

SUMMARY OF RECLAMATION YARD INSPECTION

Week No.:

1

Inspection Date:

September 29, 2016

Logical Environmental Solutions, LLC (LES) visited the Reclamation Yard operated by Julian Enterprises located at the end of Richard White Way in Fairfield for the initial weekly inspection on September 29, 2016. The site operations were noted, photographs were taken, and three baseline samples (S-1 to S-3) of possibly impacted soil were collected for analyses of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), petroleum hydrocarbons, and leachable DEEP 15 metals. One selected soil sample (S-1) was also analyzed for pesticides, polychlorinated biphenyls (PCBs), and herbicides. The soil sample locations were selected based upon visual observations, color, odor, and field screening using a photoionization detector (PID). The soil throughout the pile contained varying amounts of asphalt, concrete, gravel, organics, and miscellaneous building debris associated with roadway projects and construction sites. Obvious signs of contamination such as strong odors, elevated PID readings or staining were not observed on the reclamation pile.

The table on the following page summarizes the results of the baseline soil samples and the attached figure depicts the sample locations. As the table indicates, low to moderate concentrations of petroleum hydrocarbons and SVOCs were detected in the samples. The petroleum hydrocarbon and SVOCs detected at elevated concentrations exceeding the Connecticut Department of Energy and Environmental Protection (CTDEEP) Remediation Standard Regulation Criteria are commonly associated with asphalt, which was present in varying amounts in the soil throughout the site. The soil samples did not contain detectable concentrations of VOCs, PCBs, pesticides, and herbicides, and leachable metals were not detected at concentrations greater than typical background levels.

Additional soil samples will be collected throughout the duration of Julian's occupation of the site until December 15, 2016. Please let me know if you should have any questions.



Cindy Knight, LEP

Logical Environmental Solutions, LLC

Office: 860-870-1780

Mobile: 860-402-7069

Email: ck@logicalenvironmental.com

**Soil Samples Collected September 29, 2016
Reclamation Yard – Fairfield, Connecticut**

Sample I.D.:	S-1	S-2	S-3	CTDEEP PMC GB Groundwater Area	CTDEEP DEC Residential/Commercial & Industrial
CT ETPH - (mg/kg)	< 290	610	440	2,500 mg/kg	500 /2,500 mg/kg
VOCs - Method 8260 (mg/kg)	ND	ND	ND	--	--
SVOCs - Method 8270 (mg/kg)					
Acenaphthylene	< 0.27	0.3	0.45	84 mg/kg	1,000/2,500 mg/kg
Anthracene	< 0.27	0.49	0.37	400 mg/kg	1,000/2,500 mg/kg
Benzo(a)anthracene	0.95	1.7	1.3	1 mg/kg	1/7.8 mg/kg
Benzo(a)pyrene	1.0	1.9	1.7	1 mg/kg	1/1 mg/kg
Benzo(b)fluoranthene	1.1	2.2	2.0	1 mg/kg	1/7.8 mg/kg
Benzo(g,h,i)perylene	0.72	1.2	1.1	1 mg/kg (APS)	8.4/78 mg/kg (APS)
Benzo(k)fluoranthene	0.91	1.3	0.98	1 mg/kg	8.4/78 mg/kg
Bis(2-ethylhexyl)phthalate	5.1	< 0.26	< 0.25	11 mg/kg	44/410 mg/kg
Chrysene	1.3	2.0	1.6	1 mg/kg (APS)	84/780 mg/kg (APS)
Fluoranthene	2.1	3.3	2.2	56 mg/kg	1,000/2,500 mg/kg
Indeno(1,2,3-cd)pyrene	0.76	1.3	1.2	1 mg/kg (APS)	1/7.8 mg/kg (APS)
Phenanthrene	1.1	1.8	1.0	40 mg/kg	1,000/2,500 mg/kg
Pyrene	1.9	2.9	2.1	40 mg/kg	1,000/2,500 mg/kg
All other SVOCs Tested	ND	ND	ND	--	--
PCBs – Method 8082 (mg/kg)	< 0.39	< 0.37	< 0.35	Not Applicable	1/10 mg/kg
Pesticides - Method 8081 (mg/kg)	ND	NA	NA	--	--
Herbicides – Method 8151 (mg/kg)	ND	NA	NA	--	--
TCLP DEEP 15 Metals (mg/L)				Not Applicable	
Barium	0.31	0.36	0.29		4,700/140,000 mg/kg
Nickel	< 0.1	< 0.1	0.1		1.0 mg/L
Zinc	0.55	0.22	< 0.1		50 mg/L

ND – Not Detected above laboratory detection limits.

NA – Not Analyzed for this procedure.

PMC – Pollutant Mobility Criteria

DEC – Direct Exposure Criteria

APS – Additional Polluting Substance

The compounds listed above are those that were detected - please see laboratory reports for full lists of compounds and their specific detection limits.



Wednesday, October 05, 2016

Attn: Ms. Cindy Knight
Logical Environmental Solutions
354 South River Road
Tolland CT 06084

Project ID: FAIRFIELD TOWN RECLAMATION YARD
Sample ID#s: BV31664 - BV31666

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

A handwritten signature in black ink that reads "Phyllis Shiller". The signature is written in a cursive style.

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
 Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

October 05, 2016

FOR: Attn: Ms. Cindy Knight
 Logical Environmental Solutions
 354 South River Road
 Tolland CT 06084

Sample Information

Matrix: SOLID
 Location Code: LOGIC-DAS
 Rush Request: Standard
 P.O.#:

Custody Information

Collected by: CK
 Received by: SW
 Analyzed by: see "By" below

Date

09/29/16
 09/29/16

Time

8:20
 12:48

Laboratory Data

SDG ID: GBV31664
 Phoenix ID: BV31664

Project ID: FAIRFIELD TOWN RECLAMATION YARD
 Client ID: S-1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
TCLP Silver	< 0.10	0.10	mg/L	1	10/02/16	LK	SW6010C
TCLP Arsenic	< 0.10	0.10	mg/L	1	10/02/16	LK	SW6010C
TCLP Barium	0.31	0.10	mg/L	1	10/02/16	LK	SW6010C
TCLP Beryllium	< 0.040	0.040	mg/L	1	10/02/16	LK	SW6010C
TCLP Cadmium	< 0.050	0.050	mg/L	1	10/02/16	LK	SW6010C
TCLP Chromium	< 0.10	0.10	mg/L	1	10/02/16	LK	SW6010C
TCLP Copper	< 0.10	0.10	mg/L	1	10/03/16	LK	SW6010C
TCLP Mercury	< 0.0002	0.0002	mg/L	1	09/30/16	MA	SW7470A
TCLP Nickel	< 0.10	0.10	mg/L	1	10/02/16	LK	SW6010C
TCLP Lead	< 0.10	0.10	mg/L	1	10/02/16	LK	SW6010C
TCLP Antimony	< 0.060	0.060	mg/L	1	10/02/16	LK	SW6010C
TCLP Selenium	< 0.10	0.10	mg/L	1	10/02/16	LK	SW6010C
TCLP Thallium	< 0.050	0.050	mg/L	1	10/02/16	LK	SW6010C
TCLP Vanadium	< 0.10	0.10	mg/L	1	10/02/16	LK	SW6010C
TCLP Zinc	0.55	0.10	mg/L	1	10/03/16	LK	SW6010C
TCLP Metals Digestion	Completed				09/30/16	W/W	SW3005A
Percent Solid	86		%		09/29/16	W	SW846-%Solid
Soil Extraction for PCB	Completed				09/29/16	JJ/V	SW3545A
Soil Extraction for Pesticide	Completed				09/29/16	JJ/V	SW3545A
Soil Extraction for SVOA	Completed				09/29/16	JJ/CKV	SW3545A
Extraction of CT ETPH	Completed				09/29/16	GJ/CKV	SW3545A
Soil Extraction for Herbicide	Completed				09/29/16	G/Q/D	SW8151A
TCLP Digestion Mercury	Completed				09/30/16	W/W	SW7470A
TCLP Extraction for Metals	Completed				09/29/16	W	SW1311
Field Extraction	Completed				09/29/16		SW5035A

