B	7/28/17 14:47	CJG	8/4/17 02:36	CJG	A
Methyl t-Butyl Ether	ND		ug/kg	36.8	SW846 8260B	7/28/17 14:47	CJG	8/4/17 02:36	CJG	A
Naphthalene	106	1	ug/kg	73.7	SW846 8260B	7/28/17 14:47	CJG	8/4/17 02:36	CJG	A
Toluene	ND		ug/kg	36.8	SW846 8260B	7/28/17 14:47	CJG	8/4/17 02:36	CJG	A
Total Xylenes	ND		ug/kg	111	SW846 8260B	7/28/17 14:47	CJG	8/4/17 02:36	CJG	A
1,2,4-Trimethylbenzene	ND		ug/kg	36.8	SW846 8260B	7/28/17 14:47	CJG	8/4/17 02:36	CJG	A
1,3,5-Trimethylbenzene	ND		ug/kg	36.8	SW846 8260B	7/28/17 14:47	CJG	8/4/17 02:36	CJG	A
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared</i>	<i>By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
1,2-Dichloroethane-d4 (S)	116		%	71 - 146	SW846 8260B	7/28/17 14:47	CJG	8/4/17 02:36	CJG	A
4-Bromofluorobenzene (S)	125		%	46 - 138	SW846 8260B	7/28/17 14:47	CJG	8/4/17 02:36	CJG	A
Dibromofluoromethane (S)	108		%	42 - 143	SW846 8260B	7/28/17 14:47	CJG	8/4/17 02:36	CJG	A
Toluene-d8 (S)	127		%	54 - 141	SW846 8260B	7/28/17 14:47	CJG	8/4/17 02:36	CJG	A
WET CHEMISTRY										
Moisture	9.1		%	0.1	S2540G-11			7/31/17 15:29	AXD	
Total Solids	90.9		%	0.1	S2540G-11			7/31/17 15:29	AXD	

Ms. Amy K Borden
Project Coordinator

ALS Environmental Laboratory Locations Across North America

Canada: Burlington ■ Calgary ■ Centre of Excellence ■ Edmonton ■ Fort McMurray ■ Fort St. John ■ Grande Prairie ■ London ■ Mississauga ■ Richmond Hill ■ Saskatoon ■ Thunder Bay
Vancouver Waterloo ■ Winnipeg ■ Yellowknife United States: Cincinnati ■ Everett ■ Fort Collins ■ Holland ■ Houston ■ Middletown ■ Salt Lake City ■ Spring City ■ York Mexico: Monterrey



ALS Environmental



34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010, NY 11759, PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11, MA PA0102, MD 128, VA 460157, WV 343

