

24 January 2019

Mr. Joshua Haugh  
Division of Environmental Remediation  
New York State Department of Environmental Conservation  
1130 N. Westcott Road  
Schenectady, New York 12306-2014

RE: Summary of Phase II Remedial Investigation Results  
Contract/Work Assignment No: D007624-38  
Admiral Cleaners, Watervliet, New York  
Site No. 401075

Dear Mr. Haugh:

This letter provides a draft summary of analytical results for samples collected during field activities at the Admiral Cleaners Site (No. 401075) in the City of Watervliet, Albany County, New York. In September and October 2018, EA Engineering, P.C. and its affiliate EA Science and Technology (EA) completed Phase II field activities as described in the Remedial Investigation/Feasibility Study Letter Work Plan.<sup>1</sup>

In September 2018, fifteen soil borings were completed by EA's drilling contractor, Aztech Environmental Technologies of Ballston Spa, New York. Four of the soil borings were advanced to a depth of 2 feet below ground surface (bgs). These borings were located near previous surface soil sample locations as requested by the New York Department of Conservation (NYSDEC). Surface soil samples from the 0- to 6-inch (in.) interval were analyzed for volatile organic compounds (VOCs) by U.S. Environmental Protection Agency (EPA) Method 8260C. EA collected two surface soil samples from surface soil locations: one from the 0–12 in. interval and one from the 12–24 in. Samples were submitted to Con-Test Analytical, Inc. (Con-Test) and analyzed for VOCs by EPA Method 8260C; semi-volatile organic compounds (SVOCs) by EPA Method 8270D; polychlorinated biphenyls (PCBs) by EPA Method 8082A; pesticides by EPA Method 8081B; and metals (including cyanide and mercury) by EPA Methods 6010C, SW9014, and 7471B. A summary of detected VOCs and SVOCs is presented in **Table 1**. A summary of detected PCBs, pesticides, and metal compounds and analytes is presented in **Table 2**. Surface soil sample locations and exceedances are provided as **Figure 1**.

Eleven boreholes were advanced until refusal using a Geoprobe® 6610DT probe. One subsurface soil sample was collected at soil borings from the interval directly above the groundwater interface, or at the interval directly above refusal if groundwater was not encountered. Soil macrocores were screened using a photoionization detector (PID). Due to an elevated PID reading of approximately 15,000 parts per million at refusal, an additional subsurface soil sample was collected from location MW-7R. Samples were submitted to Con-Test and analyzed for VOCs by EPA Method

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<sup>1</sup>EA. 2018. *Remedial Investigation/Feasibility Study Letter Work Plan*. 22 March.



8260C. A summary of samples with detected VOCs in subsurface soil is presented in **Table 3**. Subsurface soil sample locations and detections for chlorinated VOCs are presented in **Figure 2**.

Soil boring logs are provided in **Attachment 1**. During outdoor intrusive activities (e.g., soil borings/direct push, monitoring well installation, etc.) at the site, a Community Air Monitoring Plan was in place. Soil boring cuttings were containerized and stored securely onsite. One waste characterization sample was collected from the cuttings and submitted to Con-Test for full characterization including Toxicity Characteristic Leaching Procedure analysis. A summary of the waste characterization results is provided in **Table 4**.

Four soil boring locations were converted to 1-in. prepacked temporary groundwater monitoring wells and seven soil borings were over drilled with hollow-stem augers and converted to 2-in. groundwater monitoring wells. All drilling equipment was decontaminated between wells within 55-gallon drums. All investigative-derived waste (IDW), such as soil cuttings and liquid generated from contaminated equipment decontamination were containerized in 55-gallon drums. The groundwater monitoring wells were developed to purge any drilling fluids or sediment that may have entered the well during installation. All purge water was containerized in 55-gallon drums.

In October 2018, EA collected groundwater samples from groundwater monitoring wells installed on the site using the low-flow methodology. Groundwater quality parameters were recorded and purge forms are provided as **Attachment 2**. Groundwater samples were submitted to Con-Test for chemical analysis. One sample was collected from groundwater monitoring wells for VOC analysis by EPA Method 8260C. Samples were collected from four wells for perfluorinated compounds (PFC) analysis by EPA Method 537 and 1,4-dioxane analysis by EPA Method 8270-Select Ion Monitoring. A summary of detected VOCs in groundwater is presented in **Table 6**; a summary of detected PFCs and 1,4-dioxane is presented in **Table 7**. Groundwater sample locations and detections for VOCs are presented as **Figure 3**. Detections for PFCs and 1,4-dioxane are presented as **Figure 4**.

Additionally, samples were collected from three groundwater monitoring wells (MW-06, MW-07R, and MW-10) and submitted for analysis of Monitored Natural Attenuation (MNA) parameters: Total Organic Carbon by EPA Method 5310B; Dissolved Gases (methane, ethane, ethane) by EPA RSK-175; and major anions by EPA Methods D516 (sulfate), SM 2320B (alkalinity), and SM4500 (nitrate). Three samples were also collected and submitted to Microbial Insights, Inc. for analysis for the presence and population estimates of *Dehalococcoides* bacteria in groundwater as well as functional genes required for further microbial degradation of PCE to daughter products. A summary of MNA parameters and microbial analysis is presented in **Table 8**.

A summary of soil boring and monitoring well construction data and notes is provided in **Table 5**. Groundwater elevation contours were also interpolated from depths to groundwater collected in October 2018 following a survey of Phase II sample locations. Groundwater monitoring well locations, groundwater elevations, and interpolated groundwater elevation contours are presented as **Figure 5**. The groundwater elevation measurement from MW-07 was not used for the potentiometric surface interpolation, as it likely represents a small groundwater lens or discontinuity that does not extend laterally based on observations in adjacent soil borings. Groundwater surface elevations were interpolated using depths to water gauged at the newly



installed monitoring wells approximately 48 hours after sampling. Local groundwater flow direction is easterly, which also mimics regional topography (e.g., towards the Hudson River).

Analytical results and field PID screening results indicate that the greatest VOCs impacts are observed in groundwater and saturated subsurface soil (i.e., MW-07R). The greatest concentrations of VOCs are observed in subsurface soil and groundwater around the suspected disposal/release area, in the northern portion of the parcel, and in the areas just south and southwest of the suspected disposal/release area (below the northern half of the Admiral Cleaners building). The observed groundwater concentrations for PCE at monitoring well MW-07R is approximately 5.5 to 7 percent aqueous solubility, which indicates the potential for dense non-aqueous phase liquid (DNAPL).

Analytical results for soil and groundwater samples are provided as **DRAFT** only and have not been validated by an independent third party. Analytical data reports for soil and groundwater samples are provided as **Attachment 3**.

Sincerely yours,

EA SCIENCE AND TECHNOLOGY

A handwritten signature in black ink, appearing to read 'Chris Schroer', written over a horizontal line.

Christopher Schroer  
Project Manager

EA ENGINEERING, P.C.

A handwritten signature in black ink, appearing to read 'Donald Conan', written over a horizontal line.

Donald F. Conan, P.E., P.G.  
Contract Manager

Attachment 1 – Phase II Soil Boring Logs

Attachment 2 – Phase II Groundwater Monitoring Forms

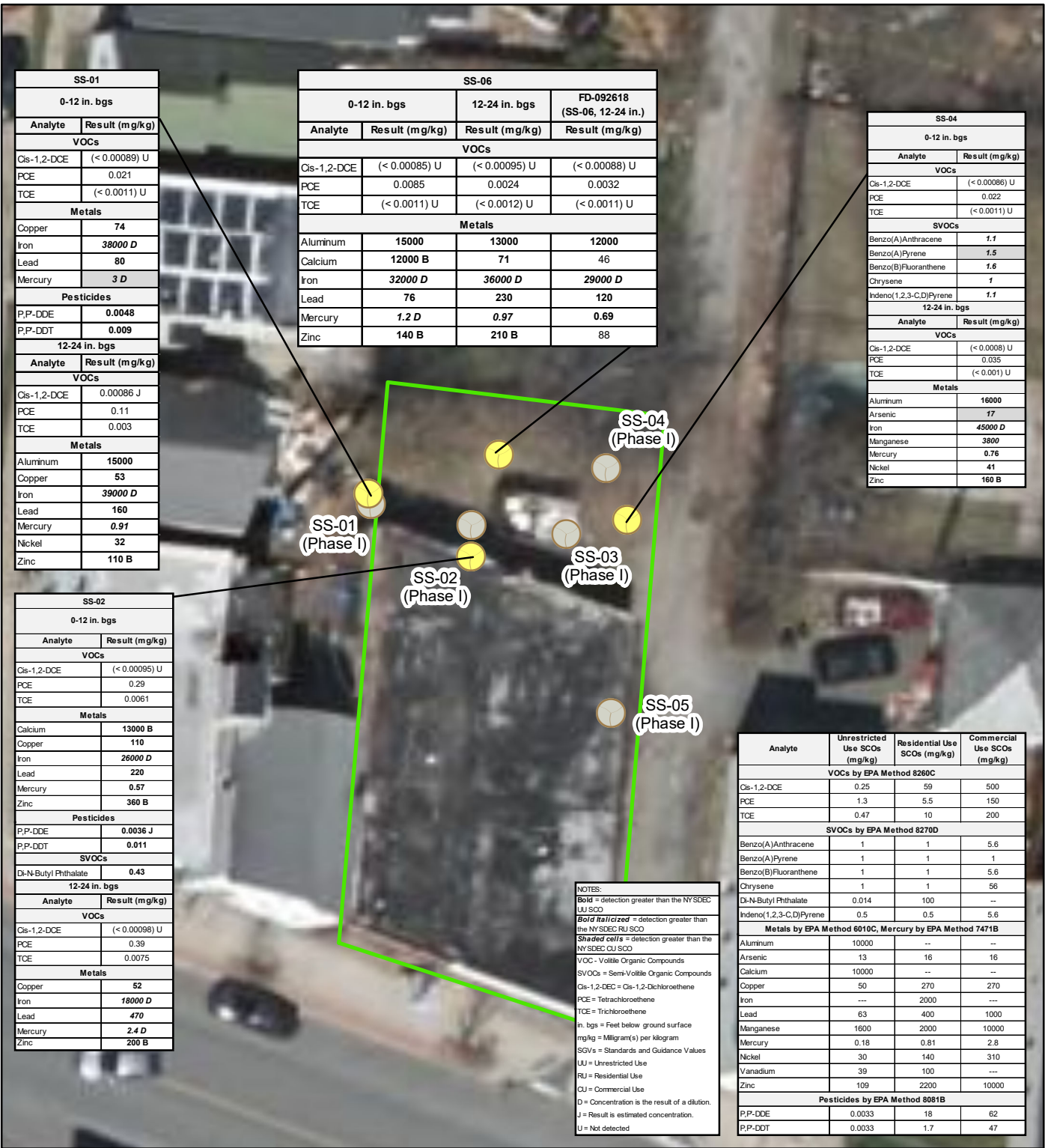
Attachment 3 – Phase II Remedial Investigation Analytical Results

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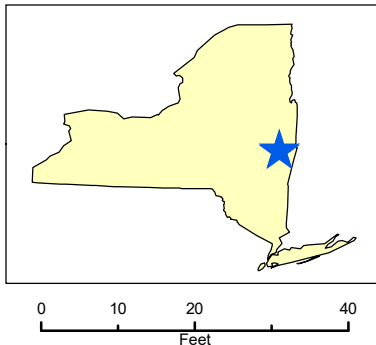


## Figures

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NOTES:  
**Bold** = detection greater than the NY SDEC LU SCO  
**Bold italicized** = detection greater than the NY SDEC RU SCO  
*Shaded cells* = detection greater than the NY SDEC CU SCO  
VOC = Volatile Organic Compounds  
SVOCs = Semi-Volatile Organic Compounds  
Cis-1,2-DEC = Cis-1,2-Dichloroethene  
PCE = Tetrachloroethene  
TCE = Trichloroethene  
m. bgs = Feet below ground surface  
mg/kg = Milligram(s) per kilogram  
SGVs = Standards and Guidance Values  
UU = Unrestricted Use  
RU = Residential Use  
CU = Commercial Use  
D = Concentration is the result of a dilution.  
J = Result is estimated concentration.  
U = Not detected



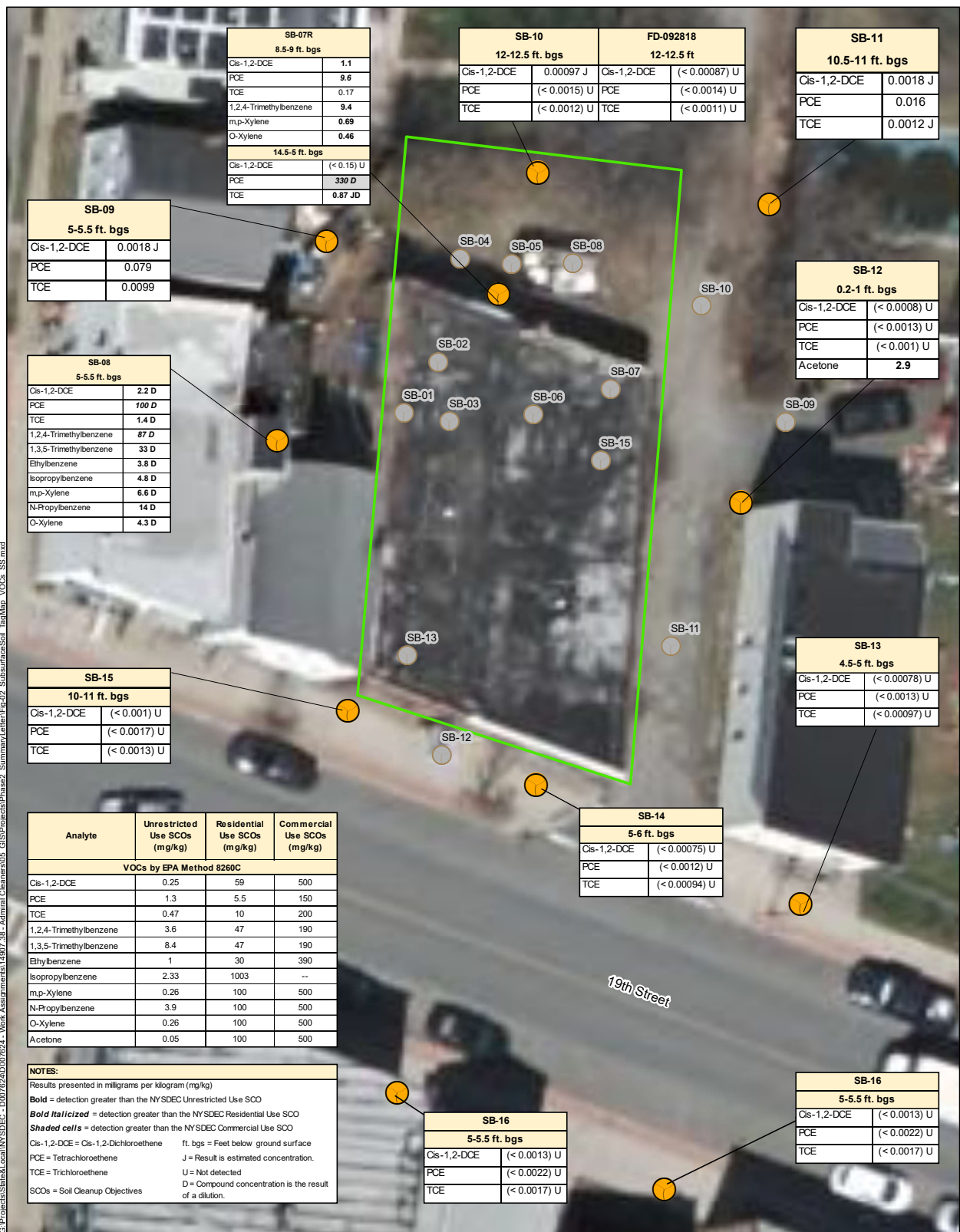
- Admiral Cleaners Site Boundary
- ★ Site Location
- Phase II Surface Soil Locations
- Phase I Surface Soil Location

**Figure 1**  
**Remedial Investigation Phase II**  
**Surface Soil Sample**  
**Locations and Exceedances**  
**26 September 2018**

Admiral Cleaners  
 Watervliet, Albany County, NY

Map Date: 1/24/2019  
 Projection: NAD 1983 State Plane New York  
 East FIPS 3101 Feet

G:\Projects\State&Local\NYSDDEC - 0007624\007624 - Work Assignments\1480738 - Admiral Cleaners\Phase2 - Summary\Letter\Fig-02 SubsurfaceSoil\_TrafficMap\_VOCs\_SS.mxd



SB-07R 8.5-9 ft. bgs	
Cis-1,2-DCE	1.1
PCE	9.6
TCE	0.17
1,2,4-Trimethylbenzene	9.4
m,p-Xylene	0.69
O-Xylene	0.46
14.5-5 ft. bgs	
Cis-1,2-DCE	(< 0.15) U
PCE	330 D
TCE	0.87 JD

SB-10 12-12.5 ft. bgs		FD-092818 12-12.5 ft	
Cis-1,2-DCE	0.00097 J	Cis-1,2-DCE	(< 0.00087) U
PCE	(< 0.0015) U	PCE	(< 0.0014) U
TCE	(< 0.0012) U	TCE	(< 0.0011) U

SB-11 10.5-11 ft. bgs	
Cis-1,2-DCE	0.0018 J
PCE	0.016
TCE	0.0012 J

SB-09 5-5.5 ft. bgs	
Cis-1,2-DCE	0.0018 J
PCE	0.079
TCE	0.0099

SB-12 0.2-1 ft. bgs	
Cis-1,2-DCE	(< 0.0008) U
PCE	(< 0.0013) U
TCE	(< 0.001) U
Acetone	2.9

SB-08 5-5.5 ft. bgs	
Cis-1,2-DCE	2.2 D
PCE	100 D
TCE	1.4 D
1,2,4-Trimethylbenzene	87 D
1,3,5-Trimethylbenzene	33 D
Ethylbenzene	3.8 D
Isopropylbenzene	4.8 D
m,p-Xylene	6.6 D
N-Propylbenzene	14 D
O-Xylene	4.3 D

SB-15 10-11 ft. bgs	
Cis-1,2-DCE	(< 0.001) U
PCE	(< 0.0017) U
TCE	(< 0.0013) U

SB-13 4.5-5 ft. bgs	
Cis-1,2-DCE	(< 0.00078) U
PCE	(< 0.0013) U
TCE	(< 0.00097) U

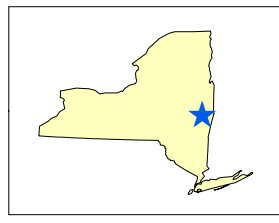
Analyte	Unrestricted Use SCOs (mg/kg)	Residential Use SCOs (mg/kg)	Commercial Use SCOs (mg/kg)
<b>VOCs by EPA Method 8260C</b>			
Cis-1,2-DCE	0.25	59	500
PCE	1.3	5.5	150
TCE	0.47	10	200
1,2,4-Trimethylbenzene	3.6	47	190
1,3,5-Trimethylbenzene	8.4	47	190
Ethylbenzene	1	30	390
Isopropylbenzene	2.33	1003	--
m,p-Xylene	0.26	100	500
N-Propylbenzene	3.9	100	500
O-Xylene	0.26	100	500
Acetone	0.05	100	500

SB-14 5-6 ft. bgs	
Cis-1,2-DCE	(< 0.00075) U
PCE	(< 0.0012) U
TCE	(< 0.00094) U

**NOTES:**  
 Results presented in milligrams per kilogram (mg/kg)  
**Bold** = detection greater than the NY SDEC Unrestricted Use SCO  
**Bold Italicized** = detection greater than the NY SDEC Residential Use SCO  
**Shaded cells** = detection greater than the NY SDEC Commercial Use SCO  
 Cis-1,2-DCE = Cis-1,2-Dichloroethene      ft. bgs = Feet below ground surface  
 PCE = Tetrachloroethene      J = Result is estimated concentration.  
 TCE = Trichloroethene      U = Not detected  
 D = Compound concentration is the result of a dilution.  
 SCOs = Soil Cleanup Objectives

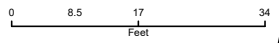
SB-16 5-5.5 ft. bgs	
Cis-1,2-DCE	(< 0.0013) U
PCE	(< 0.0022) U
TCE	(< 0.0017) U

SB-16 5-5.5 ft. bgs	
Cis-1,2-DCE	(< 0.0013) U
PCE	(< 0.0022) U
TCE	(< 0.0017) U



- ★ Site Location
- ▭ Admiral Cleaners Site Boundary
- Phase II Soil Boring Locations
- Phase I Soil Boring Location

**Figure 2**  
 Remedial Investigation Phase II  
 Subsurface Soil Sample Locations  
 and Detected Volatile Organic Compounds  
 27-28 September 2018  
 Admiral Cleaners  
 Watervliet, Albany County, NY

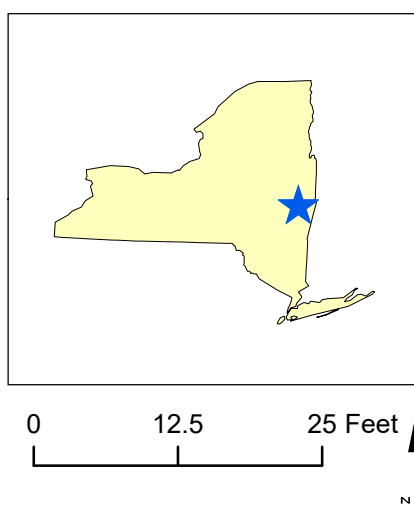
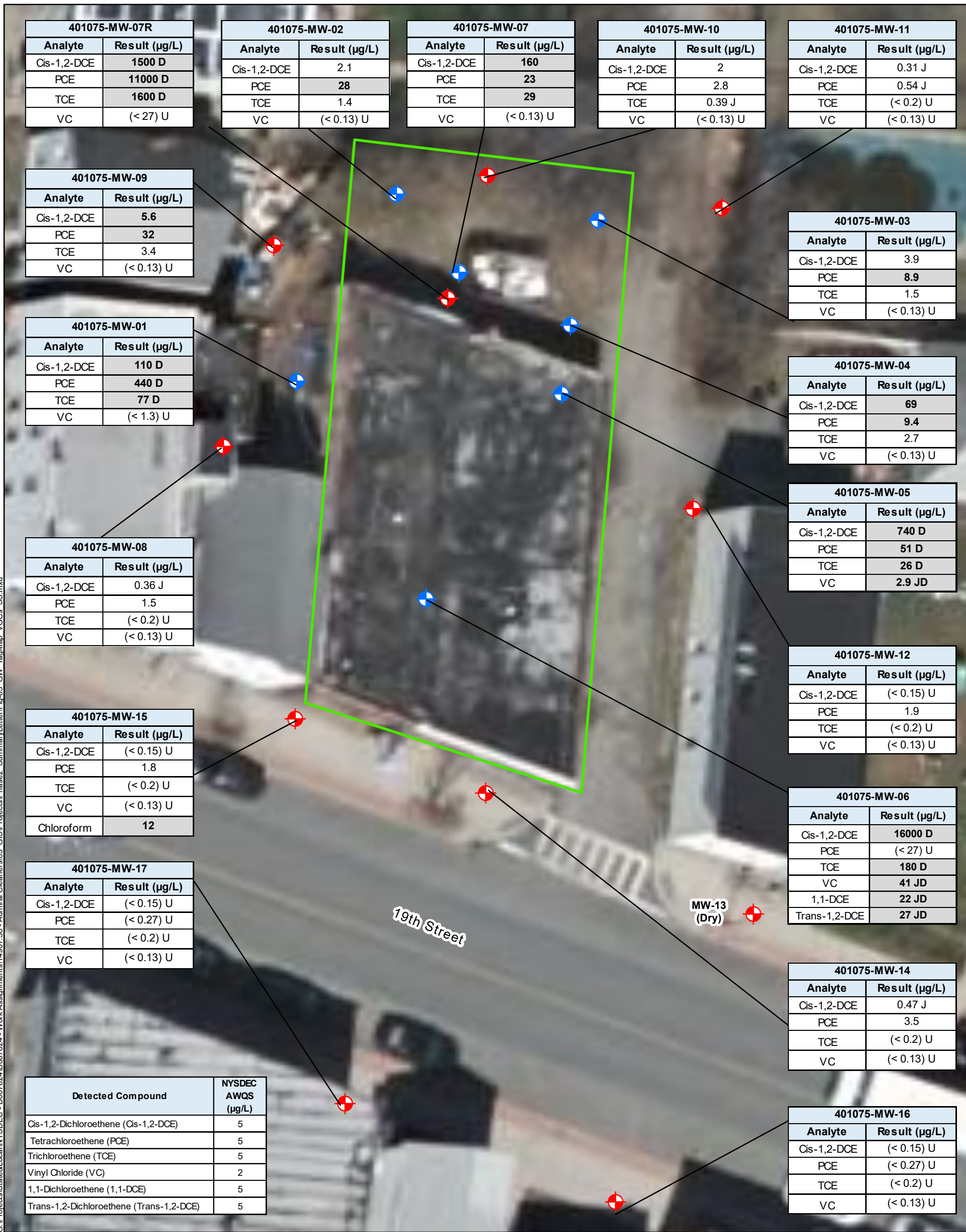


Map Date: 1/24/2019  
 Projection: NAD 1983 State Plane New York  
 East FIPS 3101 Feet





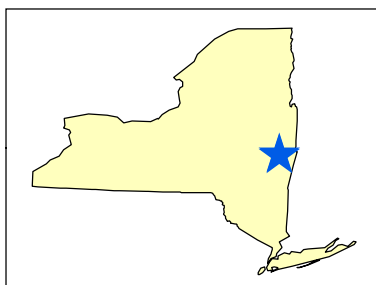
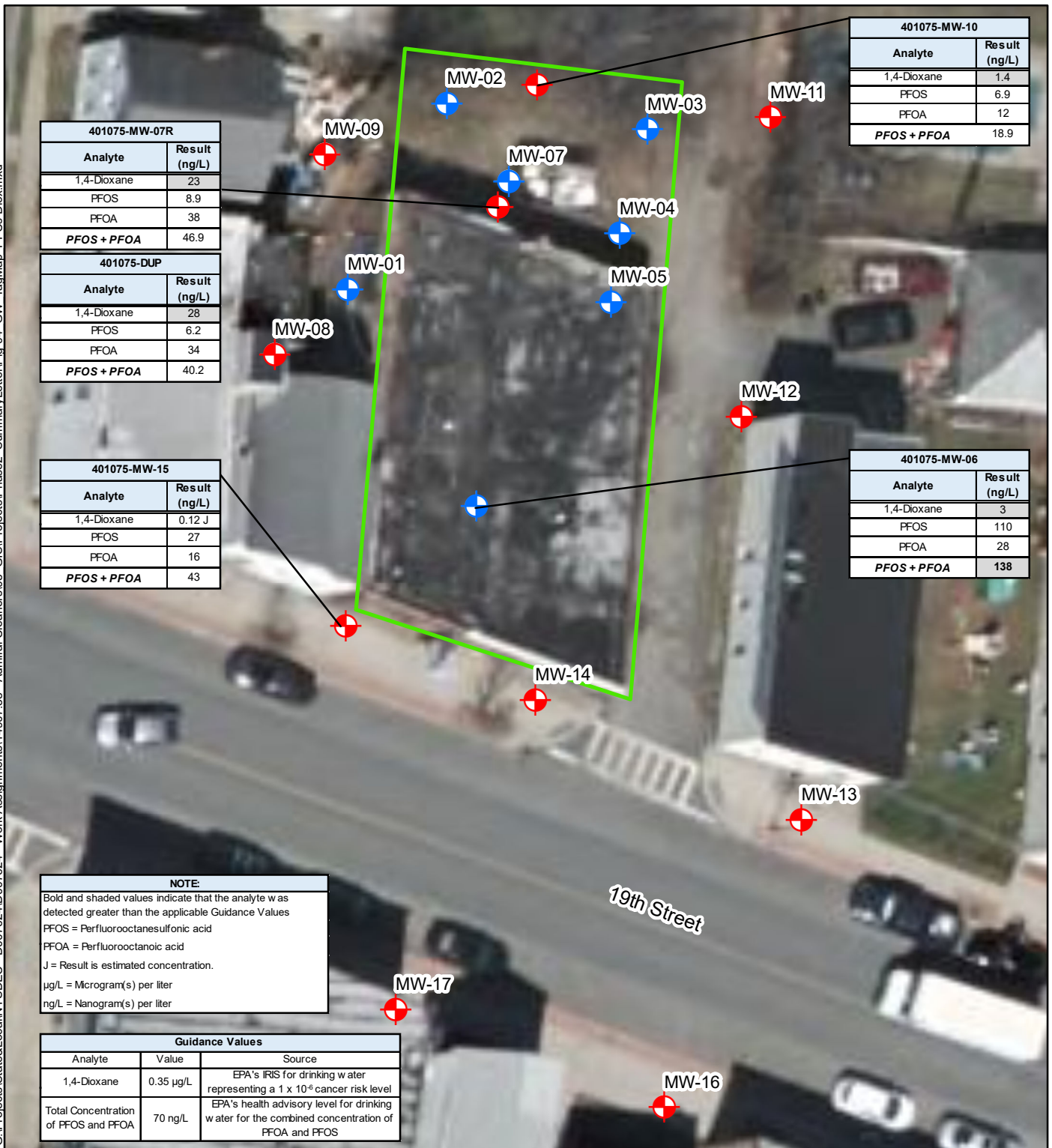
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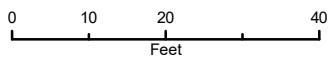
- ★ Site Location
- Admiral Cleaners Site Boundary
- ⊕ Phase I Monitoring Wells
- ⊕ Phase II Monitoring Wells

**NOTE:**  
 Bold and shaded values indicate that the analyte was detected greater than the applicable Guidance Values  
 PFOS = Perfluorooctanesulfonic acid  
 PFOA = Perfluorooctanoic acid  
 J = Result is estimated concentration.  
 µg/L = Microgram(s) per liter  
 ng/L = Nanogram(s) per liter

**Figure 3**  
**Remedial Investigation Phase II**  
**VOC Exceedances in Groundwater**  
**15-16 October 2018**  
 Admiral Cleaners  
 Watervliet, Albany County, NY



- Admiral Cleaners Site Boundary
- ★ Site Location
- ⊕ Phase I Monitoring Wells
- ⊕ Phase II Monitoring Wells

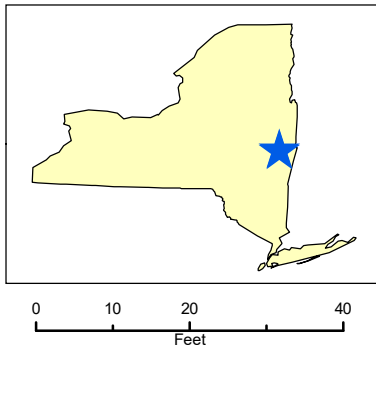
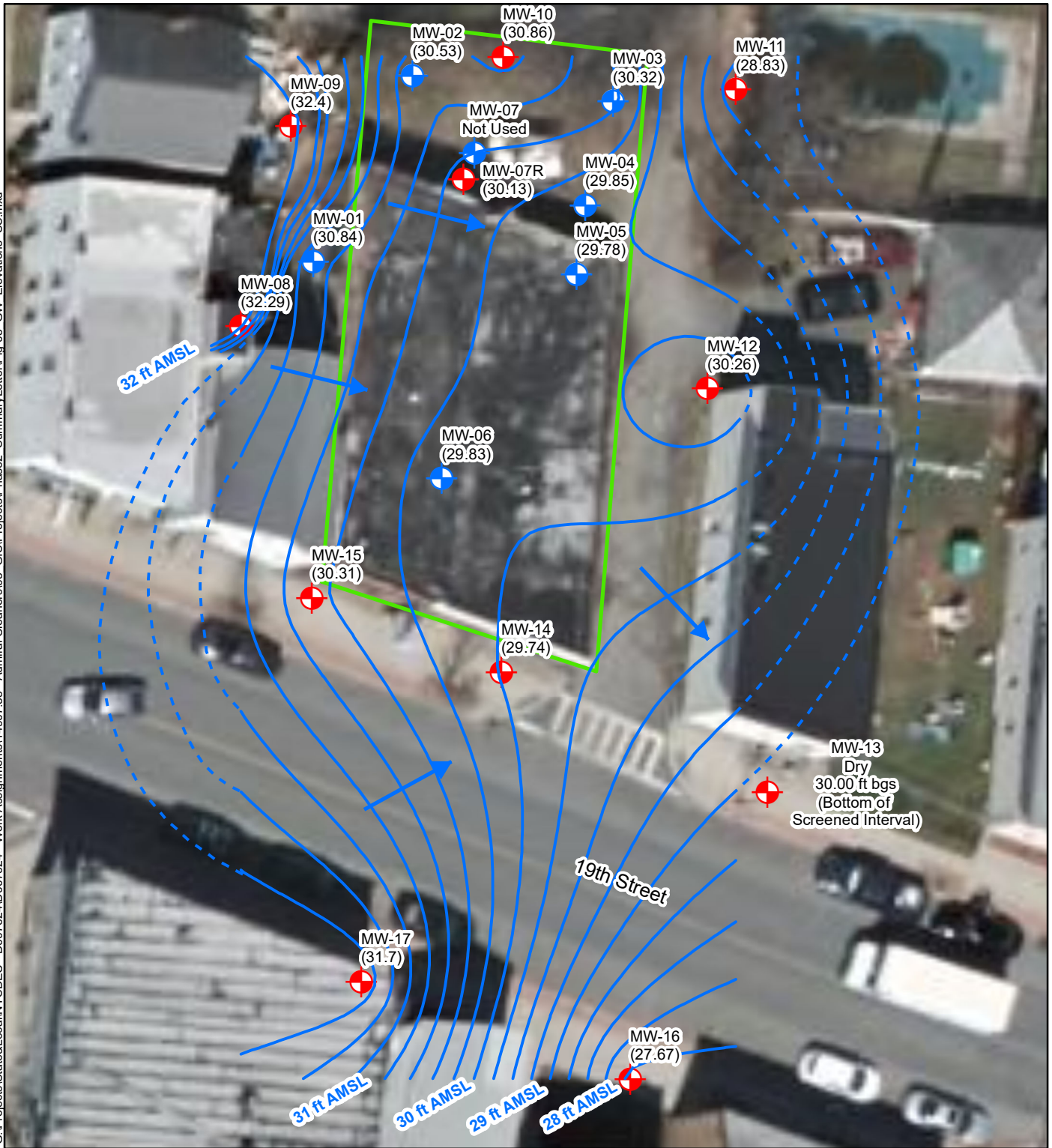


**Figure 4**  
**Remedial Investigation Phase II**  
**Groundwater Sample Locations**  
**and Detections for PFCs and 1,4-Dioxane**  
**15-16 October 2018**

Admiral Cleaners  
 Watervliet, Albany County, NY

Map Date: 1/24/2019  
 Projection: NAD 1983 State Plane New York  
 East FIPS 3101 Feet





- ★ Site Location
- Admiral Cleaners Site Boundary
- ⊕ Phase I Monitoring Wells
- ⊕ Phase II Monitoring Wells
- - - Inferred Groundwater Elevation Contour
- Interpolated Groundwater Elevation Contour
- ➔ Approximate Groundwater Flow Direction

**Figure 5**  
**Remedial Investigation Phase II**  
**Groundwater Elevations**  
**and Potentiometric Surface**  
**18 October 2018**

Admiral Cleaners  
 Watervliet, Albany County, NY

Map Date: 1/23/2019  
 Projection: NAD 1983 State Plane New York  
 East FIPS 3101 Feet

## **Tables**



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Table 1 Summary of Detected VOCs and SVOCs in Surface Soil Samples (September 2018)<sup>1</sup>

Analyte	Sample ID	401075-SS-01-00-12	401075-SS-01-12-24	401075-SS-02-00-12	401075-SS-02-12-24	401075-SS-04-00-12	401075-SS-04-12-24	401075-SS-06-00-12	401075-SS-06-12-24	401075-FD-092618	Unrestricted Use SCOs (mg/kg) <sup>2</sup>	Residential Use SCOs (mg/kg) <sup>2</sup>	Commercial Use SCOs (mg/kg) <sup>2</sup>									
	Laboratory ID	18I1225-01	18I1225-02	18I1225-03	18I1225-04	18I1225-05	18I1225-06	18I1225-07	18I1225-08	18I1225-09												
	Interval (in. bgs)	0-12	12-24	0-12	12-24	0-12	12-24	0-12	12-24	12-24												
	Sample Date	9/26/2018	9/26/2018	9/26/2018	9/26/2018	9/26/2018	9/26/2018	9/26/2018	9/26/2018	9/26/2018												
	Sample Type	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil												
<b>VOCs by EPA Method 8260C</b>																						
Cis-1,2-Dichloroethylene	mg/kg	(< 0.00089)	U	0.00086	J	(< 0.00095)	U	(< 0.00098)	U	(< 0.00086)	U	(< 0.0008)	U	(< 0.00085)	U	(< 0.00095)	U	(< 0.00088)	U	0.25	59	500
Tetrachloroethylene (PCE)	mg/kg	0.021		0.11		0.29		0.39		0.022		0.035		0.0085		0.0024		0.0032		1.3	5.5	150
Trichloroethylene (TCE)	mg/kg	(< 0.0011)	U	0.003		0.0061		0.0075		(< 0.0011)	U	(< 0.001)	U	(< 0.0011)	U	(< 0.0012)	U	(< 0.0011)	U	0.47	10	200
<b>SVOCs by EPA Method 8270D</b>																						
Anthracene	mg/kg	(< 0.058)	U	(< 0.057)	U	(< 0.057)	U	(< 0.062)	U	0.1	J	(< 0.058)	U	0.086	J	(< 0.061)	U	(< 0.053)	U	100	100	500
Benzo(A)Anthracene	mg/kg	0.08	J	0.13	J	0.17	J	(< 0.057)	U	<b>1.1</b>		0.057	J	0.47		0.082	J	(< 0.049)	U	1	1	5.6
Benzo(A)Pyrene	mg/kg	0.1	J	0.19	J	0.18	J	(< 0.067)	U	<b>1.5</b>		(< 0.063)	U	0.52		0.082	J	(< 0.058)	U	1	1	1
Benzo(B)Fluoranthene	mg/kg	0.12	J	0.19	J	0.22		(< 0.061)	U	<b>1.6</b>		0.075	J	0.62		0.088	J	(< 0.052)	U	1	1	5.6
Benzo(G,H,I)Perylene	mg/kg	0.091	J	0.13	J	0.13	J	(< 0.095)	U	1.1		(< 0.089)	U	0.38		(< 0.094)	U	(< 0.082)	U	100	100	500
Benzo(K)Fluoranthene	mg/kg	(< 0.063)	U	0.087	J	0.089	J	(< 0.067)	U	0.59		(< 0.063)	U	0.24		(< 0.066)	U	(< 0.058)	U	0.8	1	56
Benzoic Acid*	mg/kg	(< 0.21)	U	(< 0.21)	U	(< 0.21)	U	(< 0.23)	U	(< 0.23)	U	0.23	J	(< 0.21)	U	(< 0.23)	U	(< 0.2)	U	2.7	100	--
Carbazole	mg/kg	(< 0.052)	U	(< 0.051)	U	(< 0.051)	U	(< 0.056)	U	0.065	J	(< 0.052)	U	0.077	J	(< 0.055)	U	(< 0.048)	U	--	--	--
Chrysene	mg/kg	0.085	J	0.12	J	0.17	J	(< 0.067)	U	1		(< 0.063)	U	0.47		0.069	J	(< 0.058 )	U	1	1	56
Dibenz(A,H)Anthracene	mg/kg	(< 0.12)	U	(< 0.12)	U	(< 0.12)	U	(< 0.13)	U	0.29		(< 0.12)	U	(< 0.12)	U	(< 0.13)	U	(< 0.11)	U	0.33	0.33	0.56
Di-N-Butyl Phthalate	mg/kg	(< 0.088)	U	(< 0.086)	U	<b>0.43</b>		(< 0.094)	U	(< 0.094)	U	(< 0.088)	U	(< 0.084)	U	(< 0.092)	U	(< 0.081)	U	0.014 <sup>3</sup>	100 <sup>3</sup>	--
Fluoranthene	mg/kg	0.085	J	0.1	J	0.28		(< 0.071)	U	1.7		0.067	J	0.82		0.093	J	(< 0.061)	U	100	100	500
Indeno(1,2,3-C,D)Pyrene	mg/kg	(< 0.14)	U	0.15	J	(< 0.14)	U	(< 0.15)	U	<b>1.1</b>		(< 0.14)	U	0.4		(< 0.15)	U	(< 0.13)	U	0.5	0.5	5.6
Phenanthrene	mg/kg	(< 0.1)	U	(< 0.1)	U	0.17	J	(< 0.11)	U	0.4		(< 0.1)	U	0.45		(< 0.11)	U	(< 0.096)	U	100	100	500
Pyrene	mg/kg	0.086	J	0.1	J	0.25		(< 0.071)	U	1.8		(< 0.066)	U	0.76		0.098	J	(< 0.061 )	U	100	100	500

NOTES:

<sup>1</sup> Analytical data results provided by Con-Test Analytical. Data presented in this table is preliminary, unvalidated data.

<sup>2</sup> New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation (DER), 6 New York Code of Rules and Regulations Part 375 Environmental Remediation Programs Objectives (2006).

<sup>3</sup> NYSDEC DER Commissioner Policy-51, Soil Cleanup Objectives, Supplemental Soil Cleanup Objectives (2010).

ID = Identification  
EPA = United States Environmental Protection Agency  
SCOs = Soil Cleanup Objectives  
VOCs = Volatile organic compounds  
SVOCs = Semivolatile organic compounds  
in. bgs = Inches below ground surface  
mg/kg = Milligram(s) per kilogram = parts per million  
J = Result is estimated concentration.  
U = Analyte was analyzed for, but not detected below the laboratory detection limit.

**Bold values indicate that the analyte was detected greater than the NYSDEC Unrestricted Use Soil Cleanup Objective**  
***Bold, italicized values indicate that the analyte was detected greater than the NYSDEC Residential Use Soil Cleanup Objective***  
***Bold, italicized values with shaded cells indicate that the analyte was detected greater than the NYSDEC Commercial Use Cleanup Objective***  
DUPLICATE sample was collected at 401075-SS-06-12-24

Table 2 Summary of Detected Metals, Pesticides, PCBs, and Cyanide in Surface Soil Samples (September 2018)<sup>1</sup>

Analyte	Sample ID	401075-SS-01-00-12	401075-SS-01-12-24	401075-SS-02-00-12	401075-SS-02-12-24	401075-SS-04-00-12	401075-SS-04-12-24	401075-SS-06-00-12	401075-SS-06-12-24	401075-FD-092618	Unrestricted Use SCOs <sup>2</sup> (mg/kg)	Residential Use SCOs <sup>2</sup> (mg/kg)	Commercial Use SCOs <sup>2</sup> (mg/kg)									
	Laboratory ID	1811225-01	1811225-02	1811225-03	1811225-04	1811225-05	1811225-06	1811225-07	1811225-08	1811225-09												
	Interval (in. bgs)	0-12	12-24	0-12	12-24	0-12	12-24	0-12	12-24	12-24												
	Sample Date	9/26/2018	9/26/2018	9/26/2018	9/26/2018	43369.44097	9/26/2018	9/26/2018	9/26/2018	9/26/2018												
	Sample Type	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil												
<b>Metals by EPA Method 6010C, Mercury by EPA Method 7471B</b>																						
Aluminum	mg/kg	<b>15000</b>		<b>15000</b>		9400		8300		<b>16000</b>		<b>15000</b>		<b>13000</b>		<b>12000</b>		10000 <sup>3</sup>	--	--		
Antimony	mg/kg	(< 1.3)	U	(< 1.3)	U	(< 1.4)	U	5.4		(< 1.3)	U	(< 1.3)	U	(< 1.4)	U	(< 1.3)	U	12 <sup>3</sup>	--	--		
Arsenic	mg/kg	11		12		10		12		<b>17</b>		8.5		11		10		13	16	16		
Barium	mg/kg	130		130		130		220		190		170		140		160		100	350	350	400	
Beryllium	mg/kg	0.87		0.81		0.63		1.1		0.61		0.96		0.83		0.75		0.7	7.2	14	590	
Cadmium	mg/kg	0.51		0.38		0.8		0.56		0.42		0.69		0.36		0.92		0.34	2.5	2.5	9.3	
Calcium	mg/kg	2100	B	2200	B	<b>13000</b>	B	6600	B	1300	B	1600	B	<b>12000</b>	B	7200	B	2200	10000 <sup>3</sup>	--	--	
Chromium, Total	mg/kg	22		23		22		15		17		22		20		22		19	30	36	1500	
Cobalt	mg/kg	13		16		10		10		8.5		<b>30</b>		15		11		15	20	30	---	
Copper	mg/kg	<b>74</b>		<b>53</b>		<b>110</b>		<b>52</b>		<b>53</b>		42		49		<b>71</b>		46	50	270	270	
Iron	mg/kg	<b>38000</b>	D	<b>39000</b>	D	<b>26000</b>	D	<b>18000</b>	D	<b>21000</b>	D	<b>45000</b>	D	<b>32000</b>	D	<b>36000</b>	D	<b>29000</b>	---	2000 <sup>3</sup>	---	
Lead	mg/kg	<b>80</b>		<b>160</b>		<b>220</b>		<b>470</b>		<b>500</b>		45		<b>76</b>		<b>230</b>		<b>120</b>	63	400	1000	
Magnesium	mg/kg	5600	D	7100	D	3500	D	2400	D	2600	D	4800	D	6100	D	6000	D	5200	---	---	---	
Manganese	mg/kg	250		740		510		420		250		<b>3800</b>		1500		560		670	1600	2000	10000	
Mercury	mg/kg	<b>3</b>	D	<b>0.91</b>		<b>0.57</b>		<b>2.4</b>	D	<b>1.7</b>	D	<b>0.76</b>		<b>1.2</b>	D	<b>0.97</b>		<b>0.69</b>	0.18	0.81	2.8	
Nickel	mg/kg	23		<b>32</b>		29		22		16		<b>41</b>		27		27		27	30	140	310	
Potassium	mg/kg	2200	D	2300	D	1500	D	1200	D	1600	D	2600	D	2800	D	2200	D	1600	---	---	---	
Sodium	mg/kg	170		120		170		210		140		150		310		140		82	---	---	---	
Vanadium	mg/kg	30		26		22		31		20		34		32		28		23	39 <sup>3</sup>	100 <sup>3</sup>	---	
Zinc	mg/kg	100	B	<b>110</b>	B	<b>360</b>	B	<b>200</b>	B	87	B	<b>160</b>	B	<b>140</b>	B	<b>210</b>	B	88	109	2200	10000	
<b>Total Cyanide by EPA Method SW9014</b>																						
Cyanide	mg/kg	0.5	J	1.1		0.3	J	1.4		3.9		(< 0.25)	U	0.26	J	0.31	J	1.3		27	27	27
<b>Pesticides by EPA Method 8081B</b>																						
P,P'-DDE	mg/kg	<b>0.0048</b>		(< 0.00035)	U	<b>0.0036</b>	J	(< 0.00038)	U	(< 0.0038)	U	(< 0.00036)	U	(< 0.00034)	U	(< 0.00038)	U	(< 0.0016)	U	0.0033	18	62
P,P'-DDT	mg/kg	<b>0.009</b>		(< 0.00047)	U	0.011		(< 0.00051)	U	(< 0.0051)	U	(< 0.00048)	U	(< 0.00046)	U	(< 0.0005)	U	(< 0.0024)	U	0.0033	1.7	47
<b>Polychlorinated Biphenyls by EPA Method 8082A</b>																						
Aroclor 1268	mg/kg	(< 0.037)	U	(< 0.038)	U	0.047	JD	(< 0.041)	U	(< 0.041)	U	(< 0.038)	U	(< 0.037)	U	(< 0.04)	U	(< 0.13)	U	0.1	1	1
<b>Percent Solids by SM 2540G</b>																						
Solids, Percent	%	84.6		85.2		84.8		78.5		77.9		83.8		87.1		79.5		90.8		--	--	--
NOTES:																						
<sup>1</sup> Analytical data results provided by Con-Test Analytical. Data presented in this table is preliminary, unvalidated data.																						
<sup>2</sup> New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation, 6 New York Code of Rules and Regulations Part 375 Environmental Remediation Programs Objectives (2006).																						
<sup>3</sup> NYSDEC Division of Environmental Conservation Commissioner Policy-51, Soil Cleanup Objectives, Supplemental Soil Cleanup Objectives (2010).																						
ID = Identification																						
EPA = United States Environmental Protection Agency																						
SCOs = Soil Cleanup Objectives																						
in. bgs = Inches below ground surface																						
mg/kg = Milligram(s) per kilogram = parts per million																						
% = Percent																						
J = Result is estimated concentration.																						
U = Analyte was analyzed for, but not detected below the laboratory detection limit.																						
D = Indicates the compound concentration is the result of a dilution.																						
B = Indicates analyte was present in the method blank and sample																						
<b>Bold</b> values indicate that the analyte was detected greater than the NYSDEC Unrestricted Use Soil Cleanup Objective																						
<b>Bold Italicized</b> values indicate that the analyte was detected greater than the NYSDEC Residential Use Soil Cleanup Objective																						
<b>Shaded cells</b> indicate that the analyte was detected greater than the NYSDEC Commercial Use Cleanup Objective																						
DUPLICATE sample was collected at 401075-SS-06-12-24																						