Chlorinated Herbicides

2,4,5-T ND 97 ug/Kg 10 09/30/16 CE SW8151A

Client ID: S-1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4,5-TP (Silvex)	ND	97	ug/Kg	10	09/30/16	CE	SW8151A
2,4-D	ND	190	ug/Kg	10	09/30/16	CE	SW8151A
2,4-DB	ND	1900	ug/Kg	10	09/30/16	CE	SW8151A
Dalapon	ND	97	ug/Kg	10	09/30/16	CE	SW8151A
Dicamba	ND	97	ug/Kg	10	09/30/16	CE	SW8151A
Dichloroprop	ND	190	ug/Kg	10	09/30/16	CE	SW8151A
Dinoseb	ND	190	ug/Kg	10	09/30/16	CE	SW8151A
<u>QA/QC Surrogates</u>							
% DCAA	78		%	10	09/30/16	CE	30 - 150 %
<u>TPH by GC (Extractable Products)</u>							
Ext. Petroleum HC	ND	290	mg/Kg	5	09/30/16	JRB	CTETPH 8015D
Identification	ND		mg/Kg	5	09/30/16	JRB	CTETPH 8015D
<u>QA/QC Surrogates</u>							
% n-Pentacosane	95		%	5	09/30/16	JRB	50 - 150 %
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	390	ug/Kg	10	09/30/16	AW	SW8082A
PCB-1221	ND	390	ug/Kg	10	09/30/16	AW	SW8082A
PCB-1232	ND	390	ug/Kg	10	09/30/16	AW	SW8082A
PCB-1242	ND	390	ug/Kg	10	09/30/16	AW	SW8082A
PCB-1248	ND	390	ug/Kg	10	09/30/16	AW	SW8082A
PCB-1254	ND	390	ug/Kg	10	09/30/16	AW	SW8082A
PCB-1260	ND	390	ug/Kg	10	09/30/16	AW	SW8082A
PCB-1262	ND	390	ug/Kg	10	09/30/16	AW	SW8082A
PCB-1268	ND	390	ug/Kg	10	09/30/16	AW	SW8082A
<u>QA/QC Surrogates</u>							
% DCBP	90		%	10	09/30/16	AW	30 - 150 %
% TCMX	78		%	10	09/30/16	AW	30 - 150 %
<u>Pesticides</u>							
4,4' -DDD	ND	7.7	ug/Kg	2	09/30/16	CE	SW8081B
4,4' -DDE	ND	7.7	ug/Kg	2	09/30/16	CE	SW8081B
4,4' -DDT	ND	7.7	ug/Kg	2	09/30/16	CE	SW8081B
a-BHC	ND	7.7	ug/Kg	2	09/30/16	CE	SW8081B
Alachlor	ND	7.7	ug/Kg	2	09/30/16	CE	SW8081B
Aldrin	ND	3.9	ug/Kg	2	09/30/16	CE	SW8081B
b-BHC	ND	7.7	ug/Kg	2	09/30/16	CE	SW8081B
Chlordane	ND	39	ug/Kg	2	09/30/16	CE	SW8081B
d-BHC	ND	7.7	ug/Kg	2	09/30/16	CE	SW8081B
Dieldrin	ND	3.9	ug/Kg	2	09/30/16	CE	SW8081B
Endosulfan I	ND	7.7	ug/Kg	2	09/30/16	CE	SW8081B
Endosulfan II	ND	7.7	ug/Kg	2	09/30/16	CE	SW8081B
Endosulfan sulfate	ND	7.7	ug/Kg	2	09/30/16	CE	SW8081B
Endrin	ND	7.7	ug/Kg	2	09/30/16	CE	SW8081B
Endrin aldehyde	ND	7.7	ug/Kg	2	09/30/16	CE	SW8081B
Endrin ketone	ND	7.7	ug/Kg	2	09/30/16	CE	SW8081B
g-BHC	ND	6.0	ug/Kg	2	09/30/16	CE	SW8081B
Heptachlor	ND	7.7	ug/Kg	2	09/30/16	CE	SW8081B
Heptachlor epoxide	ND	7.7	ug/Kg	2	09/30/16	CE	SW8081B

Client ID: S-1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Methoxychlor	ND	39	ug/Kg	2	09/30/16	CE	SW8081B
Toxaphene	ND	150	ug/Kg	2	09/30/16	CE	SW8081B
<u>QA/QC Surrogates</u>							
% DCBP	79		%	2	09/30/16	CE	30 - 150 %
% TCMX	69		%	2	09/30/16	CE	30 - 150 %
<u>Volatiles</u>							
1,1,1,2-Tetrachloroethane	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	2.8	ug/Kg	1	09/30/16	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
1,1-Dichloroethane	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
1,1-Dichloroethene	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
1,1-Dichloropropene	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	320	ug/Kg	50	10/01/16	JLI	SW8260C
1,2,3-Trichloropropane	ND	320	ug/Kg	50	10/01/16	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	320	ug/Kg	50	10/01/16	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	320	ug/Kg	50	10/01/16	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	320	ug/Kg	50	10/01/16	JLI	SW8260C
1,2-Dibromoethane	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
1,2-Dichlorobenzene	ND	320	ug/Kg	50	10/01/16	JLI	SW8260C
1,2-Dichloroethane	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
1,2-Dichloropropane	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	320	ug/Kg	50	10/01/16	JLI	SW8260C
1,3-Dichlorobenzene	ND	320	ug/Kg	50	10/01/16	JLI	SW8260C
1,3-Dichloropropane	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
1,4-Dichlorobenzene	ND	320	ug/Kg	50	10/01/16	JLI	SW8260C
2,2-Dichloropropane	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
2-Chlorotoluene	ND	320	ug/Kg	50	10/01/16	JLI	SW8260C
2-Hexanone	ND	23	ug/Kg	1	09/30/16	JLI	SW8260C
2-Isopropyltoluene	ND	320	ug/Kg	50	10/01/16	JLI	SW8260C
4-Chlorotoluene	ND	320	ug/Kg	50	10/01/16	JLI	SW8260C
4-Methyl-2-pentanone	ND	23	ug/Kg	1	09/30/16	JLI	SW8260C
Acetone	ND	230	ug/Kg	1	09/30/16	JLI	SW8260C
Acrylonitrile	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
Benzene	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
Bromobenzene	ND	320	ug/Kg	50	10/01/16	JLI	SW8260C
Bromochloromethane	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
Bromodichloromethane	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
Bromoform	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
Bromomethane	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
Carbon Disulfide	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
Carbon tetrachloride	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
Chlorobenzene	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
Chloroethane	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
Chloroform	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
Chloromethane	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
Dibromochloromethane	ND	2.8	ug/Kg	1	09/30/16	JLI	SW8260C

Client ID: S-1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Dibromomethane	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
Dichlorodifluoromethane	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
Ethylbenzene	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
Hexachlorobutadiene	ND	320	ug/Kg	50	10/01/16	JLI	SW8260C
Isopropylbenzene	ND	320	ug/Kg	50	10/01/16	JLI	SW8260C
m&p-Xylene	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
Methyl Ethyl Ketone	ND	28	ug/Kg	1	09/30/16	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	9.3	ug/Kg	1	09/30/16	JLI	SW8260C
Methylene chloride	ND	9.3	ug/Kg	1	09/30/16	JLI	SW8260C
Naphthalene	ND	320	ug/Kg	50	10/01/16	JLI	SW8260C
n-Butylbenzene	ND	320	ug/Kg	50	10/01/16	JLI	SW8260C
n-Propylbenzene	ND	320	ug/Kg	50	10/01/16	JLI	SW8260C
o-Xylene	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
p-Isopropyltoluene	ND	320	ug/Kg	50	10/01/16	JLI	SW8260C
sec-Butylbenzene	ND	320	ug/Kg	50	10/01/16	JLI	SW8260C
Styrene	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
tert-Butylbenzene	ND	320	ug/Kg	50	10/01/16	JLI	SW8260C
Tetrachloroethene	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
Tetrahydrofuran (THF)	ND	9.3	ug/Kg	1	09/30/16	JLI	SW8260C
Toluene	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
Total Xylenes	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	640	ug/Kg	50	10/01/16	JLI	SW8260C
Trichloroethene	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
Trichlorofluoromethane	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
Vinyl chloride	ND	4.7	ug/Kg	1	09/30/16	JLI	SW8260C
<u>QA/QC Surrogates</u>							
% 1,2-dichlorobenzene-d4	100		%	50	10/01/16	JLI	70 - 130 %
% Bromofluorobenzene	99		%	50	10/01/16	JLI	70 - 130 %
% Dibromofluoromethane	104		%	1	09/30/16	JLI	70 - 130 %
% Toluene-d8	90		%	1	09/30/16	JLI	70 - 130 %
<u>Semivolatiles</u>							
1,2,4,5-Tetrachlorobenzene	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
1,2,4-Trichlorobenzene	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
1,2-Dichlorobenzene	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
1,2-Diphenylhydrazine	ND	380	ug/Kg	1	09/29/16	DD	SW8270D
1,3-Dichlorobenzene	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
1,4-Dichlorobenzene	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
2,4,5-Trichlorophenol	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
2,4,6-Trichlorophenol	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
2,4-Dichlorophenol	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
2,4-Dimethylphenol	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
2,4-Dinitrophenol	ND	380	ug/Kg	1	09/29/16	DD	SW8270D
2,4-Dinitrotoluene	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
2,6-Dinitrotoluene	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
2-Chloronaphthalene	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
2-Chlorophenol	ND	270	ug/Kg	1	09/29/16	DD	SW8270D

Client ID: S-1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2-Methylnaphthalene	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
2-Methylphenol (o-cresol)	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
2-Nitroaniline	ND	380	ug/Kg	1	09/29/16	DD	SW8270D
2-Nitrophenol	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	380	ug/Kg	1	09/29/16	DD	SW8270D
3,3'-Dichlorobenzidine	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
3-Nitroaniline	ND	380	ug/Kg	1	09/29/16	DD	SW8270D
4,6-Dinitro-2-methylphenol	ND	380	ug/Kg	1	09/29/16	DD	SW8270D
4-Bromophenyl phenyl ether	ND	380	ug/Kg	1	09/29/16	DD	SW8270D
4-Chloro-3-methylphenol	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
4-Chloroaniline	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
4-Chlorophenyl phenyl ether	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
4-Nitroaniline	ND	610	ug/Kg	1	09/29/16	DD	SW8270D
4-Nitrophenol	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
Acenaphthene	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
Acenaphthylene	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
Acetophenone	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
Aniline	ND	380	ug/Kg	1	09/29/16	DD	SW8270D
Anthracene	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
Benz(a)anthracene	950	270	ug/Kg	1	09/29/16	DD	SW8270D
Benzidine	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
Benzo(a)pyrene	1000	270	ug/Kg	1	09/29/16	DD	SW8270D
Benzo(b)fluoranthene	1100	270	ug/Kg	1	09/29/16	DD	SW8270D
Benzo(ghi)perylene	720	270	ug/Kg	1	09/29/16	DD	SW8270D
Benzo(k)fluoranthene	910	270	ug/Kg	1	09/29/16	DD	SW8270D
Benzoic acid	ND	760	ug/Kg	1	09/29/16	DD	SW8270D
Benzyl butyl phthalate	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
Bis(2-chloroethoxy)methane	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
Bis(2-chloroethyl)ether	ND	380	ug/Kg	1	09/29/16	DD	SW8270D
Bis(2-chloroisopropyl)ether	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
Bis(2-ethylhexyl)phthalate	5100	270	ug/Kg	1	09/29/16	DD	SW8270D
Carbazole	ND	380	ug/Kg	1	09/29/16	DD	SW8270D
Chrysene	1300	270	ug/Kg	1	09/29/16	DD	SW8270D
Dibenz(a,h)anthracene	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
Dibenzofuran	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
Diethyl phthalate	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
Dimethylphthalate	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
Di-n-butylphthalate	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
Di-n-octylphthalate	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
Fluoranthene	2100	270	ug/Kg	1	09/29/16	DD	SW8270D
Fluorene	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
Hexachlorobenzene	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
Hexachlorobutadiene	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
Hexachlorocyclopentadiene	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
Hexachloroethane	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
Indeno(1,2,3-cd)pyrene	760	270	ug/Kg	1	09/29/16	DD	SW8270D
Isophorone	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
Naphthalene	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
Nitrobenzene	ND	270	ug/Kg	1	09/29/16	DD	SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
N-Nitrosodimethylamine	ND	380	ug/Kg	1	09/29/16	DD	SW8270D
N-Nitrosodi-n-propylamine	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
N-Nitrosodiphenylamine	ND	380	ug/Kg	1	09/29/16	DD	SW8270D
Pentachloronitrobenzene	ND	380	ug/Kg	1	09/29/16	DD	SW8270D
Pentachlorophenol	ND	380	ug/Kg	1	09/29/16	DD	SW8270D
Phenanthrene	1100	270	ug/Kg	1	09/29/16	DD	SW8270D
Phenol	ND	270	ug/Kg	1	09/29/16	DD	SW8270D
Pyrene	1900	270	ug/Kg	1	09/29/16	DD	SW8270D
Pyridine	ND	380	ug/Kg	1	09/29/16	DD	SW8270D
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	80		%	1	09/29/16	DD	30 - 130 %
% 2-Fluorobiphenyl	68		%	1	09/29/16	DD	30 - 130 %
% 2-Fluorophenol	51		%	1	09/29/16	DD	30 - 130 %
% Nitrobenzene-d5	61		%	1	09/29/16	DD	30 - 130 %
% Phenol-d5	62		%	1	09/29/16	DD	30 - 130 %
% Terphenyl-d14	60		%	1	09/29/16	DD	30 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
 QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

