Tim O'Connor & Company, LLC
environmental consultation

August 11, 2017

Mr. Mark Dennen
Principal Environmental Scientist
Rhode Island Department of Environmental Management
235 Promenade Street
Providence, Rhode Island 02908-5767

Re: Quarterly Report – 2nd Quarter 2017
Former Portsmouth Landfill

Dear: Mr. Dennen:

This Quarterly Report is submitted on behalf of AP Enterprise, LLC (APE) regarding the Portsmouth Landfill (the Property) per the Beneficial Use Determination Approval (BUDA) which was issued by the Rhode Island Department of Environmental Management (RIDEM) on September 20, 2010, amended on March 11, 2011 and March 18, 2014 and most recently renewed on September 9, 2014. On September 20, 2015 the BUDA expired.

This report covers activities conducted during the period of April 1 to June 30, 2017.

Construction Activities

Construction activities during this reporting period consisted of:

- The delivery and management of newly accepted final capping soil;
- The delivery and management of soils per Appendix A of the RIDEM Rules and Regulations for Composting and Solid Waste Management Facilities (the Appendix A Soils); and
- Erosion control activities.

Photos of the Property are attached as Appendix A.

Soil Accepted

The attached table summarizes the soils delivered to the Property during this reporting period. The supporting laboratory analysis data reports for the soil reported on the table (with the exception of the Appendix A soils) is provided electronically on the enclosed disk. Please note that the data package also contains data for soil that was not taken to the landfill. In order

identify the data for the soil accepted at Portsmouth, a table developed by the generator's consultant is included with the data package.

Complaints

No complaints were received directly by APE during this reporting period.

Schedule

The APE project team estimates that approximately 12,000 cubic yards will be required to complete the capping project. It is important to note that due to settlement and compaction, the final volume of capping soil required to cap the landfill is driven by existing conditions and the elevations in the approved final site grading plan and will not be determined until the project is very close to meeting the elevations in the grading plan.

Monitoring

Enclosed is a copy of the Limited Surface Investigation & Groundwater & Landfill Gas Monitoring Report, dated July 31, 2017 by ATC Group Services LLC. The next round of sampling will take place in August 2017.

Please feel free to contact me should you have any questions regarding this matter.

Sincerely
TIM O'CONNOR & COMPANY, LLC

Timothy M. O'Connor, PE, LEED-AP
Principal

Former Portsmouth Landfill Soils Accepted
2nd Quarter 2017

Delivery Dates	Source	Consultant	Quantity (tons)
April 19, 20, 21	Weir Street, Tauton, MA	Brighter Horizons	1,359.03
May 8, 9, 10, 11	* Department of Public Works Oxford, MA	Capital Environmental LLC	1,644.99
May 9	* Department of Public Works Uxbridge, MA	Capital Environmental LLC	403.8
May 30	* Department of Public Works Douglas, MA	Capital Environmental LLC	151.02
May 30, 31, June 1	* Department of Public Works Northborough, Ma	Capital Environmental LLC	528.91
June 21 & 23	162 Chandler Street; Naval Station Newport	Riverhawk Environmental	225
		Total	4,312.75

Notes

1. * - Indicates soils reguilated per Appendix A of the RIDEM Rules and Regulations for Composting and Solid Waste Management Facilities

Appendix A – Photographs

Photo 1 – Along Park Avenue Looking Northeast

Photo 2 – Along Eastern Limit of Disturbance

Photo 3 – Along Eastern Limit of Disturbance Looking South

Photo 4 – Central Portion of Site Looking North

Photo 5 – North-Western Limit of Disturbance

Photo 6 – Near Northern Limit of Disturbance

Appendix B – Analytical Data

(on disk)

CERTIFICATE OF ANALYSIS

William Kenney
River Hawk Environmental, LLC
2183 Ocean Street, Suite 2
Marshfield, MA 02050

RE: General Public Works Projects (1070105)
ESS Laboratory Work Order Number: 1611473

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 4:42 pm, Nov 28, 2016

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

Subcontracted Analyses

CTS - Cranston, RI	Particle Size
ProScience Analytical Services, Inc. - Woburn, MA	Asbestos

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects

ESS Laboratory Work Order: 1611473

SAMPLE RECEIPT

The following samples were received on November 16, 2016 for the analyses specified on the enclosed Chain of Custody Record.

Low Level VOA vials were frozen by ESS Laboratory on November 16, 2016 at 17:30.

Lab Number	Sample Name	Matrix	Analysis
1611473-01	Stockpile #104	Soil	§, 1010, 1311, 1311/6010C, 1311/7470A, 1311/8081B, 1311/8151A, 1311/8260B, 1311/8270D, 6010C, 6020A, 7.3.3.2, 7.3.4.1, 7196A, 7471B, 8081B, 8082A, 8100M, 8260B Low, 8270D, 9014, 9045, 9050A, CALC

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects

ESS Laboratory Work Order: 1611473

PROJECT NARRATIVE

1311/8260B Volatile TCLP Compounds

CK62138-BS1 **Blank Spike recovery is above upper control limit (B+).**
Vinyl Chloride (133% @ 70-130%)

1311/8270D Semi Volatile TCLP Compounds

CK61836-BLK1 **Surrogate recovery(ies) above upper control limit (S+).**
2,4,6-Tribromophenol (114% @ 15-110%)

CK61836-BS1 **Surrogate recovery(ies) above upper control limit (S+).**
2,4,6-Tribromophenol (121% @ 15-110%)

CK61836-BSD1 **Surrogate recovery(ies) above upper control limit (S+).**
2,4,6-Tribromophenol (121% @ 15-110%)

CZK0334-CCV1 **Calibration required quadratic regression (Q).**
Pentachlorophenol (125% @ 80-120%)

CZK0334-CCV1 **Continuing Calibration %Diff/Drift is above control limit (CD+).**
2,4,6-Tribromophenol (24% @ 20%), Pentachlorophenol (25% @ 20%)

5035/8260B Volatile Organic Compounds / Low Level

CK61825-BSD1 **Relative percent difference for duplicate is outside of criteria (D+).**
Acetone (26% @ 25%)

8081B Organochlorine Pesticides

CZK0227-CCV9 **Continuing Calibration %Diff/Drift is below control limit (CD-).**
Decachlorobiphenyl (35% @ 20%), Decachlorobiphenyl [2C] (37% @ 20%)

CZK0306-CCV1 **Continuing Calibration %Diff/Drift is below control limit (CD-).**
Decachlorobiphenyl [2C] (24% @ 20%)

CZK0306-CCV3 **Continuing Calibration %Diff/Drift is below control limit (CD-).**
Decachlorobiphenyl (27% @ 20%), Decachlorobiphenyl [2C] (28% @ 20%)

CZK0306-CCV5 **Continuing Calibration %Diff/Drift is above control limit (CD+).**
Decachlorobiphenyl (30% @ 20%)

8100M Total Petroleum Hydrocarbons

CZK0243-CCV2 **Continuing Calibration %Diff/Drift is above control limit (CD+).**
Triacontane (C30) (25% @ 20%)

8270D Semi-Volatile Organic Compounds

CK61612-BSD1 **Relative percent difference for duplicate is outside of criteria (D+).**
Hexachlorocyclopentadiene (32% @ 30%)

CZK0238-CCV1 **Calibration required quadratic regression (Q).**
2,4-Dinitrophenol (82% @ 80-120%), Benzoic Acid (90% @ 80-120%), Pentachlorophenol (91% @ 80-120%)

CZK0238-CCV1 **Continuing Calibration %Diff/Drift is below control limit (CD-).**
Hexachlorocyclopentadiene (30% @ 20%)

CZK0238-CCV1 **Surrogate recovery(ies) above upper control limit (S+).**

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects ESS Laboratory Work Order: 1611473

2-Fluorophenol (124% @ 80-120%)

CZK0312-CCV1 **Continuing Calibration %Diff/Drift is above control limit (CD+).**
2,4,5-Trichlorophenol (22% @ 20%), 2,4,6-Trichlorophenol (24% @ 20%), Benzoic Acid (37% @ 20%), Pentachlorophenol (23% @ 20%)

CZK0312-CCV1 **Continuing Calibration %Diff/Drift is below control limit (CD-).**
Hexachlorocyclopentadiene (22% @ 20%)

Total Metals

CK61712-BSD1 **Blank Spike recovery is above upper control limit (B+).**
Antimony (129% @ 80-120%)

CK61712-BSD1 **Blank Spike recovery is below lower control limit (B-).**
Arsenic (75% @ 80-120%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects

ESS Laboratory Work Order: 1611473

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015C - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects
Client Sample ID: Stockpile #104
Date Sampled: 11/15/16 14:20
Percent Solids: 96

ESS Laboratory Work Order: 1611473
ESS Laboratory Sample ID: 1611473-01
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Antimony	ND (0.48)		6020A		20	NAR	11/18/16 22:31	2.18	100	CK61712
Arsenic	ND (2.40)		6010C		1	KJK	11/22/16 17:34	2.18	100	CK61712
Barium	**12.9** (2.40)		6010C		1	KJK	11/20/16 2:43	2.18	100	CK61712
Beryllium	**0.17** (0.11)		6010C		1	KJK	11/20/16 2:43	2.18	100	CK61712
Cadmium	ND (0.48)		6010C		1	KJK	11/20/16 2:43	2.18	100	CK61712
Chromium	**6.3** (1.0)		6010C		1	KJK	11/20/16 2:43	2.18	100	CK61712
Copper	**6.77** (2.40)		6010C		1	KJK	11/20/16 2:43	2.18	100	CK61712
Lead	ND (4.80)		6010C		1	KJK	11/20/16 2:43	2.18	100	CK61712
Manganese	**97.8** (0.96)		6010C		1	KJK	11/20/16 2:43	2.18	100	CK61712
Mercury	ND (0.030)		7471B		1	MJV	11/18/16 14:14	0.69	40	CK61713
Nickel	**2.74** (2.40)		6010C		1	KJK	11/20/16 2:43	2.18	100	CK61712
Selenium	ND (0.48)		6020A		20	NAR	11/18/16 22:31	2.18	100	CK61712
Silver	ND (0.48)		6010C		1	KJK	11/20/16 2:43	2.18	100	CK61712
Thallium	ND (0.48)		6020A		20	NAR	11/18/16 22:31	2.18	100	CK61712
Vanadium	**6.30** (0.96)		6010C		1	KJK	11/20/16 2:43	2.18	100	CK61712
Zinc	**20.6** (2.40)		6010C		1	KJK	11/20/16 2:43	2.18	100	CK61712

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects
Client Sample ID: Stockpile #104
Date Sampled: 11/15/16 14:20
Percent Solids: 96
Initial Volume: 100
Final Volume: 5
Extraction Method: 3510C

ESS Laboratory Work Order: 1611473
ESS Laboratory Sample ID: 1611473-01
Sample Matrix: Soil
Units: mg/L
Analyst: JXS
Prepared: 11/23/16 10:30

1311/8081B Pesticide TCLP Compounds

Analyte	Results (MRL)	MDL	Method	TCLP Limit	DF	Analyzed	Sequence	Batch
Chlordane (Total)	ND (0.00500)		1311/8081B		1	11/23/16 13:44	CZK0394	CK62303
Endrin	ND (0.00050)		1311/8081B		1	11/23/16 13:44	CZK0394	CK62303
gamma-BHC (Lindane)	ND (0.00050)		1311/8081B		1	11/23/16 13:44	CZK0394	CK62303
Heptachlor	ND (0.00050)		1311/8081B		1	11/23/16 13:44	CZK0394	CK62303
Heptachlor Epoxide	ND (0.00050)		1311/8081B		1	11/23/16 13:44	CZK0394	CK62303
Methoxychlor	ND (0.00050)		1311/8081B		1	11/23/16 13:44	CZK0394	CK62303
Toxaphene	ND (0.0130)		1311/8081B		1	11/23/16 13:44	CZK0394	CK62303

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*96 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*98 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*75 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*77 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects
Client Sample ID: Stockpile #104
Date Sampled: 11/15/16 14:20
Percent Solids: 96

ESS Laboratory Work Order: 1611473
ESS Laboratory Sample ID: 1611473-01
Sample Matrix: Soil
Units: mg/L

Extraction Method: 3005A TCLP

1311 TCLP Metals

Analyte	Results (MRL)	MDL	Method	TCLP Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Arsenic	ND (0.050)		1311/6010C		1	NAR	11/21/16 19:48	50	50	CK61840
Barium	**0.141** (0.050)		1311/6010C		1	KJK	11/20/16 0:55	50	50	CK61840
Cadmium	ND (0.0100)		1311/6010C		1	KJK	11/20/16 0:55	50	50	CK61840
Chromium	ND (0.020)		1311/6010C		1	KJK	11/20/16 0:55	50	50	CK61840
Lead	ND (0.050)		1311/6010C		1	KJK	11/20/16 0:55	50	50	CK61840
Mercury	ND (0.00050)		1311/7470A		1	AA	11/21/16 13:58	20	40	CK61706
Selenium	ND (0.050)		1311/6010C		1	KJK	11/20/16 0:55	50	50	CK61840
Silver	ND (0.010)		1311/6010C		1	KJK	11/20/16 0:55	50	50	CK61840

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects
Client Sample ID: Stockpile #104
Date Sampled: 11/15/16 14:20
Percent Solids: 96
Initial Volume: 35
Final Volume: 4
Extraction Method: 3510C

ESS Laboratory Work Order: 1611473
ESS Laboratory Sample ID: 1611473-01
Sample Matrix: Soil
Units: mg/L
Analyst: JXS
Prepared: 11/22/16 15:30

1311/8151A TCLP Herbicide Compounds

Analyte	Results (MRL)	MDL	Method	TCLP Limit	DF	Analyzed	Sequence	Batch
2,4,5-TP (Silvex)	ND (0.002)		1311/8151A		1	11/22/16 22:36	CZK0363	CK62244
2,4-D	ND (0.009)		1311/8151A		1	11/22/16 22:36	CZK0363	CK62244

	%Recovery	Qualifier	Limits
Surrogate: DCAA	*111 %*		*30-150*
Surrogate: DCAA [2C]	*91 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects
Client Sample ID: Stockpile #104
Date Sampled: 11/15/16 14:20
Percent Solids: 96
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1611473
ESS Laboratory Sample ID: 1611473-01
Sample Matrix: Soil
Units: mg/L
Analyst: GEM

1311/8260B Volatile TCLP Compounds

Analyte	Results (MRL)	MDL	Method	TCLP Limit	DF	Analyzed	Sequence	Batch
1,1-Dichloroethene	ND (0.100)		1311/8260B		100	11/21/16 21:42	CZK0330	CK62138
1,2-Dichloroethane	ND (0.100)		1311/8260B		100	11/21/16 21:42	CZK0330	CK62138
1,4-Dichlorobenzene	ND (0.100)		1311/8260B		100	11/21/16 21:42	CZK0330	CK62138
2-Butanone	ND (2.50)		1311/8260B		100	11/21/16 21:42	CZK0330	CK62138
Benzene	ND (0.100)		1311/8260B		100	11/21/16 21:42	CZK0330	CK62138
Carbon Tetrachloride	ND (0.100)		1311/8260B		100	11/21/16 21:42	CZK0330	CK62138
Chlorobenzene	ND (0.100)		1311/8260B		100	11/21/16 21:42	CZK0330	CK62138
Chloroform	ND (0.100)		1311/8260B		100	11/21/16 21:42	CZK0330	CK62138
Tetrachloroethene	ND (0.100)		1311/8260B		100	11/21/16 21:42	CZK0330	CK62138
Trichloroethene	ND (0.100)		1311/8260B		100	11/21/16 21:42	CZK0330	CK62138
Vinyl Chloride	ND (0.100)		1311/8260B		100	11/21/16 21:42	CZK0330	CK62138

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichloroethane-d4	*113 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*105 %*		*70-130*
Surrogate: Dibromofluoromethane	*100 %*		*70-130*
Surrogate: Toluene-d8	*112 %*		*70-130*

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects
Client Sample ID: Stockpile #104
Date Sampled: 11/15/16 14:20
Percent Solids: 96
Initial Volume: 200
Final Volume: 1
Extraction Method: 3520C

ESS Laboratory Work Order: 1611473
ESS Laboratory Sample ID: 1611473-01
Sample Matrix: Soil
Units: mg/L
Analyst: TJ
Prepared: 11/18/16 16:22

1311/8270D Semi Volatile TCLP Compounds

Analyte	Results (MRL)	MDL	Method	TCLP Limit	DF	Analyzed	Sequence	Batch
2,4,5-Trichlorophenol	ND (0.05)		1311/8270D		1	11/22/16 1:47	CZK0334	CK61836
2,4,6-Trichlorophenol	ND (0.05)		1311/8270D		1	11/22/16 1:47	CZK0334	CK61836
2,4-Dinitrotoluene	ND (0.05)		1311/8270D		1	11/22/16 1:47	CZK0334	CK61836
2-Methylphenol	ND (0.05)		1311/8270D		1	11/22/16 1:47	CZK0334	CK61836
3+4-Methylphenol	ND (0.10)		1311/8270D		1	11/22/16 1:47	CZK0334	CK61836
Hexachlorobenzene	ND (0.05)		1311/8270D		1	11/22/16 1:47	CZK0334	CK61836
Hexachlorobutadiene	ND (0.05)		1311/8270D		1	11/22/16 1:47	CZK0334	CK61836
Hexachloroethane	ND (0.02)		1311/8270D		1	11/22/16 1:47	CZK0334	CK61836
Nitrobenzene	ND (0.05)		1311/8270D		1	11/22/16 1:47	CZK0334	CK61836
Pentachlorophenol	ND (0.25)		1311/8270D		1	11/22/16 1:47	CZK0334	CK61836
Pyridine	ND (0.50)		1311/8270D		1	11/22/16 1:47	CZK0334	CK61836

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichlorobenzene-d4	*72 %*		*30-130*
Surrogate: 2,4,6-Tribromophenol	*109 %*		*15-110*
Surrogate: 2-Chlorophenol-d4	*73 %*		*15-110*
Surrogate: 2-Fluorobiphenyl	*81 %*		*30-130*
Surrogate: 2-Fluorophenol	*70 %*		*15-110*
Surrogate: Nitrobenzene-d5	*82 %*		*30-130*
Surrogate: Phenol-d6	*81 %*		*15-110*
Surrogate: p-Terphenyl-d14	*93 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects
Client Sample ID: Stockpile #104
Date Sampled: 11/15/16 14:20
Percent Solids: 96

ESS Laboratory Work Order: 1611473
ESS Laboratory Sample ID: 1611473-01
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: [CALC]

Total Metals Solid

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V	Batch
Chromium (III)	**6.3** (1.5)		CALC		1	EEM	11/22/16 14:00	1	1	[CALC]

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects
Client Sample ID: Stockpile #104
Date Sampled: 11/15/16 14:20
Percent Solids: 96
Initial Volume: 8.5
Final Volume: 10
Extraction Method: 5035

ESS Laboratory Work Order: 1611473
ESS Laboratory Sample ID: 1611473-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: MEK

5035/8260B Volatile Organic Compounds / Low Level

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
1,1,1,2-Tetrachloroethane	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
1,1,1-Trichloroethane	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
1,1,2,2-Tetrachloroethane	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
1,1,2-Trichloroethane	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
1,1-Dichloroethane	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
1,1-Dichloroethene	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
1,1-Dichloropropene	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
1,2,3-Trichlorobenzene	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
1,2,3-Trichloropropane	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
1,2,4-Trichlorobenzene	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
1,2,4-Trimethylbenzene	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
1,2-Dibromo-3-Chloropropane	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
1,2-Dibromoethane	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
1,2-Dichlorobenzene	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
1,2-Dichloroethane	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
1,2-Dichloropropane	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
1,3,5-Trimethylbenzene	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
1,3-Dichlorobenzene	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
1,3-Dichloropropane	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
1,4-Dichlorobenzene	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
1,4-Dioxane	ND (0.0616)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
1-Chlorohexane	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
2,2-Dichloropropane	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
2-Butanone	ND (0.0308)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
2-Chlorotoluene	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
2-Hexanone	ND (0.0308)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
4-Chlorotoluene	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
4-Isopropyltoluene	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
4-Methyl-2-Pentanone	ND (0.0308)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Acetone	ND (0.0308)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Benzene	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Bromobenzene	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects
Client Sample ID: Stockpile #104
Date Sampled: 11/15/16 14:20
Percent Solids: 96
Initial Volume: 8.5
Final Volume: 10
Extraction Method: 5035

ESS Laboratory Work Order: 1611473
ESS Laboratory Sample ID: 1611473-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: MEK

5035/8260B Volatile Organic Compounds / Low Level

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Bromochloromethane	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Bromodichloromethane	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Bromoform	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Bromomethane	ND (0.0062)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Carbon Disulfide	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Carbon Tetrachloride	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Chlorobenzene	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Chloroethane	ND (0.0062)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Chloroform	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Chloromethane	ND (0.0062)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
cis-1,2-Dichloroethene	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
cis-1,3-Dichloropropene	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Dibromochloromethane	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Dibromomethane	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Dichlorodifluoromethane	ND (0.0062)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Diethyl Ether	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Di-isopropyl ether	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Ethyl tertiary-butyl ether	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Ethylbenzene	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Hexachlorobutadiene	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Isopropylbenzene	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Methyl tert-Butyl Ether	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Methylene Chloride	ND (0.0154)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Naphthalene	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
n-Butylbenzene	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
n-Propylbenzene	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
sec-Butylbenzene	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Styrene	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
tert-Butylbenzene	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Tertiary-amyl methyl ether	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Tetrachloroethene	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Tetrahydrofuran	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects
Client Sample ID: Stockpile #104
Date Sampled: 11/15/16 14:20
Percent Solids: 96
Initial Volume: 8.5
Final Volume: 10
Extraction Method: 5035

ESS Laboratory Work Order: 1611473
ESS Laboratory Sample ID: 1611473-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: MEK

5035/8260B Volatile Organic Compounds / Low Level

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Toluene	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
trans-1,2-Dichloroethene	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
trans-1,3-Dichloropropene	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Trichloroethene	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Trichlorofluoromethane	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Vinyl Acetate	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Vinyl Chloride	ND (0.0062)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Xylene O	ND (0.0031)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Xylene P,M	ND (0.0062)		8260B Low		1	11/18/16 17:43	CZK0291	CK61825
Xylenes (Total)	ND (0.0062)		8260B Low		1	11/18/16 17:43		[CALC]

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	*116 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*108 %*		*70-130*
Surrogate: Dibromofluoromethane	*101 %*		*70-130*
Surrogate: Toluene-d8	*102 %*		*70-130*

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects
Client Sample ID: Stockpile #104
Date Sampled: 11/15/16 14:20
Percent Solids: 96
Initial Volume: 20.1
Final Volume: 5
Extraction Method: 3546

ESS Laboratory Work Order: 1611473
ESS Laboratory Sample ID: 1611473-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JXS
Prepared: 11/17/16 10:00

8081B Organochlorine Pesticides

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Chlordane (Total)	ND (0.0313)		8081B		1	11/19/16 1:42	CZK0306	CK61609
Dieldrin	ND (0.0026)		8081B		1	11/19/16 1:42	CZK0306	CK61609

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*60 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*60 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*79 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*74 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects
Client Sample ID: Stockpile #104
Date Sampled: 11/15/16 14:20
Percent Solids: 96
Initial Volume: 19.8
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1611473
ESS Laboratory Sample ID: 1611473-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: SMR
Prepared: 11/17/16 11:02

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0529)		8082A		1	11/18/16 14:12		CK61607
Aroclor 1221	ND (0.0529)		8082A		1	11/18/16 14:12		CK61607
Aroclor 1232	ND (0.0529)		8082A		1	11/18/16 14:12		CK61607
Aroclor 1242	ND (0.0529)		8082A		1	11/18/16 14:12		CK61607
Aroclor 1248	ND (0.0529)		8082A		1	11/18/16 14:12		CK61607
Aroclor 1254	ND (0.0529)		8082A		1	11/18/16 14:12		CK61607
Aroclor 1260	ND (0.0529)		8082A		1	11/18/16 14:12		CK61607
Aroclor 1262	ND (0.0529)		8082A		1	11/18/16 14:12		CK61607
Aroclor 1268	ND (0.0529)		8082A		1	11/18/16 14:12		CK61607

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*64 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*57 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*66 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*67 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects
Client Sample ID: Stockpile #104
Date Sampled: 11/15/16 14:20
Percent Solids: 96
Initial Volume: 20.6
Final Volume: 1
Extraction Method: 3546

ESS Laboratory Work Order: 1611473
ESS Laboratory Sample ID: 1611473-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: DPS
Prepared: 11/17/16 10:00

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons	**89.0** (38.1)		8100M		1	11/17/16 17:04	CZK0265	CK61611

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*83 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects
Client Sample ID: Stockpile #104
Date Sampled: 11/15/16 14:20
Percent Solids: 96
Initial Volume: 15.3
Final Volume: 0.5
Extraction Method: 3546

ESS Laboratory Work Order: 1611473
ESS Laboratory Sample ID: 1611473-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 11/17/16 10:00

8270D Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
1,1-Biphenyl	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
1,2,4-Trichlorobenzene	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
1,2-Dichlorobenzene	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
1,3-Dichlorobenzene	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
1,4-Dichlorobenzene	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
2,3,4,6-Tetrachlorophenol	ND (1.71)		8270D		1	11/19/16 20:24	CZK0312	CK61612
2,4,5-Trichlorophenol	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
2,4,6-Trichlorophenol	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
2,4-Dichlorophenol	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
2,4-Dimethylphenol	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
2,4-Dinitrophenol	ND (1.71)		8270D		1	11/19/16 20:24	CZK0312	CK61612
2,4-Dinitrotoluene	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
2,6-Dinitrotoluene	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
2-Chloronaphthalene	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
2-Chlorophenol	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
2-Methylnaphthalene	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
2-Methylphenol	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
2-Nitroaniline	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
2-Nitrophenol	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
3,3´-Dichlorobenzidine	ND (0.685)		8270D		1	11/19/16 20:24	CZK0312	CK61612
3+4-Methylphenol	ND (0.685)		8270D		1	11/19/16 20:24	CZK0312	CK61612
3-Nitroaniline	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
4,6-Dinitro-2-Methylphenol	ND (1.71)		8270D		1	11/19/16 20:24	CZK0312	CK61612
4-Bromophenyl-phenylether	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
4-Chloro-3-Methylphenol	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
4-Chloroaniline	ND (0.685)		8270D		1	11/19/16 20:24	CZK0312	CK61612
4-Chloro-phenyl-phenyl ether	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
4-Nitroaniline	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
4-Nitrophenol	ND (1.71)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Acenaphthene	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Acenaphthylene	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Acetophenone	ND (0.685)		8270D		1	11/19/16 20:24	CZK0312	CK61612

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects
Client Sample ID: Stockpile #104
Date Sampled: 11/15/16 14:20
Percent Solids: 96
Initial Volume: 15.3
Final Volume: 0.5
Extraction Method: 3546

ESS Laboratory Work Order: 1611473
ESS Laboratory Sample ID: 1611473-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 11/17/16 10:00

8270D Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aniline	ND (0.685)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Anthracene	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Azobenzene	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Benzo(a)anthracene	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Benzo(a)pyrene	ND (0.171)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Benzo(b)fluoranthene	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Benzo(g,h,i)perylene	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Benzo(k)fluoranthene	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Benzoic Acid	ND (1.71)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Benzyl Alcohol	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
bis(2-Chloroethoxy)methane	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
bis(2-Chloroethyl)ether	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
bis(2-chloroisopropyl)Ether	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
bis(2-Ethylhexyl)phthalate	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Butylbenzylphthalate	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Carbazole	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Chrysene	ND (0.171)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Dibenzo(a,h)Anthracene	ND (0.171)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Dibenzofuran	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Diethylphthalate	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Dimethylphthalate	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Di-n-butylphthalate	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Di-n-octylphthalate	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Fluoranthene	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Fluorene	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Hexachlorobenzene	ND (0.171)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Hexachlorobutadiene	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Hexachlorocyclopentadiene	ND (1.71)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Hexachloroethane	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Indeno(1,2,3-cd)Pyrene	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Isophorone	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Naphthalene	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects
Client Sample ID: Stockpile #104
Date Sampled: 11/15/16 14:20
Percent Solids: 96
Initial Volume: 15.3
Final Volume: 0.5
Extraction Method: 3546

ESS Laboratory Work Order: 1611473
ESS Laboratory Sample ID: 1611473-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 11/17/16 10:00

8270D Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Nitrobenzene	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
N-Nitrosodimethylamine	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
N-Nitroso-Di-n-Propylamine	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
N-nitrosodiphenylamine	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Pentachlorophenol	ND (1.71)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Phenanthrene	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Phenol	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Pyrene	ND (0.342)		8270D		1	11/19/16 20:24	CZK0312	CK61612
Pyridine	ND (1.71)		8270D		1	11/19/16 20:24	CZK0312	CK61612

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichlorobenzene-d4	*71 %*		*30-130*
Surrogate: 2,4,6-Tribromophenol	*98 %*		*30-130*
Surrogate: 2-Chlorophenol-d4	*77 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*73 %*		*30-130*
Surrogate: 2-Fluorophenol	*74 %*		*30-130*
Surrogate: Nitrobenzene-d5	*69 %*		*30-130*
Surrogate: Phenol-d6	*83 %*		*30-130*
Surrogate: p-Terphenyl-d14	*87 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects
Client Sample ID: Stockpile #104
Date Sampled: 11/15/16 14:20
Percent Solids: 96

ESS Laboratory Work Order: 1611473
ESS Laboratory Sample ID: 1611473-01
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Conductivity	**WL 73500** (5)		9050A		1	JLK	11/22/16 16:00	umhos/cm	CK62236
Corrosivity (pH)	**8.25** (N/A)		9045		1	JLK	11/16/16 22:34	S.U.	CK61644
Corrosivity (pH) Sample Temp	**Soil pH measured in water at 20.8 ºC.**								
Flashpoint	**> 200** (N/A)		1010		1	CRR	11/17/16 13:35	°F	CK61742
Hexavalent Chromium	ND (0.6)		7196A		1	EEM	11/22/16 14:00	mg/kg dry	CK62223
Particle Size	**See Attached** (N/A)								
Reactive Cyanide	ND (2.0)		7.3.3.2		1	EEM	11/22/16 14:01	mg/kg	CK62226
Reactive Sulfide	ND (2.0)		7.3.4.1		1	EEM	11/22/16 14:01	mg/kg	CK62226
Total Cyanide	**4.08** (1.03)		9014		1	EEM	11/18/16 11:20	mg/kg dry	CK61823

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects
Client Sample ID: Stockpile #104
Date Sampled: 11/15/16 14:20

ESS Laboratory Work Order: 1611473
ESS Laboratory Sample ID: 1611473-01
Sample Matrix: Soil
Units: %

Subcontracted Analysis

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
Asbestos	**See Attached** (N/A)								

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects
Client Sample ID: Stockpile #104
Date Sampled: 11/15/16 14:20
Percent Solids: 96
Initial Volume: 100
Final Volume: 2000
Extraction Method: 1311

ESS Laboratory Work Order: 1611473
ESS Laboratory Sample ID: 1611473-01
Sample Matrix: Soil
Units: °C
Analyst: LAB
Prepared: 11/17/16 18:00

TCLP Extraction by 1311

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Batch
Temperature (Min C)	**19.6** (N/A)		1311		1	LAB	11/18/16 10:40	CK61758
Temperature (Min C)	**19.6** (N/A)		1311		1	LAB	11/18/16 10:40	CK61758
Temperature (Max C)	**23.8** (N/A)		1311		1	LAB	11/18/16 10:40	CK61758
Temperature (Max C)	**23.8** (N/A)		1311		1	LAB	11/18/16 10:40	CK61758
Temperature (Range)	**Temperature is not within 23 +/-2 ºC.** (N/A)							
Temperature (Range)	**Temperature is not within 23 +/-2 ºC.** (N/A)							

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects
Client Sample ID: Stockpile #104
Date Sampled: 11/15/16 14:20
Percent Solids: 96
Initial Volume: 1
Final Volume: 1
Extraction Method: 1311/ZHE

ESS Laboratory Work Order: 1611473
ESS Laboratory Sample ID: 1611473-01
Sample Matrix: Soil
Units: °C
Analyst: GEM
Prepared: 11/17/16 18:50

ZHE Extraction by 1311

Analyte	Results (MRL)	MDL	Method	TCLP Limit	DF	Analyst	Analyzed	Batch
Temperature (Min C)	**21.5** (N/A)		1311		1	GEM	11/18/16 12:10	CK62228
Temperature (Max C)	**22.0** (N/A)		1311		1	GEM	11/18/16 12:10	CK62228
Temperature (Range)	**Temperature is within 23 +/-2 °C.** (N/A)							

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects

ESS Laboratory Work Order: 1611473

Quality Control Data

Total Metals

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch CK61712 - 3050B										
Blank										
Antimony	ND	0.50	mg/kg wet							
Arsenic	ND	2.50	mg/kg wet							
Barium	ND	2.50	mg/kg wet							
Beryllium	ND	0.11	mg/kg wet							
Cadmium	ND	0.50	mg/kg wet							
Chromium	ND	1.0	mg/kg wet							
Copper	ND	2.50	mg/kg wet							
Lead	ND	5.00	mg/kg wet							
Manganese	ND	1.00	mg/kg wet							
Nickel	ND	2.50	mg/kg wet							
Selenium	ND	0.50	mg/kg wet							
Silver	ND	0.50	mg/kg wet							
Thallium	ND	0.50	mg/kg wet							
Vanadium	ND	1.00	mg/kg wet							
Zinc	ND	2.50	mg/kg wet							
LCS										
Antimony	117	21.6	mg/kg wet	100.0		117	80-120			
Arsenic	131	8.62	mg/kg wet	161.0		81	80-120			
Barium	329	8.62	mg/kg wet	351.0		94	80-120			
Beryllium	84.3	0.38	mg/kg wet	89.40		94	80-120			
Cadmium	167	1.72	mg/kg wet	190.0		88	80-120			
Chromium	81.3	3.4	mg/kg wet	87.90		92	80-120			
Copper	233	8.62	mg/kg wet	258.0		90	80-120			
Lead	130	17.2	mg/kg wet	138.0		94	80-120			
Nickel	125	8.62	mg/kg wet	127.0		99	80-120			
Selenium	282	21.6	mg/kg wet	305.0		93	80-120			
Silver	56.2	1.72	mg/kg wet	58.00		97	80-120			
Thallium	75.1	21.6	mg/kg wet	89.80		84	80-120			
Vanadium	76.1	3.45	mg/kg wet	81.60		93	80-120			
Zinc	159	8.62	mg/kg wet	173.0		92	80-120			
LCS										
Manganese	366	3.23	mg/kg wet	400.0		91	80-120			
LCS Dup										
Antimony	129	21.2	mg/kg wet	100.0		129	80-120	10	30	B+
Arsenic	121	8.47	mg/kg wet	161.0		75	80-120	8	20	B-
Barium	349	8.47	mg/kg wet	351.0		99	80-120	6	20	
Beryllium	87.7	0.37	mg/kg wet	89.40		98	80-120	4	20	
Cadmium	173	1.69	mg/kg wet	190.0		91	80-120	3	20	
Chromium	84.6	3.4	mg/kg wet	87.90		96	80-120	4	20	
Copper	241	8.47	mg/kg wet	258.0		94	80-120	3	20	
Lead	136	16.9	mg/kg wet	138.0		99	80-120	5	20	
Nickel	134	8.47	mg/kg wet	127.0		106	80-120	7	20	
Selenium	310	21.2	mg/kg wet	305.0		102	80-120	9	30	
Silver	59.0	1.69	mg/kg wet	58.00		102	80-120	5	20	