Table 3 Summary of Detected VOCs in Soil Boring Samples (September 2018)<sup>1</sup>

Analyte	Sample ID	401075-SB-07R 8.5-9	401075-SB-7R 14.5-15	401075-SB-08 5-5.5	401075-SB-09 5-5.5	401075-SB-10 12-12.5	401075-SB-FD 092818	401075-SB-11 10.5-11	Unrestricted Use SCOs <sup>2</sup> (mg/kg)	Residential Use SCOs <sup>2</sup> (mg/kg)	Commercial Use SCOs <sup>2</sup> (mg/kg)							
	Laboratory ID																	
	Interval (ft. bgs)	8.5-9 ft	14.5-5 ft	5-5.5 ft	5-5.5 ft	12-12.5 ft	12-12.5 ft	10.5-11 ft										
	Sample Date	9/28/2018	9/28/2018	9/28/2018	9/28/2018	9/28/2018	9/28/2018	9/28/2018										
	Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil										
<b>VOCs by EPA Method 8260C</b>																		
1,2,4-Trimethylbenzene	mg/kg	<b>9.4</b>	(< 0.19)	U	<b>87</b>	D	(< 0.0008)	U	(< 0.00092)	U	(< 0.00087)	U	(< 0.00082)	U	3.6	47	190	
1,3,5-Trimethylbenzene (Mesitylene)	mg/kg	3.3	(< 0.13)	U	<b>33</b>	D	(< 0.0006)	U	(< 0.00069)	U	(< 0.00065)	U	(< 0.00062)	U	8.4	47	190	
Acetone	mg/kg	(< 0.54)	U	(< 10)	U	(< 2.2)	U	(< 0.023)	U	(< 0.027)	U	(< 0.025)	U	(< 0.024)	U	0.05	100	500
Chloroform	mg/kg	(< 0.01)	U	(< 0.23)	U	(< 0.05)	U	(< 0.0007)	U	(< 0.00081)	U	(< 0.00076)	U	(< 0.00072)	U	0.37	10	350
Cis-1,2-Dichloroethene	mg/kg	<b>1.1</b>	(< 0.15)	U	<b>2.2</b>	D	0.0018	J	0.00097	J	(< 0.00087)	U	0.0018	J	0.25	59	500	
Cymene	mg/kg	1.1	(< 0.16)	U	12	D	(< 0.0008)	U	(< 0.00092)	U	(< 0.00087)	U	(< 0.00082)	U	--	--	--	
Ethylbenzene	mg/kg	0.4	(< 0.13)	U	<b>3.8</b>	D	(< 0.0008)	U	(< 0.00092)	U	(< 0.00087)	U	(< 0.00082)	U	1	30	390	
Isopropylbenzene (Cumene)	mg/kg	0.47	(< 0.12)	U	<b>4.8</b>	D	(< 0.0007)	U	(< 0.00081)	U	(< 0.00076)	U	(< 0.00072)	U	2.3 <sup>3</sup>	100 <sup>3</sup>	--	
m,p-Xylene	mg/kg	<b>0.69</b>	(< 0.26)	U	<b>6.6</b>	D	(< 0.0017)	U	(< 0.002)	U	(< 0.0018)	U	(< 0.0017)	U	0.26	100	500	
Methylcyclohexane	mg/kg	0.04	J	(< 0.65)	U	0.35	D	(< 0.001)	U	(< 0.0012)	U	(< 0.0011)	U	(< 0.001)	U	--	--	--
Naphthalene	mg/kg	1.3	(< 0.13)	U	11	D	(< 0.0007)	U	(< 0.00081)	U	(< 0.00076)	U	(< 0.00072)	U	--	--	--	
N-Butylbenzene	mg/kg	2.3	(< 0.16)	U	26	D	(< 0.0007)	U	(< 0.00081)	U	(< 0.00076)	U	(< 0.00072)	U	--	--	--	
N-Propylbenzene	mg/kg	1.4	(< 0.13)	U	<b>14</b>	D	(< 0.0007)	U	(< 0.00081)	U	(< 0.00076)	U	(< 0.00072)	U	3.9	100	500	
O-Xylene (1,2-Dimethylbenzene)	mg/kg	<b>0.46</b>	(< 0.14)	U	<b>4.3</b>	D	(< 0.0007)	U	(< 0.00081)	U	(< 0.00076)	U	(< 0.00072)	U	0.26	100	500	
Sec-Butylbenzene	mg/kg	0.92	(< 0.13)	U	10	D	(< 0.001)	U	(< 0.0012)	U	(< 0.0011)	U	(< 0.001)	U	11	100	500	
T-Butylbenzene	mg/kg	0.097	(< 0.13)	U	0.95	D	(< 0.0009)	U	(< 0.001)	U	(< 0.00098)	U	(< 0.00092)	U	5.9	100	500	
Tetrachloroethene (PCE)	mg/kg	<b>9.6</b>	<b>330</b>	D	<b>100</b>	D	0.079		(< 0.0015)	U	(< 0.0014)	U	0.016		1.3	5.5	150	
Toluene	mg/kg	0.024	J	(< 0.18)	U	0.23	D	(< 0.0008)	U	(< 0.00092)	U	(< 0.00087)	U	(< 0.00082)	U	0.7	100	500
Trans-1,2-Dichloroethene	mg/kg	(< 0.0084)	U	(< 0.16)	U	(< 0.034)	U	0.001	J	(< 0.001)	U	(< 0.00098)	U	(< 0.00092)	U	--	--	--
Trichloroethene (TCE)	mg/kg	0.17		<b>0.87</b>	JD	<b>1.4</b>	D	0.0099		(< 0.0012)	U	(< 0.0011)	U	0.0012	J	0.47	10	200
<b>Percent Solids by SM 2540G</b>																		
Percent Solids	%	84.2		93.5		84.4		88.1		83.3		84.6		81.4		--	--	--
NOTES:																		
<sup>1</sup> Analytical data results provided by Con-Test Analytical. Data presented in this table is preliminary, unvalidated data.																		
<sup>2</sup> New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation, 6 New York Code of Rules and Regulations Part 375 Environmental Remediation Programs Objectives (2006).																		
<sup>3</sup> NYSDEC Division of Environmental Conservation Commissioner Policy-51, Soil Cleanup Objectives, Supplemental Soil Cleanup Objectives (2010).																		
ID = Identification																		
EPA = United States Environmental Protection Agency																		
SCOs = Soil Cleanup Objectives																		
ft. bgs = Feet below ground surface																		
mg/kg = Milligram(s) per kilogram = parts per million																		
% = Percent																		
J = Result is estimated concentration.																		
U = Analyte was analyzed for, but not detected below the laboratory detection limit.																		
D = Indicates the compound concentration is the result of a dilution.																		
B = Indicates analyte was present in the method blank and sample																		
<b>Bold</b> values indicate that the analyte was detected greater than the NYSDEC Unrestricted Use Soil Cleanup Objective																		
<b>Bold Italicized</b> values indicate that the analyte was detected greater than the NYSDEC Residential Use Soil Cleanup Objective																		
<b>Shaded cells</b> indicate that the analyte was detected greater than the NYSDEC Commercial Use Cleanup Objective																		
DUPLICATE sample was collected at 401075-SB-10 12-12.5																		

Table 3 Summary of Detected VOCs in Soil Boring Samples (September 2018)<sup>1</sup>

Analyte	Sample ID	401075-SB-12 0.2-1	401075-SB-13 4.5-5	401075-SB-14 5-6	401075-SB-15 10-11	401075-SB-16 5-5.5	401075-SB-17 5-5.7	Unrestricted Use SCOs <sup>2</sup> (mg/kg)	Residential Use SCOs <sup>2</sup> (mg/kg)	Commercial Use SCOs <sup>2</sup> (mg/kg)
	Laboratory ID									
	Interval (ft. bgs)	0.2-1 ft	4.5-5 ft	5-6 ft	10-11 ft	5-5.5 ft	5-5.7 ft			
	Sample Date	9/28/2018	9/27/2018	9/27/2018	9/26/2018	9/27/2018	9/27/2018			
	Sample Type	Soil	Soil	Soil	Soil	Soil	Soil			
<b>VOCs by EPA Method 8260C</b>										
1,2,4-Trimethylbenzene	mg/kg	(< 0.0008) U	0.001 J	(< 0.00075) U	(< 0.001) U	(< 0.0013) U	(< 0.0012) U	3.6	47	190
1,3,5-Trimethylbenzene (Mesitylene)	mg/kg	(< 0.0006) U	(< 0.00058) U	(< 0.00057) U	(< 0.00077) U	(< 0.00099) U	(< 0.00093) U	8.4	47	190
Acetone	mg/kg	<b>2.9</b>	(< 0.023) U	(< 0.022) U	(< 0.03) U	(< 0.039) U	(< 0.036) U	0.05	100	500
Chloroform	mg/kg	(< 0.0007) U	0.0011 J	(< 0.00066) U	(< 0.00089) U	0.0021 J	(< 0.0011) U	0.37	10	350
Cis-1,2-Dichloroethene	mg/kg	(< 0.0008) U	(< 0.00078) U	(< 0.00075) U	(< 0.001) U	(< 0.0013) U	(< 0.0012) U	0.25	59	500
Cymene	mg/kg	(< 0.0008) U	(< 0.00078) U	(< 0.00075) U	(< 0.001) U	(< 0.0013) U	(< 0.0012) U	--	--	--
Ethylbenzene	mg/kg	(< 0.0008) U	(< 0.00078) U	(< 0.00075) U	(< 0.001) U	(< 0.0013) U	(< 0.0012) U	1	30	390
Isopropylbenzene (Cumene)	mg/kg	(< 0.0007) U	(< 0.00068) U	(< 0.00066) U	(< 0.00089) U	(< 0.0012) U	(< 0.0011) U	2.3 <sup>3</sup>	100 <sup>3</sup>	--
m,p-Xylene	mg/kg	(< 0.0017) U	0.002 J	(< 0.0016) U	(< 0.0022) U	(< 0.0028) U	(< 0.0026) U	0.26	100	500
Methylcyclohexane	mg/kg	(< 0.001) U	(< 0.00097) U	(< 0.00094) U	(< 0.0013) U	(< 0.0017) U	(< 0.0016) U	--	--	--
Naphthalene	mg/kg	(< 0.0007) U	(< 0.00068) U	(< 0.00066) U	(< 0.00089) U	(< 0.0012) U	(< 0.0011) U	--	--	--
N-Butylbenzene	mg/kg	(< 0.0007) U	(< 0.00068) U	(< 0.00066) U	(< 0.00089) U	(< 0.0012) U	(< 0.0011) U	--	--	--
N-Propylbenzene	mg/kg	(< 0.0007) U	(< 0.00068) U	(< 0.00066) U	(< 0.00089) U	(< 0.0012) U	(< 0.0011) U	3.9	100	500
O-Xylene (1,2-Dimethylbenzene)	mg/kg	(< 0.0007) U	(< 0.00068) U	(< 0.00066) U	(< 0.00089) U	(< 0.0012) U	(< 0.0011) U	0.26	100	500
Sec-Butylbenzene	mg/kg	(< 0.001) U	(< 0.00097) U	(< 0.00094) U	(< 0.0013) U	(< 0.0017) U	(< 0.0016) U	11	100	500
T-Butylbenzene	mg/kg	(< 0.0009) U	(< 0.00087) U	(< 0.00085) U	(< 0.0011) U	(< 0.0015) U	(< 0.0014) U	5.9	100	500
Tetrachloroethene (PCE)	mg/kg	(< 0.0013) U	(< 0.0013) U	(< 0.0012) U	(< 0.0017) U	(< 0.0022) U	(< 0.002) U	1.3	5.5	150
Toluene	mg/kg	(< 0.0008) U	(< 0.00078) U	(< 0.00075) U	(< 0.001) U	(< 0.0013) U	(< 0.0012) U	0.7	100	500
Trans-1,2-Dichloroethene	mg/kg	(< 0.0009) U	(< 0.00087) U	(< 0.00085) U	(< 0.0011) U	(< 0.0015) U	(< 0.0014) U	--	--	--
Trichloroethene (TCE)	mg/kg	(< 0.001) U	(< 0.00097) U	(< 0.00094) U	(< 0.0013) U	(< 0.0017) U	(< 0.0016) U	0.47	10	200
<b>Percent Solids by SM 2540G</b>										
Percent Solids	%	87.6	96.1	96.1	92.2	97.1	87	--	--	--
NOTES:										
<sup>1</sup> Analytical data results provided by Con-Test Analytical. Data presented in this table is preliminary, unvalidated data. <sup>2</sup> New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation, 6 New York Code of Rules and Regulations Part 375 Environmental Remediation Programs Objectives (2006). <sup>3</sup> NYSDEC Division of Environmental Conservation Commissioner Policy-51, Soil Cleanup Objectives, Supplemental Soil Cleanup Objectives (2010). ID = Identification EPA = United States Environmental Protection Agency SCOs = Soil Cleanup Objectives ft. bgs = Feet below ground surface mg/kg = Milligram(s) per kilogram = parts per million % = Percent J = Result is estimated concentration. U = Analyte was analyzed for, but not detected below the laboratory detection limit. D = Indicates the compound concentration is the result of a dilution. B = Indicates analyte was present in the method blank and sample <b>Bold</b> values indicate that the analyte was detected greater than the NYSDEC Unrestricted Use Soil Cleanup Objective <b>Bold Italicized</b> values indicate that the analyte was detected greater than the NYSDEC Residential Use Soil Cleanup Objective <i>Shaded cells</i> indicate that the analyte was detected greater than the NYSDEC Commercial Use Cleanup Objective DUPLICATE sample was collected at 401075-SB-10 12-12.5										

**Table 4 Toxicity Characteristic Leaching Procedure Analytical Results (September 2018)**

		Location ID	WASTE CHAR	
		Sample Name	401075-WASTE CHAR	
		Sample Date	9/28/2018	
Analyte	RCRA TCLP	Unit	Result	
<b>Metals (6010C)</b>				
Arsenic	NSL	mg/kg	8.5	
Barium	NSL	mg/kg	130	
Cadmium	NSL	mg/kg	0.15 J	
Chromium, Total	NSL	mg/kg	23	
Lead	NSL	mg/kg	36	
Mercury	NSL	mg/kg	0.12	
Selenium	NSL	mg/kg	< 3 U	
Silver	NSL	mg/kg	< 0.21 U	
<b>Pesticides (8081B)</b>				
Chlordane	30	µg/l	< 0.2 U	
Endrin	20	µg/l	< 0.08 U	
Gamma Bhc (Lindane)	NSL	µg/l	< 0.03 U	
Heptachlor	8	µg/l	< 0.05 U	
Heptachlor Epoxide	8	µg/l	< 0.05 U	
Methoxychlor	10000	µg/l	< 0.5 U	
Toxaphene	500	µg/l	< 1 U	
<b>PCBs (8082A)</b>				
PCB-1016 (Aroclor 1016)	NSL	mg/kg	< 0.051 U	
PCB-1221 (Aroclor 1221)	NSL	mg/kg	< 0.055 U	
PCB-1232 (Aroclor 1232)	NSL	mg/kg	< 0.038 U	
PCB-1242 (Aroclor 1242)	NSL	mg/kg	< 0.042 U	
PCB-1248 (Aroclor 1248)	NSL	mg/kg	< 0.051 U	
PCB-1254 (Aroclor 1254)	NSL	mg/kg	< 0.055 U	
PCB-1260 (Aroclor 1260)	NSL	mg/kg	< 0.059 U	
PCB-1262 (Aroclor 1262)	NSL	mg/kg	< 0.042 U	
PCB-1268 (Aroclor 1268)	NSL	mg/kg	< 0.034 U	
<b>Herbicides (8151(S))</b>				
2,4-D (Dichlorophenoxyacetic Acid)	NSL	mg/l	< 0.05 U	
Silvex (2,4,5-TP)	NSL	mg/l	< 0.005 U	
<b>VOCs (8260C)</b>				
1,1-Dichloroethene	0.7	mg/l	< 0.01 U	
1,2-Dichloroethane	0.5	mg/l	< 0.01 U	
1,4-Dichlorobenzene	7.5	mg/l	< 0.01 U	
Benzene	0.5	mg/l	< 0.01 U	
Carbon Tetrachloride	0.5	mg/l	< 0.05 U	
Chlorobenzene	100	mg/l	< 0.01 U	
Chloroform	6	mg/l	< 0.02 U	
Methyl Ethyl Ketone (2-Butanone)	NSL	mg/l	< 0.2 U	
Tetrachloroethylene (PCE)	NSL	mg/l	< 0.01 U	
Trichloroethylene (TCE)	NSL	mg/l	< 0.01 U	
Vinyl Chloride	0.2	mg/l	< 0.02 U	
<b>SVOCs (8270D)</b>				
2,4,5-Trichlorophenol	400	mg/l	< 0.05 U	
2,4,6-Trichlorophenol	2	mg/l	< 0.05 U	
2,4-Dinitrotoluene	0.13	mg/l	< 0.05 U	
2-Methylphenol (O-Cresol)	NSL	mg/l	< 0.05 U	
3- And 4- Methylphenol (Total)	NSL	mg/l	< 0.05 U	
Hexachlorobenzene	0.13	mg/l	< 0.05 U	
Hexachlorobutadiene	NSL	mg/l	< 0.05 U	
Hexachloroethane	3	mg/l	< 0.05 U	
Nitrobenzene	2	mg/l	< 0.05 U	
Pentachlorophenol	100	mg/l	< 0.05 U	
Pyridine	5	mg/l	< 0.025 U	
<b>Various Parameters</b>				
Solids, Percent	NSL	%	92.2	
Free Liquids	NSL	unknown	0	
Ignitability	NSL	unknown	0	
pH	12.5	ph units	8.9	
Reactive Cyanide	NSL	mg/kg	< 3.9 U	
Specific Conductance	NSL	umhos/cm	21	
Sulfide Reactive	NSL	mg/kg	< 20 U	
Notes: U = Indicates That The Compound Was Analyzed For, But Not Detected. J = Detected But Below The Reporting Limit (Lowest Calibration Standard); Therefore, Result Is An Estimated Concentration (Clp J-Flag). RCRA TCLP, October 2009, <a href="http://www.epa.gov/osw/hazard/wastetypes/characteristic.htm">http://www.epa.gov/osw/hazard/wastetypes/characteristic.htm</a> <b>Cells exceeding the RCRA TCLP screening levels are shaded gray and boldfaced</b>				

**Table 5 Remedial Investigation Phase II Soil Boring and Groundwater Monitoring Well Construction Details**

	Location ID	MW-07R	MW-08	MW-09	MW-10	MW-11	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17
	Location Description	Soil Boring and Monitoring Well	Soil Boring and Monitoring Well	Soil Boring and Monitoring Well	Soil Boring and Monitoring Well	Soil Boring and Monitoring Well	Soil Boring and Monitoring Well	Soil Boring and Monitoring Well	Soil Boring and Monitoring Well	Soil Boring and Monitoring Well	Soil Boring and Monitoring Well	Soil Boring and Monitoring Well
	Install Date	9/28/2018	9/28/2018	9/28/2018	9/28/2018	9/28/2018	9/28/2018	9/27/2018	9/27/2018	9/26/2018	9/27/2018	9/27/2018
<b>Soil Boring Details</b>												
Depth to Refusal	ft bgs	15	10	9	15	13	7	5	6	11	5.5	7.5
Surface Conditions		Vegetated	Vegetated	Vegetated	Vegetated	Vegetated	Concrete	Concrete	Concrete	Concrete	Concrete	Concrete
Primary Soil Types (top to bottom of soil boring)		Glacial till and fill material; dry, stiff clay; plastic, moist clay; fine pulverized shale	Glacial till; dry, stiff clay; shale gravel and brittle silty clay; fine pulverized shale	Dry, stiff clay; shale gravel and brittle silty clay; fine pulverized shale	Glacial till; dry, stiff clay; plastic, moist clay; dry stiff clay; fine pulverized shale	Glacial till and fill material; dry stiff clay; moist, stiff clay; fine pulverized shale	Slightly moist, stiff clay; fine pulverized shale	Glacial till and stiff, dry clay; fine pulverized shale	slightly moist, stiff clay; shale gravel; fine pulverized shale	Stiff, moist clay; shale gravel; fine pulverized shale	Glacial till and fill material; stiff, dry clay; shale gravel; pulverized shale	Glacial till and fill material; dry stiff clay; slightly moist, stiff clay; shale gravel; pulverized shale
Max PID reading	ppm	> 15000	365	12.6	0.6	0.6	12	14.5	0.1	1.4	0.1	0.0
Depth Interval of Max PID reading	ft bgs	14-15	5-6	1-2	5-6	9-10	6-7	4-5	3-4	10-11	4-6	--
Sample Interval	ft bgs	8.5-9 and 14.5-15	5-5.5	5-5.5	12-12.5	10.5-11	0.2-1	4.5-5	5-6	10-11	5-5.5	5-5.7
<b>Monitoring Well Construction Details</b>												
Monitoring Well Diameter	in.	2	1	2	1	1	1	2	2	2	1	1
PVC Casing	ft bgs	0-5	0-5	0-5	0-5	0-8	0-2	0-2	0-3	0-5	0-2.5	0-3
PVC Screen	ft bgs	5-12	5-10	5-10	5-15	8-13	2-7	2-5	3-6	5-10	2.5-5.5	3-8
Stick up or Flush Mount	--	Flush	Flush	Flush	Flush	Flush	Flush	Flush	Flush	Flush	Flush	Flush
Grout Interval	ft bgs	0-1	--	0-1	--	--	--	N/A	0-1	0-1	0-0.5	0-1
Bentonite Seal Interval	ft bgs	3-1	--	1-3	--	--	--	1.2-0	1-2	1-3	0.5-1.5	1-2
Sand Pack Interval	ft bgs	13-3	Prepacked Screen	3-10	Prepacked Screen	Prepacked Screen	Prepacked Screen	1.2-5	2-6	3-10	1.5-5.5	2-8
DTW at Well Development	ft bgs	6.97	6.2	5.61	7.06	8.15	5.06	Dry	4.89	4.89	6.19	3.14
DTB at Well Development	ft bgs	10.89	9.05	9.25	13.71	11.79	6.11	4.42	5.72	9.31	7.7	4.7
NOTES: ft bgs = Feet below ground surface ppm = Parts per million PVC = Polyvinyl chloride DTW = Depth to water DTB = Depth to bottom												

Table 6 Summary of VOCs Detected in Groundwater Samples (October 2018)

Analyte	Sample ID	401075-MW-01	401075-MW-02	401075-MW-03	401075-MW-04	401075-MW-05	401075-MW-06	401075-MW-07	401075-MW-07R	401075-MW-07R	401075-MW-07R	NYSDEC Ambient Water Quality Standards <sup>2</sup>					
	Laboratory ID	18J0859-01	18J0859-02	18J0859-03	18J0859-04	18J0859-05	18J0859-06	18J0859-07	18J0859-08	18J0859-18							
	Sample Date	10/16/2018	10/16/2018	10/15/2018	10/16/2018	10/16/2018	10/15/2018	10/16/2018	10/15/2018	10/15/2018							
	Sample Type	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater							
VOCs via EPA Method 8260C																	
1,1-Dichloroethene	µg/L	(< 2.1) U	(< 0.21) U	(< 0.21) U	0.23 J	J	2.2	JD	22	JD	0.38	J	(< 42) U	(< 42) U	5		
1,2,4-Trimethylbenzene	µg/L	(< 1.8) U	(< 0.18) U	(< 0.18) U	(< 0.18) U	(< 0.18) U	(< 0.9) U	(< 18) U	(< 18) U	(< 18) U	(< 36) U	U	(< 36) U	(< 36) U	5		
Bromodichloromethane	µg/L	(< 3) U	(< 0.3) U	(< 0.3) U	(< 0.3) U	(< 0.3) U	(< 1.5) U	(< 30) U	(< 30) U	(< 30) U	(< 59) U	U	(< 59) U	(< 59) U	--		
Chloroform	µg/L	(< 2.2) U	(< 0.22) U	1.6 J	J	(< 0.22) U	(< 1.1) U	(< 22) U	(< 22) U	(< 22) U	(< 44) U	U	(< 44) U	(< 44) U	7		
Cis-1,2-Dichloroethene	µg/L	<b>110</b>	D	2.1	3.9	<b>69</b>	<b>740</b>	D	<b>16000</b>	D	<b>160</b>	U	<b>1500</b>	D	<b>1400</b>	D	5
m,p-Xylene	µg/L	(< 2.6) U	(< 0.26) U	(< 0.26) U	(< 0.26) U	(< 0.26) U	1.6	JD	(< 26) U	(< 26) U	(< 26) U	U	(< 51) U	(< 51) U	5		
O-Xylene (1,2-Dimethylbenzene)	µg/L	(< 1.3) U	(< 0.13) U	(< 0.13) U	(< 0.13) U	(< 0.13) U	0.95	JD	(< 13) U	(< 13) U	(< 13) U	U	(< 26) U	(< 26) U	5		
Tert-Butyl Alcohol	µg/L	(< 22) U	(< 2.2) U	(< 2.2) U	(< 2.2) U	(< 2.2) U	(< 11) U	U	(< 220) U	U	(< 2.2) U	U	(< 430) U	(< 430) U	--		
Tetrachloroethene (PCE)	µg/L	<b>440</b>	D	<b>28</b>	<b>8.9</b>	<b>9.4</b>	<b>51</b>	D	(< 27) U	U	<b>23</b>	U	<b>11000</b>	D	<b>14000</b>	D	5
Toluene	µg/L	(< 1.7) U	(< 0.17) U	(< 0.17) U	(< 0.17) U	(< 0.17) U	1.1	JD	(< 17) U	U	(< 17) U	U	(< 34) U	(< 34) U	5		
Trans-1,2-Dichloroethene	µg/L	1.8	JD	(< 0.15) U	(< 0.15) U	0.3 J	4.2	JD	<b>27</b>	JD	3.6	U	(< 30) U	(< 30) U	5		
Trichloroethene (TCE)	µg/L	<b>77</b>	D	1.4	1.5	2.7	<b>26</b>	D	<b>180</b>	D	<b>29</b>	U	<b>1600</b>	D	<b>1600</b>	D	5
Vinyl Chloride	µg/L	(< 1.3) U	(< 0.13) U	(< 0.13) U	(< 0.13) U	(< 0.13) U	<b>2.9</b>	JD	<b>41</b>	JD	(< 0.13) U	U	(< 27) U	(< 27) U	2		

Analyte	Sample ID	401075-MW-08	401075-MW-09	401075-MW-10	401075-MW-11	401075-MW-12	401075-MW-14	401075-MW-15	401075-MW-16	401075-MW-17	NYSDEC Ambient Water Quality Standards <sup>2</sup>
	Laboratory ID	18J0859-09	18J0859-10	18J0859-11	18J0859-12	18J0859-13	18J0859-14	18J0859-15	18J0859-16	18J0859-17	
	Sample Date	10/16/2018	10/16/2018	10/15/2018	10/16/2018	10/16/2018	10/16/2018	10/15/2018	10/15/2018	10/15/2018	
	Sample Type	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	
VOCs via EPA Method 8260C											
1,1-Dichloroethene	µg/L	(< 0.21) U	(< 0.21) U	(< 0.21) U	(< 0.21) U	(< 0.21) U	(< 0.21) U	(< 0.21) U	(< 0.21) U	(< 0.21) U	5
1,2,4-Trimethylbenzene	µg/L	(< 0.18) U	(< 0.18) U	(< 0.18) U	(< 0.18) U	(< 0.18) U	0.21	J	(< 0.18) U	(< 0.18) U	5
Bromodichloromethane	µg/L	(< 0.3) U	(< 0.3) U	(< 0.3) U	(< 0.3) U	(< 0.3) U	(< 0.3) U	0.81	U	(< 0.3) U	--
Chloroform	µg/L	(< 0.22) U	(< 0.22) U	(< 0.22) U	(< 0.22) U	(< 0.22) U	(< 0.22) U	<b>12</b>	U	(< 0.22) U	7
Cis-1,2-Dichloroethene	µg/L	0.36	J	<b>5.6</b>	2	0.31	J	(< 0.15) U	0.47	J	5
m,p-Xylene	µg/L	(< 0.26) U	(< 0.26) U	(< 0.26) U	(< 0.26) U	(< 0.26) U	(< 0.26) U	(< 0.26) U	(< 0.26) U	(< 0.26) U	5
O-Xylene (1,2-Dimethylbenzene)	µg/L	(< 0.13) U	(< 0.13) U	(< 0.13) U	(< 0.13) U	(< 0.13) U	(< 0.13) U	(< 0.13) U	(< 0.13) U	(< 0.13) U	5
Tert-Butyl Alcohol	µg/L	(< 2.2) U	(< 2.2) U	(< 2.2) U	(< 2.2) U	(< 2.2) U	3.1	J	(< 2.2) U	U	--
Tetrachloroethene (PCE)	µg/L	1.5	<b>32</b>	2.8	0.54	J	1.9	3.5	1.8	U	5
Toluene	µg/L	(< 0.17) U	(< 0.17) U	(< 0.17) U	(< 0.17) U	(< 0.17) U	(< 0.17) U	(< 0.17) U	(< 0.17) U	(< 0.17) U	5
Trans-1,2-Dichloroethene	µg/L	(< 0.15) U	0.67	J	(< 0.15) U	(< 0.15) U	(< 0.15) U	(< 0.15) U	(< 0.15) U	(< 0.15) U	5
Trichloroethene (TCE)	µg/L	(< 0.2) U	3.4	0.39	J	(< 0.2) U	(< 0.2) U	(< 0.2) U	(< 0.2) U	(< 0.2) U	5
Vinyl Chloride	µg/L	(< 0.13) U	(< 0.13) U	(< 0.13) U	(< 0.13) U	(< 0.13) U	(< 0.13) U	(< 0.13) U	(< 0.13) U	(< 0.13) U	2

NOTES:  
<sup>1</sup> Data presented in this table is preliminary, unvalidated data.  
<sup>2</sup> New York Code of Rules and Regulations Part 703.5 Class GA Groundwater Quality Regulations, as presented in the Division of Water Technical and Operational Guidance Series 1.1.1, 1998, as amended.  
ID = Identification  
VOC = Volatile organic compound  
µg/L = Microgram(s) per liter  
J = Result is estimated concentration.  
U = Analyte was analyzed for, but not detected below the laboratory detection limit.  
D = Indicates that the compound concentration is the result of a dilution.  
**Bold and shaded values indicate that the analyte was detected greater than the NYSDEC Ambient Water Quality Standards.**  
DUPLICATE sample was collected at MW-07R.  
Analytical data results provided by Con-Test Analytical.



Table 7 Summary of 1,4-Dioxane and PFCs Detected in Groundwater Samples (October 2018)<sup>1</sup>

Analyte	Sample ID	401075-MW-06	401075-MW-07R	401075-DUP	401075-MW-10	401075-MW-10 <sup>2</sup>	401075-MW-15	Guidance Values	
	Laboratory ID	18J0765-02	18J0765-01	18J0765-06	18J0765-04	18J0859-20	18J0765-03		
	Sample Date	10/15/2018	10/15/2018	10/15/2018	10/15/2018	10/16/2018	10/15/2018		
	Sample Type	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater		
<b>1,4-Dioxane via EPA Method 8270 SIM</b>									
1,4-Dioxane (P-Dioxane)	µg/L	3	23	28	--	1.4 <sup>2</sup>	0.12	J	0.35 <sup>3</sup>
<b>PFCs via EPA Method 537</b>									
Perfluorooctanesulfonic acid (PFOS)	ng/L	110	8.9	6.2	6.9	--	27		--
Perfluorooctanoic acid (PFOA)	ng/L	28	38	34	12	--	16		--
<b>Total of PFOS and PFOA</b>	ng/L	<b>138</b>	46.9	40.2	18.9	--	43		70 <sup>4</sup>
Perfluorobutanesulfonic acid (PFBS)	ng/L	4.2	(<2.0)	U	2.6	10	5.7		--
Perfluorohexanoic acid (PFHxA)	ng/L	10	5.8	7	14	--	9.4		--
Perfluoroheptanoic acid (PFHpA)	ng/L	7.2	9.3	9.4	4.6	--	7.6		--
Perfluorobutanoic acid (PFBA)	ng/L	5.2	6.2	4.5	4	--	2.5		--
Perfluoropentanoic acid (PFPeA)	ng/L	7	190	170	14	--	9.3		--
6:2 Fluorotelomersulfonate (6:2 FTS)	ng/L	6	(<2.0)	U	(<2.0)	U	(<2.0)	U	--
Perfluorohexanesulfonic acid (PFHxS)	ng/L	14	3.9	3.2	5.5	--	8.5		--
Perfluorononanoic acid (PFNA)	ng/L	4.4	(<2.0)	U	(<2.0)	U	(<2.0)	U	--
Perfluorodecanoic acid (PFDA)	ng/L	2	(<2.0)	U	(<2.0)	U	(<2.0)	U	--
NOTES:									
<sup>1</sup> Data presented in this table is preliminary, unvalidated data.									
<sup>2</sup> Sample for 1,4-Dioxane for 401075-MW-10 collected one day after samples for PFOA and PFAS due to insufficient volume in well.									
<sup>3</sup> U.S. Environmental Protection Agency (USEPA)'s Integrated Risk Information System for drinking water representing a 1 x 10 <sup>-6</sup> cancer risk level (2013).									
<sup>4</sup> USEPA health advisory level for drinking water - combined concentrations of PFOA and PFAS									
ID = Identification									
VOC = Volatile organic compound									
µg/L = Microgram(s) per liter									
ng/L = Nanogram(s) per liter									
J = Result is estimated concentration.									
U = Analyte was analyzed for, but not detected below the laboratory detection limit.									
Bold and shaded values indicate that the analyte was detected greater than the NYSDEC Ambient Water Quality Standards.									
DUPLICATE sample was collected at MW-07R.									
Analytical data results provided by Con-Test Analytical.									

**Table 8 Summary of Microbiological Community Structure Sampling and Monitored Natural Attenuation Parameters  
(October 2018)**

Analyte	Sample ID	401075-MW-06	401075-MW-07R	401075-MW-10			
	Laboratory ID	18J0765-02	18J0765-01	18J0765-04			
	Sample Date	10/15/2018	10/15/2018	10/15/2018			
	Sample Type	Groundwater	Groundwater	Groundwater			
<b>Dechlorinating Bacteria<sup>1</sup></b>							
<i>Dehalococcoides (DHC)</i>	cells/mL	(<1.3)	U	34.3		(<0.5)	U
<b>DHC Functional Genes<sup>1</sup></b>							
tceA Reductase (TCE)	cells/mL	(<1.3)	U	(<0.4)	U	(<0.5)	U
BAVI Vinyl Chloride Reductase (BVC)	cells/mL	(<1.3)	U	(<0.4)	U	(<0.5)	U
Vinyl Chloride Reductase	cells/mL	(<1.3)	U	(<0.4)	U	(<0.5)	U
<b>Dissolved Gases via EPA Method RSK175<sup>2</sup></b>							
Ethane	mg/L	(<0.0036)	U	(<0.0036)	U	(<0.0036)	U
Ethene	mg/L	(<0.0045)	U	(<0.0045)	U	(<0.0045)	U
Methane	mg/L	3		0.21		0.0089	
<b>Major Anions via ASTM D516, SM2320B, and SM4500<sup>2</sup></b>							
Sulfate	mg/L	17		140		160	
Alkalinity	mg/L	480		2200	SM-01	720	
Nitrite as N	mg/L	(<0.010)	U	(<0.010)	U	(<0.010)	U
Nitrate as N	mg/L	(<0.050)	U	(<0.050)	U	6.1	
<b>Total Organic Carbon via SM 5310B<sup>2</sup></b>							
Total Organic Carbon	mg/L	8.4	--	41		13	W-18
<p>NOTES:</p> <p><sup>1</sup> Data provided by Microbial Insights, Inc.</p> <p><sup>2</sup> Analytical results provided by Con-Test Analytical. Data presented in this table is preliminary, unvalidated data.</p> <p>ID = Identification</p> <p>EPA = United States Environmental Protection Agency</p> <p>cells/mL = Cells per milliliter</p> <p>mg/L = Milligram(s) per liter</p> <p>U = Analyte was analyzed for, but not detected</p> <p>SM-01 = Sample container does not satisfy method specifications.</p> <p>W-18 = Test replicate shows more than 10% difference between values.</p>							

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## **Attachment 1**

# **Remedial Investigation Phase II Soil Boring Logs**

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EA Engineering, P.C.  
EA Science and Technology

LOG OF SURFACE SOIL

Coordinates: Northing: \_\_\_\_\_ Easting: \_\_\_\_\_  
 Surface Elevation: \_\_\_\_\_  
 Reference Elevation: \_\_\_\_\_  
 Reference Description: \_\_\_\_\_

Job No. 14907.38 Client: NYSDEC  
 Project: Admiral Cleaners

Location  
Watervliet, NY

Sampling Location Description:  
Between MW-07R and building

Sample Location ID:  
SS-04-01 (ET)

Sheet 1 of 1

Sampling Date/Time

Sample Method:

Start

Finish

Macrocore

DATE 9/26/18  
TIME 1105

DATE 9/26/18  
TIME 1118

Surface Conditions: vegetated

Weather: overcast

Temperature: 75

Sample Interval (in.)	PID (ppm)	TCL VOCs	TCL SVOCs	TCL Metals	TCL PCBs/Pesticides	USCS Log
0-12	7.2	X	X	X	X	
12-24	3.6	X	X	X	X	

0-9 in: fine sand with some gravel, trace vegetation, trace clay, loose, dry. Med brown  
 9-12 in: clay with some sand, brown-red, compact, dry  
 Med brown, sand with clay, little gravel, compact, dry

Logged by: SS/ET

Date: 9/26/18 (ET)

Sample Interval: 0-12

Time: 1115 (ET) 1116

12-24

1116 (ET) 1115



EA Engineering, P.C.  
EA Science and Technology

LOG OF SURFACE SOIL

Coordinates: Northing: \_\_\_\_\_ Easting: \_\_\_\_\_  
 Surface Elevation: \_\_\_\_\_  
 Reference Elevation: \_\_\_\_\_  
 Reference Description: \_\_\_\_\_

Job. No. 14907.38 Client: NYSDEC  
 Project: Admiral Cleaners

Location  
 Watervliet, NY

Sampling Location Description:  
 East side of backyard,  
 near fence, next to MW-01

Sample Location ID:  
 55-02

Sheet 1 of 1

Sampling Date/Time

Sample Method:

Start

Finish

Macrocore

DATE 9/26/18  
 TIME .

DATE 9/26/18  
 TIME

Surface Conditions: Vegetated  
 Weather: Overcast  
 Temperature: 75F

Sample Interval (in.)	PID (ppm)	TCL VOCs	TCL SVOCs	TCL Metals	TCL PCBs/Pesticides	USCS Log	
0-12	13.5	X	X	X	X		Dark brown, med-fine sand, little clay, trace gravel, med-compact, dry
12-24	5.6	X	X	X	X		MS/MSD. Med gray, med-fine sand, with clay, little gravel, compact, dry, trace fill

Logged by: SS/ET

Date: 9/26/18

Sample Interval: 0-12

Time: 1145

12-24

\* MS/MSD @ 12"-24"

1146



EA Engineering, P.C.  
EA Science and Technology

LOG OF SURFACE SOIL

Coordinates: Northing: \_\_\_\_\_ Easting: \_\_\_\_\_  
 Surface Elevation: \_\_\_\_\_  
 Reference Elevation: \_\_\_\_\_  
 Reference Description: \_\_\_\_\_

Job No. 14907.38 Client: NYSDEC  
 Project: Admiral Cleaners Location: Watervliet, NY

Sampling Location Description: Between MW-3 and MW-4  
 Sample Location ID: SS-04  
 Sheet 1 of 1

Sample Method: Hand auger (0-12) Geoprobe (12-24)  
 Start DATE 9/26/18 TIME 1030  
 Finish DATE 9/26/18 TIME 1100

Surface Conditions: Vegetated  
 Weather: overcast  
 Temperature: 73F

Sample Interval (in.)	PID (ppm)	TCL VOCs	TCL SVOCs	TCL Metals	TCL PCBs/Pesticides	USCS Log	
0-12	5.3	X	X	X	X		Brown-Dark brown, loose, sandy soil w/some gravel, trace vegetation, dry, trace fill (glass/brick)
12-24	4.5						12-18: Crushed brick 18-24: same as 0-12

Logged by: SS/ET  
 Sample Interval: 0-12

Date: 9/26/18  
 Time: 1030 (ET) 1035

12-24

1100





EA Engineering, P.C.  
EA Science and Technology

LOG OF SURFACE SOIL

Coordinates: Northing: \_\_\_\_\_ Easting: \_\_\_\_\_  
 Surface Elevation: \_\_\_\_\_  
 Reference Elevation: \_\_\_\_\_  
 Reference Description: \_\_\_\_\_

Job No. 14907.38 Client: NYSDEC  
 Project: Admiral Cleaners

Location  
Watervliet, NY

Sampling Location Description:  
Back of property, between  
MW-10 and MW-074

Sample Location ID:  
SS-06

Sheet 1 of 1

Sampling Date/Time

Sample Method:

Start

Finish

Macrocore

DATE 9/26/18  
TIME 1120

DATE 9/26/18  
TIME 1130

Surface Conditions:

Vegetated

Weather:

75F Overcast

Temperature:

75F

Sample Interval (in.)	PID (ppm)	TCL VOCs	TCL SVOCs	TCL Metals	TCL PCBs/ Pesticides	USCS Log	
0-12	14.0	X	X	X	X		Same as below, plus trace vegetation
12-24	11.0	X	X	X	X		FD collected here, fine-med sand, med-dark brown, little gravel, loose, trace clay, trace fill

Logged by: SS/ET

Date: 9/26/18

Sample Interval: 0-12

Time: 1125

12-24

\* Duplicate @ 12"-24"



A Engineering, P.C.  
A Science and Technology

LOG OF SOIL BORING

Coordinates: Northing \_\_\_\_\_ Easting: \_\_\_\_\_  
 Surface Elevation: \_\_\_\_\_  
 Casing Below Surface: \_\_\_\_\_  
 Reference Elevation: \_\_\_\_\_  
 Reference Description: \_\_\_\_\_

Job No. 14907.38	Client: NYSDEC	Location: Watervliet, NY
Project: Admiral Cleaners		Soil Boring Number: MW-7R
Drilling Method: Geoprobe Direct-Push		Sheet 1 of 1
Sampling Method:		
Macrocore		Drilling
Water Level: 8.5-9.0	Start	Finish
Time:	DATE 9/29/13	DATE 9/28/13
Date:	TIME 0700	TIME 1100

Well Description	Boring Diagram	Recovery (Recov./Driven)	PID (ppm)	Depth in Feet	USCS Log	Surface Conditions: GRAVE/ORGANICS Weather: OVERCAST, LT RAIN, Temperature: 55F
Riser 5 F E E L S A N D C R E E K	Grout 5 F E E L S A N D C R E E K	26" 60" 60" 60"	0.1 2.0 145 632 405 520 1500	0		0-0.8' ORGANICS, VEGETATIVE MATTEL
				1		0.4-2.2 BROWN, SL MOIST LOOSE SILTY CLAY
				2		trace BRICK FRAGMENTS
				3		
				4		
				5		5-8.5 BROWN-GREY, DRY, HARD, STIFF CLAY
				6		8.5-10 - SAA, WET, LOOSE
				7		
				8		
				9		
				10		10-11.2 - BROWN, HARD, LOOSE, MOSTLY DRY CLAY
				11		11.2-12.5 - GREY, LOOSE, DRY, SILTY CLAY, SOME GRAVEL
				12		12.5-15 - GREY, DRY, LOOSE, BRITTLE CLAY-SIZED ROCK, SOME GRAVEL
				13		
				14		
15		REFUSAL @ 15'				
16						
17						
18		ANGER GRINDING @ 10-12'				
19		DCL ABOVE WELL @ 12' DEEP				
20		12-7 SCREEN 5-0 RISER				
21		12-3 SAND 3-1 SEAL				
22		0-1 Grout				
23						
24		5.5 BAGS SAND				
25						
26		SAMPLES				
27		* 401075-SB-07R - 8.5'-9' +MS/MSD				
28		* 401075-SB-07R - 14.5'-15'				
29						

Monitoring Well Construction Information		Sample Information	
Monitoring Well Diameter: 2 in	Bottom of Monitoring Well: 7.2 ft bgs	Interval(s): 8.5-9.0 *MS/MSD	Description: 14.5-15.0
Stick Up or Flush Mount: FLUSH	Screen Interval: 12 To 5 ft bgs		
Riser Interval: 5 To 0 ft bgs	Sand Pack Interval: 12 To 3 ft bgs		
Bentonite Seal: 3 To 1 ft bgs	Grout Interval: 0 To 0 ft bgs	PID: 8.5-9- 1456 ppm	14.5-15, 15K PPM
Logged by: S. Soldner/E. Thielemann	Date: 9/28/13	Driller: JEFF MORGAN	
Drilling Contractor: Aztech			





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**LOG OF SOIL BORING**

Coordinates: Northing \_\_\_\_\_ Easting: \_\_\_\_\_  
Surface Elevation: \_\_\_\_\_  
Casing Below Surface: \_\_\_\_\_  
Reference Elevation: \_\_\_\_\_  
Reference Description: \_\_\_\_\_

Job No. 14907.38	Client Project: Admiral Cleaners	NYSDEC	Location: Watervliet, NY
Drilling Method: Geoprobe Direct-Push		Soil Boring Number: MW-08	
Sampling Method:		Sheet 1 of 1	
Macrocore		Drilling	
Water Level: ~5-5.5	Start	Finish	
Time:	DATE 09/25/18	DATE 09/25/18	
Date:	TIME 1200	TIME 1245	

Well Description	Boring Diagram	Recovery (Recov./Driven)	PID (ppm)	Depth in Feet	USCS Log	Surface Conditions: GLASS, SOIL
RISER		28" 60"	63.5	0		0-0.4' ORGANICS, SOIL
			12.3	1		0.4-5' BROWN, LOOSE, MOIST, SILTY SAND
			8.2	2		SOME GRAVEL
				3		
				4		
				5		
				6		
				7		
				8		
				9		
- 1" Pre - Pack - Screen		68" 60"	365	5		5-7.5' GREY-BROWN, HARD, STIFF CLAY*
				6		WL ~ 5.0-5.5
			112.3	7		7.5-9' BRITTLE W/ SOME GRAVEL; SAA
			33.4	8		9-10' GREY, LOOSE CRUSHED SHALE
			18.0	9		
			14.5	10		
			6.7	10		Refusal @ 10'
				11		SCREEN 10-5' 5'-0' RISER
				12		1" Prepack
				13		
	14					
	15					
	16					
	17					
	18					
	19					
	20					
	21					
	22					
	23					
	24					
	25					
	26					
	27					
	28					
	29					

Monitoring Well Construction Information	Sample Information
Monitoring Well Diameter: 1 in	Interval(s): 5-5.5
Bottom of Monitoring Well: 10 ft bgs	Description: *
Stick Up or Flush Mount: FLUSH	
Screen Interval: 10 To 5 ft bgs	
Riser Interval: 5 To 0 ft bgs	
Sand Pack Interval: 10 To ft bgs	
Bentonite Seal: To ft bgs	
Grout Interval: To ft bgs	PID: 365 PPM
Logged by: S. Soldner/E. Thieleman	Date: 09/29/18
Drilling Contractor: Aztech	Driller: JEFF MORGAN

1" Pre pack



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LOG OF SOIL BORING

Coordinates: Northing \_\_\_\_\_ Easting: \_\_\_\_\_  
Surface Elevation: \_\_\_\_\_  
Casing Below Surface: \_\_\_\_\_  
Reference Elevation: \_\_\_\_\_  
Reference Description: \_\_\_\_\_

Job No. 14907.38	Client Project: NYSDEC Admiral Cleaners	Location Watervliet, NY
Drilling Method: Geoprobe Direct-Push		Soil Boring Number: MW-09
Sampling Method:		Sheet 1 of 1
Macrocore		Drilling
Water Level: ~ 5-6	Start	Finish
Time:	DATE 07/20/18	DATE 07/28/18
Date:	TIME 1330	TIME 1510

Well Description	Boring Diagram	Recovery (Recov./Driven)	PID (ppm)	Depth in Feet	USCS Log	Surface Conditions: Weather: Temperature:	
		24% 60" 60" 60"	0.2	0		0-0.4 ORGANICS 0.4-2 HARD, BROWN, BRITTLE, DRY CLAY	
			12.6	1			
			11.3	2			
				3			
				4			
				5	11.9		5-6' BROWN, LOOSE, SLIGHTLY MOIST, BRITTLE SILTY CLAY, TRACE GRAVEL
				6	9.8		
				7	1.8		6-9' GREY, LOOSE, CRUSHED SHALE
				8	11.1		
				9			
				10			
				11			Refusal @ 9' Angle to 10'
				12			3 BAGS SAND   BAG BENT SEAL
				13			
				14			SCREEN 10-5 Riser 5-0
				15			Sand 10-3 Bent Seal 3 to 1
				16			Grout 1-0
				17			
				18			* SAMPLE
				19			401075-SB-09-5'-5.5'
				20			
				21			
				22			
				23			
				24			
				25			
				26			
				27			
				28			
	29						