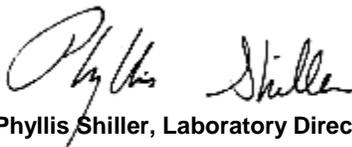
Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Volatile Comment:

There was a suppression of the last internal standard in the low level analysis, all affected compounds are reported from the methanol preserved high level analysis which did not exhibit this interference.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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Phyllis Shiller, Laboratory Director

October 05, 2016

Reviewed and Released by: Bobbi Aloisa, Vice President



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
 Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

October 05, 2016

FOR: Attn: Ms. Cindy Knight
 Logical Environmental Solutions
 354 South River Road
 Tolland CT 06084

Sample Information

Matrix: SOLID
 Location Code: LOGIC-DAS
 Rush Request: Standard
 P.O.#:

Custody Information

Collected by: CK
 Received by: SW
 Analyzed by: see "By" below

Date

09/29/16
 09/29/16

Time

8:30
 12:48

Laboratory Data

SDG ID: GBV31664
 Phoenix ID: BV31665

Project ID: FAIRFIELD TOWN RECLAMATION YARD
 Client ID: S-2

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
TCLP Silver	< 0.10	0.10	mg/L	1	10/02/16	LK	SW6010C
TCLP Arsenic	< 0.10	0.10	mg/L	1	10/02/16	LK	SW6010C
TCLP Barium	0.36	0.10	mg/L	1	10/02/16	LK	SW6010C
TCLP Beryllium	< 0.040	0.040	mg/L	1	10/02/16	LK	SW6010C
TCLP Cadmium	< 0.050	0.050	mg/L	1	10/02/16	LK	SW6010C
TCLP Chromium	< 0.10	0.10	mg/L	1	10/02/16	LK	SW6010C
TCLP Copper	< 0.10	0.10	mg/L	1	10/02/16	LK	SW6010C
TCLP Mercury	< 0.0002	0.0002	mg/L	1	09/30/16	MA	SW7470A
TCLP Nickel	< 0.10	0.10	mg/L	1	10/02/16	LK	SW6010C
TCLP Lead	< 0.10	0.10	mg/L	1	10/02/16	LK	SW6010C
TCLP Antimony	< 0.060	0.060	mg/L	1	10/03/16	LK	SW6010C
TCLP Selenium	< 0.10	0.10	mg/L	1	10/02/16	LK	SW6010C
TCLP Thallium	< 0.050	0.050	mg/L	1	10/02/16	LK	SW6010C
TCLP Vanadium	< 0.10	0.10	mg/L	1	10/02/16	LK	SW6010C
TCLP Zinc	0.22	0.10	mg/L	1	10/03/16	LK	SW6010C
TCLP Metals Digestion	Completed				09/30/16	W/W	SW3005A
Percent Solid	90		%		09/29/16	W	SW846-%Solid
Soil Extraction for PCB	Completed				09/29/16	JJ/V	SW3545A
Soil Extraction for SVOA	Completed				09/29/16	JJ/CKV	SW3545A
Extraction of CT ETPH	Completed				09/29/16	JJ/CKV	SW3545A
TCLP Digestion Mercury	Completed				09/30/16	W/W	SW7470A
TCLP Extraction for Metals	Completed				09/29/16	W	SW1311

TPH by GC (Extractable Products)

Ext. Petroleum HC	610	270	mg/Kg	5	09/30/16	JRB	CTETPH 8015D
Identification	**		mg/Kg	5	09/30/16	JRB	CTETPH 8015D
<u>QA/QC Surrogates</u>							
% n-Pentacosane	85		%	5	09/30/16	JRB	50 - 150 %

Client ID: S-2

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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Polychlorinated Biphenyls

PCB-1016	ND	370	ug/Kg	10	09/30/16	AW	SW8082A
PCB-1221	ND	370	ug/Kg	10	09/30/16	AW	SW8082A
PCB-1232	ND	370	ug/Kg	10	09/30/16	AW	SW8082A
PCB-1242	ND	370	ug/Kg	10	09/30/16	AW	SW8082A
PCB-1248	ND	370	ug/Kg	10	09/30/16	AW	SW8082A
PCB-1254	ND	370	ug/Kg	10	09/30/16	AW	SW8082A
PCB-1260	ND	370	ug/Kg	10	09/30/16	AW	SW8082A
PCB-1262	ND	370	ug/Kg	10	09/30/16	AW	SW8082A
PCB-1268	ND	370	ug/Kg	10	09/30/16	AW	SW8082A

QA/QC Surrogates

% DCBP	90		%	10	09/30/16	AW	30 - 150 %
% TCMX	90		%	10	09/30/16	AW	30 - 150 %

Semivolatiles

1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
1,2,4-Trichlorobenzene	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
1,2-Dichlorobenzene	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
1,2-Diphenylhydrazine	ND	370	ug/Kg	1	09/29/16	DD	SW8270D
1,3-Dichlorobenzene	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
1,4-Dichlorobenzene	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
2,4,5-Trichlorophenol	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
2,4,6-Trichlorophenol	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
2,4-Dichlorophenol	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
2,4-Dimethylphenol	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
2,4-Dinitrophenol	ND	370	ug/Kg	1	09/29/16	DD	SW8270D
2,4-Dinitrotoluene	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
2,6-Dinitrotoluene	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
2-Chloronaphthalene	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
2-Chlorophenol	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
2-Methylnaphthalene	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
2-Methylphenol (o-cresol)	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
2-Nitroaniline	ND	370	ug/Kg	1	09/29/16	DD	SW8270D
2-Nitrophenol	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	370	ug/Kg	1	09/29/16	DD	SW8270D
3,3'-Dichlorobenzidine	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
3-Nitroaniline	ND	370	ug/Kg	1	09/29/16	DD	SW8270D
4,6-Dinitro-2-methylphenol	ND	370	ug/Kg	1	09/29/16	DD	SW8270D
4-Bromophenyl phenyl ether	ND	370	ug/Kg	1	09/29/16	DD	SW8270D
4-Chloro-3-methylphenol	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
4-Chloroaniline	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
4-Nitroaniline	ND	590	ug/Kg	1	09/29/16	DD	SW8270D
4-Nitrophenol	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
Acenaphthene	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
Acenaphthylene	300	260	ug/Kg	1	09/29/16	DD	SW8270D
Acetophenone	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
Aniline	ND	370	ug/Kg	1	09/29/16	DD	SW8270D
Anthracene	490	260	ug/Kg	1	09/29/16	DD	SW8270D