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects

ESS Laboratory Work Order: 1611473

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Total Metals										
Batch CK61712 - 3050B										
Thallium	81.0	21.2	mg/kg wet	89.80		90	80-120	8	30	
Vanadium	79.0	3.39	mg/kg wet	81.60		97	80-120	4	20	
Zinc	168	8.47	mg/kg wet	173.0		97	80-120	5	20	
LCS Dup										
Manganese	383	3.57	mg/kg wet	400.0		96	80-120	5	20	
Batch CK61713 - 7471B										
Blank										
Mercury	ND	0.033	mg/kg wet							
LCS										
Mercury	16.2	1.90	mg/kg wet	15.90		102	80-120			
LCS Dup										
Mercury	15.6	1.87	mg/kg wet	15.90		98	80-120	4	20	
1311/8081B Pesticide TCLP Compounds										
Batch CK62303 - 3510C										
Blank										
Chlordane (Total)	ND	0.00500	mg/L							
Endrin	ND	0.00050	mg/L							
gamma-BHC (Lindane)	ND	0.00050	mg/L							
Heptachlor	ND	0.00050	mg/L							
Heptachlor Epoxide	ND	0.00050	mg/L							
Methoxychlor	ND	0.00050	mg/L							
Toxaphene	ND	0.0130	mg/L							
Surrogate: Decachlorobiphenyl	*0.00227*		mg/L	*0.002500*		*91*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.00228*		mg/L	*0.002500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.00198*		mg/L	*0.002500*		*79*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.00202*		mg/L	*0.002500*		*81*	*30-150*			
Blank										
Chlordane (Total)	ND	0.00500	mg/L							
Endrin	ND	0.00050	mg/L							
gamma-BHC (Lindane)	ND	0.00050	mg/L							
Heptachlor	ND	0.00050	mg/L							
Heptachlor Epoxide	ND	0.00050	mg/L							
Methoxychlor	ND	0.00050	mg/L							
Toxaphene	ND	0.0130	mg/L							
Surrogate: Decachlorobiphenyl	*0.00247*		mg/L	*0.002500*		*99*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.00250*		mg/L	*0.002500*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.00217*		mg/L	*0.002500*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.00222*		mg/L	*0.002500*		*89*	*30-150*			
Blank										
Chlordane (Total)	ND	0.00500	mg/L							
Endrin	ND	0.00050	mg/L							

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects

ESS Laboratory Work Order: 1611473

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
1311/8081B Pesticide TCLP Compounds										
Batch CK62303 - 3510C										
gamma-BHC (Lindane)	ND	0.00050	mg/L							
Heptachlor	ND	0.00050	mg/L							
Heptachlor Epoxide	ND	0.00050	mg/L							
Methoxychlor	ND	0.00050	mg/L							
Toxaphene	ND	0.0130	mg/L							
Surrogate: Decachlorobiphenyl	*0.00197*		mg/L	*0.002500*		*79*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.00225*		mg/L	*0.002500*		*90*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.00180*		mg/L	*0.002500*		*72*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.00191*		mg/L	*0.002500*		*76*	*30-150*			
LCS										
Chlordane (Total)	ND	0.00050	mg/L				40-140			
Endrin	0.00024	0.00005	mg/L	0.0002500		96	40-140			
gamma-BHC (Lindane)	0.00022	0.00005	mg/L	0.0002500		89	40-140			
Heptachlor	0.00020	0.00005	mg/L	0.0002500		80	40-140			
Heptachlor Epoxide	0.00024	0.00005	mg/L	0.0002500		96	40-140			
Methoxychlor	0.00025	0.00005	mg/L	0.0002500		102	40-140			
Surrogate: Decachlorobiphenyl	*0.000203*		mg/L	*0.0002500*		*81*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.000204*		mg/L	*0.0002500*		*82*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.000208*		mg/L	*0.0002500*		*83*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.000208*		mg/L	*0.0002500*		*83*	*30-150*			
LCS Dup										
Chlordane (Total)	ND	0.00050	mg/L				40-140		20	
Endrin	0.00025	0.00005	mg/L	0.0002500		100	40-140	5	20	
gamma-BHC (Lindane)	0.00024	0.00005	mg/L	0.0002500		95	40-140	7	20	
Heptachlor	0.00022	0.00005	mg/L	0.0002500		89	40-140	11	20	
Heptachlor Epoxide	0.00025	0.00005	mg/L	0.0002500		101	40-140	6	20	
Methoxychlor	0.00026	0.00005	mg/L	0.0002500		105	40-140	3	20	
Surrogate: Decachlorobiphenyl	*0.000226*		mg/L	*0.0002500*		*90*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.000228*		mg/L	*0.0002500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.000226*		mg/L	*0.0002500*		*90*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.000228*		mg/L	*0.0002500*		*91*	*30-150*			
1311 TCLP Metals										
Batch CK61706 - 245.1/7470A										
Blank										
Mercury	ND	0.00050	mg/L							
Blank										
Mercury	ND	0.00050	mg/L							
LCS										
Mercury	0.00691	0.00050	mg/L	0.006000		115	80-120			
LCS Dup										
Mercury	0.00691	0.00050	mg/L	0.006000		115	80-120	0.1	20	

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects

ESS Laboratory Work Order: 1611473

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
1311 TCLP Metals										
Batch CK61840 - 3005A_TCLP										
Blank										
Arsenic	ND	0.050	mg/L							
Barium	ND	0.050	mg/L							
Cadmium	ND	0.0100	mg/L							
Chromium	ND	0.020	mg/L							
Lead	ND	0.050	mg/L							
Selenium	ND	0.050	mg/L							
Silver	ND	0.010	mg/L							
LCS										
Arsenic	0.436	0.050	mg/L	0.5000		87	80-120			
Barium	0.458	0.050	mg/L	0.5000		92	80-120			
Cadmium	0.227	0.0100	mg/L	0.2500		91	80-120			
Chromium	0.460	0.020	mg/L	0.5000		92	80-120			
Lead	0.455	0.050	mg/L	0.5000		91	80-120			
Selenium	0.989	0.050	mg/L	1.000		99	80-120			
Silver	0.243	0.010	mg/L	0.2500		97	80-120			
LCS Dup										
Arsenic	0.467	0.050	mg/L	0.5000		93	80-120	7	20	
Barium	0.467	0.050	mg/L	0.5000		93	80-120	2	20	
Cadmium	0.236	0.0100	mg/L	0.2500		94	80-120	4	20	
Chromium	0.473	0.020	mg/L	0.5000		95	80-120	3	20	
Lead	0.474	0.050	mg/L	0.5000		95	80-120	4	20	
Selenium	1.02	0.050	mg/L	1.000		102	80-120	3	20	
Silver	0.250	0.010	mg/L	0.2500		100	80-120	3	20	
1311/8151A TCLP Herbicide Compounds										
Batch CK62244 - 3510C										
Blank										
2,4,5-TP (Silvex)	ND	0.002	mg/L							
2,4,5-TP (Silvex) [2C]	ND	0.002	mg/L							
2,4-D	ND	0.009	mg/L							
2,4-D [2C]	ND	0.009	mg/L							
Surrogate: DCAA	*6.15*		mg/L	*5.714*		*108*	*30-150*			
Surrogate: DCAA [2C]	*4.72*		mg/L	*5.714*		*83*	*30-150*			
Blank										
2,4,5-TP (Silvex)	ND	0.002	mg/L							
2,4,5-TP (Silvex) [2C]	ND	0.002	mg/L							
2,4-D	ND	0.009	mg/L							
2,4-D [2C]	ND	0.009	mg/L							
Surrogate: DCAA	*7.22*		mg/L	*5.714*		*126*	*30-150*			
Surrogate: DCAA [2C]	*5.75*		mg/L	*5.714*		*101*	*30-150*			
LCS										

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects

ESS Laboratory Work Order: 1611473

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
1311/8151A TCLP Herbicide Compounds										
Batch CK62244 - 3510C										
2,4,5-TP (Silvex)	0.004	0.002	mg/L	0.005429		76	40-140			
2,4,5-TP (Silvex) [2C]	0.004	0.002	mg/L	0.005429		66	40-140			
2,4-D	0.042	0.009	mg/L	0.05371		79	40-140			
2,4-D [2C]	0.041	0.009	mg/L	0.05371		77	40-140			
Surrogate: DCAA	*7.82*		mg/L	*5.714*		*137*	*30-150*			
Surrogate: DCAA [2C]	*6.43*		mg/L	*5.714*		*113*	*30-150*			
LCS Dup										
2,4,5-TP (Silvex)	0.004	0.002	mg/L	0.005429		76	40-140	0	20	
2,4,5-TP (Silvex) [2C]	0.004	0.002	mg/L	0.005429		70	40-140	6	20	
2,4-D	0.043	0.009	mg/L	0.05371		80	40-140	1	20	
2,4-D [2C]	0.042	0.009	mg/L	0.05371		79	40-140	2	20	
Surrogate: DCAA	*6.75*		mg/L	*5.714*		*118*	*30-150*			
Surrogate: DCAA [2C]	*5.49*		mg/L	*5.714*		*96*	*30-150*			
1311/8260B Volatile TCLP Compounds										
Batch CK62138 - 5030B										
Blank										
1,1-Dichloroethene	ND	0.0010	mg/L							
1,2-Dichloroethane	ND	0.0010	mg/L							
1,4-Dichlorobenzene	ND	0.0010	mg/L							
2-Butanone	ND	0.0250	mg/L							
Benzene	ND	0.0010	mg/L							
Carbon Tetrachloride	ND	0.0010	mg/L							
Chlorobenzene	ND	0.0010	mg/L							
Chloroform	ND	0.0010	mg/L							
Tetrachloroethene	ND	0.0010	mg/L							
Trichloroethene	ND	0.0010	mg/L							
Vinyl Chloride	ND	0.0010	mg/L							
Surrogate: 1,2-Dichloroethane-d4	*0.0269*		mg/L	*0.02500*		*108*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.0233*		mg/L	*0.02500*		*93*	*70-130*			
Surrogate: Dibromofluoromethane	*0.0245*		mg/L	*0.02500*		*98*	*70-130*			
Surrogate: Toluene-d8	*0.0278*		mg/L	*0.02500*		*111*	*70-130*			
LCS										
1,1-Dichloroethene	11.3		ug/L	10.00		113	70-130			
1,2-Dichloroethane	10.2		ug/L	10.00		102	70-130			
1,4-Dichlorobenzene	9.74		ug/L	10.00		97	70-130			
2-Butanone	55.1		ug/L	50.00		110	70-130			
Benzene	10.3		ug/L	10.00		103	70-130			
Carbon Tetrachloride	8.09		ug/L	10.00		81	70-130			
Chlorobenzene	9.85		ug/L	10.00		98	70-130			
Chloroform	10.6		ug/L	10.00		106	70-130			
Tetrachloroethene	10.1		ug/L	10.00		101	70-130			
Trichloroethene	9.14		ug/L	10.00		91	70-130			

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects

ESS Laboratory Work Order: 1611473

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
1311/8260B Volatile TCLP Compounds										
Batch CK62138 - 5030B										
Vinyl Chloride	13.3		ug/L	10.00		133	70-130			B+
Surrogate: 1,2-Dichloroethane-d4	*0.0254*		mg/L	*0.02500*		*102*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.0209*		mg/L	*0.02500*		*84*	*70-130*			
Surrogate: Dibromofluoromethane	*0.0235*		mg/L	*0.02500*		*94*	*70-130*			
Surrogate: Toluene-d8	*0.0245*		mg/L	*0.02500*		*98*	*70-130*			
LCS Dup										
1,1-Dichloroethene	12.4		ug/L	10.00		124	70-130	10	25	
1,2-Dichloroethane	10.8		ug/L	10.00		108	70-130	6	25	
1,4-Dichlorobenzene	9.42		ug/L	10.00		94	70-130	3	25	
2-Butanone	54.9		ug/L	50.00		110	70-130	0.5	25	
Benzene	10.7		ug/L	10.00		107	70-130	3	25	
Carbon Tetrachloride	8.37		ug/L	10.00		84	70-130	3	25	
Chlorobenzene	10.0		ug/L	10.00		100	70-130	2	25	
Chloroform	10.4		ug/L	10.00		104	70-130	1	25	
Tetrachloroethene	10.2		ug/L	10.00		102	70-130	0.8	25	
Trichloroethene	9.43		ug/L	10.00		94	70-130	3	25	
Vinyl Chloride	12.4		ug/L	10.00		124	70-130	7	25	
Surrogate: 1,2-Dichloroethane-d4	*0.0249*		mg/L	*0.02500*		*100*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.0216*		mg/L	*0.02500*		*86*	*70-130*			
Surrogate: Dibromofluoromethane	*0.0240*		mg/L	*0.02500*		*96*	*70-130*			
Surrogate: Toluene-d8	*0.0245*		mg/L	*0.02500*		*98*	*70-130*			
1311/8270D Semi Volatile TCLP Compounds										
Batch CK61836 - 3520C										
Blank										
2,4,5-Trichlorophenol	ND	0.05	mg/L							
2,4,6-Trichlorophenol	ND	0.05	mg/L							
2,4-Dinitrotoluene	ND	0.05	mg/L							
2-Methylphenol	ND	0.05	mg/L							
3+4-Methylphenol	ND	0.10	mg/L							
Hexachlorobenzene	ND	0.05	mg/L							
Hexachlorobutadiene	ND	0.05	mg/L							
Hexachloroethane	ND	0.02	mg/L							
Nitrobenzene	ND	0.05	mg/L							
Pentachlorophenol	ND	0.25	mg/L							
Pyridine	ND	0.50	mg/L							
Surrogate: 1,2-Dichlorobenzene-d4	*0.369*		mg/L	*0.5000*		*74*	*30-130*			
Surrogate: 2,4,6-Tribromophenol	*0.857*		mg/L	*0.7500*		*114*	*15-110*			*S+*
Surrogate: 2-Chlorophenol-d4	*0.509*		mg/L	*0.7500*		*68*	*15-110*			
Surrogate: 2-Fluorobiphenyl	*0.429*		mg/L	*0.5000*		*86*	*30-130*			
Surrogate: 2-Fluorophenol	*0.415*		mg/L	*0.7500*		*55*	*15-110*			
Surrogate: Nitrobenzene-d5	*0.431*		mg/L	*0.5000*		*86*	*30-130*			
Surrogate: Phenol-d6	*0.565*		mg/L	*0.7500*		*75*	*15-110*			
Surrogate: p-Terphenyl-d14	*0.510*		mg/L	*0.5000*		*102*	*30-130*			
LCS										

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
1311/8270D Semi Volatile TCLP Compounds										
Batch CK61836 - 3520C										
2,4,5-Trichlorophenol	0.11	0.01	mg/L	0.1000		108	30-130			
2,4,6-Trichlorophenol	0.10	0.01	mg/L	0.1000		100	30-130			
2,4-Dinitrotoluene	0.10	0.01	mg/L	0.1000		102	40-140			
2-Methylphenol	0.08	0.01	mg/L	0.1000		82	30-130			
3+4-Methylphenol	0.17	0.02	mg/L	0.2000		86	30-130			
Hexachlorobenzene	0.09	0.01	mg/L	0.1000		94	40-140			
Hexachlorobutadiene	0.08	0.01	mg/L	0.1000		80	40-140			
Hexachloroethane	0.07	0.005	mg/L	0.1000		75	40-140			
Nitrobenzene	0.09	0.01	mg/L	0.1000		88	40-140			
Pentachlorophenol	0.12	0.05	mg/L	0.1000		122	30-130			
Pyridine	0.07	0.10	mg/L	0.1000		71	40-140			
Surrogate: 1,2-Dichlorobenzene-d4	*0.0749*		mg/L	*0.1000*		*75*	*30-130*			
Surrogate: 2,4,6-Tribromophenol	*0.181*		mg/L	*0.1500*		*121*	*15-110*			*S+*
Surrogate: 2-Chlorophenol-d4	*0.111*		mg/L	*0.1500*		*74*	*15-110*			
Surrogate: 2-Fluorobiphenyl	*0.0874*		mg/L	*0.1000*		*87*	*30-130*			
Surrogate: 2-Fluorophenol	*0.0970*		mg/L	*0.1500*		*65*	*15-110*			
Surrogate: Nitrobenzene-d5	*0.0868*		mg/L	*0.1000*		*87*	*30-130*			
Surrogate: Phenol-d6	*0.120*		mg/L	*0.1500*		*80*	*15-110*			
Surrogate: p-Terphenyl-d14	*0.0997*		mg/L	*0.1000*		*100*	*30-130*			
LCS Dup										
2,4,5-Trichlorophenol	0.11	0.01	mg/L	0.1000		108	30-130	0.5	20	
2,4,6-Trichlorophenol	0.10	0.01	mg/L	0.1000		100	30-130	0.1	20	
2,4-Dinitrotoluene	0.10	0.01	mg/L	0.1000		101	40-140	1	20	
2-Methylphenol	0.08	0.01	mg/L	0.1000		83	30-130	1	20	
3+4-Methylphenol	0.16	0.02	mg/L	0.2000		82	30-130	5	20	
Hexachlorobenzene	0.09	0.01	mg/L	0.1000		92	40-140	1	20	
Hexachlorobutadiene	0.08	0.01	mg/L	0.1000		79	40-140	1	20	
Hexachloroethane	0.07	0.005	mg/L	0.1000		74	40-140	1	20	
Nitrobenzene	0.09	0.01	mg/L	0.1000		86	40-140	2	20	
Pentachlorophenol	0.12	0.05	mg/L	0.1000		121	30-130	1	20	
Pyridine	0.07	0.10	mg/L	0.1000		68	40-140	4	20	
Surrogate: 1,2-Dichlorobenzene-d4	*0.0729*		mg/L	*0.1000*		*73*	*30-130*			
Surrogate: 2,4,6-Tribromophenol	*0.181*		mg/L	*0.1500*		*121*	*15-110*			*S+*
Surrogate: 2-Chlorophenol-d4	*0.115*		mg/L	*0.1500*		*77*	*15-110*			
Surrogate: 2-Fluorobiphenyl	*0.0857*		mg/L	*0.1000*		*86*	*30-130*			
Surrogate: 2-Fluorophenol	*0.103*		mg/L	*0.1500*		*69*	*15-110*			
Surrogate: Nitrobenzene-d5	*0.0858*		mg/L	*0.1000*		*86*	*30-130*			
Surrogate: Phenol-d6	*0.126*		mg/L	*0.1500*		*84*	*15-110*			
Surrogate: p-Terphenyl-d14	*0.0999*		mg/L	*0.1000*		*100*	*30-130*			
Total Metals Solid										
Batch CK61712 - [CALC]										
Blank										
Chromium (III)	ND	1.0	mg/kg wet							
LCS										

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Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Total Metals Solid										
Batch CK61712 - [CALC]										
Chromium (III)	81.3	3.4	mg/kg wet							
LCS Dup										
Chromium (III)	84.6	3.4	mg/kg wet							
Batch CK62223 - [CALC]										
Blank										
Chromium (III)	ND	0.9	mg/kg wet							
LCS										
Chromium (III)	ND	0.9	mg/kg wet							
LCS Dup										
Chromium (III)	ND	0.9	mg/kg wet							
Reference										
Chromium (III)	ND	2.7	mg/kg wet							
5035/8260B Volatile Organic Compounds / Low Level										
Batch CK61825 - 5035										
Blank										
1,1,1,2-Tetrachloroethane	ND	0.0050	mg/kg wet							
1,1,1-Trichloroethane	ND	0.0050	mg/kg wet							
1,1,2,2-Tetrachloroethane	ND	0.0050	mg/kg wet							
1,1,2-Trichloroethane	ND	0.0050	mg/kg wet							
1,1-Dichloroethane	ND	0.0050	mg/kg wet							
1,1-Dichloroethene	ND	0.0050	mg/kg wet							
1,1-Dichloropropene	ND	0.0050	mg/kg wet							
1,2,3-Trichlorobenzene	ND	0.0050	mg/kg wet							
1,2,3-Trichloropropane	ND	0.0050	mg/kg wet							
1,2,4-Trichlorobenzene	ND	0.0050	mg/kg wet							
1,2,4-Trimethylbenzene	ND	0.0050	mg/kg wet							
1,2-Dibromo-3-Chloropropane	ND	0.0050	mg/kg wet							
1,2-Dibromoethane	ND	0.0050	mg/kg wet							
1,2-Dichlorobenzene	ND	0.0050	mg/kg wet							
1,2-Dichloroethane	ND	0.0050	mg/kg wet							
1,2-Dichloropropane	ND	0.0050	mg/kg wet							
1,3,5-Trimethylbenzene	ND	0.0050	mg/kg wet							
1,3-Dichlorobenzene	ND	0.0050	mg/kg wet							
1,3-Dichloropropane	ND	0.0050	mg/kg wet							
1,4-Dichlorobenzene	ND	0.0050	mg/kg wet							
1,4-Dioxane	ND	0.100	mg/kg wet							
1-Chlorohexane	ND	0.0050	mg/kg wet							
2,2-Dichloropropane	ND	0.0050	mg/kg wet							
2-Butanone	ND	0.0500	mg/kg wet							
2-Chlorotoluene	ND	0.0050	mg/kg wet							
2-Hexanone	ND	0.0500	mg/kg wet							
4-Chlorotoluene	ND	0.0050	mg/kg wet							

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
5035/8260B Volatile Organic Compounds / Low Level										
Batch CK61825 - 5035										
4-Isopropyltoluene	ND	0.0050	mg/kg wet							
4-Methyl-2-Pentanone	ND	0.0500	mg/kg wet							
Acetone	ND	0.0500	mg/kg wet							
Benzene	ND	0.0050	mg/kg wet							
Bromobenzene	ND	0.0050	mg/kg wet							
Bromochloromethane	ND	0.0050	mg/kg wet							
Bromodichloromethane	ND	0.0050	mg/kg wet							
Bromoform	ND	0.0050	mg/kg wet							
Bromomethane	ND	0.0100	mg/kg wet							
Carbon Disulfide	ND	0.0050	mg/kg wet							
Carbon Tetrachloride	ND	0.0050	mg/kg wet							
Chlorobenzene	ND	0.0050	mg/kg wet							
Chloroethane	ND	0.0100	mg/kg wet							
Chloroform	ND	0.0050	mg/kg wet							
Chloromethane	ND	0.0100	mg/kg wet							
cis-1,2-Dichloroethene	ND	0.0050	mg/kg wet							
cis-1,3-Dichloropropene	ND	0.0050	mg/kg wet							
Dibromochloromethane	ND	0.0050	mg/kg wet							
Dibromomethane	ND	0.0050	mg/kg wet							
Dichlorodifluoromethane	ND	0.0100	mg/kg wet							
Diethyl Ether	ND	0.0050	mg/kg wet							
Di-isopropyl ether	ND	0.0050	mg/kg wet							
Ethyl tertiary-butyl ether	ND	0.0050	mg/kg wet							
Ethylbenzene	ND	0.0050	mg/kg wet							
Hexachlorobutadiene	ND	0.0050	mg/kg wet							
Isopropylbenzene	ND	0.0050	mg/kg wet							
Methyl tert-Butyl Ether	ND	0.0050	mg/kg wet							
Methylene Chloride	ND	0.0250	mg/kg wet							
Naphthalene	ND	0.0050	mg/kg wet							
n-Butylbenzene	ND	0.0050	mg/kg wet							
n-Propylbenzene	ND	0.0050	mg/kg wet							
sec-Butylbenzene	ND	0.0050	mg/kg wet							
Styrene	ND	0.0050	mg/kg wet							
tert-Butylbenzene	ND	0.0050	mg/kg wet							
Tertiary-amyl methyl ether	ND	0.0050	mg/kg wet							
Tetrachloroethene	ND	0.0050	mg/kg wet							
Tetrahydrofuran	ND	0.0050	mg/kg wet							
Toluene	ND	0.0050	mg/kg wet							
trans-1,2-Dichloroethene	ND	0.0050	mg/kg wet							
trans-1,3-Dichloropropene	ND	0.0050	mg/kg wet							
Trichloroethene	ND	0.0050	mg/kg wet							
Trichlorofluoromethane	ND	0.0050	mg/kg wet							
Vinyl Acetate	ND	0.0050	mg/kg wet							
Vinyl Chloride	ND	0.0100	mg/kg wet							
Xylene O	ND	0.0050	mg/kg wet							

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Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
5035/8260B Volatile Organic Compounds / Low Level										
Batch CK61825 - 5035										
Xylene P,M	ND	0.0100	mg/kg wet							
Xylenes (Total)	ND	0.0100	mg/kg wet							
Surrogate: 1,2-Dichloroethane-d4	*0.0517*		mg/kg wet	*0.05000*		*103*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.0506*		mg/kg wet	*0.05000*		*101*	*70-130*			
Surrogate: Dibromofluoromethane	*0.0476*		mg/kg wet	*0.05000*		*95*	*70-130*			
Surrogate: Toluene-d8	*0.0515*		mg/kg wet	*0.05000*		*103*	*70-130*			
LCS										
1,1,1,2-Tetrachloroethane	0.0495	0.0050	mg/kg wet	0.05000		99	70-130			
1,1,1-Trichloroethane	0.0542	0.0050	mg/kg wet	0.05000		108	70-130			
1,1,2,2-Tetrachloroethane	0.0518	0.0050	mg/kg wet	0.05000		104	70-130			
1,1,2-Trichloroethane	0.0455	0.0050	mg/kg wet	0.05000		91	70-130			
1,1-Dichloroethane	0.0531	0.0050	mg/kg wet	0.05000		106	70-130			
1,1-Dichloroethene	0.0565	0.0050	mg/kg wet	0.05000		113	70-130			
1,1-Dichloropropene	0.0561	0.0050	mg/kg wet	0.05000		112	70-130			
1,2,3-Trichlorobenzene	0.0522	0.0050	mg/kg wet	0.05000		104	70-130			
1,2,3-Trichloropropane	0.0457	0.0050	mg/kg wet	0.05000		91	70-130			
1,2,4-Trichlorobenzene	0.0532	0.0050	mg/kg wet	0.05000		106	70-130			
1,2,4-Trimethylbenzene	0.0547	0.0050	mg/kg wet	0.05000		109	70-130			
1,2-Dibromo-3-Chloropropane	0.0488	0.0050	mg/kg wet	0.05000		98	70-130			
1,2-Dibromoethane	0.0474	0.0050	mg/kg wet	0.05000		95	70-130			
1,2-Dichlorobenzene	0.0499	0.0050	mg/kg wet	0.05000		100	70-130			
1,2-Dichloroethane	0.0544	0.0050	mg/kg wet	0.05000		109	70-130			
1,2-Dichloropropane	0.0498	0.0050	mg/kg wet	0.05000		100	70-130			
1,3,5-Trimethylbenzene	0.0554	0.0050	mg/kg wet	0.05000		111	70-130			
1,3-Dichlorobenzene	0.0502	0.0050	mg/kg wet	0.05000		100	70-130			
1,3-Dichloropropane	0.0535	0.0050	mg/kg wet	0.05000		107	70-130			
1,4-Dichlorobenzene	0.0503	0.0050	mg/kg wet	0.05000		101	70-130			
1,4-Dioxane	0.820	0.100	mg/kg wet	1.000		82	70-130			
1-Chlorohexane	0.0552	0.0050	mg/kg wet	0.05000		110	70-130			
2,2-Dichloropropane	0.0522	0.0050	mg/kg wet	0.05000		104	70-130			
2-Butanone	0.237	0.0500	mg/kg wet	0.2500		95	70-130			
2-Chlorotoluene	0.0548	0.0050	mg/kg wet	0.05000		110	70-130			
2-Hexanone	0.223	0.0500	mg/kg wet	0.2500		89	70-130			
4-Chlorotoluene	0.0529	0.0050	mg/kg wet	0.05000		106	70-130			
4-Isopropyltoluene	0.0559	0.0050	mg/kg wet	0.05000		112	70-130			
4-Methyl-2-Pentanone	0.210	0.0500	mg/kg wet	0.2500		84	70-130			
Acetone	0.245	0.0500	mg/kg wet	0.2500		98	70-130			
Benzene	0.0521	0.0050	mg/kg wet	0.05000		104	70-130			
Bromobenzene	0.0516	0.0050	mg/kg wet	0.05000		103	70-130			
Bromochloromethane	0.0511	0.0050	mg/kg wet	0.05000		102	70-130			
Bromodichloromethane	0.0487	0.0050	mg/kg wet	0.05000		97	70-130			
Bromoform	0.0461	0.0050	mg/kg wet	0.05000		92	70-130			
Bromomethane	0.0520	0.0100	mg/kg wet	0.05000		104	70-130			
Carbon Disulfide	0.0538	0.0050	mg/kg wet	0.05000		108	70-130			
Carbon Tetrachloride	0.0543	0.0050	mg/kg wet	0.05000		109	70-130			

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
5035/8260B Volatile Organic Compounds / Low Level										
Batch CK61825 - 5035										
Chlorobenzene	0.0505	0.0050	mg/kg wet	0.05000		101	70-130			
Chloroethane	0.0527	0.0100	mg/kg wet	0.05000		105	70-130			
Chloroform	0.0542	0.0050	mg/kg wet	0.05000		108	70-130			
Chloromethane	0.0581	0.0100	mg/kg wet	0.05000		116	70-130			
cis-1,2-Dichloroethene	0.0521	0.0050	mg/kg wet	0.05000		104	70-130			
cis-1,3-Dichloropropene	0.0486	0.0050	mg/kg wet	0.05000		97	70-130			
Dibromochloromethane	0.0482	0.0050	mg/kg wet	0.05000		96	70-130			
Dibromomethane	0.0515	0.0050	mg/kg wet	0.05000		103	70-130			
Dichlorodifluoromethane	0.0541	0.0100	mg/kg wet	0.05000		108	70-130			
Diethyl Ether	0.0522	0.0050	mg/kg wet	0.05000		104	70-130			
Di-isopropyl ether	0.0523	0.0050	mg/kg wet	0.05000		105	70-130			
Ethyl tertiary-butyl ether	0.0510	0.0050	mg/kg wet	0.05000		102	70-130			
Ethylbenzene	0.0554	0.0050	mg/kg wet	0.05000		111	70-130			
Hexachlorobutadiene	0.0538	0.0050	mg/kg wet	0.05000		108	70-130			
Isopropylbenzene	0.0461	0.0050	mg/kg wet	0.05000		92	70-130			
Methyl tert-Butyl Ether	0.0508	0.0050	mg/kg wet	0.05000		102	70-130			
Methylene Chloride	0.0538	0.0250	mg/kg wet	0.05000		108	70-130			
Naphthalene	0.0451	0.0050	mg/kg wet	0.05000		90	70-130			
n-Butylbenzene	0.0574	0.0050	mg/kg wet	0.05000		115	70-130			
n-Propylbenzene	0.0560	0.0050	mg/kg wet	0.05000		112	70-130			
sec-Butylbenzene	0.0538	0.0050	mg/kg wet	0.05000		108	70-130			
Styrene	0.0475	0.0050	mg/kg wet	0.05000		95	70-130			
tert-Butylbenzene	0.0545	0.0050	mg/kg wet	0.05000		109	70-130			
Tertiary-amyl methyl ether	0.0438	0.0050	mg/kg wet	0.05000		88	70-130			
Tetrachloroethene	0.0520	0.0050	mg/kg wet	0.05000		104	70-130			
Tetrahydrofuran	0.0464	0.0050	mg/kg wet	0.05000		93	70-130			
Toluene	0.0521	0.0050	mg/kg wet	0.05000		104	70-130			
trans-1,2-Dichloroethene	0.0541	0.0050	mg/kg wet	0.05000		108	70-130			
trans-1,3-Dichloropropene	0.0454	0.0050	mg/kg wet	0.05000		91	70-130			
Trichloroethene	0.0536	0.0050	mg/kg wet	0.05000		107	70-130			
Trichlorofluoromethane	0.0513	0.0050	mg/kg wet	0.05000		103	70-130			
Vinyl Acetate	0.0456	0.0050	mg/kg wet	0.05000		91	70-130			
Vinyl Chloride	0.0613	0.0100	mg/kg wet	0.05000		123	70-130			
Xylene O	0.0527	0.0050	mg/kg wet	0.05000		105	70-130			
Xylene P,M	0.106	0.0100	mg/kg wet	0.1000		106	70-130			
Xylenes (Total)	0.159	0.0100	mg/kg wet							
Surrogate: 1,2-Dichloroethane-d4	*0.0491*		mg/kg wet	*0.05000*		*98*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.0467*		mg/kg wet	*0.05000*		*93*	*70-130*			
Surrogate: Dibromofluoromethane	*0.0455*		mg/kg wet	*0.05000*		*91*	*70-130*			
Surrogate: Toluene-d8	*0.0475*		mg/kg wet	*0.05000*		*95*	*70-130*			
LCS Dup										
1,1,1,2-Tetrachloroethane	0.0508	0.0050	mg/kg wet	0.05000		102	70-130	3	25	
1,1,1-Trichloroethane	0.0559	0.0050	mg/kg wet	0.05000		112	70-130	3	25	
1,1,2,2-Tetrachloroethane	0.0562	0.0050	mg/kg wet	0.05000		112	70-130	8	25	
1,1,2-Trichloroethane	0.0485	0.0050	mg/kg wet	0.05000		97	70-130	6	25	