Monitoring Well Construction Information		Sample Information	
Monitoring Well Diameter:	2 in	Interval(s):	5-5.5'
Bottom of Monitoring Well:	9.9 ft bgs	Description:	see above
Stick Up or Flush Mount:	Flush		
Screen Interval:	To 5 ft bgs 10 to 5		
Riser Interval:	To 5 ft bgs 5 to 0		
Sand Pack Interval:	To 5 ft bgs 10 to 3		
Bentonite Seal:	To 3 ft bgs 3 to 1	PID:	11-8 PPM
Grout Interval:	To 1 ft bgs 1 to 0		
Logged by:	S. Soldner/E. Thieleman	Date:	09/29/18
Drilling Contractor:	Aztech	Driller:	JEFF MORGAN





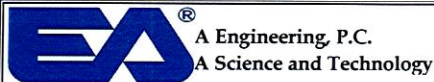
LOG OF SOIL BORING  
Coordinates: Northing \_\_\_\_\_ Easting: \_\_\_\_\_  
Surface Elevation: \_\_\_\_\_  
Casing Below Surface: \_\_\_\_\_  
Reference Elevation: \_\_\_\_\_  
Reference Description: \_\_\_\_\_

Job No. 14907.38	Client: NYSDEC Project: Admiral Cleaners	Location: Watervliet, NY
Drilling Method: Geoprobe Direct-Push		Soil Boring Number: MW-10
Sampling Method:		Sheet 1 of 1
Macrocore		Drilling
Water Level: 12'	Time: 0900	Start DATE 09/28/18
Date: 09/28/18		Finish DATE 9/29/18
		TIME 0800

Well Description	Boring Diagram	Recovery (Recov./ Driven)	PID (ppm)	Depth in Feet	USCS Log	Surface Conditions: <i>Grass, Soil</i>				
Riser		30"	0.0	0		0-0.4' ORGANICS, MOIST (FROM RAIN), SOME ROOTS 0.4-0.7' BROWN-GREY, DRY, SEMI-LOOSE FINE SILT/CLAY				
		60"	0.3	1						
				2						
				3						
		1" prep sand screen		0.3			4			
				60"	0.6		5		5-10' - BROWN-GREY, DRY, HARD, STIFF CLAY SLIGHTLY MOIST NEAR 9.5-10'	
					60"		0.4	7		
								8		
				5' prep sand screen			0.2		9	
							60"	0.1	10	
	11									
						12		* WATER LEVEL AT 12-12.5'		
						13				
						14		REFUSAL @ 15'		
		15								
		16								
		17								
		18					* SAMPLE 401075-SB-10-12'-12.5' 401075-FD-092818			
		19								
		20			* DUPLICATE					
		21								
		22			1" PREPACK SAND SCREEN 15'-5" RISER 5'-0"					
		23								
		24								
		25								
		26								
		27								
		28								
		29								

Monitoring Well Construction Information	Sample Information
Monitoring Well Diameter: 1 in Bottom of Monitoring Well: 15' ft bgs Stick Up or Flush Mount: Finely Screen Interval: 5' To 5' ft bgs Riser Interval: 5' To 0' ft bgs Sand Pack Interval: _____ To _____ ft bgs Bentonite Seal: _____ To _____ ft bgs Grout Interval: _____ To _____ ft bgs	Interval(s): 12.0-12.5 0840 Description: _____ PID: 0.1 PPM

Logged by: S. Soldner/E. Thieleman  
Drilling Contractor: Aztech  
Date: 09/28/18  
Driller: JEEP MORGAN



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LOG OF SOIL BORING

Coordinates: Northing \_\_\_\_\_ Easting: \_\_\_\_\_  
 Surface Elevation: \_\_\_\_\_  
 Casing Below Surface: \_\_\_\_\_  
 Reference Elevation: \_\_\_\_\_  
 Reference Description: \_\_\_\_\_

Job No. 14907.38	Client NYSDEC	Project Admiral Cleaners	Location Watervliet, NY
Drilling Method: Geoprobe Direct-Push		Soil Boring Number: MW-11	
Sampling Method:		Sheet 1 of 1	
Macrocore		Drilling	
Water Level: ~10	Start	Finish	
Time:	DATE 07/28/18	DATE 07/28/18	
Date:	TIME 1510	TIME 1555	

Well Description	Boring Diagram	Recovery (Recov./Driven)	PID (ppm)	Depth in Feet	USCS Log	Surface Conditions: Weather: Temperature:
RISER	[Blank]	31" / 60"	0.1	0	[Blank]	0-1' ORGANICS, BECK FRAG.
				1		1-2.7' BROWN, DRY, LOOSE SILTY SAND
				2		TRACE GRAVEL
				3		
		48" / 60"	0.3	5	[Blank]	5-8' BROWN DRY LOOSE HARD CLAYEY SILT
				6		8-9' BROWN, SL. MOIST, HARD STIFF, CLAY
				7		
				8		
		36" / 36"	0.2	9	[Blank]	10-11' BROWN, MOIST, STIFF, HARD CLAY
				10		11-13' Grey, very dry, LOOSE CRUSHED SHALE
				11		
				12		
		[Blank]	[Blank]	[Blank]	[Blank]	13
14	SCREEN 13-8 RISER 8-0					
15	1" Prepack					
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						

Monitoring Well Construction Information		Sample Information	
Monitoring Well Diameter: 1 in	Bottom of Monitoring Well: ft bgs	Interval(s): 10.5'-11'	Description:
Stick Up or Flush Mount: Flush	Screen Interval: 13 To 8 ft bgs	PID: 0.3 PPM	
1" Prepack	Riser Interval: 8 To 0 ft bgs		
	Sand Pack Interval: To ft bgs		
	Bentonite Seal: To ft bgs		
	Grout Interval: To ft bgs		
Logged by: S. Soldner/E. Thielemann	Drilling Contractor: Aztech	Date: 07/28/18	Driller: JEFF MORGAN





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LOG OF SOIL BORING

Coordinates: Northing \_\_\_\_\_ Easting: \_\_\_\_\_  
 Surface Elevation: \_\_\_\_\_  
 Casing Below Surface: \_\_\_\_\_  
 Reference Elevation: \_\_\_\_\_  
 Reference Description: \_\_\_\_\_

Job No. 14907.38	Client Project: Admiral Cleaners	NYSDEC	Location: Watervliet, NY
Drilling Method: Geoprobe Direct-Push		Soil Boring Number: MW-12	
Sampling Method:		Sheet 1 of _____	
Macrocore		Drilling	
Water Level:	Start	Finish	
Time:	DATE 09/28/18	DATE 09/28/18	
Date:	TIME 1600	TIME 1640	

Well Description	Boring Diagram	Recovery (Recov./Driven)	PID (ppm)	Depth in Feet	USCS Log	Surface Conditions: Weather: Temperature:	
RISER  - SCREEN - Riser - 1"	1" Pre Pack	39"	0.5	0		Ø-Ø.2 - ORGANICS	
		60"	0.3	1		0.2-1 - BROWN, SL. MOIST, LOOSE CLAY	
				2		1-3' - GREY, VERY DRY, LOOSE, CRUSHED SHALE	
				3			
				4			
				5		2" slough	
				120"		5-7' GREY, VERY DRY, LOOSE, CRUSHED SHALE	
				24"	0.7	7	
					0.6	8	
					↓	9	Recess @ 7'
						10	
						11	
						12	SCREEN 7'-2'
						13	RISER 2'-0'
						14	1" PRE PACK
						15	
						16	* 401075-SB-12-Ø.2'-1'
						17	
						18	
						19	
						20	
						21	
						22	
						23	
						24	
						25	
						26	
						27	
						28	
				29			

Monitoring Well Construction Information		Sample Information	
Monitoring Well Diameter:	1 in	Interval(s):	Ø.2'-1'
Bottom of Monitoring Well:	7 ft bgs	Description:	
Stick Up or Flush Mount:	Flush		
Screen Interval:	To 2 ft bgs		
Riser Interval:	To Ø ft bgs		
Sand Pack Interval:	To ft bgs		
Bentonite Seal:	To ft bgs	PID:	0.3 PPM
Grout Interval:	To ft bgs		
Logged by:	S. Soldner/E. Thielemann	Date:	09/28/18
Drilling Contractor:	Aztech	Driller:	JEFF MORGAN









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LOG OF SOIL BORING

Coordinates: Northing \_\_\_\_\_ Easting: \_\_\_\_\_  
 Surface Elevation: \_\_\_\_\_  
 Casing Below Surface: \_\_\_\_\_  
 Reference Elevation: \_\_\_\_\_  
 Reference Description: \_\_\_\_\_

Job No. 14907.38	Client: Project: NYSDEC Admiral Cleaners	Location: Watervliet, NY
Drilling Method: Geoprobe Direct-Push		Soil Boring Number: MW-15
Sampling Method:		Sheet 1 of 1
Macrocore		Drilling
Water Level: <u>N 10.5'</u>	Time: <u>1435</u>	Start DATE: <u>9/26/18</u> Finish DATE: <u>9/26/18</u>
Date: <u>9/26/18</u>		TIME: <u>1330</u>

Well Description	Boring Diagram	Recovery (Recov./Driven)	PID (ppm)	Depth in Feet	USCS Log	Surface Conditions: CONCRETE Weather: OVERCAST W 10-15 mph 70F Temperature: 70F
RISER	[Diagram showing riser and seal]			0		0-5' - NOT SAMPLED DUE TO CONCRETE
				1		
				2		
				3		
				4		
SCREEN	[Diagram showing screen and sand pack]	5 1/2"	0.1	5		5-6' - BROWN/DK BROWN, CONSOLIDATED, STIFF MOIST, SILTY CLAY W/ GRAVEL SHARDS CLOSE TO 6'
				6		
				7		
				8		
				9		
				10		
				11		
				12		
				13		
				14		
		12 1/2"	1.4	10		6-9.5 - GREY LOOSE, VERY DRY SILT, BRITTLE, COARSER WITH DEPTH, ~ 9.5 GRAVEL SHARDS
				11		
				12		
				13		
				14		
				15		
				16		
				17		
				18		
				19		
				20		
				21		
				22		
				23		
				24		
25						
26						
27						
28						
29						

Refusal @ 10.5-11'  
 10-10.5' - DRY, GRAY/DEGREY, STIFF HARD FULVERIZED ROCK  
 10.5-11' - SAA & SLIGHTLY MOIST  
 \* SAMPLE 401075 - MW-15 - 10'-11' HERE

Monitoring Well Construction Information		Sample Information	
Monitoring Well Diameter: <u>2</u> in	Bottom of Monitoring Well: <u>10'</u> ft bgs	Interval(s): <u>10-11'</u>	Description: <u>SLIGHTLY MOIST, GREY, HARD, FULVERIZED ROCK BRITTLE</u>
Stick Up or Flush Mount: <u>FLUSH</u>	Screen Interval: <u>5</u> To <u>10</u> ft bgs	PID: <u>1.4</u> PPM	
Riser Interval: <u>0</u> To <u>5</u> ft bgs	Sand Pack Interval: <u>10</u> To <u>3.8</u> ft bgs		
Bentonite Seal: <u>0.3</u> To <u>1.8</u> ft bgs	Grout Interval: <u>0.1</u> To <u>0</u> ft bgs		
Logged by: <u>S. Soldner/E. Thieleman</u>	Drilling Contractor: <u>Aztech</u>	Date: <u>09/26/18</u>	Driller: <u>JEFF MORGAN</u>



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**LOG OF SOIL BORING**

Coordinates: Northing \_\_\_\_\_ Easting: \_\_\_\_\_  
Surface Elevation: \_\_\_\_\_  
Casing Below Surface: \_\_\_\_\_  
Reference Elevation: \_\_\_\_\_  
Reference Description: \_\_\_\_\_

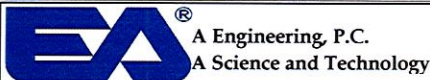
Job No. 14907.38	Client NYSDEC	Location Watervliet, NY
Project Admiral Cleaners		Soil Boring Number MW-16
Drilling Method Geoprobe Direct-Push		Sheet <u>1</u> of <u>   </u>
Sampling Method:		Drilling
Macrocore		Start _____ Finish _____
Water Level:	Time: _____	DATE <u>09/27/18</u> DATE <u>09/27/18</u>
Date: _____	TIME <u>1520</u>	TIME <u>1630</u>

Well Description	Boring Diagram	Recovery (Recov./Driven)	PID (ppm)	Depth in Feet	USCS Log	Surface Conditions: <u>OVERCAST, @ 5 mph</u>
RISEA SANDPACK SCREEN		52" / 52"	0.0	1		0-0.8' SIDEWALK CONCRETE
				2		0.8-1.2' BROWN, LOOSE SL MOIST SILTY SAND w/ SOME BRICK FRAG
				3		1.2-5' LT BROWN/GRAY, DRY, LOOSE, BRITTLE SILT/CRUSHED ROCK; SOME GRAVEL SHARDS
			0.1	4		
				5		
			0.0	6		5-5.5 SAA
				7		REFUSAL @ 5.5'
				8		
				9		SCREEN 5.5-2.5 SAND 5-1.5
				10		RISE 2.5-0' SEAL 1.5-0.5
				11		* 401075-SB-16-5'-5.5'
				12		
				13		
				14		
				15		
				16		
				17		
				18		
				19		
				20		

Monitoring Well Construction Information	Sample Information
Monitoring Well Diameter: <u>1</u> in Bottom of Monitoring Well: <u>5</u> ft bgs Stick Up or Flush Mount: <u>FLUSH</u> Screen Interval: <u>5.5</u> To <u>2.5</u> ft bgs Riser Interval: <u>2.5</u> To <u>0</u> ft bgs Sand Pack Interval: <u>5.5</u> To <u>1.5</u> ft bgs Bentonite Seal: <u>1.5</u> To <u>0.5</u> ft bgs Grout Interval: <u>0.5</u> To <u>0</u> ft bgs	Interval(s): <u>5-5.5</u> Description: _____ _____ _____ PID: <u>0-0</u> PPM

Logged by: S. Soldner/E. Thieleman Date: 09/27/18  
 Drilling Contractor: Aztech Driller: JEFF MORGAN





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LOG OF SOIL BORING

Coordinates: Northing \_\_\_\_\_ Easting: \_\_\_\_\_  
 Surface Elevation: \_\_\_\_\_  
 Casing Below Surface: \_\_\_\_\_  
 Reference Elevation: \_\_\_\_\_  
 Reference Description: \_\_\_\_\_

Job No. 14907.38 Client: NYSDEC  
 Project: Admiral Cleaners Location: Watervliet, NY  
 Drilling Method: Geoprobe Direct-Push Soil Boring Number: MW-17  
 Sampling Method: \_\_\_\_\_ Sheet 1 of 1  
 Macrocore \_\_\_\_\_  
 Water Level: \_\_\_\_\_ Drilling Start: 09/27/18 Finish: 09/27/18  
 Time: \_\_\_\_\_ DATE: 09/27/18 DATE: 09/27/18  
 Date: \_\_\_\_\_ TIME: 1315 TIME: 1500

Well Description	Boring Diagram	Recovery (Recov./Driven)	PID (ppm)	Depth in Feet	USCS Log	Surface Conditions: <u>CONCRETE SIDEWALK</u>
A SE R - 1" - Pre Pack - SAND - SCREEN L		36" 48		0		0-1' CONCRETE SIDEWALK
				1		1'-1.5' GREY, LOOSE, SLIGHTLY MOIST SILTY SAND
				2		1.5-3' w/ Gravel fragments, some brick frag
				3		SAA, BROWN
				4		3-5' BROWN-GREY, HARD, STIFF, CLAY, SL. MOIST
				5		5-5.7' - BROWN, HARD, STIFF, SL. MOIST CLAY
				6		
				7		5-7-6' - GREY, LOOSE, <del>ALL</del> CRUSHED <del>CLAY</del> CLAY-sized Gravel
				8		GEOPROBE REFUSAL @ 7.5'
				9		AUGER REFUSAL @ 8'
				10		
				11		
				12		
				13		4 BAGS SAND, 1 BAG WALK BLOCK
				14		
				15		* 401075-SB-17-5-5.7'
				16		
				17		
				18		
				19		
				20		
				21		
				22		
				23		
				24		
				25		
				26		
				27		
				28		
29						

Monitoring Well Construction Information		Sample Information	
Monitoring Well Diameter:	1 in	Interval(s):	5-5.7
Bottom of Monitoring Well:	2 ft bgs	Description:	BROWN, STIFF, HARD, SL. MOIST CLAY
Stick Up or Flush Mount:	Flush	PID:	PPM
Screen Interval:	4 To 3 ft bgs		
Riser Interval:	3 To 0 ft bgs		
Sand Pack Interval:	0 To 2 ft bgs		
Bentonite Seal:	2 To 1 ft bgs		
Grout Interval:	1 To 0 ft bgs		
Logged by:	S. Soldner/E. Thieleman	Date:	09/27/18
Drilling Contractor:	Aztech	Driller:	JEFF MORGAN

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## **Attachment 2**

### **Remedial Investigation Phase II Groundwater Monitoring Forms**

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**GROUNDWATER SAMPLING PURGE FORM**

<b>Well I.D.:</b> MW-01	<b>EA Personnel:</b> E. Thieleman/S. Soldner	<b>Client:</b> NYSDEC
<b>Location:</b> Admiral Cleaners, Watervliet, NY	<b>Well Condition:</b> Good	<b>Weather:</b> Overcast, S 10 mph, 50F
<b>Sounding Method:</b> Solinst 100-ft water level tape	<b>Gauge Date:</b> 10/15/2018	<b>Measurement Ref:</b> Top of Casing (TOC)
	<b>Gauge Time:</b> 1141	
<b>Stick Up/Down (ft):</b> Flush	<b>PID Headspace Reading (ppb):</b> 5.7	<b>Well Diameter (in):</b> 1

<b>Purge Date:</b> 15-Oct-18	<b>Purge Time:</b> 1250
<b>Purge Method:</b> Low Flow via Peristaltic Pump	<b>Field Technician:</b> E. Thieleman/S. Soldner

**Well Volume**

<b>A. Well Depth (ft):</b> 7.64	<b>D. Well Volume (ft):</b> 0.041	<b>Depth/Height of Top of PVC:</b> Down 0.5-ft
<b>B. Depth to Water (ft):</b> 6.86	<b>E. Well Volume (gal) (C*D):</b> 0.03198	<b>Pump Type:</b> Peristaltic Pump
<b>C. Liquid Depth (ft) (A-B):</b> 0.78	<b>F. Three Well Volumes (gal) (E3):</b> 0.09594	<b>Pump Intake Depth:</b> NA

**Water Quality Parameters**

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1252	Dry	Dry	Dry	Dry	Dry	Dry	Dry	0.30	Dry

<b>Total Quantity of Water Removed (gal):</b> 0.3 L	<b>Samplers:</b> EI/SS	<b>Sampling Date:</b> 10/16/2018	<b>Sampling Time:</b> 1000	<b>Split Sample With:</b> --	<b>Sample Type:</b> GW Grab
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**COMMENTS AND OBSERVATIONS:** Brown/turbid; well went dry very quickly.







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**GROUNDWATER SAMPLING PURGE FORM**

<b>Well I.D.:</b> MW-03	<b>EA Personnel:</b> E. Thieleman/S. Soldner	<b>Client:</b> NYSDEC
<b>Location:</b> Admiral Cleaners, Watervliet, NY	<b>Well Condition:</b> Good	<b>Weather:</b> Overcast, S 10 mph, 55F
<b>Sounding Method:</b> Solinst 100-ft water level tape	<b>Gauge Date:</b> 10/15/2018	<b>Measurement Ref:</b> Top of Casing (TOC)
	<b>Gauge Time:</b> 1145	
<b>Stick Up/Down (ft):</b> Flush	<b>PID Headspace Reading (ppb):</b> 1	<b>Well Diameter (in):</b> 1.0 in

<b>Purge Date:</b> 15-Oct-18	<b>Purge Time:</b> 1313
<b>Purge Method:</b> Low Flow via Peristaltic Pump	<b>Field Technician:</b> E. Thieleman/S. Soldner

**Well Volume**

<b>A. Well Depth (ft):</b> 10.60	<b>D. Well Volume (ft):</b> 0.041	<b>Depth/Height of Top of PVC:</b> Down 0.1-ft
<b>B. Depth to Water (ft):</b> 5.52	<b>E. Well Volume (gal) (C*D):</b> 0.20828	<b>Pump Type:</b> Peristaltic Pump
<b>C. Liquid Depth (ft) (A-B):</b> 5.08	<b>F. Three Well Volumes (gal) (E3):</b> 0.62484	<b>Pump Intake Depth:</b> NA

**Water Quality Parameters**

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1314	7.27	0.473	919.0	3.15	15.87	85	--	0.30	0.00
1317	6.38	0.432	595.0	0.00	15.84	53	--	0.30	0.90
1320	6.30	0.358	343.0	0.00	16.01	86	--	0.30	1.80
1323	6.3	0.329	287.0	0.00	15.86	105	--	0.30	2.70
1326	6.3	0.325	288.0	0.00	15.84	106	--	0.30	3.60
1329	6.31	0.322	296.0	0.00	15.84	109	--	0.30	4.50
1332	6.32	0.323	236.0	0.00	15.75	91	--	0.30	5.40
1335	6.33	0.317	240	0.00	15.72	102	--	0.30	6.30
1338	6.33	0.314	212	0.00	15.73	108	--	0.30	7.20
1341	6.33	0.316	201	0.00	15.73	112	--	0.30	8.10
1344	6.34	0.318	104	0.00	15.73	124	--	0.30	9.00
1347	6.36	0.318	84.5	0.00	15.73	127	--	0.30	9.90
1350	6.36	0.319	51.5	0.00	15.74	131	--	0.30	10.80
1353	6.37	0.32	49.2	0.00	15.74	131	--	0.30	11.70
1356	6.38	0.32	31.2	0.00	15.74	132	--	0.30	12.60
1359	6.39	0.32	34.4	0.00	15.74	132	--	0.30	13.50

<b>Total Quantity of Water Removed (gal):</b>	13.5 L	<b>Sampling Time:</b>	1400
<b>Samplers:</b>	ET/SS	<b>Split Sample With:</b>	--
<b>Sampling Date:</b>	10/15/2018	<b>Sample Type:</b>	Grab

**COMMENTS AND OBSERVATIONS:** Turbid/Colorless



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**GROUNDWATER SAMPLING PURGE FORM**

<b>Well I.D.:</b> MW-04	<b>EA Personnel:</b> E. Thieleman/S. Soldner	<b>Client:</b> NYSDEC
<b>Location:</b> Admiral Cleaners, Watervliet, NY	<b>Well Condition:</b> Good	<b>Weather:</b> Overcast, S 10 mph, 55F
<b>Sounding Method:</b> Solinst 100-ft water level tape	<b>Gauge Date:</b> 10/15/2018	<b>Measurement Ref:</b>
	<b>Gauge Time:</b> 1125	Top of Casing (TOC)
<b>Stick Up/Down (ft):</b> Flush	<b>PID Headspace Reading (ppb):</b> 3.7	<b>Well Diameter (in):</b> 1.0 in

<b>Purge Date:</b> 15-Oct-18	<b>Purge Time:</b> 1540
<b>Purge Method:</b> Low Flow via Peristaltic Pump	<b>Field Technician:</b> E. Thieleman/S. Soldner

**Well Volume**

<b>A. Well Depth (ft):</b> 9.59	<b>D. Well Volume (ft):</b> 0.041	<b>Depth/Height of Top of PVC:</b> Down 0.5-ft
<b>B. Depth to Water (ft):</b> 5.69	<b>E. Well Volume (gal) (C*D):</b> 0.1599	<b>Pump Type:</b> Peristaltic Pump
<b>C. Liquid Depth (ft) (A-B):</b> 3.9	<b>F. Three Well Volumes (gal) (E3):</b> 0.4797	<b>Pump Intake Depth:</b> NA

**Water Quality Parameters**

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1540	7.12	0.284	953	7.95	16.5	173	--	0.30	0.00
1543	6.56	0.300	685	3.91	16.47	163	--	0.30	0.90
1546	6.47	0.294	434	1.94	16.43	177	--	0.30	1.20
Dry									

<b>Total Quantity of Water Removed (gal):</b> 1.2 L	<b>Sampling Time:</b> 935
<b>Samplers:</b> ET/SS	<b>Split Sample With:</b> --
<b>Sampling Date:</b> 10/16/2018	<b>Sample Type:</b> GW Grab

**COMMENTS AND OBSERVATIONS:** Brown/turbid at first sample, then turbid/colorless



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**GROUNDWATER SAMPLING PURGE FORM**

<b>Well I.D.:</b> MW-05	<b>EA Personnel:</b> E. Thieleman/S. Soldner	<b>Client:</b> NYSDEC
<b>Location:</b> Admiral Cleaners, Watervliet, NY	<b>Well Condition:</b> Good	<b>Weather:</b> 50F, clear, calm
<b>Sounding Method:</b> Solinst 100-ft water level tape	<b>Gauge Date:</b> 10/15/2018	<b>Measurement Ref:</b> Top of Casing (TOC)
	<b>Gauge Time:</b> 1147	
<b>Stick Up/Down (ft):</b> Up 0.5 ft	<b>PID Headspace Reading (ppb):</b> 18.7	<b>Well Diameter (in):</b> 1

<b>Purge Date:</b> 16-Oct-18	<b>Purge Time:</b> 1103
<b>Purge Method:</b> Low Flow via Peristaltic Pump	<b>Field Technician:</b> E. Thieleman/S. Soldner

**Well Volume**

<b>A. Well Depth (ft):</b> 11.87	<b>D. Well Volume (ft):</b> 0.041	<b>Depth/Height of Top of PVC:</b> Up 0.5 ft
<b>B. Depth to Water (ft):</b> 8.16	<b>E. Well Volume (gal) (C*D):</b> 0.15211	<b>Pump Type:</b> Peristaltic Pump
<b>C. Liquid Depth (ft) (A-B):</b> 3.71	<b>F. Three Well Volumes (gal) (E3):</b> 0.45633	<b>Pump Intake Depth:</b> NA

**Water Quality Parameters**

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1104	6.77	0.780	39.7	1.97	14.99	72	7.45	0.20	0.00
1107	6.48	0.767	31.5	6.70	15.33	80	9	0.20	0.6
1110	6.39	0.756	33.0	6.12	15.36	83	9.09	0.20	1.2
1113	6.34	0.751	29.5	5.65	15.23	84	8.89	0.20	1.8
1116	6.31	0.746	27.6	5.27	15.16	85	8.94	0.20	2.4
1119	6.61	0.74	26.8	4.87	15.19	86	8.87	0.20	3
1122	6.30	0.737	27.2	4.54	15.22	87	9	0.20	3.6
1125	6.30	0.735	26.4	4.26	15.22	88	8.95	0.20	4.2
1128	6.29	0.735	26.1	3.99	15.24	88	8.9	0.20	4.8
1131	6.29	0.735	26.4	3.74	15.27	89	8.84	0.20	5.4
1134	6.29	0.735	29.7	3.61	15.29	90	8.89	0.20	6
1137	6.29	0.736	29.7	3.30	15.33	90	8.89	0.20	6.6
1140	6.3	0.733	25.0	2.94	15.33	91	9.1	0.20	7.2
1143	6.3	0.733	12.3	2.2	15.46	91	9.41	0.20	7.8
1146	6.3	0.726	11.9	0.64	15.58	91	9.69	0.20	8.4
1149	6.31	0.728	13.8	0.54	15.63	92	9.9	0.20	9
1152	6.31	0.731	13.3	0.43	15.63	92	10	0.2	9.6
1155	6.32	0.733	12.7	0.32	15.62	92	10	0.2	10.2

<b>Total Quantity of Water Removed (gal):</b>	10.2 L	<b>Sampling Time:</b>	1155
<b>Samplers:</b>	ET/SS	<b>Split Sample With:</b>	--
<b>Sampling Date:</b>	10/16/2018	<b>Sample Type:</b>	GW Grab

**COMMENTS AND OBSERVATIONS:** Switched out pump battery at 1140



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**GROUNDWATER SAMPLING PURGE FORM**

<b>Well I.D.:</b> MW-06	<b>EA Personnel:</b> E. Thieleman/S. Soldner	<b>Client:</b> NYSDEC
<b>Location:</b> Admiral Cleaners, Watervliet, NY	<b>Well Condition:</b> Good	<b>Weather:</b> Overcast, 50F
<b>Sounding Method:</b> Solinst 100-ft water level tape	<b>Gauge Date:</b> N/A	<b>Measurement Ref:</b> Top of Casing (TOC)
	<b>Gauge Time:</b> N/A	
<b>Stick Up/Down (ft):</b> Up 0.5 ft	<b>PID Headspace Reading (ppb):</b> 133.4	<b>Well Diameter (in):</b> 1

<b>Purge Date:</b> 15-Oct-18	<b>Purge Time:</b> 1245
<b>Purge Method:</b> Low Flow via Peristaltic Pump	<b>Field Technician:</b> E. Thieleman/S. Soldner

**Well Volume**

<b>A. Well Depth (ft):</b> NC	<b>D. Well Volume (ft):</b> 0.041	<b>Depth/Height of Top of PVC:</b> Up 0.5 ft
<b>B. Depth to Water (ft):</b> NC	<b>E. Well Volume (gal) (C*D):</b> #VALUE!	<b>Pump Type:</b> Peristaltic Pump
<b>C. Liquid Depth (ft) (A-B):</b> #VALUE!	<b>F. Three Well Volumes (gal) (E3):</b> #VALUE!	<b>Pump Intake Depth:</b> NA

**Water Quality Parameters**

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1246	7.41	1.04	58	0.00	16.59	58	--	0.25	0.00
1249	6.93	1.02	190.00	0.00	16.59	52	--	0.25	0.75
1252	6.91	1.02	117.00	0.00	16.51	57	--	0.25	1.50
1255	6.46	1.020	61.10	0.00	16.47	62	--	0.25	2.25
1258	6.4	1.020	33.40	0.00	16.46	65	--	0.25	3.00
1301	6.37	1.020	33.30	0.00	16.46	67	--	0.25	3.75
1304	6.35	1.020	33.10	0.00	16.45	68	--	0.25	4.50

<b>Total Quantity of Water Removed (gal):</b> _____ 4.5 L	<b>Sampling Time:</b> _____ 1304
<b>Samplers:</b> _____ ET/SS	<b>Split Sample With:</b> _____ MS/MSD
<b>Sampling Date:</b> _____ 10/15/2018	<b>Sample Type:</b> _____ GW Grab

**COMMENTS AND OBSERVATIONS:** Not gauged prior to sampling - PFC sample location  
 Samples collected for VOCs, PFCs, 1,4-Dioxane, TOC, Major Anions, and dissolved gases. MS/MSD collected for VOCs, PFCs, 1,4-Dioxane



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**GROUNDWATER SAMPLING PURGE FORM**

<b>Well I.D.:</b> MW-07	<b>EA Personnel:</b> E. Thieleman/S. Soldner	<b>Client:</b> NYSDEC
<b>Location:</b> Admiral Cleaners, Watervliet, NY	<b>Well Condition:</b> Good	<b>Weather:</b> 45F, clear, calm
<b>Sounding Method:</b> Solinst 100-ft water level tape	<b>Gauge Date:</b> 10/15/2018	<b>Measurement Ref:</b>
	<b>Gauge Time:</b> 1158	Top of Casing (TOC)
<b>Stick Up/Down (ft):</b> Flush	<b>PID Headspace Reading (ppm):</b> 0.2	<b>Well Diameter (in):</b> 1

<b>Purge Date:</b> 16-Oct-18	<b>Purge Time:</b> 900
<b>Purge Method:</b> Low Flow via Peristaltic Pump	<b>Field Technician:</b> E. Thieleman/S. Soldner

**Well Volume**

<b>A. Well Depth (ft):</b> 6.30	<b>D. Well Volume (ft):</b> 0.041	<b>Depth/Height of Top of PVC:</b> 4" bgs
<b>B. Depth to Water (ft):</b> 3.7	<b>E. Well Volume (gal) (C*D):</b> 0.1066	<b>Pump Type:</b> Peristaltic Pump
<b>C. Liquid Depth (ft) (A-B):</b> 2.6	<b>F. Three Well Volumes (gal) (E3):</b> 0.3198	<b>Pump Intake Depth:</b> NA

**Water Quality Parameters**

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
900	6.25	1.9	301.0	0.00	15.83	-52	3.86	0.15	0
903	6.42	1.41	494.0	1.04	15.9	-63		0.15	0.45
--	--	--	--	--	--	--	--	--	--
913	6.54	0.847	13.4	0.20	15.69	-34	3.92	0.23	0.45
916	6.31	0.813	10.7	0.00	16.19	-39	3.93	0.23	1.14
919	6.28	0.793	8.2	0.00	16.35	-44	3.94	0.23	1.83
922	6.27	0.774	7.6	0.00	16.43	-46	3.94	0.23	2.52
925	6.24	0.746	5.5	0.00	16.49	-48	3.94	0.23	3.21
928	6.24	0.737	5	0.00	16.5	-49	3.94	0.23	3.9
931	6.24	0.723	4.1	0.00	16.55	-50	3.94	0.23	4.59
934	6.23	0.717	4.2	0.00	16.55	-51	3.94	0.23	5.28

<b>Total Quantity of Water Removed (gal):</b>	5.28 L	<b>Sampling Time:</b>	934
<b>Samplers:</b>	ET/SS	<b>Split Sample With:</b>	--
<b>Sampling Date:</b>	10/16/2018	<b>Sample Type:</b>	GW Grab

**COMMENTS AND OBSERVATIONS:**

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**GROUNDWATER SAMPLING PURGE FORM**

<b>Well I.D.:</b> MW-07R	<b>EA Personnel:</b> E. Thieleman/S. Soldner	<b>Client:</b> NYSDEC
<b>Location:</b> Admiral Cleaners, Watervliet, NY	<b>Well Condition:</b> New	<b>Weather:</b> Overcast, 52F, wind 8 mph SE
<b>Sounding Method:</b> Solinst 100-ft water level tape	<b>Gauge Date:</b> N/A	<b>Measurement Ref:</b> Top of Casing (TOC)
	<b>Gauge Time:</b> N/A	
<b>Stick Up/Down (ft):</b> Flush	<b>PID Headspace Reading (ppb):</b> 190	<b>Well Diameter (in):</b> 2

<b>Purge Date:</b> 15-Oct-18	<b>Purge Time:</b> 1177
<b>Purge Method:</b> Low Flow via Peristaltic Pump	<b>Field Technician:</b> E. Thieleman/S. Soldner

**Well Volume**

<b>A. Well Depth (ft):</b> NC	<b>D. Well Volume (ft):</b> 0.041	<b>Depth/Height of Top of PVC:</b> 2" bgs
<b>B. Depth to Water (ft):</b> NC	<b>E. Well Volume (gal) (C*D):</b> #VALUE!	<b>Pump Type:</b> Peristaltic Pump
<b>C. Liquid Depth (ft) (A-B):</b> #VALUE!	<b>F. Three Well Volumes (gal) (E3):</b> #VALUE!	<b>Pump Intake Depth:</b> NA

**Water Quality Parameters**

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1118	8.89	3.82	376.0	3.86	17.03	-23	--	0.30	0
1121	7.41	3.07	140.0	1.30	16.7	-3	--	0.30	0.9
1124	6.97	2.4	107.0	0.37	16.58	-10	--	0.30	1.8
1127	6.8	2.23	96.3	0.00	16.52	-16	--	0.30	2.7
1130	6.73	2.33	38.7	0.00	16.41	-35	--	0.30	3.6
1133	6.7	2.5	40.7	0.00	16.33	-33	--	0.30	4.5
1136	6.67	2.74	42.0	0.00	16.33	-35	--	0.30	5.4
1139	6.65	2.96	34.9	0.00	16.25	-36	--	0.30	6.3
1142	6.63	3.25	33.3	0.00	16.18	-35	--	0.30	7.2
1145	6.64	3.6	34.1	0.00	16.1	-33	--	0.30	8.1
1148	6.63	3.98	33.7	0.00	16	-28	--	0.30	9
1151	6.63	4.29	33	0.00	15.93	-21	--	0.30	9.9
1154	6.61	4.56	32.5	0.00	15.78	-14	--	0.30	10.8
1157	6.58	4.66	32.1	0.00	15.67	-13	--	0.30	11.7
1200	6.54	4.56	32.2	0.00	15.71	-13	--	0.30	12.6
Dry									

<b>Total Quantity of Water Removed (gal):</b>	12.6 L	<b>Sampling Time:</b>	1420
<b>Samplers:</b>	ET/SS	<b>Split Sample With:</b>	Dup
<b>Sampling Date:</b>	10/15/2018	<b>Sample Type:</b>	GW Grab

**COMMENTS AND OBSERVATIONS:** Not gauged prior to sampling - PFC sample location. Water is effervescent.  
 Samples collected for VOCs, PFCs, 1,4-Dioxane, TOC, Major Anions, and dissolved gases. Dup collected for VOCs, PFCs, and 1,4-Dioxane



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**GROUNDWATER SAMPLING PURGE FORM**

<b>Well I.D.:</b> MW-08	<b>EA Personnel:</b> E. Thieleman/S. Soldner	<b>Client:</b> NYSDEC
<b>Location:</b> Admiral Cleaners, Watervliet, NY	<b>Well Condition:</b> New	<b>Weather:</b> Overcast, S 10 mph, 55F
<b>Sounding Method:</b> Solinst 100-ft water level tape	<b>Gauge Date:</b> 10/15/2018	<b>Measurement Ref:</b> Top of Casing (TOC)
	<b>Gauge Time:</b> 1134	
<b>Stick Up/Down (ft):</b> Flush	<b>PID Headspace Reading (ppb):</b> 0	<b>Well Diameter (in):</b> 1

<b>Purge Date:</b> 15-Oct-18	<b>Purge Time:</b> 1555
<b>Purge Method:</b> Low Flow via Peristaltic Pump	<b>Field Technician:</b> E. Thieleman/S. Soldner

**Well Volume**

<b>A. Well Depth (ft):</b> 9.05	<b>D. Well Volume (ft):</b> 0.041	<b>Depth/Height of Top of PVC:</b> 2.5' bgs
<b>B. Depth to Water (ft):</b> 7.1	<b>E. Well Volume (gal) (C*D):</b> 0.07995	<b>Pump Type:</b> Peristaltic Pump
<b>C. Liquid Depth (ft) (A-B):</b> 1.95	<b>F. Three Well Volumes (gal) (E3):</b> 0.23985	<b>Pump Intake Depth:</b> NA

**Water Quality Parameters**

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1558	7.22	0.263	677.0	0.30	16.43	159	--	0.30	0
1601	6.91	0.412	>1000	0.00	15.62	173	--	0.30	0.9

<b>Total Quantity of Water Removed (gal):</b> 0.9 L	<b>Sampling Time:</b> 1020
<b>Samplers:</b> ET/SS	<b>Split Sample With:</b> --
<b>Sampling Date:</b> 10/16/2018	<b>Sample Type:</b> GW Grab

**COMMENTS AND OBSERVATIONS:** Sample very turbid/brown





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**GROUNDWATER SAMPLING PURGE FORM**

<b>Well I.D.:</b> MW-09	<b>EA Personnel:</b> E. Thieleman/S. Soldner	<b>Client:</b> NYSDEC
<b>Location:</b> Admiral Cleaners, Watervliet, NY	<b>Well Condition:</b> New	<b>Weather:</b> 45F, clear, calm
<b>Sounding Method:</b> Solinst 100-ft water level tape	<b>Gauge Date:</b> 10/15/2018	<b>Measurement Ref:</b> Top of Casing (TOC)
	<b>Gauge Time:</b> 1131	
<b>Stick Up/Down (ft):</b> Flush	<b>PID Headspace Reading (ppb):</b> 0.3	<b>Well Diameter (in):</b> 2

<b>Purge Date:</b> 16-Oct-18	<b>Purge Time:</b> 807
<b>Purge Method:</b> Low Flow via Peristaltic Pump	<b>Field Technician:</b> E. Thieleman/S. Soldner

**Well Volume**

<b>A. Well Depth (ft):</b> 9.35	<b>D. Well Volume (ft):</b> 0.163	<b>Depth/Height of Top of PVC:</b> 3" bgs
<b>B. Depth to Water (ft):</b> 5.6	<b>E. Well Volume (gal) (C*D):</b> 0.61125	<b>Pump Type:</b> Peristaltic Pump
<b>C. Liquid Depth (ft) (A-B):</b> 3.75	<b>F. Three Well Volumes (gal) (E3):</b> 1.83375	<b>Pump Intake Depth:</b> NA

**Water Quality Parameters**

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
807	6.90	0.373	49.7	3.34	15.33	168	5.62	0.26	0
810	6.36	0.358	23.0	2.39	15.66	175	6.15	0.26	0.78
813	6.13	0.359	15.1	1.93	15.69	180	6.25	0.26	1.56
816	6	0.363	6.9	1.36	15.74	183	6.4	0.26	2.34
819	5.93	0.369	4.1	0.95	15.68	184	6.52	0.26	3.12
822	5.95	0.379	3.5	0.59	15.72	182	6.62	0.26	3.9
825	5.95	0.384	3.2	0.26	15.71	180	6.72	0.26	4.68
828	5.96	0.403	2.9	0.00	15.68	178	6.82	0.26	5.46
831	6.01	0.408	3	0.00	15.66	176	6.91	0.26	6.24
834	6.04	0.421	3.5	0.00	15.65	173	7.05	0.26	7.02
837	6.06	0.428	3.7	0.00	15.67	171	7.25	0.26	7.8
840	6.1	0.429	4.1	0.00	15.7	168	7.35	0.26	8.58

<b>Total Quantity of Water Removed (gal):</b>	8.58 L	<b>Sampling Time:</b>	840
<b>Samplers:</b>	ET/SS	<b>Split Sample With:</b>	--
<b>Sampling Date:</b>	10/16/2018	<b>Sample Type:</b>	GW Grab

**COMMENTS AND OBSERVATIONS:**

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EA Science and Technology

**GROUNDWATER SAMPLING PURGE FORM**

<b>Well I.D.:</b> MW-11	<b>EA Personnel:</b> E. Thieleman/S. Soldner	<b>Client:</b> NYSDEC
<b>Location:</b> Admiral Cleaners, Watervliet, NY	<b>Well Condition:</b> New	<b>Weather:</b> 45F, Clear, Calm
<b>Sounding Method:</b> Solinst 100-ft water level tape	<b>Gauge Date:</b> 10/15/2018	<b>Measurement Ref:</b> Top of Casing (TOC)
	<b>Gauge Time:</b> 1128	
<b>Stick Up/Down (ft):</b> Flush	<b>PID Headspace Reading (ppb):</b> 0	<b>Well Diameter (in):</b> 1

<b>Purge Date:</b> 16-Oct-18	<b>Purge Time:</b> 1038
<b>Purge Method:</b> Low Flow via Peristaltic Pump	<b>Field Technician:</b> E. Thieleman/S. Soldner

**Well Volume**

<b>A. Well Depth (ft):</b> 11.79	<b>D. Well Volume (ft):</b> 0.041	<b>Depth/Height of Top of PVC:</b> 3" bgs
<b>B. Depth to Water (ft):</b> 8.99	<b>E. Well Volume (gal) (C*D):</b> 0.1148	<b>Pump Type:</b> Peristaltic Pump
<b>C. Liquid Depth (ft) (A-B):</b> 2.8	<b>F. Three Well Volumes (gal) (E3):</b> 0.3444	<b>Pump Intake Depth:</b> NA

**Water Quality Parameters**

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1040 Dry	1.76	0.881	375.0	0.00	15.29	58	8.21	--	0

<b>Total Quantity of Water Removed (gal):</b>	~1 L	<b>Sampling Time:</b>	1110
<b>Samplers:</b>	ET/SS	<b>Split Sample With:</b>	--
<b>Sampling Date:</b>	10/16/2018	<b>Sample Type:</b>	GW Grab

**COMMENTS AND OBSERVATIONS:**



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GROUNDWATER SAMPLING PURGE FORM

<b>Well I.D.:</b> MW-10	<b>EA Personnel:</b> E. Thieleman/S. Soldner	<b>Client:</b> NYSDEC
<b>Location:</b> Admiral Cleaners, Watervliet, NY	<b>Well Condition:</b> New	<b>Weather:</b> Overcast, 50F
<b>Sounding Method:</b> Solinst 100-ft water level tape	<b>Gauge Date:</b> N/A	<b>Measurement Ref:</b> Top of Casing (TOC)
	<b>Gauge Time:</b> N/A	
<b>Stick Up/Down (ft):</b> Flush	<b>PID Headspace Reading (ppb):</b> 0.3	<b>Well Diameter (in):</b> 1

<b>Purge Date:</b> 15-Oct-18	<b>Purge Time:</b> 1216
<b>Purge Method:</b> Low Flow via Peristaltic Pump	<b>Field Technician:</b> E. Thieleman/S. Soldner

Well Volume

<b>A. Well Depth (ft):</b> 13.71	<b>D. Well Volume (ft):</b> 0.041	<b>Depth/Height of Top of PVC:</b> 2" bgs
<b>B. Depth to Water (ft):</b> NC	<b>E. Well Volume (gal) (C*D):</b> #VALUE!	<b>Pump Type:</b> Peristaltic Pump
<b>C. Liquid Depth (ft) (A-B):</b> #VALUE!	<b>F. Three Well Volumes (gal) (E3):</b> #VALUE!	<b>Pump Intake Depth:</b> NA

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1217	7.50	1.84	40.9	0.00	15.32	41	--	0.24	0
1220	6.80	1.8	58.9	0.00	15.26	54	--	0.24	0.72
1223	6.67	1.87	69.9	0.00	15.2	53	--	0.24	1.44
1226	6.63	1.87	74.6	0.00	15.10	56	--	0.24	2.16
1229	6.52	1.87	65.5	0.00	15.19	72	--	0.24	2.88

<b>Total Quantity of Water Removed (gal):</b>	2.88 L	<b>Sampling Time:</b>	1715
<b>Samplers:</b>	ET/SS	<b>Split Sample With:</b>	--
<b>Sampling Date:</b>	10/15/2018	<b>Sample Type:</b>	GW Grab

**COMMENTS AND OBSERVATIONS:** Not gauged prior to sampling - PFC sample location.  
 Samples collected for VOCs, PFCs, 1,4-Dioxane, TOC, Major Anions, and dissolved gases  
 All samples collected on 10/15/2018 at 1715 except for 1,4-Dioxane, which was collected on 10/16/2018 at 0950.