Client ID: S-2

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Benz(a)anthracene	1700	260	ug/Kg	1	09/29/16	DD	SW8270D
Benzidine	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
Benzo(a)pyrene	1900	260	ug/Kg	1	09/29/16	DD	SW8270D
Benzo(b)fluoranthene	2200	260	ug/Kg	1	09/29/16	DD	SW8270D
Benzo(ghi)perylene	1200	260	ug/Kg	1	09/29/16	DD	SW8270D
Benzo(k)fluoranthene	1300	260	ug/Kg	1	09/29/16	DD	SW8270D
Benzoic acid	ND	730	ug/Kg	1	09/29/16	DD	SW8270D
Benzyl butyl phthalate	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
Bis(2-chloroethyl)ether	ND	370	ug/Kg	1	09/29/16	DD	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
Carbazole	ND	370	ug/Kg	1	09/29/16	DD	SW8270D
Chrysene	2000	260	ug/Kg	1	09/29/16	DD	SW8270D
Dibenz(a,h)anthracene	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
Dibenzofuran	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
Diethyl phthalate	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
Dimethylphthalate	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
Di-n-butylphthalate	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
Di-n-octylphthalate	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
Fluoranthene	3300	260	ug/Kg	1	09/29/16	DD	SW8270D
Fluorene	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
Hexachlorobenzene	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
Hexachlorobutadiene	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
Hexachlorocyclopentadiene	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
Hexachloroethane	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
Indeno(1,2,3-cd)pyrene	1300	260	ug/Kg	1	09/29/16	DD	SW8270D
Isophorone	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
Naphthalene	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
Nitrobenzene	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
N-Nitrosodimethylamine	ND	370	ug/Kg	1	09/29/16	DD	SW8270D
N-Nitrosodi-n-propylamine	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
N-Nitrosodiphenylamine	ND	370	ug/Kg	1	09/29/16	DD	SW8270D
Pentachloronitrobenzene	ND	370	ug/Kg	1	09/29/16	DD	SW8270D
Pentachlorophenol	ND	370	ug/Kg	1	09/29/16	DD	SW8270D
Phenanthrene	1800	260	ug/Kg	1	09/29/16	DD	SW8270D
Phenol	ND	260	ug/Kg	1	09/29/16	DD	SW8270D
Pyrene	2900	260	ug/Kg	1	09/29/16	DD	SW8270D
Pyridine	ND	370	ug/Kg	1	09/29/16	DD	SW8270D
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	72		%	1	09/29/16	DD	30 - 130 %
% 2-Fluorobiphenyl	65		%	1	09/29/16	DD	30 - 130 %
% 2-Fluorophenol	54		%	1	09/29/16	DD	30 - 130 %
% Nitrobenzene-d5	68		%	1	09/29/16	DD	30 - 130 %
% Phenol-d5	65		%	1	09/29/16	DD	30 - 130 %
% Terphenyl-d14	58		%	1	09/29/16	DD	30 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

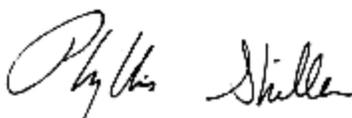
Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

TPH Comment:

**Petroleum hydrocarbon chromatogram contains a multicomponent hydrocarbon distribution in the range of C9 to C36. The sample was quantitated against a C9-C36 alkane hydrocarbon standard.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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Phyllis Shiller, Laboratory Director

October 05, 2016

Reviewed and Released by: Bobbi Aloisa, Vice President



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
 Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

October 05, 2016

FOR: Attn: Ms. Cindy Knight
 Logical Environmental Solutions
 354 South River Road
 Tolland CT 06084

Sample Information

Matrix: SOLID
 Location Code: LOGIC-DAS
 Rush Request: Standard
 P.O.#:

Custody Information

Collected by: CK
 Received by: SW
 Analyzed by: see "By" below

Date

09/29/16
 09/29/16

Time

8:45
 12:48

Laboratory Data

SDG ID: GBV31664
 Phoenix ID: BV31666

Project ID: FAIRFIELD TOWN RECLAMATION YARD
 Client ID: S-3

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
TCLP Silver	< 0.10	0.10	mg/L	1	10/02/16	LK	SW6010C
TCLP Arsenic	< 0.10	0.10	mg/L	1	10/02/16	LK	SW6010C
TCLP Barium	0.29	0.10	mg/L	1	10/02/16	LK	SW6010C
TCLP Beryllium	< 0.040	0.040	mg/L	1	10/02/16	LK	SW6010C
TCLP Cadmium	< 0.050	0.050	mg/L	1	10/02/16	LK	SW6010C
TCLP Chromium	< 0.10	0.10	mg/L	1	10/02/16	LK	SW6010C
TCLP Copper	< 0.10	0.10	mg/L	1	10/02/16	LK	SW6010C
TCLP Mercury	< 0.0002	0.0002	mg/L	1	09/30/16	MA	SW7470A
TCLP Nickel	0.10	0.10	mg/L	1	10/02/16	LK	SW6010C
TCLP Lead	< 0.10	0.10	mg/L	1	10/02/16	LK	SW6010C
TCLP Antimony	< 0.060	0.060	mg/L	1	10/02/16	LK	SW6010C
TCLP Selenium	< 0.10	0.10	mg/L	1	10/02/16	LK	SW6010C
TCLP Thallium	< 0.050	0.050	mg/L	1	10/02/16	LK	SW6010C
TCLP Vanadium	< 0.10	0.10	mg/L	1	10/02/16	LK	SW6010C
TCLP Zinc	< 0.10	0.10	mg/L	1	10/03/16	LK	SW6010C
TCLP Metals Digestion	Completed				09/30/16	W/W	SW3005A
Percent Solid	92		%		09/29/16	W	SW846-%Solid
Soil Extraction for PCB	Completed				09/29/16	JJ/V	SW3545A
Soil Extraction for SVOA	Completed				09/29/16	JJ/CKV	SW3545A
Extraction of CT ETPH	Completed				09/29/16	JJ/CKV	SW3545A
TCLP Digestion Mercury	Completed				09/30/16	W/W	SW7470A
TCLP Extraction for Metals	Completed				09/29/16	W	SW1311

TPH by GC (Extractable Products)

Ext. Petroleum HC	440	270	mg/Kg	5	09/30/16	JRB	CTETPH 8015D
Identification	**		mg/Kg	5	09/30/16	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	79		%	5	09/30/16	JRB	50 - 150 %

Client ID: S-3

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	350	ug/Kg	10	10/03/16	AW	SW8082A
PCB-1221	ND	350	ug/Kg	10	10/03/16	AW	SW8082A
PCB-1232	ND	350	ug/Kg	10	10/03/16	AW	SW8082A
PCB-1242	ND	350	ug/Kg	10	10/03/16	AW	SW8082A
PCB-1248	ND	350	ug/Kg	10	10/03/16	AW	SW8082A
PCB-1254	ND	350	ug/Kg	10	10/03/16	AW	SW8082A
PCB-1260	ND	350	ug/Kg	10	10/03/16	AW	SW8082A
PCB-1262	ND	350	ug/Kg	10	10/03/16	AW	SW8082A
PCB-1268	ND	350	ug/Kg	10	10/03/16	AW	SW8082A
<u>QA/QC Surrogates</u>							
% DCBP	90		%	10	10/03/16	AW	30 - 150 %
% TCMX	92		%	10	10/03/16	AW	30 - 150 %
<u>Semivolatiles</u>							
1,2,4,5-Tetrachlorobenzene	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
1,2,4-Trichlorobenzene	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
1,2-Dichlorobenzene	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
1,2-Diphenylhydrazine	ND	350	ug/Kg	1	09/30/16	DD	SW8270D
1,3-Dichlorobenzene	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
1,4-Dichlorobenzene	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
2,4,5-Trichlorophenol	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
2,4,6-Trichlorophenol	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
2,4-Dichlorophenol	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
2,4-Dimethylphenol	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
2,4-Dinitrophenol	ND	350	ug/Kg	1	09/30/16	DD	SW8270D
2,4-Dinitrotoluene	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
2,6-Dinitrotoluene	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
2-Chloronaphthalene	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
2-Chlorophenol	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
2-Methylnaphthalene	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
2-Methylphenol (o-cresol)	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
2-Nitroaniline	ND	350	ug/Kg	1	09/30/16	DD	SW8270D
2-Nitrophenol	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	350	ug/Kg	1	09/30/16	DD	SW8270D
3,3'-Dichlorobenzidine	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
3-Nitroaniline	ND	350	ug/Kg	1	09/30/16	DD	SW8270D
4,6-Dinitro-2-methylphenol	ND	350	ug/Kg	1	09/30/16	DD	SW8270D
4-Bromophenyl phenyl ether	ND	350	ug/Kg	1	09/30/16	DD	SW8270D
4-Chloro-3-methylphenol	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
4-Chloroaniline	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
4-Chlorophenyl phenyl ether	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
4-Nitroaniline	ND	560	ug/Kg	1	09/30/16	DD	SW8270D
4-Nitrophenol	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
Acenaphthene	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
Acenaphthylene	450	250	ug/Kg	1	09/30/16	DD	SW8270D
Acetophenone	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
Aniline	ND	350	ug/Kg	1	09/30/16	DD	SW8270D
Anthracene	370	250	ug/Kg	1	09/30/16	DD	SW8270D

Client ID: S-3

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Benz(a)anthracene	1300	250	ug/Kg	1	09/30/16	DD	SW8270D
Benzidine	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
Benzo(a)pyrene	1700	250	ug/Kg	1	09/30/16	DD	SW8270D
Benzo(b)fluoranthene	2000	250	ug/Kg	1	09/30/16	DD	SW8270D
Benzo(ghi)perylene	1100	250	ug/Kg	1	09/30/16	DD	SW8270D
Benzo(k)fluoranthene	980	250	ug/Kg	1	09/30/16	DD	SW8270D
Benzoic acid	ND	700	ug/Kg	1	09/30/16	DD	SW8270D
Benzyl butyl phthalate	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
Bis(2-chloroethoxy)methane	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
Bis(2-chloroethyl)ether	ND	350	ug/Kg	1	09/30/16	DD	SW8270D
Bis(2-chloroisopropyl)ether	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
Bis(2-ethylhexyl)phthalate	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
Carbazole	ND	350	ug/Kg	1	09/30/16	DD	SW8270D
Chrysene	1600	250	ug/Kg	1	09/30/16	DD	SW8270D
Dibenz(a,h)anthracene	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
Dibenzofuran	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
Diethyl phthalate	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
Dimethylphthalate	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
Di-n-butylphthalate	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
Di-n-octylphthalate	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
Fluoranthene	2200	250	ug/Kg	1	09/30/16	DD	SW8270D
Fluorene	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
Hexachlorobenzene	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
Hexachlorobutadiene	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
Hexachlorocyclopentadiene	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
Hexachloroethane	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
Indeno(1,2,3-cd)pyrene	1200	250	ug/Kg	1	09/30/16	DD	SW8270D
Isophorone	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
Naphthalene	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
Nitrobenzene	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
N-Nitrosodimethylamine	ND	350	ug/Kg	1	09/30/16	DD	SW8270D
N-Nitrosodi-n-propylamine	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
N-Nitrosodiphenylamine	ND	350	ug/Kg	1	09/30/16	DD	SW8270D
Pentachloronitrobenzene	ND	350	ug/Kg	1	09/30/16	DD	SW8270D
Pentachlorophenol	ND	350	ug/Kg	1	09/30/16	DD	SW8270D
Phenanthrene	1000	250	ug/Kg	1	09/30/16	DD	SW8270D
Phenol	ND	250	ug/Kg	1	09/30/16	DD	SW8270D
Pyrene	2100	250	ug/Kg	1	09/30/16	DD	SW8270D
Pyridine	ND	350	ug/Kg	1	09/30/16	DD	SW8270D
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	68		%	1	09/30/16	DD	30 - 130 %
% 2-Fluorobiphenyl	63		%	1	09/30/16	DD	30 - 130 %
% 2-Fluorophenol	51		%	1	09/30/16	DD	30 - 130 %
% Nitrobenzene-d5	62		%	1	09/30/16	DD	30 - 130 %
% Phenol-d5	62		%	1	09/30/16	DD	30 - 130 %
% Terphenyl-d14	55		%	1	09/30/16	DD	30 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