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
5035/8260B Volatile Organic Compounds / Low Level										
Batch CK61825 - 5035										
1,1-Dichloroethane	0.0556	0.0050	mg/kg wet	0.05000		111	70-130	5	25	
1,1-Dichloroethene	0.0592	0.0050	mg/kg wet	0.05000		118	70-130	5	25	
1,1-Dichloropropene	0.0590	0.0050	mg/kg wet	0.05000		118	70-130	5	25	
1,2,3-Trichlorobenzene	0.0573	0.0050	mg/kg wet	0.05000		115	70-130	9	25	
1,2,3-Trichloropropane	0.0502	0.0050	mg/kg wet	0.05000		100	70-130	9	25	
1,2,4-Trichlorobenzene	0.0575	0.0050	mg/kg wet	0.05000		115	70-130	8	25	
1,2,4-Trimethylbenzene	0.0569	0.0050	mg/kg wet	0.05000		114	70-130	4	25	
1,2-Dibromo-3-Chloropropane	0.0550	0.0050	mg/kg wet	0.05000		110	70-130	12	25	
1,2-Dibromoethane	0.0491	0.0050	mg/kg wet	0.05000		98	70-130	4	25	
1,2-Dichlorobenzene	0.0534	0.0050	mg/kg wet	0.05000		107	70-130	7	25	
1,2-Dichloroethane	0.0577	0.0050	mg/kg wet	0.05000		115	70-130	6	25	
1,2-Dichloropropane	0.0527	0.0050	mg/kg wet	0.05000		105	70-130	6	25	
1,3,5-Trimethylbenzene	0.0578	0.0050	mg/kg wet	0.05000		116	70-130	4	25	
1,3-Dichlorobenzene	0.0530	0.0050	mg/kg wet	0.05000		106	70-130	5	25	
1,3-Dichloropropane	0.0550	0.0050	mg/kg wet	0.05000		110	70-130	3	25	
1,4-Dichlorobenzene	0.0537	0.0050	mg/kg wet	0.05000		107	70-130	7	25	
1,4-Dioxane	0.969	0.100	mg/kg wet	1.000		97	70-130	17	20	
1-Chlorohexane	0.0540	0.0050	mg/kg wet	0.05000		108	70-130	2	25	
2,2-Dichloropropane	0.0535	0.0050	mg/kg wet	0.05000		107	70-130	3	25	
2-Butanone	0.267	0.0500	mg/kg wet	0.2500		107	70-130	12	25	
2-Chlorotoluene	0.0561	0.0050	mg/kg wet	0.05000		112	70-130	2	25	
2-Hexanone	0.253	0.0500	mg/kg wet	0.2500		101	70-130	13	25	
4-Chlorotoluene	0.0556	0.0050	mg/kg wet	0.05000		111	70-130	5	25	
4-Isopropyltoluene	0.0577	0.0050	mg/kg wet	0.05000		115	70-130	3	25	
4-Methyl-2-Pentanone	0.239	0.0500	mg/kg wet	0.2500		96	70-130	13	25	
Acetone	0.320	0.0500	mg/kg wet	0.2500		128	70-130	26	25	D+
Benzene	0.0551	0.0050	mg/kg wet	0.05000		110	70-130	6	25	
Bromobenzene	0.0550	0.0050	mg/kg wet	0.05000		110	70-130	6	25	
Bromochloromethane	0.0547	0.0050	mg/kg wet	0.05000		109	70-130	7	25	
Bromodichloromethane	0.0514	0.0050	mg/kg wet	0.05000		103	70-130	5	25	
Bromoform	0.0489	0.0050	mg/kg wet	0.05000		98	70-130	6	25	
Bromomethane	0.0532	0.0100	mg/kg wet	0.05000		106	70-130	2	25	
Carbon Disulfide	0.0562	0.0050	mg/kg wet	0.05000		112	70-130	4	25	
Carbon Tetrachloride	0.0570	0.0050	mg/kg wet	0.05000		114	70-130	5	25	
Chlorobenzene	0.0515	0.0050	mg/kg wet	0.05000		103	70-130	2	25	
Chloroethane	0.0558	0.0100	mg/kg wet	0.05000		112	70-130	6	25	
Chloroform	0.0567	0.0050	mg/kg wet	0.05000		113	70-130	5	25	
Chloromethane	0.0612	0.0100	mg/kg wet	0.05000		122	70-130	5	25	
cis-1,2-Dichloroethene	0.0544	0.0050	mg/kg wet	0.05000		109	70-130	4	25	
cis-1,3-Dichloropropene	0.0519	0.0050	mg/kg wet	0.05000		104	70-130	6	25	
Dibromochloromethane	0.0501	0.0050	mg/kg wet	0.05000		100	70-130	4	25	
Dibromomethane	0.0557	0.0050	mg/kg wet	0.05000		111	70-130	8	25	
Dichlorodifluoromethane	0.0569	0.0100	mg/kg wet	0.05000		114	70-130	5	25	
Diethyl Ether	0.0549	0.0050	mg/kg wet	0.05000		110	70-130	5	25	
Di-isopropyl ether	0.0558	0.0050	mg/kg wet	0.05000		112	70-130	7	25	

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
5035/8260B Volatile Organic Compounds / Low Level										
Batch CK61825 - 5035										
Ethyl tertiary-butyl ether	0.0548	0.0050	mg/kg wet	0.05000		110	70-130	7	25	
Ethylbenzene	0.0555	0.0050	mg/kg wet	0.05000		111	70-130	0.3	25	
Hexachlorobutadiene	0.0559	0.0050	mg/kg wet	0.05000		112	70-130	4	25	
Isopropylbenzene	0.0476	0.0050	mg/kg wet	0.05000		95	70-130	3	25	
Methyl tert-Butyl Ether	0.0546	0.0050	mg/kg wet	0.05000		109	70-130	7	25	
Methylene Chloride	0.0575	0.0250	mg/kg wet	0.05000		115	70-130	7	25	
Naphthalene	0.0555	0.0050	mg/kg wet	0.05000		111	70-130	21	25	
n-Butylbenzene	0.0610	0.0050	mg/kg wet	0.05000		122	70-130	6	25	
n-Propylbenzene	0.0581	0.0050	mg/kg wet	0.05000		116	70-130	4	25	
sec-Butylbenzene	0.0566	0.0050	mg/kg wet	0.05000		113	70-130	5	25	
Styrene	0.0487	0.0050	mg/kg wet	0.05000		97	70-130	2	25	
tert-Butylbenzene	0.0563	0.0050	mg/kg wet	0.05000		113	70-130	3	25	
Tertiary-amyl methyl ether	0.0470	0.0050	mg/kg wet	0.05000		94	70-130	7	25	
Tetrachloroethene	0.0534	0.0050	mg/kg wet	0.05000		107	70-130	3	25	
Tetrahydrofuran	0.0522	0.0050	mg/kg wet	0.05000		104	70-130	12	25	
Toluene	0.0545	0.0050	mg/kg wet	0.05000		109	70-130	4	25	
trans-1,2-Dichloroethene	0.0561	0.0050	mg/kg wet	0.05000		112	70-130	4	25	
trans-1,3-Dichloropropene	0.0487	0.0050	mg/kg wet	0.05000		97	70-130	7	25	
Trichloroethene	0.0555	0.0050	mg/kg wet	0.05000		111	70-130	4	25	
Trichlorofluoromethane	0.0530	0.0050	mg/kg wet	0.05000		106	70-130	3	25	
Vinyl Acetate	0.0497	0.0050	mg/kg wet	0.05000		99	70-130	9	25	
Vinyl Chloride	0.0636	0.0100	mg/kg wet	0.05000		127	70-130	4	25	
Xylene O	0.0533	0.0050	mg/kg wet	0.05000		107	70-130	1	25	
Xylene P,M	0.108	0.0100	mg/kg wet	0.1000		108	70-130	1	25	
Xylenes (Total)	0.161	0.0100	mg/kg wet							
Surrogate: 1,2-Dichloroethane-d4	*0.0501*		mg/kg wet	*0.05000*		*100*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.0461*		mg/kg wet	*0.05000*		*92*	*70-130*			
Surrogate: Dibromofluoromethane	*0.0465*		mg/kg wet	*0.05000*		*93*	*70-130*			
Surrogate: Toluene-d8	*0.0464*		mg/kg wet	*0.05000*		*93*	*70-130*			
8081B Organochlorine Pesticides										
Batch CK61609 - 3546										
Blank										
Chlordane (Total)	ND	0.0300	mg/kg wet							
Chlordane (Total) [2C]	ND	0.0300	mg/kg wet							
Dieldrin	ND	0.0025	mg/kg wet							
Dieldrin [2C]	ND	0.0025	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0122*		mg/kg wet	*0.01250*		*97*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0123*		mg/kg wet	*0.01250*		*98*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0129*		mg/kg wet	*0.01250*		*103*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0132*		mg/kg wet	*0.01250*		*106*	*30-150*			
LCS										
Dieldrin	0.0138	0.0025	mg/kg wet	0.01250		110	40-140			
Dieldrin [2C]	0.0141	0.0025	mg/kg wet	0.01250		113	40-140			

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8081B Organochlorine Pesticides										
Batch CK61609 - 3546										
Surrogate: Decachlorobiphenyl	*0.0127*		mg/kg wet	*0.01250*		*101*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0127*		mg/kg wet	*0.01250*		*101*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0130*		mg/kg wet	*0.01250*		*104*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0132*		mg/kg wet	*0.01250*		*106*	*30-150*			
LCS Dup										
Dieldrin	0.0133	0.0025	mg/kg wet	0.01250		107	40-140	3	30	
Dieldrin [2C]	0.0138	0.0025	mg/kg wet	0.01250		110	40-140	3	30	
Surrogate: Decachlorobiphenyl	*0.0124*		mg/kg wet	*0.01250*		*99*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0124*		mg/kg wet	*0.01250*		*100*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0129*		mg/kg wet	*0.01250*		*103*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0130*		mg/kg wet	*0.01250*		*104*	*30-150*			
8082A Polychlorinated Biphenyls (PCB)										
Batch CK61607 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0270*		mg/kg wet	*0.02500*		*108*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0199*		mg/kg wet	*0.02500*		*80*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0198*		mg/kg wet	*0.02500*		*79*	*30-150*			
LCS										
Aroclor 1016	0.432	0.0500	mg/kg wet	0.5000		86	40-140			
Aroclor 1260	0.430	0.0500	mg/kg wet	0.5000		86	40-140			
Surrogate: Decachlorobiphenyl	*0.0248*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0237*		mg/kg wet	*0.02500*		*95*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0212*		mg/kg wet	*0.02500*		*85*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0200*		mg/kg wet	*0.02500*		*80*	*30-150*			
LCS Dup										
Aroclor 1016	0.442	0.0500	mg/kg wet	0.5000		88	40-140	2	30	
Aroclor 1260	0.436	0.0500	mg/kg wet	0.5000		87	40-140	1	30	
Surrogate: Decachlorobiphenyl	*0.0245*		mg/kg wet	*0.02500*		*98*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0237*		mg/kg wet	*0.02500*		*95*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0215*		mg/kg wet	*0.02500*		*86*	*30-150*			

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CK61607 - 3540C										
Surrogate: Tetrachloro-m-xylene [2C]	*0.0202*		mg/kg wet	*0.02500*		*81*	*30-150*			
8100M Total Petroleum Hydrocarbons										
Batch CK61611 - 3546										
Blank										
Decane (C10)	ND	0.2	mg/kg wet							
Docosane (C22)	ND	0.2	mg/kg wet							
Dodecane (C12)	ND	0.2	mg/kg wet							
Eicosane (C20)	ND	0.2	mg/kg wet							
Hexacosane (C26)	ND	0.2	mg/kg wet							
Hexadecane (C16)	ND	0.2	mg/kg wet							
Nonadecane (C19)	ND	0.2	mg/kg wet							
Nonane (C9)	ND	0.2	mg/kg wet							
Octacosane (C28)	ND	0.2	mg/kg wet							
Octadecane (C18)	ND	0.2	mg/kg wet							
Tetracosane (C24)	ND	0.2	mg/kg wet							
Tetradecane (C14)	ND	0.2	mg/kg wet							
Total Petroleum Hydrocarbons	ND	37.5	mg/kg wet							
Triacontane (C30)	ND	0.2	mg/kg wet							
Surrogate: O-Terphenyl	*4.40*		mg/kg wet	*5.000*		*88*	*40-140*			
LCS										
Decane (C10)	1.7	0.2	mg/kg wet	2.500		68	40-140			
Docosane (C22)	2.0	0.2	mg/kg wet	2.500		78	40-140			
Dodecane (C12)	1.7	0.2	mg/kg wet	2.500		67	40-140			
Eicosane (C20)	1.9	0.2	mg/kg wet	2.500		77	40-140			
Hexacosane (C26)	2.0	0.2	mg/kg wet	2.500		81	40-140			
Hexadecane (C16)	1.9	0.2	mg/kg wet	2.500		77	40-140			
Nonadecane (C19)	2.0	0.2	mg/kg wet	2.500		78	40-140			
Nonane (C9)	1.5	0.2	mg/kg wet	2.500		60	30-140			
Octacosane (C28)	2.1	0.2	mg/kg wet	2.500		84	40-140			
Octadecane (C18)	1.9	0.2	mg/kg wet	2.500		75	40-140			
Tetracosane (C24)	2.0	0.2	mg/kg wet	2.500		80	40-140			
Tetradecane (C14)	1.8	0.2	mg/kg wet	2.500		74	40-140			
Total Petroleum Hydrocarbons	25.9	37.5	mg/kg wet	35.00		74	40-140			
Triacontane (C30)	2.2	0.2	mg/kg wet	2.500		87	40-140			
Surrogate: O-Terphenyl	*3.97*		mg/kg wet	*5.000*		*79*	*40-140*			
LCS Dup										
Decane (C10)	2.0	0.2	mg/kg wet	2.500		79	40-140	15	25	
Docosane (C22)	2.2	0.2	mg/kg wet	2.500		89	40-140	13	25	
Dodecane (C12)	2.0	0.2	mg/kg wet	2.500		79	40-140	16	25	
Eicosane (C20)	2.2	0.2	mg/kg wet	2.500		87	40-140	12	25	
Hexacosane (C26)	2.3	0.2	mg/kg wet	2.500		92	40-140	13	25	

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8100M Total Petroleum Hydrocarbons										
Batch CK61611 - 3546										
Hexadecane (C16)	2.1	0.2	mg/kg wet	2.500		85	40-140	9	25	
Nonadecane (C19)	2.2	0.2	mg/kg wet	2.500		88	40-140	12	25	
Nonane (C9)	1.7	0.2	mg/kg wet	2.500		68	30-140	13	25	
Octacosane (C28)	2.4	0.2	mg/kg wet	2.500		94	40-140	12	25	
Octadecane (C18)	2.1	0.2	mg/kg wet	2.500		85	40-140	12	25	
Tetracosane (C24)	2.2	0.2	mg/kg wet	2.500		90	40-140	12	25	
Tetradecane (C14)	2.1	0.2	mg/kg wet	2.500		85	40-140	14	25	
Total Petroleum Hydrocarbons	29.4	37.5	mg/kg wet	35.00		84	40-140	13	25	
Triacontane (C30)	2.4	0.2	mg/kg wet	2.500		98	40-140	12	25	
Surrogate: O-Terphenyl	*4.38*		mg/kg wet	*5.000*		*88*	*40-140*			
8270D Semi-Volatile Organic Compounds										
Batch CK61612 - 3546										
Blank										
1,1-Biphenyl	ND	0.333	mg/kg wet							
1,2,4-Trichlorobenzene	ND	0.333	mg/kg wet							
1,2-Dichlorobenzene	ND	0.333	mg/kg wet							
1,3-Dichlorobenzene	ND	0.333	mg/kg wet							
1,4-Dichlorobenzene	ND	0.333	mg/kg wet							
2,3,4,6-Tetrachlorophenol	ND	1.67	mg/kg wet							
2,4,5-Trichlorophenol	ND	0.333	mg/kg wet							
2,4,6-Trichlorophenol	ND	0.333	mg/kg wet							
2,4-Dichlorophenol	ND	0.333	mg/kg wet							
2,4-Dimethylphenol	ND	0.333	mg/kg wet							
2,4-Dinitrophenol	ND	1.67	mg/kg wet							
2,4-Dinitrotoluene	ND	0.333	mg/kg wet							
2,6-Dinitrotoluene	ND	0.333	mg/kg wet							
2-Chloronaphthalene	ND	0.333	mg/kg wet							
2-Chlorophenol	ND	0.333	mg/kg wet							
2-Methylnaphthalene	ND	0.333	mg/kg wet							
2-Methylphenol	ND	0.333	mg/kg wet							
2-Nitroaniline	ND	0.333	mg/kg wet							
2-Nitrophenol	ND	0.333	mg/kg wet							
3,3´-Dichlorobenzidine	ND	0.667	mg/kg wet							
3+4-Methylphenol	ND	0.667	mg/kg wet							
3-Nitroaniline	ND	0.333	mg/kg wet							
4,6-Dinitro-2-Methylphenol	ND	1.67	mg/kg wet							
4-Bromophenyl-phenylether	ND	0.333	mg/kg wet							
4-Chloro-3-Methylphenol	ND	0.333	mg/kg wet							
4-Chloroaniline	ND	0.667	mg/kg wet							
4-Chloro-phenyl-phenyl ether	ND	0.333	mg/kg wet							
4-Nitroaniline	ND	0.333	mg/kg wet							
4-Nitrophenol	ND	1.67	mg/kg wet							
Acenaphthene	ND	0.333	mg/kg wet							

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Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8270D Semi-Volatile Organic Compounds										
Batch CK61612 - 3546										
Acenaphthylene	ND	0.333	mg/kg wet							
Acetophenone	ND	0.667	mg/kg wet							
Aniline	ND	0.667	mg/kg wet							
Anthracene	ND	0.333	mg/kg wet							
Azobenzene	ND	0.333	mg/kg wet							
Benzo(a)anthracene	ND	0.333	mg/kg wet							
Benzo(a)pyrene	ND	0.167	mg/kg wet							
Benzo(b)fluoranthene	ND	0.333	mg/kg wet							
Benzo(g,h,i)perylene	ND	0.333	mg/kg wet							
Benzo(k)fluoranthene	ND	0.333	mg/kg wet							
Benzoic Acid	ND	1.67	mg/kg wet							
Benzyl Alcohol	ND	0.333	mg/kg wet							
bis(2-Chloroethoxy)methane	ND	0.333	mg/kg wet							
bis(2-Chloroethyl)ether	ND	0.333	mg/kg wet							
bis(2-chloroisopropyl)Ether	ND	0.333	mg/kg wet							
bis(2-Ethylhexyl)phthalate	ND	0.333	mg/kg wet							
Butylbenzylphthalate	ND	0.333	mg/kg wet							
Carbazole	ND	0.333	mg/kg wet							
Chrysene	ND	0.167	mg/kg wet							
Dibenzo(a,h)Anthracene	ND	0.167	mg/kg wet							
Dibenzofuran	ND	0.333	mg/kg wet							
Diethylphthalate	ND	0.333	mg/kg wet							
Dimethylphthalate	ND	0.333	mg/kg wet							
Di-n-butylphthalate	ND	0.333	mg/kg wet							
Di-n-octylphthalate	ND	0.333	mg/kg wet							
Fluoranthene	ND	0.333	mg/kg wet							
Fluorene	ND	0.333	mg/kg wet							
Hexachlorobenzene	ND	0.167	mg/kg wet							
Hexachlorobutadiene	ND	0.333	mg/kg wet							
Hexachlorocyclopentadiene	ND	1.67	mg/kg wet							
Hexachloroethane	ND	0.333	mg/kg wet							
Indeno(1,2,3-cd)Pyrene	ND	0.333	mg/kg wet							
Isophorone	ND	0.333	mg/kg wet							
Naphthalene	ND	0.333	mg/kg wet							
Nitrobenzene	ND	0.333	mg/kg wet							
N-Nitrosodimethylamine	ND	0.333	mg/kg wet							
N-Nitroso-Di-n-Propylamine	ND	0.333	mg/kg wet							
N-nitrosodiphenylamine	ND	0.333	mg/kg wet							
Pentachlorophenol	ND	1.67	mg/kg wet							
Phenanthrene	ND	0.333	mg/kg wet							
Phenol	ND	0.333	mg/kg wet							
Pyrene	ND	0.333	mg/kg wet							
Pyridine	ND	1.67	mg/kg wet							
Surrogate: 1,2-Dichlorobenzene-d4	*2.33*		mg/kg wet	*3.333*		*70*	*30-130*			
Surrogate: 2,4,6-Tribromophenol	*3.65*		mg/kg wet	*5.000*		*73*	*30-130*			

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects

ESS Laboratory Work Order: 1611473

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8270D Semi-Volatile Organic Compounds										
Batch CK61612 - 3546										
Surrogate: 2-Chlorophenol-d4	*3.64*		mg/kg wet	*5.000*		*73*	*30-130*			
Surrogate: 2-Fluorobiphenyl	*2.09*		mg/kg wet	*3.333*		*63*	*30-130*			
Surrogate: 2-Fluorophenol	*3.59*		mg/kg wet	*5.000*		*72*	*30-130*			
Surrogate: Nitrobenzene-d5	*2.43*		mg/kg wet	*3.333*		*73*	*30-130*			
Surrogate: Phenol-d6	*3.75*		mg/kg wet	*5.000*		*75*	*30-130*			
Surrogate: p-Terphenyl-d14	*3.09*		mg/kg wet	*3.333*		*93*	*30-130*			
LCS										
1,1-Biphenyl	2.35	0.333	mg/kg wet	3.333		70	40-140			
1,2,4-Trichlorobenzene	2.07	0.333	mg/kg wet	3.333		62	40-140			
1,2-Dichlorobenzene	2.00	0.333	mg/kg wet	3.333		60	40-140			
1,3-Dichlorobenzene	2.03	0.333	mg/kg wet	3.333		61	40-140			
1,4-Dichlorobenzene	1.99	0.333	mg/kg wet	3.333		60	40-140			
2,3,4,6-Tetrachlorophenol	2.43	1.67	mg/kg wet	3.333		73	30-130			
2,4,5-Trichlorophenol	2.96	0.333	mg/kg wet	3.333		89	30-130			
2,4,6-Trichlorophenol	2.76	0.333	mg/kg wet	3.333		83	30-130			
2,4-Dichlorophenol	2.27	0.333	mg/kg wet	3.333		68	30-130			
2,4-Dimethylphenol	2.42	0.333	mg/kg wet	3.333		73	30-130			
2,4-Dinitrophenol	1.97	1.67	mg/kg wet	3.333		59	30-130			
2,4-Dinitrotoluene	2.75	0.333	mg/kg wet	3.333		82	40-140			
2,6-Dinitrotoluene	2.71	0.333	mg/kg wet	3.333		81	40-140			
2-Chloronaphthalene	2.14	0.333	mg/kg wet	3.333		64	40-140			
2-Chlorophenol	1.99	0.333	mg/kg wet	3.333		60	30-130			
2-Methylnaphthalene	2.52	0.333	mg/kg wet	3.333		76	40-140			
2-Methylphenol	2.09	0.333	mg/kg wet	3.333		63	30-130			
2-Nitroaniline	2.53	0.333	mg/kg wet	3.333		76	40-140			
2-Nitrophenol	2.04	0.333	mg/kg wet	3.333		61	30-130			
3,3´-Dichlorobenzidine	2.47	0.667	mg/kg wet	3.333		74	40-140			
3+4-Methylphenol	4.25	0.667	mg/kg wet	6.667		64	30-130			
3-Nitroaniline	2.81	0.333	mg/kg wet	3.333		84	40-140			
4,6-Dinitro-2-Methylphenol	2.44	1.67	mg/kg wet	3.333		73	30-130			
4-Bromophenyl-phenylether	2.71	0.333	mg/kg wet	3.333		81	40-140			
4-Chloro-3-Methylphenol	3.11	0.333	mg/kg wet	3.333		93	30-130			
4-Chloroaniline	2.20	0.667	mg/kg wet	3.333		66	40-140			
4-Chloro-phenyl-phenyl ether	2.53	0.333	mg/kg wet	3.333		76	40-140			
4-Nitroaniline	2.93	0.333	mg/kg wet	3.333		88	40-140			
4-Nitrophenol	2.50	1.67	mg/kg wet	3.333		75	30-130			
Acenaphthene	2.42	0.333	mg/kg wet	3.333		72	40-140			
Acenaphthylene	2.43	0.333	mg/kg wet	3.333		73	40-140			
Acetophenone	2.07	0.667	mg/kg wet	3.333		62	40-140			
Aniline	1.83	0.667	mg/kg wet	3.333		55	40-140			
Anthracene	2.82	0.333	mg/kg wet	3.333		85	40-140			
Azobenzene	2.93	0.333	mg/kg wet	3.333		88	40-140			
Benzo(a)anthracene	2.78	0.333	mg/kg wet	3.333		83	40-140			
Benzo(a)pyrene	2.94	0.167	mg/kg wet	3.333		88	40-140			
Benzo(b)fluoranthene	2.89	0.333	mg/kg wet	3.333		87	40-140			

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects

ESS Laboratory Work Order: 1611473

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8270D Semi-Volatile Organic Compounds										
Batch CK61612 - 3546										
Benzo(g,h,i)perylene	3.31	0.333	mg/kg wet	3.333		99	40-140			
Benzo(k)fluoranthene	2.87	0.333	mg/kg wet	3.333		86	40-140			
Benzoic Acid	2.14	1.67	mg/kg wet	3.333		64	40-140			
Benzyl Alcohol	2.53	0.333	mg/kg wet	3.333		76	40-140			
bis(2-Chloroethoxy)methane	2.15	0.333	mg/kg wet	3.333		65	40-140			
bis(2-Chloroethyl)ether	1.97	0.333	mg/kg wet	3.333		59	40-140			
bis(2-chloroisopropyl)Ether	2.08	0.333	mg/kg wet	3.333		62	40-140			
bis(2-Ethylhexyl)phthalate	2.85	0.333	mg/kg wet	3.333		86	40-140			
Butylbenzylphthalate	2.84	0.333	mg/kg wet	3.333		85	40-140			
Carbazole	2.48	0.333	mg/kg wet	3.333		74	40-140			
Chrysene	2.81	0.167	mg/kg wet	3.333		84	40-140			
Dibenzo(a,h)Anthracene	3.28	0.167	mg/kg wet	3.333		98	40-140			
Dibenzofuran	2.44	0.333	mg/kg wet	3.333		73	40-140			
Diethylphthalate	2.90	0.333	mg/kg wet	3.333		87	40-140			
Dimethylphthalate	2.74	0.333	mg/kg wet	3.333		82	40-140			
Di-n-butylphthalate	2.56	0.333	mg/kg wet	3.333		77	40-140			
Di-n-octylphthalate	3.05	0.333	mg/kg wet	3.333		92	40-140			
Fluoranthene	2.52	0.333	mg/kg wet	3.333		76	40-140			
Fluorene	2.60	0.333	mg/kg wet	3.333		78	40-140			
Hexachlorobenzene	2.77	0.167	mg/kg wet	3.333		83	40-140			
Hexachlorobutadiene	2.09	0.333	mg/kg wet	3.333		63	40-140			
Hexachlorocyclopentadiene	2.10	1.67	mg/kg wet	3.333		63	40-140			
Hexachloroethane	2.02	0.333	mg/kg wet	3.333		61	40-140			
Indeno(1,2,3-cd)Pyrene	3.24	0.333	mg/kg wet	3.333		97	40-140			
Isophorone	2.16	0.333	mg/kg wet	3.333		65	40-140			
Naphthalene	2.02	0.333	mg/kg wet	3.333		61	40-140			
Nitrobenzene	2.15	0.333	mg/kg wet	3.333		65	40-140			
N-Nitrosodimethylamine	1.79	0.333	mg/kg wet	3.333		54	40-140			
N-Nitroso-Di-n-Propylamine	2.15	0.333	mg/kg wet	3.333		64	40-140			
N-nitrosodiphenylamine	2.82	0.333	mg/kg wet	3.333		85	40-140			
Pentachlorophenol	2.99	1.67	mg/kg wet	3.333		90	30-130			
Phenanthrene	2.81	0.333	mg/kg wet	3.333		84	40-140			
Phenol	1.94	0.333	mg/kg wet	3.333		58	30-130			
Pyrene	2.86	0.333	mg/kg wet	3.333		86	40-140			
Pyridine	1.59	1.67	mg/kg wet	3.333		48	40-140			
Surrogate: 1,2-Dichlorobenzene-d4	*2.02*		mg/kg wet	*3.333*		*61*	*30-130*			
Surrogate: 2,4,6-Tribromophenol	*4.20*		mg/kg wet	*5.000*		*84*	*30-130*			
Surrogate: 2-Chlorophenol-d4	*3.14*		mg/kg wet	*5.000*		*63*	*30-130*			
Surrogate: 2-Fluorobiphenyl	*2.33*		mg/kg wet	*3.333*		*70*	*30-130*			
Surrogate: 2-Fluorophenol	*3.02*		mg/kg wet	*5.000*		*60*	*30-130*			
Surrogate: Nitrobenzene-d5	*2.17*		mg/kg wet	*3.333*		*65*	*30-130*			
Surrogate: Phenol-d6	*3.20*		mg/kg wet	*5.000*		*64*	*30-130*			
Surrogate: p-Terphenyl-d14	*2.89*		mg/kg wet	*3.333*		*87*	*30-130*			
LCS Dup										
1,1-Biphenyl	2.88	0.333	mg/kg wet	3.333		86	40-140	20	30	

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects

ESS Laboratory Work Order: 1611473

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8270D Semi-Volatile Organic Compounds										
Batch CK61612 - 3546										
1,2,4-Trichlorobenzene	2.70	0.333	mg/kg wet	3.333		81	40-140	26	30	
1,2-Dichlorobenzene	2.52	0.333	mg/kg wet	3.333		76	40-140	23	30	
1,3-Dichlorobenzene	2.57	0.333	mg/kg wet	3.333		77	40-140	24	30	
1,4-Dichlorobenzene	2.49	0.333	mg/kg wet	3.333		75	40-140	22	30	
2,3,4,6-Tetrachlorophenol	2.76	1.67	mg/kg wet	3.333		83	30-130	13	30	
2,4,5-Trichlorophenol	3.37	0.333	mg/kg wet	3.333		101	30-130	13	30	
2,4,6-Trichlorophenol	3.27	0.333	mg/kg wet	3.333		98	30-130	17	30	
2,4-Dichlorophenol	2.93	0.333	mg/kg wet	3.333		88	30-130	25	30	
2,4-Dimethylphenol	3.07	0.333	mg/kg wet	3.333		92	30-130	24	30	
2,4-Dinitrophenol	2.08	1.67	mg/kg wet	3.333		62	30-130	5	30	
2,4-Dinitrotoluene	3.09	0.333	mg/kg wet	3.333		93	40-140	12	30	
2,6-Dinitrotoluene	2.98	0.333	mg/kg wet	3.333		89	40-140	9	30	
2-Chloronaphthalene	2.63	0.333	mg/kg wet	3.333		79	40-140	21	30	
2-Chlorophenol	2.51	0.333	mg/kg wet	3.333		75	30-130	23	30	
2-Methylnaphthalene	2.69	0.333	mg/kg wet	3.333		81	40-140	7	30	
2-Methylphenol	2.64	0.333	mg/kg wet	3.333		79	30-130	23	30	
2-Nitroaniline	2.72	0.333	mg/kg wet	3.333		82	40-140	7	30	
2-Nitrophenol	2.63	0.333	mg/kg wet	3.333		79	30-130	25	30	
3,3´-Dichlorobenzidine	2.69	0.667	mg/kg wet	3.333		81	40-140	9	30	
3+4-Methylphenol	4.70	0.667	mg/kg wet	6.667		71	30-130	10	30	
3-Nitroaniline	3.10	0.333	mg/kg wet	3.333		93	40-140	10	30	
4,6-Dinitro-2-Methylphenol	2.26	1.67	mg/kg wet	3.333		68	30-130	8	30	
4-Bromophenyl-phenylether	3.03	0.333	mg/kg wet	3.333		91	40-140	11	30	
4-Chloro-3-Methylphenol	3.02	0.333	mg/kg wet	3.333		91	30-130	3	30	
4-Chloroaniline	2.85	0.667	mg/kg wet	3.333		85	40-140	26	30	
4-Chloro-phenyl-phenyl ether	2.95	0.333	mg/kg wet	3.333		89	40-140	15	30	
4-Nitroaniline	2.63	0.333	mg/kg wet	3.333		79	40-140	11	30	
4-Nitrophenol	2.60	1.67	mg/kg wet	3.333		78	30-130	4	30	
Acenaphthene	2.87	0.333	mg/kg wet	3.333		86	40-140	17	30	
Acenaphthylene	2.92	0.333	mg/kg wet	3.333		88	40-140	18	30	
Acetophenone	2.62	0.667	mg/kg wet	3.333		78	40-140	23	30	
Aniline	2.36	0.667	mg/kg wet	3.333		71	40-140	25	30	
Anthracene	3.08	0.333	mg/kg wet	3.333		93	40-140	9	30	
Azobenzene	3.20	0.333	mg/kg wet	3.333		96	40-140	9	30	
Benzo(a)anthracene	2.98	0.333	mg/kg wet	3.333		89	40-140	7	30	
Benzo(a)pyrene	3.15	0.167	mg/kg wet	3.333		95	40-140	7	30	
Benzo(b)fluoranthene	3.10	0.333	mg/kg wet	3.333		93	40-140	7	30	
Benzo(g,h,i)perylene	3.51	0.333	mg/kg wet	3.333		105	40-140	6	30	
Benzo(k)fluoranthene	3.03	0.333	mg/kg wet	3.333		91	40-140	6	30	
Benzoic Acid	2.35	1.67	mg/kg wet	3.333		70	40-140	9	30	
Benzyl Alcohol	3.32	0.333	mg/kg wet	3.333		100	40-140	27	30	
bis(2-Chloroethoxy)methane	2.79	0.333	mg/kg wet	3.333		84	40-140	26	30	
bis(2-Chloroethyl)ether	2.54	0.333	mg/kg wet	3.333		76	40-140	25	30	
bis(2-chloroisopropyl)Ether	2.63	0.333	mg/kg wet	3.333		79	40-140	23	30	
bis(2-Ethylhexyl)phthalate	3.05	0.333	mg/kg wet	3.333		92	40-140	7	30	

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects

ESS Laboratory Work Order: 1611473

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8270D Semi-Volatile Organic Compounds										
Batch CK61612 - 3546										
Butylbenzylphthalate	3.03	0.333	mg/kg wet	3.333		91	40-140	6	30	
Carbazole	3.29	0.333	mg/kg wet	3.333		99	40-140	28	30	
Chrysene	2.93	0.167	mg/kg wet	3.333		88	40-140	4	30	
Dibenzo(a,h)Anthracene	3.49	0.167	mg/kg wet	3.333		105	40-140	6	30	
Dibenzofuran	2.87	0.333	mg/kg wet	3.333		86	40-140	16	30	
Diethylphthalate	3.01	0.333	mg/kg wet	3.333		90	40-140	4	30	
Dimethylphthalate	2.96	0.333	mg/kg wet	3.333		89	40-140	8	30	
Di-n-butylphthalate	3.08	0.333	mg/kg wet	3.333		92	40-140	18	30	
Di-n-octylphthalate	3.29	0.333	mg/kg wet	3.333		99	40-140	7	30	
Fluoranthene	2.67	0.333	mg/kg wet	3.333		80	40-140	6	30	
Fluorene	2.98	0.333	mg/kg wet	3.333		89	40-140	14	30	
Hexachlorobenzene	3.07	0.167	mg/kg wet	3.333		92	40-140	10	30	
Hexachlorobutadiene	2.71	0.333	mg/kg wet	3.333		81	40-140	26	30	
Hexachlorocyclopentadiene	2.90	1.67	mg/kg wet	3.333		87	40-140	32	30	D+
Hexachloroethane	2.51	0.333	mg/kg wet	3.333		75	40-140	22	30	
Indeno(1,2,3-cd)Pyrene	3.45	0.333	mg/kg wet	3.333		103	40-140	6	30	
Isophorone	2.80	0.333	mg/kg wet	3.333		84	40-140	26	30	
Naphthalene	2.61	0.333	mg/kg wet	3.333		78	40-140	26	30	
Nitrobenzene	2.78	0.333	mg/kg wet	3.333		84	40-140	26	30	
N-Nitrosodimethylamine	2.25	0.333	mg/kg wet	3.333		68	40-140	23	30	
N-Nitroso-Di-n-Propylamine	2.69	0.333	mg/kg wet	3.333		81	40-140	22	30	
N-nitrosodiphenylamine	2.63	0.333	mg/kg wet	3.333		79	40-140	7	30	
Pentachlorophenol	3.12	1.67	mg/kg wet	3.333		94	30-130	4	30	
Phenanthrene	2.99	0.333	mg/kg wet	3.333		90	40-140	6	30	
Phenol	2.52	0.333	mg/kg wet	3.333		76	30-130	26	30	
Pyrene	3.12	0.333	mg/kg wet	3.333		93	40-140	8	30	
Pyridine	2.07	1.67	mg/kg wet	3.333		62	40-140	26	30	
Surrogate: 1,2-Dichlorobenzene-d4	*2.46*		mg/kg wet	*3.333*		*74*	*30-130*			
Surrogate: 2,4,6-Tribromophenol	*4.54*		mg/kg wet	*5.000*		*91*	*30-130*			
Surrogate: 2-Chlorophenol-d4	*3.90*		mg/kg wet	*5.000*		*78*	*30-130*			
Surrogate: 2-Fluorobiphenyl	*2.79*		mg/kg wet	*3.333*		*84*	*30-130*			
Surrogate: 2-Fluorophenol	*3.76*		mg/kg wet	*5.000*		*75*	*30-130*			
Surrogate: Nitrobenzene-d5	*2.73*		mg/kg wet	*3.333*		*82*	*30-130*			
Surrogate: Phenol-d6	*3.87*		mg/kg wet	*5.000*		*77*	*30-130*			
Surrogate: p-Terphenyl-d14	*3.00*		mg/kg wet	*3.333*		*90*	*30-130*			
Classical Chemistry										
Batch CK61742 - General Preparation										
Reference										
Flashpoint	81		°F	81.00		100	97.9-102.1			
Batch CK61823 - TCN Prep										
Blank										
Total Cyanide	ND	1.00	mg/kg wet							
LCS										

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects

ESS Laboratory Work Order: 1611473

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Classical Chemistry										
Batch CK61823 - TCN Prep										
Total Cyanide	5.04	1.00	mg/kg wet	5.015		101	90-110			
Reference										
Total Cyanide	49.5	4.93	mg/kg wet	48.40		102	36.1577-206.612			
Reference										
Total Cyanide	48.9	4.96	mg/kg wet	48.40		101	36.1577-206.612			
Batch CK62223 - General Preparation										
Blank										
Hexavalent Chromium	ND	0.9	mg/kg wet							
LCS										
Hexavalent Chromium	32.8	0.9	mg/kg wet	33.32		98	80-120			
LCS Dup										
Hexavalent Chromium	33.0	0.9	mg/kg wet	33.32		99	80-120	0.5	20	
Reference										
Hexavalent Chromium	69.5	2.7	mg/kg wet	71.00		98	20.3-222.5			
Batch CK62226 - General Preparation										
Blank										
Reactive Cyanide	ND	2.0	mg/kg							
Reactive Sulfide	ND	2.0	mg/kg							
LCS										
Reactive Cyanide	4.0	2.0	mg/kg	100.3		4	0.68-5.41			
Reactive Sulfide	0.2	2.0	mg/kg	10.00		2	0-44			
Batch CK62236 - General Preparation										
Blank										
Conductivity	ND	5	umhos/cm							
LCS										
Conductivity	1420		umhos/cm	1411		101	90-110			

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects ESS Laboratory Work Order: 1611473

Notes and Definitions

Z18	Temperature is not within 23 +/-2 ºC.
Z17	Temperature is within 23 +/-2 ºC.
Z-10	Soil pH measured in water at 20.8 ºC.
Z-08	See Attached
WL	Results obtained from a deionized water leach of the sample.
U	Analyte included in the analysis, but not detected
S+	Surrogate recovery(ies) above upper control limit (S+).
Q	Calibration required quadratic regression (Q).
D+	Relative percent difference for duplicate is outside of criteria (D+).
D	Diluted.
CD+	Continuing Calibration %Diff/Drift is above control limit (CD+).
CD-	Continuing Calibration %Diff/Drift is below control limit (CD-).
B+	Blank Spike recovery is above upper control limit (B+).
B-	Blank Spike recovery is below lower control limit (B-).
>	Greater than.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: River Hawk Environmental, LLC
Client Project ID: General Public Works Projects

ESS Laboratory Work Order: 1611473

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

ProScience Analytical Services, Inc

Shawn Morrell
ESS Laboratory
185 Frances Ave.
Cranston, RI 02910

November 22, 2016

Dear Shawn Morrell,

The enclosed analytical results have been obtained using the EPA/600/R-93/116 method. However the sample preparation technique used was in accordance with the US EPA office of Environmental Evaluation and Measurement -Region 1 requirements. This technique implies the elimination of interfering particles through several steps which include the homogenization of the sample, separation of different fractions and mandatory examination under the stereomicroscope. Asbestos content less than 1% is recorded on the report as "TR"(Trace).