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GROUNDWATER SAMPLING PURGE FORM

<b>Well I.D.:</b> MW-12	<b>EA Personnel:</b> E. Thieleman/S. Soldner	<b>Client:</b> NYSDEC
<b>Location:</b> Admiral Cleaners, Watervliet, NY	<b>Well Condition:</b> New	<b>Weather:</b> Overcast, S 10 mph, 50F
<b>Sounding Method:</b> Solinst 100-ft water level tape	<b>Gauge Date:</b> 10/15/2018	<b>Measurement Ref:</b> Top of Casing (TOC)
	<b>Gauge Time:</b> 1120	
<b>Stick Up/Down (ft):</b> Flush	<b>PID Headspace Reading (ppb):</b> 0	<b>Well Diameter (in):</b> 1

<b>Purge Date:</b> 15-Oct-18	<b>Purge Time:</b> 1230
<b>Purge Method:</b> Low Flow via Peristaltic Pump	<b>Field Technician:</b> E. Thieleman/S. Soldner

Well Volume

<b>A. Well Depth (ft):</b> 6.11	<b>D. Well Volume (ft):</b> 0.041	<b>Depth/Height of Top of PVC:</b> -0.1 ft
<b>B. Depth to Water (ft):</b> 2.65	<b>E. Well Volume (gal) (C*D):</b> 0.14186	<b>Pump Type:</b> Peristaltic Pump
<b>C. Liquid Depth (ft) (A-B):</b> 3.46	<b>F. Three Well Volumes (gal) (E3):</b> 0.42558	<b>Pump Intake Depth:</b> NA

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1232	7.78	0.073	>1000	11.34	16.49	44	--	0.30	--
1235	7.85	0	335.0	11.77	16.38	166	Dry	0.30	~0.8
Dry									

<b>Total Quantity of Water Removed (gal):</b>	<u>                    ~0.8 L                    </u>	<b>Sampling Time:</b>	<u>                    920                    </u>
<b>Samplers:</b>	<u>                    ET/SS                    </u>	<b>Split Sample With:</b>	<u>                    --                    </u>
<b>Sampling Date:</b>	<u>                    10/16/2018                    </u>	<b>Sample Type:</b>	<u>                    GW Grab                    </u>

**COMMENTS AND OBSERVATIONS:**                     Brown/turbid - sample very turbid



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GROUNDWATER SAMPLING PURGE FORM

<b>Well I.D.:</b> MW-13	<b>EA Personnel:</b> E. Thieleman/S. Soldner	<b>Client:</b> NYSDEC
<b>Location:</b> Admiral Cleaners, Watervliet, NY	<b>Well Condition:</b> New	<b>Weather:</b> Overcast
<b>Sounding Method:</b> Solinst 100-ft water level tape	<b>Gauge Date:</b> 10/15/2018 <b>Gauge Time:</b> 1109	<b>Measurement Ref:</b> Top of Casing (TOC)
<b>Stick Up/Down (ft):</b> Flush	<b>PID Headspace Reading (ppb):</b> 0	<b>Well Diameter (in):</b> 1

<b>Purge Date:</b> 15-Oct-18	<b>Purge Time:</b> N/A
<b>Purge Method:</b> Low Flow via Peristaltic Pump	<b>Field Technician:</b> E. Thieleman/S. Soldner

Well Volume

<b>A. Well Depth (ft):</b> 4.42	<b>D. Well Volume (ft):</b> 0.041	<b>Depth/Height of Top of PVC:</b> -0.2 ft
<b>B. Depth to Water (ft):</b> Dry	<b>E. Well Volume (gal) (C*D):</b> 0	<b>Pump Type:</b> Peristaltic Pump
<b>C. Liquid Depth (ft) (A-B):</b> 0	<b>F. Three Well Volumes (gal) (E3):</b> 0	<b>Pump Intake Depth:</b> NA

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
Dry									

<b>Total Quantity of Water Removed (gal):</b> 0.00	<b>Sampling Time:</b> N/A
<b>Samplers:</b> N/A	<b>Split Sample With:</b> N/A
<b>Sampling Date:</b> N/A	<b>Sample Type:</b> GW Grab

COMMENTS AND OBSERVATIONS: Well dry, no purging or sampling



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GROUNDWATER SAMPLING PURGE FORM

<b>Well I.D.:</b> MW-14	<b>EA Personnel:</b> E. Thieleman/S. Soldner	<b>Client:</b> NYSDEC
<b>Location:</b> Admiral Cleaners, Watervliet, NY	<b>Well Condition:</b> New	<b>Weather:</b> Clear, calm, 45F
<b>Sounding Method:</b> Solinst 100-ft water level tape	<b>Gauge Date:</b> 10/15/2018	<b>Measurement Ref:</b> Top of Casing (TOC)
	<b>Gauge Time:</b> 1101	
<b>Stick Up/Down (ft):</b> Flush	<b>PID Headspace Reading (ppb):</b> 0	<b>Well Diameter (in):</b> 2

<b>Purge Date:</b> 16-Oct-18	<b>Purge Time:</b> 823
<b>Purge Method:</b> Low Flow via Peristaltic Pump	<b>Field Technician:</b> E. Thieleman/S. Soldner

Well Volume

<b>A. Well Depth (ft):</b> 5.78	<b>D. Well Volume (ft):</b> 0.163	<b>Depth/Height of Top of PVC:</b> -0.3 ft
<b>B. Depth to Water (ft):</b> 4.69	<b>E. Well Volume (gal) (C*D):</b> 0.17767	<b>Pump Type:</b> Peristaltic Pump
<b>C. Liquid Depth (ft) (A-B):</b> 1.09	<b>F. Three Well Volumes (gal) (E3):</b> 0.53301	<b>Pump Intake Depth:</b> NA

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
825	7.86	0.822	454.0	7.27	17.32	248	--	0.25	--
828	7.69	0.814	121.0	6.45	18.23	248	--	0.25	0.75
831	7.66	0.829	49.5	5.84	18.37	246	--	0.25	1.5
834	7.83	0.821	21.0	3.79	18.53	241	--	0.25	2.25
837	7.96	0.814	3.4	2.10	18.73	235	--	0.25	3
Dry									

<b>Total Quantity of Water Removed (gal):</b> 3 L	<b>Sampling Time:</b> 850
<b>Samplers:</b> ET/SS	<b>Split Sample With:</b> --
<b>Sampling Date:</b> 18/16/2018	<b>Sample Type:</b> GW Grab

**COMMENTS AND OBSERVATIONS:** Clear, colorless



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**GROUNDWATER SAMPLING PURGE FORM**

<b>Well I.D.:</b> MW-15	<b>EA Personnel:</b> E. Thieleman/S. Soldner	<b>Client:</b> NYSDEC
<b>Location:</b> Admiral Cleaners, Watervliet, NY	<b>Well Condition:</b> New	<b>Weather:</b> 50F, overcast, windy
<b>Sounding Method:</b> Solinst 100-ft water level tape	<b>Gauge Date:</b> N/A	<b>Measurement Ref:</b> Top of Casing (TOC)
	<b>Gauge Time:</b> N/A	
<b>Stick Up/Down (ft):</b> Flush	<b>PID Headspace Reading (ppb):</b>	<b>Well Diameter (in):</b> 1

<b>Purge Date:</b> 15-Oct-18	<b>Purge Time:</b> 1458
<b>Purge Method:</b> Low Flow via Peristaltic Pump	<b>Field Technician:</b> E. Thieleman/S. Soldner

**Well Volume**

<b>A. Well Depth (ft):</b> NC	<b>D. Well Volume (ft):</b> 0.041	<b>Depth/Height of Top of PVC:</b> -3 in
<b>B. Depth to Water (ft):</b> NC	<b>E. Well Volume (gal) (C*D):</b> N/A	<b>Pump Type:</b> Peristaltic Pump
<b>C. Liquid Depth (ft) (A-B):</b> N/A	<b>F. Three Well Volumes (gal) (E3):</b> N/A	<b>Pump Intake Depth:</b> NA

**Water Quality Parameters**

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1458	7.05	0.471	28.2	4.26	17.79	119	--	0.20	0
1501	7.08	0.442	11.3	3.27	18.48	114	--	0.20	0.6
1504	6.92	0.444	8.0	3.23	18.64	121	--	0.20	1.2
1507	6.84	0.47	6.0	3.22	18.77	125	--	0.20	1.8
1510	6.82	0.4899	4.7	3.05	18.82	126	--	0.20	2.4
1513	6.83	0.495	3.9	2.86	18.85	127	--	0.20	3
1516	6.82	0.497	3.6	2.66	18.84	127	--	0.20	3.6
1519	6.81	0.495	2.9	2.45	18.86	128	--	0.20	4.2
1522	6.8	0.502	2.3	2.29	18.86	129	--	0.20	4.8
1525	6.79	0.503	2.3	2.20	18.9	129	--	0.20	5.4
1528	6.79	0.508	2.1	2.28	18.88	130	--	0.20	6

<b>Total Quantity of Water Removed (gal):</b>	6 L	<b>Sampling Time:</b>	15285
<b>Samplers:</b>	ET/SS	<b>Split Sample With:</b>	--
<b>Sampling Date:</b>	10/15/2018	<b>Sample Type:</b>	GW Grab

**COMMENTS AND OBSERVATIONS:** Not gauged prior to sampling - PFC sample location.







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**GROUNDWATER SAMPLING PURGE FORM**

<b>Well I.D.:</b> MW-17	<b>EA Personnel:</b> E. Thieleman/S. Soldner	<b>Client:</b> NYSDEC
<b>Location:</b> Admiral Cleaners, Watervliet, NY	<b>Well Condition:</b> New	<b>Weather:</b> Overcast, S 10 mph, 55F
<b>Sounding Method:</b> Solinst 100-ft water level tape	<b>Gauge Date:</b> 10/15/2018	<b>Measurement Ref:</b> Top of Casing (TOC)
	<b>Gauge Time:</b> 1103	
<b>Stick Up/Down (ft):</b> Flush	<b>PID Headspace Reading (ppb):</b> 0.2	<b>Well Diameter (in):</b> 1

<b>Purge Date:</b> 15-Oct-18	<b>Purge Time:</b> 1617
<b>Purge Method:</b> Low Flow via Peristaltic Pump	<b>Field Technician:</b> E. Thieleman/S. Soldner

**Well Volume**

<b>A. Well Depth (ft):</b> 7.71	<b>D. Well Volume (ft):</b> 0.041	<b>Depth/Height of Top of PVC:</b> -0.2 ft
<b>B. Depth to Water (ft):</b> 6.2	<b>E. Well Volume (gal) (C*D):</b> 0.06191	<b>Pump Type:</b> Peristaltic Pump
<b>C. Liquid Depth (ft) (A-B):</b> 1.51	<b>F. Three Well Volumes (gal) (E3):</b> 0.18573	<b>Pump Intake Depth:</b> NA

**Water Quality Parameters**

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1620	7.93	1.07	331.0	7.68	16.51	140	--	0.30	0
1623	7.32	1.08	74.3	4.40	17.41	177	--	0.30	0.9
1626	7.27	1.08	37.2	4.08	17.55	188	--	0.30	1.8
1629	7.19	1.09	21.1	3.13	17.67	199	--	0.30	2.4
1632	7.19	1.09	20.9	3.03	17.68	200	--	0.30	3.2
1635	7.2	1.09	21.3	3.14	17.69	204	--	0.30	4

<b>Total Quantity of Water Removed (gal):</b> 4 L	<b>Sampling Time:</b> 1638
<b>Samplers:</b> ET/SS	<b>Split Sample With:</b> --
<b>Sampling Date:</b> 10/15/2018	<b>Sample Type:</b> GW Grab

**COMMENTS AND OBSERVATIONS:** Well practically dry at sample time.

## **Attachment 3**

# **Remedial Investigation Phase II Laboratory Analytical Results**

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October 11, 2018

Christopher Schroer  
EA Engineering, Science & Tech. - NY  
6712 Brooklawn Parkway, Suite 104  
Syracuse, NY 13211

Project Location: Watervliet, NY  
Client Job Number:  
Project Number: 1490378.0003  
Laboratory Work Order Number: 18I1225

Enclosed are results of analyses for samples received by the laboratory on September 27, 2018. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Aaron L. Benoit", with a horizontal line extending to the right from the end of the signature.

Aaron L. Benoit  
Project Manager

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EA Engineering, Science & Tech. - NY  
 6712 Brooklawn Parkway, Suite 104  
 Syracuse, NY 13211  
 ATTN: Christopher Schroer

REPORT DATE: 10/11/2018

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 1490378.0003

**ANALYTICAL SUMMARY**

WORK ORDER NUMBER: 1811225

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Watervliet, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
401075-SS-01-00-12	1811225-01	Soil		SM 2540G SW-846 6010D SW-846 7471B SW-846 8081B SW-846 8082A SW-846 8260C SW-846 8270D SW-846 9014	
401075-SS-01-12-24	1811225-02	Soil		SM 2540G SW-846 6010D SW-846 7471B SW-846 8081B SW-846 8082A SW-846 8260C SW-846 8270D SW-846 9014	
401075-SS-02-00-12	1811225-03	Soil		SM 2540G SW-846 6010D SW-846 7471B SW-846 8081B SW-846 8082A SW-846 8260C SW-846 8270D SW-846 9014	
401075-SS-02-12-24	1811225-04	Soil		SM 2540G SW-846 6010D SW-846 7471B SW-846 8081B SW-846 8082A SW-846 8260C SW-846 8270D SW-846 9014	
401075-SS-04-00-12	1811225-05	Soil		SM 2540G SW-846 6010D SW-846 7471B SW-846 8081B SW-846 8082A SW-846 8260C SW-846 8270D SW-846 9014	

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 Syracuse, NY 13211  
 ATTN: Christopher Schroer

REPORT DATE: 10/11/2018

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 1490378.0003

**ANALYTICAL SUMMARY**

WORK ORDER NUMBER: 1811225

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Watervliet, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
401075-SS-04-12-24	1811225-06	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8081B	
				SW-846 8082A	
				SW-846 8260C	
				SW-846 8270D	
401075-SS-06-00-12	1811225-07	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8081B	
				SW-846 8082A	
				SW-846 8260C	
				SW-846 8270D	
401075-SS-06-12-24	1811225-08	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8081B	
				SW-846 8082A	
				SW-846 8260C	
				SW-846 8270D	
401075-FD-092618	1811225-09	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8081B	
				SW-846 8082A	
				SW-846 8260C	
				SW-846 8270D	
401075-FD-092618	1811225-10	Water		SW-846 6010D	
				SW-846 7470A	
				SW-846 8081B	
				SW-846 8082A	
				SW-846 8260C	
				SW-846 8270D	
				SW-846 9014	
Trip Blank	1811225-11	Trip Blank Water		SW-846 8260C	

**CASE NARRATIVE SUMMARY**

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332  
SW-846 6010D

**Qualifications:****B**

Analyte is found in the associated laboratory blank as well as in the sample.

**Analyte & Samples(s) Qualified:****Calcium**

1811225-01[401075-SS-01-00-12], 1811225-02[401075-SS-01-12-24], 1811225-03[401075-SS-02-00-12], 1811225-04[401075-SS-02-12-24], 1811225-05[401075-SS-04-00-12], 1811225-06[401075-SS-04-12-24], 1811225-07[401075-SS-06-00-12], 1811225-08[401075-SS-06-12-24], 1811225-09[401075-FD-092618], B214328-BS1, B214328-BSD1, B214328-MS1, B214328-MSD1

**Zinc**

1811225-01[401075-SS-01-00-12], 1811225-02[401075-SS-01-12-24], 1811225-03[401075-SS-02-00-12], 1811225-04[401075-SS-02-12-24], 1811225-05[401075-SS-04-00-12], 1811225-06[401075-SS-04-12-24], 1811225-07[401075-SS-06-00-12], 1811225-08[401075-SS-06-12-24], 1811225-09[401075-FD-092618], B214328-BS1, B214328-BSD1, B214328-MS1, B214328-MSD1

**B-07**

Data is not affected by elevated level in laboratory blank since sample result is >10x level found in the blank.

**Analyte & Samples(s) Qualified:****Calcium**

1811225-01[401075-SS-01-00-12], 1811225-02[401075-SS-01-12-24], 1811225-03[401075-SS-02-00-12], 1811225-04[401075-SS-02-12-24], 1811225-05[401075-SS-04-00-12], 1811225-06[401075-SS-04-12-24], 1811225-07[401075-SS-06-00-12], 1811225-08[401075-SS-06-12-24], 1811225-09[401075-FD-092618], B214328-BLK1

**Zinc**

1811225-01[401075-SS-01-00-12], 1811225-02[401075-SS-01-12-24], 1811225-03[401075-SS-02-00-12], 1811225-04[401075-SS-02-12-24], 1811225-05[401075-SS-04-00-12], 1811225-06[401075-SS-04-12-24], 1811225-07[401075-SS-06-00-12], 1811225-08[401075-SS-06-12-24], 1811225-09[401075-FD-092618], B214328-BLK1

**MS-07A**

Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.

**Analyte & Samples(s) Qualified:****Antimony**

1811225-04[401075-SS-02-12-24], B214328-MS1, B214328-MSD1

**MS-19**

Sample to spike ratio is greater than or equal to 4:1. Spiked amount is not representative of the native amount in the sample. Appropriate or meaningful recoveries cannot be calculated.

**Analyte & Samples(s) Qualified:****Aluminum**

1811225-04[401075-SS-02-12-24], B214328-MS1, B214328-MSD1

**Barium**

1811225-04[401075-SS-02-12-24], B214328-MS1, B214328-MSD1

**Calcium**

1811225-04[401075-SS-02-12-24], B214328-MS1, B214328-MSD1

**Iron**

1811225-04[401075-SS-02-12-24], B214328-MS1, B214328-MSD1

**Lead**

1811225-04[401075-SS-02-12-24], B214328-MS1, B214328-MSD1

**Manganese**

1811225-04[401075-SS-02-12-24], B214328-MS1, B214328-MSD1

**Potassium**

1811225-04[401075-SS-02-12-24], B214328-MSD1

**MS-22**

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.

**Analyte & Samples(s) Qualified:****Copper**

B214328-MS1

**Magnesium**

B214328-MS1

**Selenium**

B214328-MSD1

**SW-846 7471B****Qualifications:**

**MS-19**

Sample to spike ratio is greater than or equal to 4:1. Spiked amount is not representative of the native amount in the sample. Appropriate or meaningful recoveries cannot be calculated.

**Analyte & Samples(s) Qualified:****Mercury**

18I1225-04[401075-SS-02-12-24], B214451-MS1, B214451-MSD1

**SW-846 8081B****Qualifications:****DL-03**

Elevated reporting limit due to matrix.

**Analyte & Samples(s) Qualified:**

18I1225-05[401075-SS-04-00-12]

**R-06**

Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.

**Analyte & Samples(s) Qualified:****alpha-BHC**

18I1225-04[401075-SS-02-12-24], B213585-MS1, B213585-MSD1

**alpha-BHC [2C]**

18I1225-04[401075-SS-02-12-24], B213585-MS1, B213585-MSD1

**beta-BHC**

18I1225-04[401075-SS-02-12-24], B213585-MS1, B213585-MSD1

**delta-BHC**

18I1225-04[401075-SS-02-12-24], B213585-MS1, B213585-MSD1

**delta-BHC [2C]**

18I1225-04[401075-SS-02-12-24], B213585-MS1, B213585-MSD1

**gamma-BHC (Lindane)**

18I1225-04[401075-SS-02-12-24], B213585-MS1, B213585-MSD1

**gamma-BHC (Lindane) [2C]**

18I1225-04[401075-SS-02-12-24], B213585-MS1, B213585-MSD1

**Hexachlorobenzene**

18I1225-04[401075-SS-02-12-24], B213585-MS1, B213585-MSD1

**V-06**

Continuing calibration did not meet method specifications and was biased on the high side for this compound.

**Analyte & Samples(s) Qualified:****alpha-BHC [2C]**

B213585-BS1, B213585-BSD1, B213585-MS1, B213585-MSD1

**delta-BHC [2C]**

B213585-MS1, B213585-MSD1

**gamma-BHC (Lindane) [2C]**

B213585-MS1, B213585-MSD1

**Hexachlorobenzene [2C]**

B213585-BS1, B213585-BSD1, B213585-MS1, B213585-MSD1

**SW-846 8260C****Qualifications:****L-02**

Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.

**Analyte & Samples(s) Qualified:****Methyl Acetate**

B213632-BS1, B213632-BSD1, B213971-BS1, B213971-BSD1, B214232-BS1, B214232-BSD1

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**L-07**

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

**Analyte & Samples(s) Qualified:****Acetone**

B213971-BSD1

**Hexachlorobutadiene**

B213632-BS1

**MS-07A**

Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.

**Analyte & Samples(s) Qualified:****Bromomethane**

1811225-04[401075-SS-02-12-24], B213971-MS1, B213971-MSD1

**Tetrachloroethylene**

1811225-04[401075-SS-02-12-24], B213971-MS1, B213971-MSD1

**MS-15**

Matrix spike and matrix spike duplicate recoveries are outside of control limits. Data validation is not affected since results for this compound in this sample are "not detected", and recovery bias is on the high side.

**Analyte & Samples(s) Qualified:****2-Butanone (MEK)**

B213971-MS1, B213971-MSD1

**2-Hexanone (MBK)**

B213971-MS1, B213971-MSD1

**Acetone**

B213971-MS1, B213971-MSD1

**Methyl Acetate**

B213971-MS1, B213971-MSD1

**PR-15**

According to the NY ELAP program, all voa results less than 0.2mg/Kg are estimated and biased low if not collected according to SW-846 5035-L/5035A-L.

**Analyte & Samples(s) Qualified:**

1811225-01[401075-SS-01-00-12], 1811225-02[401075-SS-01-12-24], 1811225-03[401075-SS-02-00-12], 1811225-04[401075-SS-02-12-24], 1811225-05[401075-SS-04-00-12], 1811225-06[401075-SS-04-12-24], 1811225-07[401075-SS-06-00-12], 1811225-08[401075-SS-06-12-24], 1811225-09[401075-FD-092618]

**V-05**

Continuing calibration did not meet method specifications and was biased on the low side for this compound.

**Analyte & Samples(s) Qualified:****Carbon Disulfide**

1811225-10[401075-FD-092618], 1811225-11[Trip Blank], B213632-BLK1, B213632-BS1, B213632-BSD1, S027814-CCV1

**Carbon Tetrachloride**

1811225-10[401075-FD-092618], 1811225-11[Trip Blank], B213632-BLK1, B213632-BS1, B213632-BSD1, S027814-CCV1

**Dichlorodifluoromethane (Freon I)**

1811225-10[401075-FD-092618], 1811225-11[Trip Blank], B213632-BLK1, B213632-BS1, B213632-BSD1, S027814-CCV1

**Methyl Acetate**

1811225-10[401075-FD-092618], 1811225-11[Trip Blank], B213632-BLK1, B213632-BS1, B213632-BSD1, S027814-CCV1

**Trichlorofluoromethane (Freon II)**

1811225-10[401075-FD-092618], 1811225-11[Trip Blank], B213632-BLK1, B213632-BS1, B213632-BSD1, S027814-CCV1

**V-34**

Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.

**Analyte & Samples(s) Qualified:****Bromomethane**

1811225-01[401075-SS-01-00-12], 1811225-02[401075-SS-01-12-24], 1811225-03[401075-SS-02-00-12], 1811225-04[401075-SS-02-12-24], 1811225-05[401075-SS-04-00-12], 1811225-06[401075-SS-04-12-24], 1811225-07[401075-SS-06-00-12], 1811225-08[401075-SS-06-12-24], 1811225-09[401075-FD-092618], B213971-BLK1, B213971-BS1, B213971-BSD1, B213971-MS1, B213971-MSD1, B214232-BLK1, B214232-BS1, B214232-BSD1, S028032-CCV1, S028105-CCV1

**V-36**

Initial calibration verification (ICV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

**Analyte & Samples(s) Qualified:****1,4-Dioxane**

B213971-BS1, B213971-BSD1, B213971-MS1, B213971-MSD1, B214232-BS1, B214232-BSD1, S028032-CCV1, S028105-CCV1



**Qualifications:****L-04**

Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.

**Analyte & Samples(s) Qualified:****Hexachlorocyclopentadiene**

18I1225-01[401075-SS-01-00-12], 18I1225-02[401075-SS-01-12-24], 18I1225-03[401075-SS-02-00-12], 18I1225-04[401075-SS-02-12-24], 18I1225-05[401075-SS-04-00-12], 18I1225-06[401075-SS-04-12-24], 18I1225-07[401075-SS-06-00-12], 18I1225-08[401075-SS-06-12-24], 18I1225-09[401075-FD-092618], B214250-BLK1, B214250-BS1, B214250-BSD1

**L-07A**

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD outside of control limits. Reduced precision anticipated for any reported result for this compound.

**Analyte & Samples(s) Qualified:****Benzidine**

B213872-BSD1

**MS-09**

Matrix spike recovery and/or matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated.

**Analyte & Samples(s) Qualified:****Benzidine**

18I1225-04[401075-SS-02-12-24], B214250-MS1, B214250-MSD1

**Benzoic Acid**

18I1225-04[401075-SS-02-12-24], B214250-MS1, B214250-MSD1

**MS-22**

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.

**Analyte & Samples(s) Qualified:****2,4-Dinitrophenol**

B214250-MSD1

**R-05**

Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.

**Analyte & Samples(s) Qualified:****Benzidine**

18I1225-10[401075-FD-092618], B213872-BLK1, B213872-BS1

**V-04**

Initial calibration did not meet method specifications. Compound was calibrated using a response factor where %RSD is outside of method specified criteria. Reported result is estimated.

**Analyte & Samples(s) Qualified:****2,4-Dinitrophenol**

18I1225-01[401075-SS-01-00-12], 18I1225-02[401075-SS-01-12-24], 18I1225-03[401075-SS-02-00-12], 18I1225-04[401075-SS-02-12-24], 18I1225-05[401075-SS-04-00-12], 18I1225-06[401075-SS-04-12-24], 18I1225-07[401075-SS-06-00-12], 18I1225-08[401075-SS-06-12-24], 18I1225-09[401075-FD-092618], 18I1225-10[401075-FD-092618], B214250-BLK1, B214250-BS1, B214250-BSD1, B214250-MS1, B214250-MSD1

**Benzidine**

18I1225-01[401075-SS-01-00-12], 18I1225-02[401075-SS-01-12-24], 18I1225-03[401075-SS-02-00-12], 18I1225-04[401075-SS-02-12-24], 18I1225-05[401075-SS-04-00-12], 18I1225-06[401075-SS-04-12-24], 18I1225-07[401075-SS-06-00-12], 18I1225-08[401075-SS-06-12-24], 18I1225-09[401075-FD-092618], 18I1225-10[401075-FD-092618], B213872-BLK1, B213872-BS1, B213872-BSD1, B214250-BLK1, B214250-BS1, B214250-BSD1, B214250-MS1, B214250-MSD1

**Hexachlorocyclopentadiene**

18I1225-01[401075-SS-01-00-12], 18I1225-02[401075-SS-01-12-24], 18I1225-03[401075-SS-02-00-12], 18I1225-04[401075-SS-02-12-24], 18I1225-05[401075-SS-04-00-12], 18I1225-06[401075-SS-04-12-24], 18I1225-07[401075-SS-06-00-12], 18I1225-08[401075-SS-06-12-24], 18I1225-09[401075-FD-092618], 18I1225-10[401075-FD-092618], B214250-BLK1, B214250-BS1, B214250-BSD1, B214250-MS1, B214250-MSD1

**V-05**

Continuing calibration did not meet method specifications and was biased on the low side for this compound.

**Analyte & Samples(s) Qualified:****Aniline**

B213872-BLK1, B213872-BS1, B213872-BSD1

**Benzidine**

1811225-01[401075-SS-01-00-12], 1811225-02[401075-SS-01-12-24], 1811225-03[401075-SS-02-00-12], 1811225-04[401075-SS-02-12-24], 1811225-05[401075-SS-04-00-12], 1811225-06[401075-SS-04-12-24], 1811225-07[401075-SS-06-00-12], 1811225-08[401075-SS-06-12-24], 1811225-09[401075-FD-092618], 1811225-10[401075-FD-092618], B213872-BLK1, B213872-BS1, B213872-BSD1, B214250-BLK1, B214250-BS1, B214250-BSD1, B214250-MS1, B214250-MSD1

**Bis(2-chloroethyl)ether**

B213872-BLK1, B213872-BS1, B213872-BSD1

**Bis(2-chloroisopropyl)ether**

B213872-BLK1, B213872-BS1, B213872-BSD1

**V-06**

Continuing calibration did not meet method specifications and was biased on the high side for this compound.

**Analyte & Samples(s) Qualified:****2,4-Dinitrotoluene**

B213872-BLK1, B213872-BS1, B213872-BSD1

**Benzoic Acid**

1811225-10[401075-FD-092618], B213872-BLK1, B213872-BS1, B213872-BSD1, B214250-BS1, B214250-BSD1, B214250-MS1, B214250-MSD1

**Hexachlorobutadiene**

B213872-BLK1, B213872-BS1, B213872-BSD1

**Pentachloronitrobenzene**

B213872-BLK1, B213872-BS1, B213872-BSD1

**V-19**

Initial calibration did not meet method specifications. Compound was calibrated using linear regression with correlation coefficient <0.99.

Reported result is estimated.

**Analyte & Samples(s) Qualified:****2,4-Dinitrophenol**

B213872-BLK1, B213872-BS1, B213872-BSD1

**V-20**

Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

**Analyte & Samples(s) Qualified:****Benzoic Acid**

1811225-01[401075-SS-01-00-12], 1811225-02[401075-SS-01-12-24], 1811225-03[401075-SS-02-00-12], 1811225-04[401075-SS-02-12-24], 1811225-05[401075-SS-04-00-12], 1811225-06[401075-SS-04-12-24], 1811225-07[401075-SS-06-00-12], 1811225-08[401075-SS-06-12-24], 1811225-09[401075-FD-092618], B214250-BLK1

**V-34**

Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.

**Analyte & Samples(s) Qualified:****4-Chloroaniline**

1811225-01[401075-SS-01-00-12], 1811225-02[401075-SS-01-12-24], 1811225-03[401075-SS-02-00-12], 1811225-04[401075-SS-02-12-24], 1811225-05[401075-SS-04-00-12], 1811225-06[401075-SS-04-12-24], 1811225-07[401075-SS-06-00-12], 1811225-08[401075-SS-06-12-24], 1811225-09[401075-FD-092618], 1811225-10[401075-FD-092618], B213872-BLK1, B213872-BS1, B213872-BSD1, B214250-BLK1, B214250-BS1, B214250-BSD1, B214250-MS1, B214250-MSD1

**Benzidine**

1811225-01[401075-SS-01-00-12], 1811225-02[401075-SS-01-12-24], 1811225-03[401075-SS-02-00-12], 1811225-04[401075-SS-02-12-24], 1811225-05[401075-SS-04-00-12], 1811225-06[401075-SS-04-12-24], 1811225-07[401075-SS-06-00-12], 1811225-08[401075-SS-06-12-24], 1811225-09[401075-FD-092618], 1811225-10[401075-FD-092618], B214250-BLK1, B214250-BS1, B214250-BSD1, B214250-MS1, B214250-MSD1

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

A handwritten signature in black ink, appearing to read "Lisa Worthington", is written over a light gray rectangular background.

Lisa A. Worthington  
Project Manager

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-01-00-12

Sampled: 9/26/2018 11:16

Sample ID: 1811225-01

Sample Matrix: Soil

Sample Flags: PR-15

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.11	0.026	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
Acrylonitrile	ND	0.0067	0.0028	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0011	0.00078	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
Benzene	ND	0.0022	0.00078	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
Bromobenzene	ND	0.0022	0.00089	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
Bromochloromethane	ND	0.0022	0.0016	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
Bromodichloromethane	ND	0.0022	0.00067	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
Bromoform	ND	0.0022	0.0016	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
Bromomethane	ND	0.011	0.0047	mg/Kg dry	1	V-34	SW-846 8260C	10/4/18	10/4/18 8:40	MFF
2-Butanone (MEK)	ND	0.045	0.019	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
tert-Butyl Alcohol (TBA)	ND	0.045	0.023	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
n-Butylbenzene	ND	0.0022	0.00078	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
sec-Butylbenzene	ND	0.0022	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
tert-Butylbenzene	ND	0.0022	0.0010	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0011	0.00067	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
Carbon Disulfide	ND	0.0067	0.0048	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
Carbon Tetrachloride	ND	0.0022	0.00089	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
Chlorobenzene	ND	0.0022	0.00078	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
Chlorodibromomethane	ND	0.0011	0.00078	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
Chloroethane	ND	0.022	0.0017	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
Chloroform	ND	0.0045	0.00078	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
Chloromethane	ND	0.011	0.0071	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
2-Chlorotoluene	ND	0.0022	0.00089	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
4-Chlorotoluene	ND	0.0022	0.00089	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0022	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
1,2-Dibromoethane (EDB)	ND	0.0011	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
Dibromomethane	ND	0.0022	0.00067	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
1,2-Dichlorobenzene	ND	0.0022	0.00078	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
1,3-Dichlorobenzene	ND	0.0022	0.00078	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
1,4-Dichlorobenzene	ND	0.0022	0.00089	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
trans-1,4-Dichloro-2-butene	ND	0.0045	0.0023	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.022	0.0014	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
1,1-Dichloroethane	ND	0.0022	0.00078	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
1,2-Dichloroethane	ND	0.0022	0.0014	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
1,1-Dichloroethylene	ND	0.0045	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
cis-1,2-Dichloroethylene	ND	0.0022	0.00089	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
trans-1,2-Dichloroethylene	ND	0.0022	0.0010	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
1,2-Dichloropropane	ND	0.0022	0.0014	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
1,3-Dichloropropane	ND	0.0011	0.00078	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
2,2-Dichloropropane	ND	0.0022	0.0010	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
1,1-Dichloropropene	ND	0.0022	0.0010	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
cis-1,3-Dichloropropene	ND	0.0011	0.00078	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
trans-1,3-Dichloropropene	ND	0.0011	0.00078	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
Diethyl Ether	ND	0.022	0.0020	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY  
 Date Received: 9/27/2018  
 Field Sample #: 401075-SS-01-00-12  
 Sample ID: 1811225-01  
 Sample Matrix: Soil

Sample Description:  
 Sampled: 9/26/2018 11:16

Work Order: 1811225

Sample Flags: PR-15

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0011	0.00067	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
1,4-Dioxane	ND	0.11	0.064	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
Ethylbenzene	ND	0.0022	0.00089	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
Hexachlorobutadiene	ND	0.0022	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
2-Hexanone (MBK)	ND	0.022	0.012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
Isopropylbenzene (Cumene)	ND	0.0022	0.00078	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0022	0.00089	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
Methyl Acetate	ND	0.0022	0.0018	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0045	0.0010	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
Methyl Cyclohexane	ND	0.0022	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
Methylene Chloride	ND	0.022	0.0079	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.022	0.0085	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
Naphthalene	ND	0.0045	0.00078	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
n-Propylbenzene	ND	0.0022	0.00078	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
Styrene	ND	0.0022	0.00067	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
1,1,1,2-Tetrachloroethane	ND	0.0022	0.0020	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
1,1,2,2-Tetrachloroethane	ND	0.0022	0.0010	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
Tetrachloroethylene	0.021	0.0022	0.0014	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
Tetrahydrofuran	ND	0.011	0.0024	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
Toluene	ND	0.0022	0.00089	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
1,2,3-Trichlorobenzene	ND	0.0022	0.00067	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
1,2,4-Trichlorobenzene	ND	0.0022	0.00089	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
1,3,5-Trichlorobenzene	ND	0.0022	0.00078	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
1,1,1-Trichloroethane	ND	0.0022	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
1,1,2-Trichloroethane	ND	0.0022	0.0013	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
Trichloroethylene	ND	0.0022	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
Trichlorofluoromethane (Freon 11)	ND	0.011	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
1,2,3-Trichloropropane	ND	0.0022	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.011	0.0010	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
1,2,4-Trimethylbenzene	ND	0.0022	0.00089	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
1,3,5-Trimethylbenzene	ND	0.0022	0.00067	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
Vinyl Chloride	ND	0.011	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
m+p Xylene	ND	0.0045	0.0019	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
o-Xylene	ND	0.0022	0.00078	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:40	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		106	70-130					10/4/18	8:40	
Toluene-d8		99.1	70-130					10/4/18	8:40	
4-Bromofluorobenzene		99.6	70-130					10/4/18	8:40	



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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-01-00-12

Sampled: 9/26/2018 11:16

Sample ID: 1811225-01

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.20	0.060	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Acenaphthylene	ND	0.20	0.067	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Acetophenone	ND	0.40	0.079	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Aniline	ND	0.40	0.11	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Anthracene	ND	0.20	0.058	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Benzidine	ND	0.78	0.50	mg/Kg dry	1	V-04, V-05, V-34	SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Benzo(a)anthracene	0.080	0.20	0.053	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Benzo(a)pyrene	0.10	0.20	0.063	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Benzo(b)fluoranthene	0.12	0.20	0.057	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Benzo(g,h,i)perylene	0.091	0.20	0.089	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Benzo(k)fluoranthene	ND	0.20	0.063	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Benzoic Acid	ND	1.2	0.21	mg/Kg dry	1	V-20	SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Bis(2-chloroethoxy)methane	ND	0.40	0.077	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Bis(2-chloroethyl)ether	ND	0.40	0.079	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Bis(2-chloroisopropyl)ether	ND	0.40	0.086	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Bis(2-Ethylhexyl)phthalate	ND	0.40	0.16	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
4-Bromophenylphenylether	ND	0.40	0.067	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Butylbenzylphthalate	ND	0.40	0.096	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Carbazole	ND	0.20	0.052	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
4-Chloroaniline	ND	0.78	0.092	mg/Kg dry	1	V-34	SW-846 8270D	10/8/18	10/9/18 13:41	CDT
4-Chloro-3-methylphenol	ND	0.78	0.086	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
2-Chloronaphthalene	ND	0.40	0.076	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
2-Chlorophenol	ND	0.40	0.072	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
4-Chlorophenylphenylether	ND	0.40	0.067	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Chrysene	0.085	0.20	0.063	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Dibenz(a,h)anthracene	ND	0.20	0.12	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Dibenzofuran	ND	0.40	0.070	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Di-n-butylphthalate	ND	0.40	0.088	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
1,2-Dichlorobenzene	ND	0.40	0.071	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
1,3-Dichlorobenzene	ND	0.40	0.069	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
1,4-Dichlorobenzene	ND	0.40	0.072	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
3,3-Dichlorobenzidine	ND	0.20	0.061	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
2,4-Dichlorophenol	ND	0.40	0.069	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Diethylphthalate	ND	0.40	0.072	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
2,4-Dimethylphenol	ND	0.40	0.075	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Dimethylphthalate	ND	0.40	0.071	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
4,6-Dinitro-2-methylphenol	ND	0.40	0.38	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
2,4-Dinitrophenol	ND	0.78	0.23	mg/Kg dry	1	V-04	SW-846 8270D	10/8/18	10/9/18 13:41	CDT
2,4-Dinitrotoluene	ND	0.40	0.065	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
2,6-Dinitrotoluene	ND	0.40	0.071	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Di-n-octylphthalate	ND	0.40	0.21	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
1,2-Diphenylhydrazine (as Azobenzene)	ND	0.40	0.065	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Fluoranthene	0.085	0.20	0.066	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Fluorene	ND	0.20	0.065	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT

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Project Location: Watervliet, NY  
 Date Received: 9/27/2018  
 Field Sample #: 401075-SS-01-00-12  
 Sample ID: 1811225-01  
 Sample Matrix: Soil

Sample Description:  
 Sampled: 9/26/2018 11:16

Work Order: 1811225

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0.40	0.071	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Hexachlorobutadiene	ND	0.40	0.071	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Hexachlorocyclopentadiene	ND	0.40	0.085	mg/Kg dry	1	L-04, V-04	SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Hexachloroethane	ND	0.40	0.080	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Indeno(1,2,3-cd)pyrene	ND	0.20	0.14	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Isophorone	ND	0.40	0.078	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
1-Methylnaphthalene	ND	0.20	0.077	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
2-Methylnaphthalene	ND	0.20	0.070	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
2-Methylphenol	ND	0.40	0.10	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
3/4-Methylphenol	ND	0.40	0.13	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Naphthalene	ND	0.20	0.10	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
2-Nitroaniline	ND	0.40	0.067	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
3-Nitroaniline	ND	0.40	0.058	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
4-Nitroaniline	ND	0.40	0.067	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Nitrobenzene	ND	0.40	0.076	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
2-Nitrophenol	ND	0.40	0.11	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
4-Nitrophenol	ND	0.78	0.088	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
N-Nitrosodimethylamine	ND	0.40	0.25	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
N-Nitrosodiphenylamine	ND	0.40	0.083	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
N-Nitrosodi-n-propylamine	ND	0.40	0.083	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Pentachloronitrobenzene	ND	0.40	0.096	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Pentachlorophenol	ND	0.40	0.097	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Phenanthrene	ND	0.20	0.10	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Phenol	ND	0.40	0.069	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Pyrene	0.086	0.20	0.066	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Pyridine	ND	0.40	0.065	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
1,2,4,5-Tetrachlorobenzene	ND	0.40	0.072	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
1,2,4-Trichlorobenzene	ND	0.40	0.072	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
2,4,5-Trichlorophenol	ND	0.40	0.091	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
2,4,6-Trichlorophenol	ND	0.40	0.067	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 13:41	CDT
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
2-Fluorophenol		60.5	30-130						10/9/18 13:41	
Phenol-d6		60.0	30-130						10/9/18 13:41	
Nitrobenzene-d5		64.5	30-130						10/9/18 13:41	
2-Fluorobiphenyl		67.9	30-130						10/9/18 13:41	
2,4,6-Tribromophenol		56.0	30-130						10/9/18 13:41	
p-Terphenyl-d14		72.3	30-130						10/9/18 13:41	

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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-01-00-12

Sampled: 9/26/2018 11:16

Sample ID: 1811225-01

Sample Matrix: Soil

**Organochloride Pesticides by GC/ECD**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Alachlor [1]	ND	0.023	0.0013	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 2:46	TG
Aldrin [1]	ND	0.0059	0.00035	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 2:46	TG
alpha-BHC [1]	ND	0.0059	0.00047	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 2:46	TG
beta-BHC [1]	ND	0.0059	0.00059	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 2:46	TG
delta-BHC [1]	ND	0.0059	0.00047	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 2:46	TG
gamma-BHC (Lindane) [1]	ND	0.0023	0.00059	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 2:46	TG
Chlordane [1]	ND	0.023	0.0068	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 2:46	TG
4,4'-DDD [1]	ND	0.0047	0.00047	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 2:46	TG
4,4'-DDE [2]	0.0048	0.0047	0.00035	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 2:46	TG
4,4'-DDT [2]	0.0090	0.0047	0.00047	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 2:46	TG
Dieldrin [1]	ND	0.0047	0.00035	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 2:46	TG
Endosulfan I [1]	ND	0.0059	0.00047	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 2:46	TG
Endosulfan II [1]	ND	0.0094	0.00035	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 2:46	TG
Endosulfan sulfate [1]	ND	0.0094	0.0015	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 2:46	TG
Endrin [1]	ND	0.0094	0.00035	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 2:46	TG
Endrin aldehyde [1]	ND	0.0094	0.0014	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 2:46	TG
Endrin ketone [1]	ND	0.0094	0.00047	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 2:46	TG
Heptachlor [1]	ND	0.0059	0.00059	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 2:46	TG
Heptachlor epoxide [1]	ND	0.0059	0.00047	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 2:46	TG
Hexachlorobenzene [1]	ND	0.0070	0.00082	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 2:46	TG
Methoxychlor [1]	ND	0.059	0.00070	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 2:46	TG
Toxaphene [1]	ND	0.12	0.050	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 2:46	TG
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
Decachlorobiphenyl [1]		62.0	30-150						10/4/18 2:46	
Decachlorobiphenyl [2]		68.1	30-150						10/4/18 2:46	
Tetrachloro-m-xylene [1]		35.3	30-150						10/4/18 2:46	
Tetrachloro-m-xylene [2]		43.3	30-150						10/4/18 2:46	

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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-01-00-12

Sampled: 9/26/2018 11:16

Sample ID: 1811225-01

Sample Matrix: Soil

**Polychlorinated Biphenyls By GC/ECD**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.094	0.056	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 14:58	TG
Aroclor-1221 [1]	ND	0.094	0.061	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 14:58	TG
Aroclor-1232 [1]	ND	0.094	0.042	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 14:58	TG
Aroclor-1242 [1]	ND	0.094	0.047	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 14:58	TG
Aroclor-1248 [1]	ND	0.094	0.056	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 14:58	TG
Aroclor-1254 [1]	ND	0.094	0.061	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 14:58	TG
Aroclor-1260 [1]	ND	0.094	0.066	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 14:58	TG
Aroclor-1262 [1]	ND	0.094	0.047	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 14:58	TG
Aroclor-1268 [1]	ND	0.094	0.037	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 14:58	TG
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
Decachlorobiphenyl [1]		75.5	30-150						10/3/18 14:58	
Decachlorobiphenyl [2]		84.2	30-150						10/3/18 14:58	
Tetrachloro-m-xylene [1]		73.6	30-150						10/3/18 14:58	
Tetrachloro-m-xylene [2]		84.3	30-150						10/3/18 14:58	

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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-01-00-12

Sampled: 9/26/2018 11:16

Sample ID: 1811225-01

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	15000	2.0	1.8	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:38	QNW
Antimony	ND	2.0	1.3	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:38	QNW
Arsenic	11	2.0	0.99	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:38	QNW
Barium	130	2.0	0.96	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:38	QNW
Beryllium	0.87	0.20	0.14	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:38	QNW
Cadmium	0.51	0.20	0.12	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:38	QNW
Calcium	2100	5.9	4.0	mg/Kg dry	1	B-07, B	SW-846 6010D	10/9/18	10/10/18 13:38	QNW
Chromium	22	0.39	0.24	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:38	QNW
Cobalt	13	2.0	1.1	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:38	QNW
Copper	74	0.39	0.33	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:38	QNW
Iron	38000	39	34	mg/Kg dry	20		SW-846 6010D	10/9/18	10/10/18 15:06	QNW
Lead	80	0.59	0.34	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:38	QNW
Magnesium	5600	120	63	mg/Kg dry	20		SW-846 6010D	10/9/18	10/10/18 15:06	QNW
Manganese	250	0.39	0.12	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:38	QNW
Mercury	3.0	0.15	0.015	mg/Kg dry	5		SW-846 7471B	10/10/18	10/11/18 8:26	AJL
Nickel	23	0.39	0.31	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:38	QNW
Potassium	2200	1600	560	mg/Kg dry	20		SW-846 6010D	10/9/18	10/10/18 15:06	QNW
Selenium	ND	3.9	3.2	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:38	QNW
Silver	ND	0.39	0.23	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:38	QNW
Sodium	170	78	30	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:38	QNW
Thallium	ND	2.0	1.4	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:38	QNW
Vanadium	30	0.78	0.58	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:38	QNW
Zinc	100	0.78	0.54	mg/Kg dry	1	B-07, B	SW-846 6010D	10/9/18	10/10/18 13:38	QNW

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-01-00-12

Sampled: 9/26/2018 11:16

Sample ID: 1811225-01

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/PHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Cyanide	0.50	0.50	0.25	mg/Kg dry	1	J	SW-846 9014	10/3/18	10/5/18 17:50	DJM
% Solids	84.6			% Wt	1		SM 2540G	10/9/18	10/10/18 7:13	DMP



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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-01-12-24

Sampled: 9/26/2018 11:15

Sample ID: 1811225-02

Sample Matrix: Soil

Sample Flags: PR-15

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.11	0.025	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
Acrylonitrile	ND	0.0063	0.0026	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0011	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
Benzene	ND	0.0021	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
Bromobenzene	ND	0.0021	0.00084	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
Bromochloromethane	ND	0.0021	0.0015	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
Bromodichloromethane	ND	0.0021	0.00063	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
Bromoform	ND	0.0021	0.0015	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
Bromomethane	ND	0.011	0.0044	mg/Kg dry	1	V-34	SW-846 8260C	10/4/18	10/4/18 10:05	MFF
2-Butanone (MEK)	ND	0.042	0.018	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
tert-Butyl Alcohol (TBA)	ND	0.042	0.022	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
n-Butylbenzene	ND	0.0021	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
sec-Butylbenzene	ND	0.0021	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
tert-Butylbenzene	ND	0.0021	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0011	0.00063	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
Carbon Disulfide	ND	0.0063	0.0045	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
Carbon Tetrachloride	ND	0.0021	0.00084	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
Chlorobenzene	ND	0.0021	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
Chlorodibromomethane	ND	0.0011	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
Chloroethane	ND	0.021	0.0016	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
Chloroform	ND	0.0042	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
Chloromethane	ND	0.011	0.0067	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
2-Chlorotoluene	ND	0.0021	0.00084	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
4-Chlorotoluene	ND	0.0021	0.00084	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0021	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
1,2-Dibromoethane (EDB)	ND	0.0011	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
Dibromomethane	ND	0.0021	0.00063	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
1,2-Dichlorobenzene	ND	0.0021	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
1,3-Dichlorobenzene	ND	0.0021	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
1,4-Dichlorobenzene	ND	0.0021	0.00084	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
trans-1,4-Dichloro-2-butene	ND	0.0042	0.0022	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.021	0.0014	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
1,1-Dichloroethane	ND	0.0021	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
1,2-Dichloroethane	ND	0.0021	0.0014	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
1,1-Dichloroethylene	ND	0.0042	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
cis-1,2-Dichloroethylene	0.00086	0.0021	0.00084	mg/Kg dry	1	J	SW-846 8260C	10/4/18	10/4/18 10:05	MFF
trans-1,2-Dichloroethylene	ND	0.0021	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
1,2-Dichloropropane	ND	0.0021	0.0014	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
1,3-Dichloropropane	ND	0.0011	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
2,2-Dichloropropane	ND	0.0021	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
1,1-Dichloropropene	ND	0.0021	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
cis-1,3-Dichloropropene	ND	0.0011	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
trans-1,3-Dichloropropene	ND	0.0011	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
Diethyl Ether	ND	0.021	0.0019	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF

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Project Location: Watervliet, NY  
 Date Received: 9/27/2018  
 Field Sample #: 401075-SS-01-12-24  
 Sample ID: 1811225-02  
 Sample Matrix: Soil

Sample Description:  
 Sampled: 9/26/2018 11:15

Work Order: 1811225

Sample Flags: PR-15

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0011	0.00063	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
1,4-Dioxane	ND	0.11	0.061	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
Ethylbenzene	ND	0.0021	0.00084	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
Hexachlorobutadiene	ND	0.0021	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
2-Hexanone (MBK)	ND	0.021	0.011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
Isopropylbenzene (Cumene)	ND	0.0021	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0021	0.00084	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
Methyl Acetate	ND	0.0021	0.0017	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0042	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
Methyl Cyclohexane	ND	0.0021	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
Methylene Chloride	ND	0.021	0.0075	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.021	0.0080	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
Naphthalene	ND	0.0042	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
n-Propylbenzene	ND	0.0021	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
Styrene	ND	0.0021	0.00063	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
1,1,1,2-Tetrachloroethane	ND	0.0021	0.0019	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
1,1,2,2-Tetrachloroethane	ND	0.0021	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
Tetrachloroethylene	0.11	0.0021	0.0014	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
Tetrahydrofuran	ND	0.011	0.0023	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
Toluene	ND	0.0021	0.00084	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
1,2,3-Trichlorobenzene	ND	0.0021	0.00063	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
1,2,4-Trichlorobenzene	ND	0.0021	0.00084	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
1,3,5-Trichlorobenzene	ND	0.0021	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
1,1,1-Trichloroethane	ND	0.0021	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
1,1,2-Trichloroethane	ND	0.0021	0.0013	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
Trichloroethylene	0.0030	0.0021	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
Trichlorofluoromethane (Freon 11)	ND	0.011	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
1,2,3-Trichloropropane	ND	0.0021	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.011	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
1,2,4-Trimethylbenzene	ND	0.0021	0.00084	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
1,3,5-Trimethylbenzene	ND	0.0021	0.00063	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
Vinyl Chloride	ND	0.011	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
m+p Xylene	ND	0.0042	0.0018	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
o-Xylene	ND	0.0021	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:05	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		104	70-130						10/4/18 10:05	
Toluene-d8		98.8	70-130						10/4/18 10:05	
4-Bromofluorobenzene		99.0	70-130						10/4/18 10:05	