ANALYTICAL RESULTS

Workorder: 2249898 Blue Bell Sunoco

Lab ID: **2249898011**

Date Collected: 7/28/2017 15:02

Matrix: Solid

Sample ID: **SB18-1**

Date Received: 7/29/2017 12:45

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/kg	36.8	SW846 8260B	7/28/17 15:02	CJG	8/4/17 02:58	CJG	A
Ethylbenzene	ND		ug/kg	36.8	SW846 8260B	7/28/17 15:02	CJG	8/4/17 02:58	CJG	A
Isopropylbenzene	ND		ug/kg	36.8	SW846 8260B	7/28/17 15:02	CJG	8/4/17 02:58	CJG	A
Methyl t-Butyl Ether	ND		ug/kg	36.8	SW846 8260B	7/28/17 15:02	CJG	8/4/17 02:58	CJG	A
Naphthalene	ND		ug/kg	73.7	SW846 8260B	7/28/17 15:02	CJG	8/4/17 02:58	CJG	A
Toluene	ND		ug/kg	36.8	SW846 8260B	7/28/17 15:02	CJG	8/4/17 02:58	CJG	A
Total Xylenes	ND		ug/kg	110	SW846 8260B	7/28/17 15:02	CJG	8/4/17 02:58	CJG	A
1,2,4-Trimethylbenzene	ND		ug/kg	36.8	SW846 8260B	7/28/17 15:02	CJG	8/4/17 02:58	CJG	A
1,3,5-Trimethylbenzene	ND		ug/kg	36.8	SW846 8260B	7/28/17 15:02	CJG	8/4/17 02:58	CJG	A
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared</i>	<i>By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
1,2-Dichloroethane-d4 (S)	102		%	71 - 146	SW846 8260B	7/28/17 15:02	CJG	8/4/17 02:58	CJG	A
4-Bromofluorobenzene (S)	112		%	46 - 138	SW846 8260B	7/28/17 15:02	CJG	8/4/17 02:58	CJG	A
Dibromofluoromethane (S)	95.8		%	42 - 143	SW846 8260B	7/28/17 15:02	CJG	8/4/17 02:58	CJG	A
Toluene-d8 (S)	114		%	54 - 141	SW846 8260B	7/28/17 15:02	CJG	8/4/17 02:58	CJG	A
WET CHEMISTRY										
Moisture	10.2		%	0.1	S2540G-11			7/31/17 15:29	AXD	
Total Solids	89.8		%	0.1	S2540G-11			7/31/17 15:29	AXD	

Amy K Borden

Ms. Amy K Borden
Project Coordinator

ALS Environmental Laboratory Locations Across North America

Canada: Burlington · Calgary · Centre of Excellence · Edmonton · Fort McMurray · Fort St. John · Grande Prairie · London · Mississauga · Richmond Hill · Saskatoon · Thunder Bay
Vancouver · Waterloo · Winnipeg · Yellowknife United States: Cincinnati · Everett · Fort Collins · Holland · Houston · Middletown · Salt Lake City · Spring City · York Mexico: Monterrey



ALS Environmental



34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010, NY 11759, PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11, MA PA0102, MD 128, VA 460157, WV 343

ANALYTICAL RESULTS

Workorder: 2249898 Blue Bell Sunoco

Lab ID: **2249898012**
Sample ID: **SB19-1**

Date Collected: 7/28/2017 15:23 Matrix: ~ Solid
Date Received: 7/29/2017 12:45

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/kg	40.8	SW846 8260B	7/28/17 15:23	CJG	8/4/17 03:20	CJG	A
Ethylbenzene	ND		ug/kg	40.8	SW846 8260B	7/28/17 15:23	CJG	8/4/17 03:20	CJG	A
Isopropylbenzene	ND		ug/kg	40.8	SW846 8260B	7/28/17 15:23	CJG	8/4/17 03:20	CJG	A
Methyl t-Butyl Ether	ND		ug/kg	40.8	SW846 8260B	7/28/17 15:23	CJG	8/4/17 03:20	CJG	A
Naphthalene	ND		ug/kg	81.7	SW846 8260B	7/28/17 15:23	CJG	8/4/17 03:20	CJG	A
Toluene	ND		ug/kg	40.8	SW846 8260B	7/28/17 15:23	CJG	8/4/17 03:20	CJG	A
Total Xylenes	ND		ug/kg	123	SW846 8260B	7/28/17 15:23	CJG	8/4/17 03:20	CJG	A
1,2,4-Trimethylbenzene	ND		ug/kg	40.8	SW846 8260B	7/28/17 15:23	CJG	8/4/17 03:20	CJG	A
1,3,5-Trimethylbenzene	ND		ug/kg	40.8	SW846 8260B	7/28/17 15:23	CJG	8/4/17 03:20	CJG	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	99.9		%	71 - 146	SW846 8260B	7/28/17 15:23	CJG	8/4/17 03:20	CJG	A
4-Bromofluorobenzene (S)	107		%	46 - 138	SW846 8260B	7/28/17 15:23	CJG	8/4/17 03:20	CJG	A
Dibromofluoromethane (S)	91.1		%	42 - 143	SW846 8260B	7/28/17 15:23	CJG	8/4/17 03:20	CJG	A
Toluene-d8 (S)	110		%	54 - 141	SW846 8260B	7/28/17 15:23	CJG	8/4/17 03:20	CJG	A
WET CHEMISTRY										
Moisture	12.4		%	0.1	S2540G-11			7/31/17 15:29	AXD	
Total Solids	87.6		%	0.1	S2540G-11			7/31/17 15:29	AXD	