The quality control data related to the samples analyzed is available upon client's written request. ProScience Analytical Services Inc., assumes no responsibility for potential sample contamination that may have occurred during the sample collection process or erroneous data provided by the client.

The enclosed results may not be used under any circumstances as product endorsement by any US government agency including NIST/NVLAP.

All Laboratory records are retained for at least three years unless otherwise directed in writing by the client. The actual samples are retained for a period of two months and written request is necessary in order to be retained for a longer period of time. All analytical results and records are considered strictly confidential and will not be released under any circumstances to anyone except the actual client. The analytical results included in this report apply only to the items tested.

If you have any questions please contact the Laboratory Manager or the Laboratory Director.

Sincerely,

Patricia Weakley

Patricia Weakley, Optical Asbestos Manager

Aimee Cormier, Laboratory Director

Enclosure:
LAB BATCH ID: S 102927 CLIENT PROJECT ID: 1611473
Client Ref: N/A
AIHA ID# 102754; CT ID# PH-0209; MA ID# AA000156; ME ID# LB-055; ME ID# LA-056; NVLAP Lab Code 200090-0; RI ID # AAL-093; VT ID# AL016876

22 Cummings Park • Woburn, Massachusetts • 01801 • Phone (781)935-3212 • Fax (781)932-4857

ProScience Analytical Services, Inc.

Client #: 2118
Client Project: 1611473
Client Reference: N/A
Client Name: ESS Laboratory
Method: EPA/600/R-93/116; ENV.EVAL. and MEAS.- REGION 1 Requirements

Batch: S 102927
Date Sampled: 11/15/2016
Date Received: 11/18/2016
Date Analyzed: 11/22/2016
Date of Report: 11/22/2016

Sample ID	Color	*ASBESTOS %*						*NON-ASBESTOS %*						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
1611473-01	Brown	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Soil
Location: N/A
Comments:

Analyzed: Yes

Asbestos Codes: CHR = Chrysotile AMO = Amosite CRO = Crocidolite ACT = Actinolite TRE = Tremolite ANT = Anthophyllite

Non-Asbestos Codes: FBG = Fiberglass MNW = Mineral Wool CEL = Cellulose HAR = Hair SYN = Synthetic OTH = Other NON = Non-Fibrous Minerals

Note: To create a unique lab sample ID, use the Batch # and the Sample ID (example: [Batch #] - [Sample ID]).

* All results are in percentage

Sophetra Ken, Analyst

Client Name: ESS Laboratory
Client Project #: 1611473
Client Reference: N/A

Batch: S 102927
Date Received: 11/18/2016
Date Due: 11/23/2016
Stop on first pos: Yes or No

Batch: S 102927

		Stereo Scope						Optical Properties					RI		Asbestos Percent						Non-Asbestos Percent						
Sample ID	**Description**	**Analyst**	SSAPE	Color	Homogeneity	Texture	Friable	Morphology	Extinction	Sign of Elongation	Birefringence	Pleochroism	Parallel	Perpendicular	Chrysotile	Amosite	Crocidolite	Tremolite	Anthophyllite	Actinolite	Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non-Fibrous
1611473-01	Soil	S.K	∅	BR	N	MT	N																				100

Analyzed By / Date: Syntheta Then 11/22/16 **QC By / Date:** Patricia Woolley 11/22/16 **Fax, Email, Verbal Results By / Date:** **# of Samples:** 1

Comments:

SSAPE = Stereo Scope Asbestos Percentage Estimate Birefringence L= less than .010, M= .011-.029, H= greater than .03: Microscope Olympus BH-2, Serial # circle 1- 242277, 229027, 235000, 230663

S102927

ESS Laboratory — PROSCIENCE — CHAIN OF CUSTODY

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910-2211
Tel. (401)461-7181 Fax (401)461-4486
www.esslaboratory.com

ESS Lab # 1611473

Turn Time Standard **DUE 11/23/16**

Reporting Limits

Regulatory State: MA **RI** CT NH NJ NY ME Other_____

Is this project for any of the following:(please circle)
MA-MCP Navy USACE CT DEP Other_____

Electonic Deliverables **Excel** Access **PDF**

Co. Name	Project #	Project Name	Analysis	Asbestos PLM (EPA Screening Protocol)
ESS Laboratory		**1611473**		
Contact Person: **Shawn Morrell**	Proj. Location			
Address	City , State	Zip	PO # **B02412**	
Tel.	email: smorrell@thielsch.com			

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	Asbestos PLM (EPA Screening Protocol)
	11/15/16	**1440**	**C**	**S**	**1611473-01**	**1**	**1**	**AG**	2oz	**X**

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present _____Yes _____No

Seals Intact ____ Yes _____No NA:____

Cooler Temperature: _____

Internal Use Only

[ ] Pickup

[ ] Technician____

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-_____

Sampled by :

Comments:

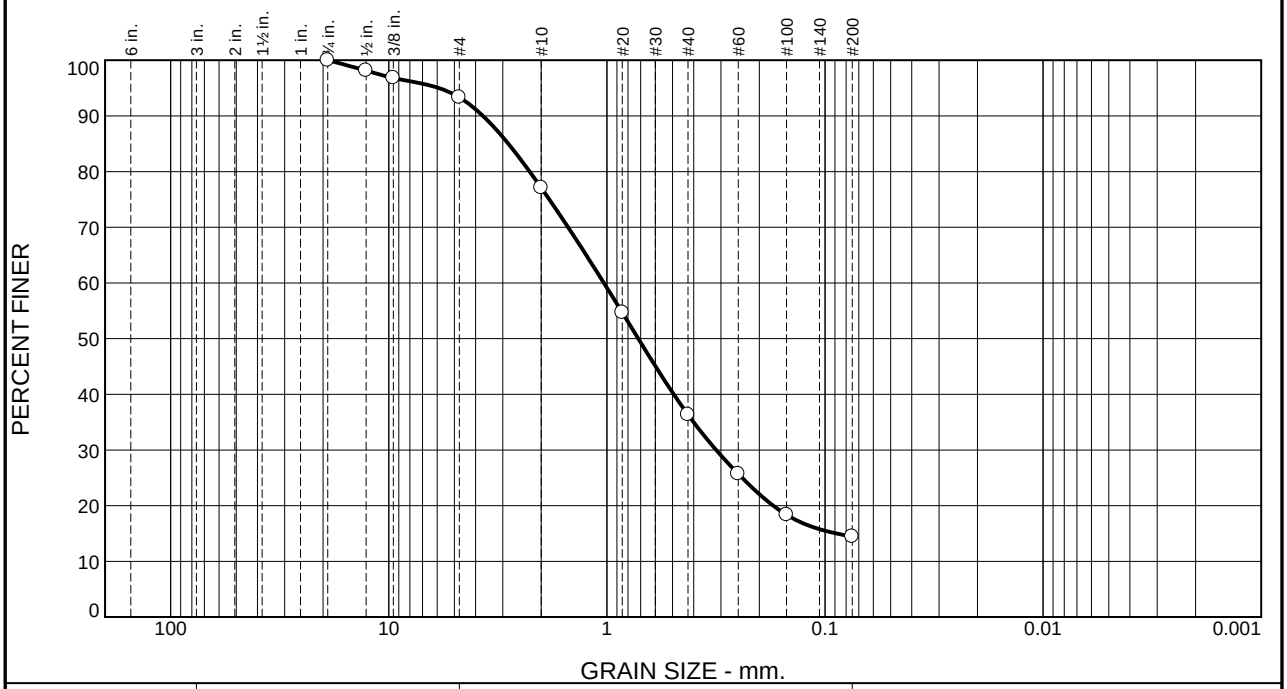
Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
R Grove 11/15/16 1253	Kathy Astore 11-18-16 @ 12:53 PM		
Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)

* By circling MA-MCP, client acknowledges sampels were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

Report Method Blank & Laboratory Control Sample Results

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	6.7	16.2	40.8	21.9	14.4	

TEST RESULTS (D422)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
.75	100.0		
0.5	98.1		
.375	96.8		
#4	93.3		
#10	77.1		
#20	54.7		
#40	36.3		
#60	25.7		
#100	18.3		
#200	14.4		

* (no specification provided)

Material Description

Grey silty sand

Atterberg Limits (ASTM D 4318)

PL= NP **LL=** NV **PI=**

Classification

USCS (D 2487)= SM **AASHTO (M 145)=** A-1-b

Coefficients

D_{90}= 3.6975 D_{85}= 2.8290 D_{60}= 1.0324
D_{50}= 0.7179 D_{30}= 0.3155 D_{15}= 0.0885
D_{10}= C_u= C_c=

Remarks

Date Received: 11.16.16 **Date Tested:** 11.21.16

Tested By: IA

Checked By: Matthew Colman, P.E.

Title: Laboratory Manager

Source of Sample: Stockpile **Depth:** Composite **Date Sampled:** 11.15.16

Sample Number: Stockpile X104

Thielsch Engineering Inc.

Cranston, RI

Client: River Hawk Environmental, LLC

Project: General Public Works Project Marshfield, MA

Project No: 1611473 **Figure** 1611473-01

SOILS LABORATORY TESTING ASSIGNMENT SHEET

THIELSCH ENGINEERING
195 Frances Ave., Cranston, RI 02910
401-467-6454

Project Name **General Public Works Project**
ESS Project No. 1611473
Project Manager Michelle Mirenda
Date Received 11/15/2016 (by)

Client Company River Hawk Environmental, LLC
Site Location
Assigned By
Date Assigned 11/16/2016

Collected By
Date Required 11/23/2016

Sample Information				Lab No.	Identification Tests								Permeability		Compaction			Soil Strength			Consol.		Notes
Boring/ Test Pit No.	Sample or depth	Sample date	ESS Sample ID		Water Cont. %	LL & PL %	Org. %	Bulk	Sieve -200 %	Hyd -2μ %	G_s	Tube Den-sity	Sand	Clay	Mod.	Std.	CBR	Un-con-fined	UU	CIU	Stand ard	E.O.P.	
					D2216	D4318	D2974		D422		D854		D2434	D5084	D1557	D698	D1883	D2166	D2850	D4767	D2435	D2435	#
Stockpile #104		11/15/16	1611473-01						X														**

Notes: ** = 6" minimum

ESS Laboratory
Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1611473

Turn Time	5 Days
Regulatory State	Rhode Island
Is this project for any of the following?:	
Reporting Limits	Residential Direct Exposure Criteria (RI DEM)
Electonic Deliverables	

Company Name: River Hawk Environmental, LLC	Project #: 1070105	Project Name: General Public Works Projects	
Contact Person: William Kenney		Address: 2183 Ocean Street	
City: Marshfield	State: MA	Zip Code	PO #: 1070105
Telephone Number: 781-536-4639	FAX Number: N/A	Email Address: bkenney@riverhawkllc.com	

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Asbestos	Cyanide	Chlordane and Dieldrin	Polychlorinated Biphenyls	Volatile Organic Compounds	Semi-Volatile Organic Compounds	Total Petroleum Hydrocarbons	Particle Size (6" minimum)	Corrosivity	Ignitability	Reactivity	Conductivity	TCLP Metals (if 20x rule apply)	Sb, As, Ba, Be, Cd, Tri-Valent Cr, Hex-Valent Cr	Cu, Pb, Mo, Hg, Ni, Se, Ag, Tl, V, Zn	FULL TCLP LIST
01	11/15/2016	2:40	Composite	Soil	Stockpile #104	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*
Number of Containers per Sample:

Laboratory Use Only

Cooler Present: ✓
Seals Intact:
Cooler Temperature: 1.4 °C ice ICB

Sampled by :

Comments: Please specify "Other" preservative and containers types in this space

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
11/16/16 @ 10:38	11/16/16 10:38	11/17/16 @ 11:20	11/17/16 11:20
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
11/17/16 16:30	11/17/16 1724		

ESS Laboratory Sample and Cooler Receipt Checklist

Client: River Hawk Environmental, LLC - TB/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 1611473
Date Received: 11/16/2016
Project Due Date: 11/23/2016
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 1.8 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** (Yes) / No / NA
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? (Yes) No
    ESS Sample IDs: 01
    Analysis: Grain Size Asbestos
    TAT: STD
12. Were VOAs received? (Yes) / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? (Yes) / No / NA
13. Are the samples properly preserved? (Yes) No
    a. If metals preserved upon receipt: Date: _____ Time: _____ By: _____
    b. Low Level VOA vials frozen: Date: 11/16/16 Time: 1730 By: JL

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes (No)
    a. Was there a need to contact the client? Yes / No
    Who was contacted? _____ Date: _____ Time: _____ By: _____

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
01	84721	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
01	84722	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
01	84723	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
01	84724	Yes	NA	Yes	VOA Vial - Methanol	MeOH	
01	84725	Yes	NA	Yes	VOA Vial - Other	Other	
01	84726	Yes	NA	Yes	VOA Vial - Other	Other	

2nd Review
Are barcode labels on correct containers? (Yes) / No

Completed By: _____ Date & Time: 11/16/16 1711
Reviewed By: _____ Date & Time: 11/16/16 1730
Delivered By: _____ 11/16/16 1730

ESS Laboratory Sample and Cooler Receipt Checklist

Client: River Hawk Environmental, LLC - TB/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 1611473
Date Received: 11/16/2016
Project Due Date: 11/23/2016
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 1.8 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** (Yes) / No / NA
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / (NA)

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

Added 3-8oz jars + 1-4oz jar per MM WR 11/17/16

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
01	84721	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
01	84722	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
01	84723	Yes	NA	Yes	4 oz. Jar - Unpres	NP	
01	84724	Yes	NA	Yes	VOA Vial - Methanol	MeOH	
01	84725	Yes	NA	Yes	VOA Vial - Other	Other	
01	84726	Yes	NA	Yes	VOA Vial - Other	Other	
01	85012	Yes	NA	Yes	2 oz. Jar - Unpres	NP	
01	85565	Yes	NA	Yes	8 oz. Jar - Unpres	NP	
01	85566	Yes	NA	Yes	8 oz. Jar - Unpres	NP	
01	85567	Yes	NA	Yes	8 oz. Jar - Unpres	NP	
01	85568	Yes	NA	Yes	4 oz. Jar - Unpres	NP	

2nd Review
Are barcode labels on correct containers? (Yes) / No

Completed By: Date & Time: 11/17/16 1726
Reviewed By: Date & Time: 11/17/16 1933
Delivered By: 11/17/16 1933

Rev.

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1611473

Turn Time	5	Days	
Regulatory State	Rhode Island		
Is this project for any of the following?:			

Reporting Limits: Residential Direct Exposure Criteria (RI DEM)

Electonic Deliverables

Company Name	Project #	Project Name
River Hawk Environmental, LLC	1070105	General Public Works Projects

Contact Person	Address		
William Kenney	2183 Ocean Street		
City	**State**	**Zip Code**	**PO #**
Marshfield	MA		1070105
Telephone Number	**FAX Number**	**Email Address**	
781-536-4639	N/A	bkenney@riverhawkllc.com	

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID
01	11/15/2016	2:40	Composite	Soil	Stockpile #104

Analysis

ASBESTOS	Cyanide	Chlordane and Dieldrin	Polychlorinated Biphenyls	Volatile Organic Compounds	Semi-Volatile Organic Compounds	Total Petroleum Hydrocarbons	Particle Size (6" minimum)	Corrosivity	Ignitability	Reactivity	Conductivity	TCLP Metals (if 20x rule apply)	As, Ba, Be, Cd, Cr-Valent Cr, Hex-Valent Cr	Pb, Mn, Hg, Ni, Se, Ag, Tl, V, Zn	FULL TCLP LIST
x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial

Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*

Number of Containers per Sample:

Laboratory Use Only

Cooler Present: ✓

Seals Intact: _____

Cooler Temperature: _____ °C

Sampled by :

Comments: Please specify "Other" preservative and containers types in this space

TCLP list - See attached 11/16/16

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
11/16/16 @ 10:38	11/16/16 10:38		
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

ESS Laboratory

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CHAIN OF CUSTODY

ESS Lab # 1611473

Turn Time	5	Days
Regulatory State	Rhode Island	
Is this project for any of the following?:		

Reporting Limits: Residential Direct Exposure Criteria (RI DEM)

Electonic Deliverables

Company Name	**Project #**	**Project Name**
River Hawk Environmental, LLC	1070105	General Public Works Projects
Contact Person	**Address**	
William Kenney	2183 Ocean Street	
City	**State**	**Zip Code** / **PO #**
Marshfield	MA	1070105
Telephone Number	**FAX Number**	**Email Address**
781-536-4639	N/A	bkenney@riverhawkllc.com

Analysis

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Cyanide	Chlordane and Dieldrin	Polychlorinated Biphenyls	Volatile Organic Compounds	Semi-Volatile Organic Compounds	Total Petroleum Hydrocarbons	Particle Size (6" minimum)	Corrosivity	Ignitability	Reactivity	Conductivity	TCLP Metals (if 20x rule apply)	Sb, As, Ba, Be, Cd, Tri-Valent Cr, Hex-Valent Cr	Cu, Pb, Mn, Hg, Ni, Se, Ag, Th, V, Zn
01	11/15/2016	2:40	Composite	Soil	Stockpile #104	x	x	x	x	x	x	x	x	x	x	x	x	x	x

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial

Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*

Number of Containers per Sample:

Laboratory Use Only

Cooler Present: ✓
Seals Intact:
Cooler Temperature: 1.8 °C ice RB

Sampled by :

Comments: Please specify "Other" preservative and containers types in this space

Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)
11/16/16 @ 10:38	11/16/16 10:38	11/16/16 1540	11/16/16 1655
Relinquished by: (Signature, Date & Time)	Received By: (Signature, Date & Time)	Relinquished By: (Signature, Date & Time)	Received By: (Signature, Date & Time)

ANALYTICAL REPORT

Lab Number:	L1640071
Client:	Beta Group, Inc. 6 Blackstone Valley Place Bldg 101 Lincoln, RI 02865
ATTN:	Joe McLoughlin
Phone:	(401) 333-2382
Project Name:	ARLINGTON STREET
Project Number:	Not Specified
Report Date:	01/16/17

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), VA (460195), MD (348), IL (200077), NC (666), TX (T104704476), DOD (L2217), USDA (Permit #P-330-11-00240).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1640071-01	WEIR COMP-1	SOIL	TAUNTON, MA	12/09/16 10:22	12/09/16
L1640071-02	WEIR COMP-2	SOIL	TAUNTON, MA	12/09/16 10:58	12/09/16
L1640071-03	WEIR COMP-3	SOIL	TAUNTON, MA	12/09/16 11:43	12/09/16
L1640071-04	WEIR COMP-4	SOIL	TAUNTON, MA	12/09/16 12:17	12/09/16
L1640071-05	WEIR COMP-5	SOIL	TAUNTON, MA	12/09/16 13:11	12/09/16
L1640071-06	S-6	SOIL	TAUNTON, MA	12/09/16 10:29	12/09/16
L1640071-07	S-19	SOIL	TAUNTON, MA	12/09/16 11:06	12/09/16
L1640071-08	S-25	SOIL	TAUNTON, MA	12/09/16 14:51	12/09/16
L1640071-09	S-40	SOIL	TAUNTON, MA	12/09/16 12:24	12/09/16
L1640071-10	S-49	SOIL	TAUNTON, MA	12/09/16 13:21	12/09/16

Project Name: ARLINGTON STREET
Project Number: Not Specified
Lab Number: L1640071
Report Date: 01/16/17

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name:	ARLINGTON STREET	**Lab Number:**	L1640071
Project Number:	Not Specified	**Report Date:**	01/16/17

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name:	ARLINGTON STREET	**Lab Number:**	L1640071
Project Number:	Not Specified	**Report Date:**	01/16/17

Case Narrative (continued)

Report Submission

This report replaces the report issued December 18, 2016. The following elements were added to the metals analysis on L1640071-01: Antimony, Beryllium, Nickel, Thallium, Vanadium, and Zinc. In addition, the answer to question G has been changed.

MCP Related Narratives

Sample Receipt

In reference to question H:

A Matrix Spike was not submitted for the analysis of Metals.

Volatile Organics

In reference to question H:

The initial calibration, associated with L1640071-06 through -09, did not meet the method required minimum response factor on the lowest calibration standard for acetone (0.0700), 2-butanone (0.0895), 4-methyl-2-pentanone (0.0902), and 1,4-dioxane (0.0021), as well as the average response factor for acetone and 1,4-dioxane. The initial calibration verification is outside acceptance criteria for dichlorodifluoromethane (146%), but within overall method criteria.

The initial calibration, associated with L1640071-10, did not meet the method required minimum response factor on the lowest calibration standard for 4-methyl-2-pentanone (0.0959).

The continuing calibration standards, associated with L1640071-06 through -10, are outside the acceptance criteria for several compounds; however, they are within overall method allowances. Copies of the continuing calibration standards are included as an addendum to this report.

Pesticides

A copy of the Degradation Standards for 4,4'-DDT and Endrin breakdown products is included as an addendum.

In reference to question G:

One or more of the target analytes did not achieve the requested CAM reporting limits.

Project Name:	ARLINGTON STREET	**Lab Number:**	L1640071
Project Number:	Not Specified	**Report Date:**	01/16/17

Case Narrative (continued)

Herbicides

In reference to question H:

The WG960687-2/-3 LCS/LCSD recoveries, associated with L1640071-01 through -05, are below the acceptance criteria for dinoseb (5%/5%); however, the recoveries are due to a noted method interference caused by the hydrolysis step of the extraction procedure. The results of the associated samples are reported; however, all results are considered to have a potentially low bias for this compound.

Metals

In reference to question I:

L1640071-02 through -05 were analyzed for a subset of MCP analytes per the Chain of Custody.

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. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Kelly Stenstrom

Title: Technical Director/Representative

Date: 01/16/17

ORGANICS

VOLATILES

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-06
Client ID: S-6
Sample Location: TAUNTON, MA
Matrix: Soil
Analytical Method: 97,8260C
Analytical Date: 12/14/16 23:44
Analyst: MV
Percent Solids: 77%

Date Collected: 12/09/16 10:29
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	22	--	1
1,1-Dichloroethane	ND		ug/kg	3.2	--	1
Chloroform	ND		ug/kg	3.2	--	1
Carbon tetrachloride	ND		ug/kg	2.2	--	1
1,2-Dichloropropane	ND		ug/kg	7.6	--	1
Dibromochloromethane	ND		ug/kg	2.2	--	1
1,1,2-Trichloroethane	ND		ug/kg	3.2	--	1
Tetrachloroethene	ND		ug/kg	2.2	--	1
Chlorobenzene	ND		ug/kg	2.2	--	1
Trichlorofluoromethane	ND		ug/kg	8.7	--	1
1,2-Dichloroethane	ND		ug/kg	2.2	--	1
1,1,1-Trichloroethane	ND		ug/kg	2.2	--	1
Bromodichloromethane	ND		ug/kg	2.2	--	1
trans-1,3-Dichloropropene	ND		ug/kg	2.2	--	1
cis-1,3-Dichloropropene	ND		ug/kg	2.2	--	1
1,3-Dichloropropene, Total	ND		ug/kg	2.2	--	1
1,1-Dichloropropene	ND		ug/kg	8.7	--	1
Bromoform	ND		ug/kg	8.7	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	2.2	--	1
Benzene	ND		ug/kg	2.2	--	1
Toluene	ND		ug/kg	3.2	--	1
Ethylbenzene	ND		ug/kg	2.2	--	1
Chloromethane	ND		ug/kg	8.7	--	1
Bromomethane	ND		ug/kg	4.3	--	1
Vinyl chloride	ND		ug/kg	4.3	--	1
Chloroethane	ND		ug/kg	4.3	--	1
1,1-Dichloroethene	ND		ug/kg	2.2	--	1
trans-1,2-Dichloroethene	ND		ug/kg	3.2	--	1
Trichloroethene	ND		ug/kg	2.2	--	1
1,2-Dichlorobenzene	ND		ug/kg	8.7	--	1

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-06
Client ID: S-6
Sample Location: TAUNTON, MA

Date Collected: 12/09/16 10:29
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	8.7	--	1
1,4-Dichlorobenzene	ND		ug/kg	8.7	--	1
Methyl tert butyl ether	ND		ug/kg	4.3	--	1
p/m-Xylene	ND		ug/kg	4.3	--	1
o-Xylene	ND		ug/kg	4.3	--	1
Xylenes, Total	ND		ug/kg	4.3	--	1
cis-1,2-Dichloroethene	ND		ug/kg	2.2	--	1
1,2-Dichloroethene, Total	ND		ug/kg	2.2	--	1
Dibromomethane	ND		ug/kg	8.7	--	1
1,2,3-Trichloropropane	ND		ug/kg	8.7	--	1
Styrene	ND		ug/kg	4.3	--	1
Dichlorodifluoromethane	ND		ug/kg	22	--	1
Acetone	ND		ug/kg	78	--	1
Carbon disulfide	ND		ug/kg	8.7	--	1
Methyl ethyl ketone	ND		ug/kg	22	--	1
Methyl isobutyl ketone	ND		ug/kg	22	--	1
2-Hexanone	ND		ug/kg	22	--	1
Bromochloromethane	ND		ug/kg	8.7	--	1
Tetrahydrofuran	ND		ug/kg	8.7	--	1
2,2-Dichloropropane	ND		ug/kg	11	--	1
1,2-Dibromoethane	ND		ug/kg	8.7	--	1
1,3-Dichloropropane	ND		ug/kg	8.7	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	2.2	--	1
Bromobenzene	ND		ug/kg	11	--	1
n-Butylbenzene	ND		ug/kg	2.2	--	1
sec-Butylbenzene	ND		ug/kg	2.2	--	1
tert-Butylbenzene	ND		ug/kg	8.7	--	1
o-Chlorotoluene	ND		ug/kg	8.7	--	1
p-Chlorotoluene	ND		ug/kg	8.7	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	8.7	--	1
Hexachlorobutadiene	ND		ug/kg	8.7	--	1
Isopropylbenzene	ND		ug/kg	2.2	--	1
p-Isopropyltoluene	ND		ug/kg	2.2	--	1
Naphthalene	ND		ug/kg	8.7	--	1
n-Propylbenzene	ND		ug/kg	2.2	--	1
1,2,3-Trichlorobenzene	ND		ug/kg	8.7	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	8.7	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	8.7	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	8.7	--	1

Project Name: ARLINGTON STREET
Project Number: Not Specified
Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-06
Client ID: S-6
Sample Location: TAUNTON, MA
Date Collected: 12/09/16 10:29
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
Diethyl ether	ND		ug/kg	11	--	1
Diisopropyl Ether	ND		ug/kg	8.7	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	8.7	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	8.7	--	1
1,4-Dioxane	ND		ug/kg	87	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	91		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	87		70-130
Dibromofluoromethane	98		70-130

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-07
Client ID: S-19
Sample Location: TAUNTON, MA
Matrix: Soil
Analytical Method: 97,8260C
Analytical Date: 12/15/16 00:09
Analyst: MV
Percent Solids: 75%

Date Collected: 12/09/16 11:06
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	16	--	1
1,1-Dichloroethane	ND		ug/kg	2.4	--	1
Chloroform	ND		ug/kg	2.4	--	1
Carbon tetrachloride	ND		ug/kg	1.6	--	1
1,2-Dichloropropane	ND		ug/kg	5.7	--	1
Dibromochloromethane	ND		ug/kg	1.6	--	1
1,1,2-Trichloroethane	ND		ug/kg	2.4	--	1
Tetrachloroethene	ND		ug/kg	1.6	--	1
Chlorobenzene	ND		ug/kg	1.6	--	1
Trichlorofluoromethane	ND		ug/kg	6.5	--	1
1,2-Dichloroethane	ND		ug/kg	1.6	--	1
1,1,1-Trichloroethane	ND		ug/kg	1.6	--	1
Bromodichloromethane	ND		ug/kg	1.6	--	1
trans-1,3-Dichloropropene	ND		ug/kg	1.6	--	1
cis-1,3-Dichloropropene	ND		ug/kg	1.6	--	1
1,3-Dichloropropene, Total	ND		ug/kg	1.6	--	1
1,1-Dichloropropene	ND		ug/kg	6.5	--	1
Bromoform	ND		ug/kg	6.5	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.6	--	1
Benzene	ND		ug/kg	1.6	--	1
Toluene	ND		ug/kg	2.4	--	1
Ethylbenzene	ND		ug/kg	1.6	--	1
Chloromethane	ND		ug/kg	6.5	--	1
Bromomethane	ND		ug/kg	3.2	--	1
Vinyl chloride	ND		ug/kg	3.2	--	1
Chloroethane	ND		ug/kg	3.2	--	1
1,1-Dichloroethene	ND		ug/kg	1.6	--	1
trans-1,2-Dichloroethene	ND		ug/kg	2.4	--	1
Trichloroethene	ND		ug/kg	1.6	--	1
1,2-Dichlorobenzene	ND		ug/kg	6.5	--	1

Project Name: ARLINGTON STREET
Project Number: Not Specified
Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-07
Client ID: S-19
Sample Location: TAUNTON, MA
Date Collected: 12/09/16 11:06
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	6.5	--	1
1,4-Dichlorobenzene	ND		ug/kg	6.5	--	1
Methyl tert butyl ether	ND		ug/kg	3.2	--	1
p/m-Xylene	ND		ug/kg	3.2	--	1
o-Xylene	ND		ug/kg	3.2	--	1
Xylenes, Total	ND		ug/kg	3.2	--	1
cis-1,2-Dichloroethene	ND		ug/kg	1.6	--	1
1,2-Dichloroethene, Total	ND		ug/kg	1.6	--	1
Dibromomethane	ND		ug/kg	6.5	--	1
1,2,3-Trichloropropane	ND		ug/kg	6.5	--	1
Styrene	ND		ug/kg	3.2	--	1
Dichlorodifluoromethane	ND		ug/kg	16	--	1
Acetone	ND		ug/kg	59	--	1
Carbon disulfide	ND		ug/kg	6.5	--	1
Methyl ethyl ketone	ND		ug/kg	16	--	1
Methyl isobutyl ketone	ND		ug/kg	16	--	1
2-Hexanone	ND		ug/kg	16	--	1
Bromochloromethane	ND		ug/kg	6.5	--	1
Tetrahydrofuran	ND		ug/kg	6.5	--	1
2,2-Dichloropropane	ND		ug/kg	8.1	--	1
1,2-Dibromoethane	ND		ug/kg	6.5	--	1
1,3-Dichloropropane	ND		ug/kg	6.5	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.6	--	1
Bromobenzene	ND		ug/kg	8.1	--	1
n-Butylbenzene	ND		ug/kg	1.6	--	1
sec-Butylbenzene	6.2		ug/kg	1.6	--	1
tert-Butylbenzene	ND		ug/kg	6.5	--	1
o-Chlorotoluene	ND		ug/kg	6.5	--	1
p-Chlorotoluene	ND		ug/kg	6.5	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	6.5	--	1
Hexachlorobutadiene	ND		ug/kg	6.5	--	1
Isopropylbenzene	ND		ug/kg	1.6	--	1
p-Isopropyltoluene	6.4		ug/kg	1.6	--	1
Naphthalene	ND		ug/kg	6.5	--	1
n-Propylbenzene	ND		ug/kg	1.6	--	1
1,2,3-Trichlorobenzene	ND		ug/kg	6.5	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	6.5	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	6.5	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	6.5	--	1

Project Name: ARLINGTON STREET
Project Number: Not Specified
Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-07
Client ID: S-19
Sample Location: TAUNTON, MA
Date Collected: 12/09/16 11:06
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
Diethyl ether	ND		ug/kg	8.1	--	1
Diisopropyl Ether	ND		ug/kg	6.5	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	6.5	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	6.5	--	1
1,4-Dioxane	ND		ug/kg	65	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	100		70-130