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Project Location: Watervliet, NY  
 Date Received: 9/27/2018  
 Field Sample #: 401075-SS-01-12-24  
 Sample ID: 1811225-02  
 Sample Matrix: Soil

Sample Description:  
 Sampled: 9/26/2018 11:15

Work Order: 1811225

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.20	0.059	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Acenaphthylene	ND	0.20	0.066	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Acetophenone	ND	0.40	0.078	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Aniline	ND	0.40	0.11	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Anthracene	ND	0.20	0.057	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Benzidine	ND	0.77	0.49	mg/Kg dry	1	V-04, V-05, V-34	SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Benzo(a)anthracene	0.13	0.20	0.052	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Benzo(a)pyrene	0.19	0.20	0.062	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Benzo(b)fluoranthene	0.19	0.20	0.056	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Benzo(g,h,i)perylene	0.13	0.20	0.087	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Benzo(k)fluoranthene	0.087	0.20	0.062	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Benzoic Acid	ND	1.2	0.21	mg/Kg dry	1	V-20	SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Bis(2-chloroethoxy)methane	ND	0.40	0.076	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Bis(2-chloroethyl)ether	ND	0.40	0.078	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Bis(2-chloroisopropyl)ether	ND	0.40	0.085	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Bis(2-Ethylhexyl)phthalate	ND	0.40	0.15	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
4-Bromophenylphenylether	ND	0.40	0.066	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Butylbenzylphthalate	ND	0.40	0.094	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Carbazole	ND	0.20	0.051	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
4-Chloroaniline	ND	0.77	0.091	mg/Kg dry	1	V-34	SW-846 8270D	10/8/18	10/9/18 14:04	CDT
4-Chloro-3-methylphenol	ND	0.77	0.085	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
2-Chloronaphthalene	ND	0.40	0.074	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
2-Chlorophenol	ND	0.40	0.071	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
4-Chlorophenylphenylether	ND	0.40	0.066	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Chrysene	0.12	0.20	0.062	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Dibenz(a,h)anthracene	ND	0.20	0.12	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Dibenzofuran	ND	0.40	0.069	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Di-n-butylphthalate	ND	0.40	0.086	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
1,2-Dichlorobenzene	ND	0.40	0.070	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
1,3-Dichlorobenzene	ND	0.40	0.067	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
1,4-Dichlorobenzene	ND	0.40	0.071	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
3,3-Dichlorobenzidine	ND	0.20	0.060	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
2,4-Dichlorophenol	ND	0.40	0.067	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Diethylphthalate	ND	0.40	0.071	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
2,4-Dimethylphenol	ND	0.40	0.073	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Dimethylphthalate	ND	0.40	0.070	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
4,6-Dinitro-2-methylphenol	ND	0.40	0.38	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
2,4-Dinitrophenol	ND	0.77	0.23	mg/Kg dry	1	V-04	SW-846 8270D	10/8/18	10/9/18 14:04	CDT
2,4-Dinitrotoluene	ND	0.40	0.064	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
2,6-Dinitrotoluene	ND	0.40	0.070	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Di-n-octylphthalate	ND	0.40	0.21	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
1,2-Diphenylhydrazine (as Azobenzene)	ND	0.40	0.064	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Fluoranthene	0.10	0.20	0.065	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Fluorene	ND	0.20	0.064	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT

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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-01-12-24

Sampled: 9/26/2018 11:15

Sample ID: 1811225-02

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0.40	0.070	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Hexachlorobutadiene	ND	0.40	0.070	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Hexachlorocyclopentadiene	ND	0.40	0.084	mg/Kg dry	1	L-04, V-04	SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Hexachloroethane	ND	0.40	0.079	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Indeno(1,2,3-cd)pyrene	0.15	0.20	0.14	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Isophorone	ND	0.40	0.077	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
1-Methylnaphthalene	ND	0.20	0.076	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
2-Methylnaphthalene	ND	0.20	0.069	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
2-Methylphenol	ND	0.40	0.099	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
3/4-Methylphenol	ND	0.40	0.13	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Naphthalene	ND	0.20	0.10	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
2-Nitroaniline	ND	0.40	0.066	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
3-Nitroaniline	ND	0.40	0.057	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
4-Nitroaniline	ND	0.40	0.066	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Nitrobenzene	ND	0.40	0.074	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
2-Nitrophenol	ND	0.40	0.10	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
4-Nitrophenol	ND	0.77	0.086	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
N-Nitrosodimethylamine	ND	0.40	0.25	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
N-Nitrosodiphenylamine	ND	0.40	0.081	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
N-Nitrosodi-n-propylamine	ND	0.40	0.081	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Pentachloronitrobenzene	ND	0.40	0.094	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Pentachlorophenol	ND	0.40	0.095	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Phenanthrene	ND	0.20	0.10	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Phenol	ND	0.40	0.067	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Pyrene	0.10	0.20	0.065	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Pyridine	ND	0.40	0.064	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
1,2,4,5-Tetrachlorobenzene	ND	0.40	0.071	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
1,2,4-Trichlorobenzene	ND	0.40	0.071	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
2,4,5-Trichlorophenol	ND	0.40	0.089	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
2,4,6-Trichlorophenol	ND	0.40	0.066	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:04	CDT
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
2-Fluorophenol		59.9	30-130						10/9/18 14:04	
Phenol-d6		64.7	30-130						10/9/18 14:04	
Nitrobenzene-d5		67.0	30-130						10/9/18 14:04	
2-Fluorobiphenyl		77.4	30-130						10/9/18 14:04	
2,4,6-Tribromophenol		63.1	30-130						10/9/18 14:04	
p-Terphenyl-d14		82.0	30-130						10/9/18 14:04	

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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-01-12-24

Sampled: 9/26/2018 11:15

Sample ID: 1811225-02

Sample Matrix: Soil

**Organochloride Pesticides by GC/ECD**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Alachlor [1]	ND	0.023	0.0013	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:13	TG
Aldrin [1]	ND	0.0059	0.00035	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:13	TG
alpha-BHC [1]	ND	0.0059	0.00047	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:13	TG
beta-BHC [1]	ND	0.0059	0.00059	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:13	TG
delta-BHC [1]	ND	0.0059	0.00047	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:13	TG
gamma-BHC (Lindane) [1]	ND	0.0023	0.00059	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:13	TG
Chlordane [1]	ND	0.023	0.0068	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:13	TG
4,4'-DDD [1]	ND	0.0047	0.00047	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:13	TG
4,4'-DDE [1]	ND	0.0047	0.00035	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:13	TG
4,4'-DDT [1]	ND	0.0047	0.00047	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:13	TG
Dieldrin [1]	ND	0.0047	0.00035	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:13	TG
Endosulfan I [1]	ND	0.0059	0.00047	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:13	TG
Endosulfan II [1]	ND	0.0094	0.00035	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:13	TG
Endosulfan sulfate [1]	ND	0.0094	0.0015	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:13	TG
Endrin [1]	ND	0.0094	0.00035	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:13	TG
Endrin aldehyde [1]	ND	0.0094	0.0014	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:13	TG
Endrin ketone [1]	ND	0.0094	0.00047	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:13	TG
Heptachlor [1]	ND	0.0059	0.00059	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:13	TG
Heptachlor epoxide [1]	ND	0.0059	0.00047	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:13	TG
Hexachlorobenzene [1]	ND	0.0070	0.00082	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:13	TG
Methoxychlor [1]	ND	0.059	0.00070	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:13	TG
Toxaphene [1]	ND	0.12	0.050	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:13	TG
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
Decachlorobiphenyl [1]		69.1	30-150						10/4/18 3:13	
Decachlorobiphenyl [2]		76.5	30-150						10/4/18 3:13	
Tetrachloro-m-xylene [1]		43.1	30-150						10/4/18 3:13	
Tetrachloro-m-xylene [2]		52.7	30-150						10/4/18 3:13	

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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-01-12-24

Sampled: 9/26/2018 11:15

Sample ID: 1811225-02

Sample Matrix: Soil

**Polychlorinated Biphenyls By GC/ECD**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.094	0.056	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 15:16	TG
Aroclor-1221 [1]	ND	0.094	0.061	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 15:16	TG
Aroclor-1232 [1]	ND	0.094	0.042	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 15:16	TG
Aroclor-1242 [1]	ND	0.094	0.047	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 15:16	TG
Aroclor-1248 [1]	ND	0.094	0.056	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 15:16	TG
Aroclor-1254 [1]	ND	0.094	0.061	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 15:16	TG
Aroclor-1260 [1]	ND	0.094	0.066	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 15:16	TG
Aroclor-1262 [1]	ND	0.094	0.047	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 15:16	TG
Aroclor-1268 [1]	ND	0.094	0.038	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 15:16	TG
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
Decachlorobiphenyl [1]		88.3	30-150						10/3/18 15:16	
Decachlorobiphenyl [2]		96.4	30-150						10/3/18 15:16	
Tetrachloro-m-xylene [1]		82.0	30-150						10/3/18 15:16	
Tetrachloro-m-xylene [2]		94.6	30-150						10/3/18 15:16	

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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-01-12-24

Sampled: 9/26/2018 11:15

Sample ID: 1811225-02

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	15000	1.9	1.8	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:43	QNW
Antimony	ND	1.9	1.3	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:43	QNW
Arsenic	12	1.9	0.98	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:43	QNW
Barium	130	1.9	0.96	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:43	QNW
Beryllium	0.81	0.19	0.14	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:43	QNW
Cadmium	0.38	0.19	0.12	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:43	QNW
Calcium	2200	5.8	4.0	mg/Kg dry	1	B-07, B	SW-846 6010D	10/9/18	10/10/18 13:43	QNW
Chromium	23	0.39	0.24	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:43	QNW
Cobalt	16	1.9	1.1	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:43	QNW
Copper	53	0.39	0.33	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:43	QNW
Iron	39000	39	34	mg/Kg dry	20		SW-846 6010D	10/9/18	10/10/18 15:11	QNW
Lead	160	0.58	0.34	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:43	QNW
Magnesium	7100	120	63	mg/Kg dry	20		SW-846 6010D	10/9/18	10/10/18 15:11	QNW
Manganese	740	0.39	0.12	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:43	QNW
Mercury	0.91	0.030	0.0030	mg/Kg dry	1		SW-846 7471B	10/10/18	10/11/18 7:50	AJL
Nickel	32	0.39	0.31	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:43	QNW
Potassium	2300	1500	560	mg/Kg dry	20		SW-846 6010D	10/9/18	10/10/18 15:11	QNW
Selenium	ND	3.9	3.2	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:43	QNW
Silver	ND	0.39	0.23	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:43	QNW
Sodium	120	77	29	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:43	QNW
Thallium	ND	1.9	1.4	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:43	QNW
Vanadium	26	0.77	0.57	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:43	QNW
Zinc	110	0.77	0.53	mg/Kg dry	1	B-07, B	SW-846 6010D	10/9/18	10/10/18 13:43	QNW



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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-01-12-24

Sampled: 9/26/2018 11:15

Sample ID: 1811225-02

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Cyanide	1.1	0.49	0.24	mg/Kg dry	1		SW-846 9014	10/3/18	10/5/18 17:50	DJM
% Solids	85.2			% Wt	1		SM 2540G	10/9/18	10/10/18 7:13	DMP

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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-02-00-12

Sampled: 9/26/2018 11:45

Sample ID: 1811225-03

Sample Matrix: Soil

Sample Flags: PR-15

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.12	0.028	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
Acrylonitrile	ND	0.0071	0.0030	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0012	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
Benzene	ND	0.0024	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
Bromobenzene	ND	0.0024	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
Bromochloromethane	ND	0.0024	0.0017	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
Bromodichloromethane	ND	0.0024	0.00071	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
Bromoform	ND	0.0024	0.0017	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
Bromomethane	ND	0.012	0.0050	mg/Kg dry	1	V-34	SW-846 8260C	10/4/18	10/4/18 10:33	MFF
2-Butanone (MEK)	ND	0.047	0.021	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
tert-Butyl Alcohol (TBA)	ND	0.047	0.025	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
n-Butylbenzene	ND	0.0024	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
sec-Butylbenzene	ND	0.0024	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
tert-Butylbenzene	ND	0.0024	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0012	0.00071	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
Carbon Disulfide	ND	0.0071	0.0051	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
Carbon Tetrachloride	ND	0.0024	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
Chlorobenzene	ND	0.0024	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
Chlorodibromomethane	ND	0.0012	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
Chloroethane	ND	0.024	0.0018	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
Chloroform	ND	0.0047	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
Chloromethane	ND	0.012	0.0076	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
2-Chlorotoluene	ND	0.0024	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
4-Chlorotoluene	ND	0.0024	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0024	0.0013	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
1,2-Dibromoethane (EDB)	ND	0.0012	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
Dibromomethane	ND	0.0024	0.00071	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
1,2-Dichlorobenzene	ND	0.0024	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
1,3-Dichlorobenzene	ND	0.0024	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
1,4-Dichlorobenzene	ND	0.0024	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
trans-1,4-Dichloro-2-butene	ND	0.0047	0.0025	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.024	0.0015	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
1,1-Dichloroethane	ND	0.0024	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
1,2-Dichloroethane	ND	0.0024	0.0015	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
1,1-Dichloroethylene	ND	0.0047	0.0013	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
cis-1,2-Dichloroethylene	ND	0.0024	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
trans-1,2-Dichloroethylene	ND	0.0024	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
1,2-Dichloropropane	ND	0.0024	0.0015	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
1,3-Dichloropropane	ND	0.0012	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
2,2-Dichloropropane	ND	0.0024	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
1,1-Dichloropropene	ND	0.0024	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
cis-1,3-Dichloropropene	ND	0.0012	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
trans-1,3-Dichloropropene	ND	0.0012	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
Diethyl Ether	ND	0.024	0.0021	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF

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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-02-00-12

Sampled: 9/26/2018 11:45

Sample ID: 1811225-03

Sample Matrix: Soil

Sample Flags: PR-15

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0012	0.00071	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
1,4-Dioxane	ND	0.12	0.068	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
Ethylbenzene	ND	0.0024	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
Hexachlorobutadiene	ND	0.0024	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
2-Hexanone (MBK)	ND	0.024	0.013	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
Isopropylbenzene (Cumene)	ND	0.0024	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0024	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
Methyl Acetate	ND	0.0024	0.0019	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0047	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
Methyl Cyclohexane	ND	0.0024	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
Methylene Chloride	ND	0.024	0.0084	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.024	0.0090	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
Naphthalene	ND	0.0047	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
n-Propylbenzene	ND	0.0024	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
Styrene	ND	0.0024	0.00071	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
1,1,1,2-Tetrachloroethane	ND	0.0024	0.0021	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
1,1,2,2-Tetrachloroethane	ND	0.0024	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
Tetrachloroethylene	0.29	0.0024	0.0015	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
Tetrahydrofuran	ND	0.012	0.0026	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
Toluene	ND	0.0024	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
1,2,3-Trichlorobenzene	ND	0.0024	0.00071	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
1,2,4-Trichlorobenzene	ND	0.0024	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
1,3,5-Trichlorobenzene	ND	0.0024	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
1,1,1-Trichloroethane	ND	0.0024	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
1,1,2-Trichloroethane	ND	0.0024	0.0014	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
Trichloroethylene	0.0061	0.0024	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
Trichlorofluoromethane (Freon 11)	ND	0.012	0.0013	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
1,2,3-Trichloropropane	ND	0.0024	0.0013	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.012	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
1,2,4-Trimethylbenzene	ND	0.0024	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
1,3,5-Trimethylbenzene	ND	0.0024	0.00071	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
Vinyl Chloride	ND	0.012	0.0013	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
m+p Xylene	ND	0.0047	0.0020	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
o-Xylene	ND	0.0024	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 10:33	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		101	70-130						10/4/18 10:33	
Toluene-d8		97.2	70-130						10/4/18 10:33	
4-Bromofluorobenzene		100	70-130						10/4/18 10:33	

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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-02-00-12

Sampled: 9/26/2018 11:45

Sample ID: 1811225-03

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.20	0.060	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Acenaphthylene	ND	0.20	0.067	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Acetophenone	ND	0.40	0.078	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Aniline	ND	0.40	0.11	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Anthracene	ND	0.20	0.057	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Benzidine	ND	0.77	0.50	mg/Kg dry	1	V-04, V-05, V-34	SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Benzo(a)anthracene	0.17	0.20	0.053	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Benzo(a)pyrene	0.18	0.20	0.062	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Benzo(b)fluoranthene	0.22	0.20	0.056	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Benzo(g,h,i)perylene	0.13	0.20	0.088	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Benzo(k)fluoranthene	0.089	0.20	0.062	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Benzoic Acid	ND	1.2	0.21	mg/Kg dry	1	V-20	SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Bis(2-chloroethoxy)methane	ND	0.40	0.076	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Bis(2-chloroethyl)ether	ND	0.40	0.078	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Bis(2-chloroisopropyl)ether	ND	0.40	0.085	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Bis(2-Ethylhexyl)phthalate	ND	0.40	0.15	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
4-Bromophenylphenylether	ND	0.40	0.067	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Butylbenzylphthalate	ND	0.40	0.095	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Carbazole	ND	0.20	0.051	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
4-Chloroaniline	ND	0.77	0.091	mg/Kg dry	1	V-34	SW-846 8270D	10/8/18	10/9/18 14:28	CDT
4-Chloro-3-methylphenol	ND	0.77	0.085	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
2-Chloronaphthalene	ND	0.40	0.075	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
2-Chlorophenol	ND	0.40	0.071	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
4-Chlorophenylphenylether	ND	0.40	0.067	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Chrysene	0.17	0.20	0.062	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Dibenz(a,h)anthracene	ND	0.20	0.12	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Dibenzofuran	ND	0.40	0.069	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Di-n-butylphthalate	0.43	0.40	0.086	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
1,2-Dichlorobenzene	ND	0.40	0.070	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
1,3-Dichlorobenzene	ND	0.40	0.068	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
1,4-Dichlorobenzene	ND	0.40	0.071	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
3,3-Dichlorobenzidine	ND	0.20	0.061	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
2,4-Dichlorophenol	ND	0.40	0.068	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Diethylphthalate	ND	0.40	0.071	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
2,4-Dimethylphenol	ND	0.40	0.074	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Dimethylphthalate	ND	0.40	0.070	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
4,6-Dinitro-2-methylphenol	ND	0.40	0.38	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
2,4-Dinitrophenol	ND	0.77	0.23	mg/Kg dry	1	V-04	SW-846 8270D	10/8/18	10/9/18 14:28	CDT
2,4-Dinitrotoluene	ND	0.40	0.064	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
2,6-Dinitrotoluene	ND	0.40	0.070	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Di-n-octylphthalate	ND	0.40	0.21	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
1,2-Diphenylhydrazine (as Azobenzene)	ND	0.40	0.064	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Fluoranthene	0.28	0.20	0.065	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Fluorene	ND	0.20	0.064	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT

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Project Location: Watervliet, NY  
 Date Received: 9/27/2018  
 Field Sample #: 401075-SS-02-00-12  
 Sample ID: 1811225-03  
 Sample Matrix: Soil

Sample Description:  
 Sampled: 9/26/2018 11:45

Work Order: 1811225

Semivolatle Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0.40	0.070	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Hexachlorobutadiene	ND	0.40	0.070	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Hexachlorocyclopentadiene	ND	0.40	0.084	mg/Kg dry	1	L-04, V-04	SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Hexachloroethane	ND	0.40	0.079	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Indeno(1,2,3-cd)pyrene	ND	0.20	0.14	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Isophorone	ND	0.40	0.077	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
1-Methylnaphthalene	ND	0.20	0.076	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
2-Methylnaphthalene	ND	0.20	0.069	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
2-Methylphenol	ND	0.40	0.099	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
3/4-Methylphenol	ND	0.40	0.13	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Naphthalene	ND	0.20	0.10	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
2-Nitroaniline	ND	0.40	0.067	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
3-Nitroaniline	ND	0.40	0.057	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
4-Nitroaniline	ND	0.40	0.067	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Nitrobenzene	ND	0.40	0.075	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
2-Nitrophenol	ND	0.40	0.11	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
4-Nitrophenol	ND	0.77	0.086	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
N-Nitrosodimethylamine	ND	0.40	0.25	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
N-Nitrosodiphenylamine	ND	0.40	0.082	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
N-Nitrosodi-n-propylamine	ND	0.40	0.082	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Pentachloronitrobenzene	ND	0.40	0.095	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Pentachlorophenol	ND	0.40	0.096	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Phenanthrene	0.17	0.20	0.10	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Phenol	ND	0.40	0.068	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Pyrene	0.25	0.20	0.065	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Pyridine	ND	0.40	0.064	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
1,2,4,5-Tetrachlorobenzene	ND	0.40	0.071	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
1,2,4-Trichlorobenzene	ND	0.40	0.071	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
2,4,5-Trichlorophenol	ND	0.40	0.090	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
2,4,6-Trichlorophenol	ND	0.40	0.067	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:28	CDT
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
2-Fluorophenol		55.8	30-130						10/9/18 14:28	
Phenol-d6		60.6	30-130						10/9/18 14:28	
Nitrobenzene-d5		69.9	30-130						10/9/18 14:28	
2-Fluorobiphenyl		74.9	30-130						10/9/18 14:28	
2,4,6-Tribromophenol		52.1	30-130						10/9/18 14:28	
p-Terphenyl-d14		78.9	30-130						10/9/18 14:28	

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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-02-00-12

Sampled: 9/26/2018 11:45

Sample ID: 1811225-03

Sample Matrix: Soil

**Organochloride Pesticides by GC/ECD**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Alachlor [1]	ND	0.023	0.0013	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:40	TG
Aldrin [1]	ND	0.0058	0.00035	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:40	TG
alpha-BHC [1]	ND	0.0058	0.00046	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:40	TG
beta-BHC [1]	ND	0.0058	0.00058	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:40	TG
delta-BHC [1]	ND	0.0058	0.00046	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:40	TG
gamma-BHC (Lindane) [1]	ND	0.0023	0.00058	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:40	TG
Chlordane [1]	ND	0.023	0.0067	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:40	TG
4,4'-DDD [1]	ND	0.0046	0.00046	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:40	TG
4,4'-DDE [2]	0.0036	0.0046	0.00035	mg/Kg dry	1	J	SW-846 8081B	9/28/18	10/4/18 3:40	TG
4,4'-DDT [1]	0.011	0.0046	0.00046	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:40	TG
Dieldrin [1]	ND	0.0046	0.00035	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:40	TG
Endosulfan I [1]	ND	0.0058	0.00046	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:40	TG
Endosulfan II [1]	ND	0.0093	0.00035	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:40	TG
Endosulfan sulfate [1]	ND	0.0093	0.0015	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:40	TG
Endrin [1]	ND	0.0093	0.00035	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:40	TG
Endrin aldehyde [1]	ND	0.0093	0.0014	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:40	TG
Endrin ketone [1]	ND	0.0093	0.00046	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:40	TG
Heptachlor [1]	ND	0.0058	0.00058	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:40	TG
Heptachlor epoxide [1]	ND	0.0058	0.00046	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:40	TG
Hexachlorobenzene [1]	ND	0.0069	0.00081	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:40	TG
Methoxychlor [1]	ND	0.058	0.00069	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:40	TG
Toxaphene [1]	ND	0.12	0.050	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 3:40	TG
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
Decachlorobiphenyl [1]		66.7	30-150						10/4/18 3:40	
Decachlorobiphenyl [2]		72.8	30-150						10/4/18 3:40	
Tetrachloro-m-xylene [1]		35.8	30-150						10/4/18 3:40	
Tetrachloro-m-xylene [2]		44.6	30-150						10/4/18 3:40	

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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-02-00-12

Sampled: 9/26/2018 11:45

Sample ID: 1811225-03

Sample Matrix: Soil

**Polychlorinated Biphenyls By GC/ECD**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.093	0.056	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 15:34	TG
Aroclor-1221 [1]	ND	0.093	0.060	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 15:34	TG
Aroclor-1232 [1]	ND	0.093	0.042	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 15:34	TG
Aroclor-1242 [1]	ND	0.093	0.046	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 15:34	TG
Aroclor-1248 [1]	ND	0.093	0.056	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 15:34	TG
Aroclor-1254 [1]	ND	0.093	0.060	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 15:34	TG
Aroclor-1260 [1]	ND	0.093	0.065	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 15:34	TG
Aroclor-1262 [1]	ND	0.093	0.046	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 15:34	TG
Aroclor-1268 [1]	0.047	0.093	0.037	mg/Kg dry	4	J	SW-846 8082A	9/28/18	10/3/18 15:34	TG
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
Decachlorobiphenyl [1]	86.6		30-150				10/3/18 15:34			
Decachlorobiphenyl [2]	94.8		30-150				10/3/18 15:34			
Tetrachloro-m-xylene [1]	76.3		30-150				10/3/18 15:34			
Tetrachloro-m-xylene [2]	87.3		30-150				10/3/18 15:34			



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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-02-00-12

Sampled: 9/26/2018 11:45

Sample ID: 1811225-03

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	9400	2.0	1.8	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:48	QNW
Antimony	ND	2.0	1.4	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:48	QNW
Arsenic	10	2.0	1.0	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:48	QNW
Barium	130	2.0	0.98	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:48	QNW
Beryllium	0.63	0.20	0.15	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:48	QNW
Cadmium	0.80	0.20	0.12	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:48	QNW
Calcium	13000	5.9	4.1	mg/Kg dry	1	B-07, B	SW-846 6010D	10/9/18	10/10/18 13:48	QNW
Chromium	22	0.40	0.24	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:48	QNW
Cobalt	10	2.0	1.1	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:48	QNW
Copper	110	0.40	0.34	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:48	QNW
Iron	26000	20	17	mg/Kg dry	10		SW-846 6010D	10/9/18	10/10/18 15:31	QNW
Lead	220	0.59	0.35	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:48	QNW
Magnesium	3500	59	32	mg/Kg dry	10		SW-846 6010D	10/9/18	10/10/18 15:31	QNW
Manganese	510	0.40	0.12	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:48	QNW
Mercury	0.57	0.029	0.0029	mg/Kg dry	1		SW-846 7471B	10/10/18	10/11/18 7:52	AJL
Nickel	29	0.40	0.31	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:48	QNW
Potassium	1500	790	290	mg/Kg dry	10		SW-846 6010D	10/9/18	10/10/18 15:31	QNW
Selenium	ND	4.0	3.3	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:48	QNW
Silver	ND	0.40	0.23	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:48	QNW
Sodium	170	79	30	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:48	QNW
Thallium	ND	2.0	1.4	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:48	QNW
Vanadium	22	0.79	0.59	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:48	QNW
Zinc	360	0.79	0.54	mg/Kg dry	1	B-07, B	SW-846 6010D	10/9/18	10/10/18 13:48	QNW

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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-02-00-12

Sampled: 9/26/2018 11:45

Sample ID: 1811225-03

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Cyanide	0.30	0.51	0.25	mg/Kg dry	1	J	SW-846 9014	10/3/18	10/5/18 17:50	DJM
% Solids	84.8			% Wt	1		SM 2540G	10/9/18	10/10/18 7:14	DMP

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Project Location: Watervliet, NY  
 Date Received: 9/27/2018  
 Field Sample #: 401075-SS-02-12-24  
 Sample ID: 1811225-04  
 Sample Matrix: Soil

Sample Description:  
 Sampled: 9/26/2018 11:46

Work Order: 1811225

Sample Flags: PR-15

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.12	0.029	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
Acrylonitrile	ND	0.0073	0.0030	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0012	0.00085	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
Benzene	ND	0.0024	0.00085	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
Bromobenzene	ND	0.0024	0.00098	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
Bromochloromethane	ND	0.0024	0.0017	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
Bromodichloromethane	ND	0.0024	0.00073	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
Bromoform	ND	0.0024	0.0017	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
Bromomethane	ND	0.012	0.0051	mg/Kg dry	1	MS-07A, V-34	SW-846 8260C	10/4/18	10/4/18 8:13	MFF
2-Butanone (MEK)	ND	0.049	0.021	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
tert-Butyl Alcohol (TBA)	ND	0.049	0.025	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
n-Butylbenzene	ND	0.0024	0.00085	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
sec-Butylbenzene	ND	0.0024	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
tert-Butylbenzene	ND	0.0024	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0012	0.00073	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
Carbon Disulfide	ND	0.0073	0.0052	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
Carbon Tetrachloride	ND	0.0024	0.00098	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
Chlorobenzene	ND	0.0024	0.00085	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
Chlorodibromomethane	ND	0.0012	0.00085	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
Chloroethane	ND	0.024	0.0018	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
Chloroform	ND	0.0049	0.00085	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
Chloromethane	ND	0.012	0.0078	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
2-Chlorotoluene	ND	0.0024	0.00098	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
4-Chlorotoluene	ND	0.0024	0.00098	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0024	0.0013	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
1,2-Dibromoethane (EDB)	ND	0.0012	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
Dibromomethane	ND	0.0024	0.00073	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
1,2-Dichlorobenzene	ND	0.0024	0.00085	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
1,3-Dichlorobenzene	ND	0.0024	0.00085	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
1,4-Dichlorobenzene	ND	0.0024	0.00098	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
trans-1,4-Dichloro-2-butene	ND	0.0049	0.0026	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.024	0.0016	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
1,1-Dichloroethane	ND	0.0024	0.00085	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
1,2-Dichloroethane	ND	0.0024	0.0016	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
1,1-Dichloroethylene	ND	0.0049	0.0013	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
cis-1,2-Dichloroethylene	ND	0.0024	0.00098	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
trans-1,2-Dichloroethylene	ND	0.0024	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
1,2-Dichloropropane	ND	0.0024	0.0016	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
1,3-Dichloropropane	ND	0.0012	0.00085	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
2,2-Dichloropropane	ND	0.0024	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
1,1-Dichloropropene	ND	0.0024	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
cis-1,3-Dichloropropene	ND	0.0012	0.00085	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
trans-1,3-Dichloropropene	ND	0.0012	0.00085	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
Diethyl Ether	ND	0.024	0.0022	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF

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Project Location: Watervliet, NY  
 Date Received: 9/27/2018  
 Field Sample #: 401075-SS-02-12-24  
 Sample ID: 1811225-04  
 Sample Matrix: Soil

Sample Description:  
 Sampled: 9/26/2018 11:46

Work Order: 1811225

Sample Flags: PR-15

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0012	0.00073	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
1,4-Dioxane	ND	0.12	0.070	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
Ethylbenzene	ND	0.0024	0.00098	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
Hexachlorobutadiene	ND	0.0024	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
2-Hexanone (MBK)	ND	0.024	0.013	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
Isopropylbenzene (Cumene)	ND	0.0024	0.00085	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0024	0.00098	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
Methyl Acetate	ND	0.0024	0.0020	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0049	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
Methyl Cyclohexane	ND	0.0024	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
Methylene Chloride	ND	0.024	0.0087	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.024	0.0093	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
Naphthalene	ND	0.0049	0.00085	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
n-Propylbenzene	ND	0.0024	0.00085	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
Styrene	ND	0.0024	0.00073	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
1,1,1,2-Tetrachloroethane	ND	0.0024	0.0022	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
1,1,2,2-Tetrachloroethane	ND	0.0024	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
Tetrachloroethylene	0.39	0.0024	0.0016	mg/Kg dry	1	MS-07A	SW-846 8260C	10/4/18	10/4/18 8:13	MFF
Tetrahydrofuran	ND	0.012	0.0027	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
Toluene	ND	0.0024	0.00098	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
1,2,3-Trichlorobenzene	ND	0.0024	0.00073	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
1,2,4-Trichlorobenzene	ND	0.0024	0.00098	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
1,3,5-Trichlorobenzene	ND	0.0024	0.00085	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
1,1,1-Trichloroethane	ND	0.0024	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
1,1,2-Trichloroethane	ND	0.0024	0.0015	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
Trichloroethylene	0.0075	0.0024	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
Trichlorofluoromethane (Freon 11)	ND	0.012	0.0013	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
1,2,3-Trichloropropane	ND	0.0024	0.0013	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.012	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
1,2,4-Trimethylbenzene	ND	0.0024	0.00098	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
1,3,5-Trimethylbenzene	ND	0.0024	0.00073	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
Vinyl Chloride	ND	0.012	0.0013	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
m+p Xylene	ND	0.0049	0.0021	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
o-Xylene	ND	0.0024	0.00085	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 8:13	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		102	70-130					10/4/18	8:13	
Toluene-d8		97.7	70-130					10/4/18	8:13	
4-Bromofluorobenzene		100	70-130					10/4/18	8:13	

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Project Location: Watervliet, NY  
 Date Received: 9/27/2018  
 Field Sample #: 401075-SS-02-12-24  
 Sample ID: 1811225-04  
 Sample Matrix: Soil

Sample Description:  
 Sampled: 9/26/2018 11:46

Work Order: 1811225

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.22	0.065	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Acenaphthylene	ND	0.22	0.072	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Acetophenone	ND	0.43	0.085	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Aniline	ND	0.43	0.12	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Anthracene	ND	0.22	0.062	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Benzidine	ND	0.83	0.54	mg/Kg dry	1	MS-09, V-04, V-05, V-34	SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Benzo(a)anthracene	ND	0.22	0.057	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Benzo(a)pyrene	ND	0.22	0.067	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Benzo(b)fluoranthene	ND	0.22	0.061	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Benzo(g,h,i)perylene	ND	0.22	0.095	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Benzo(k)fluoranthene	ND	0.22	0.067	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Benzoic Acid	ND	1.3	0.23	mg/Kg dry	1	MS-09, V-20	SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Bis(2-chloroethoxy)methane	ND	0.43	0.082	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Bis(2-chloroethyl)ether	ND	0.43	0.085	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Bis(2-chloroisopropyl)ether	ND	0.43	0.092	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Bis(2-Ethylhexyl)phthalate	ND	0.43	0.17	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
4-Bromophenylphenylether	ND	0.43	0.072	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Butylbenzylphthalate	ND	0.43	0.10	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Carbazole	ND	0.22	0.056	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
4-Chloroaniline	ND	0.83	0.099	mg/Kg dry	1	V-34	SW-846 8270D	10/8/18	10/9/18 14:52	CDT
4-Chloro-3-methylphenol	ND	0.83	0.092	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
2-Chloronaphthalene	ND	0.43	0.081	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
2-Chlorophenol	ND	0.43	0.077	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
4-Chlorophenylphenylether	ND	0.43	0.072	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Chrysene	ND	0.22	0.067	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Dibenz(a,h)anthracene	ND	0.22	0.13	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Dibenzofuran	ND	0.43	0.075	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Di-n-butylphthalate	ND	0.43	0.094	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
1,2-Dichlorobenzene	ND	0.43	0.076	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
1,3-Dichlorobenzene	ND	0.43	0.073	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
1,4-Dichlorobenzene	ND	0.43	0.077	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
3,3-Dichlorobenzidine	ND	0.22	0.066	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
2,4-Dichlorophenol	ND	0.43	0.073	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Diethylphthalate	ND	0.43	0.077	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
2,4-Dimethylphenol	ND	0.43	0.080	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Dimethylphthalate	ND	0.43	0.076	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
4,6-Dinitro-2-methylphenol	ND	0.43	0.41	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
2,4-Dinitrophenol	ND	0.83	0.25	mg/Kg dry	1	V-04	SW-846 8270D	10/8/18	10/9/18 14:52	CDT
2,4-Dinitrotoluene	ND	0.43	0.070	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
2,6-Dinitrotoluene	ND	0.43	0.076	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Di-n-octylphthalate	ND	0.43	0.23	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
1,2-Diphenylhydrazine (as Azobenzene)	ND	0.43	0.070	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Fluoranthene	ND	0.22	0.071	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT

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Project Location: Watervliet, NY  
 Date Received: 9/27/2018  
 Field Sample #: 401075-SS-02-12-24  
 Sample ID: 1811225-04  
 Sample Matrix: Soil

Sample Description:  
 Sampled: 9/26/2018 11:46

Work Order: 1811225

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Fluorene	ND	0.22	0.070	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Hexachlorobenzene	ND	0.43	0.076	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Hexachlorobutadiene	ND	0.43	0.076	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Hexachlorocyclopentadiene	ND	0.43	0.091	mg/Kg dry	1	L-04, V-04	SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Hexachloroethane	ND	0.43	0.086	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Indeno(1,2,3-cd)pyrene	ND	0.22	0.15	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Isophorone	ND	0.43	0.083	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
1-Methylnaphthalene	ND	0.22	0.082	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
2-Methylnaphthalene	ND	0.22	0.075	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
2-Methylphenol	ND	0.43	0.11	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
3/4-Methylphenol	ND	0.43	0.14	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Naphthalene	ND	0.22	0.11	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
2-Nitroaniline	ND	0.43	0.072	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
3-Nitroaniline	ND	0.43	0.062	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
4-Nitroaniline	ND	0.43	0.072	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Nitrobenzene	ND	0.43	0.081	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
2-Nitrophenol	ND	0.43	0.11	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
4-Nitrophenol	ND	0.83	0.094	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
N-Nitrosodimethylamine	ND	0.43	0.27	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
N-Nitrosodiphenylamine	ND	0.43	0.089	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
N-Nitrosodi-n-propylamine	ND	0.43	0.089	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Pentachloronitrobenzene	ND	0.43	0.10	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Pentachlorophenol	ND	0.43	0.10	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Phenanthrene	ND	0.22	0.11	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Phenol	ND	0.43	0.073	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Pyrene	ND	0.22	0.071	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
Pyridine	ND	0.43	0.070	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
1,2,4,5-Tetrachlorobenzene	ND	0.43	0.077	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
1,2,4-Trichlorobenzene	ND	0.43	0.077	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
2,4,5-Trichlorophenol	ND	0.43	0.097	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT
2,4,6-Trichlorophenol	ND	0.43	0.072	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 14:52	CDT

Surrogates	% Recovery	Recovery Limits	Flag/Qual
2-Fluorophenol	56.3	30-130	
Phenol-d6	62.8	30-130	
Nitrobenzene-d5	71.9	30-130	
2-Fluorobiphenyl	77.1	30-130	
2,4,6-Tribromophenol	53.2	30-130	
p-Terphenyl-d14	86.0	30-130	

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Project Location: Watervliet, NY  
 Date Received: 9/27/2018  
 Field Sample #: 401075-SS-02-12-24  
 Sample ID: 1811225-04  
 Sample Matrix: Soil

Sample Description:  
 Sampled: 9/26/2018 11:46

Work Order: 1811225

**Organochloride Pesticides by GC/ECD**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Alachlor [1]	ND	0.025	0.0014	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 4:06	TG
Aldrin [1]	ND	0.0064	0.00038	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 4:06	TG
alpha-BHC [1]	ND	0.0064	0.00051	mg/Kg dry	1	R-06	SW-846 8081B	9/28/18	10/4/18 4:06	TG
beta-BHC [1]	ND	0.0064	0.00064	mg/Kg dry	1	R-06	SW-846 8081B	9/28/18	10/4/18 4:06	TG
delta-BHC [1]	ND	0.0064	0.00051	mg/Kg dry	1	R-06	SW-846 8081B	9/28/18	10/4/18 4:06	TG
gamma-BHC (Lindane) [1]	ND	0.0025	0.00064	mg/Kg dry	1	R-06	SW-846 8081B	9/28/18	10/4/18 4:06	TG
Chlordane [1]	ND	0.025	0.0074	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 4:06	TG
4,4'-DDD [1]	ND	0.0051	0.00051	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 4:06	TG
4,4'-DDE [1]	ND	0.0051	0.00038	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 4:06	TG
4,4'-DDT [1]	ND	0.0051	0.00051	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 4:06	TG
Dieldrin [1]	ND	0.0051	0.00038	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 4:06	TG
Endosulfan I [1]	ND	0.0064	0.00051	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 4:06	TG
Endosulfan II [1]	ND	0.010	0.00038	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 4:06	TG
Endosulfan sulfate [1]	ND	0.010	0.0017	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 4:06	TG
Endrin [1]	ND	0.010	0.00038	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 4:06	TG
Endrin aldehyde [1]	ND	0.010	0.0015	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 4:06	TG
Endrin ketone [1]	ND	0.010	0.00051	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 4:06	TG
Heptachlor [1]	ND	0.0064	0.00064	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 4:06	TG
Heptachlor epoxide [1]	ND	0.0064	0.00051	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 4:06	TG
Hexachlorobenzene [1]	ND	0.0076	0.00089	mg/Kg dry	1	R-06	SW-846 8081B	9/28/18	10/4/18 4:06	TG
Methoxychlor [1]	ND	0.064	0.00076	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 4:06	TG
Toxaphene [1]	ND	0.13	0.055	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 4:06	TG
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
Decachlorobiphenyl [1]		62.3	30-150						10/4/18 4:06	
Decachlorobiphenyl [2]		72.1	30-150						10/4/18 4:06	
Tetrachloro-m-xylene [1]		38.6	30-150						10/4/18 4:06	
Tetrachloro-m-xylene [2]		47.6	30-150						10/4/18 4:06	



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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-02-12-24

Sampled: 9/26/2018 11:46

Sample ID: 1811225-04

Sample Matrix: Soil

**Polychlorinated Biphenyls By GC/ECD**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.10	0.061	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 15:52	TG
Aroclor-1221 [1]	ND	0.10	0.066	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 15:52	TG
Aroclor-1232 [1]	ND	0.10	0.046	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 15:52	TG
Aroclor-1242 [1]	ND	0.10	0.051	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 15:52	TG
Aroclor-1248 [1]	ND	0.10	0.061	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 15:52	TG
Aroclor-1254 [1]	ND	0.10	0.066	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 15:52	TG
Aroclor-1260 [1]	ND	0.10	0.071	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 15:52	TG
Aroclor-1262 [1]	ND	0.10	0.051	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 15:52	TG
Aroclor-1268 [1]	ND	0.10	0.041	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 15:52	TG
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
Decachlorobiphenyl [1]		89.4	30-150						10/3/18 15:52	
Decachlorobiphenyl [2]		97.4	30-150						10/3/18 15:52	
Tetrachloro-m-xylene [1]		74.0	30-150						10/3/18 15:52	
Tetrachloro-m-xylene [2]		84.8	30-150						10/3/18 15:52	

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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-02-12-24

Sampled: 9/26/2018 11:46

Sample ID: 1811225-04

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	8300	2.1	1.9	mg/Kg dry	1	MS-19	SW-846 6010D	10/9/18	10/10/18 13:34	QNW
Antimony	ND	2.1	1.4	mg/Kg dry	1	MS-07A	SW-846 6010D	10/9/18	10/10/18 13:34	QNW
Arsenic	12	2.1	1.1	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:34	QNW
Barium	220	2.1	1.0	mg/Kg dry	1	MS-19	SW-846 6010D	10/9/18	10/10/18 13:34	QNW
Beryllium	1.1	0.21	0.16	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:34	QNW
Cadmium	0.56	0.21	0.13	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:34	QNW
Calcium	6600	6.3	4.3	mg/Kg dry	1	B-07, MS-19, B	SW-846 6010D	10/9/18	10/10/18 13:34	QNW
Chromium	15	0.42	0.26	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:34	QNW
Cobalt	10	2.1	1.2	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:34	QNW
Copper	52	0.42	0.36	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:34	QNW
Iron	18000	21	18	mg/Kg dry	10	MS-19	SW-846 6010D	10/9/18	10/10/18 14:53	QNW
Lead	470	0.63	0.37	mg/Kg dry	1	MS-19	SW-846 6010D	10/9/18	10/10/18 13:34	QNW
Magnesium	2400	63	34	mg/Kg dry	10		SW-846 6010D	10/9/18	10/10/18 14:53	QNW
Manganese	420	0.42	0.13	mg/Kg dry	1	MS-19	SW-846 6010D	10/9/18	10/10/18 13:34	QNW
Mercury	2.4	0.16	0.016	mg/Kg dry	5	MS-19	SW-846 7471B	10/10/18	10/11/18 8:24	AJL
Nickel	22	0.42	0.33	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:34	QNW
Potassium	1200	840	300	mg/Kg dry	10	MS-19	SW-846 6010D	10/9/18	10/10/18 14:53	QNW
Selenium	ND	4.2	3.5	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:34	QNW
Silver	ND	0.42	0.25	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:34	QNW
Sodium	210	84	32	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:34	QNW
Thallium	ND	2.1	1.5	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:34	QNW
Vanadium	31	0.84	0.62	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:34	QNW
Zinc	200	0.84	0.58	mg/Kg dry	1	B-07, B	SW-846 6010D	10/9/18	10/10/18 13:34	QNW

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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-02-12-24

Sampled: 9/26/2018 11:46

Sample ID: 1811225-04

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Cyanide	1.4	0.57	0.28	mg/Kg dry	1		SW-846 9014	10/3/18	10/5/18 17:50	DJM
% Solids	78.5			% Wt	1		SM 2540G	10/9/18	10/10/18 7:14	DMP

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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-04-00-12

Sampled: 9/26/2018 10:35

Sample ID: 1811225-05

Sample Matrix: Soil

Sample Flags: PR-15

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.11	0.025	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
Acrylonitrile	ND	0.0065	0.0027	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0011	0.00076	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
Benzene	ND	0.0022	0.00076	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
Bromobenzene	ND	0.0022	0.00086	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
Bromochloromethane	ND	0.0022	0.0015	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
Bromodichloromethane	ND	0.0022	0.00065	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
Bromoform	ND	0.0022	0.0015	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
Bromomethane	ND	0.011	0.0045	mg/Kg dry	1	V-34	SW-846 8260C	10/4/18	10/4/18 11:01	MFF
2-Butanone (MEK)	ND	0.043	0.019	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
tert-Butyl Alcohol (TBA)	ND	0.043	0.023	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
n-Butylbenzene	ND	0.0022	0.00076	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
sec-Butylbenzene	ND	0.0022	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
tert-Butylbenzene	ND	0.0022	0.00097	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0011	0.00065	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
Carbon Disulfide	ND	0.0065	0.0046	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
Carbon Tetrachloride	ND	0.0022	0.00086	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
Chlorobenzene	ND	0.0022	0.00076	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
Chlorodibromomethane	ND	0.0011	0.00076	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
Chloroethane	ND	0.022	0.0016	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
Chloroform	ND	0.0043	0.00076	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
Chloromethane	ND	0.011	0.0069	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
2-Chlorotoluene	ND	0.0022	0.00086	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
4-Chlorotoluene	ND	0.0022	0.00086	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0022	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
1,2-Dibromoethane (EDB)	ND	0.0011	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
Dibromomethane	ND	0.0022	0.00065	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
1,2-Dichlorobenzene	ND	0.0022	0.00076	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
1,3-Dichlorobenzene	ND	0.0022	0.00076	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
1,4-Dichlorobenzene	ND	0.0022	0.00086	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
trans-1,4-Dichloro-2-butene	ND	0.0043	0.0023	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.022	0.0014	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
1,1-Dichloroethane	ND	0.0022	0.00076	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
1,2-Dichloroethane	ND	0.0022	0.0014	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
1,1-Dichloroethylene	ND	0.0043	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
cis-1,2-Dichloroethylene	ND	0.0022	0.00086	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
trans-1,2-Dichloroethylene	ND	0.0022	0.00097	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
1,2-Dichloropropane	ND	0.0022	0.0014	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
1,3-Dichloropropane	ND	0.0011	0.00076	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
2,2-Dichloropropane	ND	0.0022	0.00097	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
1,1-Dichloropropene	ND	0.0022	0.00097	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
cis-1,3-Dichloropropene	ND	0.0011	0.00076	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
trans-1,3-Dichloropropene	ND	0.0011	0.00076	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
Diethyl Ether	ND	0.022	0.0019	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF

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Project Location: Watervliet, NY  
 Date Received: 9/27/2018  
 Field Sample #: 401075-SS-04-00-12  
 Sample ID: 1811225-05  
 Sample Matrix: Soil

Sample Description:  
 Sampled: 9/26/2018 10:35

Work Order: 1811225

Sample Flags: PR-15

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0011	0.00065	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
1,4-Dioxane	ND	0.11	0.062	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
Ethylbenzene	ND	0.0022	0.00086	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
Hexachlorobutadiene	ND	0.0022	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
2-Hexanone (MBK)	ND	0.022	0.012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
Isopropylbenzene (Cumene)	ND	0.0022	0.00076	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0022	0.00086	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
Methyl Acetate	ND	0.0022	0.0017	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0043	0.00097	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
Methyl Cyclohexane	ND	0.0022	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
Methylene Chloride	ND	0.022	0.0077	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.022	0.0082	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
Naphthalene	ND	0.0043	0.00076	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
n-Propylbenzene	ND	0.0022	0.00076	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
Styrene	ND	0.0022	0.00065	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
1,1,1,2-Tetrachloroethane	ND	0.0022	0.0019	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
1,1,2,2-Tetrachloroethane	ND	0.0022	0.00097	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
Tetrachloroethylene	0.022	0.0022	0.0014	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
Tetrahydrofuran	ND	0.011	0.0024	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
Toluene	ND	0.0022	0.00086	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
1,2,3-Trichlorobenzene	ND	0.0022	0.00065	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
1,2,4-Trichlorobenzene	ND	0.0022	0.00086	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
1,3,5-Trichlorobenzene	ND	0.0022	0.00076	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
1,1,1-Trichloroethane	ND	0.0022	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
1,1,2-Trichloroethane	ND	0.0022	0.0013	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
Trichloroethylene	ND	0.0022	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
Trichlorofluoromethane (Freon 11)	ND	0.011	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
1,2,3-Trichloropropane	ND	0.0022	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.011	0.00097	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
1,2,4-Trimethylbenzene	ND	0.0022	0.00086	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
1,3,5-Trimethylbenzene	ND	0.0022	0.00065	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
Vinyl Chloride	ND	0.011	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
m+p Xylene	ND	0.0043	0.0018	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
o-Xylene	ND	0.0022	0.00076	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:01	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		102	70-130					10/4/18	11:01	
Toluene-d8		98.4	70-130					10/4/18	11:01	
4-Bromofluorobenzene		98.1	70-130					10/4/18	11:01	