Amy K Borden

Ms. Amy K Borden
Project Coordinator

ALS Environmental Laboratory Locations Across North America

Canada: Burlington · Calgary · Centre of Excellence · Edmonton · Fort McMurray · Fort St. John · Grande Prairie · London · Mississauga · Richmond Hill · Saskatoon · Thunder Bay
Vancouver · Waterloo · Winnipeg · Yellowknife United States: Cincinnati · Everett · Fort Collins · Holland · Houston · Middletown · Salt Lake City · Spring City · York Mexico: Monterrey


ALS Environmental


34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010, NY 11759, PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11, MA PA0102, MD 128, VA 460157, WV 343

ANALYTICAL RESULTS

Workorder: 2249898 Blue Bell Sunoco

Lab ID: **2249898013**
Sample ID: **SB20-1**

Date Collected: 7/28/2017 15:39 Matrix: ~ Solid
Date Received: 7/29/2017 12:45

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/kg	34.1	SW846 8260B	7/28/17 15:39	CJG	8/4/17 03:42	CJG	A
Ethylbenzene	ND		ug/kg	34.1	SW846 8260B	7/28/17 15:39	CJG	8/4/17 03:42	CJG	A
Isopropylbenzene	ND		ug/kg	34.1	SW846 8260B	7/28/17 15:39	CJG	8/4/17 03:42	CJG	A
Methyl t-Butyl Ether	ND		ug/kg	34.1	SW846 8260B	7/28/17 15:39	CJG	8/4/17 03:42	CJG	A
Naphthalene	ND		ug/kg	68.1	SW846 8260B	7/28/17 15:39	CJG	8/4/17 03:42	CJG	A
Toluene	ND		ug/kg	34.1	SW846 8260B	7/28/17 15:39	CJG	8/4/17 03:42	CJG	A
Total Xylenes	ND		ug/kg	102	SW846 8260B	7/28/17 15:39	CJG	8/4/17 03:42	CJG	A
1,2,4-Trimethylbenzene	ND		ug/kg	34.1	SW846 8260B	7/28/17 15:39	CJG	8/4/17 03:42	CJG	A
1,3,5-Trimethylbenzene	ND		ug/kg	34.1	SW846 8260B	7/28/17 15:39	CJG	8/4/17 03:42	CJG	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	104		%	71 - 146	SW846 8260B	7/28/17 15:39	CJG	8/4/17 03:42	CJG	A
4-Bromofluorobenzene (S)	114		%	46 - 138	SW846 8260B	7/28/17 15:39	CJG	8/4/17 03:42	CJG	A
Dibromofluoromethane (S)	95.5		%	42 - 143	SW846 8260B	7/28/17 15:39	CJG	8/4/17 03:42	CJG	A
Toluene-d8 (S)	115		%	54 - 141	SW846 8260B	7/28/17 15:39	CJG	8/4/17 03:42	CJG	A
WET CHEMISTRY										
Moisture	11.6		%	0.1	S2540G-11			7/31/17 15:29	AXD	
Total Solids	88.4		%	0.1	S2540G-11			7/31/17 15:29	AXD	

Ms. Amy K Borden
Project Coordinator

ALS Environmental Laboratory Locations Across North America

Canada: Burlington · Calgary · Centre of Excellence · Edmonton · Fort McMurray · Fort St. John · Grande Prairie · London · Mississauga · Richmond Hill · Saskatoon · Thunder Bay
Vancouver Waterloo · Winnipeg · Yellowknife United States: Cincinnati · Everett · Fort Collins · Holland · Houston · Middletown · Salt Lake City · Spring City · York Mexico: Monterrey