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-08
Client ID: S-25
Sample Location: TAUNTON, MA
Matrix: Soil
Analytical Method: 97,8260C
Analytical Date: 12/15/16 00:35
Analyst: MV
Percent Solids: 75%

Date Collected: 12/09/16 14:51
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	18	--	1
1,1-Dichloroethane	ND		ug/kg	2.6	--	1
Chloroform	ND		ug/kg	2.6	--	1
Carbon tetrachloride	ND		ug/kg	1.8	--	1
1,2-Dichloropropane	ND		ug/kg	6.2	--	1
Dibromochloromethane	ND		ug/kg	1.8	--	1
1,1,2-Trichloroethane	ND		ug/kg	2.6	--	1
Tetrachloroethene	ND		ug/kg	1.8	--	1
Chlorobenzene	ND		ug/kg	1.8	--	1
Trichlorofluoromethane	ND		ug/kg	7.1	--	1
1,2-Dichloroethane	ND		ug/kg	1.8	--	1
1,1,1-Trichloroethane	ND		ug/kg	1.8	--	1
Bromodichloromethane	ND		ug/kg	1.8	--	1
trans-1,3-Dichloropropene	ND		ug/kg	1.8	--	1
cis-1,3-Dichloropropene	ND		ug/kg	1.8	--	1
1,3-Dichloropropene, Total	ND		ug/kg	1.8	--	1
1,1-Dichloropropene	ND		ug/kg	7.1	--	1
Bromoform	ND		ug/kg	7.1	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.8	--	1
Benzene	ND		ug/kg	1.8	--	1
Toluene	ND		ug/kg	2.6	--	1
Ethylbenzene	4.4		ug/kg	1.8	--	1
Chloromethane	ND		ug/kg	7.1	--	1
Bromomethane	ND		ug/kg	3.5	--	1
Vinyl chloride	ND		ug/kg	3.5	--	1
Chloroethane	ND		ug/kg	3.5	--	1
1,1-Dichloroethene	ND		ug/kg	1.8	--	1
trans-1,2-Dichloroethene	ND		ug/kg	2.6	--	1
Trichloroethene	ND		ug/kg	1.8	--	1
1,2-Dichlorobenzene	ND		ug/kg	7.1	--	1

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-08
Client ID: S-25
Sample Location: TAUNTON, MA

Date Collected: 12/09/16 14:51
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	7.1	--	1
1,4-Dichlorobenzene	ND		ug/kg	7.1	--	1
Methyl tert butyl ether	ND		ug/kg	3.5	--	1
p/m-Xylene	9.8		ug/kg	3.5	--	1
o-Xylene	3.7		ug/kg	3.5	--	1
Xylenes, Total	14		ug/kg	3.5	--	1
cis-1,2-Dichloroethene	ND		ug/kg	1.8	--	1
1,2-Dichloroethene, Total	ND		ug/kg	1.8	--	1
Dibromomethane	ND		ug/kg	7.1	--	1
1,2,3-Trichloropropane	ND		ug/kg	7.1	--	1
Styrene	ND		ug/kg	3.5	--	1
Dichlorodifluoromethane	ND		ug/kg	18	--	1
Acetone	ND		ug/kg	64	--	1
Carbon disulfide	ND		ug/kg	7.1	--	1
Methyl ethyl ketone	ND		ug/kg	18	--	1
Methyl isobutyl ketone	ND		ug/kg	18	--	1
2-Hexanone	ND		ug/kg	18	--	1
Bromochloromethane	ND		ug/kg	7.1	--	1
Tetrahydrofuran	ND		ug/kg	7.1	--	1
2,2-Dichloropropane	ND		ug/kg	8.8	--	1
1,2-Dibromoethane	ND		ug/kg	7.1	--	1
1,3-Dichloropropane	ND		ug/kg	7.1	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.8	--	1
Bromobenzene	ND		ug/kg	8.8	--	1
n-Butylbenzene	15		ug/kg	1.8	--	1
sec-Butylbenzene	10		ug/kg	1.8	--	1
tert-Butylbenzene	ND		ug/kg	7.1	--	1
o-Chlorotoluene	ND		ug/kg	7.1	--	1
p-Chlorotoluene	ND		ug/kg	7.1	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	7.1	--	1
Hexachlorobutadiene	ND		ug/kg	7.1	--	1
Isopropylbenzene	5.9		ug/kg	1.8	--	1
p-Isopropyltoluene	12		ug/kg	1.8	--	1
Naphthalene	18		ug/kg	7.1	--	1
n-Propylbenzene	21		ug/kg	1.8	--	1
1,2,3-Trichlorobenzene	ND		ug/kg	7.1	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	7.1	--	1
1,3,5-Trimethylbenzene	55		ug/kg	7.1	--	1
1,2,4-Trimethylbenzene	110		ug/kg	7.1	--	1

Project Name: ARLINGTON STREET
Project Number: Not Specified
Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-08
Client ID: S-25
Sample Location: TAUNTON, MA
Date Collected: 12/09/16 14:51
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
Diethyl ether	ND		ug/kg	8.8	--	1
Diisopropyl Ether	ND		ug/kg	7.1	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	7.1	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	7.1	--	1
1,4-Dioxane	ND		ug/kg	71	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	97		70-130

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-09
Client ID: S-40
Sample Location: TAUNTON, MA
Matrix: Soil
Analytical Method: 97,8260C
Analytical Date: 12/15/16 01:00
Analyst: MV
Percent Solids: 92%

Date Collected: 12/09/16 12:24
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	12	--	1
1,1-Dichloroethane	ND		ug/kg	1.8	--	1
Chloroform	ND		ug/kg	1.8	--	1
Carbon tetrachloride	ND		ug/kg	1.2	--	1
1,2-Dichloropropane	ND		ug/kg	4.3	--	1
Dibromochloromethane	ND		ug/kg	1.2	--	1
1,1,2-Trichloroethane	ND		ug/kg	1.8	--	1
Tetrachloroethene	ND		ug/kg	1.2	--	1
Chlorobenzene	ND		ug/kg	1.2	--	1
Trichlorofluoromethane	ND		ug/kg	5.0	--	1
1,2-Dichloroethane	ND		ug/kg	1.2	--	1
1,1,1-Trichloroethane	ND		ug/kg	1.2	--	1
Bromodichloromethane	ND		ug/kg	1.2	--	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	--	1
cis-1,3-Dichloropropene	ND		ug/kg	1.2	--	1
1,3-Dichloropropene, Total	ND		ug/kg	1.2	--	1
1,1-Dichloropropene	ND		ug/kg	5.0	--	1
Bromoform	ND		ug/kg	5.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.2	--	1
Benzene	ND		ug/kg	1.2	--	1
Toluene	ND		ug/kg	1.8	--	1
Ethylbenzene	ND		ug/kg	1.2	--	1
Chloromethane	ND		ug/kg	5.0	--	1
Bromomethane	ND		ug/kg	2.5	--	1
Vinyl chloride	ND		ug/kg	2.5	--	1
Chloroethane	ND		ug/kg	2.5	--	1
1,1-Dichloroethene	ND		ug/kg	1.2	--	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	--	1
Trichloroethene	ND		ug/kg	1.2	--	1
1,2-Dichlorobenzene	ND		ug/kg	5.0	--	1

Project Name: ARLINGTON STREET
Project Number: Not Specified
Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-09
Client ID: S-40
Sample Location: TAUNTON, MA
Date Collected: 12/09/16 12:24
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	5.0	--	1
1,4-Dichlorobenzene	ND		ug/kg	5.0	--	1
Methyl tert butyl ether	ND		ug/kg	2.5	--	1
p/m-Xylene	ND		ug/kg	2.5	--	1
o-Xylene	ND		ug/kg	2.5	--	1
Xylenes, Total	ND		ug/kg	2.5	--	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	--	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	--	1
Dibromomethane	ND		ug/kg	5.0	--	1
1,2,3-Trichloropropane	ND		ug/kg	5.0	--	1
Styrene	ND		ug/kg	2.5	--	1
Dichlorodifluoromethane	ND		ug/kg	12	--	1
Acetone	ND		ug/kg	45	--	1
Carbon disulfide	ND		ug/kg	5.0	--	1
Methyl ethyl ketone	ND		ug/kg	12	--	1
Methyl isobutyl ketone	ND		ug/kg	12	--	1
2-Hexanone	ND		ug/kg	12	--	1
Bromochloromethane	ND		ug/kg	5.0	--	1
Tetrahydrofuran	ND		ug/kg	5.0	--	1
2,2-Dichloropropane	ND		ug/kg	6.2	--	1
1,2-Dibromoethane	ND		ug/kg	5.0	--	1
1,3-Dichloropropane	ND		ug/kg	5.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.2	--	1
Bromobenzene	ND		ug/kg	6.2	--	1
n-Butylbenzene	ND		ug/kg	1.2	--	1
sec-Butylbenzene	ND		ug/kg	1.2	--	1
tert-Butylbenzene	ND		ug/kg	5.0	--	1
o-Chlorotoluene	ND		ug/kg	5.0	--	1
p-Chlorotoluene	ND		ug/kg	5.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	--	1
Hexachlorobutadiene	ND		ug/kg	5.0	--	1
Isopropylbenzene	ND		ug/kg	1.2	--	1
p-Isopropyltoluene	ND		ug/kg	1.2	--	1
Naphthalene	ND		ug/kg	5.0	--	1
n-Propylbenzene	ND		ug/kg	1.2	--	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	--	1

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-09
Client ID: S-40
Sample Location: TAUNTON, MA

Date Collected: 12/09/16 12:24
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
Diethyl ether	ND		ug/kg	6.2	--	1
Diisopropyl Ether	ND		ug/kg	5.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	5.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	5.0	--	1
1,4-Dioxane	ND		ug/kg	50	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	85		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	95		70-130

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-10
Client ID: S-49
Sample Location: TAUNTON, MA
Matrix: Soil
Analytical Method: 97,8260C
Analytical Date: 12/15/16 17:16
Analyst: KD
Percent Solids: 80%

Date Collected: 12/09/16 13:21
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	16	--	1
1,1-Dichloroethane	ND		ug/kg	2.5	--	1
Chloroform	ND		ug/kg	2.5	--	1
Carbon tetrachloride	ND		ug/kg	1.6	--	1
1,2-Dichloropropane	ND		ug/kg	5.8	--	1
Dibromochloromethane	ND		ug/kg	1.6	--	1
1,1,2-Trichloroethane	ND		ug/kg	2.5	--	1
Tetrachloroethene	ND		ug/kg	1.6	--	1
Chlorobenzene	ND		ug/kg	1.6	--	1
Trichlorofluoromethane	ND		ug/kg	6.6	--	1
1,2-Dichloroethane	ND		ug/kg	1.6	--	1
1,1,1-Trichloroethane	ND		ug/kg	1.6	--	1
Bromodichloromethane	ND		ug/kg	1.6	--	1
trans-1,3-Dichloropropene	ND		ug/kg	1.6	--	1
cis-1,3-Dichloropropene	ND		ug/kg	1.6	--	1
1,3-Dichloropropene, Total	ND		ug/kg	1.6	--	1
1,1-Dichloropropene	ND		ug/kg	6.6	--	1
Bromoform	ND		ug/kg	6.6	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.6	--	1
Benzene	ND		ug/kg	1.6	--	1
Toluene	ND		ug/kg	2.5	--	1
Ethylbenzene	ND		ug/kg	1.6	--	1
Chloromethane	ND		ug/kg	6.6	--	1
Bromomethane	ND		ug/kg	3.3	--	1
Vinyl chloride	ND		ug/kg	3.3	--	1
Chloroethane	ND		ug/kg	3.3	--	1
1,1-Dichloroethene	ND		ug/kg	1.6	--	1
trans-1,2-Dichloroethene	ND		ug/kg	2.5	--	1
Trichloroethene	ND		ug/kg	1.6	--	1
1,2-Dichlorobenzene	ND		ug/kg	6.6	--	1

Project Name: ARLINGTON STREET
Project Number: Not Specified
Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-10
Client ID: S-49
Sample Location: TAUNTON, MA
Date Collected: 12/09/16 13:21
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	6.6	--	1
1,4-Dichlorobenzene	ND		ug/kg	6.6	--	1
Methyl tert butyl ether	ND		ug/kg	3.3	--	1
p/m-Xylene	ND		ug/kg	3.3	--	1
o-Xylene	ND		ug/kg	3.3	--	1
Xylenes, Total	ND		ug/kg	3.3	--	1
cis-1,2-Dichloroethene	ND		ug/kg	1.6	--	1
1,2-Dichloroethene, Total	ND		ug/kg	1.6	--	1
Dibromomethane	ND		ug/kg	6.6	--	1
1,2,3-Trichloropropane	ND		ug/kg	6.6	--	1
Styrene	ND		ug/kg	3.3	--	1
Dichlorodifluoromethane	ND		ug/kg	16	--	1
Acetone	ND		ug/kg	59	--	1
Carbon disulfide	ND		ug/kg	6.6	--	1
Methyl ethyl ketone	ND		ug/kg	16	--	1
Methyl isobutyl ketone	ND		ug/kg	16	--	1
2-Hexanone	ND		ug/kg	16	--	1
Bromochloromethane	ND		ug/kg	6.6	--	1
Tetrahydrofuran	ND		ug/kg	6.6	--	1
2,2-Dichloropropane	ND		ug/kg	8.2	--	1
1,2-Dibromoethane	ND		ug/kg	6.6	--	1
1,3-Dichloropropane	ND		ug/kg	6.6	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.6	--	1
Bromobenzene	ND		ug/kg	8.2	--	1
n-Butylbenzene	ND		ug/kg	1.6	--	1
sec-Butylbenzene	3.2		ug/kg	1.6	--	1
tert-Butylbenzene	ND		ug/kg	6.6	--	1
o-Chlorotoluene	ND		ug/kg	6.6	--	1
p-Chlorotoluene	ND		ug/kg	6.6	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	6.6	--	1
Hexachlorobutadiene	ND		ug/kg	6.6	--	1
Isopropylbenzene	ND		ug/kg	1.6	--	1
p-Isopropyltoluene	ND		ug/kg	1.6	--	1
Naphthalene	ND		ug/kg	6.6	--	1
n-Propylbenzene	ND		ug/kg	1.6	--	1
1,2,3-Trichlorobenzene	ND		ug/kg	6.6	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	6.6	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	6.6	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	6.6	--	1

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-10
Client ID: S-49
Sample Location: TAUNTON, MA

Date Collected: 12/09/16 13:21
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics by 8260/5035 - Westborough Lab						
Diethyl ether	ND		ug/kg	8.2	--	1
Diisopropyl Ether	ND		ug/kg	6.6	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	6.6	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	6.6	--	1
1,4-Dioxane	ND		ug/kg	66	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	123		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	109		70-130

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 12/14/16 19:55
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 06-09 Batch: WG961460-5					
Methylene chloride	ND		ug/kg	10	--
1,1-Dichloroethane	ND		ug/kg	1.5	--
Chloroform	ND		ug/kg	1.5	--
Carbon tetrachloride	ND		ug/kg	1.0	--
1,2-Dichloropropane	ND		ug/kg	3.5	--
Dibromochloromethane	ND		ug/kg	1.0	--
1,1,2-Trichloroethane	ND		ug/kg	1.5	--
Tetrachloroethene	ND		ug/kg	1.0	--
Chlorobenzene	ND		ug/kg	1.0	--
Trichlorofluoromethane	ND		ug/kg	4.0	--
1,2-Dichloroethane	ND		ug/kg	1.0	--
1,1,1-Trichloroethane	ND		ug/kg	1.0	--
Bromodichloromethane	ND		ug/kg	1.0	--
trans-1,3-Dichloropropene	ND		ug/kg	1.0	--
cis-1,3-Dichloropropene	ND		ug/kg	1.0	--
1,3-Dichloropropene, Total	ND		ug/kg	1.0	--
1,1-Dichloropropene	ND		ug/kg	4.0	--
Bromoform	ND		ug/kg	4.0	--
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	--
Benzene	ND		ug/kg	1.0	--
Toluene	ND		ug/kg	1.5	--
Ethylbenzene	ND		ug/kg	1.0	--
Chloromethane	ND		ug/kg	4.0	--
Bromomethane	ND		ug/kg	2.0	--
Vinyl chloride	ND		ug/kg	2.0	--
Chloroethane	ND		ug/kg	2.0	--
1,1-Dichloroethene	ND		ug/kg	1.0	--
trans-1,2-Dichloroethene	ND		ug/kg	1.5	--
Trichloroethene	ND		ug/kg	1.0	--

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 12/14/16 19:55
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 06-09 Batch: WG961460-5					
1,2-Dichlorobenzene	ND		ug/kg	4.0	--
1,3-Dichlorobenzene	ND		ug/kg	4.0	--
1,4-Dichlorobenzene	ND		ug/kg	4.0	--
Methyl tert butyl ether	ND		ug/kg	2.0	--
p/m-Xylene	ND		ug/kg	2.0	--
o-Xylene	ND		ug/kg	2.0	--
Xylenes, Total	ND		ug/kg	2.0	--
cis-1,2-Dichloroethene	ND		ug/kg	1.0	--
1,2-Dichloroethene, Total	ND		ug/kg	1.0	--
Dibromomethane	ND		ug/kg	4.0	--
1,4-Dichlorobutane	ND		ug/kg	10	--
1,2,3-Trichloropropane	ND		ug/kg	4.0	--
Styrene	ND		ug/kg	2.0	--
Dichlorodifluoromethane	ND		ug/kg	10	--
Acetone	ND		ug/kg	36	--
Carbon disulfide	ND		ug/kg	4.0	--
Methyl ethyl ketone	ND		ug/kg	10	--
Methyl isobutyl ketone	ND		ug/kg	10	--
2-Hexanone	ND		ug/kg	10	--
Ethyl methacrylate	ND		ug/kg	10	--
Acrylonitrile	ND		ug/kg	4.0	--
Bromochloromethane	ND		ug/kg	4.0	--
Tetrahydrofuran	ND		ug/kg	4.0	--
2,2-Dichloropropane	ND		ug/kg	5.0	--
1,2-Dibromoethane	ND		ug/kg	4.0	--
1,3-Dichloropropane	ND		ug/kg	4.0	--
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.0	--
Bromobenzene	ND		ug/kg	5.0	--
n-Butylbenzene	ND		ug/kg	1.0	--

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 12/14/16 19:55
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 06-09 Batch: WG961460-5					
sec-Butylbenzene	ND		ug/kg	1.0	--
tert-Butylbenzene	ND		ug/kg	4.0	--
o-Chlorotoluene	ND		ug/kg	4.0	--
p-Chlorotoluene	ND		ug/kg	4.0	--
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.0	--
Hexachlorobutadiene	ND		ug/kg	4.0	--
Isopropylbenzene	ND		ug/kg	1.0	--
p-Isopropyltoluene	ND		ug/kg	1.0	--
Naphthalene	ND		ug/kg	4.0	--
n-Propylbenzene	ND		ug/kg	1.0	--
1,2,3-Trichlorobenzene	ND		ug/kg	4.0	--
1,2,4-Trichlorobenzene	ND		ug/kg	4.0	--
1,3,5-Trimethylbenzene	ND		ug/kg	4.0	--
1,2,4-Trimethylbenzene	ND		ug/kg	4.0	--
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	--
Diethyl ether	ND		ug/kg	5.0	--
Diisopropyl Ether	ND		ug/kg	4.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/kg	4.0	--
Tertiary-Amyl Methyl Ether	ND		ug/kg	4.0	--
1,4-Dioxane	ND		ug/kg	40	--
2-Chloroethylvinyl ether	ND		ug/kg	20	--
Halothane	ND		ug/kg	40	--
Ethyl Acetate	ND		ug/kg	20	--
Freon-113	ND		ug/kg	20	--
Vinyl acetate	ND		ug/kg	10	--

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 12/14/16 19:55
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 06-09 Batch: WG961460-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	83		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	87		70-130
Dibromofluoromethane	91		70-130

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 12/15/16 08:33
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 10 Batch: WG961701-5					
Methylene chloride	ND		ug/kg	10	--
1,1-Dichloroethane	ND		ug/kg	1.5	--
Chloroform	ND		ug/kg	1.5	--
Carbon tetrachloride	ND		ug/kg	1.0	--
1,2-Dichloropropane	ND		ug/kg	3.5	--
Dibromochloromethane	ND		ug/kg	1.0	--
1,1,2-Trichloroethane	ND		ug/kg	1.5	--
Tetrachloroethene	ND		ug/kg	1.0	--
Chlorobenzene	ND		ug/kg	1.0	--
Trichlorofluoromethane	ND		ug/kg	4.0	--
1,2-Dichloroethane	ND		ug/kg	1.0	--
1,1,1-Trichloroethane	ND		ug/kg	1.0	--
Bromodichloromethane	ND		ug/kg	1.0	--
trans-1,3-Dichloropropene	ND		ug/kg	1.0	--
cis-1,3-Dichloropropene	ND		ug/kg	1.0	--
1,3-Dichloropropene, Total	ND		ug/kg	1.0	--
1,1-Dichloropropene	ND		ug/kg	4.0	--
Bromoform	ND		ug/kg	4.0	--
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	--
Benzene	ND		ug/kg	1.0	--
Toluene	ND		ug/kg	1.5	--
Ethylbenzene	ND		ug/kg	1.0	--
Chloromethane	ND		ug/kg	4.0	--
Bromomethane	ND		ug/kg	2.0	--
Vinyl chloride	ND		ug/kg	2.0	--
Chloroethane	ND		ug/kg	2.0	--
1,1-Dichloroethene	ND		ug/kg	1.0	--
trans-1,2-Dichloroethene	ND		ug/kg	1.5	--
Trichloroethene	ND		ug/kg	1.0	--

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 12/15/16 08:33
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 10 Batch: WG961701-5					
1,2-Dichlorobenzene	ND		ug/kg	4.0	--
1,3-Dichlorobenzene	ND		ug/kg	4.0	--
1,4-Dichlorobenzene	ND		ug/kg	4.0	--
Methyl tert butyl ether	ND		ug/kg	2.0	--
p/m-Xylene	ND		ug/kg	2.0	--
o-Xylene	ND		ug/kg	2.0	--
Xylenes, Total	ND		ug/kg	2.0	--
cis-1,2-Dichloroethene	ND		ug/kg	1.0	--
1,2-Dichloroethene, Total	ND		ug/kg	1.0	--
Dibromomethane	ND		ug/kg	4.0	--
1,4-Dichlorobutane	ND		ug/kg	10	--
1,2,3-Trichloropropane	ND		ug/kg	4.0	--
Styrene	ND		ug/kg	2.0	--
Dichlorodifluoromethane	ND		ug/kg	10	--
Acetone	ND		ug/kg	36	--
Carbon disulfide	ND		ug/kg	4.0	--
Methyl ethyl ketone	ND		ug/kg	10	--
Methyl isobutyl ketone	ND		ug/kg	10	--
2-Hexanone	ND		ug/kg	10	--
Ethyl methacrylate	ND		ug/kg	10	--
Acrylonitrile	ND		ug/kg	4.0	--
Bromochloromethane	ND		ug/kg	4.0	--
Tetrahydrofuran	ND		ug/kg	4.0	--
2,2-Dichloropropane	ND		ug/kg	5.0	--
1,2-Dibromoethane	ND		ug/kg	4.0	--
1,3-Dichloropropane	ND		ug/kg	4.0	--
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.0	--
Bromobenzene	ND		ug/kg	5.0	--
n-Butylbenzene	ND		ug/kg	1.0	--

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 12/15/16 08:33
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 10 Batch: WG961701-5					
sec-Butylbenzene	ND		ug/kg	1.0	--
tert-Butylbenzene	ND		ug/kg	4.0	--
o-Chlorotoluene	ND		ug/kg	4.0	--
p-Chlorotoluene	ND		ug/kg	4.0	--
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.0	--
Hexachlorobutadiene	ND		ug/kg	4.0	--
Isopropylbenzene	ND		ug/kg	1.0	--
p-Isopropyltoluene	ND		ug/kg	1.0	--
Naphthalene	ND		ug/kg	4.0	--
n-Propylbenzene	ND		ug/kg	1.0	--
1,2,3-Trichlorobenzene	ND		ug/kg	4.0	--
1,2,4-Trichlorobenzene	ND		ug/kg	4.0	--
1,3,5-Trimethylbenzene	ND		ug/kg	4.0	--
1,2,4-Trimethylbenzene	ND		ug/kg	4.0	--
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	--
Diethyl ether	ND		ug/kg	5.0	--
Diisopropyl Ether	ND		ug/kg	4.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/kg	4.0	--
Tertiary-Amyl Methyl Ether	ND		ug/kg	4.0	--
1,4-Dioxane	ND		ug/kg	40	--
Halothane	ND		ug/kg	40	--
Ethyl Acetate	ND		ug/kg	20	--
Freon-113	ND		ug/kg	20	--
Vinyl acetate	ND		ug/kg	10	--

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 12/15/16 08:33
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 10 Batch: WG961701-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	123		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	108		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 06-09 Batch: WG961460-3 WG961460-4								
Methylene chloride	88		87		70-130	1		20
1,1-Dichloroethane	85		81		70-130	5		20
Chloroform	87		84		70-130	4		20
Carbon tetrachloride	87		81		70-130	7		20
1,2-Dichloropropane	84		85		70-130	1		20
Dibromochloromethane	96		96		70-130	0		20
1,1,2-Trichloroethane	97		98		70-130	1		20
Tetrachloroethene	111		106		70-130	5		20
Chlorobenzene	103		99		70-130	4		20
Trichlorofluoromethane	86		81		70-130	6		20
1,2-Dichloroethane	79		79		70-130	0		20
1,1,1-Trichloroethane	87		82		70-130	6		20
Bromodichloromethane	81		82		70-130	1		20
trans-1,3-Dichloropropene	90		89		70-130	1		20
cis-1,3-Dichloropropene	85		83		70-130	2		20
1,1-Dichloropropene	88		83		70-130	6		20
Bromoform	99		104		70-130	5		20
1,1,2,2-Tetrachloroethane	94		96		70-130	2		20
Benzene	90		87		70-130	3		20
Toluene	99		96		70-130	3		20
Ethylbenzene	98		94		70-130	4		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 06-09 Batch: WG961460-3 WG961460-4								
Chloromethane	80		76		70-130	5		20
Bromomethane	92		87		70-130	6		20
Vinyl chloride	81		79		70-130	3		20
Chloroethane	90		87		70-130	3		20
1,1-Dichloroethene	94		91		70-130	3		20
trans-1,2-Dichloroethene	94		92		70-130	2		20
Trichloroethene	90		86		70-130	5		20
1,2-Dichlorobenzene	106		103		70-130	3		20
1,3-Dichlorobenzene	108		104		70-130	4		20
1,4-Dichlorobenzene	107		103		70-130	4		20
Methyl tert butyl ether	84		85		70-130	1		20
p/m-Xylene	105		100		70-130	5		20
o-Xylene	104		99		70-130	5		20
cis-1,2-Dichloroethene	94		93		70-130	1		20
Dibromomethane	87		88		70-130	1		20
1,4-Dichlorobutane	87		86		70-130	1		20
1,2,3-Trichloropropane	91		89		70-130	2		20
Styrene	103		99		70-130	4		20
Dichlorodifluoromethane	74		66	Q	70-130	11		20
Acetone	70		74		70-130	6		20
Carbon disulfide	79		78		70-130	1		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 06-09 Batch: WG961460-3 WG961460-4								
Methyl ethyl ketone	70		72		70-130	3		20
Methyl isobutyl ketone	81		87		70-130	7		20
2-Hexanone	73		75		70-130	3		20
Ethyl methacrylate	89		90		70-130	1		20
Acrylonitrile	80		84		70-130	5		20
Bromochloromethane	99		102		70-130	3		20
Tetrahydrofuran	77		80		70-130	4		20
2,2-Dichloropropane	84		79		70-130	6		20
1,2-Dibromoethane	98		100		70-130	2		20
1,3-Dichloropropane	94		95		70-130	1		20
1,1,1,2-Tetrachloroethane	99		98		70-130	1		20
Bromobenzene	107		104		70-130	3		20
n-Butylbenzene	99		92		70-130	7		20
sec-Butylbenzene	103		96		70-130	7		20
tert-Butylbenzene	103		97		70-130	6		20
o-Chlorotoluene	99		92		70-130	7		20
p-Chlorotoluene	98		91		70-130	7		20
1,2-Dibromo-3-chloropropane	95		97		70-130	2		20
Hexachlorobutadiene	108		101		70-130	7		20
Isopropylbenzene	102		95		70-130	7		20
p-Isopropyltoluene	105		98		70-130	7		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 06-09 Batch: WG961460-3 WG961460-4								
Naphthalene	104		104		70-130	0		20
n-Propylbenzene	99		92		70-130	7		20
1,2,3-Trichlorobenzene	113		109		70-130	4		20
1,2,4-Trichlorobenzene	113		108		70-130	5		20
1,3,5-Trimethylbenzene	104		96		70-130	8		20
1,2,4-Trimethylbenzene	102		95		70-130	7		20
trans-1,4-Dichloro-2-butene	71		81		70-130	13		20
Diethyl ether	86		88		70-130	2		20
Diisopropyl Ether	78		75		70-130	4		20
tert-Butyl Alcohol[1]	74		81		70-130	9		20
Ethyl-Tert-Butyl-Ether	83		82		70-130	1		20
Tertiary-Amyl Methyl Ether	85		86		70-130	1		20
1,4-Dioxane	89		97		70-130	9		20
2-Chloroethylvinyl ether	79		85		70-130	7		20
Halothane	99		95		70-130	4		20
Ethyl Acetate	72		76		70-130	5		20
Freon-113	94		89		70-130	5		20
Vinyl acetate	74		75		70-130	1		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 06-09 Batch: WG961460-3 WG961460-4								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	83		85		70-130
Toluene-d8	104		104		70-130
4-Bromofluorobenzene	92		91		70-130
Dibromofluoromethane	95		99		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 10 Batch: WG961701-3 WG961701-4								
Methylene chloride	112		112		70-130	0		20
1,1-Dichloroethane	109		112		70-130	3		20
Chloroform	102		102		70-130	0		20
Carbon tetrachloride	86		80		70-130	7		20
1,2-Dichloropropane	107		108		70-130	1		20
Dibromochloromethane	100		100		70-130	0		20
1,1,2-Trichloroethane	105		104		70-130	1		20
Tetrachloroethene	102		96		70-130	6		20
Chlorobenzene	103		100		70-130	3		20
Trichlorofluoromethane	128		116		70-130	10		20
1,2-Dichloroethane	116		117		70-130	1		20
1,1,1-Trichloroethane	104		98		70-130	6		20
Bromodichloromethane	99		100		70-130	1		20
trans-1,3-Dichloropropene	104		104		70-130	0		20
cis-1,3-Dichloropropene	97		99		70-130	2		20
1,1-Dichloropropene	99		94		70-130	5		20
Bromoform	85		92		70-130	8		20
1,1,2,2-Tetrachloroethane	109		103		70-130	6		20
Benzene	97		94		70-130	3		20
Toluene	103		99		70-130	4		20
Ethylbenzene	106		102		70-130	4		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 10 Batch: WG961701-3 WG961701-4								
Chloromethane	133	Q	126		70-130	5		20
Bromomethane	99		96		70-130	3		20
Vinyl chloride	124		113		70-130	9		20
Chloroethane	148	Q	142	Q	70-130	4		20
1,1-Dichloroethene	128		116		70-130	10		20
trans-1,2-Dichloroethene	115		110		70-130	4		20
Trichloroethene	101		98		70-130	3		20
1,2-Dichlorobenzene	96		103		70-130	7		20
1,3-Dichlorobenzene	105		104		70-130	1		20
1,4-Dichlorobenzene	106		104		70-130	2		20
Methyl tert butyl ether	110		116		70-130	5		20
p/m-Xylene	104		101		70-130	3		20
o-Xylene	103		100		70-130	3		20
cis-1,2-Dichloroethene	97		96		70-130	1		20
Dibromomethane	103		103		70-130	0		20
1,4-Dichlorobutane	120		122		70-130	2		20
1,2,3-Trichloropropane	113		106		70-130	6		20
Styrene	104		103		70-130	1		20
Dichlorodifluoromethane	85		76		70-130	11		20
Acetone	162	Q	154	Q	70-130	5		20
Carbon disulfide	106		98		70-130	8		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 10 Batch: WG961701-3 WG961701-4								
Methyl ethyl ketone	108		110		70-130	2		20
Methyl isobutyl ketone	118		125		70-130	6		20
2-Hexanone	126		121		70-130	4		20
Ethyl methacrylate	100		103		70-130	3		20
Acrylonitrile	120		124		70-130	3		20
Bromochloromethane	98		99		70-130	1		20
Tetrahydrofuran	121		123		70-130	2		20
2,2-Dichloropropane	103		98		70-130	5		20
1,2-Dibromoethane	101		101		70-130	0		20
1,3-Dichloropropane	105		104		70-130	1		20
1,1,1,2-Tetrachloroethane	100		100		70-130	0		20
Bromobenzene	103		100		70-130	3		20
n-Butylbenzene	108		110		70-130	2		20
sec-Butylbenzene	103		98		70-130	5		20
tert-Butylbenzene	104		97		70-130	7		20
o-Chlorotoluene	114		104		70-130	9		20
p-Chlorotoluene	108		105		70-130	3		20
1,2-Dibromo-3-chloropropane	85		94		70-130	10		20
Hexachlorobutadiene	83		84		70-130	1		20
Isopropylbenzene	96		97		70-130	1		20
p-Isopropyltoluene	104		101		70-130	3		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 10 Batch: WG961701-3 WG961701-4								
Naphthalene	88		96		70-130	9		20
n-Propylbenzene	114		103		70-130	10		20
1,2,3-Trichlorobenzene	88		96		70-130	9		20
1,2,4-Trichlorobenzene	93		100		70-130	7		20
1,3,5-Trimethylbenzene	107		100		70-130	7		20
1,2,4-Trimethylbenzene	105		102		70-130	3		20
trans-1,4-Dichloro-2-butene	86		99		70-130	14		20
Diethyl ether	131	Q	129		70-130	2		20
Diisopropyl Ether	118		132	Q	70-130	11		20
tert-Butyl Alcohol[1]	104		120		70-130	14		20
Ethyl-Tert-Butyl-Ether	96		97		70-130	1		20
Tertiary-Amyl Methyl Ether	72		75		70-130	4		20
1,4-Dioxane	98		108		70-130	10		20
Halothane	88		85		70-130	3		20
Ethyl Acetate	105		107		70-130	2		20
Freon-113	111		97		70-130	13		20
Vinyl acetate	63	Q	70		70-130	11		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 10 Batch: WG961701-3 WG961701-4								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	115		117		70-130
Toluene-d8	107		106		70-130
4-Bromofluorobenzene	107		105		70-130
Dibromofluoromethane	102		104		70-130

SEMIVOLATILES

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-01
Client ID: WEIR COMP-1
Sample Location: TAUNTON, MA
Matrix: Soil
Analytical Method: 97,8270D
Analytical Date: 12/14/16 04:14
Analyst: RC
Percent Solids: 75%