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Project Location: Watervliet, NY  
 Date Received: 9/27/2018  
 Field Sample #: 401075-SS-04-00-12  
 Sample ID: 1811225-05  
 Sample Matrix: Soil

Sample Description:  
 Sampled: 9/26/2018 10:35

Work Order: 1811225

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.22	0.065	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Acenaphthylene	ND	0.22	0.072	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Acetophenone	ND	0.43	0.085	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Aniline	ND	0.43	0.12	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Anthracene	0.10	0.22	0.062	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Benzidine	ND	0.84	0.54	mg/Kg dry	1	V-04, V-05, V-34	SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Benzo(a)anthracene	1.1	0.22	0.057	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Benzo(a)pyrene	1.5	0.22	0.067	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Benzo(b)fluoranthene	1.6	0.22	0.061	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Benzo(g,h,i)perylene	1.1	0.22	0.095	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Benzo(k)fluoranthene	0.59	0.22	0.067	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Benzoic Acid	ND	1.3	0.23	mg/Kg dry	1	V-20	SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Bis(2-chloroethoxy)methane	ND	0.43	0.082	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Bis(2-chloroethyl)ether	ND	0.43	0.085	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Bis(2-chloroisopropyl)ether	ND	0.43	0.092	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Bis(2-Ethylhexyl)phthalate	ND	0.43	0.17	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
4-Bromophenylphenylether	ND	0.43	0.072	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Butylbenzylphthalate	ND	0.43	0.10	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Carbazole	0.065	0.22	0.056	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 15:15	CDT
4-Chloroaniline	ND	0.84	0.099	mg/Kg dry	1	V-34	SW-846 8270D	10/8/18	10/9/18 15:15	CDT
4-Chloro-3-methylphenol	ND	0.84	0.092	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
2-Chloronaphthalene	ND	0.43	0.081	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
2-Chlorophenol	ND	0.43	0.077	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
4-Chlorophenylphenylether	ND	0.43	0.072	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Chrysene	1.0	0.22	0.067	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Dibenz(a,h)anthracene	0.29	0.22	0.13	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Dibenzofuran	ND	0.43	0.075	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Di-n-butylphthalate	ND	0.43	0.094	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
1,2-Dichlorobenzene	ND	0.43	0.076	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
1,3-Dichlorobenzene	ND	0.43	0.073	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
1,4-Dichlorobenzene	ND	0.43	0.077	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
3,3-Dichlorobenzidine	ND	0.22	0.066	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
2,4-Dichlorophenol	ND	0.43	0.073	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Diethylphthalate	ND	0.43	0.077	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
2,4-Dimethylphenol	ND	0.43	0.080	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Dimethylphthalate	ND	0.43	0.076	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
4,6-Dinitro-2-methylphenol	ND	0.43	0.41	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
2,4-Dinitrophenol	ND	0.84	0.25	mg/Kg dry	1	V-04	SW-846 8270D	10/8/18	10/9/18 15:15	CDT
2,4-Dinitrotoluene	ND	0.43	0.070	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
2,6-Dinitrotoluene	ND	0.43	0.076	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Di-n-octylphthalate	ND	0.43	0.23	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
1,2-Diphenylhydrazine (as Azobenzene)	ND	0.43	0.070	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Fluoranthene	1.7	0.22	0.071	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Fluorene	ND	0.22	0.070	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT

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Project Location: Watervliet, NY  
 Date Received: 9/27/2018  
 Field Sample #: 401075-SS-04-00-12  
 Sample ID: 1811225-05  
 Sample Matrix: Soil

Sample Description:  
 Sampled: 9/26/2018 10:35

Work Order: 1811225

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0.43	0.076	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Hexachlorobutadiene	ND	0.43	0.076	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Hexachlorocyclopentadiene	ND	0.43	0.091	mg/Kg dry	1	L-04, V-04	SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Hexachloroethane	ND	0.43	0.086	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Indeno(1,2,3-cd)pyrene	1.1	0.22	0.15	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Isophorone	ND	0.43	0.084	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
1-Methylnaphthalene	ND	0.22	0.082	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
2-Methylnaphthalene	ND	0.22	0.075	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
2-Methylphenol	ND	0.43	0.11	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
3/4-Methylphenol	ND	0.43	0.14	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Naphthalene	ND	0.22	0.11	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
2-Nitroaniline	ND	0.43	0.072	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
3-Nitroaniline	ND	0.43	0.062	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
4-Nitroaniline	ND	0.43	0.072	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Nitrobenzene	ND	0.43	0.081	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
2-Nitrophenol	ND	0.43	0.11	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
4-Nitrophenol	ND	0.84	0.094	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
N-Nitrosodimethylamine	ND	0.43	0.27	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
N-Nitrosodiphenylamine	ND	0.43	0.089	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
N-Nitrosodi-n-propylamine	ND	0.43	0.089	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Pentachloronitrobenzene	ND	0.43	0.10	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Pentachlorophenol	ND	0.43	0.10	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Phenanthrene	0.40	0.22	0.11	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Phenol	ND	0.43	0.073	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Pyrene	1.8	0.22	0.071	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Pyridine	ND	0.43	0.070	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
1,2,4,5-Tetrachlorobenzene	ND	0.43	0.077	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
1,2,4-Trichlorobenzene	ND	0.43	0.077	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
2,4,5-Trichlorophenol	ND	0.43	0.097	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
2,4,6-Trichlorophenol	ND	0.43	0.072	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:15	CDT
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
2-Fluorophenol		51.3	30-130						10/9/18 15:15	
Phenol-d6		52.8	30-130						10/9/18 15:15	
Nitrobenzene-d5		57.5	30-130						10/9/18 15:15	
2-Fluorobiphenyl		63.1	30-130						10/9/18 15:15	
2,4,6-Tribromophenol		55.7	30-130						10/9/18 15:15	
p-Terphenyl-d14		68.2	30-130						10/9/18 15:15	



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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-04-00-12

Sampled: 9/26/2018 10:35

Sample ID: 1811225-05

Sample Matrix: Soil

Sample Flags: DL-03

**Organochloride Pesticides by GC/ECD**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Alachlor [1]	ND	0.26	0.014	mg/Kg dry	10		SW-846 8081B	9/28/18	10/4/18 7:35	TG
Aldrin [1]	ND	0.064	0.0038	mg/Kg dry	10		SW-846 8081B	9/28/18	10/4/18 7:35	TG
alpha-BHC [1]	ND	0.064	0.0051	mg/Kg dry	10		SW-846 8081B	9/28/18	10/4/18 7:35	TG
beta-BHC [1]	ND	0.064	0.0064	mg/Kg dry	10		SW-846 8081B	9/28/18	10/4/18 7:35	TG
delta-BHC [1]	ND	0.064	0.0051	mg/Kg dry	10		SW-846 8081B	9/28/18	10/4/18 7:35	TG
gamma-BHC (Lindane) [1]	ND	0.026	0.0064	mg/Kg dry	10		SW-846 8081B	9/28/18	10/4/18 7:35	TG
Chlordane [1]	ND	0.26	0.074	mg/Kg dry	10		SW-846 8081B	9/28/18	10/4/18 7:35	TG
4,4'-DDD [1]	ND	0.051	0.0051	mg/Kg dry	10		SW-846 8081B	9/28/18	10/4/18 7:35	TG
4,4'-DDE [1]	ND	0.051	0.0038	mg/Kg dry	10		SW-846 8081B	9/28/18	10/4/18 7:35	TG
4,4'-DDT [1]	ND	0.051	0.0051	mg/Kg dry	10		SW-846 8081B	9/28/18	10/4/18 7:35	TG
Dieldrin [1]	ND	0.051	0.0038	mg/Kg dry	10		SW-846 8081B	9/28/18	10/4/18 7:35	TG
Endosulfan I [1]	ND	0.064	0.0051	mg/Kg dry	10		SW-846 8081B	9/28/18	10/4/18 7:35	TG
Endosulfan II [1]	ND	0.10	0.0038	mg/Kg dry	10		SW-846 8081B	9/28/18	10/4/18 7:35	TG
Endosulfan sulfate [1]	ND	0.10	0.017	mg/Kg dry	10		SW-846 8081B	9/28/18	10/4/18 7:35	TG
Endrin [1]	ND	0.10	0.0038	mg/Kg dry	10		SW-846 8081B	9/28/18	10/4/18 7:35	TG
Endrin aldehyde [1]	ND	0.10	0.015	mg/Kg dry	10		SW-846 8081B	9/28/18	10/4/18 7:35	TG
Endrin ketone [1]	ND	0.10	0.0051	mg/Kg dry	10		SW-846 8081B	9/28/18	10/4/18 7:35	TG
Heptachlor [1]	ND	0.064	0.0064	mg/Kg dry	10		SW-846 8081B	9/28/18	10/4/18 7:35	TG
Heptachlor epoxide [1]	ND	0.064	0.0051	mg/Kg dry	10		SW-846 8081B	9/28/18	10/4/18 7:35	TG
Hexachlorobenzene [1]	ND	0.077	0.0090	mg/Kg dry	10		SW-846 8081B	9/28/18	10/4/18 7:35	TG
Methoxychlor [1]	ND	0.64	0.0077	mg/Kg dry	10		SW-846 8081B	9/28/18	10/4/18 7:35	TG
Toxaphene [1]	ND	1.3	0.55	mg/Kg dry	10		SW-846 8081B	9/28/18	10/4/18 7:35	TG
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
Decachlorobiphenyl [1]		62.5	30-150						10/4/18 7:35	
Decachlorobiphenyl [2]		67.1	30-150						10/4/18 7:35	
Tetrachloro-m-xylene [1]		45.6	30-150						10/4/18 7:35	
Tetrachloro-m-xylene [2]		58.7	30-150						10/4/18 7:35	

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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-04-00-12

Sampled: 9/26/2018 10:35

Sample ID: 1811225-05

Sample Matrix: Soil

**Polychlorinated Biphenyls By GC/ECD**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.10	0.062	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 16:13	TG
Aroclor-1221 [1]	ND	0.10	0.067	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 16:13	TG
Aroclor-1232 [1]	ND	0.10	0.046	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 16:13	TG
Aroclor-1242 [1]	ND	0.10	0.051	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 16:13	TG
Aroclor-1248 [1]	ND	0.10	0.062	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 16:13	TG
Aroclor-1254 [1]	ND	0.10	0.067	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 16:13	TG
Aroclor-1260 [1]	ND	0.10	0.072	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 16:13	TG
Aroclor-1262 [1]	ND	0.10	0.051	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 16:13	TG
Aroclor-1268 [1]	ND	0.10	0.041	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 16:13	TG
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
Decachlorobiphenyl [1]		72.1	30-150						10/3/18 16:13	
Decachlorobiphenyl [2]		83.1	30-150						10/3/18 16:13	
Tetrachloro-m-xylene [1]		79.1	30-150						10/3/18 16:13	
Tetrachloro-m-xylene [2]		90.0	30-150						10/3/18 16:13	

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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-04-00-12

Sampled: 9/26/2018 10:35

Sample ID: 1811225-05

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	8300	2.1	2.0	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:53	QNW
Antimony	5.4	2.1	1.4	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:53	QNW
Arsenic	9.4	2.1	1.1	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:53	QNW
Barium	190	2.1	1.0	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:53	QNW
Beryllium	0.61	0.21	0.16	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:53	QNW
Cadmium	0.42	0.21	0.13	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:53	QNW
Calcium	1300	6.3	4.4	mg/Kg dry	1	B-07, B	SW-846 6010D	10/9/18	10/10/18 13:53	QNW
Chromium	17	0.42	0.26	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:53	QNW
Cobalt	8.5	2.1	1.2	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:53	QNW
Copper	53	0.42	0.36	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:53	QNW
Iron	21000	21	18	mg/Kg dry	10		SW-846 6010D	10/9/18	10/10/18 15:36	QNW
Lead	500	0.63	0.37	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:53	QNW
Magnesium	2600	63	34	mg/Kg dry	10		SW-846 6010D	10/9/18	10/10/18 15:36	QNW
Manganese	250	0.42	0.13	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:53	QNW
Mercury	1.7	0.063	0.0063	mg/Kg dry	2		SW-846 7471B	10/10/18	10/11/18 8:27	AJL
Nickel	16	0.42	0.34	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:53	QNW
Potassium	1600	850	310	mg/Kg dry	10		SW-846 6010D	10/9/18	10/10/18 15:36	QNW
Selenium	ND	4.2	3.5	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:53	QNW
Silver	ND	0.42	0.25	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:53	QNW
Sodium	140	85	32	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:53	QNW
Thallium	ND	2.1	1.5	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:53	QNW
Vanadium	20	0.85	0.63	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:53	QNW
Zinc	87	0.85	0.58	mg/Kg dry	1	B-07, B	SW-846 6010D	10/9/18	10/10/18 13:53	QNW

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-04-00-12

Sampled: 9/26/2018 10:35

Sample ID: 1811225-05

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Cyanide	3.9	0.55	0.27	mg/Kg dry	1		SW-846 9014	10/3/18	10/5/18 17:50	DJM
% Solids	77.9			% Wt	1		SM 2540G	10/9/18	10/10/18 7:14	DMP

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Project Location: Watervliet, NY  
 Date Received: 9/27/2018  
 Field Sample #: 401075-SS-04-12-24  
 Sample ID: 1811225-06  
 Sample Matrix: Soil

Sample Description:  
 Sampled: 9/26/2018 11:00

Work Order: 1811225

Sample Flags: PR-15

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.10	0.023	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
Acrylonitrile	ND	0.0060	0.0025	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0010	0.00070	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
Benzene	ND	0.0020	0.00070	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
Bromobenzene	ND	0.0020	0.00080	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
Bromochloromethane	ND	0.0020	0.0014	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
Bromodichloromethane	ND	0.0020	0.00060	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
Bromoform	ND	0.0020	0.0014	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
Bromomethane	ND	0.010	0.0042	mg/Kg dry	1	V-34	SW-846 8260C	10/4/18	10/4/18 11:28	MFF
2-Butanone (MEK)	ND	0.040	0.017	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
tert-Butyl Alcohol (TBA)	ND	0.040	0.021	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
n-Butylbenzene	ND	0.0020	0.00070	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
sec-Butylbenzene	ND	0.0020	0.0010	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
tert-Butylbenzene	ND	0.0020	0.00090	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	0.00060	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
Carbon Disulfide	ND	0.0060	0.0043	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
Carbon Tetrachloride	ND	0.0020	0.00080	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
Chlorobenzene	ND	0.0020	0.00070	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
Chlorodibromomethane	ND	0.0010	0.00070	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
Chloroethane	ND	0.020	0.0015	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
Chloroform	ND	0.0040	0.00070	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
Chloromethane	ND	0.010	0.0064	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
2-Chlorotoluene	ND	0.0020	0.00080	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
4-Chlorotoluene	ND	0.0020	0.00080	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
1,2-Dibromoethane (EDB)	ND	0.0010	0.0010	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
Dibromomethane	ND	0.0020	0.00060	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
1,2-Dichlorobenzene	ND	0.0020	0.00070	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
1,3-Dichlorobenzene	ND	0.0020	0.00070	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
1,4-Dichlorobenzene	ND	0.0020	0.00080	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
trans-1,4-Dichloro-2-butene	ND	0.0040	0.0021	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.020	0.0013	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
1,1-Dichloroethane	ND	0.0020	0.00070	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
1,2-Dichloroethane	ND	0.0020	0.0013	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
1,1-Dichloroethylene	ND	0.0040	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
cis-1,2-Dichloroethylene	ND	0.0020	0.00080	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
trans-1,2-Dichloroethylene	ND	0.0020	0.00090	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
1,2-Dichloropropane	ND	0.0020	0.0013	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
1,3-Dichloropropane	ND	0.0010	0.00070	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
2,2-Dichloropropane	ND	0.0020	0.00090	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
1,1-Dichloropropene	ND	0.0020	0.00090	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
cis-1,3-Dichloropropene	ND	0.0010	0.00070	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
trans-1,3-Dichloropropene	ND	0.0010	0.00070	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
Diethyl Ether	ND	0.020	0.0018	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF

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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-04-12-24

Sampled: 9/26/2018 11:00

Sample ID: 1811225-06

Sample Matrix: Soil

Sample Flags: PR-15

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0010	0.00060	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
1,4-Dioxane	ND	0.10	0.057	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
Ethylbenzene	ND	0.0020	0.00080	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
Hexachlorobutadiene	ND	0.0020	0.0010	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
2-Hexanone (MBK)	ND	0.020	0.011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
Isopropylbenzene (Cumene)	ND	0.0020	0.00070	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0020	0.00080	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
Methyl Acetate	ND	0.0020	0.0016	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	0.00090	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
Methyl Cyclohexane	ND	0.0020	0.0010	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
Methylene Chloride	ND	0.020	0.0071	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.020	0.0076	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
Naphthalene	ND	0.0040	0.00070	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
n-Propylbenzene	ND	0.0020	0.00070	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
Styrene	ND	0.0020	0.00060	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
1,1,1,2-Tetrachloroethane	ND	0.0020	0.0018	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
1,1,2,2-Tetrachloroethane	ND	0.0020	0.00090	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
Tetrachloroethylene	0.035	0.0020	0.0013	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
Tetrahydrofuran	ND	0.010	0.0022	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
Toluene	ND	0.0020	0.00080	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
1,2,3-Trichlorobenzene	ND	0.0020	0.00060	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
1,2,4-Trichlorobenzene	ND	0.0020	0.00080	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
1,3,5-Trichlorobenzene	ND	0.0020	0.00070	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
1,1,1-Trichloroethane	ND	0.0020	0.0010	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
1,1,2-Trichloroethane	ND	0.0020	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
Trichloroethylene	ND	0.0020	0.0010	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
Trichlorofluoromethane (Freon 11)	ND	0.010	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
1,2,3-Trichloropropane	ND	0.0020	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.010	0.00090	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
1,2,4-Trimethylbenzene	ND	0.0020	0.00080	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
1,3,5-Trimethylbenzene	ND	0.0020	0.00060	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
Vinyl Chloride	ND	0.010	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
m+p Xylene	ND	0.0040	0.0017	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
o-Xylene	ND	0.0020	0.00070	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:28	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		102	70-130						10/4/18 11:28	
Toluene-d8		97.3	70-130						10/4/18 11:28	
4-Bromofluorobenzene		101	70-130						10/4/18 11:28	

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Project Location: Watervliet, NY  
 Date Received: 9/27/2018  
 Field Sample #: 401075-SS-04-12-24  
 Sample ID: 1811225-06  
 Sample Matrix: Soil

Sample Description:  
 Sampled: 9/26/2018 11:00

Work Order: 1811225

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.20	0.060	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Acenaphthylene	ND	0.20	0.068	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Acetophenone	ND	0.40	0.079	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Aniline	ND	0.40	0.11	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Anthracene	ND	0.20	0.058	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Benzidine	ND	0.78	0.50	mg/Kg dry	1	V-04, V-05, V-34	SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Benzo(a)anthracene	0.057	0.20	0.053	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Benzo(a)pyrene	ND	0.20	0.063	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Benzo(b)fluoranthene	0.075	0.20	0.057	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Benzo(g,h,i)perylene	ND	0.20	0.089	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Benzo(k)fluoranthene	ND	0.20	0.063	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Benzoic Acid	0.23	1.2	0.21	mg/Kg dry	1	V-20, J	SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Bis(2-chloroethoxy)methane	ND	0.40	0.077	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Bis(2-chloroethyl)ether	ND	0.40	0.079	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Bis(2-chloroisopropyl)ether	ND	0.40	0.087	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Bis(2-Ethylhexyl)phthalate	ND	0.40	0.16	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
4-Bromophenylphenylether	ND	0.40	0.068	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Butylbenzylphthalate	ND	0.40	0.096	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Carbazole	ND	0.20	0.052	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
4-Chloroaniline	ND	0.78	0.092	mg/Kg dry	1	V-34	SW-846 8270D	10/8/18	10/9/18 15:39	CDT
4-Chloro-3-methylphenol	ND	0.78	0.087	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
2-Chloronaphthalene	ND	0.40	0.076	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
2-Chlorophenol	ND	0.40	0.072	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
4-Chlorophenylphenylether	ND	0.40	0.068	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Chrysene	ND	0.20	0.063	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Dibenz(a,h)anthracene	ND	0.20	0.12	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Dibenzofuran	ND	0.40	0.070	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Di-n-butylphthalate	ND	0.40	0.088	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
1,2-Dichlorobenzene	ND	0.40	0.071	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
1,3-Dichlorobenzene	ND	0.40	0.069	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
1,4-Dichlorobenzene	ND	0.40	0.072	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
3,3-Dichlorobenzidine	ND	0.20	0.062	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
2,4-Dichlorophenol	ND	0.40	0.069	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Diethylphthalate	ND	0.40	0.072	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
2,4-Dimethylphenol	ND	0.40	0.075	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Dimethylphthalate	ND	0.40	0.071	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
4,6-Dinitro-2-methylphenol	ND	0.40	0.38	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
2,4-Dinitrophenol	ND	0.78	0.23	mg/Kg dry	1	V-04	SW-846 8270D	10/8/18	10/9/18 15:39	CDT
2,4-Dinitrotoluene	ND	0.40	0.065	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
2,6-Dinitrotoluene	ND	0.40	0.071	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Di-n-octylphthalate	ND	0.40	0.21	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
1,2-Diphenylhydrazine (as Azobenzene)	ND	0.40	0.065	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Fluoranthene	0.067	0.20	0.066	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Fluorene	ND	0.20	0.065	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT



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Project Location: Watervliet, NY  
 Date Received: 9/27/2018  
 Field Sample #: 401075-SS-04-12-24  
 Sample ID: 1811225-06  
 Sample Matrix: Soil

Sample Description:  
 Sampled: 9/26/2018 11:00

Work Order: 1811225

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0.40	0.071	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Hexachlorobutadiene	ND	0.40	0.071	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Hexachlorocyclopentadiene	ND	0.40	0.085	mg/Kg dry	1	L-04, V-04	SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Hexachloroethane	ND	0.40	0.081	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Indeno(1,2,3-cd)pyrene	ND	0.20	0.14	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Isophorone	ND	0.40	0.078	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
1-Methylnaphthalene	ND	0.20	0.077	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
2-Methylnaphthalene	ND	0.20	0.070	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
2-Methylphenol	ND	0.40	0.10	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
3/4-Methylphenol	ND	0.40	0.13	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Naphthalene	ND	0.20	0.10	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
2-Nitroaniline	ND	0.40	0.068	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
3-Nitroaniline	ND	0.40	0.058	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
4-Nitroaniline	ND	0.40	0.068	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Nitrobenzene	ND	0.40	0.076	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
2-Nitrophenol	ND	0.40	0.11	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
4-Nitrophenol	ND	0.78	0.088	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
N-Nitrosodimethylamine	ND	0.40	0.25	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
N-Nitrosodiphenylamine	ND	0.40	0.083	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
N-Nitrosodi-n-propylamine	ND	0.40	0.083	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Pentachloronitrobenzene	ND	0.40	0.096	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Pentachlorophenol	ND	0.40	0.097	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Phenanthrene	ND	0.20	0.10	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Phenol	ND	0.40	0.069	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Pyrene	ND	0.20	0.066	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Pyridine	ND	0.40	0.065	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
1,2,4,5-Tetrachlorobenzene	ND	0.40	0.072	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
1,2,4-Trichlorobenzene	ND	0.40	0.072	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
2,4,5-Trichlorophenol	ND	0.40	0.091	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
2,4,6-Trichlorophenol	ND	0.40	0.068	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 15:39	CDT
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
2-Fluorophenol		62.9	30-130						10/9/18 15:39	
Phenol-d6		64.5	30-130						10/9/18 15:39	
Nitrobenzene-d5		67.5	30-130						10/9/18 15:39	
2-Fluorobiphenyl		72.8	30-130						10/9/18 15:39	
2,4,6-Tribromophenol		66.1	30-130						10/9/18 15:39	
p-Terphenyl-d14		79.2	30-130						10/9/18 15:39	

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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-04-12-24

Sampled: 9/26/2018 11:00

Sample ID: 1811225-06

Sample Matrix: Soil

**Organochloride Pesticides by GC/ECD**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Alachlor [1]	ND	0.024	0.0013	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:02	TG
Aldrin [1]	ND	0.0060	0.00036	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:02	TG
alpha-BHC [1]	ND	0.0060	0.00048	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:02	TG
beta-BHC [1]	ND	0.0060	0.00060	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:02	TG
delta-BHC [1]	ND	0.0060	0.00048	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:02	TG
gamma-BHC (Lindane) [1]	ND	0.0024	0.00060	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:02	TG
Chlordane [1]	ND	0.024	0.0069	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:02	TG
4,4'-DDD [1]	ND	0.0048	0.00048	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:02	TG
4,4'-DDE [1]	ND	0.0048	0.00036	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:02	TG
4,4'-DDT [1]	ND	0.0048	0.00048	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:02	TG
Dieldrin [1]	ND	0.0048	0.00036	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:02	TG
Endosulfan I [1]	ND	0.0060	0.00048	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:02	TG
Endosulfan II [1]	ND	0.0095	0.00036	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:02	TG
Endosulfan sulfate [1]	ND	0.0095	0.0016	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:02	TG
Endrin [1]	ND	0.0095	0.00036	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:02	TG
Endrin aldehyde [1]	ND	0.0095	0.0014	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:02	TG
Endrin ketone [1]	ND	0.0095	0.00048	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:02	TG
Heptachlor [1]	ND	0.0060	0.00060	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:02	TG
Heptachlor epoxide [1]	ND	0.0060	0.00048	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:02	TG
Hexachlorobenzene [1]	ND	0.0072	0.00084	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:02	TG
Methoxychlor [1]	ND	0.060	0.00072	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:02	TG
Toxaphene [1]	ND	0.12	0.051	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:02	TG
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
Decachlorobiphenyl [1]		55.6	30-150						10/4/18 8:02	
Decachlorobiphenyl [2]		60.0	30-150						10/4/18 8:02	
Tetrachloro-m-xylene [1]		38.5	30-150						10/4/18 8:02	
Tetrachloro-m-xylene [2]		47.4	30-150						10/4/18 8:02	

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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-04-12-24

Sampled: 9/26/2018 11:00

Sample ID: 1811225-06

Sample Matrix: Soil

**Polychlorinated Biphenyls By GC/ECD**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.095	0.057	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 17:20	TG
Aroclor-1221 [1]	ND	0.095	0.062	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 17:20	TG
Aroclor-1232 [1]	ND	0.095	0.043	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 17:20	TG
Aroclor-1242 [1]	ND	0.095	0.048	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 17:20	TG
Aroclor-1248 [1]	ND	0.095	0.057	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 17:20	TG
Aroclor-1254 [1]	ND	0.095	0.062	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 17:20	TG
Aroclor-1260 [1]	ND	0.095	0.067	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 17:20	TG
Aroclor-1262 [1]	ND	0.095	0.048	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 17:20	TG
Aroclor-1268 [1]	ND	0.095	0.038	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 17:20	TG
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
Decachlorobiphenyl [1]		71.7	30-150						10/3/18 17:20	
Decachlorobiphenyl [2]		77.9	30-150						10/3/18 17:20	
Tetrachloro-m-xylene [1]		60.2	30-150						10/3/18 17:20	
Tetrachloro-m-xylene [2]		69.7	30-150						10/3/18 17:20	

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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-04-12-24

Sampled: 9/26/2018 11:00

Sample ID: 1811225-06

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	16000	1.9	1.8	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:59	QNW
Antimony	ND	1.9	1.3	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:59	QNW
Arsenic	17	1.9	0.98	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:59	QNW
Barium	170	1.9	0.96	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:59	QNW
Beryllium	0.96	0.19	0.14	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:59	QNW
Cadmium	0.69	0.19	0.12	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:59	QNW
Calcium	1600	5.8	4.0	mg/Kg dry	1	B-07, B	SW-846 6010D	10/9/18	10/10/18 13:59	QNW
Chromium	22	0.39	0.24	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:59	QNW
Cobalt	30	1.9	1.1	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:59	QNW
Copper	42	0.39	0.33	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:59	QNW
Iron	45000	39	34	mg/Kg dry	20		SW-846 6010D	10/9/18	10/10/18 15:41	QNW
Lead	45	0.58	0.34	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:59	QNW
Magnesium	4800	120	63	mg/Kg dry	20		SW-846 6010D	10/9/18	10/10/18 15:41	QNW
Manganese	3800	0.39	0.12	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:59	QNW
Mercury	0.76	0.029	0.0029	mg/Kg dry	1		SW-846 7471B	10/10/18	10/11/18 7:59	AJL
Nickel	41	0.39	0.31	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:59	QNW
Potassium	2600	1600	560	mg/Kg dry	20		SW-846 6010D	10/9/18	10/10/18 15:41	QNW
Selenium	ND	3.9	3.2	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:59	QNW
Silver	ND	0.39	0.23	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:59	QNW
Sodium	150	78	29	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:59	QNW
Thallium	ND	1.9	1.4	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:59	QNW
Vanadium	34	0.78	0.58	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 13:59	QNW
Zinc	160	0.78	0.54	mg/Kg dry	1	B-07, B	SW-846 6010D	10/9/18	10/10/18 13:59	QNW

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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-04-12-24

Sampled: 9/26/2018 11:00

Sample ID: 1811225-06

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Cyanide	ND	0.51	0.25	mg/Kg dry	1		SW-846 9014	10/3/18	10/5/18 17:50	DJM
% Solids	83.8			% Wt	1		SM 2540G	10/9/18	10/10/18 7:14	DMP

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Project Location: Watervliet, NY  
 Date Received: 9/27/2018  
 Field Sample #: 401075-SS-06-00-12  
 Sample ID: 1811225-07  
 Sample Matrix: Soil

Sample Description:  
 Sampled: 9/26/2018 11:25

Work Order: 1811225

Sample Flags: PR-15

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.11	0.025	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
Acrylonitrile	ND	0.0064	0.0026	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0011	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
Benzene	ND	0.0021	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
Bromobenzene	ND	0.0021	0.00085	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
Bromochloromethane	ND	0.0021	0.0015	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
Bromodichloromethane	ND	0.0021	0.00064	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
Bromoform	ND	0.0021	0.0015	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
Bromomethane	ND	0.011	0.0044	mg/Kg dry	1	V-34	SW-846 8260C	10/4/18	10/4/18 11:56	MFF
2-Butanone (MEK)	ND	0.042	0.019	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
tert-Butyl Alcohol (TBA)	ND	0.042	0.022	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
n-Butylbenzene	ND	0.0021	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
sec-Butylbenzene	ND	0.0021	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
tert-Butylbenzene	ND	0.0021	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0011	0.00064	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
Carbon Disulfide	ND	0.0064	0.0046	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
Carbon Tetrachloride	ND	0.0021	0.00085	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
Chlorobenzene	ND	0.0021	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
Chlorodibromomethane	ND	0.0011	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
Chloroethane	ND	0.021	0.0016	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
Chloroform	ND	0.0042	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
Chloromethane	ND	0.011	0.0068	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
2-Chlorotoluene	ND	0.0021	0.00085	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
4-Chlorotoluene	ND	0.0021	0.00085	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0021	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
1,2-Dibromoethane (EDB)	ND	0.0011	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
Dibromomethane	ND	0.0021	0.00064	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
1,2-Dichlorobenzene	ND	0.0021	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
1,3-Dichlorobenzene	ND	0.0021	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
1,4-Dichlorobenzene	ND	0.0021	0.00085	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
trans-1,4-Dichloro-2-butene	ND	0.0042	0.0022	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.021	0.0014	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
1,1-Dichloroethane	ND	0.0021	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
1,2-Dichloroethane	ND	0.0021	0.0014	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
1,1-Dichloroethylene	ND	0.0042	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
cis-1,2-Dichloroethylene	ND	0.0021	0.00085	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
trans-1,2-Dichloroethylene	ND	0.0021	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
1,2-Dichloropropane	ND	0.0021	0.0014	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
1,3-Dichloropropane	ND	0.0011	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
2,2-Dichloropropane	ND	0.0021	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
1,1-Dichloropropene	ND	0.0021	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
cis-1,3-Dichloropropene	ND	0.0011	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
trans-1,3-Dichloropropene	ND	0.0011	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
Diethyl Ether	ND	0.021	0.0019	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF

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Project Location: Watervliet, NY  
 Date Received: 9/27/2018  
 Field Sample #: 401075-SS-06-00-12  
 Sample ID: 1811225-07  
 Sample Matrix: Soil

Sample Description:  
 Sampled: 9/26/2018 11:25

Work Order: 1811225

Sample Flags: PR-15

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0011	0.00064	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
1,4-Dioxane	ND	0.11	0.061	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
Ethylbenzene	ND	0.0021	0.00085	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
Hexachlorobutadiene	ND	0.0021	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
2-Hexanone (MBK)	ND	0.021	0.012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
Isopropylbenzene (Cumene)	ND	0.0021	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0021	0.00085	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
Methyl Acetate	ND	0.0021	0.0017	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0042	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
Methyl Cyclohexane	ND	0.0021	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
Methylene Chloride	ND	0.021	0.0075	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.021	0.0080	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
Naphthalene	ND	0.0042	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
n-Propylbenzene	ND	0.0021	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
Styrene	ND	0.0021	0.00064	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
1,1,1,2-Tetrachloroethane	ND	0.0021	0.0019	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
1,1,2,2-Tetrachloroethane	ND	0.0021	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
Tetrachloroethylene	0.0085	0.0021	0.0014	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
Tetrahydrofuran	ND	0.011	0.0023	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
Toluene	ND	0.0021	0.00085	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
1,2,3-Trichlorobenzene	ND	0.0021	0.00064	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
1,2,4-Trichlorobenzene	ND	0.0021	0.00085	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
1,3,5-Trichlorobenzene	ND	0.0021	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
1,1,1-Trichloroethane	ND	0.0021	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
1,1,2-Trichloroethane	ND	0.0021	0.0013	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
Trichloroethylene	ND	0.0021	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
Trichlorofluoromethane (Freon 11)	ND	0.011	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
1,2,3-Trichloropropane	ND	0.0021	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.011	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
1,2,4-Trimethylbenzene	ND	0.0021	0.00085	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
1,3,5-Trimethylbenzene	ND	0.0021	0.00064	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
Vinyl Chloride	ND	0.011	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
m+p Xylene	ND	0.0042	0.0018	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
o-Xylene	ND	0.0021	0.00074	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 11:56	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		102	70-130						10/4/18 11:56	
Toluene-d8		97.6	70-130						10/4/18 11:56	
4-Bromofluorobenzene		102	70-130						10/4/18 11:56	



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-06-00-12

Sampled: 9/26/2018 11:25

Sample ID: 1811225-07

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.19	0.058	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Acenaphthylene	ND	0.19	0.065	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Acetophenone	ND	0.39	0.076	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Aniline	ND	0.39	0.11	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Anthracene	0.086	0.19	0.056	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Benzidine	ND	0.75	0.48	mg/Kg dry	1	V-04, V-05, V-34	SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Benzo(a)anthracene	0.47	0.19	0.051	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Benzo(a)pyrene	0.52	0.19	0.060	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Benzo(b)fluoranthene	0.62	0.19	0.055	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Benzo(g,h,i)perylene	0.38	0.19	0.085	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Benzo(k)fluoranthene	0.24	0.19	0.060	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Benzoic Acid	ND	1.1	0.21	mg/Kg dry	1	V-20	SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Bis(2-chloroethoxy)methane	ND	0.39	0.074	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Bis(2-chloroethyl)ether	ND	0.39	0.076	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Bis(2-chloroisopropyl)ether	ND	0.39	0.083	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Bis(2-Ethylhexyl)phthalate	ND	0.39	0.15	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
4-Bromophenylphenylether	ND	0.39	0.065	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Butylbenzylphthalate	ND	0.39	0.092	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Carbazole	0.077	0.19	0.050	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 16:03	CDT
4-Chloroaniline	ND	0.75	0.089	mg/Kg dry	1	V-34	SW-846 8270D	10/8/18	10/9/18 16:03	CDT
4-Chloro-3-methylphenol	ND	0.75	0.083	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
2-Chloronaphthalene	ND	0.39	0.073	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
2-Chlorophenol	ND	0.39	0.069	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
4-Chlorophenylphenylether	ND	0.39	0.065	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Chrysene	0.47	0.19	0.060	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Dibenz(a,h)anthracene	ND	0.19	0.12	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Dibenzofuran	ND	0.39	0.067	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Di-n-butylphthalate	ND	0.39	0.084	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
1,2-Dichlorobenzene	ND	0.39	0.068	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
1,3-Dichlorobenzene	ND	0.39	0.066	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
1,4-Dichlorobenzene	ND	0.39	0.069	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
3,3-Dichlorobenzidine	ND	0.19	0.059	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
2,4-Dichlorophenol	ND	0.39	0.066	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Diethylphthalate	ND	0.39	0.069	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
2,4-Dimethylphenol	ND	0.39	0.072	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Dimethylphthalate	ND	0.39	0.068	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
4,6-Dinitro-2-methylphenol	ND	0.39	0.37	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
2,4-Dinitrophenol	ND	0.75	0.22	mg/Kg dry	1	V-04	SW-846 8270D	10/8/18	10/9/18 16:03	CDT
2,4-Dinitrotoluene	ND	0.39	0.063	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
2,6-Dinitrotoluene	ND	0.39	0.068	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Di-n-octylphthalate	ND	0.39	0.20	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
1,2-Diphenylhydrazine (as Azobenzene)	ND	0.39	0.063	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Fluoranthene	0.82	0.19	0.064	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Fluorene	ND	0.19	0.063	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-06-00-12

Sampled: 9/26/2018 11:25

Sample ID: 1811225-07

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0.39	0.068	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Hexachlorobutadiene	ND	0.39	0.068	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Hexachlorocyclopentadiene	ND	0.39	0.082	mg/Kg dry	1	L-04, V-04	SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Hexachloroethane	ND	0.39	0.077	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Indeno(1,2,3-cd)pyrene	0.40	0.19	0.14	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Isophorone	ND	0.39	0.075	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
1-Methylnaphthalene	ND	0.19	0.074	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
2-Methylnaphthalene	ND	0.19	0.067	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
2-Methylphenol	ND	0.39	0.097	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
3/4-Methylphenol	ND	0.39	0.12	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Naphthalene	ND	0.19	0.099	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
2-Nitroaniline	ND	0.39	0.065	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
3-Nitroaniline	ND	0.39	0.056	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
4-Nitroaniline	ND	0.39	0.065	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Nitrobenzene	ND	0.39	0.073	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
2-Nitrophenol	ND	0.39	0.10	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
4-Nitrophenol	ND	0.75	0.084	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
N-Nitrosodimethylamine	ND	0.39	0.24	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
N-Nitrosodiphenylamine	ND	0.39	0.080	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
N-Nitrosodi-n-propylamine	ND	0.39	0.080	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Pentachloronitrobenzene	ND	0.39	0.092	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Pentachlorophenol	ND	0.39	0.093	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Phenanthrene	0.45	0.19	0.10	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Phenol	ND	0.39	0.066	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Pyrene	0.76	0.19	0.064	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
Pyridine	ND	0.39	0.063	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
1,2,4,5-Tetrachlorobenzene	ND	0.39	0.069	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
1,2,4-Trichlorobenzene	ND	0.39	0.069	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
2,4,5-Trichlorophenol	ND	0.39	0.088	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
2,4,6-Trichlorophenol	ND	0.39	0.065	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:03	CDT
<b>Surrogates</b>		<b>% Recovery</b>	<b>Recovery Limits</b>			<b>Flag/Qual</b>				
2-Fluorophenol		58.1	30-130						10/9/18 16:03	
Phenol-d6		61.6	30-130						10/9/18 16:03	
Nitrobenzene-d5		63.4	30-130						10/9/18 16:03	
2-Fluorobiphenyl		72.2	30-130						10/9/18 16:03	
2,4,6-Tribromophenol		66.3	30-130						10/9/18 16:03	
p-Terphenyl-d14		88.7	30-130						10/9/18 16:03	

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-06-00-12

Sampled: 9/26/2018 11:25

Sample ID: 1811225-07

Sample Matrix: Soil

**Organochloride Pesticides by GC/ECD**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Alachlor [1]	ND	0.023	0.0013	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:29	TG
Aldrin [1]	ND	0.0057	0.00034	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:29	TG
alpha-BHC [1]	ND	0.0057	0.00046	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:29	TG
beta-BHC [1]	ND	0.0057	0.00057	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:29	TG
delta-BHC [1]	ND	0.0057	0.00046	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:29	TG
gamma-BHC (Lindane) [1]	ND	0.0023	0.00057	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:29	TG
Chlordane [1]	ND	0.023	0.0067	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:29	TG
4,4'-DDD [1]	ND	0.0046	0.00046	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:29	TG
4,4'-DDE [1]	ND	0.0046	0.00034	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:29	TG
4,4'-DDT [1]	ND	0.0046	0.00046	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:29	TG
Dieldrin [1]	ND	0.0046	0.00034	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:29	TG
Endosulfan I [1]	ND	0.0057	0.00046	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:29	TG
Endosulfan II [1]	ND	0.0092	0.00034	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:29	TG
Endosulfan sulfate [1]	ND	0.0092	0.0015	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:29	TG
Endrin [1]	ND	0.0092	0.00034	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:29	TG
Endrin aldehyde [1]	ND	0.0092	0.0014	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:29	TG
Endrin ketone [1]	ND	0.0092	0.00046	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:29	TG
Heptachlor [1]	ND	0.0057	0.00057	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:29	TG
Heptachlor epoxide [1]	ND	0.0057	0.00046	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:29	TG
Hexachlorobenzene [1]	ND	0.0069	0.00080	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:29	TG
Methoxychlor [1]	ND	0.057	0.00069	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:29	TG
Toxaphene [1]	ND	0.11	0.049	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:29	TG
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
Decachlorobiphenyl [1]		59.3	30-150						10/4/18 8:29	
Decachlorobiphenyl [2]		64.9	30-150						10/4/18 8:29	
Tetrachloro-m-xylene [1]		30.6	30-150						10/4/18 8:29	
Tetrachloro-m-xylene [2]		37.9	30-150						10/4/18 8:29	

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-06-00-12

Sampled: 9/26/2018 11:25

Sample ID: 1811225-07

Sample Matrix: Soil

**Polychlorinated Biphenyls By GC/ECD**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.092	0.055	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 17:38	TG
Aroclor-1221 [1]	ND	0.092	0.060	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 17:38	TG
Aroclor-1232 [1]	ND	0.092	0.041	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 17:38	TG
Aroclor-1242 [1]	ND	0.092	0.046	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 17:38	TG
Aroclor-1248 [1]	ND	0.092	0.055	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 17:38	TG
Aroclor-1254 [1]	ND	0.092	0.060	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 17:38	TG
Aroclor-1260 [1]	ND	0.092	0.064	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 17:38	TG
Aroclor-1262 [1]	ND	0.092	0.046	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 17:38	TG
Aroclor-1268 [1]	ND	0.092	0.037	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 17:38	TG
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
Decachlorobiphenyl [1]		81.8	30-150						10/3/18 17:38	
Decachlorobiphenyl [2]		88.2	30-150						10/3/18 17:38	
Tetrachloro-m-xylene [1]		65.2	30-150						10/3/18 17:38	
Tetrachloro-m-xylene [2]		73.9	30-150						10/3/18 17:38	

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-06-00-12

Sampled: 9/26/2018 11:25

Sample ID: 1811225-07

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	15000	1.9	1.7	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:14	QNW
Antimony	ND	1.9	1.3	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:14	QNW
Arsenic	8.5	1.9	0.95	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:14	QNW
Barium	140	1.9	0.93	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:14	QNW
Beryllium	0.83	0.19	0.14	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:14	QNW
Cadmium	0.36	0.19	0.11	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:14	QNW
Calcium	12000	5.6	3.9	mg/Kg dry	1	B-07, B	SW-846 6010D	10/9/18	10/10/18 14:14	QNW
Chromium	20	0.38	0.23	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:14	QNW
Cobalt	15	1.9	1.1	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:14	QNW
Copper	49	0.38	0.32	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:14	QNW
Iron	32000	38	33	mg/Kg dry	20		SW-846 6010D	10/9/18	10/10/18 15:51	QNW
Lead	76	0.56	0.33	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:14	QNW
Magnesium	6100	110	61	mg/Kg dry	20		SW-846 6010D	10/9/18	10/10/18 15:51	QNW
Manganese	1500	0.38	0.11	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:14	QNW
Mercury	1.2	0.056	0.0056	mg/Kg dry	2		SW-846 7471B	10/10/18	10/11/18 8:29	AJL
Nickel	27	0.38	0.30	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:14	QNW
Potassium	2800	1500	540	mg/Kg dry	20		SW-846 6010D	10/9/18	10/10/18 15:51	QNW
Selenium	ND	3.8	3.1	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:14	QNW
Silver	ND	0.38	0.22	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:14	QNW
Sodium	310	75	28	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:14	QNW
Thallium	ND	1.9	1.4	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:14	QNW
Vanadium	32	0.75	0.56	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:14	QNW
Zinc	140	0.75	0.52	mg/Kg dry	1	B-07, B	SW-846 6010D	10/9/18	10/10/18 14:14	QNW

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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-06-00-12

Sampled: 9/26/2018 11:25

Sample ID: 1811225-07

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Cyanide	0.26	0.51	0.25	mg/Kg dry	1	J	SW-846 9014	10/3/18	10/5/18 17:50	DJM
% Solids	87.1			% Wt	1		SM 2540G	10/9/18	10/10/18 7:14	DMP

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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-06-12-24

Sampled: 9/26/2018 11:24

Sample ID: 1811225-08

Sample Matrix: Soil

Sample Flags: PR-15

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.12	0.028	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
Acrylonitrile	ND	0.0071	0.0030	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0012	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
Benzene	ND	0.0024	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
Bromobenzene	ND	0.0024	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
Bromochloromethane	ND	0.0024	0.0017	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
Bromodichloromethane	ND	0.0024	0.00071	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
Bromoform	ND	0.0024	0.0017	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
Bromomethane	ND	0.012	0.0050	mg/Kg dry	1	V-34	SW-846 8260C	10/4/18	10/4/18 12:25	MFF
2-Butanone (MEK)	ND	0.047	0.021	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
tert-Butyl Alcohol (TBA)	ND	0.047	0.025	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
n-Butylbenzene	ND	0.0024	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
sec-Butylbenzene	ND	0.0024	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
tert-Butylbenzene	ND	0.0024	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0012	0.00071	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
Carbon Disulfide	ND	0.0071	0.0051	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
Carbon Tetrachloride	ND	0.0024	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
Chlorobenzene	ND	0.0024	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
Chlorodibromomethane	ND	0.0012	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
Chloroethane	ND	0.024	0.0018	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
Chloroform	ND	0.0047	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
Chloromethane	ND	0.012	0.0076	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
2-Chlorotoluene	ND	0.0024	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
4-Chlorotoluene	ND	0.0024	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0024	0.0013	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
1,2-Dibromoethane (EDB)	ND	0.0012	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
Dibromomethane	ND	0.0024	0.00071	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
1,2-Dichlorobenzene	ND	0.0024	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
1,3-Dichlorobenzene	ND	0.0024	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
1,4-Dichlorobenzene	ND	0.0024	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
trans-1,4-Dichloro-2-butene	ND	0.0047	0.0025	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.024	0.0015	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
1,1-Dichloroethane	ND	0.0024	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
1,2-Dichloroethane	ND	0.0024	0.0015	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
1,1-Dichloroethylene	ND	0.0047	0.0013	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
cis-1,2-Dichloroethylene	ND	0.0024	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
trans-1,2-Dichloroethylene	ND	0.0024	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
1,2-Dichloropropane	ND	0.0024	0.0015	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
1,3-Dichloropropane	ND	0.0012	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
2,2-Dichloropropane	ND	0.0024	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
1,1-Dichloropropene	ND	0.0024	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
cis-1,3-Dichloropropene	ND	0.0012	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
trans-1,3-Dichloropropene	ND	0.0012	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
Diethyl Ether	ND	0.024	0.0021	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF



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Project Location: Watervliet, NY  
 Date Received: 9/27/2018  
 Field Sample #: 401075-SS-06-12-24  
 Sample ID: 1811225-08  
 Sample Matrix: Soil