ANALYTICAL RESULTS

Workorder: 2249898 Blue Bell Sunoco

Lab ID: 2249898014

Date Collected: 7/28/2017 14:12

Matrix: Water

Sample ID: SB12W

Date Received: 7/29/2017 12:45

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	1.6		ug/L	1.0	SW846 8260B			8/2/17 04:12	CJG	A
Ethylbenzene	ND		ug/L	1.0	SW846 8260B			8/2/17 04:12	CJG	A
Isopropylbenzene	2.1		ug/L	1.0	SW846 8260B			8/2/17 04:12	CJG	A
Methyl t-Butyl Ether	4.4		ug/L	1.0	SW846 8260B			8/2/17 04:12	CJG	A
Naphthalene	ND		ug/L	2.0	SW846 8260B			8/2/17 04:12	CJG	A
Toluene	ND		ug/L	1.0	SW846 8260B			8/2/17 04:12	CJG	A
Total Xylenes	ND		ug/L	3.0	SW846 8260B			8/2/17 04:12	CJG	A
1,2,4-Trimethylbenzene	ND		ug/L	1.0	SW846 8260B			8/2/17 04:12	CJG	A
1,3,5-Trimethylbenzene	ND		ug/L	1.0	SW846 8260B			8/2/17 04:12	CJG	A
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared</i>	<i>By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
1,2-Dichloroethane-d4 (S)	119		%	62 - 133	SW846 8260B			8/2/17 04:12	CJG	A
4-Bromofluorobenzene (S)	108		%	79 - 114	SW846 8260B			8/2/17 04:12	CJG	A
Dibromofluoromethane (S)	112		%	78 - 116	SW846 8260B			8/2/17 04:12	CJG	A
Toluene-d8 (S)	107		%	76 - 127	SW846 8260B			8/2/17 04:12	CJG	A



Ms. Amy K Borden
Project Coordinator

ALS Environmental Laboratory Locations Across North America

Canada: Burlington · Calgary · Centre of Excellence · Edmonton · Fort McMurray · Fort St. John · Grande Prairie · London · Mississauga · Richmond Hill · Saskatoon · Thunder Bay
Vancouver Waterloo · Winnipeg · Yellowknife United States: Cincinnati · Everett · Fort Collins · Holland · Houston · Middletown · Salt Lake City · Spring City · York Mexico: Monterrey

**ALS Environmental**

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010, NY 11759, PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11, MA PA0102, MD 128, VA 460157, WV 343**ANALYTICAL RESULTS**

Workorder: 2249898 Blue Bell Sunoco

Lab ID: 2249898015

Date Collected: 7/28/2017 15:19

Matrix: ~ Water

Sample ID: SB16W

Date Received: 7/29/2017 12:45

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	1.0	SW846 8260B			8/2/17 04:34	CJG	A
Ethylbenzene	ND		ug/L	1.0	SW846 8260B			8/2/17 04:34	CJG	A
Isopropylbenzene	ND		ug/L	1.0	SW846 8260B			8/2/17 04:34	CJG	A
Methyl t-Butyl Ether	ND		ug/L	1.0	SW846 8260B			8/2/17 04:34	CJG	A
Naphthalene	ND		ug/L	2.0	SW846 8260B			8/2/17 04:34	CJG	A
Toluene	ND		ug/L	1.0	SW846 8260B			8/2/17 04:34	CJG	A
Total Xylenes	ND		ug/L	3.0	SW846 8260B			8/2/17 04:34	CJG	A
1,2,4-Trimethylbenzene	ND		ug/L	1.0	SW846 8260B			8/2/17 04:34	CJG	A
1,3,5-Trimethylbenzene	ND		ug/L	1.0	SW846 8260B			8/2/17 04:34	CJG	A
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared</i>	<i>By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
1,2-Dichloroethane-d4 (S)	113		%	62 - 133	SW846 8260B			8/2/17 04:34	CJG	A
4-Bromofluorobenzene (S)	100		%	79 - 114	SW846 8260B			8/2/17 04:34	CJG	A
Dibromofluoromethane (S)	105		%	78 - 116	SW846 8260B			8/2/17 04:34	CJG	A
Toluene-d8 (S)	102		%	76 - 127	SW846 8260B			8/2/17 04:34	CJG	A