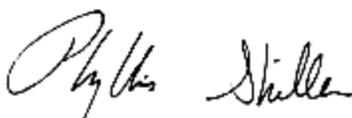
Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

TPH Comment:

**Petroleum hydrocarbon chromatogram contains a multicomponent hydrocarbon distribution in the range of C9 to C36. The sample was quantitated against a C9-C36 alkane hydrocarbon standard.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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Phyllis Shiller, Laboratory Director

October 05, 2016

Reviewed and Released by: Bobbi Aloisa, Vice President



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
 Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

October 05, 2016

QA/QC Data

SDG I.D.: GBV31664

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 360926 (mg/L), QC Sample No: BV31415 (BV31664, BV31665, BV31666)													
Mercury - Water	BRL	0.0002	<0.0002	<0.0002	NC	103			98.9			70 - 130	20
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.													
QA/QC Batch 360929 (mg/L), QC Sample No: BV31713 (BV31664, BV31665, BV31666)													
<u>ICP Metals - TCLP Extraction</u>													
Antimony	BRL	0.006	<0.006	<0.006	NC	111			111			75 - 125	20
Arsenic	BRL	0.01	<0.01	0.02	NC	114			113			75 - 125	20
Barium	BRL	0.01	0.51	0.59	14.5	95.4			102			75 - 125	20
Beryllium	BRL	0.004	<0.004	<0.004	NC	109			108			75 - 125	20
Cadmium	BRL	0.005	0.015	0.014	NC	106			102			75 - 125	20
Chromium	BRL	0.010	0.023	0.023	NC	108			105			75 - 125	20
Copper	BRL	0.010	0.133	0.130	2.30	115			115			75 - 125	20
Lead	BRL	0.010	0.283	0.339	18.0	84.6			110			75 - 125	20
Nickel	BRL	0.010	0.046	0.047	NC	106			104			75 - 125	20
Selenium	BRL	0.01	<0.01	<0.01	NC	125			125			75 - 125	20
Silver	BRL	0.010	<0.010	<0.010	NC	112			112			75 - 125	20
Thallium	BRL	0.005	<0.005	<0.005	NC	117			115			75 - 125	20
Vanadium	BRL	0.010	<0.010	<0.010	NC	107			106			75 - 125	20
Zinc	BRL	0.010	1.94	2.04	5.00	105			109			75 - 125	20



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QA/QC Report

October 05, 2016

QA/QC Data

SDG I.D.: GBV31664

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 360628 (ug/Kg), QC Sample No: BV30263 2X (BV31664, BV31665, BV31666)										
<u>Polychlorinated Biphenyls - Solid</u>										
PCB-1016	ND	33	79	74	6.5	73	79	7.9	40 - 140	30
PCB-1221	ND	33							40 - 140	30
PCB-1232	ND	33							40 - 140	30
PCB-1242	ND	33							40 - 140	30
PCB-1248	ND	33							40 - 140	30
PCB-1254	ND	33							40 - 140	30
PCB-1260	ND	33	86	81	6.0	72	78	8.0	40 - 140	30
PCB-1262	ND	33							40 - 140	30
PCB-1268	ND	33							40 - 140	30
% DCBP (Surrogate Rec)	84	%	105	96	9.0	84	92	9.1	30 - 150	30
% TCMX (Surrogate Rec)	78	%	88	82	7.1	82	88	7.1	30 - 150	30
QA/QC Batch 360643 (mg/Kg), QC Sample No: BV31267 (BV31665, BV31666)										
<u>TPH by GC (Extractable Products) - Solid</u>										
Ext. Petroleum H.C.	ND	50	74	80	7.8				60 - 120	30
% n-Pentacosane	75	%	77	83	7.5				50 - 150	30
Comment:										
*The MS/MSD could not be reported due to the presence of ETPH in the original sample. The LCS was within QA/QC criteria.										
Additional criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%.										
QA/QC Batch 360664 (mg/Kg), QC Sample No: BV31509 (BV31664)										
<u>TPH by GC (Extractable Products) - Solid</u>										
Ext. Petroleum H.C.	ND	50	60	58	3.4	59	70	17.1	60 - 120	30
% n-Pentacosane	44	%	58	53	9.0	56	70	22.2	50 - 150	30
Comment:										
Additional criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%.										
QA/QC Batch 360846 (ug/Kg), QC Sample No: BV31670 2X (BV31664)										
<u>Pesticides - Solid</u>										
4,4' -DDD	ND	1.7	100	95	5.1	94	88	6.6	40 - 140	30
4,4' -DDE	ND	1.7	94	89	5.5	NC	NC	NC	40 - 140	30
4,4' -DDT	ND	1.7	102	96	6.1	NC	NC	NC	40 - 140	30
a-BHC	ND	1.0	84	82	2.4	68	65	4.5	40 - 140	30
a-Chlordane	ND	3.3	95	92	3.2	132	127	3.9	40 - 140	30
Alachlor	ND	3.3	NA	NA	NC	NA	NA	NC	40 - 140	30
Aldrin	ND	1.0	86	83	3.6	71	69	2.9	40 - 140	30
b-BHC	ND	1.0	81	76	6.4	63	63	0.0	40 - 140	30
Chlordane	ND	3.3	91	89	2.2	115	111	3.5	40 - 140	30
d-BHC	ND	3.3	92	90	2.2	73	71	2.8	40 - 140	30
Dieldrin	ND	1.0	93	91	2.2	87	84	3.5	40 - 140	30
Endosulfan I	ND	3.3	95	92	3.2	84	80	4.9	40 - 140	30
Endosulfan II	ND	3.3	106	101	4.8	107	103	3.8	40 - 140	30

QA/QC Data

SDG I.D.: GBV31664

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Endosulfan sulfate	ND	3.3	104	98	5.9	98	97	1.0	40 - 140	30
Endrin	ND	3.3	99	96	3.1	108	106	1.9	40 - 140	30
Endrin aldehyde	ND	3.3	80	79	1.3	60	61	1.7	40 - 140	30
Endrin ketone	ND	3.3	106	101	4.8	89	84	5.8	40 - 140	30
g-BHC	ND	1.0	84	82	2.4	65	64	1.6	40 - 140	30
g-Chlordane	ND	3.3	91	89	2.2	115	111	3.5	40 - 140	30
Heptachlor	ND	3.3	87	84	3.5	74	73	1.4	40 - 140	30
Heptachlor epoxide	ND	3.3	88	87	1.1	89	86	3.4	40 - 140	30
Methoxychlor	ND	3.3	107	100	6.8	91	88	3.4	40 - 140	30
Toxaphene	ND	130	NA	NA	NC	NA	NA	NC	40 - 140	30
% DCBP	99	%	104	95	9.0	81	76	6.4	30 - 150	30
% TCMX	78	%	79	75	5.2	65	65	0.0	30 - 150	30

QA/QC Batch 360844 (ug/kg), QC Sample No: BV31784 (BV31664, BV31665, BV31666)