Sample Description:  
 Sampled: 9/26/2018 11:24

Work Order: 1811225

Sample Flags: PR-15

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0012	0.00071	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
1,4-Dioxane	ND	0.12	0.068	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
Ethylbenzene	ND	0.0024	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
Hexachlorobutadiene	ND	0.0024	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
2-Hexanone (MBK)	ND	0.024	0.013	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
Isopropylbenzene (Cumene)	ND	0.0024	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0024	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
Methyl Acetate	ND	0.0024	0.0019	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0047	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
Methyl Cyclohexane	ND	0.0024	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
Methylene Chloride	ND	0.024	0.0084	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.024	0.0090	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
Naphthalene	ND	0.0047	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
n-Propylbenzene	ND	0.0024	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
Styrene	ND	0.0024	0.00071	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
1,1,1,2-Tetrachloroethane	ND	0.0024	0.0021	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
1,1,2,2-Tetrachloroethane	ND	0.0024	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
Tetrachloroethylene	0.0024	0.0024	0.0015	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
Tetrahydrofuran	ND	0.012	0.0026	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
Toluene	ND	0.0024	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
1,2,3-Trichlorobenzene	ND	0.0024	0.00071	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
1,2,4-Trichlorobenzene	ND	0.0024	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
1,3,5-Trichlorobenzene	ND	0.0024	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
1,1,1-Trichloroethane	ND	0.0024	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
1,1,2-Trichloroethane	ND	0.0024	0.0014	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
Trichloroethylene	ND	0.0024	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
Trichlorofluoromethane (Freon 11)	ND	0.012	0.0013	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
1,2,3-Trichloropropane	ND	0.0024	0.0013	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.012	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
1,2,4-Trimethylbenzene	ND	0.0024	0.00095	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
1,3,5-Trimethylbenzene	ND	0.0024	0.00071	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
Vinyl Chloride	ND	0.012	0.0013	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
m+p Xylene	ND	0.0047	0.0020	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
o-Xylene	ND	0.0024	0.00083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/4/18 12:25	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		102	70-130					10/4/18	12:25	
Toluene-d8		98.0	70-130					10/4/18	12:25	
4-Bromofluorobenzene		100	70-130					10/4/18	12:25	

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Project Location: Watervliet, NY  
 Date Received: 9/27/2018  
 Field Sample #: 401075-SS-06-12-24  
 Sample ID: 1811225-08  
 Sample Matrix: Soil

Sample Description:  
 Sampled: 9/26/2018 11:24

Work Order: 1811225

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.21	0.064	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Acenaphthylene	ND	0.21	0.071	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Acetophenone	ND	0.42	0.084	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Aniline	ND	0.42	0.12	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Anthracene	ND	0.21	0.061	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Benzidine	ND	0.82	0.53	mg/Kg dry	1	V-04, V-05, V-34	SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Benzo(a)anthracene	0.082	0.21	0.056	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Benzo(a)pyrene	0.082	0.21	0.066	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Benzo(b)fluoranthene	0.088	0.21	0.060	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Benzo(g,h,i)perylene	ND	0.21	0.094	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Benzo(k)fluoranthene	ND	0.21	0.066	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Benzoic Acid	ND	1.2	0.23	mg/Kg dry	1	V-20	SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Bis(2-chloroethoxy)methane	ND	0.42	0.081	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Bis(2-chloroethyl)ether	ND	0.42	0.084	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Bis(2-chloroisopropyl)ether	ND	0.42	0.091	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Bis(2-Ethylhexyl)phthalate	ND	0.42	0.16	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
4-Bromophenylphenylether	ND	0.42	0.071	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Butylbenzylphthalate	ND	0.42	0.10	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Carbazole	ND	0.21	0.055	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
4-Chloroaniline	ND	0.82	0.097	mg/Kg dry	1	V-34	SW-846 8270D	10/8/18	10/9/18 16:27	CDT
4-Chloro-3-methylphenol	ND	0.82	0.091	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
2-Chloronaphthalene	ND	0.42	0.080	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
2-Chlorophenol	ND	0.42	0.076	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
4-Chlorophenylphenylether	ND	0.42	0.071	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Chrysene	0.069	0.21	0.066	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Dibenz(a,h)anthracene	ND	0.21	0.13	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Dibenzofuran	ND	0.42	0.074	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Di-n-butylphthalate	ND	0.42	0.092	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
1,2-Dichlorobenzene	ND	0.42	0.075	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
1,3-Dichlorobenzene	ND	0.42	0.072	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
1,4-Dichlorobenzene	ND	0.42	0.076	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
3,3-Dichlorobenzidine	ND	0.21	0.065	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
2,4-Dichlorophenol	ND	0.42	0.072	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Diethylphthalate	ND	0.42	0.076	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
2,4-Dimethylphenol	ND	0.42	0.079	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Dimethylphthalate	ND	0.42	0.075	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
4,6-Dinitro-2-methylphenol	ND	0.42	0.40	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
2,4-Dinitrophenol	ND	0.82	0.24	mg/Kg dry	1	V-04	SW-846 8270D	10/8/18	10/9/18 16:27	CDT
2,4-Dinitrotoluene	ND	0.42	0.069	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
2,6-Dinitrotoluene	ND	0.42	0.075	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Di-n-octylphthalate	ND	0.42	0.22	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
1,2-Diphenylhydrazine (as Azobenzene)	ND	0.42	0.069	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Fluoranthene	0.093	0.21	0.070	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Fluorene	ND	0.21	0.069	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT

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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-06-12-24

Sampled: 9/26/2018 11:24

Sample ID: 1811225-08

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0.42	0.075	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Hexachlorobutadiene	ND	0.42	0.075	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Hexachlorocyclopentadiene	ND	0.42	0.090	mg/Kg dry	1	L-04, V-04	SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Hexachloroethane	ND	0.42	0.085	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Indeno(1,2,3-cd)pyrene	ND	0.21	0.15	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Isophorone	ND	0.42	0.082	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
1-Methylnaphthalene	ND	0.21	0.081	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
2-Methylnaphthalene	ND	0.21	0.074	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
2-Methylphenol	ND	0.42	0.11	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
3/4-Methylphenol	ND	0.42	0.13	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Naphthalene	ND	0.21	0.11	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
2-Nitroaniline	ND	0.42	0.071	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
3-Nitroaniline	ND	0.42	0.061	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
4-Nitroaniline	ND	0.42	0.071	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Nitrobenzene	ND	0.42	0.080	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
2-Nitrophenol	ND	0.42	0.11	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
4-Nitrophenol	ND	0.82	0.092	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
N-Nitrosodimethylamine	ND	0.42	0.27	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
N-Nitrosodiphenylamine	ND	0.42	0.087	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
N-Nitrosodi-n-propylamine	ND	0.42	0.087	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Pentachloronitrobenzene	ND	0.42	0.10	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Pentachlorophenol	ND	0.42	0.10	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Phenanthrene	ND	0.21	0.11	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Phenol	ND	0.42	0.072	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Pyrene	0.098	0.21	0.070	mg/Kg dry	1	J	SW-846 8270D	10/8/18	10/9/18 16:27	CDT
Pyridine	ND	0.42	0.069	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
1,2,4,5-Tetrachlorobenzene	ND	0.42	0.076	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
1,2,4-Trichlorobenzene	ND	0.42	0.076	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
2,4,5-Trichlorophenol	ND	0.42	0.096	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
2,4,6-Trichlorophenol	ND	0.42	0.071	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:27	CDT
<b>Surrogates</b>		<b>% Recovery</b>	<b>Recovery Limits</b>			<b>Flag/Qual</b>				
2-Fluorophenol		55.9	30-130						10/9/18 16:27	
Phenol-d6		61.7	30-130						10/9/18 16:27	
Nitrobenzene-d5		62.7	30-130						10/9/18 16:27	
2-Fluorobiphenyl		72.4	30-130						10/9/18 16:27	
2,4,6-Tribromophenol		63.6	30-130						10/9/18 16:27	
p-Terphenyl-d14		98.6	30-130						10/9/18 16:27	

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Project Location: Watervliet, NY  
 Date Received: 9/27/2018  
 Field Sample #: 401075-SS-06-12-24  
 Sample ID: 1811225-08  
 Sample Matrix: Soil

Sample Description:  
 Sampled: 9/26/2018 11:24

Work Order: 1811225

**Organochloride Pesticides by GC/ECD**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Alachlor [1]	ND	0.025	0.0014	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:56	TG
Aldrin [1]	ND	0.0063	0.00038	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:56	TG
alpha-BHC [1]	ND	0.0063	0.00050	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:56	TG
beta-BHC [1]	ND	0.0063	0.00063	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:56	TG
delta-BHC [1]	ND	0.0063	0.00050	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:56	TG
gamma-BHC (Lindane) [1]	ND	0.0025	0.00063	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:56	TG
Chlordane [1]	ND	0.025	0.0073	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:56	TG
4,4'-DDD [1]	ND	0.0050	0.00050	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:56	TG
4,4'-DDE [1]	ND	0.0050	0.00038	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:56	TG
4,4'-DDT [1]	ND	0.0050	0.00050	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:56	TG
Dieldrin [1]	ND	0.0050	0.00038	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:56	TG
Endosulfan I [1]	ND	0.0063	0.00050	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:56	TG
Endosulfan II [1]	ND	0.010	0.00038	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:56	TG
Endosulfan sulfate [1]	ND	0.010	0.0016	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:56	TG
Endrin [1]	ND	0.010	0.00038	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:56	TG
Endrin aldehyde [1]	ND	0.010	0.0015	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:56	TG
Endrin ketone [1]	ND	0.010	0.00050	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:56	TG
Heptachlor [1]	ND	0.0063	0.00063	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:56	TG
Heptachlor epoxide [1]	ND	0.0063	0.00050	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:56	TG
Hexachlorobenzene [1]	ND	0.0075	0.00088	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:56	TG
Methoxychlor [1]	ND	0.063	0.00075	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:56	TG
Toxaphene [1]	ND	0.13	0.054	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 8:56	TG
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
Decachlorobiphenyl [1]		62.0	30-150						10/4/18 8:56	
Decachlorobiphenyl [2]		68.3	30-150						10/4/18 8:56	
Tetrachloro-m-xylene [1]		52.5	30-150						10/4/18 8:56	
Tetrachloro-m-xylene [2]		64.7	30-150						10/4/18 8:56	

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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-06-12-24

Sampled: 9/26/2018 11:24

Sample ID: 1811225-08

Sample Matrix: Soil

**Polychlorinated Biphenyls By GC/ECD**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.10	0.060	mg/Kg dry	4		SW-846 8082A	9/28/18	10/4/18 6:28	TG
Aroclor-1221 [1]	ND	0.10	0.065	mg/Kg dry	4		SW-846 8082A	9/28/18	10/4/18 6:28	TG
Aroclor-1232 [1]	ND	0.10	0.045	mg/Kg dry	4		SW-846 8082A	9/28/18	10/4/18 6:28	TG
Aroclor-1242 [1]	ND	0.10	0.050	mg/Kg dry	4		SW-846 8082A	9/28/18	10/4/18 6:28	TG
Aroclor-1248 [1]	ND	0.10	0.060	mg/Kg dry	4		SW-846 8082A	9/28/18	10/4/18 6:28	TG
Aroclor-1254 [1]	ND	0.10	0.065	mg/Kg dry	4		SW-846 8082A	9/28/18	10/4/18 6:28	TG
Aroclor-1260 [1]	ND	0.10	0.070	mg/Kg dry	4		SW-846 8082A	9/28/18	10/4/18 6:28	TG
Aroclor-1262 [1]	ND	0.10	0.050	mg/Kg dry	4		SW-846 8082A	9/28/18	10/4/18 6:28	TG
Aroclor-1268 [1]	ND	0.10	0.040	mg/Kg dry	4		SW-846 8082A	9/28/18	10/4/18 6:28	TG
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
Decachlorobiphenyl [1]		69.9	30-150						10/4/18 6:28	
Decachlorobiphenyl [2]		84.7	30-150						10/4/18 6:28	
Tetrachloro-m-xylene [1]		71.2	30-150						10/4/18 6:28	
Tetrachloro-m-xylene [2]		74.5	30-150						10/4/18 6:28	

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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-06-12-24

Sampled: 9/26/2018 11:24

Sample ID: 1811225-08

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	13000	2.0	1.9	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:19	QNW
Antimony	ND	2.0	1.4	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:19	QNW
Arsenic	11	2.0	1.0	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:19	QNW
Barium	160	2.0	1.0	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:19	QNW
Beryllium	0.75	0.20	0.15	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:19	QNW
Cadmium	0.92	0.20	0.12	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:19	QNW
Calcium	7200	6.1	4.2	mg/Kg dry	1	B-07, B	SW-846 6010D	10/9/18	10/10/18 14:19	QNW
Chromium	22	0.41	0.25	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:19	QNW
Cobalt	11	2.0	1.2	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:19	QNW
Copper	71	0.41	0.35	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:19	QNW
Iron	36000	41	36	mg/Kg dry	20		SW-846 6010D	10/9/18	10/10/18 16:01	QNW
Lead	230	0.61	0.36	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:19	QNW
Magnesium	6000	120	66	mg/Kg dry	20		SW-846 6010D	10/9/18	10/10/18 16:01	QNW
Manganese	560	0.41	0.13	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:19	QNW
Mercury	0.97	0.031	0.0031	mg/Kg dry	1		SW-846 7471B	10/10/18	10/11/18 8:02	AJL
Nickel	27	0.41	0.33	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:19	QNW
Potassium	2200	1600	590	mg/Kg dry	20		SW-846 6010D	10/9/18	10/10/18 16:01	QNW
Selenium	ND	4.1	3.4	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:19	QNW
Silver	ND	0.41	0.24	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:19	QNW
Sodium	140	82	31	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:19	QNW
Thallium	ND	2.0	1.5	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:19	QNW
Vanadium	28	0.82	0.61	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:19	QNW
Zinc	210	0.82	0.56	mg/Kg dry	1	B-07, B	SW-846 6010D	10/9/18	10/10/18 14:19	QNW

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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-SS-06-12-24

Sampled: 9/26/2018 11:24

Sample ID: 1811225-08

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Cyanide	0.31	0.53	0.26	mg/Kg dry	1	J	SW-846 9014	10/3/18	10/5/18 17:50	DJM
% Solids	79.5			% Wt	1		SM 2540G	10/9/18	10/10/18 7:14	DMP



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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-FD-092618

Sampled: 9/26/2018 00:00

Sample ID: 1811225-09

Sample Matrix: Soil

Sample Flags: PR-15

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.11	0.026	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
Acrylonitrile	ND	0.0066	0.0027	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0011	0.00077	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
Benzene	ND	0.0022	0.00077	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
Bromobenzene	ND	0.0022	0.00088	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
Bromochloromethane	ND	0.0022	0.0015	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
Bromodichloromethane	ND	0.0022	0.00066	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
Bromoform	ND	0.0022	0.0015	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
Bromomethane	ND	0.011	0.0046	mg/Kg dry	1	V-34	SW-846 8260C	10/4/18	10/8/18 11:30	MFF
2-Butanone (MEK)	ND	0.044	0.019	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
tert-Butyl Alcohol (TBA)	ND	0.044	0.023	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
n-Butylbenzene	ND	0.0022	0.00077	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
sec-Butylbenzene	ND	0.0022	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
tert-Butylbenzene	ND	0.0022	0.00099	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0011	0.00066	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
Carbon Disulfide	ND	0.0066	0.0047	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
Carbon Tetrachloride	ND	0.0022	0.00088	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
Chlorobenzene	ND	0.0022	0.00077	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
Chlorodibromomethane	ND	0.0011	0.00077	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
Chloroethane	ND	0.022	0.0016	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
Chloroform	ND	0.0044	0.00077	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
Chloromethane	ND	0.011	0.0070	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
2-Chlorotoluene	ND	0.0022	0.00088	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
4-Chlorotoluene	ND	0.0022	0.00088	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0022	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
1,2-Dibromoethane (EDB)	ND	0.0011	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
Dibromomethane	ND	0.0022	0.00066	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
1,2-Dichlorobenzene	ND	0.0022	0.00077	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
1,3-Dichlorobenzene	ND	0.0022	0.00077	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
1,4-Dichlorobenzene	ND	0.0022	0.00088	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
trans-1,4-Dichloro-2-butene	ND	0.0044	0.0023	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.022	0.0014	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
1,1-Dichloroethane	ND	0.0022	0.00077	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
1,2-Dichloroethane	ND	0.0022	0.0014	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
1,1-Dichloroethylene	ND	0.0044	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
cis-1,2-Dichloroethylene	ND	0.0022	0.00088	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
trans-1,2-Dichloroethylene	ND	0.0022	0.00099	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
1,2-Dichloropropane	ND	0.0022	0.0014	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
1,3-Dichloropropane	ND	0.0011	0.00077	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
2,2-Dichloropropane	ND	0.0022	0.00099	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
1,1-Dichloropropene	ND	0.0022	0.00099	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
cis-1,3-Dichloropropene	ND	0.0011	0.00077	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
trans-1,3-Dichloropropene	ND	0.0011	0.00077	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
Diethyl Ether	ND	0.022	0.0020	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF

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Project Location: Watervliet, NY  
 Date Received: 9/27/2018  
 Field Sample #: 401075-FD-092618  
 Sample ID: 1811225-09  
 Sample Matrix: Soil

Sample Description:  
 Sampled: 9/26/2018 00:00

Work Order: 1811225

Sample Flags: PR-15

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0011	0.00066	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
1,4-Dioxane	ND	0.11	0.063	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
Ethylbenzene	ND	0.0022	0.00088	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
Hexachlorobutadiene	ND	0.0022	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
2-Hexanone (MBK)	ND	0.022	0.012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
Isopropylbenzene (Cumene)	ND	0.0022	0.00077	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0022	0.00088	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
Methyl Acetate	ND	0.0022	0.0018	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0044	0.00099	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
Methyl Cyclohexane	ND	0.0022	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
Methylene Chloride	ND	0.022	0.0078	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.022	0.0083	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
Naphthalene	ND	0.0044	0.00077	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
n-Propylbenzene	ND	0.0022	0.00077	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
Styrene	ND	0.0022	0.00066	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
1,1,1,2-Tetrachloroethane	ND	0.0022	0.0020	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
1,1,2,2-Tetrachloroethane	ND	0.0022	0.00099	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
Tetrachloroethylene	0.0032	0.0022	0.0014	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
Tetrahydrofuran	ND	0.011	0.0024	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
Toluene	ND	0.0022	0.00088	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
1,2,3-Trichlorobenzene	ND	0.0022	0.00066	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
1,2,4-Trichlorobenzene	ND	0.0022	0.00088	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
1,3,5-Trichlorobenzene	ND	0.0022	0.00077	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
1,1,1-Trichloroethane	ND	0.0022	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
1,1,2-Trichloroethane	ND	0.0022	0.0013	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
Trichloroethylene	ND	0.0022	0.0011	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
Trichlorofluoromethane (Freon 11)	ND	0.011	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
1,2,3-Trichloropropane	ND	0.0022	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.011	0.00099	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
1,2,4-Trimethylbenzene	ND	0.0022	0.00088	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
1,3,5-Trimethylbenzene	ND	0.0022	0.00066	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
Vinyl Chloride	ND	0.011	0.0012	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
m+p Xylene	ND	0.0044	0.0019	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
o-Xylene	ND	0.0022	0.00077	mg/Kg dry	1		SW-846 8260C	10/4/18	10/8/18 11:30	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		102	70-130						10/8/18 11:30	
Toluene-d8		99.6	70-130						10/8/18 11:30	
4-Bromofluorobenzene		101	70-130						10/8/18 11:30	

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Project Location: Watervliet, NY  
 Date Received: 9/27/2018  
 Field Sample #: 401075-FD-092618  
 Sample ID: 1811225-09  
 Sample Matrix: Soil

Sample Description:  
 Sampled: 9/26/2018 00:00

Work Order: 1811225

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.19	0.056	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Acenaphthylene	ND	0.19	0.062	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Acetophenone	ND	0.37	0.073	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Aniline	ND	0.37	0.10	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Anthracene	ND	0.19	0.053	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Benzidine	ND	0.72	0.46	mg/Kg dry	1	V-05, V-34, V-04	SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Benzo(a)anthracene	ND	0.19	0.049	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Benzo(a)pyrene	ND	0.19	0.058	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Benzo(b)fluoranthene	ND	0.19	0.052	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Benzo(g,h,i)perylene	ND	0.19	0.082	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Benzo(k)fluoranthene	ND	0.19	0.058	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Benzoic Acid	ND	1.1	0.20	mg/Kg dry	1	V-20	SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Bis(2-chloroethoxy)methane	ND	0.37	0.071	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Bis(2-chloroethyl)ether	ND	0.37	0.073	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Bis(2-chloroisopropyl)ether	ND	0.37	0.080	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Bis(2-Ethylhexyl)phthalate	ND	0.37	0.14	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
4-Bromophenylphenylether	ND	0.37	0.062	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Butylbenzylphthalate	ND	0.37	0.088	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Carbazole	ND	0.19	0.048	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
4-Chloroaniline	ND	0.72	0.085	mg/Kg dry	1	V-34	SW-846 8270D	10/8/18	10/9/18 16:51	CDT
4-Chloro-3-methylphenol	ND	0.72	0.080	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
2-Chloronaphthalene	ND	0.37	0.070	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
2-Chlorophenol	ND	0.37	0.066	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
4-Chlorophenylphenylether	ND	0.37	0.062	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Chrysene	ND	0.19	0.058	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Dibenz(a,h)anthracene	ND	0.19	0.11	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Dibenzofuran	ND	0.37	0.064	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Di-n-butylphthalate	ND	0.37	0.081	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
1,2-Dichlorobenzene	ND	0.37	0.065	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
1,3-Dichlorobenzene	ND	0.37	0.063	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
1,4-Dichlorobenzene	ND	0.37	0.066	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
3,3-Dichlorobenzidine	ND	0.19	0.057	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
2,4-Dichlorophenol	ND	0.37	0.063	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Diethylphthalate	ND	0.37	0.066	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
2,4-Dimethylphenol	ND	0.37	0.069	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Dimethylphthalate	ND	0.37	0.065	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
4,6-Dinitro-2-methylphenol	ND	0.37	0.35	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
2,4-Dinitrophenol	ND	0.72	0.21	mg/Kg dry	1	V-04	SW-846 8270D	10/8/18	10/9/18 16:51	CDT
2,4-Dinitrotoluene	ND	0.37	0.060	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
2,6-Dinitrotoluene	ND	0.37	0.065	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Di-n-octylphthalate	ND	0.37	0.19	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
1,2-Diphenylhydrazine (as Azobenzene)	ND	0.37	0.060	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Fluoranthene	ND	0.19	0.061	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Fluorene	ND	0.19	0.060	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT

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Project Location: Watervliet, NY  
 Date Received: 9/27/2018  
 Field Sample #: 401075-FD-092618  
 Sample ID: 1811225-09  
 Sample Matrix: Soil

Sample Description:  
 Sampled: 9/26/2018 00:00

Work Order: 1811225

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0.37	0.065	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Hexachlorobutadiene	ND	0.37	0.065	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Hexachlorocyclopentadiene	ND	0.37	0.078	mg/Kg dry	1	L-04, V-04	SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Hexachloroethane	ND	0.37	0.074	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Indeno(1,2,3-cd)pyrene	ND	0.19	0.13	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Isophorone	ND	0.37	0.072	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
1-Methylnaphthalene	ND	0.19	0.071	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
2-Methylnaphthalene	ND	0.19	0.064	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
2-Methylphenol	ND	0.37	0.093	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
3/4-Methylphenol	ND	0.37	0.12	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Naphthalene	ND	0.19	0.095	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
2-Nitroaniline	ND	0.37	0.062	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
3-Nitroaniline	ND	0.37	0.053	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
4-Nitroaniline	ND	0.37	0.062	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Nitrobenzene	ND	0.37	0.070	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
2-Nitrophenol	ND	0.37	0.098	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
4-Nitrophenol	ND	0.72	0.081	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
N-Nitrosodimethylamine	ND	0.37	0.23	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
N-Nitrosodiphenylamine	ND	0.37	0.076	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
N-Nitrosodi-n-propylamine	ND	0.37	0.076	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Pentachloronitrobenzene	ND	0.37	0.088	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Pentachlorophenol	ND	0.37	0.089	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Phenanthrene	ND	0.19	0.096	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Phenol	ND	0.37	0.063	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Pyrene	ND	0.19	0.061	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Pyridine	ND	0.37	0.060	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
1,2,4,5-Tetrachlorobenzene	ND	0.37	0.066	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
1,2,4-Trichlorobenzene	ND	0.37	0.066	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
2,4,5-Trichlorophenol	ND	0.37	0.084	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
2,4,6-Trichlorophenol	ND	0.37	0.062	mg/Kg dry	1		SW-846 8270D	10/8/18	10/9/18 16:51	CDT
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
2-Fluorophenol		54.0	30-130						10/9/18 16:51	
Phenol-d6		57.6	30-130						10/9/18 16:51	
Nitrobenzene-d5		65.3	30-130						10/9/18 16:51	
2-Fluorobiphenyl		69.5	30-130						10/9/18 16:51	
2,4,6-Tribromophenol		55.4	30-130						10/9/18 16:51	
p-Terphenyl-d14		82.3	30-130						10/9/18 16:51	

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Project Location: Watervliet, NY  
 Date Received: 9/27/2018  
 Field Sample #: 401075-FD-092618  
 Sample ID: 1811225-09  
 Sample Matrix: Soil

Sample Description:  
 Sampled: 9/26/2018 00:00

Work Order: 1811225

**Organochloride Pesticides by GC/ECD**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Alachlor [1]	ND	0.022	0.0012	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 9:22	TG
Aldrin [1]	ND	0.0055	0.00033	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 9:22	TG
alpha-BHC [1]	ND	0.0055	0.00044	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 9:22	TG
beta-BHC [1]	ND	0.0055	0.00055	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 9:22	TG
delta-BHC [1]	ND	0.0055	0.00044	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 9:22	TG
gamma-BHC (Lindane) [1]	ND	0.0022	0.00055	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 9:22	TG
Chlordane [1]	ND	0.022	0.0064	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 9:22	TG
4,4'-DDD [1]	ND	0.0044	0.00044	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 9:22	TG
4,4'-DDE [1]	ND	0.0044	0.00033	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 9:22	TG
4,4'-DDT [1]	ND	0.0044	0.00044	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 9:22	TG
Dieldrin [1]	ND	0.0044	0.00033	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 9:22	TG
Endosulfan I [1]	ND	0.0055	0.00044	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 9:22	TG
Endosulfan II [1]	ND	0.0088	0.00033	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 9:22	TG
Endosulfan sulfate [1]	ND	0.0088	0.0014	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 9:22	TG
Endrin [1]	ND	0.0088	0.00033	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 9:22	TG
Endrin aldehyde [1]	ND	0.0088	0.0013	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 9:22	TG
Endrin ketone [1]	ND	0.0088	0.00044	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 9:22	TG
Heptachlor [1]	ND	0.0055	0.00055	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 9:22	TG
Heptachlor epoxide [1]	ND	0.0055	0.00044	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 9:22	TG
Hexachlorobenzene [1]	ND	0.0066	0.00077	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 9:22	TG
Methoxychlor [1]	ND	0.055	0.00066	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 9:22	TG
Toxaphene [1]	ND	0.11	0.047	mg/Kg dry	1		SW-846 8081B	9/28/18	10/4/18 9:22	TG
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
Decachlorobiphenyl [1]		60.7	30-150						10/4/18 9:22	
Decachlorobiphenyl [2]		66.6	30-150						10/4/18 9:22	
Tetrachloro-m-xylene [1]		35.2	30-150						10/4/18 9:22	
Tetrachloro-m-xylene [2]		43.3	30-150						10/4/18 9:22	

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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-FD-092618

Sampled: 9/26/2018 00:00

Sample ID: 1811225-09

Sample Matrix: Soil

**Polychlorinated Biphenyls By GC/ECD**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.088	0.053	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 18:14	TG
Aroclor-1221 [1]	ND	0.088	0.057	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 18:14	TG
Aroclor-1232 [1]	ND	0.088	0.040	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 18:14	TG
Aroclor-1242 [1]	ND	0.088	0.044	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 18:14	TG
Aroclor-1248 [1]	ND	0.088	0.053	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 18:14	TG
Aroclor-1254 [1]	ND	0.088	0.057	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 18:14	TG
Aroclor-1260 [1]	ND	0.088	0.062	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 18:14	TG
Aroclor-1262 [1]	ND	0.088	0.044	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 18:14	TG
Aroclor-1268 [1]	ND	0.088	0.035	mg/Kg dry	4		SW-846 8082A	9/28/18	10/3/18 18:14	TG
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
Decachlorobiphenyl [1]		81.9	30-150						10/3/18 18:14	
Decachlorobiphenyl [2]		88.1	30-150						10/3/18 18:14	
Tetrachloro-m-xylene [1]		58.8	30-150						10/3/18 18:14	
Tetrachloro-m-xylene [2]		67.9	30-150						10/3/18 18:14	

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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-FD-092618

Sampled: 9/26/2018 00:00

Sample ID: 1811225-09

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	12000	1.8	1.7	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:24	QNW
Antimony	ND	1.8	1.3	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:24	QNW
Arsenic	10	1.8	0.93	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:24	QNW
Barium	100	1.8	0.91	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:24	QNW
Beryllium	0.70	0.18	0.14	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:24	QNW
Cadmium	0.34	0.18	0.11	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:24	QNW
Calcium	2200	5.5	3.8	mg/Kg dry	1	B-07, B	SW-846 6010D	10/9/18	10/10/18 14:24	QNW
Chromium	19	0.37	0.23	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:24	QNW
Cobalt	15	1.8	1.0	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:24	QNW
Copper	46	0.37	0.31	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:24	QNW
Iron	29000	37	32	mg/Kg dry	20		SW-846 6010D	10/9/18	10/10/18 16:11	QNW
Lead	120	0.55	0.33	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:24	QNW
Magnesium	5200	110	60	mg/Kg dry	20		SW-846 6010D	10/9/18	10/10/18 16:11	QNW
Manganese	670	0.37	0.11	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:24	QNW
Mercury	0.69	0.027	0.0027	mg/Kg dry	1		SW-846 7471B	10/10/18	10/11/18 8:04	AJL
Nickel	27	0.37	0.29	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:24	QNW
Potassium	1600	1500	530	mg/Kg dry	20		SW-846 6010D	10/9/18	10/10/18 16:11	QNW
Selenium	ND	3.7	3.1	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:24	QNW
Silver	ND	0.37	0.22	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:24	QNW
Sodium	82	74	28	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:24	QNW
Thallium	ND	1.8	1.3	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:24	QNW
Vanadium	23	0.74	0.55	mg/Kg dry	1		SW-846 6010D	10/9/18	10/10/18 14:24	QNW
Zinc	88	0.74	0.51	mg/Kg dry	1	B-07, B	SW-846 6010D	10/9/18	10/10/18 14:24	QNW



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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-FD-092618

Sampled: 9/26/2018 00:00

Sample ID: 1811225-09

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Cyanide	1.3	0.47	0.23	mg/Kg dry	1		SW-846 9014	10/3/18	10/5/18 17:50	DJM
% Solids	90.8			% Wt	1		SM 2540G	10/9/18	10/10/18 7:14	DMP

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Project Location: Watervliet, NY  
 Date Received: 9/27/2018  
 Field Sample #: 401075-FD-092618  
 Sample ID: 1811225-10  
 Sample Matrix: Water

Sample Description:  
 Sampled: 9/26/2018 00:00

Work Order: 1811225

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	9.7	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
Bromodichloromethane	ND	0.50	0.30	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
Bromoform	ND	2.0	0.21	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
tert-Butylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.095	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1	V-05	SW-846 8260C	10/1/18	10/1/18 13:06	EEH
Carbon Tetrachloride	ND	5.0	0.25	µg/L	1	V-05	SW-846 8260C	10/1/18	10/1/18 13:06	EEH
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
Chloroform	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
Chloromethane	ND	2.0	0.55	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.37	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.15	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.28	µg/L	1	V-05	SW-846 8260C	10/1/18	10/1/18 13:06	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
2,2-Dichloropropane	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH

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Project Location: Watervliet, NY  
 Date Received: 9/27/2018  
 Field Sample #: 401075-FD-092618  
 Sample ID: 1811225-10  
 Sample Matrix: Water

Sample Description:  
 Sampled: 9/26/2018 00:00

Work Order: 1811225

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
Hexachlorobutadiene	ND	0.60	0.59	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
Methyl Acetate	ND	1.0	0.42	µg/L	1	V-05	SW-846 8260C	10/1/18	10/1/18 13:06	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
Methyl Cyclohexane	ND	1.0	0.63	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
Tetrachloroethylene	ND	1.0	0.27	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
Toluene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
1,1,1-Trichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
1,1,2-Trichloroethane	ND	1.0	0.24	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
Trichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1	V-05	SW-846 8260C	10/1/18	10/1/18 13:06	EEH
1,2,3-Trichloropropane	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.20	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
m+p Xylene	ND	2.0	0.26	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/1/18	10/1/18 13:06	EEH
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		83.8	70-130					10/1/18	13:06	
Toluene-d8		100	70-130					10/1/18	13:06	
4-Bromofluorobenzene		95.0	70-130					10/1/18	13:06	

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY  
 Date Received: 9/27/2018  
 Field Sample #: 401075-FD-092618  
 Sample ID: 1811225-10  
 Sample Matrix: Water

Sample Description:  
 Sampled: 9/26/2018 00:00

Work Order: 1811225

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	4.5	1.4	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Acenaphthylene	ND	4.5	1.2	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Acetophenone	ND	9.1	1.5	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Aniline	ND	4.5	2.3	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Anthracene	ND	4.5	1.4	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Benzidine	ND	18	8.8	µg/L	1	R-05, V-04, V-05, V-34	SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Benzo(a)anthracene	ND	4.5	1.4	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Benzo(a)pyrene	ND	4.5	1.4	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Benzo(b)fluoranthene	ND	4.5	1.1	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Benzo(g,h,i)perylene	ND	4.5	2.0	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Benzo(k)fluoranthene	ND	4.5	1.4	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Benzoic Acid	ND	9.1	1.8	µg/L	1	V-06	SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Bis(2-chloroethoxy)methane	ND	9.1	1.6	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Bis(2-chloroethyl)ether	ND	9.1	1.6	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Bis(2-chloroisopropyl)ether	ND	9.1	2.0	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Bis(2-Ethylhexyl)phthalate	ND	9.1	1.8	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
4-Bromophenylphenylether	ND	9.1	1.2	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Butylbenzylphthalate	ND	9.1	1.8	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Carbazole	ND	9.1	1.4	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
4-Chloroaniline	ND	9.1	1.4	µg/L	1	V-34	SW-846 8270D	10/3/18	10/5/18 19:57	BGL
4-Chloro-3-methylphenol	ND	9.1	1.3	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
2-Chloronaphthalene	ND	9.1	1.4	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
2-Chlorophenol	ND	9.1	1.1	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
4-Chlorophenylphenylether	ND	9.1	1.3	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Chrysene	ND	4.5	1.3	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Dibenz(a,h)anthracene	ND	4.5	1.9	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Dibenzofuran	ND	4.5	1.2	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Di-n-butylphthalate	ND	9.1	1.6	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
1,2-Dichlorobenzene	ND	4.5	1.2	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
1,3-Dichlorobenzene	ND	4.5	1.4	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
1,4-Dichlorobenzene	ND	4.5	1.4	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
3,3-Dichlorobenzidine	ND	9.1	2.1	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
2,4-Dichlorophenol	ND	9.1	1.3	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Diethylphthalate	ND	9.1	1.4	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
2,4-Dimethylphenol	ND	9.1	3.3	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Dimethylphthalate	ND	9.1	1.4	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
4,6-Dinitro-2-methylphenol	ND	9.1	1.8	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
2,4-Dinitrophenol	ND	9.1	3.1	µg/L	1	V-04	SW-846 8270D	10/3/18	10/5/18 19:57	BGL
2,4-Dinitrotoluene	ND	9.1	1.6	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
2,6-Dinitrotoluene	ND	9.1	1.4	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Di-n-octylphthalate	ND	9.1	1.9	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
1,2-Diphenylhydrazine (as Azobenzene)	ND	9.1	2.3	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Fluoranthene	ND	4.5	1.6	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL

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Project Location: Watervliet, NY  
 Date Received: 9/27/2018  
 Field Sample #: 401075-FD-092618  
 Sample ID: 1811225-10  
 Sample Matrix: Water

Sample Description:  
 Sampled: 9/26/2018 00:00

Work Order: 1811225

Semivolatle Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Fluorene	ND	4.5	1.3	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Hexachlorobenzene	ND	9.1	1.4	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Hexachlorobutadiene	ND	9.1	1.4	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Hexachlorocyclopentadiene	ND	9.1	1.8	µg/L	1	V-04	SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Hexachloroethane	ND	9.1	1.4	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Indeno(1,2,3-cd)pyrene	ND	4.5	1.9	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Isophorone	ND	9.1	1.7	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
1-Methylnaphthalene	ND	4.5	1.6	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
2-Methylnaphthalene	ND	4.5	1.5	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
2-Methylphenol	ND	9.1	1.3	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
3/4-Methylphenol	ND	9.1	1.0	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Naphthalene	2.6	4.5	1.5	µg/L	1	J	SW-846 8270D	10/3/18	10/5/18 19:57	BGL
2-Nitroaniline	ND	9.1	2.0	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
3-Nitroaniline	ND	9.1	1.8	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
4-Nitroaniline	ND	9.1	1.8	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Nitrobenzene	ND	9.1	1.4	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
2-Nitrophenol	ND	9.1	1.5	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
4-Nitrophenol	ND	9.1	0.95	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
N-Nitrosodimethylamine	ND	9.1	1.4	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
N-Nitrosodiphenylamine	ND	9.1	1.7	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
N-Nitrosodi-n-propylamine	ND	9.1	1.6	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Pentachloronitrobenzene	ND	9.1	1.5	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Pentachlorophenol	ND	9.1	1.0	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Phenanthrene	ND	4.5	1.3	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Phenol	ND	9.1	0.92	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Pyrene	ND	4.5	1.4	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
Pyridine	ND	4.5	1.9	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
1,2,4,5-Tetrachlorobenzene	ND	9.1	1.5	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
1,2,4-Trichlorobenzene	ND	4.5	1.5	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
2,4,5-Trichlorophenol	ND	9.1	1.4	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL
2,4,6-Trichlorophenol	ND	9.1	1.4	µg/L	1		SW-846 8270D	10/3/18	10/5/18 19:57	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual
2-Fluorophenol	52.4	15-110	
Phenol-d6	36.1	15-110	
Nitrobenzene-d5	67.7	30-130	
2-Fluorobiphenyl	76.0	30-130	
2,4,6-Tribromophenol	76.4	15-110	
p-Terphenyl-d14	93.8	30-130	

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY  
 Date Received: 9/27/2018  
 Field Sample #: 401075-FD-092618  
 Sample ID: 1811225-10  
 Sample Matrix: Water

Sample Description:  
 Sampled: 9/26/2018 00:00

Work Order: 1811225

**Organochloride Pesticides by GC/ECD**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date	Date/Time	Analyst
								Prepared	Analyzed	
Alachlor [1]	ND	0.20	0.025	µg/L	1		SW-846 8081B	10/2/18	10/10/18 6:11	TG
Aldrin [1]	ND	0.050	0.017	µg/L	1		SW-846 8081B	10/2/18	10/10/18 6:11	TG
alpha-BHC [1]	ND	0.050	0.0032	µg/L	1		SW-846 8081B	10/2/18	10/10/18 6:11	TG
beta-BHC [1]	ND	0.050	0.024	µg/L	1		SW-846 8081B	10/2/18	10/10/18 6:11	TG
delta-BHC [1]	ND	0.050	0.030	µg/L	1		SW-846 8081B	10/2/18	10/10/18 6:11	TG
gamma-BHC (Lindane) [1]	ND	0.030	0.014	µg/L	1		SW-846 8081B	10/2/18	10/10/18 6:11	TG
Chlordane [1]	ND	0.20	0.12	µg/L	1		SW-846 8081B	10/2/18	10/10/18 6:11	TG
4,4'-DDD [1]	ND	0.040	0.0018	µg/L	1		SW-846 8081B	10/2/18	10/10/18 6:11	TG
4,4'-DDE [1]	ND	0.040	0.0016	µg/L	1		SW-846 8081B	10/2/18	10/10/18 6:11	TG
4,4'-DDT [1]	ND	0.040	0.0024	µg/L	1		SW-846 8081B	10/2/18	10/10/18 6:11	TG
Dieldrin [1]	ND	0.0020	0.0020	µg/L	1		SW-846 8081B	10/2/18	10/10/18 6:11	TG
Endosulfan I [1]	ND	0.050	0.0021	µg/L	1		SW-846 8081B	10/2/18	10/10/18 6:11	TG
Endosulfan II [1]	ND	0.080	0.0029	µg/L	1		SW-846 8081B	10/2/18	10/10/18 6:11	TG
Endosulfan sulfate [1]	ND	0.080	0.0025	µg/L	1		SW-846 8081B	10/2/18	10/10/18 6:11	TG
Endrin [1]	ND	0.080	0.0017	µg/L	1		SW-846 8081B	10/2/18	10/10/18 6:11	TG
Endrin aldehyde [1]	ND	0.080	0.063	µg/L	1		SW-846 8081B	10/2/18	10/10/18 6:11	TG
Endrin ketone [1]	ND	0.080	0.0050	µg/L	1		SW-846 8081B	10/2/18	10/10/18 6:11	TG
Heptachlor [1]	ND	0.050	0.0046	µg/L	1		SW-846 8081B	10/2/18	10/10/18 6:11	TG
Heptachlor epoxide [1]	ND	0.050	0.0040	µg/L	1		SW-846 8081B	10/2/18	10/10/18 6:11	TG
Hexachlorobenzene [1]	ND	0.050	0.039	µg/L	1		SW-846 8081B	10/2/18	10/10/18 6:11	TG
Methoxychlor [1]	ND	0.50	0.0097	µg/L	1		SW-846 8081B	10/2/18	10/10/18 6:11	TG
Toxaphene [1]	ND	1.0	0.66	µg/L	1		SW-846 8081B	10/2/18	10/10/18 6:11	TG
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
Decachlorobiphenyl [1]		65.8	30-150					10/10/18	6:11	
Decachlorobiphenyl [2]		66.7	30-150					10/10/18	6:11	
Tetrachloro-m-xylene [1]		91.2	30-150					10/10/18	6:11	
Tetrachloro-m-xylene [2]		97.4	30-150					10/10/18	6:11	

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY  
 Date Received: 9/27/2018  
**Field Sample #: 401075-FD-092618**  
**Sample ID: 1811225-10**  
 Sample Matrix: Water

Sample Description:  
 Sampled: 9/26/2018 00:00

Work Order: 1811225

**Polychlorinated Biphenyls By GC/ECD**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	0.18	µg/L	1		SW-846 8082A	10/2/18	10/10/18 4:07	KAL
Aroclor-1221 [1]	ND	0.20	0.16	µg/L	1		SW-846 8082A	10/2/18	10/10/18 4:07	KAL
Aroclor-1232 [1]	ND	0.20	0.20	µg/L	1		SW-846 8082A	10/2/18	10/10/18 4:07	KAL
Aroclor-1242 [1]	ND	0.20	0.17	µg/L	1		SW-846 8082A	10/2/18	10/10/18 4:07	KAL
Aroclor-1248 [1]	ND	0.20	0.19	µg/L	1		SW-846 8082A	10/2/18	10/10/18 4:07	KAL
Aroclor-1254 [1]	ND	0.20	0.10	µg/L	1		SW-846 8082A	10/2/18	10/10/18 4:07	KAL
Aroclor-1260 [1]	ND	0.20	0.20	µg/L	1		SW-846 8082A	10/2/18	10/10/18 4:07	KAL
Aroclor-1262 [1]	ND	0.20	0.14	µg/L	1		SW-846 8082A	10/2/18	10/10/18 4:07	KAL
Aroclor-1268 [1]	ND	0.20	0.13	µg/L	1		SW-846 8082A	10/2/18	10/10/18 4:07	KAL
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
Decachlorobiphenyl [1]		56.4	30-150						10/10/18 4:07	
Decachlorobiphenyl [2]		69.8	30-150						10/10/18 4:07	
Tetrachloro-m-xylene [1]		88.7	30-150						10/10/18 4:07	
Tetrachloro-m-xylene [2]		98.7	30-150						10/10/18 4:07	



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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-FD-092618

Sampled: 9/26/2018 00:00

Sample ID: 1811225-10

Sample Matrix: Water

**Metals Analyses (Total)**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	0.054	0.050	0.037	mg/L	1		SW-846 6010D	10/3/18	10/4/18 17:39	MJH
Antimony	ND	0.050	0.031	mg/L	1		SW-846 6010D	10/3/18	10/4/18 17:39	MJH
Arsenic	ND	0.010	0.0080	mg/L	1		SW-846 6010D	10/3/18	10/4/18 17:39	MJH
Barium	ND	0.050	0.0053	mg/L	1		SW-846 6010D	10/3/18	10/4/18 17:39	MJH
Beryllium	ND	0.0040	0.0017	mg/L	1		SW-846 6010D	10/3/18	10/4/18 17:39	MJH
Cadmium	ND	0.0040	0.00090	mg/L	1		SW-846 6010D	10/3/18	10/4/18 17:39	MJH
Calcium	0.22	0.15	0.11	mg/L	1		SW-846 6010D	10/3/18	10/4/18 17:39	MJH
Chromium	ND	0.010	0.0061	mg/L	1		SW-846 6010D	10/3/18	10/4/18 17:39	MJH
Cobalt	ND	0.050	0.0080	mg/L	1		SW-846 6010D	10/3/18	10/4/18 17:39	MJH
Copper	ND	0.010	0.0028	mg/L	1		SW-846 6010D	10/3/18	10/4/18 17:39	MJH
Iron	0.20	0.050	0.040	mg/L	1		SW-846 6010D	10/3/18	10/4/18 17:39	MJH
Lead	ND	0.010	0.0044	mg/L	1		SW-846 6010D	10/3/18	10/4/18 17:39	MJH
Magnesium	0.062	0.15	0.026	mg/L	1	J	SW-846 6010D	10/3/18	10/4/18 17:39	MJH
Manganese	0.0022	0.010	0.0020	mg/L	1	J	SW-846 6010D	10/3/18	10/4/18 17:39	MJH
Mercury	0.000041	0.00010	0.000034	mg/L	1	J	SW-846 7470A	10/3/18	10/4/18 13:29	EJB
Nickel	ND	0.010	0.0046	mg/L	1		SW-846 6010D	10/3/18	10/4/18 17:39	MJH
Potassium	ND	2.0	0.32	mg/L	1		SW-846 6010D	10/3/18	10/4/18 17:39	MJH
Selenium	ND	0.050	0.034	mg/L	1		SW-846 6010D	10/3/18	10/4/18 17:39	MJH
Silver	ND	0.0050	0.0049	mg/L	1		SW-846 6010D	10/3/18	10/4/18 17:39	MJH
Sodium	0.74	2.0	0.28	mg/L	1	J	SW-846 6010D	10/3/18	10/4/18 17:39	MJH
Thallium	ND	0.050	0.040	mg/L	1		SW-846 6010D	10/3/18	10/4/18 17:39	MJH
Vanadium	ND	0.010	0.0047	mg/L	1		SW-846 6010D	10/3/18	10/4/18 17:39	MJH
Zinc	ND	0.020	0.0052	mg/L	1		SW-846 6010D	10/3/18	10/4/18 17:39	MJH

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: 401075-FD-092618

Sampled: 9/26/2018 00:00

Sample ID: 1811225-10

Sample Matrix: Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Cyanide	ND	0.010	0.0080	mg/L	1		SW-846 9014	10/3/18	10/3/18 17:30	DJM

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Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: Trip Blank

Sampled: 9/26/2018 00:00

Sample ID: 1811225-11

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	9.7	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
Bromodichloromethane	ND	0.50	0.30	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
Bromoform	ND	2.0	0.21	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
tert-Butylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.095	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1	V-05	SW-846 8260C	10/1/18	10/1/18 10:29	EEH
Carbon Tetrachloride	ND	5.0	0.25	µg/L	1	V-05	SW-846 8260C	10/1/18	10/1/18 10:29	EEH
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
Chloroform	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
Chloromethane	ND	2.0	0.55	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.37	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.15	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.28	µg/L	1	V-05	SW-846 8260C	10/1/18	10/1/18 10:29	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
2,2-Dichloropropane	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 1811225

Date Received: 9/27/2018

Field Sample #: Trip Blank

Sampled: 9/26/2018 00:00

Sample ID: 1811225-11

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
Hexachlorobutadiene	ND	0.60	0.59	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
Methyl Acetate	ND	1.0	0.42	µg/L	1	V-05	SW-846 8260C	10/1/18	10/1/18 10:29	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
Methyl Cyclohexane	ND	1.0	0.63	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
Tetrachloroethylene	ND	1.0	0.27	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
Toluene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
1,1,1-Trichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
1,1,2-Trichloroethane	ND	1.0	0.24	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
Trichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1	V-05	SW-846 8260C	10/1/18	10/1/18 10:29	EEH
1,2,3-Trichloropropane	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.20	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
m+p Xylene	ND	2.0	0.26	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/1/18	10/1/18 10:29	EEH
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		82.6	70-130					10/1/18	10:29	
Toluene-d8		102	70-130					10/1/18	10:29	
4-Bromofluorobenzene		97.2	70-130					10/1/18	10:29	