Ms. Amy K Borden

Project Coordinator

ALS Environmental Laboratory Locations Across North AmericaCanada: Burlington · Calgary · Centre of Excellence · Edmonton · Fort McMurray · Fort St. John · Grande Prairie · London · Mississauga · Richmond Hill · Saskatoon · Thunder Bay
Vancouver Waterloo · Winnipeg · Yellowknife United States: Cincinnati · Everett · Fort Collins · Holland · Houston · Middletown · Salt Lake City · Spring City · York Mexico: Monterrey



ALS Environmental



34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010, NY 11759, PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11, MA PA0102, MD 128, VA 460157, WV 343

ANALYTICAL RESULTS

Workorder: 2249898 Blue Bell Sunoco

Lab ID: **2249898016**

Date Collected: 7/28/2017 11:02

Matrix: Water

Sample ID: **FB**

Date Received: 7/29/2017 12:45

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	1.0	SW846 8260B			8/1/17 22:54	CJG	A
Ethylbenzene	ND		ug/L	1.0	SW846 8260B			8/1/17 22:54	CJG	A
Isopropylbenzene	ND		ug/L	1.0	SW846 8260B			8/1/17 22:54	CJG	A
Methyl t-Butyl Ether	ND		ug/L	1.0	SW846 8260B			8/1/17 22:54	CJG	A
Naphthalene	ND		ug/L	2.0	SW846 8260B			8/1/17 22:54	CJG	A
Toluene	ND		ug/L	1.0	SW846 8260B			8/1/17 22:54	CJG	A
Total Xylenes	ND		ug/L	3.0	SW846 8260B			8/1/17 22:54	CJG	A
1,2,4-Trimethylbenzene	ND		ug/L	1.0	SW846 8260B			8/1/17 22:54	CJG	A
1,3,5-Trimethylbenzene	ND		ug/L	1.0	SW846 8260B			8/1/17 22:54	CJG	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	114		%	62 - 133	SW846 8260B			8/1/17 22:54	CJG	A
4-Bromofluorobenzene (S)	102		%	79 - 114	SW846 8260B			8/1/17 22:54	CJG	A
Dibromofluoromethane (S)	106		%	78 - 116	SW846 8260B			8/1/17 22:54	CJG	A
Toluene-d8 (S)	102		%	76 - 127	SW846 8260B			8/1/17 22:54	CJG	A

Amy K Borden

Ms. Amy K Borden
Project Coordinator

ALS Environmental Laboratory Locations Across North America

Canada: Burlington · Calgary · Centre of Excellence · Edmonton · Fort McMurray · Fort St. John · Grande Prairie · London · Mississauga · Richmond Hill · Saskatoon · Thunder Bay
Vancouver Waterloo · Winnipeg · Yellowknife United States: Cincinnati · Everett · Fort Collins · Holland · Houston · Middletown · Salt Lake City · Spring City · York Mexico: Monterrey

**ALS Environmental**

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010, NY 11759, PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11, MA PA0102, MD 128, VA 460157, WV 343**ANALYTICAL RESULTS**