Date Collected: 12/09/16 10:22
Date Received: 12/09/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/12/16 18:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
Acenaphthene	ND		ug/kg	170	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	220	--	1
Hexachlorobenzene	ND		ug/kg	130	--	1
Bis(2-chloroethyl)ether	ND		ug/kg	190	--	1
2-Chloronaphthalene	ND		ug/kg	220	--	1
1,2-Dichlorobenzene	ND		ug/kg	220	--	1
1,3-Dichlorobenzene	ND		ug/kg	220	--	1
1,4-Dichlorobenzene	ND		ug/kg	220	--	1
3,3'-Dichlorobenzidine	ND		ug/kg	220	--	1
2,4-Dinitrotoluene	ND		ug/kg	220	--	1
2,6-Dinitrotoluene	ND		ug/kg	220	--	1
Azobenzene	ND		ug/kg	220	--	1
Fluoranthene	ND		ug/kg	130	--	1
4-Bromophenyl phenyl ether	ND		ug/kg	220	--	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	260	--	1
Bis(2-chloroethoxy)methane	ND		ug/kg	230	--	1
Hexachlorobutadiene	ND		ug/kg	220	--	1
Hexachloroethane	ND		ug/kg	170	--	1
Isophorone	ND		ug/kg	190	--	1
Naphthalene	ND		ug/kg	220	--	1
Nitrobenzene	ND		ug/kg	190	--	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	220	--	1
Butyl benzyl phthalate	ND		ug/kg	220	--	1
Di-n-butylphthalate	ND		ug/kg	220	--	1
Di-n-octylphthalate	ND		ug/kg	220	--	1
Diethyl phthalate	ND		ug/kg	220	--	1
Dimethyl phthalate	ND		ug/kg	220	--	1
Benzo(a)anthracene	ND		ug/kg	130	--	1
Benzo(a)pyrene	ND		ug/kg	170	--	1
Benzo(b)fluoranthene	ND		ug/kg	130	--	1

Project Name: ARLINGTON STREET
Project Number: Not Specified
Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-01
Client ID: WEIR COMP-1
Sample Location: TAUNTON, MA
Date Collected: 12/09/16 10:22
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
Benzo(k)fluoranthene	ND		ug/kg	130	--	1
Chrysene	ND		ug/kg	130	--	1
Acenaphthylene	ND		ug/kg	170	--	1
Anthracene	ND		ug/kg	130	--	1
Benzo(ghi)perylene	ND		ug/kg	170	--	1
Fluorene	ND		ug/kg	220	--	1
Phenanthrene	ND		ug/kg	130	--	1
Dibenzo(a,h)anthracene	ND		ug/kg	130	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	170	--	1
Pyrene	ND		ug/kg	130	--	1
Aniline	ND		ug/kg	260	--	1
4-Chloroaniline	ND		ug/kg	220	--	1
Dibenzofuran	ND		ug/kg	220	--	1
2-Methylnaphthalene	ND		ug/kg	260	--	1
Acetophenone	ND		ug/kg	220	--	1
2,4,6-Trichlorophenol	ND		ug/kg	130	--	1
2-Chlorophenol	ND		ug/kg	220	--	1
2,4-Dichlorophenol	ND		ug/kg	190	--	1
2,4-Dimethylphenol	ND		ug/kg	220	--	1
2-Nitrophenol	ND		ug/kg	470	--	1
4-Nitrophenol	ND		ug/kg	300	--	1
2,4-Dinitrophenol	ND		ug/kg	1000	--	1
Pentachlorophenol	ND		ug/kg	430	--	1
Phenol	ND		ug/kg	220	--	1
2-Methylphenol	ND		ug/kg	220	--	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	310	--	1
2,4,5-Trichlorophenol	ND		ug/kg	220	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	73		30-130
Phenol-d6	77		30-130
Nitrobenzene-d5	81		30-130
2-Fluorobiphenyl	68		30-130
2,4,6-Tribromophenol	77		30-130
4-Terphenyl-d14	53		30-130

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-02
Client ID: WEIR COMP-2
Sample Location: TAUNTON, MA
Matrix: Soil
Analytical Method: 97,8270D
Analytical Date: 12/14/16 02:57
Analyst: RC
Percent Solids: 81%

Date Collected: 12/09/16 10:58
Date Received: 12/09/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/12/16 18:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
Acenaphthene	ND		ug/kg	160	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	--	1
Hexachlorobenzene	ND		ug/kg	120	--	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	--	1
2-Chloronaphthalene	ND		ug/kg	200	--	1
1,2-Dichlorobenzene	ND		ug/kg	200	--	1
1,3-Dichlorobenzene	ND		ug/kg	200	--	1
1,4-Dichlorobenzene	ND		ug/kg	200	--	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	--	1
2,4-Dinitrotoluene	ND		ug/kg	200	--	1
2,6-Dinitrotoluene	ND		ug/kg	200	--	1
Azobenzene	ND		ug/kg	200	--	1
Fluoranthene	ND		ug/kg	120	--	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	--	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	--	1
Bis(2-chloroethoxy)methane	ND		ug/kg	220	--	1
Hexachlorobutadiene	ND		ug/kg	200	--	1
Hexachloroethane	ND		ug/kg	160	--	1
Isophorone	ND		ug/kg	180	--	1
Naphthalene	ND		ug/kg	200	--	1
Nitrobenzene	ND		ug/kg	180	--	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	--	1
Butyl benzyl phthalate	ND		ug/kg	200	--	1
Di-n-butylphthalate	ND		ug/kg	200	--	1
Di-n-octylphthalate	ND		ug/kg	200	--	1
Diethyl phthalate	ND		ug/kg	200	--	1
Dimethyl phthalate	ND		ug/kg	200	--	1
Benzo(a)anthracene	ND		ug/kg	120	--	1
Benzo(a)pyrene	ND		ug/kg	160	--	1
Benzo(b)fluoranthene	ND		ug/kg	120	--	1

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-02
Client ID: WEIR COMP-2
Sample Location: TAUNTON, MA

Date Collected: 12/09/16 10:58
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
Benzo(k)fluoranthene	ND		ug/kg	120	--	1
Chrysene	ND		ug/kg	120	--	1
Acenaphthylene	ND		ug/kg	160	--	1
Anthracene	ND		ug/kg	120	--	1
Benzo(ghi)perylene	ND		ug/kg	160	--	1
Fluorene	ND		ug/kg	200	--	1
Phenanthrene	ND		ug/kg	120	--	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	160	--	1
Pyrene	ND		ug/kg	120	--	1
Aniline	ND		ug/kg	240	--	1
4-Chloroaniline	ND		ug/kg	200	--	1
Dibenzofuran	ND		ug/kg	200	--	1
2-Methylnaphthalene	ND		ug/kg	240	--	1
Acetophenone	ND		ug/kg	200	--	1
2,4,6-Trichlorophenol	ND		ug/kg	120	--	1
2-Chlorophenol	ND		ug/kg	200	--	1
2,4-Dichlorophenol	ND		ug/kg	180	--	1
2,4-Dimethylphenol	ND		ug/kg	200	--	1
2-Nitrophenol	ND		ug/kg	440	--	1
4-Nitrophenol	ND		ug/kg	280	--	1
2,4-Dinitrophenol	ND		ug/kg	970	--	1
Pentachlorophenol	ND		ug/kg	400	--	1
Phenol	ND		ug/kg	200	--	1
2-Methylphenol	ND		ug/kg	200	--	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	290	--	1
2,4,5-Trichlorophenol	ND		ug/kg	200	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		30-130
Phenol-d6	71		30-130
Nitrobenzene-d5	75		30-130
2-Fluorobiphenyl	66		30-130
2,4,6-Tribromophenol	68		30-130
4-Terphenyl-d14	57		30-130

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-03
Client ID: WEIR COMP-3
Sample Location: TAUNTON, MA
Matrix: Soil
Analytical Method: 97,8270D
Analytical Date: 12/14/16 04:39
Analyst: RC
Percent Solids: 81%

Date Collected: 12/09/16 11:43
Date Received: 12/09/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/12/16 18:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
Acenaphthene	ND		ug/kg	160	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	--	1
Hexachlorobenzene	ND		ug/kg	120	--	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	--	1
2-Chloronaphthalene	ND		ug/kg	200	--	1
1,2-Dichlorobenzene	ND		ug/kg	200	--	1
1,3-Dichlorobenzene	ND		ug/kg	200	--	1
1,4-Dichlorobenzene	ND		ug/kg	200	--	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	--	1
2,4-Dinitrotoluene	ND		ug/kg	200	--	1
2,6-Dinitrotoluene	ND		ug/kg	200	--	1
Azobenzene	ND		ug/kg	200	--	1
Fluoranthene	ND		ug/kg	120	--	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	--	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	250	--	1
Bis(2-chloroethoxy)methane	ND		ug/kg	220	--	1
Hexachlorobutadiene	ND		ug/kg	200	--	1
Hexachloroethane	ND		ug/kg	160	--	1
Isophorone	ND		ug/kg	180	--	1
Naphthalene	ND		ug/kg	200	--	1
Nitrobenzene	ND		ug/kg	180	--	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	--	1
Butyl benzyl phthalate	ND		ug/kg	200	--	1
Di-n-butylphthalate	ND		ug/kg	200	--	1
Di-n-octylphthalate	ND		ug/kg	200	--	1
Diethyl phthalate	ND		ug/kg	200	--	1
Dimethyl phthalate	ND		ug/kg	200	--	1
Benzo(a)anthracene	ND		ug/kg	120	--	1
Benzo(a)pyrene	ND		ug/kg	160	--	1
Benzo(b)fluoranthene	ND		ug/kg	120	--	1

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-03
Client ID: WEIR COMP-3
Sample Location: TAUNTON, MA

Date Collected: 12/09/16 11:43
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
Benzo(k)fluoranthene	ND		ug/kg	120	--	1
Chrysene	ND		ug/kg	120	--	1
Acenaphthylene	ND		ug/kg	160	--	1
Anthracene	ND		ug/kg	120	--	1
Benzo(ghi)perylene	ND		ug/kg	160	--	1
Fluorene	ND		ug/kg	200	--	1
Phenanthrene	ND		ug/kg	120	--	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	160	--	1
Pyrene	ND		ug/kg	120	--	1
Aniline	ND		ug/kg	250	--	1
4-Chloroaniline	ND		ug/kg	200	--	1
Dibenzofuran	ND		ug/kg	200	--	1
2-Methylnaphthalene	ND		ug/kg	250	--	1
Acetophenone	ND		ug/kg	200	--	1
2,4,6-Trichlorophenol	ND		ug/kg	120	--	1
2-Chlorophenol	ND		ug/kg	200	--	1
2,4-Dichlorophenol	ND		ug/kg	180	--	1
2,4-Dimethylphenol	ND		ug/kg	200	--	1
2-Nitrophenol	ND		ug/kg	440	--	1
4-Nitrophenol	ND		ug/kg	290	--	1
2,4-Dinitrophenol	ND		ug/kg	980	--	1
Pentachlorophenol	ND		ug/kg	410	--	1
Phenol	ND		ug/kg	200	--	1
2-Methylphenol	ND		ug/kg	200	--	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	300	--	1
2,4,5-Trichlorophenol	ND		ug/kg	200	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	77		30-130
Phenol-d6	82		30-130
Nitrobenzene-d5	87		30-130
2-Fluorobiphenyl	71		30-130
2,4,6-Tribromophenol	79		30-130
4-Terphenyl-d14	48		30-130

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-04
Client ID: WEIR COMP-4
Sample Location: TAUNTON, MA
Matrix: Soil
Analytical Method: 97,8270D
Analytical Date: 12/14/16 05:05
Analyst: RC
Percent Solids: 79%

Date Collected: 12/09/16 12:17
Date Received: 12/09/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/12/16 18:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
Acenaphthene	ND		ug/kg	170	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	210	--	1
Hexachlorobenzene	ND		ug/kg	120	--	1
Bis(2-chloroethyl)ether	ND		ug/kg	190	--	1
2-Chloronaphthalene	ND		ug/kg	210	--	1
1,2-Dichlorobenzene	ND		ug/kg	210	--	1
1,3-Dichlorobenzene	ND		ug/kg	210	--	1
1,4-Dichlorobenzene	ND		ug/kg	210	--	1
3,3'-Dichlorobenzidine	ND		ug/kg	210	--	1
2,4-Dinitrotoluene	ND		ug/kg	210	--	1
2,6-Dinitrotoluene	ND		ug/kg	210	--	1
Azobenzene	ND		ug/kg	210	--	1
Fluoranthene	ND		ug/kg	120	--	1
4-Bromophenyl phenyl ether	ND		ug/kg	210	--	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	250	--	1
Bis(2-chloroethoxy)methane	ND		ug/kg	230	--	1
Hexachlorobutadiene	ND		ug/kg	210	--	1
Hexachloroethane	ND		ug/kg	170	--	1
Isophorone	ND		ug/kg	190	--	1
Naphthalene	ND		ug/kg	210	--	1
Nitrobenzene	ND		ug/kg	190	--	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	210	--	1
Butyl benzyl phthalate	ND		ug/kg	210	--	1
Di-n-butylphthalate	ND		ug/kg	210	--	1
Di-n-octylphthalate	ND		ug/kg	210	--	1
Diethyl phthalate	ND		ug/kg	210	--	1
Dimethyl phthalate	ND		ug/kg	210	--	1
Benzo(a)anthracene	ND		ug/kg	120	--	1
Benzo(a)pyrene	ND		ug/kg	170	--	1
Benzo(b)fluoranthene	ND		ug/kg	120	--	1

Project Name: ARLINGTON STREET
Project Number: Not Specified
Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-04
Client ID: WEIR COMP-4
Sample Location: TAUNTON, MA
Date Collected: 12/09/16 12:17
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
Benzo(k)fluoranthene	ND		ug/kg	120	--	1
Chrysene	ND		ug/kg	120	--	1
Acenaphthylene	ND		ug/kg	170	--	1
Anthracene	ND		ug/kg	120	--	1
Benzo(ghi)perylene	ND		ug/kg	170	--	1
Fluorene	ND		ug/kg	210	--	1
Phenanthrene	ND		ug/kg	120	--	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	170	--	1
Pyrene	ND		ug/kg	120	--	1
Aniline	ND		ug/kg	250	--	1
4-Chloroaniline	ND		ug/kg	210	--	1
Dibenzofuran	ND		ug/kg	210	--	1
2-Methylnaphthalene	ND		ug/kg	250	--	1
Acetophenone	ND		ug/kg	210	--	1
2,4,6-Trichlorophenol	ND		ug/kg	120	--	1
2-Chlorophenol	ND		ug/kg	210	--	1
2,4-Dichlorophenol	ND		ug/kg	190	--	1
2,4-Dimethylphenol	ND		ug/kg	210	--	1
2-Nitrophenol	ND		ug/kg	450	--	1
4-Nitrophenol	ND		ug/kg	290	--	1
2,4-Dinitrophenol	ND		ug/kg	1000	--	1
Pentachlorophenol	ND		ug/kg	420	--	1
Phenol	ND		ug/kg	210	--	1
2-Methylphenol	ND		ug/kg	210	--	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	300	--	1
2,4,5-Trichlorophenol	ND		ug/kg	210	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	70		30-130
Phenol-d6	72		30-130
Nitrobenzene-d5	77		30-130
2-Fluorobiphenyl	63		30-130
2,4,6-Tribromophenol	68		30-130
4-Terphenyl-d14	49		30-130

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-05
Client ID: WEIR COMP-5
Sample Location: TAUNTON, MA
Matrix: Soil
Analytical Method: 97,8270D
Analytical Date: 12/14/16 03:48
Analyst: RC
Percent Solids: 79%

Date Collected: 12/09/16 13:11
Date Received: 12/09/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/12/16 18:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
Acenaphthene	ND		ug/kg	170	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	210	--	1
Hexachlorobenzene	ND		ug/kg	120	--	1
Bis(2-chloroethyl)ether	ND		ug/kg	190	--	1
2-Chloronaphthalene	ND		ug/kg	210	--	1
1,2-Dichlorobenzene	ND		ug/kg	210	--	1
1,3-Dichlorobenzene	ND		ug/kg	210	--	1
1,4-Dichlorobenzene	ND		ug/kg	210	--	1
3,3'-Dichlorobenzidine	ND		ug/kg	210	--	1
2,4-Dinitrotoluene	ND		ug/kg	210	--	1
2,6-Dinitrotoluene	ND		ug/kg	210	--	1
Azobenzene	ND		ug/kg	210	--	1
Fluoranthene	ND		ug/kg	120	--	1
4-Bromophenyl phenyl ether	ND		ug/kg	210	--	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	250	--	1
Bis(2-chloroethoxy)methane	ND		ug/kg	230	--	1
Hexachlorobutadiene	ND		ug/kg	210	--	1
Hexachloroethane	ND		ug/kg	170	--	1
Isophorone	ND		ug/kg	190	--	1
Naphthalene	ND		ug/kg	210	--	1
Nitrobenzene	ND		ug/kg	190	--	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	210	--	1
Butyl benzyl phthalate	ND		ug/kg	210	--	1
Di-n-butylphthalate	ND		ug/kg	210	--	1
Di-n-octylphthalate	ND		ug/kg	210	--	1
Diethyl phthalate	ND		ug/kg	210	--	1
Dimethyl phthalate	ND		ug/kg	210	--	1
Benzo(a)anthracene	ND		ug/kg	120	--	1
Benzo(a)pyrene	ND		ug/kg	170	--	1
Benzo(b)fluoranthene	ND		ug/kg	120	--	1

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-05
Client ID: WEIR COMP-5
Sample Location: TAUNTON, MA

Date Collected: 12/09/16 13:11
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
Benzo(k)fluoranthene	ND		ug/kg	120	--	1
Chrysene	ND		ug/kg	120	--	1
Acenaphthylene	ND		ug/kg	170	--	1
Anthracene	ND		ug/kg	120	--	1
Benzo(ghi)perylene	ND		ug/kg	170	--	1
Fluorene	ND		ug/kg	210	--	1
Phenanthrene	ND		ug/kg	120	--	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	170	--	1
Pyrene	ND		ug/kg	120	--	1
Aniline	ND		ug/kg	250	--	1
4-Chloroaniline	ND		ug/kg	210	--	1
Dibenzofuran	ND		ug/kg	210	--	1
2-Methylnaphthalene	ND		ug/kg	250	--	1
Acetophenone	ND		ug/kg	210	--	1
2,4,6-Trichlorophenol	ND		ug/kg	120	--	1
2-Chlorophenol	ND		ug/kg	210	--	1
2,4-Dichlorophenol	ND		ug/kg	190	--	1
2,4-Dimethylphenol	ND		ug/kg	210	--	1
2-Nitrophenol	ND		ug/kg	450	--	1
4-Nitrophenol	ND		ug/kg	290	--	1
2,4-Dinitrophenol	ND		ug/kg	1000	--	1
Pentachlorophenol	ND		ug/kg	420	--	1
Phenol	ND		ug/kg	210	--	1
2-Methylphenol	ND		ug/kg	210	--	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	300	--	1
2,4,5-Trichlorophenol	ND		ug/kg	210	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	67		30-130
Phenol-d6	71		30-130
Nitrobenzene-d5	75		30-130
2-Fluorobiphenyl	60		30-130
2,4,6-Tribromophenol	63		30-130
4-Terphenyl-d14	40		30-130

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D
Analytical Date: 12/13/16 09:57
Analyst: ALS

Extraction Method: EPA 3546
Extraction Date: 12/12/16 18:06

Parameter	Result	Qualifier	Units	RL	MDL
MCP Semivolatile Organics - Westborough Lab for sample(s): 01-05 Batch: WG960446-1					
Acenaphthene	ND		ug/kg	130	--
1,2,4-Trichlorobenzene	ND		ug/kg	160	--
Hexachlorobenzene	ND		ug/kg	99	--
Bis(2-chloroethyl)ether	ND		ug/kg	150	--
2-Chloronaphthalene	ND		ug/kg	160	--
1,2-Dichlorobenzene	ND		ug/kg	160	--
1,3-Dichlorobenzene	ND		ug/kg	160	--
1,4-Dichlorobenzene	ND		ug/kg	160	--
3,3'-Dichlorobenzidine	ND		ug/kg	160	--
2,4-Dinitrotoluene	ND		ug/kg	160	--
2,6-Dinitrotoluene	ND		ug/kg	160	--
Azobenzene	ND		ug/kg	160	--
Fluoranthene	ND		ug/kg	99	--
4-Bromophenyl phenyl ether	ND		ug/kg	160	--
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	--
Bis(2-chloroethoxy)methane	ND		ug/kg	180	--
Hexachlorobutadiene	ND		ug/kg	160	--
Hexachloroethane	ND		ug/kg	130	--
Isophorone	ND		ug/kg	150	--
Naphthalene	ND		ug/kg	160	--
Nitrobenzene	ND		ug/kg	150	--
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	--
Butyl benzyl phthalate	ND		ug/kg	160	--
Di-n-butylphthalate	ND		ug/kg	160	--
Di-n-octylphthalate	ND		ug/kg	160	--
Diethyl phthalate	ND		ug/kg	160	--
Dimethyl phthalate	ND		ug/kg	160	--
Benzo(a)anthracene	ND		ug/kg	99	--
Benzo(a)pyrene	ND		ug/kg	130	--

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D
Analytical Date: 12/13/16 09:57
Analyst: ALS

Extraction Method: EPA 3546
Extraction Date: 12/12/16 18:06

Parameter	Result	Qualifier	Units	RL	MDL
MCP Semivolatile Organics - Westborough Lab for sample(s): 01-05 Batch: WG960446-1					
Benzo(b)fluoranthene	ND		ug/kg	99	--
Benzo(k)fluoranthene	ND		ug/kg	99	--
Chrysene	ND		ug/kg	99	--
Acenaphthylene	ND		ug/kg	130	--
Anthracene	ND		ug/kg	99	--
Benzo(ghi)perylene	ND		ug/kg	130	--
Fluorene	ND		ug/kg	160	--
Phenanthrene	ND		ug/kg	99	--
Dibenzo(a,h)anthracene	ND		ug/kg	99	--
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	--
Pyrene	ND		ug/kg	99	--
Aniline	ND		ug/kg	200	--
4-Chloroaniline	ND		ug/kg	160	--
Dibenzofuran	ND		ug/kg	160	--
2-Methylnaphthalene	ND		ug/kg	200	--
Acetophenone	ND		ug/kg	160	--
2,4,6-Trichlorophenol	ND		ug/kg	99	--
2-Chlorophenol	ND		ug/kg	160	--
2,4-Dichlorophenol	ND		ug/kg	150	--
2,4-Dimethylphenol	ND		ug/kg	160	--
2-Nitrophenol	ND		ug/kg	360	--
4-Nitrophenol	ND		ug/kg	230	--
2,4-Dinitrophenol	ND		ug/kg	790	--
Pentachlorophenol	ND		ug/kg	330	--
Phenol	ND		ug/kg	160	--
2-Methylphenol	ND		ug/kg	160	--
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	--
2,4,5-Trichlorophenol	ND		ug/kg	160	--

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D
Analytical Date: 12/13/16 09:57
Analyst: ALS

Extraction Method: EPA 3546
Extraction Date: 12/12/16 18:06

Parameter	Result	Qualifier	Units	RL	MDL
MCP Semivolatile Organics - Westborough Lab for sample(s): 01-05 Batch: WG960446-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	81		30-130
Phenol-d6	83		30-130
Nitrobenzene-d5	85		30-130
2-Fluorobiphenyl	80		30-130
2,4,6-Tribromophenol	90		30-130
4-Terphenyl-d14	85		30-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01-05 Batch: WG960446-2 WG960446-3								
Acenaphthene	76		83		40-140	9		30
1,2,4-Trichlorobenzene	74		80		40-140	8		30
Hexachlorobenzene	78		87		40-140	11		30
Bis(2-chloroethyl)ether	74		76		40-140	3		30
2-Chloronaphthalene	77		85		40-140	10		30
1,2-Dichlorobenzene	71		74		40-140	4		30
1,3-Dichlorobenzene	71		72		40-140	1		30
1,4-Dichlorobenzene	70		74		40-140	6		30
3,3'-Dichlorobenzidine	60		66		40-140	10		30
2,4-Dinitrotoluene	84		94		40-140	11		30
2,6-Dinitrotoluene	82		93		40-140	13		30
Azobenzene	79		87		40-140	10		30
Fluoranthene	78		88		40-140	12		30
4-Bromophenyl phenyl ether	79		86		40-140	8		30
Bis(2-chloroisopropyl)ether	75		78		40-140	4		30
Bis(2-chloroethoxy)methane	77		84		40-140	9		30
Hexachlorobutadiene	73		78		40-140	7		30
Hexachloroethane	74		78		40-140	5		30
Isophorone	77		84		40-140	9		30
Naphthalene	74		79		40-140	7		30
Nitrobenzene	81		88		40-140	8		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01-05 Batch: WG960446-2 WG960446-3								
Bis(2-ethylhexyl)phthalate	86		96		40-140	11		30
Butyl benzyl phthalate	89		100		40-140	12		30
Di-n-butylphthalate	80		91		40-140	13		30
Di-n-octylphthalate	82		92		40-140	11		30
Diethyl phthalate	79		87		40-140	10		30
Dimethyl phthalate	79		89		40-140	12		30
Benzo(a)anthracene	76		86		40-140	12		30
Benzo(a)pyrene	82		90		40-140	9		30
Benzo(b)fluoranthene	79		88		40-140	11		30
Benzo(k)fluoranthene	82		89		40-140	8		30
Chrysene	76		84		40-140	10		30
Acenaphthylene	79		88		40-140	11		30
Anthracene	78		88		40-140	12		30
Benzo(ghi)perylene	78		87		40-140	11		30
Fluorene	78		85		40-140	9		30
Phenanthrene	75		85		40-140	13		30
Dibenzo(a,h)anthracene	78		88		40-140	12		30
Indeno(1,2,3-cd)pyrene	82		92		40-140	11		30
Pyrene	78		88		40-140	12		30
Aniline	50		55		40-140	10		30
4-Chloroaniline	51		55		40-140	8		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01-05 Batch: WG960446-2 WG960446-3								
1-Methylnaphthalene[1]	74		82		40-140	10		30
Dibenzofuran	77		84		40-140	9		30
2-Methylnaphthalene	75		83		40-140	10		30
Acetophenone	77		82		40-140	6		30
n-Nitrosodimethylamine	70		72		22-100	3		30
2,4,6-Trichlorophenol	82		94		30-130	14		30
2-Chlorophenol	78		84		30-130	7		30
2,4-Dichlorophenol	83		90		30-130	8		30
2,4-Dimethylphenol	86		94		30-130	9		30
2-Nitrophenol	90		98		30-130	9		30
4-Nitrophenol	90		101		30-130	12		30
2,4-Dinitrophenol	80		92		30-130	14		30
Pentachlorophenol	71		80		30-130	12		30
Phenol	76		82		30-130	8		30
2-Methylphenol	79		87		30-130	10		30
3-Methylphenol/4-Methylphenol	81		88		30-130	8		30
2,4,5-Trichlorophenol	84		96		30-130	13		30
Pyridine	56		56		30-130	0		30
4-Chlorophenyl phenyl ether	76		83		40-140	9		30
Hexachlorocyclopentadiene	87		95		40-140	9		30
NitrosoDiPhenylAmine(NDPA)/DPA	79		86		40-140	8		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01-05 Batch: WG960446-2 WG960446-3								
n-Nitrosodi-n-propylamine	76		82		40-140	8		30
2-Nitroaniline	92		106		40-140	14		30
3-Nitroaniline	70		76		40-140	8		30
4-Nitroaniline	77		90		40-140	16		30
P-Chloro-M-Cresol	83		94		30-130	12		30
4,6-Dinitro-o-cresol	89		104		30-130	16		30
Carbazole	77		88		40-140	13		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	80		81		30-130
Phenol-d6	81		84		30-130
Nitrobenzene-d5	85		88		30-130
2-Fluorobiphenyl	78		83		30-130
2,4,6-Tribromophenol	92		99		30-130
4-Terphenyl-d14	79		87		30-130

PETROLEUM HYDROCARBONS

Project Name: ARLINGTON STREET
Project Number: Not Specified
Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-01
Client ID: WEIR COMP-1
Sample Location: TAUNTON, MA
Matrix: Soil
Analytical Method: 1,8015C(M)
Analytical Date: 12/14/16 11:55
Analyst: DG
Percent Solids: 75%

Date Collected: 12/09/16 10:22
Date Received: 12/09/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/11/16 22:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbon Quantitation - Westborough Lab						
TPH	118000		ug/kg	42600	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	93		40-140

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-02
Client ID: WEIR COMP-2
Sample Location: TAUNTON, MA
Matrix: Soil
Analytical Method: 1,8015C(M)
Analytical Date: 12/12/16 16:26
Analyst: DG
Percent Solids: 81%

Date Collected: 12/09/16 10:58
Date Received: 12/09/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/11/16 22:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbon Quantitation - Westborough Lab						
TPH	ND		ug/kg	40800	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	79		40-140

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-03
Client ID: WEIR COMP-3
Sample Location: TAUNTON, MA
Matrix: Soil
Analytical Method: 1,8015C(M)
Analytical Date: 12/12/16 16:59
Analyst: DG
Percent Solids: 81%

Date Collected: 12/09/16 11:43
Date Received: 12/09/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/11/16 22:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbon Quantitation - Westborough Lab						
TPH	ND		ug/kg	40400	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	67		40-140

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-04
Client ID: WEIR COMP-4
Sample Location: TAUNTON, MA
Matrix: Soil
Analytical Method: 1,8015C(M)
Analytical Date: 12/12/16 17:31
Analyst: DG
Percent Solids: 79%

Date Collected: 12/09/16 12:17
Date Received: 12/09/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/11/16 22:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbon Quantitation - Westborough Lab						
TPH	70400		ug/kg	40500	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	84		40-140

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-05
Client ID: WEIR COMP-5
Sample Location: TAUNTON, MA
Matrix: Soil
Analytical Method: 1,8015C(M)
Analytical Date: 12/12/16 18:04
Analyst: DG
Percent Solids: 79%

Date Collected: 12/09/16 13:11
Date Received: 12/09/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/11/16 22:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbon Quantitation - Westborough Lab						
TPH	ND		ug/kg	40700	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	78		40-140

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8015C(M)
Analytical Date: 12/12/16 11:35
Analyst: DG

Extraction Method: EPA 3546
Extraction Date: 12/11/16 22:30

Parameter	Result	Qualifier	Units	RL	MDL
Petroleum Hydrocarbon Quantitation - Westborough Lab for sample(s): 01-05 Batch: WG960127-1					
TPH	ND		ug/kg	31600	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	86		40-140

Lab Control Sample Analysis
Batch Quality Control

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Petroleum Hydrocarbon Quantitation - Westborough Lab Associated sample(s): 01-05 Batch: WG960127-2								
TPH	90		-		40-140	-		40

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
o-Terphenyl	87				40-140

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Duplicate Analysis
Batch Quality Control

Lab Number: L1640071
Report Date: 01/16/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Petroleum Hydrocarbon Quantitation - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG960127-3 QC Sample: L1640071-01 Client ID: WEIR COMP-1						
TPH	118000	78800	ug/kg	40		40

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	93		89		40-140

PCBS

Project Name: ARLINGTON STREET
Project Number: Not Specified
Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-01
Client ID: WEIR COMP-1
Sample Location: TAUNTON, MA
Matrix: Soil
Analytical Method: 97,8082A
Analytical Date: 12/14/16 01:13
Analyst: JW
Percent Solids: 75%

Date Collected: 12/09/16 10:22
Date Received: 12/09/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/11/16 06:03
Cleanup Method: EPA 3665A
Cleanup Date: 12/12/16
Cleanup Method: EPA 3660B
Cleanup Date: 12/13/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Polychlorinated Biphenyls - Westborough Lab							
Aroclor 1016	ND		ug/kg	44.1	--	1	A
Aroclor 1221	ND		ug/kg	44.1	--	1	A
Aroclor 1232	ND		ug/kg	44.1	--	1	A
Aroclor 1242	ND		ug/kg	44.1	--	1	A
Aroclor 1248	ND		ug/kg	44.1	--	1	A
Aroclor 1254	ND		ug/kg	44.1	--	1	A
Aroclor 1260	ND		ug/kg	44.1	--	1	A
Aroclor 1262	ND		ug/kg	44.1	--	1	A
Aroclor 1268	ND		ug/kg	44.1	--	1	A
PCBs, Total	ND		ug/kg	44.1	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		30-150	A
Decachlorobiphenyl	67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	79		30-150	B
Decachlorobiphenyl	92		30-150	B

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-02
Client ID: WEIR COMP-2
Sample Location: TAUNTON, MA
Matrix: Soil
Analytical Method: 97,8082A
Analytical Date: 12/14/16 01:26
Analyst: JW
Percent Solids: 81%

Date Collected: 12/09/16 10:58
Date Received: 12/09/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/11/16 06:03
Cleanup Method: EPA 3665A
Cleanup Date: 12/12/16
Cleanup Method: EPA 3660B
Cleanup Date: 12/13/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Polychlorinated Biphenyls - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.9	--	1	A
Aroclor 1221	ND		ug/kg	38.9	--	1	A
Aroclor 1232	ND		ug/kg	38.9	--	1	A
Aroclor 1242	ND		ug/kg	38.9	--	1	A
Aroclor 1248	ND		ug/kg	38.9	--	1	A
Aroclor 1254	ND		ug/kg	38.9	--	1	A
Aroclor 1260	ND		ug/kg	38.9	--	1	A
Aroclor 1262	ND		ug/kg	38.9	--	1	A
Aroclor 1268	ND		ug/kg	38.9	--	1	A
PCBs, Total	ND		ug/kg	38.9	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	A
Decachlorobiphenyl	60		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	83		30-150	B

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-03
Client ID: WEIR COMP-3
Sample Location: TAUNTON, MA
Matrix: Soil
Analytical Method: 97,8082A
Analytical Date: 12/14/16 01:39
Analyst: JW
Percent Solids: 81%

Date Collected: 12/09/16 11:43
Date Received: 12/09/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/11/16 06:03
Cleanup Method: EPA 3665A
Cleanup Date: 12/12/16
Cleanup Method: EPA 3660B
Cleanup Date: 12/13/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Polychlorinated Biphenyls - Westborough Lab							
Aroclor 1016	ND		ug/kg	40.0	--	1	A
Aroclor 1221	ND		ug/kg	40.0	--	1	A
Aroclor 1232	ND		ug/kg	40.0	--	1	A
Aroclor 1242	ND		ug/kg	40.0	--	1	A
Aroclor 1248	ND		ug/kg	40.0	--	1	A
Aroclor 1254	ND		ug/kg	40.0	--	1	A
Aroclor 1260	ND		ug/kg	40.0	--	1	A
Aroclor 1262	ND		ug/kg	40.0	--	1	A
Aroclor 1268	ND		ug/kg	40.0	--	1	A
PCBs, Total	ND		ug/kg	40.0	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81		30-150	A
Decachlorobiphenyl	65		30-150	A
2,4,5,6-Tetrachloro-m-xylene	83		30-150	B
Decachlorobiphenyl	92		30-150	B

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-04
Client ID: WEIR COMP-4
Sample Location: TAUNTON, MA
Matrix: Soil
Analytical Method: 97,8082A
Analytical Date: 12/14/16 01:53
Analyst: JW
Percent Solids: 79%

Date Collected: 12/09/16 12:17
Date Received: 12/09/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/11/16 06:03
Cleanup Method: EPA 3665A
Cleanup Date: 12/12/16
Cleanup Method: EPA 3660B
Cleanup Date: 12/13/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Polychlorinated Biphenyls - Westborough Lab							
Aroclor 1016	ND		ug/kg	41.1	--	1	A
Aroclor 1221	ND		ug/kg	41.1	--	1	A
Aroclor 1232	ND		ug/kg	41.1	--	1	A
Aroclor 1242	ND		ug/kg	41.1	--	1	A
Aroclor 1248	ND		ug/kg	41.1	--	1	A
Aroclor 1254	ND		ug/kg	41.1	--	1	A
Aroclor 1260	ND		ug/kg	41.1	--	1	A
Aroclor 1262	ND		ug/kg	41.1	--	1	A
Aroclor 1268	ND		ug/kg	41.1	--	1	A
PCBs, Total	ND		ug/kg	41.1	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	58		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	80		30-150	B