Semivolatiles - Solid

1,2,4,5-Tetrachlorobenzene	ND	230	71	69	2.9	68	66	3.0	30 - 130	30
1,2,4-Trichlorobenzene	ND	230	66	65	1.5	68	66	3.0	30 - 130	30
1,2-Dichlorobenzene	ND	180	61	58	5.0	61	56	8.5	30 - 130	30
1,2-Diphenylhydrazine	ND	230	71	68	4.3	65	65	0.0	30 - 130	30
1,3-Dichlorobenzene	ND	230	55	54	1.8	56	52	7.4	30 - 130	30
1,4-Dichlorobenzene	ND	230	59	56	5.2	61	55	10.3	30 - 130	30
2,4,5-Trichlorophenol	ND	230	70	67	4.4	64	65	1.6	30 - 130	30
2,4,6-Trichlorophenol	ND	130	67	65	3.0	62	64	3.2	30 - 130	30
2,4-Dichlorophenol	ND	130	76	74	2.7	69	69	0.0	30 - 130	30
2,4-Dimethylphenol	ND	230	76	74	2.7	67	69	2.9	30 - 130	30
2,4-Dinitrophenol	ND	230	<10	<10	NC	18	11	48.3	30 - 130	30
2,4-Dinitrotoluene	ND	130	71	69	2.9	66	65	1.5	30 - 130	30
2,6-Dinitrotoluene	ND	130	67	66	1.5	58	59	1.7	30 - 130	30
2-Chloronaphthalene	ND	230	70	69	1.4	66	67	1.5	30 - 130	30
2-Chlorophenol	ND	230	64	62	3.2	60	59	1.7	30 - 130	30
2-Methylnaphthalene	ND	230	71	69	2.9	67	69	2.9	30 - 130	30
2-Methylphenol (o-cresol)	ND	230	76	70	8.2	70	68	2.9	30 - 130	30
2-Nitroaniline	ND	330	58	59	1.7	62	56	10.2	30 - 130	30
2-Nitrophenol	ND	230	70	65	7.4	66	63	4.7	30 - 130	30
3&4-Methylphenol (m&p-cresol)	ND	230	67	68	1.5	62	62	0.0	30 - 130	30
3,3'-Dichlorobenzidine	ND	130	53	54	1.9	27	19	34.8	30 - 130	30
3-Nitroaniline	ND	330	59	58	1.7	51	48	6.1	30 - 130	30
4,6-Dinitro-2-methylphenol	ND	230	20	22	9.5	28	18	43.5	30 - 130	30
4-Bromophenyl phenyl ether	ND	230	71	67	5.8	64	64	0.0	30 - 130	30
4-Chloro-3-methylphenol	ND	230	77	75	2.6	71	70	1.4	30 - 130	30
4-Chloroaniline	ND	230	75	73	2.7	54	53	1.9	30 - 130	30
4-Chlorophenyl phenyl ether	ND	230	59	59	0.0	56	57	1.8	30 - 130	30
4-Nitroaniline	ND	230	74	71	4.1	67	68	1.5	30 - 130	30
4-Nitrophenol	ND	230	70	69	1.4	71	66	7.3	30 - 130	30
Acenaphthene	ND	230	66	66	0.0	58	57	1.7	30 - 130	30
Acenaphthylene	ND	130	68	65	4.5	65	64	1.6	30 - 130	30
Acetophenone	ND	230	65	62	4.7	62	60	3.3	30 - 130	30
Aniline	ND	330	132	126	4.7	113	111	1.8	30 - 130	30
Anthracene	ND	230	72	70	2.8	58	58	0.0	30 - 130	30
Benz(a)anthracene	ND	230	71	72	1.4	42	45	6.9	30 - 130	30
Benzidine	ND	330	<10	<10	NC	<10	<10	NC	30 - 130	30
Benzo(a)pyrene	ND	130	72	69	4.3	46	47	2.2	30 - 130	30
Benzo(b)fluoranthene	ND	160	84	72	15.4	50	56	11.3	30 - 130	30

QA/QC Data

SDG I.D.: GBV31664

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
	Blank	RL									
Benzo(ghi)perylene	ND	230	77	75	2.6	62	62	0.0	30 - 130	30	
Benzo(k)fluoranthene	ND	230	60	68	12.5	49	43	13.0	30 - 130	30	
Benzoic Acid	ND	330	<10	<10	NC	26	17	41.9	30 - 130	30	I,m,r
Benzyl butyl phthalate	ND	230	78	76	2.6	69	67	2.9	30 - 130	30	
Bis(2-chloroethoxy)methane	ND	230	77	74	4.0	70	72	2.8	30 - 130	30	
Bis(2-chloroethyl)ether	ND	130	59	58	1.7	55	51	7.5	30 - 130	30	
Bis(2-chloroisopropyl)ether	ND	230	64	61	4.8	59	58	1.7	30 - 130	30	
Bis(2-ethylhexyl)phthalate	ND	230	81	80	1.2	48	55	13.6	30 - 130	30	
Carbazole	ND	230	74	72	2.7	67	66	1.5	30 - 130	30	
Chrysene	ND	230	71	71	0.0	45	48	6.5	30 - 130	30	
Dibenz(a,h)anthracene	ND	130	77	71	8.1	70	73	4.2	30 - 130	30	
Dibenzofuran	ND	230	67	66	1.5	59	59	0.0	30 - 130	30	
Diethyl phthalate	ND	230	65	63	3.1	61	60	1.7	30 - 130	30	
Dimethylphthalate	ND	230	69	67	2.9	62	63	1.6	30 - 130	30	
Di-n-butylphthalate	ND	230	79	77	2.6	68	65	4.5	30 - 130	30	
Di-n-octylphthalate	ND	230	78	78	0.0	67	70	4.4	30 - 130	30	
Fluoranthene	ND	230	74	72	2.7	21	21	0.0	30 - 130	30	m
Fluorene	ND	230	71	70	1.4	60	61	1.7	30 - 130	30	
Hexachlorobenzene	ND	130	76	76	0.0	68	68	0.0	30 - 130	30	
Hexachlorobutadiene	ND	230	65	62	4.7	64	64	0.0	30 - 130	30	
Hexachlorocyclopentadiene	ND	230	69	64	7.5	49	41	17.8	30 - 130	30	
Hexachloroethane	ND	130	57	57	0.0	58	55	5.3	30 - 130	30	
Indeno(1,2,3-cd)pyrene	ND	230	79	77	2.6	58	60	3.4	30 - 130	30	
Isophorone	ND	130	66	63	4.7	61	61	0.0	30 - 130	30	
Naphthalene	ND	230	71	69	2.9	72	71	1.4	30 - 130	30	
Nitrobenzene	ND	130	65	65	0.0	63	62	1.6	30 - 130	30	
N-Nitrosodimethylamine	ND	230	61	61	0.0	60	55	8.7	30 - 130	30	
N-Nitrosodi-n-propylamine	ND	130	74	70	5.6	68	65	4.5	30 - 130	30	
N-Nitrosodiphenylamine	ND	130	73	71	2.8	68	68	0.0	30 - 130	30	
Pentachloronitrobenzene	ND	230	73	70	4.2	66	62	6.3	30 - 130	30	
Pentachlorophenol	ND	230	39	40	2.5	46	46	0.0	30 - 130	30	
Phenanthrene	ND	130	72	69	4.3	19	21	10.0	30 - 130	30	m
Phenol	ND	230	75	74	1.3	66	66	0.0	30 - 130	30	
Pyrene	ND	230	75	75	0.0	32	33	3.1	30 - 130	30	
Pyridine	ND	230	47	38	21.2	51	43	17.0	30 - 130	30	
% 2,4,6-Tribromophenol	67	%	72	73	1.4	67	63	6.2	30 - 130	30	
% 2-Fluorobiphenyl	64	%	62	61	1.6	59	59	0.0	30 - 130	30	
% 2-Fluorophenol	53	%	61	60	1.7	53	52	1.9	30 - 130	30	
% Nitrobenzene-d5	63	%	66	62	6.3	61	59	3.3	30 - 130	30	
% Phenol-d5	63	%	70	68	2.9	61	61	0.0	30 - 130	30	
% Terphenyl-d14	65	%	68	66	3.0	58	58	0.0	30 - 130	30	

Comment:

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 360855 (ug/Kg), QC Sample No: BV32348 10X (BV31664)

Chlorinated Herbicides - Solid

2,4,5-T	ND	83	94	94	0.0	89	87	2.3	40 - 140	30	
2,4,5-TP (Silvex)	ND	83	96	94	2.1	90	89	1.1	40 - 140	30	
2,4-D	ND	170	103	101	2.0	97	96	1.0	40 - 140	30	
2,4-DB	ND	1700	85	82	3.6	77	77	0.0	40 - 140	30	
Dalapon	ND	83	58	58	0.0	58	50	14.8	40 - 140	30	
Dicamba	ND	83	95	103	8.1	113	99	13.2	40 - 140	30	

QA/QC Data

SDG I.D.: GBV31664

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
	Blank	RL									
Dichloroprop	ND	170	123	122	0.8	110	116	5.3	40 - 140	30	
Dinoseb	ND	170	86	79	8.5	82	82	0.0	40 - 140	30	
% DCAA (Surrogate Rec)	82	%	81	80	1.2	80	81	1.2	30 - 150	30	
QA/QC Batch 361185 (ug/kg), QC Sample No: BV32553 (BV31664)											
Volatiles - Solid											
1,1,1,2-Tetrachloroethane	ND	5.0	125	110	12.8	115	109	5.4	70 - 130	30	
1,1,1-Trichloroethane	ND	5.0	108	97	10.7	101	94	7.2	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	3.0	114	98	15.1	101	97	4.0	70 - 130	30	
1,1,2-Trichloroethane	ND	5.0	112	100	11.3	109	102	6.6	70 - 130	30	
1,1-Dichloroethane	ND	5.0	109	97	11.7	103	94	9.1	70 - 130	30	
1,1-Dichloroethene	ND	5.0	105	94	11.1	85	76	11.2	70 - 130	30	
1,1-Dichloropropene	ND	5.0	110	98	11.5	109	99	9.6	70 - 130	30	
1,2-Dibromoethane	ND	5.0	118	105	11.7	112	106	5.5	70 - 130	30	
1,2-Dichloroethane	ND	5.0	111	98	12.4	106	99	6.8	70 - 130	30	
1,2-Dichloropropane	ND	5.0	111	99	11.4	107	99	7.8	70 - 130	30	
1,3-Dichloropropane	ND	5.0	114	103	10.1	110	103	6.6	70 - 130	30	
2,2-Dichloropropane	ND	5.0	112	100	11.3	104	96	8.0	70 - 130	30	
2-Hexanone	ND	25	89	78	13.2	80	76	5.1	70 - 130	30	
4-Methyl-2-pentanone	ND	25	91	80	12.9	84	80	4.9	70 - 130	30	
Acetone	ND	10	74	70	5.6	54	53	1.9	70 - 130	30	m
Acrylonitrile	ND	5.0	95	84	12.3	88	83	5.8	70 - 130	30	
Benzene	ND	1.0	111	99	11.4	109	100	8.6	70 - 130	30	
Bromochloromethane	ND	5.0	110	98	11.5	105	98	6.9	70 - 130	30	
Bromodichloromethane	ND	5.0	115	101	13.0	104	98	5.9	70 - 130	30	
Bromoform	ND	5.0	128	106	18.8	106	102	3.8	70 - 130	30	
Bromomethane	ND	5.0	88	80	9.5	63	69	9.1	70 - 130	30	m
Carbon Disulfide	ND	5.0	105	93	12.1	85	78	8.6	70 - 130	30	
Carbon tetrachloride	ND	5.0	114	100	13.1	100	94	6.2	70 - 130	30	
Chlorobenzene	ND	5.0	115	103	11.0	114	105	8.2	70 - 130	30	
Chloroethane	ND	5.0	90	83	8.1	42	38	10.0	70 - 130	30	m
Chloroform	ND	5.0	107	97	9.8	103	94	9.1	70 - 130	30	
Chloromethane	ND	5.0	75	68	9.8	85	74	13.8	70 - 130	30	l
cis-1,2-Dichloroethene	ND	5.0	112	99	12.3	107	98	8.8	70 - 130	30	
cis-1,3-Dichloropropene	ND	5.0	113	100	12.2	107	100	6.8	70 - 130	30	
Dibromochloromethane	ND	3.0	130	111	15.8	112	105	6.5	70 - 130	30	
Dibromomethane	ND	5.0	110	98	11.5	105	99	5.9	70 - 130	30	
Dichlorodifluoromethane	ND	5.0	74	66	11.4	89	81	9.4	70 - 130	30	l
Ethylbenzene	ND	1.0	117	104	11.8	115	106	8.1	70 - 130	30	
m&p-Xylene	ND	2.0	115	103	11.0	114	106	7.3	70 - 130	30	
Methyl ethyl ketone	ND	5.0	85	73	15.2	73	70	4.2	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	1.0	96	84	13.3	89	84	5.8	70 - 130	30	
Methylene chloride	ND	5.0	86	77	11.0	80	74	7.8	70 - 130	30	
o-Xylene	ND	2.0	116	104	10.9	115	107	7.2	70 - 130	30	
Styrene	ND	5.0	119	106	11.6	118	109	7.9	70 - 130	30	
Tetrachloroethene	ND	5.0	115	103	11.0	117	109	7.1	70 - 130	30	
Tetrahydrofuran (THF)	ND	5.0	91	79	14.1	82	78	5.0	70 - 130	30	
Toluene	ND	1.0	113	101	11.2	111	103	7.5	70 - 130	30	
trans-1,2-Dichloroethene	ND	5.0	113	101	11.2	106	98	7.8	70 - 130	30	
trans-1,3-Dichloropropene	ND	5.0	112	99	12.3	105	100	4.9	70 - 130	30	
Trichloroethene	ND	5.0	118	105	11.7	115	106	8.1	70 - 130	30	
Trichlorofluoromethane	ND	5.0	85	77	9.9	23	20	14.0	70 - 130	30	m
Trichlorotrifluoroethane	ND	5.0	97	88	9.7	79	72	9.3	70 - 130	30	