Workorder: 2249898 Blue Bell Sunoco

Lab ID: 2249898017

Date Collected: 7/28/2017 00:00

Matrix: Water

Sample ID: Trip Blank

Date Received: 7/29/2017 12:45

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/L	1.0	SW846 8260B			8/1/17 23:17	CJG	A
Ethylbenzene	ND		ug/L	1.0	SW846 8260B			8/1/17 23:17	CJG	A
Isopropylbenzene	ND		ug/L	1.0	SW846 8260B			8/1/17 23:17	CJG	A
Methyl t-Butyl Ether	ND		ug/L	1.0	SW846 8260B			8/1/17 23:17	CJG	A
Naphthalene	ND		ug/L	2.0	SW846 8260B			8/1/17 23:17	CJG	A
Toluene	ND		ug/L	1.0	SW846 8260B			8/1/17 23:17	CJG	A
Total Xylenes	ND		ug/L	3.0	SW846 8260B			8/1/17 23:17	CJG	A
1,2,4-Trimethylbenzene	ND		ug/L	1.0	SW846 8260B			8/1/17 23:17	CJG	A
1,3,5-Trimethylbenzene	ND		ug/L	1.0	SW846 8260B			8/1/17 23:17	CJG	A
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared</i>	<i>By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
1,2-Dichloroethane-d4 (S)	112		%	62 - 133	SW846 8260B			8/1/17 23:17	CJG	A
4-Bromofluorobenzene (S)	101		%	79 - 114	SW846 8260B			8/1/17 23:17	CJG	A
Dibromofluoromethane (S)	104		%	78 - 116	SW846 8260B			8/1/17 23:17	CJG	A
Toluene-d8 (S)	102		%	76 - 127	SW846 8260B			8/1/17 23:17	CJG	A

Ms. Amy K Borden

Project Coordinator

ALS Environmental Laboratory Locations Across North AmericaCanada: Burlington · Calgary · Centre of Excellence · Edmonton · Fort McMurray · Fort St. John · Grande Prairie · London · Mississauga · Richmond Hill · Saskatoon · Thunder Bay
Vancouver Waterloo · Winnipeg · Yellowknife United States: Cincinnati · Everett · Fort Collins · Holland · Houston · Middletown · Salt Lake City · Spring City · York Mexico: Monterrey

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
2249898002	1	SB11-2	SW846 8260B	Naphthalene
The QC sample type LCS for method SW846 8260B was outside the control limits for the analyte Naphthalene. The % Recovery was reported as 236 and the control limits were 46 to 142.				
2249898004	1	SB13-1	SW846 8260B	1,2-Dichloroethane-d4
The surrogate 1,2-Dichloroethane-d4 for method SW846 8260B was outside of control limits. The % Recovery was reported as 331 and the control limits were 71 to 146. This result was reported at a dilution of 500.				
2249898004	2	SB13-1	SW846 8260B	Toluene-d8
The surrogate Toluene-d8 for method SW846 8260B was outside of control limits. The % Recovery was reported as 16.3 and the control limits were 54 to 141. This result was reported at a dilution of 500.				
2249898004	3	SB13-1	SW846 8260B	Naphthalene
The QC sample type LCS for method SW846 8260B was outside the control limits for the analyte Naphthalene. The % Recovery was reported as 236 and the control limits were 46 to 142.				
2249898005	3	SB13-2	SW846 8260B	1,2-Dichloroethane-d4
The surrogate 1,2-Dichloroethane-d4 for method SW846 8260B was outside of control limits. The % Recovery was reported as 63.6 and the control limits were 71 to 146. This result was reported at a dilution of 50.				
2249898005	1	SB14-2	SW846 8260B	Naphthalene
The QC sample type LCS for method SW846 8260B was outside the control limits for the analyte Naphthalene. The % Recovery was reported as 236 and the control limits were 46 to 142.				
2249898007	1	SB15-1	SW846 8260B	Naphthalene
The QC sample type LCS for method SW846 8260B was outside the control limits for the analyte Naphthalene. The % Recovery was reported as 236 and the control limits were 46 to 142.				
2249898009	1	SB16-1	SW846 8260B	1,2-Dichloroethane-d4
The surrogate 1,2-Dichloroethane-d4 for method SW846 8260B was outside of control limits. The % Recovery was reported as 151 and the control limits were 71 to 146. This result was reported at a dilution of 500.				
2249898009	2	SB16-1	SW846 8260B	Toluene-d8
The surrogate Toluene-d8 for method SW846 8260B was outside of control limits. The % Recovery was reported as 14.2 and the control limits were 54 to 141. This result was reported at a dilution of 500.				
2249898009	3	SB16-1	SW846 8260B	Naphthalene
The QC sample type LCS for method SW846 8260B was outside the control limits for the analyte Naphthalene. The % Recovery was reported as 236 and the control limits were 46 to 142.				
2249898010	1	SB17-1	SW846 8260B	Naphthalene
The QC sample type LCS for method SW846 8260B was outside the control limits for the analyte Naphthalene. The % Recovery was reported as 236 and the control limits were 46 to 142.				