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-05
Client ID: WEIR COMP-5
Sample Location: TAUNTON, MA
Matrix: Soil
Analytical Method: 97,8082A
Analytical Date: 12/14/16 02:06
Analyst: JW
Percent Solids: 79%

Date Collected: 12/09/16 13:11
Date Received: 12/09/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/11/16 06:03
Cleanup Method: EPA 3665A
Cleanup Date: 12/12/16
Cleanup Method: EPA 3660B
Cleanup Date: 12/13/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Polychlorinated Biphenyls - Westborough Lab							
Aroclor 1016	ND		ug/kg	40.6	--	1	A
Aroclor 1221	ND		ug/kg	40.6	--	1	A
Aroclor 1232	ND		ug/kg	40.6	--	1	A
Aroclor 1242	ND		ug/kg	40.6	--	1	A
Aroclor 1248	ND		ug/kg	40.6	--	1	A
Aroclor 1254	ND		ug/kg	40.6	--	1	A
Aroclor 1260	ND		ug/kg	40.6	--	1	A
Aroclor 1262	ND		ug/kg	40.6	--	1	A
Aroclor 1268	ND		ug/kg	40.6	--	1	A
PCBs, Total	ND		ug/kg	40.6	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		30-150	A
Decachlorobiphenyl	46		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	69		30-150	B

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8082A
Analytical Date: 12/11/16 15:09
Analyst: JA

Extraction Method: EPA 3546
Extraction Date: 12/10/16 14:39
Cleanup Method: EPA 3665A
Cleanup Date: 12/10/16
Cleanup Method: EPA 3660B
Cleanup Date: 12/11/16

Parameter	Result	Qualifier	Units	RL	MDL	Column
MCP Polychlorinated Biphenyls - Westborough Lab for sample(s): 01-05 Batch: WG959996-1						
Aroclor 1016	ND		ug/kg	31.8	--	A
Aroclor 1221	ND		ug/kg	31.8	--	A
Aroclor 1232	ND		ug/kg	31.8	--	A
Aroclor 1242	ND		ug/kg	31.8	--	A
Aroclor 1248	ND		ug/kg	31.8	--	A
Aroclor 1254	ND		ug/kg	31.8	--	A
Aroclor 1260	ND		ug/kg	31.8	--	A
Aroclor 1262	ND		ug/kg	31.8	--	A
Aroclor 1268	ND		ug/kg	31.8	--	A
PCBs, Total	ND		ug/kg	31.8	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	96		30-150	A
Decachlorobiphenyl	95		30-150	A
2,4,5,6-Tetrachloro-m-xylene	103		30-150	B
Decachlorobiphenyl	94		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
MCP Polychlorinated Biphenyls - Westborough Lab Associated sample(s): 01-05 Batch: WG959996-2 WG959996-3									
Aroclor 1016	96		82		40-140	16		30	A
Aroclor 1260	103		90		40-140	13		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	101		84		30-150	A
Decachlorobiphenyl	100		87		30-150	A
2,4,5,6-Tetrachloro-m-xylene	109		90		30-150	B
Decachlorobiphenyl	98		82		30-150	B

PESTICIDES

Project Name: ARLINGTON STREET
Project Number: Not Specified
Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-01
Client ID: WEIR COMP-1
Sample Location: TAUNTON, MA
Matrix: Soil
Analytical Method: 97,8081B
Analytical Date: 12/13/16 18:58
Analyst: AM
Percent Solids: 75%

Date Collected: 12/09/16 10:22
Date Received: 12/09/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/11/16 04:49
Cleanup Method: EPA 3620B
Cleanup Date: 12/13/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Organochlorine Pesticides - Westborough Lab							
Delta-BHC	ND		ug/kg	10.5	--	1	A
Lindane	ND		ug/kg	3.51	--	1	A
Alpha-BHC	ND		ug/kg	4.39	--	1	A
Beta-BHC	ND		ug/kg	10.5	--	1	A
Heptachlor	ND		ug/kg	5.27	--	1	A
Aldrin	ND		ug/kg	10.5	--	1	A
Heptachlor epoxide	ND		ug/kg	19.7	--	1	A
Endrin	ND		ug/kg	4.39	--	1	A
Endrin ketone	ND		ug/kg	10.5	--	1	A
Dieldrin	ND		ug/kg	6.58	--	1	A
4,4'-DDE	ND		ug/kg	10.5	--	1	A
4,4'-DDD	ND		ug/kg	10.5	--	1	A
4,4'-DDT	ND		ug/kg	19.7	--	1	A
Endosulfan I	ND		ug/kg	10.5	--	1	A
Endosulfan II	ND		ug/kg	10.5	--	1	A
Endosulfan sulfate	ND		ug/kg	4.39	--	1	A
Methoxychlor	ND		ug/kg	19.7	--	1	A
Chlordane	ND		ug/kg	85.6	--	1	A
Hexachlorobenzene	ND		ug/kg	10.5	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	B
Decachlorobiphenyl	58		30-150	B
2,4,5,6-Tetrachloro-m-xylene	66		30-150	A
Decachlorobiphenyl	61		30-150	A

Project Name: ARLINGTON STREET
Project Number: Not Specified
Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-01
Client ID: WEIR COMP-1
Sample Location: TAUNTON, MA
Matrix: Soil
Analytical Method: 97,8151A
Analytical Date: 12/16/16 10:08
Analyst: AM
Percent Solids: 75%
Methylation Date: 12/14/16 20:55

Date Collected: 12/09/16 10:22
Date Received: 12/09/16
Field Prep: Not Specified
Extraction Method: EPA 8151A
Extraction Date: 12/14/16 09:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Chlorinated Herbicides - Westborough Lab							
MCPP	ND		ug/kg	4400	--	1	A
MCPA	ND		ug/kg	4400	--	1	A
Dalapon	ND		ug/kg	44	--	1	A
Dicamba	ND		ug/kg	44	--	1	A
Dichloroprop	ND		ug/kg	44	--	1	A
2,4-D	ND		ug/kg	44	--	1	A
2,4-DB	ND		ug/kg	44	--	1	A
2,4,5-T	ND		ug/kg	44	--	1	A
2,4,5-TP (Silvex)	ND		ug/kg	44	--	1	A
Dinoseb	ND		ug/kg	44	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	118		30-150	A
DCAA	80		30-150	B

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-02
Client ID: WEIR COMP-2
Sample Location: TAUNTON, MA
Matrix: Soil
Analytical Method: 97,8081B
Analytical Date: 12/13/16 19:10
Analyst: AM
Percent Solids: 81%

Date Collected: 12/09/16 10:58
Date Received: 12/09/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/11/16 04:49
Cleanup Method: EPA 3620B
Cleanup Date: 12/13/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Organochlorine Pesticides - Westborough Lab							
Delta-BHC	ND		ug/kg	9.39	--	1	A
Lindane	ND		ug/kg	3.13	--	1	A
Alpha-BHC	ND		ug/kg	3.91	--	1	A
Beta-BHC	ND		ug/kg	9.39	--	1	A
Heptachlor	ND		ug/kg	4.70	--	1	A
Aldrin	ND		ug/kg	9.39	--	1	A
Heptachlor epoxide	ND		ug/kg	17.6	--	1	A
Endrin	ND		ug/kg	3.91	--	1	A
Endrin ketone	ND		ug/kg	9.39	--	1	A
Dieldrin	ND		ug/kg	5.87	--	1	A
4,4'-DDE	ND		ug/kg	9.39	--	1	A
4,4'-DDD	ND		ug/kg	9.39	--	1	A
4,4'-DDT	ND		ug/kg	17.6	--	1	A
Endosulfan I	ND		ug/kg	9.39	--	1	A
Endosulfan II	ND		ug/kg	9.39	--	1	A
Endosulfan sulfate	ND		ug/kg	3.91	--	1	A
Methoxychlor	ND		ug/kg	17.6	--	1	A
Chlordane	ND		ug/kg	76.3	--	1	A
Hexachlorobenzene	ND		ug/kg	9.39	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	77		30-150	B
Decachlorobiphenyl	72		30-150	B
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	77		30-150	A

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-02
Client ID: WEIR COMP-2
Sample Location: TAUNTON, MA
Matrix: Soil
Analytical Method: 97,8151A
Analytical Date: 12/16/16 10:27
Analyst: AM
Percent Solids: 81%
Methylation Date: 12/14/16 20:55

Date Collected: 12/09/16 10:58
Date Received: 12/09/16
Field Prep: Not Specified
Extraction Method: EPA 8151A
Extraction Date: 12/14/16 09:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Chlorinated Herbicides - Westborough Lab							
MCPP	ND		ug/kg	4100	--	1	A
MCPA	ND		ug/kg	4100	--	1	A
Dalapon	ND		ug/kg	41	--	1	A
Dicamba	ND		ug/kg	41	--	1	A
Dichloroprop	ND		ug/kg	41	--	1	A
2,4-D	ND		ug/kg	41	--	1	A
2,4-DB	ND		ug/kg	41	--	1	A
2,4,5-T	ND		ug/kg	41	--	1	A
2,4,5-TP (Silvex)	ND		ug/kg	41	--	1	A
Dinoseb	ND		ug/kg	41	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	106		30-150	A
DCAA	80		30-150	B

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-03
Client ID: WEIR COMP-3
Sample Location: TAUNTON, MA
Matrix: Soil
Analytical Method: 97,8081B
Analytical Date: 12/13/16 19:23
Analyst: AM
Percent Solids: 81%

Date Collected: 12/09/16 11:43
Date Received: 12/09/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/11/16 04:49
Cleanup Method: EPA 3620B
Cleanup Date: 12/13/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Organochlorine Pesticides - Westborough Lab							
Delta-BHC	ND		ug/kg	9.73	--	1	A
Lindane	ND		ug/kg	3.24	--	1	A
Alpha-BHC	ND		ug/kg	4.06	--	1	A
Beta-BHC	ND		ug/kg	9.73	--	1	A
Heptachlor	ND		ug/kg	4.87	--	1	A
Aldrin	ND		ug/kg	9.73	--	1	A
Heptachlor epoxide	ND		ug/kg	18.2	--	1	A
Endrin	ND		ug/kg	4.06	--	1	A
Endrin ketone	ND		ug/kg	9.73	--	1	A
Dieldrin	ND		ug/kg	6.08	--	1	A
4,4'-DDE	ND		ug/kg	9.73	--	1	A
4,4'-DDD	ND		ug/kg	9.73	--	1	A
4,4'-DDT	ND		ug/kg	18.2	--	1	A
Endosulfan I	ND		ug/kg	9.73	--	1	A
Endosulfan II	ND		ug/kg	9.73	--	1	A
Endosulfan sulfate	ND		ug/kg	4.06	--	1	A
Methoxychlor	ND		ug/kg	18.2	--	1	A
Chlordane	ND		ug/kg	79.1	--	1	A
Hexachlorobenzene	ND		ug/kg	9.73	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		30-150	B
Decachlorobiphenyl	63		30-150	B
2,4,5,6-Tetrachloro-m-xylene	78		30-150	A
Decachlorobiphenyl	64		30-150	A

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-03
Client ID: WEIR COMP-3
Sample Location: TAUNTON, MA
Matrix: Soil
Analytical Method: 97,8151A
Analytical Date: 12/16/16 10:47
Analyst: AM
Percent Solids: 81%
Methylation Date: 12/14/16 20:55

Date Collected: 12/09/16 11:43
Date Received: 12/09/16
Field Prep: Not Specified
Extraction Method: EPA 8151A
Extraction Date: 12/14/16 09:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Chlorinated Herbicides - Westborough Lab							
MCPP	ND		ug/kg	4100	--	1	A
MCPA	ND		ug/kg	4100	--	1	A
Dalapon	ND		ug/kg	41	--	1	A
Dicamba	ND		ug/kg	41	--	1	A
Dichloroprop	ND		ug/kg	41	--	1	A
2,4-D	ND		ug/kg	41	--	1	A
2,4-DB	ND		ug/kg	41	--	1	A
2,4,5-T	ND		ug/kg	41	--	1	A
2,4,5-TP (Silvex)	ND		ug/kg	41	--	1	A
Dinoseb	ND		ug/kg	41	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	130		30-150	A
DCAA	90		30-150	B

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-04
Client ID: WEIR COMP-4
Sample Location: TAUNTON, MA
Matrix: Soil
Analytical Method: 97,8081B
Analytical Date: 12/13/16 19:35
Analyst: AM
Percent Solids: 79%

Date Collected: 12/09/16 12:17
Date Received: 12/09/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/11/16 04:49
Cleanup Method: EPA 3620B
Cleanup Date: 12/13/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Organochlorine Pesticides - Westborough Lab							
Delta-BHC	ND		ug/kg	9.56	--	1	A
Lindane	ND		ug/kg	3.19	--	1	A
Alpha-BHC	ND		ug/kg	3.98	--	1	A
Beta-BHC	ND		ug/kg	9.56	--	1	A
Heptachlor	ND		ug/kg	4.78	--	1	A
Aldrin	ND		ug/kg	9.56	--	1	A
Heptachlor epoxide	ND		ug/kg	17.9	--	1	A
Endrin	ND		ug/kg	3.98	--	1	A
Endrin ketone	ND		ug/kg	9.56	--	1	A
Dieldrin	ND		ug/kg	5.98	--	1	A
4,4'-DDE	ND		ug/kg	9.56	--	1	A
4,4'-DDD	ND		ug/kg	9.56	--	1	A
4,4'-DDT	ND		ug/kg	17.9	--	1	A
Endosulfan I	ND		ug/kg	9.56	--	1	A
Endosulfan II	ND		ug/kg	9.56	--	1	A
Endosulfan sulfate	ND		ug/kg	3.98	--	1	A
Methoxychlor	ND		ug/kg	17.9	--	1	A
Chlordane	ND		ug/kg	77.7	--	1	A
Hexachlorobenzene	ND		ug/kg	9.56	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	65		30-150	B
2,4,5,6-Tetrachloro-m-xylene	83		30-150	A
Decachlorobiphenyl	70		30-150	A

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-04
Client ID: WEIR COMP-4
Sample Location: TAUNTON, MA
Matrix: Soil
Analytical Method: 97,8151A
Analytical Date: 12/16/16 11:06
Analyst: AM
Percent Solids: 79%
Methylation Date: 12/14/16 20:55

Date Collected: 12/09/16 12:17
Date Received: 12/09/16
Field Prep: Not Specified
Extraction Method: EPA 8151A
Extraction Date: 12/14/16 09:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Chlorinated Herbicides - Westborough Lab							
MCPP	ND		ug/kg	4100	--	1	A
MCPA	ND		ug/kg	4100	--	1	A
Dalapon	ND		ug/kg	41	--	1	A
Dicamba	ND		ug/kg	41	--	1	A
Dichloroprop	ND		ug/kg	41	--	1	A
2,4-D	ND		ug/kg	41	--	1	A
2,4-DB	ND		ug/kg	41	--	1	A
2,4,5-T	ND		ug/kg	41	--	1	A
2,4,5-TP (Silvex)	ND		ug/kg	41	--	1	A
Dinoseb	ND		ug/kg	41	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	127		30-150	A
DCAA	87		30-150	B

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-05
Client ID: WEIR COMP-5
Sample Location: TAUNTON, MA
Matrix: Soil
Analytical Method: 97,8081B
Analytical Date: 12/13/16 19:48
Analyst: AM
Percent Solids: 79%

Date Collected: 12/09/16 13:11
Date Received: 12/09/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/11/16 04:49
Cleanup Method: EPA 3620B
Cleanup Date: 12/13/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Organochlorine Pesticides - Westborough Lab							
Delta-BHC	ND		ug/kg	9.96	--	1	A
Lindane	ND		ug/kg	3.32	--	1	A
Alpha-BHC	ND		ug/kg	4.15	--	1	A
Beta-BHC	ND		ug/kg	9.96	--	1	A
Heptachlor	ND		ug/kg	4.98	--	1	A
Aldrin	ND		ug/kg	9.96	--	1	A
Heptachlor epoxide	ND		ug/kg	18.7	--	1	A
Endrin	ND		ug/kg	4.15	--	1	A
Endrin ketone	ND		ug/kg	9.96	--	1	A
Dieldrin	ND		ug/kg	6.22	--	1	A
4,4'-DDE	ND		ug/kg	9.96	--	1	A
4,4'-DDD	ND		ug/kg	9.96	--	1	A
4,4'-DDT	ND		ug/kg	18.7	--	1	A
Endosulfan I	ND		ug/kg	9.96	--	1	A
Endosulfan II	ND		ug/kg	9.96	--	1	A
Endosulfan sulfate	ND		ug/kg	4.15	--	1	A
Methoxychlor	ND		ug/kg	18.7	--	1	A
Chlordane	ND		ug/kg	80.9	--	1	A
Hexachlorobenzene	ND		ug/kg	9.96	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	39		30-150	B
Decachlorobiphenyl	36		30-150	B
2,4,5,6-Tetrachloro-m-xylene	41		30-150	A
Decachlorobiphenyl	40		30-150	A

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-05
Client ID: WEIR COMP-5
Sample Location: TAUNTON, MA
Matrix: Soil
Analytical Method: 97,8151A
Analytical Date: 12/16/16 11:26
Analyst: AM
Percent Solids: 79%
Methylation Date: 12/14/16 20:55

Date Collected: 12/09/16 13:11
Date Received: 12/09/16
Field Prep: Not Specified
Extraction Method: EPA 8151A
Extraction Date: 12/14/16 09:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Chlorinated Herbicides - Westborough Lab							
MCPP	ND		ug/kg	4200	--	1	A
MCPA	ND		ug/kg	4200	--	1	A
Dalapon	ND		ug/kg	42	--	1	A
Dicamba	ND		ug/kg	42	--	1	A
Dichloroprop	ND		ug/kg	42	--	1	A
2,4-D	ND		ug/kg	42	--	1	A
2,4-DB	ND		ug/kg	42	--	1	A
2,4,5-T	ND		ug/kg	42	--	1	A
2,4,5-TP (Silvex)	ND		ug/kg	42	--	1	A
Dinoseb	ND		ug/kg	42	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	126		30-150	A
DCAA	85		30-150	B

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8081B
Analytical Date: 12/13/16 18:20
Analyst: AM

Extraction Method: EPA 3546
Extraction Date: 12/11/16 04:49
Cleanup Method: EPA 3620B
Cleanup Date: 12/13/16

Parameter	Result	Qualifier	Units	RL	MDL	Column
MCP Organochlorine Pesticides - Westborough Lab for sample(s): 01-05 Batch: WG960057-1						
Delta-BHC	ND		ug/kg	7.80	--	A
Lindane	ND		ug/kg	2.60	--	A
Alpha-BHC	ND		ug/kg	3.25	--	A
Beta-BHC	ND		ug/kg	7.80	--	A
Heptachlor	ND		ug/kg	3.90	--	A
Aldrin	ND		ug/kg	7.80	--	A
Heptachlor epoxide	ND		ug/kg	14.6	--	A
Endrin	ND		ug/kg	3.25	--	A
Endrin ketone	ND		ug/kg	7.80	--	A
Dieldrin	ND		ug/kg	4.87	--	A
4,4'-DDE	ND		ug/kg	7.80	--	A
4,4'-DDD	ND		ug/kg	7.80	--	A
4,4'-DDT	ND		ug/kg	14.6	--	A
Endosulfan I	ND		ug/kg	7.80	--	A
Endosulfan II	ND		ug/kg	7.80	--	A
Endosulfan sulfate	ND		ug/kg	3.25	--	A
Methoxychlor	ND		ug/kg	14.6	--	A
Chlordane	ND		ug/kg	63.4	--	A
Hexachlorobenzene	ND		ug/kg	7.80	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	74		30-150	B
2,4,5,6-Tetrachloro-m-xylene	79		30-150	A
Decachlorobiphenyl	78		30-150	A

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8151A
Analytical Date: 12/15/16 01:32
Analyst: DM

Extraction Method: EPA 8151A
Extraction Date: 12/13/16 10:38

Methylation Date: 12/14/16 02:07

Parameter	Result	Qualifier	Units	RL	MDL	Column
MCP Chlorinated Herbicides - Westborough Lab for sample(s): 01-05 Batch: WG960687-1						
MCPP	ND		ug/kg	3300	--	A
MCPA	ND		ug/kg	3300	--	A
Dalapon	ND		ug/kg	33	--	A
Dicamba	ND		ug/kg	33	--	A
Dichloroprop	ND		ug/kg	33	--	A
2,4-D	ND		ug/kg	33	--	A
2,4-DB	ND		ug/kg	33	--	A
2,4,5-T	ND		ug/kg	33	--	A
2,4,5-TP (Silvex)	ND		ug/kg	33	--	A
Dinoseb	ND		ug/kg	33	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	88		30-150	A
DCAA	78		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
MCP Organochlorine Pesticides - Westborough Lab Associated sample(s): 01-05 Batch: WG960057-2 WG960057-3									
Delta-BHC	75		84		40-140	11		30	A
Lindane	75		84		40-140	11		30	A
Alpha-BHC	82		96		40-140	16		30	A
Beta-BHC	82		91		40-140	10		30	A
Heptachlor	82		95		40-140	15		30	A
Aldrin	81		92		40-140	13		30	A
Heptachlor epoxide	77		89		40-140	14		30	A
Endrin	76		90		40-140	17		30	A
Endrin ketone	62		69		40-140	11		30	A
Dieldrin	82		96		40-140	16		30	A
4,4'-DDE	75		88		40-140	16		30	A
4,4'-DDD	76		88		40-140	15		30	A
4,4'-DDT	78		92		40-140	16		30	A
Endosulfan I	79		94		40-140	17		30	A
Endosulfan II	74		84		40-140	13		30	A
Endosulfan sulfate	50		54		40-140	8		30	A
Methoxychlor	79		95		40-140	18		30	A
Hexachlorobenzene	74		85		40-140	14		30	A
Endrin aldehyde	52		58		40-140	11		30	A
cis-Chlordane	75		86		40-140	14		30	A
trans-Chlordane	76		89		40-140	16		30	A

Lab Control Sample Analysis
Batch Quality Control

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Organochlorine Pesticides - Westborough Lab Associated sample(s): 01-05 Batch: WG960057-2 WG960057-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		79		30-150	B
Decachlorobiphenyl	72		75		30-150	B
2,4,5,6-Tetrachloro-m-xylene	76		85		30-150	A
Decachlorobiphenyl	72		77		30-150	A

Lab Control Sample Analysis
Batch Quality Control

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
MCP Chlorinated Herbicides - Westborough Lab Associated sample(s): 01-05 Batch: WG960687-2 WG960687-3									
MCPP	120		113		40-140	6		30	A
MCPA	84		82		40-140	2		30	A
Dalapon	67		64		40-140	5		30	A
Dicamba	77		75		40-140	3		30	A
Dichloroprop	112		106		40-140	6		30	A
2,4-D	80		82		40-140	2		30	A
2,4-DB	74		72		40-140	3		30	A
2,4,5-T	77		75		40-140	3		30	A
2,4,5-TP (Silvex)	76		75		40-140	1		30	A
Dinoseb	5	Q	5	Q	40-140	0		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	79		76		30-150	A
DCAA	73		78		30-150	B

METALS

Project Name: ARLINGTON STREET
Project Number: Not Specified
Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-01
Client ID: WEIR COMP-1
Sample Location: TAUNTON, MA
Matrix: Soil
Percent Solids: 75%

Date Collected: 12/09/16 10:22
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/kg	2.6	--	1	12/12/16 22:00	12/14/16 10:44	EPA 3050B	97,6010C	PS
Arsenic, Total	3.0		mg/kg	0.53	--	1	12/12/16 22:00	12/14/16 10:44	EPA 3050B	97,6010C	PS
Barium, Total	22		mg/kg	0.53	--	1	12/12/16 22:00	12/14/16 10:44	EPA 3050B	97,6010C	PS
Beryllium, Total	0.35		mg/kg	0.26	--	1	12/12/16 22:00	12/14/16 10:44	EPA 3050B	97,6010C	PS
Cadmium, Total	ND		mg/kg	0.53	--	1	12/12/16 22:00	12/14/16 10:44	EPA 3050B	97,6010C	PS
Chromium, Total	18		mg/kg	0.53	--	1	12/12/16 22:00	12/14/16 10:44	EPA 3050B	97,6010C	PS
Lead, Total	11		mg/kg	2.6	--	1	12/12/16 22:00	12/14/16 10:44	EPA 3050B	97,6010C	PS
Mercury, Total	ND		mg/kg	0.086	--	1	12/10/16 10:30	12/15/16 15:31	EPA 7471B	97,7471B	BV
Nickel, Total	14		mg/kg	1.3	--	1	12/12/16 22:00	12/14/16 10:44	EPA 3050B	97,6010C	PS
Selenium, Total	ND		mg/kg	2.6	--	1	12/12/16 22:00	12/14/16 10:44	EPA 3050B	97,6010C	PS
Silver, Total	ND		mg/kg	0.53	--	1	12/12/16 22:00	12/14/16 10:44	EPA 3050B	97,6010C	PS
Thallium, Total	ND		mg/kg	2.6	--	1	12/12/16 22:00	12/14/16 10:44	EPA 3050B	97,6010C	PS
Vanadium, Total	20		mg/kg	0.53	--	1	12/12/16 22:00	12/14/16 10:44	EPA 3050B	97,6010C	PS
Zinc, Total	40		mg/kg	2.6	--	1	12/12/16 22:00	12/14/16 10:44	EPA 3050B	97,6010C	PS

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-02
Client ID: WEIR COMP-2
Sample Location: TAUNTON, MA
Matrix: Soil
Percent Solids: 81%

Date Collected: 12/09/16 10:58
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab											
Arsenic, Total	2.6		mg/kg	0.48	--	1	12/12/16 22:00	12/14/16 10:48	EPA 3050B	97,6010C	PS
Barium, Total	23		mg/kg	0.48	--	1	12/12/16 22:00	12/14/16 10:48	EPA 3050B	97,6010C	PS
Cadmium, Total	ND		mg/kg	0.48	--	1	12/12/16 22:00	12/14/16 10:48	EPA 3050B	97,6010C	PS
Chromium, Total	16		mg/kg	0.48	--	1	12/12/16 22:00	12/14/16 10:48	EPA 3050B	97,6010C	PS
Lead, Total	7.1		mg/kg	2.4	--	1	12/12/16 22:00	12/14/16 10:48	EPA 3050B	97,6010C	PS
Mercury, Total	ND		mg/kg	0.083	--	1	12/10/16 10:30	12/15/16 15:32	EPA 7471B	97,7471B	BV
Selenium, Total	ND		mg/kg	2.4	--	1	12/12/16 22:00	12/14/16 10:48	EPA 3050B	97,6010C	PS
Silver, Total	ND		mg/kg	0.48	--	1	12/12/16 22:00	12/14/16 10:48	EPA 3050B	97,6010C	PS

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-03
Client ID: WEIR COMP-3
Sample Location: TAUNTON, MA
Matrix: Soil
Percent Solids: 81%

Date Collected: 12/09/16 11:43
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab											
Arsenic, Total	2.7		mg/kg	0.47	--	1	12/12/16 22:00	12/14/16 10:53	EPA 3050B	97,6010C	PS
Barium, Total	29		mg/kg	0.47	--	1	12/12/16 22:00	12/14/16 10:53	EPA 3050B	97,6010C	PS
Cadmium, Total	ND		mg/kg	0.47	--	1	12/12/16 22:00	12/14/16 10:53	EPA 3050B	97,6010C	PS
Chromium, Total	19		mg/kg	0.47	--	1	12/12/16 22:00	12/14/16 10:53	EPA 3050B	97,6010C	PS
Lead, Total	8.1		mg/kg	2.4	--	1	12/12/16 22:00	12/14/16 10:53	EPA 3050B	97,6010C	PS
Mercury, Total	ND		mg/kg	0.083	--	1	12/10/16 10:30	12/15/16 15:34	EPA 7471B	97,7471B	BV
Selenium, Total	ND		mg/kg	2.4	--	1	12/12/16 22:00	12/14/16 10:53	EPA 3050B	97,6010C	PS
Silver, Total	ND		mg/kg	0.47	--	1	12/12/16 22:00	12/14/16 10:53	EPA 3050B	97,6010C	PS

Project Name: ARLINGTON STREET
Project Number: Not Specified
Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-04
Client ID: WEIR COMP-4
Sample Location: TAUNTON, MA
Matrix: Soil
Percent Solids: 79%

Date Collected: 12/09/16 12:17
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab											
Arsenic, Total	2.6		mg/kg	0.48	--	1	12/12/16 22:00	12/14/16 10:57	EPA 3050B	97,6010C	PS
Barium, Total	18		mg/kg	0.48	--	1	12/12/16 22:00	12/14/16 10:57	EPA 3050B	97,6010C	PS
Cadmium, Total	ND		mg/kg	0.48	--	1	12/12/16 22:00	12/14/16 10:57	EPA 3050B	97,6010C	PS
Chromium, Total	14		mg/kg	0.48	--	1	12/12/16 22:00	12/14/16 10:57	EPA 3050B	97,6010C	PS
Lead, Total	9.1		mg/kg	2.4	--	1	12/12/16 22:00	12/14/16 10:57	EPA 3050B	97,6010C	PS
Mercury, Total	ND		mg/kg	0.082	--	1	12/10/16 10:30	12/15/16 15:36	EPA 7471B	97,7471B	BV
Selenium, Total	ND		mg/kg	2.4	--	1	12/12/16 22:00	12/14/16 10:57	EPA 3050B	97,6010C	PS
Silver, Total	ND		mg/kg	0.48	--	1	12/12/16 22:00	12/14/16 10:57	EPA 3050B	97,6010C	PS

Project Name: ARLINGTON STREET
Project Number: Not Specified
Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-05
Client ID: WEIR COMP-5
Sample Location: TAUNTON, MA
Matrix: Soil
Percent Solids: 79%

Date Collected: 12/09/16 13:11
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab											
Arsenic, Total	3.5		mg/kg	0.50	--	1	12/12/16 22:00	12/14/16 11:01	EPA 3050B	97,6010C	PS
Barium, Total	21		mg/kg	0.50	--	1	12/12/16 22:00	12/14/16 11:01	EPA 3050B	97,6010C	PS
Cadmium, Total	ND		mg/kg	0.50	--	1	12/12/16 22:00	12/14/16 11:01	EPA 3050B	97,6010C	PS
Chromium, Total	15		mg/kg	0.50	--	1	12/12/16 22:00	12/14/16 11:01	EPA 3050B	97,6010C	PS
Lead, Total	8.4		mg/kg	2.5	--	1	12/12/16 22:00	12/14/16 11:01	EPA 3050B	97,6010C	PS
Mercury, Total	ND		mg/kg	0.084	--	1	12/10/16 10:30	12/15/16 15:38	EPA 7471B	97,7471B	BV
Selenium, Total	ND		mg/kg	2.5	--	1	12/12/16 22:00	12/14/16 11:01	EPA 3050B	97,6010C	PS
Silver, Total	ND		mg/kg	0.50	--	1	12/12/16 22:00	12/14/16 11:01	EPA 3050B	97,6010C	PS

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab for sample(s): 01-05 Batch: WG959906-1										
Mercury, Total	ND		mg/kg	0.083	--	1	12/10/16 10:30	12/15/16 11:14	97,7471B	BV

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab for sample(s): 01-05 Batch: WG960443-1										
Antimony, Total	ND		mg/kg	2.0	--	1	12/12/16 22:00	12/14/16 10:28	97,6010C	PS
Arsenic, Total	ND		mg/kg	0.40	--	1	12/12/16 22:00	12/14/16 10:28	97,6010C	PS
Barium, Total	ND		mg/kg	0.40	--	1	12/12/16 22:00	12/14/16 10:28	97,6010C	PS
Beryllium, Total	ND		mg/kg	0.20	--	1	12/12/16 22:00	12/14/16 10:28	97,6010C	PS
Cadmium, Total	ND		mg/kg	0.40	--	1	12/12/16 22:00	12/14/16 10:28	97,6010C	PS
Chromium, Total	ND		mg/kg	0.40	--	1	12/12/16 22:00	12/14/16 10:28	97,6010C	PS
Lead, Total	ND		mg/kg	2.0	--	1	12/12/16 22:00	12/14/16 10:28	97,6010C	PS
Nickel, Total	ND		mg/kg	1.0	--	1	12/12/16 22:00	12/14/16 10:28	97,6010C	PS
Selenium, Total	ND		mg/kg	2.0	--	1	12/12/16 22:00	12/14/16 10:28	97,6010C	PS
Silver, Total	ND		mg/kg	0.40	--	1	12/12/16 22:00	12/14/16 10:28	97,6010C	PS
Thallium, Total	ND		mg/kg	2.0	--	1	12/12/16 22:00	12/14/16 10:28	97,6010C	PS
Vanadium, Total	ND		mg/kg	0.40	--	1	12/12/16 22:00	12/14/16 10:28	97,6010C	PS
Zinc, Total	ND		mg/kg	2.0	--	1	12/12/16 22:00	12/14/16 10:28	97,6010C	PS

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis
Batch Quality Control

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Total Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG959906-2 WG959906-3 SRM Lot Number: D091-540								
Mercury, Total	101		109		72-128	8		30
MCP Total Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG960443-2 WG960443-3 SRM Lot Number: D091-540								
Antimony, Total	154		154		1-200	0		30
Arsenic, Total	96		90		80-121	6		30
Barium, Total	86		86		84-117	0		30
Beryllium, Total	90		88		83-117	2		30
Cadmium, Total	96		94		83-117	2		30
Chromium, Total	91		91		80-119	0		30
Lead, Total	96		89		82-118	8		30
Nickel, Total	93		93		83-117	0		30
Selenium, Total	90		90		79-121	0		30
Silver, Total	89		89		76-124	0		30
Thallium, Total	99		92		80-121	7		30
Vanadium, Total	96		87		78-122	10		30
Zinc, Total	88		88		82-118	0		30

INORGANICS
&
MISCELLANEOUS

Project Name:	ARLINGTON STREET	**Lab Number:**	L1640071
Project Number:	Not Specified	**Report Date:**	01/16/17

SAMPLE RESULTS

Lab ID:	L1640071-01	Date Collected:	12/09/16 10:22
Client ID:	WEIR COMP-1	Date Received:	12/09/16
Sample Location:	TAUNTON, MA	Field Prep:	Not Specified
Matrix:	Soil		

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Clay
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	12/15/16 09:21	1,1030	AB

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-02
Client ID: WEIR COMP-2
Sample Location: TAUNTON, MA
Matrix: Soil

Date Collected: 12/09/16 10:58
Date Received: 12/09/16
Field Prep: Not Specified

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Clay
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	12/15/16 09:21	1,1030	AB

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-03
Client ID: WEIR COMP-3
Sample Location: TAUNTON, MA
Matrix: Soil

Date Collected: 12/09/16 11:43
Date Received: 12/09/16
Field Prep: Not Specified

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Clay
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	12/15/16 09:21	1,1030	AB

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-04
Client ID: WEIR COMP-4
Sample Location: TAUNTON, MA
Matrix: Soil

Date Collected: 12/09/16 12:17
Date Received: 12/09/16
Field Prep: Not Specified

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Clay
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	12/15/16 09:21	1,1030	AB