QA/QC Data

SDG I.D.: GBV31664

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
	Blank	RL								
Vinyl chloride	ND	5.0	83	76	8.8	92	82	11.5	70 - 130	30
% Dibromofluoromethane	99	%	100	100	0.0	98	99	1.0	70 - 130	30
% Toluene-d8	98	%	100	100	0.0	100	100	0.0	70 - 130	30

Comment:

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 361209 (ug/kg), QC Sample No: BV32726 (BV31664 (50X))

Volatiles - Solid

1,2,3-Trichlorobenzene	ND	5.0	103	106	2.9	85	86	1.2	70 - 130	30
1,2,3-Trichloropropane	ND	5.0	101	105	3.9	106	104	1.9	70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0	104	107	2.8	86	89	3.4	70 - 130	30
1,2,4-Trimethylbenzene	ND	1.0	109	111	1.8	95	103	8.1	70 - 130	30
1,2-Dibromo-3-chloropropane	ND	5.0	118	125	5.8	98	100	2.0	70 - 130	30
1,2-Dichlorobenzene	ND	5.0	108	110	1.8	94	100	6.2	70 - 130	30
1,3,5-Trimethylbenzene	ND	1.0	110	112	1.8	97	105	7.9	70 - 130	30
1,3-Dichlorobenzene	ND	5.0	111	112	0.9	95	101	6.1	70 - 130	30
1,4-Dichlorobenzene	ND	5.0	107	109	1.9	91	97	6.4	70 - 130	30
2-Chlorotoluene	ND	5.0	113	114	0.9	98	107	8.8	70 - 130	30
2-Isopropyltoluene	ND	5.0	100	102	2.0	87	94	7.7	70 - 130	30
4-Chlorotoluene	ND	5.0	108	110	1.8	92	100	8.3	70 - 130	30
Bromobenzene	ND	5.0	113	113	0.0	98	105	6.9	70 - 130	30
Hexachlorobutadiene	ND	5.0	118	117	0.9	90	98	8.5	70 - 130	30
Isopropylbenzene	ND	1.0	113	114	0.9	99	108	8.7	70 - 130	30
Naphthalene	ND	5.0	109	112	2.7	96	96	0.0	70 - 130	30
n-Butylbenzene	ND	1.0	111	112	0.9	91	100	9.4	70 - 130	30
n-Propylbenzene	ND	1.0	109	110	0.9	95	104	9.0	70 - 130	30
p-Isopropyltoluene	ND	1.0	112	113	0.9	96	105	9.0	70 - 130	30
sec-Butylbenzene	ND	1.0	118	120	1.7	100	109	8.6	70 - 130	30
tert-Butylbenzene	ND	1.0	114	113	0.9	99	107	7.8	70 - 130	30
trans-1,4-dichloro-2-butene	ND	5.0	92	94	2.2	76	77	1.3	70 - 130	30
% 1,2-dichlorobenzene-d4	100	%	100	100	0.0	100	100	0.0	70 - 130	30
% Bromofluorobenzene	97	%	102	101	1.0	101	101	0.0	70 - 130	30

Comment:

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

l = This parameter is outside laboratory LCS/LCSD specified recovery limits.

m = This parameter is outside laboratory MS/MSD specified recovery limits.

r = This parameter is outside laboratory RPD specified recovery limits.

s = This parameter is outside laboratory Blank Surrogate specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria

Intf - Interference



Phyllis Shiller, Laboratory Director

October 05, 2016

Sample Criteria Exceedences Report

GBV31664 - LOGIC-DAS

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL	Analysis Units
BV31664	\$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1100	270	1000	1000	ug/Kg
BV31664	\$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1000	270	1000	1000	ug/Kg
BV31664	\$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/k)	1000	270	1000	1000	ug/Kg
BV31664	\$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/k)	1100	270	1000	1000	ug/Kg
BV31665	\$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	2200	260	1000	1000	ug/Kg
BV31665	\$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1700	260	1000	1000	ug/Kg
BV31665	\$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1900	260	1000	1000	ug/Kg
BV31665	\$8270-SMR	Benzo(k)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1300	260	1000	1000	ug/Kg
BV31665	\$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/k)	1700	260	1000	1000	ug/Kg
BV31665	\$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/k)	2200	260	1000	1000	ug/Kg
BV31665	\$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/k)	1900	260	1000	1000	ug/Kg
BV31665	\$ETPH_SMR	Ext. Petroleum HC	CT / PESTICIDES, PCB's, TPH, a / RES DEC (mg/kg)	610	270	500	500	mg/Kg
BV31666	\$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1300	250	1000	1000	ug/Kg
BV31666	\$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	1700	250	1000	1000	ug/Kg
BV31666	\$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / GB PMC (mg/kg)	2000	250	1000	1000	ug/Kg
BV31666	\$8270-SMR	Benzo(b)fluoranthene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/k)	2000	250	1000	1000	ug/Kg
BV31666	\$8270-SMR	Benz(a)anthracene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/k)	1300	250	1000	1000	ug/Kg
BV31666	\$8270-SMR	Benzo(a)pyrene	CT / SEMIVOLATILE ORGANIC COMP / RES DEC (mg/k)	1700	250	1000	1000	ug/Kg

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.



REASONABLE CONFIDENCE PROTOCOL LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

Laboratory Name: Phoenix Environmental Labs, Inc. **Client:** Logical Environmental Solutions

Project Location: FAIRFIELD TOWN RECLAMATION Y **Project Number:**

Laboratory Sample ID(s): BV31664-BV31666 **Sampling Date(s):** 9/29/2016

List RCP Methods Used (e.g., 8260, 8270, et cetera) 1311/1312, 6010, 7470/7471, 8081, 8082, 8151, 8260, 8270, ETPH

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1A	Were the method specified preservation and holding time requirements met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1B	<u>VPH and EPH methods only:</u> Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
2	Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3	Were samples received at an appropriate temperature (< 6 Degrees C)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
4	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? See Sections: ETPH Narration, SVOA Narration, VOA Narration.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5	a) Were reporting limits specified or referenced on the chain-of-custody? b) Were these reporting limits met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
7	Are project-specific matrix spikes and laboratory duplicates included in the data set?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence". This form may not be altered and all questions must be answered.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: Maryam Taylor **Position:** Project Manager

Printed Name: Maryam Taylor **Date:** Wednesday, October 05, 2016

Name of Laboratory Phoenix Environmental Labs, Inc.

This certification form is to be used for RCP methods only.



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



RCP Certification Report

October 05, 2016

SDG I.D.: GBV31664

ETPH Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 360664 (Samples: BV31664): -----

The LCSD recovery is below range. A low bias is possible.

Instrument:

AU-FID1 09/30/16-1 Jeff Bucko, Chemist 09/30/16

BV31664, BV31665, BV31666

The initial calibration (ETPH923I) RSD for the compound list was less than 30% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 30% except for the following compounds:None.

QC (Batch Specific):

Batch 360643 (BV31267)

BV31665, BV31666

All LCS recoveries were within 60 - 120 with the following exceptions: None.

All LCSD recoveries were within 60 - 120 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

*The MS/MSD could not be reported due to the presence of ETPH in the original sample. The LCS was within QA/QC criteria.

Batch 360664 (BV31509)

BV31664

All LCS recoveries were within 60 - 120 with the following exceptions: None.

All LCSD recoveries were within 60 - 120 with the following exceptions: Ext. Petroleum H.C.(58%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Herbicide Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument:

AU-ECD12 09/30/16-1 Dee Dee Chin, Chemist 09/30/16

BV31664

The initial calibration (HRB919AI) RSD for the compound list was less than 20% except for the following compounds: None.