ALS Environmental Laboratory Locations Across North America

Canada: Burlington · Calgary · Centre of Excellence · Edmonton · Fort McMurray · Fort St. John · Grande Prairie · London · Mississauga · Richmond Hill · Saskatoon · Thunder Bay
Vancouver Waterloo · Winnipeg · Yellowknife United States: Cincinnati · Everett · Fort Collins · Holland · Houston · Middletown · Salt Lake City · Spring City · York Mexico: Monterrey



34 Dogwood Lane
Middletown, PA 17057
P. 717-944-5541
F. 717-944-1430

Environmental

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADDED AREAS MUST BE COMPLETED BY THE CLIENT /
SAMPLER. INSTRUCTIONS ON THE BACK.

Page **2** of **3**

Courier:

Tracking #:

COC#

Co. Name: **JPI Associates Inc**

Contact (Phone):

Address:

Phone: **856.456.6500**

Container Type: **CG AG**

Container Size: **100ml 250ml**

Preservative: **NA**

Bill to (if different than Report to):

PO#:

Project Name/ID:

ALS Quote #:

TAT: ☐ Normal Standard TAT is 10-12 business days.
☐ Rush-Subject to ALS approval and surcharges.

Email? ☐ Y ☐ N

Fax? ☐ Y ☐ N

Sample Description/Location
(see back page for the lab report)

COC Comments

Sample Date

Matrix

Enter Number of Containers Per Analysis

1 Trip blank
2 Field blank water - Aspaliz
3
4
5
6
7
8

Field blank
Trip blank

Receipt Information
(Required by State Regulation)
Received by: ☐ Initials: ☐ Date: ☐
Cooler Temp: ☐
Therm ID: **352**
No. of Coolers: ☐
Notes: ☐

Circle appropriate Y or N.

Correct container?	Y	N
Correct sample volume?	Y	N
Correct preservation?	Y	N
Headspace/Leakage?	Y	N
COC Labels completed/accurate?	Y	N
Received on location?	Y	N
(If present) Seals intact?	Y	N
Custody seals Present?	Y	N
Container in good condition?	Y	N

ALS FIELD SERVICES

Setup	☐
Labor	☐
Composite Sampling	☐
Rental Equipment	☐
Other:	☐

SAMPLED BY (Please Print):

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1			2		
3			4		
5			6		
7			8		
9			10		

Project Comments:

DATA DELIVERABLES

Standard ☐ OLP-100 ☐ IN-Reduced ☐ NJ-Full ☐ Other ☐

Site Samples Collected in? ☐ MD ☐ NJ ☐ NY ☐ PA ☐

Form/To ☐ Form ☐ Other ☐

DOO Criteria Required? ☐

* Q-Grate; C-Composite
** Solid: Acid; D-Drinking Water; GW-Groundwater; G-Gravel; O-Other Liquids; SL-Sludge; SO-Soil; WP-Water; W-Water/Wastewater
*** Container Type: AG-Ambur Glass; CG-Clear Glass; PL-Plastic. Container Size: 250ml, 500ml, 1L, 5oz., etc. Phase/Vial: NC, HNO₃, NaOH, etc.

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY

Rev 01-2013

This page left blank.