Project Name:	ARLINGTON STREET	**Lab Number:**	L1640071
Project Number:	Not Specified	**Report Date:**	01/16/17

SAMPLE RESULTS

Lab ID:	L1640071-05	Date Collected:	12/09/16 13:11
Client ID:	WEIR COMP-5	Date Received:	12/09/16
Sample Location:	TAUNTON, MA	Field Prep:	Not Specified
Matrix:	Soil		

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Clay
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	12/15/16 09:21	1,1030	AB

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-01
Client ID: WEIR COMP-1
Sample Location: TAUNTON, MA
Matrix: Soil

Date Collected: 12/09/16 10:22
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Specific Conductance @ 25 C	130		umhos/cm	10	--	1	-	12/10/16 03:00	1,9050A	KA
Solids, Total	75.1		%	0.100	NA	1	-	12/10/16 05:13	121,2540G	VB
pH (H)	5.9		SU	-	NA	1	-	12/10/16 02:00	1,9045D	VB
Cyanide, Reactive	ND		mg/kg	10	--	1	12/13/16 20:10	12/13/16 21:54	1,7.3	RP
Sulfide, Reactive	ND		mg/kg	10	--	1	12/13/16 20:10	12/13/16 21:45	1,7.3	RP

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-02
Client ID: WEIR COMP-2
Sample Location: TAUNTON, MA
Matrix: Soil

Date Collected: 12/09/16 10:58
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Specific Conductance @ 25 C	130		umhos/cm	10	--	1	-	12/10/16 03:00	1,9050A	KA
Solids, Total	81.0		%	0.100	NA	1	-	12/10/16 05:13	121,2540G	VB
pH (H)	7.6		SU	-	NA	1	-	12/10/16 02:00	1,9045D	VB
Cyanide, Reactive	ND		mg/kg	10	--	1	12/13/16 20:10	12/13/16 21:54	1,7.3	RP
Sulfide, Reactive	ND		mg/kg	10	--	1	12/13/16 20:10	12/13/16 21:45	1,7.3	RP

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-03
Client ID: WEIR COMP-3
Sample Location: TAUNTON, MA
Matrix: Soil

Date Collected: 12/09/16 11:43
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Specific Conductance @ 25 C	140		umhos/cm	10	--	1	-	12/10/16 03:00	1,9050A	KA
Solids, Total	80.9		%	0.100	NA	1	-	12/10/16 05:13	121,2540G	VB
pH (H)	7.7		SU	-	NA	1	-	12/10/16 02:00	1,9045D	VB
Cyanide, Reactive	ND		mg/kg	10	--	1	12/13/16 20:10	12/13/16 21:54	1,7.3	RP
Sulfide, Reactive	ND		mg/kg	10	--	1	12/13/16 20:10	12/13/16 21:46	1,7.3	RP

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-04
Client ID: WEIR COMP-4
Sample Location: TAUNTON, MA
Matrix: Soil

Date Collected: 12/09/16 12:17
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Specific Conductance @ 25 C	260		umhos/cm	10	--	1	-	12/10/16 03:00	1,9050A	KA
Solids, Total	79.4		%	0.100	NA	1	-	12/10/16 05:13	121,2540G	VB
pH (H)	8.0		SU	-	NA	1	-	12/10/16 02:00	1,9045D	VB
Cyanide, Reactive	ND		mg/kg	10	--	1	12/13/16 20:10	12/13/16 21:54	1,7.3	RP
Sulfide, Reactive	ND		mg/kg	10	--	1	12/13/16 20:10	12/13/16 21:46	1,7.3	RP

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-05
Client ID: WEIR COMP-5
Sample Location: TAUNTON, MA
Matrix: Soil

Date Collected: 12/09/16 13:11
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Specific Conductance @ 25 C	140		umhos/cm	10	--	1	-	12/10/16 03:00	1,9050A	KA
Solids, Total	78.7		%	0.100	NA	1	-	12/10/16 05:13	121,2540G	VB
pH (H)	7.5		SU	-	NA	1	-	12/10/16 02:00	1,9045D	VB
Cyanide, Reactive	ND		mg/kg	10	--	1	12/13/16 20:10	12/13/16 21:55	1,7.3	RP
Sulfide, Reactive	ND		mg/kg	10	--	1	12/13/16 20:10	12/13/16 21:46	1,7.3	RP

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-06
Client ID: S-6
Sample Location: TAUNTON, MA
Matrix: Soil

Date Collected: 12/09/16 10:29
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	76.8		%	0.100	NA	1	-	12/10/16 05:13	121,2540G	VB

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-07
Client ID: S-19
Sample Location: TAUNTON, MA
Matrix: Soil

Date Collected: 12/09/16 11:06
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	74.9		%	0.100	NA	1	-	12/10/16 05:13	121,2540G	VB

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-08
Client ID: S-25
Sample Location: TAUNTON, MA
Matrix: Soil

Date Collected: 12/09/16 14:51
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	74.5		%	0.100	NA	1	-	12/10/16 05:13	121,2540G	VB

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-09
Client ID: S-40
Sample Location: TAUNTON, MA
Matrix: Soil

Date Collected: 12/09/16 12:24
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	91.7		%	0.100	NA	1	-	12/10/16 05:13	121,2540G	VB

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

SAMPLE RESULTS

Lab ID: L1640071-10
Client ID: S-49
Sample Location: TAUNTON, MA
Matrix: Soil

Date Collected: 12/09/16 13:21
Date Received: 12/09/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	79.8		%	0.100	NA	1	-	12/10/16 05:13	121,2540G	VB

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-05 Batch: WG960859-1										
Sulfide, Reactive	ND		mg/kg	10	--	1	12/13/16 20:10	12/13/16 21:45	1,7.3	RP
General Chemistry - Westborough Lab for sample(s): 01-05 Batch: WG960860-1										
Cyanide, Reactive	ND		mg/kg	10	--	1	12/13/16 20:10	12/13/16 21:53	1,7.3	RP

Lab Control Sample Analysis
Batch Quality Control

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-05 Batch: WG959866-1								
pH	100		-		99-101	-		
General Chemistry - Westborough Lab Associated sample(s): 01-05 Batch: WG959875-1								
Specific Conductance	101		-		99-101	-		
General Chemistry - Westborough Lab Associated sample(s): 01-05 Batch: WG960859-2								
Sulfide, Reactive	98		-		60-125	-		40
General Chemistry - Westborough Lab Associated sample(s): 01-05 Batch: WG960860-2								
Cyanide, Reactive	59		-		30-125	-		40

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Duplicate Analysis
Batch Quality Control

Lab Number: L1640071
Report Date: 01/16/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG959875-2 QC Sample: L1640071-05 Client ID: WEIR COMP-5						
Specific Conductance @ 25 C	140	130	umhos/cm	7		20
General Chemistry - Westborough Lab Associated sample(s): 01-10 QC Batch ID: WG959890-1 QC Sample: L1640071-01 Client ID: WEIR COMP-1						
Solids, Total	75.1	73.3	%	2		20
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG960859-3 QC Sample: L1640071-01 Client ID: WEIR COMP-1						
Sulfide, Reactive	ND	ND	mg/kg	NC		40
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG960860-3 QC Sample: L1640071-01 Client ID: WEIR COMP-1						
Cyanide, Reactive	ND	ND	mg/kg	NC		40

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: 12/09/2016 21:47

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1640071-01A	Glass 120ml/4oz unpreserved	A	N/A	4.9	Y	Absent	MCP-CR-6010T-10(180),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),MCP-AG-6010T-10(180),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),MCP-PB-6010T-10(180)
L1640071-01B	Glass 250ml/8oz unpreserved	A	N/A	4.9	Y	Absent	IGNIT-1030(14),MCP-8082-10(365),REACTS(14),MCP-8081-10(14),MCP-8151-10(14),MCP-8270-10(14),TS(7),PH-9045(1),REACTCN(14),TPH-DRO-D(14),COND-9050(28)
L1640071-02A	Glass 60mL/2oz unpreserved	A	N/A	4.9	Y	Absent	MCP-CR-6010T-10(180),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),MCP-AG-6010T-10(180),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),MCP-PB-6010T-10(180)
L1640071-02B	Glass 250ml/8oz unpreserved	A	N/A	4.9	Y	Absent	IGNIT-1030(14),MCP-8082-10(365),REACTS(14),MCP-8081-10(14),MCP-8151-10(14),MCP-8270-10(14),TS(7),PH-9045(1),REACTCN(14),TPH-DRO-D(14),COND-9050(28)
L1640071-03A	Glass 120ml/4oz unpreserved	A	N/A	4.9	Y	Absent	MCP-CR-6010T-10(180),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),MCP-AG-6010T-10(180),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),MCP-PB-6010T-10(180)

*Values in parentheses indicate holding time in days

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1640071-03B	Glass 250ml/8oz unpreserved	A	N/A	4.9	Y	Absent	IGNIT-1030(14),MCP-8082-10(365),REACTS(14),MCP-8081-10(14),MCP-8151-10(14),MCP-8270-10(14),TS(7),PH-9045(1),REACTCN(14),TPH-DRO-D(14),COND-9050(28)
L1640071-04A	Glass 60mL/2oz unpreserved	A	N/A	4.9	Y	Absent	MCP-CR-6010T-10(180),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),MCP-AG-6010T-10(180),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),MCP-PB-6010T-10(180)
L1640071-04B	Glass 250ml/8oz unpreserved	A	N/A	4.9	Y	Absent	IGNIT-1030(14),MCP-8082-10(365),REACTS(14),MCP-8081-10(14),MCP-8151-10(14),MCP-8270-10(14),TS(7),PH-9045(1),REACTCN(14),TPH-DRO-D(14),COND-9050(28)
L1640071-05A	Glass 60mL/2oz unpreserved	A	N/A	4.9	Y	Absent	MCP-CR-6010T-10(180),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),MCP-AG-6010T-10(180),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),MCP-PB-6010T-10(180)
L1640071-05B	Glass 250ml/8oz unpreserved	A	N/A	4.9	Y	Absent	IGNIT-1030(14),MCP-8082-10(365),REACTS(14),MCP-8081-10(14),MCP-8151-10(14),MCP-8270-10(14),TS(7),PH-9045(1),REACTCN(14),TPH-DRO-D(14),COND-9050(28)
L1640071-06A	Vial MeOH preserved	A	N/A	4.9	Y	Absent	MCP-8260HLW-10(14)
L1640071-06B	Vial water preserved	A	N/A	4.9	Y	Absent	MCP-8260HLW-10(14)
L1640071-06C	Vial water preserved	A	N/A	4.9	Y	Absent	MCP-8260HLW-10(14)
L1640071-06D	Plastic 2oz unpreserved for TS	A	N/A	4.9	Y	Absent	TS(7)
L1640071-07A	Vial MeOH preserved	A	N/A	4.9	Y	Absent	MCP-8260HLW-10(14)
L1640071-07B	Vial water preserved	A	N/A	4.9	Y	Absent	MCP-8260HLW-10(14)
L1640071-07C	Vial water preserved	A	N/A	4.9	Y	Absent	MCP-8260HLW-10(14)
L1640071-07D	Plastic 2oz unpreserved for TS	A	N/A	4.9	Y	Absent	TS(7)
L1640071-08A	Vial MeOH preserved	A	N/A	4.9	Y	Absent	MCP-8260HLW-10(14)
L1640071-08B	Vial water preserved	A	N/A	4.9	Y	Absent	MCP-8260HLW-10(14)
L1640071-08C	Vial water preserved	A	N/A	4.9	Y	Absent	MCP-8260HLW-10(14)
L1640071-08D	Plastic 2oz unpreserved for TS	A	N/A	4.9	Y	Absent	TS(7)
L1640071-09A	Vial MeOH preserved	A	N/A	4.9	Y	Absent	MCP-8260HLW-10(14)

*Values in parentheses indicate holding time in days

Project Name: ARLINGTON STREET
Project Number: Not Specified

Lab Number: L1640071
Report Date: 01/16/17

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1640071-09B	Vial water preserved	A	N/A	4.9	Y	Absent	MCP-8260HLW-10(14)
L1640071-09C	Vial water preserved	A	N/A	4.9	Y	Absent	MCP-8260HLW-10(14)
L1640071-09D	Bag	A	N/A	4.9	Y	Absent	TS(7)
L1640071-10A	Vial MeOH preserved	A	N/A	4.9	Y	Absent	MCP-8260HLW-10(14)
L1640071-10B	Vial water preserved	A	N/A	4.9	Y	Absent	MCP-8260HLW-10(14)
L1640071-10C	Vial water preserved	A	N/A	4.9	Y	Absent	MCP-8260HLW-10(14)
L1640071-10D	Bag	A	N/A	4.9	Y	Absent	TS(7)

*Values in parentheses indicate holding time in days

Project Name: ARLINGTON STREET **Lab Number:** L1640071
Project Number: Not Specified **Report Date:** 01/16/17

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the

Project Name: ARLINGTON STREET **Lab Number:** L1640071

Project Number: Not Specified **Report Date:** 01/16/17

Data Qualifiers

reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name: ARLINGTON STREET
Project Number: Not Specified
Lab Number: L1640071
Report Date: 01/16/17

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: NPW and SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
EPA 9012B: NPW: Total Cyanide
EPA 9050A: NPW: Specific Conductance
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility
SM 2540D: TSS
EPA 3005A NPW
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.**

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N, **EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E.**

Mansfield Facility:

Drinking Water
EPA 200.7: Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1** Hg.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Serial_No:01161712:10

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 12/9/16

ALPHA Job #: L1640071

8 Walkup Drive
Westboro, MA 01581
Tel: 508-898-9220

320 Forbes Blvd
Mansfield, MA 02048
Tel: 508-822-9300

Client Information

Client: Beta Group, Inc.

Address: 6 Blackstone Valley Place
Lincoln, RI 02865

Phone: 401-333-2382

Email: JMcLoughlin@beta-inc.com

Project Information

Project Name: Arlington Street

Project Location: Taunton, MA

Project #:

Project Manager: Joe McLoughlin

ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due:

Report Information - Data Deliverables

☒ ADEx ☒ EMAIL

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements & Project Information Requirements

☒ Yes ☐ No MA MCP Analytical Methods
☐ Yes ☒ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
☐ Yes ☒ No GW1 Standards (Info Required for Metals & EPH with Targets)
☐ Yes ☒ No NPDES RGP
☐ Other State /Fed Program _____ Criteria _____

Additional Project Information:

*Run TCLP if exceeds 20x rule

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	VOC: ☒ 8260 ☐ 624 ☐ 524.2	SVOC: ☒ ABN ☐ PAH	METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15	METALS: ☐ RCRA5 ☒ RCRA8 ☐ PP13	EPH: ☐ Ranges & Targets ☐ Ranges Only	VPH: ☐ Ranges & Targets ☐ Ranges Only	☒ PCB ☐ PEST	TPH: ☒ Quant Only ☐ Fingerprint	Pesticides / Herbicides	Conductivity / Reactivity / Ignitability	Corrosivity	SAMPLE INFO Filtration ☐ Field ☐ Lab to do Preservation ☐ Lab to do	Sample Comments	TOTAL # BOTTLES
40071-01	Weir Comp-1	12/9/16	10:22	S	MD	X	X			X	X	X	X	X					2
-02	Weir Comp-2		10:58			X	X			X	X	X	X	X					2
-03	Weir Comp-3		11:43			X	X			X	X	X	X	X					2
-04	Weir Comp-4		12:17			X	X			X	X	X	X	X					2
-05	Weir Comp-5		13:11			X	X			X	X	X	X	X					2
-06	S-6		10:29			X													4
-07	S-19		11:06			X													4
-08	S-25		11:51			X													4
-09	S-40		12:24			X													4
-10	S-49		13:21			X													4
																			30
	Container Type					V	A	A	A			A	A	A	A	A			
	Preservative					F	A	E	A			A	A	A	A	A			

Container Type
P= Plastic
A= Amber glass
V= Vial
G= Glass
B= Bacteria cup
C= Cube
O= Other
E= Encore
D= BOD Bottle

Preservative
A= None
B= HCl
C= HNO_3
D= H_2SO_4
E= NaOH
F= MeOH
G= $NaHSO_4$
H= $Na_2S_2O_3$
I= Ascorbic Acid
J= NH_4Cl
K= Zn Acetate
O= Other

Relinquished By:	Date/Time	Received By:	Date/Time
Michael Davis	12/9/16 15:05		12/9/16 15:05
	12/9/16		12/9/16 1740
	12/9/16		12/9/16 1805

All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 12-Mar-2012)

Method Blank Summary
Form 4

Client	: Beta Group, Inc.	Lab Number	: L1640071
Project Name	: ARLINGTON STREET	Project Number	:
Lab Sample ID	: WG961460-5	Lab File ID	: V11161214N05
Instrument ID	: VOA111		
Matrix	: SOIL	Analysis Date	: 12/14/16 19:55

Client Sample No.	Lab Sample ID	Analysis Date
WG961460-3LCS	WG961460-3	12/14/16 17:59
WG961460-4LCSD	WG961460-4	12/14/16 18:49
S-6	L1640071-06	12/14/16 23:44
S-19	L1640071-07	12/15/16 00:09
S-25	L1640071-08	12/15/16 00:35
S-40	L1640071-09	12/15/16 01:00

Method Blank Summary
Form 4

Client	: Beta Group, Inc.	Lab Number	: L1640071
Project Name	: ARLINGTON STREET	Project Number	:
Lab Sample ID	: WG961701-5	Lab File ID	: V04161215A05
Instrument ID	: VOA104		
Matrix	: SOIL	Analysis Date	: 12/15/16 08:33

Client Sample No.	Lab Sample ID	Analysis Date
WG961701-3LCS	WG961701-3	12/15/16 07:14
WG961701-4LCSD	WG961701-4	12/15/16 07:41
S-49	L1640071-10	12/15/16 17:16

Continuing Calibration
Form 7

Client	: Beta Group, Inc.	Lab Number	: L1640071	
Project Name	: ARLINGTON STREET	Project Number	:	
Instrument ID	: VOA111	Calibration Date	: 12/14/16 17:59	
Lab File ID	: V11161214N01	Init. Calib. Date(s)	: 11/30/16	11/30/16
Sample No	: WG961460-2	Init. Calib. Times	: 08:21	11:19
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	168	0
Dichlorodifluoromethane	0.212	0.157	-	25.9*	20	110	0
Chloromethane	0.33	0.263	-	20.3*	20	127	0
Vinyl chloride	0.323	0.263	-	18.6	20	126	0
Bromomethane	0.236	0.217	-	8.1	20	152	0
Chloroethane	0.177	0.16	-	9.6	20	136	0
Trichlorofluoromethane	0.375	0.322	-	14.1	20	125	0
Ethyl ether	0.162	0.14	-	13.6	20	141	0
1,1-Dichloroethene	0.221	0.206	-	6.8	20	142	0
Carbon disulfide	20	15.89	-	20.5*	20	129	0
Freon-113	0.2	0.188	-	6	20	137	0
Acrolein	20	15.015	-	24.9*	20	127	0
Methylene chloride	0.307	0.27	-	12.1	20	142	0
Acetone	0.063	0.044	-	30.2*	20	108	0
trans-1,2-Dichloroethene	0.271	0.256	-	5.5	20	149	0
Methyl acetate	0.159	0.116	-	27*	20	118	0
Methyl tert-butyl ether	0.826	0.69	-	16.5	20	132	0
tert-Butyl alcohol	0.023	0.017	-	26.1*	20	106	0
Diisopropyl ether	1.041	0.811	-	22.1*	20	120	0
1,1-Dichloroethane	0.531	0.453	-	14.7	20	132	0
Halothane	0.17	0.168	-	1.2	20	147	0
Acrylonitrile	0.079	0.063	-	20.3*	20	121	0
Ethyl tert-butyl ether	0.942	0.78	-	17.2	20	128	-.01
Vinyl acetate	0.647	0.478	-	26.1*	20	112	-.01
cis-1,2-Dichloroethene	0.31	0.292	-	5.8	20	147	0
2,2-Dichloropropane	0.431	0.363	-	15.8	20	127	-.01
Bromochloromethane	0.14	0.139	-	0.7	20	152	0
Cyclohexane	0.408	0.354	-	13.2	20	124	0
Chloroform	0.516	0.448	-	13.2	20	133	0
Ethyl acetate	0.233	0.168	-	27.9*	20	109	0
Carbon tetrachloride	0.358	0.311	-	13.1	20	128	0
Tetrahydrofuran	0.083	0.064	-	22.9*	20	116	-.01
Dibromofluoromethane	0.255	0.243	-	4.7	20	154	0
1,1,1-Trichloroethane	0.427	0.37	-	13.3	20	131	0
2-Butanone	0.101	0.071	-	29.7*	20	104	0
1,1-Dichloropropene	0.359	0.314	-	12.5	20	132	0
Benzene	1.136	1.025	-	9.8	20	141	0
tert-Amyl methyl ether	0.81	0.689	-	14.9	20	131	0
1,2-Dichloroethane-d4	0.261	0.217	-	16.9	20	135	-.01
1,2-Dichloroethane	0.382	0.303	-	20.7*	20	121	0
Methyl cyclohexane	0.397	0.369	-	7.1	20	138	0
Trichloroethene	0.288	0.26	-	9.7	20	140	0
Dibromomethane	0.169	0.147	-	13	20	135	0
1,2-Dichloropropane	0.308	0.26	-	15.6	20	133	0
2-Chloroethyl vinyl ether	0.173	0.137	-	20.8*	20	117	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Beta Group, Inc.	Lab Number	: L1640071	
Project Name	: ARLINGTON STREET	Project Number	:	
Instrument ID	: VOA111	Calibration Date	: 12/14/16 17:59	
Lab File ID	: V11161214N01	Init. Calib. Date(s)	: 11/30/16	11/30/16
Sample No	: WG961460-2	Init. Calib. Times	: 08:21	11:19
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Bromodichloromethane	0.409	0.332	-	18.8	20	123	0
1,4-Dioxane	0.00231	0.00205	-	11.3	20	136	0
cis-1,3-Dichloropropene	0.493	0.42	-	14.8	20	129	0
Chlorobenzene-d5	1	1	-	0	20	155	0
Toluene-d8	1.23	1.273	-	-3.5	20	163	0
Toluene	0.827	0.819	-	1	20	145	0
4-Methyl-2-pentanone	0.107	0.087	-	18.7	20	115	0
Tetrachloroethene	0.346	0.384	-	-11	20	159	0
trans-1,3-Dichloropropene	0.496	0.447	-	9.9	20	126	0
Ethyl methacrylate	0.404	0.359	-	11.1	20	123	0
1,1,2-Trichloroethane	0.236	0.228	-	3.4	20	131	0
Chlorodibromomethane	0.351	0.336	-	4.3	20	134	0
1,3-Dichloropropane	0.5	0.47	-	6	20	131	0
1,2-Dibromoethane	0.272	0.265	-	2.6	20	139	0
2-Hexanone	0.185	0.135	-	27*	20	100	0
Chlorobenzene	0.959	0.986	-	-2.8	20	147	0
Ethylbenzene	1.586	1.555	-	2	20	139	0
1,1,1,2-Tetrachloroethane	0.347	0.343	-	1.2	20	137	0
p/m Xylene	0.589	0.62	-	-5.3	20	148	0
o Xylene	0.587	0.61	-	-3.9	20	146	0
Styrene	0.972	0.999	-	-2.8	20	141	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	152	0
Bromoform	0.433	0.428	-	1.2	20	133	0
Isopropylbenzene	2.968	3.025	-	-1.9	20	140	0
4-Bromofluorobenzene	0.963	0.89	-	7.6	20	140	0
Bromobenzene	0.799	0.857	-	-7.3	20	148	0
n-Propylbenzene	3.605	3.566	-	1.1	20	135	0
1,4-Dichlorobutane	0.975	0.849	-	12.9	20	117	0
1,1,2,2-Tetrachloroethane	0.67	0.63	-	6	20	124	0
4-Ethyltoluene	2.985	3.091	-	-3.6	20	141	0
2-Chlorotoluene	2.507	2.47	-	1.5	20	134	0
1,3,5-Trimethylbenzene	2.452	2.539	-	-3.5	20	140	0
1,2,3-Trichloropropane	0.532	0.485	-	8.8	20	120	0
trans-1,4-Dichloro-2-buten	0.187	0.133	-	28.9*	20	98	0
4-Chlorotoluene	2.239	2.196	-	1.9	20	132	0
tert-Butylbenzene	2.073	2.137	-	-3.1	20	141	0
1,2,4-Trimethylbenzene	2.532	2.571	-	-1.5	20	137	0
sec-Butylbenzene	3.103	3.197	-	-3	20	139	0
p-Isopropyltoluene	2.641	2.779	-	-5.2	20	141	0
1,3-Dichlorobenzene	1.478	1.6	-	-8.3	20	146	0
1,4-Dichlorobenzene	1.49	1.597	-	-7.2	20	143	0
p-Diethylbenzene	1.628	1.698	-	-4.3	20	141	0
n-Butylbenzene	2.523	2.498	-	1	20	133	0
1,2-Dichlorobenzene	1.389	1.474	-	-6.1	20	144	0
1,2,4,5-Tetramethylbenzene	2.716	2.799	-	-3.1	20	139	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Beta Group, Inc.	Lab Number	: L1640071	
Project Name	: ARLINGTON STREET	Project Number	:	
Instrument ID	: VOA111	Calibration Date	: 12/14/16 17:59	
Lab File ID	: V11161214N01	Init. Calib. Date(s)	: 11/30/16	11/30/16
Sample No	: WG961460-2	Init. Calib. Times	: 08:21	11:19
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dibromo-3-chloropropan	0.108	0.103	-	4.6	20	136	0
1,3,5-Trichlorobenzene	1.22	1.368	-	-12.1	20	152	0
Hexachlorobutadiene	0.591	0.638	-	-8	20	146	0
1,2,4-Trichlorobenzene	1.063	1.199	-	-12.8	20	150	0
Naphthalene	2.047	2.119	-	-3.5	20	140	0
1,2,3-Trichlorobenzene	0.96	1.082	-	-12.7	20	152	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Beta Group, Inc.	Lab Number	: L1640071	
Project Name	: ARLINGTON STREET	Project Number	:	
Instrument ID	: VOA104	Calibration Date	: 12/15/16 07:14	
Lab File ID	: V04161215A02	Init. Calib. Date(s)	: 08/05/16	08/06/16
Sample No	: WG961701-2	Init. Calib. Times	: 21:44	00:48
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	76	-.01
Dichlorodifluoromethane	0.25	0.214	-	14.4	20	62	0
Chloromethane	20	26.607	-	-33*	20	91	0
Vinyl chloride	0.327	0.406	-	-24.2*	20	92	0
Bromomethane	0.185	0.184	-	0.5	20	76	0
Chloroethane	0.144	0.214	-	-48.6*	20	108	0
Trichlorofluoromethane	0.32	0.408	-	-27.5*	20	93	0
Ethyl ether	0.113	0.148	-	-31*	20	100	0
1,1-Dichloroethene	0.191	0.244	-	-27.7*	20	93	0
Carbon disulfide	20	21.254	-	-6.3	20	74	0
Freon-113	0.21	0.233	-	-11	20	74	0
Acrolein	0.042	0.071	-	-69*	20	131	-.01
Methylene chloride	0.305	0.341	-	-11.8	20	85	0
Acetone	20	32.483	-	-62.4*	20	117	-.01
trans-1,2-Dichloroethene	0.275	0.316	-	-14.9	20	84	0
Methyl acetate	20	24.261	-	-21.3*	20	92	0
Methyl tert-butyl ether	0.73	0.805	-	-10.3	20	83	0
tert-Butyl alcohol	0.031	0.033	-	-6.5	20	83	0
Diisopropyl ether	1.149	1.353	-	-17.8	20	88	-.01
1,1-Dichloroethane	0.551	0.601	-	-9.1	20	80	0
Halothane	0.209	0.185	-	11.5	20	66	0
Acrylonitrile	0.095	0.115	-	-21.1*	20	92	-.01
Ethyl tert-butyl ether	1.024	0.981	-	4.2	20	72	0
Vinyl acetate	20	12.527	-	37.4*	20	51	0
cis-1,2-Dichloroethene	0.308	0.3	-	2.6	20	72	0
2,2-Dichloropropane	0.398	0.411	-	-3.3	20	77	0
Bromochloromethane	0.148	0.145	-	2	20	71	0
Cyclohexane	0.529	0.582	-	-10	20	80	0
Chloroform	0.497	0.506	-	-1.8	20	76	-.01
Ethyl acetate	20	21.004	-	-5	20	76	0
Carbon tetrachloride	0.385	0.331	-	14	20	64	0
Tetrahydrofuran	0.099	0.12	-	-21.2*	20	110	-.01
Dibromofluoromethane	0.278	0.283	-	-1.8	20	79	0
1,1,1-Trichloroethane	0.424	0.44	-	-3.8	20	77	0
2-Butanone	20	21.653	-	-8.3	20	89	0
1,1-Dichloropropene	0.345	0.341	-	1.2	20	74	0
Benzene	1.063	1.031	-	3	20	71	-.01
tert-Amyl methyl ether	0.774	0.559	-	27.8*	20	54	0
1,2-Dichloroethane-d4	0.264	0.304	-	-15.2	20	89	0
1,2-Dichloroethane	0.38	0.441	-	-16.1	20	87	0
Methyl cyclohexane	0.412	0.388	-	5.8	20	68	0
Trichloroethene	0.295	0.297	-	-0.7	20	74	-.01
Dibromomethane	0.171	0.177	-	-3.5	20	77	-.01
1,2-Dichloropropane	0.322	0.346	-	-7.5	20	81	-.01
Bromodichloromethane	0.383	0.379	-	1	20	75	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Beta Group, Inc.	Lab Number	: L1640071	
Project Name	: ARLINGTON STREET	Project Number	:	
Instrument ID	: VOA104	Calibration Date	: 12/15/16 07:14	
Lab File ID	: V04161215A02	Init. Calib. Date(s)	: 08/05/16	08/06/16
Sample No	: WG961701-2	Init. Calib. Times	: 21:44	00:48
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,4-Dioxane	1000	983.961	-	1.6	20	79	-.01
cis-1,3-Dichloropropene	0.445	0.43	-	3.4	20	73	0
Chlorobenzene-d5	1	1	-	0	20	72	-.01
Toluene-d8	1.177	1.261	-	-7.1	20	77	-.01
Toluene	0.821	0.845	-	-2.9	20	72	-.01
4-Methyl-2-pentanone	0.128	0.151	-	-18	20	85	-.01
Tetrachloroethene	0.407	0.415	-	-2	20	70	-.01
trans-1,3-Dichloropropene	0.458	0.478	-	-4.4	20	75	0
Ethyl methacrylate	0.384	0.383	-	0.3	20	72	-.01
1,1,2-Trichloroethane	0.244	0.256	-	-4.9	20	74	-.01
Chlorodibromomethane	0.387	0.385	-	0.5	20	72	0
1,3-Dichloropropane	0.471	0.494	-	-4.9	20	74	0
1,2-Dibromoethane	0.318	0.321	-	-0.9	20	73	-.01
2-Hexanone	0.218	0.275	-	-26.1*	20	93	-.01
Chlorobenzene	0.984	1.011	-	-2.7	20	72	-.01
Ethylbenzene	1.54	1.636	-	-6.2	20	74	-.01
1,1,1,2-Tetrachloroethane	0.373	0.375	-	-0.5	20	71	-.01
p/m Xylene	0.617	0.643	-	-4.2	20	72	-.01
o Xylene	0.606	0.625	-	-3.1	20	71	-.01
Styrene	1.009	1.052	-	-4.3	20	71	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	77	0
Bromoform	0.48	0.409	-	14.8	20	67	-.01
Isopropylbenzene	2.889	2.759	-	4.5	20	72	-.01
4-Bromofluorobenzene	0.854	0.918	-	-7.5	20	84	-.01
Bromobenzene	0.826	0.85	-	-2.9	20	78	-.01
n-Propylbenzene	3.243	3.683	-	-13.6	20	85	-.01
1,4-Dichlorobutane	1.094	1.318	-	-20.5*	20	93	0
1,1,2,2-Tetrachloroethane	0.652	0.711	-	-9	20	86	0
4-Ethyltoluene	3.035	3.258	-	-7.3	20	81	-.01
2-Chlorotoluene	1.98	2.256	-	-13.9	20	86	-.01
1,3,5-Trimethylbenzene	2.465	2.647	-	-7.4	20	81	-.01
1,2,3-Trichloropropane	0.492	0.557	-	-13.2	20	88	-.01
trans-1,4-Dichloro-2-buten	20	17.269	-	13.7	20	72	0
4-Chlorotoluene	2.019	2.19	-	-8.5	20	83	-.01
tert-Butylbenzene	2.066	2.148	-	-4	20	79	-.01
1,2,4-Trimethylbenzene	2.461	2.592	-	-5.3	20	79	-.01
sec-Butylbenzene	3.102	3.209	-	-3.4	20	78	0
p-Isopropyltoluene	2.59	2.702	-	-4.3	20	79	-.01
1,3-Dichlorobenzene	1.507	1.587	-	-5.3	20	79	-.01
1,4-Dichlorobenzene	1.517	1.606	-	-5.9	20	81	0
p-Diethylbenzene	1.623	1.605	-	1.1	20	75	-.01
n-Butylbenzene	2.16	2.336	-	-8.1	20	81	-.01
1,2-Dichlorobenzene	1.437	1.38	-	4	20	72	0
1,2,4,5-Tetramethylbenzene	2.695	2.486	-	7.8	20	71	-.01
1,2-Dibromo-3-chloropropan	0.116	0.098	-	15.5	20	70	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Beta Group, Inc.	Lab Number	: L1640071	
Project Name	: ARLINGTON STREET	Project Number	:	
Instrument ID	: VOA104	Calibration Date	: 12/15/16 07:14	
Lab File ID	: V04161215A02	Init. Calib. Date(s)	: 08/05/16	08/06/16
Sample No	: WG961701-2	Init. Calib. Times	: 21:44	00:48
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,3,5-Trichlorobenzene	1.19	1.097	-	7.8	20	71	-.01
Hexachlorobutadiene	0.585	0.484	-	17.3	20	67	0
1,2,4-Trichlorobenzene	1.03	0.953	-	7.5	20	73	-.01
Naphthalene	2.192	1.923	-	12.3	20	71	-.01
1,2,3-Trichlorobenzene	0.969	0.856	-	11.7	20	70	0

* Value outside of QC limits.

I:\Pest18\161213\18161213-01.d

Data File Name	**18161213-01.d**
Data File Path	**I:\Pest18\161213**
Operator	**PEST18:am**
Date Acquired	**12/13/2016 8:34**
Acq. Method File	**PEST.M**
Sample Name	**PEM1816121301,42ee,,d**
Instrument Name	**Pest 18**

Name	Ret Time	Response	
4,4'-DDT	4.82	274714353.2	% Breakdown
4,4'-DDE	4.15	260742.235	
4,4'-DDD	4.61	384936.837	0.23%
Endrin	4.55	141821214	% Breakdown
Endrin Aldehyde	5.01	981604.575	
Endrin Ketone	5.51	1306908.048	1.59%
4,4'-DDT	5.45	101280149	% Breakdown
4,4'-DDE	4.80	239704.63	
4,4'-DDD	5.23	411767.104	0.64%
Endrin	5.16	62098882.02	% Breakdown
Endrin Aldehyde	5.54	532753.423	
Endrin Ketone	6.10	751951.274	2.03%

wg960057-1,2,3
L1640071-01,02,03,04,05