The initial calibration (HRB919BI) RSD for the compound list was less than 20% except for the following compounds: None.

The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

QC (Batch Specific):

Batch 360855 (BV32348)

BV31664

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Mercury Narration



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Certification Report

October 05, 2016

SDG I.D.: GBV31664

Mercury Narration

Were all QA/QC performance criteria specified in the analytical method achieved? Yes.

Instrument:

MERLIN 09/30/16 09:00 Mike Arsenault, Chemist 09/30/16

BV31664, BV31665, BV31666

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.

The initial calibration met all criteria including a standard run at or below the reporting level.

All calibration verification standards (ICV, CCV) met criteria.

All calibration blank verification standards (ICB, CCB) met criteria.

The matrix spike sample is used to identify spectral interference for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.

The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.

QC (Batch Specific):

Batch 360926 (BV31415)

BV31664, BV31665, BV31666

All LCS recoveries were within 70 - 130 with the following exceptions: None.

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.

ICP Metals Narration

Were all QA/QC performance criteria specified in the analytical method achieved? Yes.

Instrument:

ARCOS 10/01/16 17:36 Laura Kinnin, Chemist 10/01/16

BV31664, BV31665, BV31666

The linear range is defined daily by the calibration range.

The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.

The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.

The following ICP Interference Check (ICSAB) compounds did not meet criteria: None.

ARCOS 10/03/16 07:18 Laura Kinnin, Chemist 10/03/16

BV31664, BV31665, BV31666

The linear range is defined daily by the calibration range.

The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.

The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.

The following ICP Interference Check (ICSAB) compounds did not meet criteria: None.

QC (Batch Specific):

Batch 360929 (BV31713)

BV31664, BV31665, BV31666

All LCS recoveries were within 75 - 125 with the following exceptions: None.



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RCP Certification Report

October 05, 2016

SDG I.D.: GBV31664

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument:

AU-ECD29 09/30/16-1 Adam Werner, Chemist 09/30/16

BV31664, BV31665

The initial calibration (PC0823AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC0823BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

AU-ECD29 10/03/16-1 Adam Werner, Chemist 10/03/16

BV31666

The initial calibration (PC0823AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC0823BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

QC (Batch Specific):

Batch 360628 (BV30263)

BV31664, BV31665, BV31666

All LCS recoveries were within 40 - 140 with the following exceptions: None.
All LCSD recoveries were within 40 - 140 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

PEST Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument:

AU-ECD35 09/30/16-1 Carol Eddy, Chemist 09/30/16

BV31664

8081 Narration:

Endrin and DDT breakdown was evaluated and does not exceed 15%.

The initial calibration (PS929AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PS929BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

QC (Batch Specific):

Batch 360846 (BV31670)

BV31664

All LCS recoveries were within 40 - 140 with the following exceptions: None.
All LCSD recoveries were within 40 - 140 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

SVOA Narration



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Tel. (860) 645-1102 Fax (860) 645-0823



RCP Certification Report

October 05, 2016

SDG I.D.: GBV31664

SVOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 360844 (Samples: BV31664, BV31665, BV31666): -----

The LCS and/or the LCSD recovery is above the upper range for one or more analytes that were not reported in the sample(s), therefore no significant bias is suspected. (Aniline)

The LCS/LCSD recoveries for one or more analytes is below the method criteria. A low bias is possible. (2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Benzidine, Benzoic Acid)

Instrument:

CHEM19 09/29/16-1

Damien Drobinski, Chemist 09/29/16

BV31664, BV31665, BV31666

The DDT breakdown and pentachlorophenol & benzidine peak tailing were evaluated in the DFTPP tune and were found to be in control.

Initial Calibration Verification (CHEM19/SV_0830):

98% of target compounds met criteria.

The following compounds had %RSDs >20%: Benzoic acid 21% (20%)

The following compounds did not meet recommended response factors: 2-Nitrophenol 0.089 (0.1), Hexachlorobenzene 0.088 (0.1)

The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM19/0929_04-SV_0830):

Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.

97% of target compounds met criteria.

The following compounds did not meet % deviation criteria: Aniline 103%H (30%), Pentachlorophenol 31%L (30%)

The following compounds did not meet maximum % deviations: Aniline 103%H (40%)

The following compounds did not meet recommended response factors: 2-Nitrophenol 0.090 (0.1), Hexachlorobenzene 0.092 (0.1)

The following compounds did not meet minimum response factors: None.

QC (Batch Specific):

Batch 360844 (BV31784)

BV31664, BV31665, BV31666

All LCS recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<10%), 4,6-Dinitro-2-methylphenol(20%), Aniline(132%), Benzidine(<10%), Benzoic Acid(<10%)

All LCSD recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<10%), 4,6-Dinitro-2-methylphenol(22%), Benzidine(<10%), Benzoic Acid(<10%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

VOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 361185 (Samples: BV31664): -----

The LCS and/or the LCSD recovery is below range. A low bias is possible. (Chloromethane, Dichlorodifluoromethane)

Instrument:



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587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
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VOA Narration

CHEM03 09/30/16-1

Jane Li, Chemist 09/30/16

BV31664

Initial Calibration Verification (CHEM03/VT-L0929):

99% of target compounds met criteria.

The following compounds had %RSDs >20%: Methylene chloride 28% (20%)

The following compounds did not meet recommended response factors: None.

The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM03/0930L02-VT-L0929):

Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.

99% of target compounds met criteria.

The following compounds did not meet % deviation criteria: None.

The following compounds did not meet maximum % deviations: None.

The following compounds did not meet recommended response factors: None.

The following compounds did not meet minimum response factors: None.

CHEM03 09/30/16-2

Jane Li, Chemist 09/30/16

BV31664

Initial Calibration Verification (CHEM03/VT-L0929):

99% of target compounds met criteria.

The following compounds had %RSDs >20%: None.

The following compounds did not meet recommended response factors: None.

The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM03/0930L35-VT-L0929):

Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.

100% of target compounds met criteria.

The following compounds did not meet % deviation criteria: None.

The following compounds did not meet maximum % deviations: None.

The following compounds did not meet recommended response factors: None.

The following compounds did not meet minimum response factors: None.

QC (Batch Specific):

Batch 361185 (BV32553)

BV31664

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: Chloromethane(68%), Dichlorodifluoromethane(66%)

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

Batch 361209 (BV32726)

BV31664

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.



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Temperature Narration

The samples were received at 1C with cooling initiated.
(Note acceptance criteria is above freezing up to 6°C)

CHAIN OF CUSTODY RECORD



587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
 Email: info@phoenixlabs.com Fax (860) 645-0823
 Client Services (860) 645-8726

Cooler: Yes No
 Coolant: IPK ICE No

Temp / °C Pg / of

Contact Options:

Fax:
 Phone: 860.402.7069
 Email: sk@phoenixenvironmental.com

Project P.O.: Fairchild - Town Reclamation Yard

This section **MUST** be completed with **Bottle Quantities.**

Report to: Cindy Knight - LES

Invoice to: DAS Contract - Town of Fairchild

Attn: Joseph Michelangelo
 Email: J.Michelangelo@fairchild.org

Client Sample - Information - Identification

Sampler's Signature: [Signature] Date: 9/29/16

Matrix Code:
 DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water
 RW=Raw Water SE=Sediment SL=Sludge S=Soil SD=Solid W=Wipe
 OIL=Oil B=Bulk L=Liquid

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled
31664	S-1	S	9/29/16	8:20
31665	S-2	↓	↓	8:20
31666	S-3	↓	↓	8:45

Analysis Request

CTPH 8370 8082 8210 8081
SOIL VOLS 8082 8210 8081
DEEP IS METH
TCLP DEEP IS METH

Soil VOA Vial (1 methanol) H2O	1	1	1
GL Soil container () oz	1	1	1
40 ml VOA Vial (1 As [] HCl	1	1	1
PL As [] 250ml [] 500ml [] 1000ml	1	1	1
PL H2SO4 [] 250ml [] 500ml [] 1000ml	1	1	1
PL HNO3 250ml	1	1	1
Bacteria Bottle	1	1	1

Reinquished by: [Signature] Accepted by: [Signature]

Date: 9/29/16 Time: 12:48

RI Direct Exposure (Residential) GW Other

CT RCP Cert GW Protection SW Protection GA Mobility GB Mobility Residential DEC I/C DEC Other

MA MCP Certification GW-1 GW-2 GW-3 S-1 S-2 S-3 MWRA eSMART Other

Data Format Excel PDF GIS/Key EQ/IS Other

Data Package Tier II Checklist Full Data Package* Phoenix Std Report Other

Turnaround: 1 Day* 2 Days* 3 Days* Standard Other

* SURCHARGE APPLIES

State where samples were collected: CT

* SURCHARGE APPLIES

Comments, Special Requirements or Regulations:

Lisa Arnold

From: CINDY KNIGHT <info@logicalenvironmental.com>
Sent: Friday, September 30, 2016 3:26 PM
To: Lisa Arnold
Subject: RE: Fairfield GBV 316647

725 Old Post Road
Fairfield ct. 06824

Sent from Yahoo Mail on Android

On Fri, Sep 30, 2016 at 10:39 AM, Lisa Arnold
<lisa@phoenixlabs.com> wrote:

Do you have the physical street address?

From: CINDY KNIGHT [<mailto:info@logicalenvironmental.com>]
Sent: Friday, September 30, 2016 10:37 AM
To: Lisa Arnold
Subject: Re: Fairfield GBV 31664

Yes . JMICHELANGELO@FAIRFIELDCT.ORG thanks

Sent from Yahoo Mail on Android

On Fri, Sep 30, 2016 at 10:01 AM, Lisa Arnold

<lisa@phoenixlabs.com> wrote:

Good morning again,

Did you want the Town of Fairfield to be Invoiced? If so, can you please email the address?

Thank you,

Lisa