**Sample Extraction Data**

**Prep Method: % Solids-SM 2540G**

Lab Number [Field ID]	Batch	Date
18I1225-01 [401075-SS-01-00-12]	B214323	10/09/18
18I1225-02 [401075-SS-01-12-24]	B214323	10/09/18
18I1225-03 [401075-SS-02-00-12]	B214323	10/09/18
18I1225-04 [401075-SS-02-12-24]	B214323	10/09/18
18I1225-05 [401075-SS-04-00-12]	B214323	10/09/18
18I1225-06 [401075-SS-04-12-24]	B214323	10/09/18
18I1225-07 [401075-SS-06-00-12]	B214323	10/09/18
18I1225-08 [401075-SS-06-12-24]	B214323	10/09/18
18I1225-09 [401075-FD-092618]	B214323	10/09/18

**Prep Method: SW-846 3050B-SW-846 6010D**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
18I1225-01 [401075-SS-01-00-12]	B214328	1.51	50.0	10/09/18
18I1225-02 [401075-SS-01-12-24]	B214328	1.52	50.0	10/09/18
18I1225-03 [401075-SS-02-00-12]	B214328	1.49	50.0	10/09/18
18I1225-04 [401075-SS-02-12-24]	B214328	1.51	50.0	10/09/18
18I1225-05 [401075-SS-04-00-12]	B214328	1.52	50.0	10/09/18
18I1225-06 [401075-SS-04-12-24]	B214328	1.53	50.0	10/09/18
18I1225-07 [401075-SS-06-00-12]	B214328	1.53	50.0	10/09/18
18I1225-08 [401075-SS-06-12-24]	B214328	1.54	50.0	10/09/18
18I1225-09 [401075-FD-092618]	B214328	1.49	50.0	10/09/18

**Prep Method: SW-846 3005A-SW-846 6010D**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18I1225-10 [401075-FD-092618]	B213917	50.0	50.0	10/03/18

**Prep Method: SW-846 7470A Prep-SW-846 7470A**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18I1225-10 [401075-FD-092618]	B214020	6.00	6.00	10/03/18

**Prep Method: SW-846 7471-SW-846 7471B**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
18I1225-01 [401075-SS-01-00-12]	B214451	0.576	50.0	10/10/18
18I1225-02 [401075-SS-01-12-24]	B214451	0.589	50.0	10/10/18
18I1225-03 [401075-SS-02-00-12]	B214451	0.617	50.0	10/10/18
18I1225-04 [401075-SS-02-12-24]	B214451	0.590	50.0	10/10/18
18I1225-05 [401075-SS-04-00-12]	B214451	0.614	50.0	10/10/18
18I1225-06 [401075-SS-04-12-24]	B214451	0.617	50.0	10/10/18
18I1225-07 [401075-SS-06-00-12]	B214451	0.616	50.0	10/10/18
18I1225-08 [401075-SS-06-12-24]	B214451	0.614	50.0	10/10/18
18I1225-09 [401075-FD-092618]	B214451	0.610	50.0	10/10/18

**Prep Method: SW-846 3546-SW-846 8081B**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
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**Sample Extraction Data**

**Prep Method: SW-846 3546-SW-846 8081B**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
18I1225-01 [401075-SS-01-00-12]	B213585	10.1	10.0	09/28/18
18I1225-02 [401075-SS-01-12-24]	B213585	10.0	10.0	09/28/18
18I1225-03 [401075-SS-02-00-12]	B213585	10.2	10.0	09/28/18
18I1225-04 [401075-SS-02-12-24]	B213585	10.0	10.0	09/28/18
18I1225-05 [401075-SS-04-00-12]	B213585	10.0	10.0	09/28/18
18I1225-06 [401075-SS-04-12-24]	B213585	10.0	10.0	09/28/18
18I1225-07 [401075-SS-06-00-12]	B213585	10.0	10.0	09/28/18
18I1225-08 [401075-SS-06-12-24]	B213585	10.0	10.0	09/28/18
18I1225-09 [401075-FD-092618]	B213585	10.0	10.0	09/28/18

**Prep Method: SW-846 3510C-SW-846 8081B**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18I1225-10 [401075-FD-092618]	B213767	1000	10.0	10/02/18

**Prep Method: SW-846 3546-SW-846 8082A**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
18I1225-01 [401075-SS-01-00-12]	B213584	10.1	10.0	09/28/18
18I1225-02 [401075-SS-01-12-24]	B213584	10.0	10.0	09/28/18
18I1225-03 [401075-SS-02-00-12]	B213584	10.2	10.0	09/28/18
18I1225-04 [401075-SS-02-12-24]	B213584	10.0	10.0	09/28/18
18I1225-05 [401075-SS-04-00-12]	B213584	10.0	10.0	09/28/18
18I1225-06 [401075-SS-04-12-24]	B213584	10.0	10.0	09/28/18
18I1225-07 [401075-SS-06-00-12]	B213584	10.0	10.0	09/28/18
18I1225-08 [401075-SS-06-12-24]	B213584	10.0	10.0	09/28/18
18I1225-09 [401075-FD-092618]	B213584	10.0	10.0	09/28/18

**Prep Method: SW-846 3510C-SW-846 8082A**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18I1225-10 [401075-FD-092618]	B213766	1000	10.0	10/02/18

**Prep Method: SW-846 5035-SW-846 8260C**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
18I1225-01 [401075-SS-01-00-12]	B213971	5.31	10.0	10/04/18
18I1225-02 [401075-SS-01-12-24]	B213971	5.57	10.0	10/04/18
18I1225-03 [401075-SS-02-00-12]	B213971	4.97	10.0	10/04/18
18I1225-04 [401075-SS-02-12-24]	B213971	5.22	10.0	10/04/18
18I1225-05 [401075-SS-04-00-12]	B213971	5.94	10.0	10/04/18
18I1225-06 [401075-SS-04-12-24]	B213971	5.98	10.0	10/04/18
18I1225-07 [401075-SS-06-00-12]	B213971	5.42	10.0	10/04/18
18I1225-08 [401075-SS-06-12-24]	B213971	5.31	10.0	10/04/18

**Prep Method: SW-846 5035-SW-846 8260C**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
18I1225-09 [401075-FD-092618]	B214232	5.01	10.0	10/04/18

**Sample Extraction Data**

**Prep Method: SW-846 5030B-SW-846 8260C**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18I1225-10 [401075-FD-092618]	B213632	5	5.00	10/01/18
18I1225-11 [Trip Blank]	B213632	5	5.00	10/01/18

**Prep Method: SW-846 3546-SW-846 8270D**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
18I1225-01 [401075-SS-01-00-12]	B214250	30.0	1.00	10/08/18
18I1225-02 [401075-SS-01-12-24]	B214250	30.3	1.00	10/08/18
18I1225-03 [401075-SS-02-00-12]	B214250	30.3	1.00	10/08/18
18I1225-04 [401075-SS-02-12-24]	B214250	30.2	1.00	10/08/18
18I1225-05 [401075-SS-04-00-12]	B214250	30.4	1.00	10/08/18
18I1225-06 [401075-SS-04-12-24]	B214250	30.2	1.00	10/08/18
18I1225-07 [401075-SS-06-00-12]	B214250	30.3	1.00	10/08/18
18I1225-08 [401075-SS-06-12-24]	B214250	30.2	1.00	10/08/18
18I1225-09 [401075-FD-092618]	B214250	30.3	1.00	10/08/18

**Prep Method: SW-846 3510C-SW-846 8270D**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18I1225-10 [401075-FD-092618]	B213872	990	0.900	10/03/18

**SW-846 9014**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
18I1225-01 [401075-SS-01-00-12]	B213925	1.18	50.0	10/03/18
18I1225-02 [401075-SS-01-12-24]	B213925	1.19	50.0	10/03/18
18I1225-03 [401075-SS-02-00-12]	B213925	1.15	50.0	10/03/18
18I1225-04 [401075-SS-02-12-24]	B213925	1.11	50.0	10/03/18
18I1225-05 [401075-SS-04-00-12]	B213925	1.17	50.0	10/03/18
18I1225-06 [401075-SS-04-12-24]	B213925	1.18	50.0	10/03/18
18I1225-07 [401075-SS-06-00-12]	B213925	1.12	50.0	10/03/18
18I1225-08 [401075-SS-06-12-24]	B213925	1.19	50.0	10/03/18
18I1225-09 [401075-FD-092618]	B213925	1.17	50.0	10/03/18

**SW-846 9014**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18I1225-10 [401075-FD-092618]	B213870	50.0	50.0	10/03/18



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B213632 - SW-846 5030B

Blank (B213632-BLK1)

Prepared & Analyzed: 10/01/18

Acetone	ND	50	µg/L							
Acrylonitrile	ND	5.0	µg/L							
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L							
Benzene	ND	1.0	µg/L							
Bromobenzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	0.50	µg/L							
Bromoform	ND	1.0	µg/L							
Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	20	µg/L							
tert-Butyl Alcohol (TBA)	ND	20	µg/L							
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L							
Carbon Disulfide	ND	4.0	µg/L							V-05
Carbon Tetrachloride	ND	5.0	µg/L							V-05
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
Cyclohexane	ND	5.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
Dibromomethane	ND	1.0	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							V-05
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							
1,1-Dichloropropene	ND	2.0	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
Diethyl Ether	ND	2.0	µg/L							
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							
Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	0.60	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							

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**QUALITY CONTROL**

**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B213632 - SW-846 5030B</b>										
<b>Blank (B213632-BLK1)</b>										
Prepared & Analyzed: 10/01/18										
Methyl Acetate	ND	1.0	µg/L							V-05
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methyl Cyclohexane	ND	1.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Naphthalene	ND	2.0	µg/L							
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Tetrahydrofuran	ND	10	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							
1,2,4-Trichlorobenzene	ND	1.0	µg/L							
1,3,5-Trichlorobenzene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							V-05
1,2,3-Trichloropropane	ND	2.0	µg/L							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
1,3,5-Trimethylbenzene	ND	1.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Xylenes (total)	ND	3.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	20.7		µg/L	25.0		82.8	70-130			
Surrogate: Toluene-d8	25.0		µg/L	25.0		100	70-130			
Surrogate: 4-Bromofluorobenzene	24.4		µg/L	25.0		97.7	70-130			
<b>LCS (B213632-BS1)</b>										
Prepared & Analyzed: 10/01/18										
Acetone	102	50	µg/L	100		102	70-160			†
Acrylonitrile	10.4	5.0	µg/L	10.0		104	70-130			
tert-Amyl Methyl Ether (TAME)	9.85	0.50	µg/L	10.0		98.5	70-130			
Benzene	9.71	1.0	µg/L	10.0		97.1	70-130			
Bromobenzene	10.4	1.0	µg/L	10.0		104	70-130			
Bromochloromethane	11.1	1.0	µg/L	10.0		111	70-130			
Bromodichloromethane	9.71	0.50	µg/L	10.0		97.1	70-130			
Bromoform	10.8	1.0	µg/L	10.0		108	70-130			
Bromomethane	8.28	2.0	µg/L	10.0		82.8	40-160			†
2-Butanone (MEK)	101	20	µg/L	100		101	40-160			†
tert-Butyl Alcohol (TBA)	97.4	20	µg/L	100		97.4	40-160			†
n-Butylbenzene	11.4	1.0	µg/L	10.0		114	70-130			
sec-Butylbenzene	11.5	1.0	µg/L	10.0		115	70-130			
tert-Butylbenzene	11.4	1.0	µg/L	10.0		114	70-130			
tert-Butyl Ethyl Ether (TBEE)	9.88	0.50	µg/L	10.0		98.8	70-130			
Carbon Disulfide	10.1	4.0	µg/L	10.0		101	70-130			V-05
Carbon Tetrachloride	8.63	5.0	µg/L	10.0		86.3	70-130			V-05
Chlorobenzene	10.6	1.0	µg/L	10.0		106	70-130			
Chlorodibromomethane	10.2	0.50	µg/L	10.0		102	70-130			

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B213632 - SW-846 5030B</b>										
<b>LCS (B213632-BS1)</b>										
Prepared & Analyzed: 10/01/18										
Chloroethane	8.50	2.0	µg/L	10.0		85.0	70-130			
Chloroform	9.04	2.0	µg/L	10.0		90.4	70-130			
Chloromethane	9.66	2.0	µg/L	10.0		96.6	40-160			†
2-Chlorotoluene	10.5	1.0	µg/L	10.0		105	70-130			
4-Chlorotoluene	10.3	1.0	µg/L	10.0		103	70-130			
Cyclohexane	11.3	5.0	µg/L	10.0		113	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	10.5	5.0	µg/L	10.0		105	70-130			
1,2-Dibromoethane (EDB)	10.3	0.50	µg/L	10.0		103	70-130			
Dibromomethane	9.80	1.0	µg/L	10.0		98.0	70-130			
1,2-Dichlorobenzene	10.5	1.0	µg/L	10.0		105	70-130			
1,3-Dichlorobenzene	11.3	1.0	µg/L	10.0		113	70-130			
1,4-Dichlorobenzene	10.4	1.0	µg/L	10.0		104	70-130			
trans-1,4-Dichloro-2-butene	10.5	2.0	µg/L	10.0		105	70-130			
Dichlorodifluoromethane (Freon 12)	8.07	2.0	µg/L	10.0		80.7	40-160			V-05 †
1,1-Dichloroethane	10.1	1.0	µg/L	10.0		101	70-130			
1,2-Dichloroethane	8.40	1.0	µg/L	10.0		84.0	70-130			
1,1-Dichloroethylene	8.87	1.0	µg/L	10.0		88.7	70-130			
cis-1,2-Dichloroethylene	9.55	1.0	µg/L	10.0		95.5	70-130			
trans-1,2-Dichloroethylene	10.2	1.0	µg/L	10.0		102	70-130			
1,2-Dichloropropane	11.4	1.0	µg/L	10.0		114	70-130			
1,3-Dichloropropane	9.39	0.50	µg/L	10.0		93.9	70-130			
2,2-Dichloropropane	10.2	1.0	µg/L	10.0		102	40-130			†
1,1-Dichloropropene	9.37	2.0	µg/L	10.0		93.7	70-130			
cis-1,3-Dichloropropene	10.9	0.50	µg/L	10.0		109	70-130			
trans-1,3-Dichloropropene	10.8	0.50	µg/L	10.0		108	70-130			
Diethyl Ether	9.76	2.0	µg/L	10.0		97.6	70-130			
Diisopropyl Ether (DIPE)	9.95	0.50	µg/L	10.0		99.5	70-130			
1,4-Dioxane	102	50	µg/L	100		102	40-130			†
Ethylbenzene	11.0	1.0	µg/L	10.0		110	70-130			
<b>Hexachlorobutadiene</b>	13.5	0.60	µg/L	10.0		<b>135</b> *	70-130			L-07
2-Hexanone (MBK)	101	10	µg/L	100		101	70-160			†
Isopropylbenzene (Cumene)	11.5	1.0	µg/L	10.0		115	70-130			
p-Isopropyltoluene (p-Cymene)	11.4	1.0	µg/L	10.0		114	70-130			
<b>Methyl Acetate</b>	19.0	1.0	µg/L	10.0		<b>190</b> *	70-130			L-02, V-05
Methyl tert-Butyl Ether (MTBE)	9.68	1.0	µg/L	10.0		96.8	70-130			
Methyl Cyclohexane	11.3	1.0	µg/L	10.0		113	70-130			
Methylene Chloride	9.85	5.0	µg/L	10.0		98.5	70-130			
4-Methyl-2-pentanone (MIBK)	101	10	µg/L	100		101	70-160			†
Naphthalene	10.7	2.0	µg/L	10.0		107	40-130			†
n-Propylbenzene	10.5	1.0	µg/L	10.0		105	70-130			
Styrene	11.1	1.0	µg/L	10.0		111	70-130			
1,1,1,2-Tetrachloroethane	11.6	1.0	µg/L	10.0		116	70-130			
1,1,2,2-Tetrachloroethane	10.8	0.50	µg/L	10.0		108	70-130			
Tetrachloroethylene	10.7	1.0	µg/L	10.0		107	70-130			
Tetrahydrofuran	10.2	10	µg/L	10.0		102	70-130			
Toluene	10.3	1.0	µg/L	10.0		103	70-130			
1,2,3-Trichlorobenzene	11.0	5.0	µg/L	10.0		110	70-130			
1,2,4-Trichlorobenzene	10.8	1.0	µg/L	10.0		108	70-130			
1,3,5-Trichlorobenzene	11.4	1.0	µg/L	10.0		114	70-130			
1,1,1-Trichloroethane	9.19	1.0	µg/L	10.0		91.9	70-130			
1,1,2-Trichloroethane	10.4	1.0	µg/L	10.0		104	70-130			
Trichloroethylene	10.2	1.0	µg/L	10.0		102	70-130			

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B213632 - SW-846 5030B</b>										
<b>LCS (B213632-BS1)</b>										
Prepared & Analyzed: 10/01/18										
Trichlorofluoromethane (Freon 11)	7.62	2.0	µg/L	10.0		76.2	70-130			V-05
1,2,3-Trichloropropane	9.84	2.0	µg/L	10.0		98.4	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.71	1.0	µg/L	10.0		97.1	70-130			
1,2,4-Trimethylbenzene	10.4	1.0	µg/L	10.0		104	70-130			
1,3,5-Trimethylbenzene	10.5	1.0	µg/L	10.0		105	70-130			
Vinyl Chloride	9.24	2.0	µg/L	10.0		92.4	40-160			†
m+p Xylene	21.2	2.0	µg/L	20.0		106	70-130			
o-Xylene	10.6	1.0	µg/L	10.0		106	70-130			
Surrogate: 1,2-Dichloroethane-d4	20.2		µg/L	25.0		80.7	70-130			
Surrogate: Toluene-d8	25.2		µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	24.9		µg/L	25.0		99.6	70-130			
<b>LCS Dup (B213632-BSD1)</b>										
Prepared & Analyzed: 10/01/18										
Acetone	88.3	50	µg/L	100		88.3	70-160	14.6	25	†
Acrylonitrile	9.47	5.0	µg/L	10.0		94.7	70-130	9.46	25	
tert-Amyl Methyl Ether (TAME)	9.68	0.50	µg/L	10.0		96.8	70-130	1.74	25	
Benzene	9.55	1.0	µg/L	10.0		95.5	70-130	1.66	25	
Bromobenzene	10.3	1.0	µg/L	10.0		103	70-130	1.16	25	
Bromochloromethane	11.3	1.0	µg/L	10.0		113	70-130	2.23	25	
Bromodichloromethane	9.38	0.50	µg/L	10.0		93.8	70-130	3.46	25	
Bromoform	10.5	1.0	µg/L	10.0		105	70-130	2.53	25	
Bromomethane	9.50	2.0	µg/L	10.0		95.0	40-160	13.7	25	†
2-Butanone (MEK)	89.9	20	µg/L	100		89.9	40-160	11.6	25	†
tert-Butyl Alcohol (TBA)	87.6	20	µg/L	100		87.6	40-160	10.6	25	†
n-Butylbenzene	11.2	1.0	µg/L	10.0		112	70-130	1.69	25	
sec-Butylbenzene	11.5	1.0	µg/L	10.0		115	70-130	0.0868	25	
tert-Butylbenzene	11.2	1.0	µg/L	10.0		112	70-130	1.33	25	
tert-Butyl Ethyl Ether (TBEE)	9.77	0.50	µg/L	10.0		97.7	70-130	1.12	25	
Carbon Disulfide	9.97	4.0	µg/L	10.0		99.7	70-130	1.69	25	V-05
Carbon Tetrachloride	8.39	5.0	µg/L	10.0		83.9	70-130	2.82	25	V-05
Chlorobenzene	10.5	1.0	µg/L	10.0		105	70-130	0.853	25	
Chlorodibromomethane	10.0	0.50	µg/L	10.0		100	70-130	2.27	25	
Chloroethane	9.13	2.0	µg/L	10.0		91.3	70-130	7.15	25	
Chloroform	9.16	2.0	µg/L	10.0		91.6	70-130	1.32	25	
Chloromethane	9.57	2.0	µg/L	10.0		95.7	40-160	0.936	25	†
2-Chlorotoluene	10.3	1.0	µg/L	10.0		103	70-130	1.25	25	
4-Chlorotoluene	10.0	1.0	µg/L	10.0		100	70-130	2.65	25	
Cyclohexane	11.1	5.0	µg/L	10.0		111	70-130	1.78	25	
1,2-Dibromo-3-chloropropane (DBCP)	9.11	5.0	µg/L	10.0		91.1	70-130	14.4	25	
1,2-Dibromoethane (EDB)	10.0	0.50	µg/L	10.0		100	70-130	2.07	25	
Dibromomethane	9.99	1.0	µg/L	10.0		99.9	70-130	1.92	25	
1,2-Dichlorobenzene	10.6	1.0	µg/L	10.0		106	70-130	0.852	25	
1,3-Dichlorobenzene	10.9	1.0	µg/L	10.0		109	70-130	3.87	25	
1,4-Dichlorobenzene	10.3	1.0	µg/L	10.0		103	70-130	0.678	25	
trans-1,4-Dichloro-2-butene	10.0	2.0	µg/L	10.0		100	70-130	4.48	25	
Dichlorodifluoromethane (Freon 12)	7.83	2.0	µg/L	10.0		78.3	40-160	3.02	25	V-05 †
1,1-Dichloroethane	10.0	1.0	µg/L	10.0		100	70-130	0.596	25	
1,2-Dichloroethane	8.49	1.0	µg/L	10.0		84.9	70-130	1.07	25	
1,1-Dichloroethylene	9.22	1.0	µg/L	10.0		92.2	70-130	3.87	25	
cis-1,2-Dichloroethylene	9.60	1.0	µg/L	10.0		96.0	70-130	0.522	25	
trans-1,2-Dichloroethylene	9.48	1.0	µg/L	10.0		94.8	70-130	7.12	25	
1,2-Dichloropropane	11.1	1.0	µg/L	10.0		111	70-130	2.49	25	

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B213632 - SW-846 5030B</b>										
<b>LCS Dup (B213632-BSD1)</b>										
Prepared & Analyzed: 10/01/18										
1,3-Dichloropropane	9.48	0.50	µg/L	10.0		94.8	70-130	0.954	25	
2,2-Dichloropropane	9.91	1.0	µg/L	10.0		99.1	40-130	3.37	25	†
1,1-Dichloropropene	9.13	2.0	µg/L	10.0		91.3	70-130	2.59	25	
cis-1,3-Dichloropropene	10.3	0.50	µg/L	10.0		103	70-130	5.19	25	
trans-1,3-Dichloropropene	10.8	0.50	µg/L	10.0		108	70-130	0.555	25	
Diethyl Ether	10.1	2.0	µg/L	10.0		101	70-130	3.82	25	
Diisopropyl Ether (DIPE)	10.1	0.50	µg/L	10.0		101	70-130	1.40	25	
1,4-Dioxane	92.6	50	µg/L	100		92.6	40-130	9.94	50	† ‡
Ethylbenzene	10.6	1.0	µg/L	10.0		106	70-130	3.33	25	
Hexachlorobutadiene	12.3	0.60	µg/L	10.0		123	70-130	9.54	25	
2-Hexanone (MBK)	92.5	10	µg/L	100		92.5	70-160	9.21	25	†
Isopropylbenzene (Cumene)	11.3	1.0	µg/L	10.0		113	70-130	1.57	25	
p-Isopropyltoluene (p-Cymene)	11.3	1.0	µg/L	10.0		113	70-130	1.32	25	
<b>Methyl Acetate</b>	19.5	1.0	µg/L	10.0		<b>195</b> *	70-130	2.54	25	L-02, V-05
Methyl tert-Butyl Ether (MTBE)	9.24	1.0	µg/L	10.0		92.4	70-130	4.65	25	
Methyl Cyclohexane	10.8	1.0	µg/L	10.0		108	70-130	4.33	25	
Methylene Chloride	9.03	5.0	µg/L	10.0		90.3	70-130	8.69	25	
4-Methyl-2-pentanone (MIBK)	96.2	10	µg/L	100		96.2	70-160	5.01	25	†
Naphthalene	10.2	2.0	µg/L	10.0		102	40-130	5.18	25	†
n-Propylbenzene	10.3	1.0	µg/L	10.0		103	70-130	2.12	25	
Styrene	10.9	1.0	µg/L	10.0		109	70-130	1.91	25	
1,1,1,2-Tetrachloroethane	10.9	1.0	µg/L	10.0		109	70-130	5.60	25	
1,1,2,2-Tetrachloroethane	10.5	0.50	µg/L	10.0		105	70-130	3.00	25	
Tetrachloroethylene	10.4	1.0	µg/L	10.0		104	70-130	3.31	25	
Tetrahydrofuran	9.56	10	µg/L	10.0		95.6	70-130	6.18	25	J
Toluene	9.65	1.0	µg/L	10.0		96.5	70-130	6.61	25	
1,2,3-Trichlorobenzene	10.2	5.0	µg/L	10.0		102	70-130	7.44	25	
1,2,4-Trichlorobenzene	10.5	1.0	µg/L	10.0		105	70-130	3.11	25	
1,3,5-Trichlorobenzene	10.8	1.0	µg/L	10.0		108	70-130	4.97	25	
1,1,1-Trichloroethane	8.91	1.0	µg/L	10.0		89.1	70-130	3.09	25	
1,1,2-Trichloroethane	10.2	1.0	µg/L	10.0		102	70-130	2.05	25	
Trichloroethylene	10.0	1.0	µg/L	10.0		100	70-130	1.78	25	
Trichlorofluoromethane (Freon 11)	8.09	2.0	µg/L	10.0		80.9	70-130	5.98	25	V-05
1,2,3-Trichloropropane	10.3	2.0	µg/L	10.0		103	70-130	4.86	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.99	1.0	µg/L	10.0		99.9	70-130	2.84	25	
1,2,4-Trimethylbenzene	10.6	1.0	µg/L	10.0		106	70-130	0.952	25	
1,3,5-Trimethylbenzene	10.2	1.0	µg/L	10.0		102	70-130	3.09	25	
Vinyl Chloride	9.35	2.0	µg/L	10.0		93.5	40-160	1.18	25	†
m+p Xylene	20.9	2.0	µg/L	20.0		104	70-130	1.48	25	
o-Xylene	10.4	1.0	µg/L	10.0		104	70-130	2.10	25	
Surrogate: 1,2-Dichloroethane-d4	20.8		µg/L	25.0		83.1	70-130			
Surrogate: Toluene-d8	25.1		µg/L	25.0		100	70-130			
Surrogate: 4-Bromofluorobenzene	24.2		µg/L	25.0		97.0	70-130			

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B213971 - SW-846 5035

Blank (B213971-BLK1)

Prepared & Analyzed: 10/04/18

Acetone	ND	0.10	mg/Kg wet							
Acrylonitrile	ND	0.0060	mg/Kg wet							
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg wet							
Benzene	ND	0.0020	mg/Kg wet							
Bromobenzene	ND	0.0020	mg/Kg wet							
Bromochloromethane	ND	0.0020	mg/Kg wet							
Bromodichloromethane	ND	0.0020	mg/Kg wet							
Bromoform	ND	0.0020	mg/Kg wet							
Bromomethane	ND	0.010	mg/Kg wet							V-34
2-Butanone (MEK)	ND	0.040	mg/Kg wet							
tert-Butyl Alcohol (TBA)	ND	0.040	mg/Kg wet							
n-Butylbenzene	ND	0.0020	mg/Kg wet							
sec-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg wet							
Carbon Disulfide	ND	0.0060	mg/Kg wet							
Carbon Tetrachloride	ND	0.0020	mg/Kg wet							
Chlorobenzene	ND	0.0020	mg/Kg wet							
Chlorodibromomethane	ND	0.0010	mg/Kg wet							
Chloroethane	ND	0.020	mg/Kg wet							
Chloroform	ND	0.0040	mg/Kg wet							
Chloromethane	ND	0.010	mg/Kg wet							
2-Chlorotoluene	ND	0.0020	mg/Kg wet							
4-Chlorotoluene	ND	0.0020	mg/Kg wet							
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg wet							
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg wet							
Dibromomethane	ND	0.0020	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.0020	mg/Kg wet							
trans-1,4-Dichloro-2-butene	ND	0.0040	mg/Kg wet							
Dichlorodifluoromethane (Freon 12)	ND	0.020	mg/Kg wet							
1,1-Dichloroethane	ND	0.0020	mg/Kg wet							
1,2-Dichloroethane	ND	0.0020	mg/Kg wet							
1,1-Dichloroethylene	ND	0.0040	mg/Kg wet							
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
1,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,3-Dichloropropane	ND	0.0010	mg/Kg wet							
2,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,1-Dichloropropene	ND	0.0020	mg/Kg wet							
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
Diethyl Ether	ND	0.020	mg/Kg wet							
Diisopropyl Ether (DIPE)	ND	0.0010	mg/Kg wet							
1,4-Dioxane	ND	0.10	mg/Kg wet							
Ethylbenzene	ND	0.0020	mg/Kg wet							
Hexachlorobutadiene	ND	0.0020	mg/Kg wet							
2-Hexanone (MBK)	ND	0.020	mg/Kg wet							
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg wet							
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg wet							
Methyl Acetate	ND	0.0020	mg/Kg wet							

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B213971 - SW-846 5035

Blank (B213971-BLK1)

Prepared & Analyzed: 10/04/18

Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg wet							
Methyl Cyclohexane	ND	0.0020	mg/Kg wet							
Methylene Chloride	ND	0.020	mg/Kg wet							
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg wet							
Naphthalene	ND	0.0040	mg/Kg wet							
n-Propylbenzene	ND	0.0020	mg/Kg wet							
Styrene	ND	0.0020	mg/Kg wet							
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg wet							
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg wet							
Tetrachloroethylene	ND	0.0020	mg/Kg wet							
Tetrahydrofuran	ND	0.010	mg/Kg wet							
Toluene	ND	0.0020	mg/Kg wet							
1,2,3-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,3,5-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,1,1-Trichloroethane	ND	0.0020	mg/Kg wet							
1,1,2-Trichloroethane	ND	0.0020	mg/Kg wet							
Trichloroethylene	ND	0.0020	mg/Kg wet							
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg wet							
1,2,3-Trichloropropane	ND	0.0020	mg/Kg wet							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.010	mg/Kg wet							
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg wet							
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg wet							
Vinyl Chloride	ND	0.010	mg/Kg wet							
m+p Xylene	ND	0.0040	mg/Kg wet							
o-Xylene	ND	0.0020	mg/Kg wet							
Surrogate: 1,2-Dichloroethane-d4	0.0501		mg/Kg wet	0.0500		100	70-130			
Surrogate: Toluene-d8	0.0487		mg/Kg wet	0.0500		97.3	70-130			
Surrogate: 4-Bromofluorobenzene	0.0495		mg/Kg wet	0.0500		99.0	70-130			

LCS (B213971-BS1)

Prepared & Analyzed: 10/04/18

Acetone	0.255	0.10	mg/Kg wet	0.200		128	70-160			†
Acrylonitrile	0.0185	0.0060	mg/Kg wet	0.0200		92.6	70-130			
tert-Amyl Methyl Ether (TAME)	0.0184	0.0010	mg/Kg wet	0.0200		92.2	70-130			
Benzene	0.0172	0.0020	mg/Kg wet	0.0200		85.8	70-130			
Bromobenzene	0.0177	0.0020	mg/Kg wet	0.0200		88.6	70-130			
Bromochloromethane	0.0196	0.0020	mg/Kg wet	0.0200		98.2	70-130			
Bromodichloromethane	0.0166	0.0020	mg/Kg wet	0.0200		83.0	70-130			
Bromoform	0.0194	0.0020	mg/Kg wet	0.0200		97.0	70-130			
Bromomethane	0.0111	0.010	mg/Kg wet	0.0200		55.4	40-130		V-34	†
2-Butanone (MEK)	0.226	0.040	mg/Kg wet	0.200		113	70-160			†
tert-Butyl Alcohol (TBA)	0.185	0.040	mg/Kg wet	0.200		92.6	40-130			†
n-Butylbenzene	0.0189	0.0020	mg/Kg wet	0.0200		94.3	70-130			
sec-Butylbenzene	0.0186	0.0020	mg/Kg wet	0.0200		92.8	70-130			
tert-Butylbenzene	0.0184	0.0020	mg/Kg wet	0.0200		91.9	70-160			†
tert-Butyl Ethyl Ether (TBEE)	0.0183	0.0010	mg/Kg wet	0.0200		91.4	70-130			
Carbon Disulfide	0.0183	0.0060	mg/Kg wet	0.0200		91.6	70-130			
Carbon Tetrachloride	0.0181	0.0020	mg/Kg wet	0.0200		90.4	70-130			
Chlorobenzene	0.0198	0.0020	mg/Kg wet	0.0200		99.0	70-130			
Chlorodibromomethane	0.0194	0.0010	mg/Kg wet	0.0200		97.0	70-130			
Chloroethane	0.0160	0.020	mg/Kg wet	0.0200		79.8	70-130			
Chloroform	0.0178	0.0040	mg/Kg wet	0.0200		89.1	70-130			

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B213971 - SW-846 5035</b>										
<b>LCS (B213971-BS1)</b>										
Prepared & Analyzed: 10/04/18										
Chloromethane	0.0169	0.010	mg/Kg wet	0.0200		84.3	70-130			
2-Chlorotoluene	0.0179	0.0020	mg/Kg wet	0.0200		89.3	70-130			
4-Chlorotoluene	0.0186	0.0020	mg/Kg wet	0.0200		93.0	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	0.0200	0.0020	mg/Kg wet	0.0200		99.8	70-130			
1,2-Dibromoethane (EDB)	0.0193	0.0010	mg/Kg wet	0.0200		96.4	70-130			
Dibromomethane	0.0192	0.0020	mg/Kg wet	0.0200		95.9	70-130			
1,2-Dichlorobenzene	0.0192	0.0020	mg/Kg wet	0.0200		96.1	70-130			
1,3-Dichlorobenzene	0.0189	0.0020	mg/Kg wet	0.0200		94.5	70-130			
1,4-Dichlorobenzene	0.0188	0.0020	mg/Kg wet	0.0200		94.1	70-130			
trans-1,4-Dichloro-2-butene	0.0170	0.0040	mg/Kg wet	0.0200		84.9	70-130			
Dichlorodifluoromethane (Freon 12)	0.0191	0.020	mg/Kg wet	0.0200		95.3	40-160			J †
1,1-Dichloroethane	0.0187	0.0020	mg/Kg wet	0.0200		93.3	70-130			
1,2-Dichloroethane	0.0181	0.0020	mg/Kg wet	0.0200		90.3	70-130			
1,1-Dichloroethylene	0.0172	0.0040	mg/Kg wet	0.0200		86.1	70-130			
cis-1,2-Dichloroethylene	0.0169	0.0020	mg/Kg wet	0.0200		84.4	70-130			
trans-1,2-Dichloroethylene	0.0183	0.0020	mg/Kg wet	0.0200		91.3	70-130			
1,2-Dichloropropane	0.0193	0.0020	mg/Kg wet	0.0200		96.4	70-130			
1,3-Dichloropropane	0.0179	0.0010	mg/Kg wet	0.0200		89.4	70-130			
2,2-Dichloropropane	0.0167	0.0020	mg/Kg wet	0.0200		83.7	70-130			
1,1-Dichloropropene	0.0175	0.0020	mg/Kg wet	0.0200		87.7	70-130			
cis-1,3-Dichloropropene	0.0179	0.0010	mg/Kg wet	0.0200		89.7	70-130			
trans-1,3-Dichloropropene	0.0179	0.0010	mg/Kg wet	0.0200		89.6	70-130			
Diethyl Ether	0.0180	0.020	mg/Kg wet	0.0200		90.0	70-130			J
Diisopropyl Ether (DIPE)	0.0184	0.0010	mg/Kg wet	0.0200		92.1	70-130			
1,4-Dioxane	0.229	0.10	mg/Kg wet	0.200		115	40-160			V-36 †
Ethylbenzene	0.0182	0.0020	mg/Kg wet	0.0200		90.8	70-130			
Hexachlorobutadiene	0.0185	0.0020	mg/Kg wet	0.0200		92.5	70-160			
2-Hexanone (MBK)	0.208	0.020	mg/Kg wet	0.200		104	70-160			†
Isopropylbenzene (Cumene)	0.0190	0.0020	mg/Kg wet	0.0200		94.9	70-130			
p-Isopropyltoluene (p-Cymene)	0.0180	0.0020	mg/Kg wet	0.0200		90.0	70-130			
<b>Methyl Acetate</b>	0.0755	0.0020	mg/Kg wet	0.0200		<b>378</b> *	70-130			L-02
Methyl tert-Butyl Ether (MTBE)	0.0188	0.0040	mg/Kg wet	0.0200		93.9	70-130			
Methyl Cyclohexane	0.0171	0.0020	mg/Kg wet	0.0200		85.7	70-130			
Methylene Chloride	0.0192	0.020	mg/Kg wet	0.0200		96.2	40-160			J †
4-Methyl-2-pentanone (MIBK)	0.197	0.020	mg/Kg wet	0.200		98.6	70-160			†
Naphthalene	0.0192	0.0040	mg/Kg wet	0.0200		95.8	40-130			†
n-Propylbenzene	0.0190	0.0020	mg/Kg wet	0.0200		95.1	70-130			
Styrene	0.0185	0.0020	mg/Kg wet	0.0200		92.5	70-130			
1,1,1,2-Tetrachloroethane	0.0185	0.0020	mg/Kg wet	0.0200		92.5	70-130			
1,1,2,2-Tetrachloroethane	0.0191	0.0010	mg/Kg wet	0.0200		95.6	70-130			
Tetrachloroethylene	0.0187	0.0020	mg/Kg wet	0.0200		93.6	70-130			
Tetrahydrofuran	0.0168	0.010	mg/Kg wet	0.0200		83.8	70-130			
Toluene	0.0168	0.0020	mg/Kg wet	0.0200		84.1	70-130			
1,2,3-Trichlorobenzene	0.0202	0.0020	mg/Kg wet	0.0200		101	70-130			
1,2,4-Trichlorobenzene	0.0212	0.0020	mg/Kg wet	0.0200		106	70-130			
1,3,5-Trichlorobenzene	0.0202	0.0020	mg/Kg wet	0.0200		101	70-130			
1,1,1-Trichloroethane	0.0166	0.0020	mg/Kg wet	0.0200		82.9	70-130			
1,1,2-Trichloroethane	0.0180	0.0020	mg/Kg wet	0.0200		90.0	70-130			
Trichloroethylene	0.0184	0.0020	mg/Kg wet	0.0200		91.9	70-130			
Trichlorofluoromethane (Freon 11)	0.0166	0.010	mg/Kg wet	0.0200		83.0	70-130			
1,2,3-Trichloropropane	0.0195	0.0020	mg/Kg wet	0.0200		97.3	70-130			



QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B213971 - SW-846 5035

LCS (B213971-BS1)

Prepared & Analyzed: 10/04/18

1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0169	0.010	mg/Kg wet	0.0200		84.7	70-130			
1,2,4-Trimethylbenzene	0.0179	0.0020	mg/Kg wet	0.0200		89.6	70-130			
1,3,5-Trimethylbenzene	0.0184	0.0020	mg/Kg wet	0.0200		92.0	70-130			
Vinyl Chloride	0.0166	0.010	mg/Kg wet	0.0200		83.1	40-130			†
m+p Xylene	0.0360	0.0040	mg/Kg wet	0.0400		89.9	70-130			
o-Xylene	0.0181	0.0020	mg/Kg wet	0.0200		90.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0502		mg/Kg wet	0.0500		100	70-130			
Surrogate: Toluene-d8	0.0494		mg/Kg wet	0.0500		98.7	70-130			
Surrogate: 4-Bromofluorobenzene	0.0506		mg/Kg wet	0.0500		101	70-130			

LCS Dup (B213971-BSD1)

Prepared & Analyzed: 10/04/18

Acetone	0.322	0.10	mg/Kg wet	0.200		161 *	70-160	23.2	25	L-07	†
Acrylonitrile	0.0171	0.0060	mg/Kg wet	0.0200		85.7	70-130	7.74	25		
tert-Amyl Methyl Ether (TAME)	0.0192	0.0010	mg/Kg wet	0.0200		96.2	70-130	4.25	25		
Benzene	0.0177	0.0020	mg/Kg wet	0.0200		88.3	70-130	2.87	25		
Bromobenzene	0.0177	0.0020	mg/Kg wet	0.0200		88.6	70-130	0.00	25		
Bromochloromethane	0.0196	0.0020	mg/Kg wet	0.0200		97.8	70-130	0.408	25		
Bromodichloromethane	0.0183	0.0020	mg/Kg wet	0.0200		91.7	70-130	9.96	25		
Bromoform	0.0196	0.0020	mg/Kg wet	0.0200		98.1	70-130	1.13	25		
Bromomethane	0.0108	0.010	mg/Kg wet	0.0200		53.9	40-130	2.74	25	V-34	†
2-Butanone (MEK)	0.252	0.040	mg/Kg wet	0.200		126	70-160	11.0	25		†
tert-Butyl Alcohol (TBA)	0.178	0.040	mg/Kg wet	0.200		89.1	40-130	3.86	25		†
n-Butylbenzene	0.0182	0.0020	mg/Kg wet	0.0200		90.9	70-130	3.67	25		
sec-Butylbenzene	0.0195	0.0020	mg/Kg wet	0.0200		97.7	70-130	5.14	25		
tert-Butylbenzene	0.0181	0.0020	mg/Kg wet	0.0200		90.6	70-160	1.42	25		†
tert-Butyl Ethyl Ether (TBEE)	0.0184	0.0010	mg/Kg wet	0.0200		92.2	70-130	0.871	25		
Carbon Disulfide	0.0182	0.0060	mg/Kg wet	0.0200		90.9	70-130	0.767	25		
Carbon Tetrachloride	0.0178	0.0020	mg/Kg wet	0.0200		89.2	70-130	1.34	25		
Chlorobenzene	0.0193	0.0020	mg/Kg wet	0.0200		96.3	70-130	2.76	25		
Chlorodibromomethane	0.0193	0.0010	mg/Kg wet	0.0200		96.3	70-130	0.724	25		
Chloroethane	0.0162	0.020	mg/Kg wet	0.0200		81.1	70-130	1.62	25	J	
Chloroform	0.0173	0.0040	mg/Kg wet	0.0200		86.5	70-130	2.96	25		
Chloromethane	0.0168	0.010	mg/Kg wet	0.0200		84.1	70-130	0.238	25		
2-Chlorotoluene	0.0176	0.0020	mg/Kg wet	0.0200		88.0	70-130	1.47	25		
4-Chlorotoluene	0.0188	0.0020	mg/Kg wet	0.0200		93.9	70-130	0.963	25		
1,2-Dibromo-3-chloropropane (DBCP)	0.0182	0.0020	mg/Kg wet	0.0200		90.9	70-130	9.33	25		
1,2-Dibromoethane (EDB)	0.0199	0.0010	mg/Kg wet	0.0200		99.4	70-130	3.06	25		
Dibromomethane	0.0191	0.0020	mg/Kg wet	0.0200		95.7	70-130	0.209	25		
1,2-Dichlorobenzene	0.0192	0.0020	mg/Kg wet	0.0200		96.0	70-130	0.104	25		
1,3-Dichlorobenzene	0.0189	0.0020	mg/Kg wet	0.0200		94.5	70-130	0.00	25		
1,4-Dichlorobenzene	0.0180	0.0020	mg/Kg wet	0.0200		90.0	70-130	4.45	25		
trans-1,4-Dichloro-2-butene	0.0186	0.0040	mg/Kg wet	0.0200		92.8	70-130	8.89	25		
Dichlorodifluoromethane (Freon 12)	0.0173	0.020	mg/Kg wet	0.0200		86.5	40-160	9.68	25	J	†
1,1-Dichloroethane	0.0185	0.0020	mg/Kg wet	0.0200		92.6	70-130	0.753	25		
1,2-Dichloroethane	0.0186	0.0020	mg/Kg wet	0.0200		92.8	70-130	2.73	25		
1,1-Dichloroethylene	0.0172	0.0040	mg/Kg wet	0.0200		85.9	70-130	0.233	25		
cis-1,2-Dichloroethylene	0.0173	0.0020	mg/Kg wet	0.0200		86.4	70-130	2.34	25		
trans-1,2-Dichloroethylene	0.0182	0.0020	mg/Kg wet	0.0200		90.8	70-130	0.549	25		
1,2-Dichloropropane	0.0195	0.0020	mg/Kg wet	0.0200		97.5	70-130	1.13	25		
1,3-Dichloropropane	0.0182	0.0010	mg/Kg wet	0.0200		91.0	70-130	1.77	25		
2,2-Dichloropropane	0.0160	0.0020	mg/Kg wet	0.0200		80.2	70-130	4.27	25		
1,1-Dichloropropene	0.0189	0.0020	mg/Kg wet	0.0200		94.6	70-130	7.57	25		

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B213971 - SW-846 5035

LCS Dup (B213971-BSD1)

Prepared & Analyzed: 10/04/18

cis-1,3-Dichloropropene	0.0184	0.0010	mg/Kg wet	0.0200		91.9	70-130	2.42	25	
trans-1,3-Dichloropropene	0.0189	0.0010	mg/Kg wet	0.0200		94.6	70-130	5.43	25	
Diethyl Ether	0.0191	0.020	mg/Kg wet	0.0200		95.7	70-130	6.14	25	J
Diisopropyl Ether (DIPE)	0.0177	0.0010	mg/Kg wet	0.0200		88.4	70-130	4.10	25	
1,4-Dioxane	0.259	0.10	mg/Kg wet	0.200		129	40-160	12.0	50	V-36 † ‡
Ethylbenzene	0.0178	0.0020	mg/Kg wet	0.0200		88.9	70-130	2.11	25	
Hexachlorobutadiene	0.0199	0.0020	mg/Kg wet	0.0200		99.3	70-160	7.09	25	
2-Hexanone (MBK)	0.221	0.020	mg/Kg wet	0.200		110	70-160	5.96	25	†
Isopropylbenzene (Cumene)	0.0196	0.0020	mg/Kg wet	0.0200		98.0	70-130	3.21	25	
p-Isopropyltoluene (p-Cymene)	0.0175	0.0020	mg/Kg wet	0.0200		87.6	70-130	2.70	25	
<b>Methyl Acetate</b>	0.0778	0.0020	mg/Kg wet	0.0200		<b>389</b> *	70-130	2.95	25	L-02
Methyl tert-Butyl Ether (MTBE)	0.0192	0.0040	mg/Kg wet	0.0200		95.8	70-130	2.00	25	
Methyl Cyclohexane	0.0169	0.0020	mg/Kg wet	0.0200		84.5	70-130	1.41	25	
Methylene Chloride	0.0197	0.020	mg/Kg wet	0.0200		98.7	40-160	2.57	25	J †
4-Methyl-2-pentanone (MIBK)	0.199	0.020	mg/Kg wet	0.200		99.4	70-160	0.879	25	†
Naphthalene	0.0180	0.0040	mg/Kg wet	0.0200		90.1	40-130	6.13	25	†
n-Propylbenzene	0.0181	0.0020	mg/Kg wet	0.0200		90.3	70-130	5.18	25	
Styrene	0.0185	0.0020	mg/Kg wet	0.0200		92.7	70-130	0.216	25	
1,1,1,2-Tetrachloroethane	0.0179	0.0020	mg/Kg wet	0.0200		89.6	70-130	3.19	25	
1,1,2,2-Tetrachloroethane	0.0191	0.0010	mg/Kg wet	0.0200		95.6	70-130	0.00	25	
Tetrachloroethylene	0.0176	0.0020	mg/Kg wet	0.0200		88.2	70-130	5.94	25	
Tetrahydrofuran	0.0183	0.010	mg/Kg wet	0.0200		91.6	70-130	8.89	25	
Toluene	0.0168	0.0020	mg/Kg wet	0.0200		84.0	70-130	0.119	25	
1,2,3-Trichlorobenzene	0.0186	0.0020	mg/Kg wet	0.0200		92.8	70-130	8.56	25	
1,2,4-Trichlorobenzene	0.0197	0.0020	mg/Kg wet	0.0200		98.6	70-130	7.42	25	
1,3,5-Trichlorobenzene	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130	1.96	25	
1,1,1-Trichloroethane	0.0168	0.0020	mg/Kg wet	0.0200		84.2	70-130	1.56	25	
1,1,2-Trichloroethane	0.0173	0.0020	mg/Kg wet	0.0200		86.3	70-130	4.20	25	
Trichloroethylene	0.0177	0.0020	mg/Kg wet	0.0200		88.7	70-130	3.54	25	
Trichlorofluoromethane (Freon 11)	0.0165	0.010	mg/Kg wet	0.0200		82.6	70-130	0.483	25	
1,2,3-Trichloropropane	0.0187	0.0020	mg/Kg wet	0.0200		93.4	70-130	4.09	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0182	0.010	mg/Kg wet	0.0200		90.8	70-130	6.95	25	
1,2,4-Trimethylbenzene	0.0180	0.0020	mg/Kg wet	0.0200		90.1	70-130	0.556	25	
1,3,5-Trimethylbenzene	0.0182	0.0020	mg/Kg wet	0.0200		90.9	70-130	1.20	25	
Vinyl Chloride	0.0164	0.010	mg/Kg wet	0.0200		81.8	40-130	1.58	25	†
m+p Xylene	0.0357	0.0040	mg/Kg wet	0.0400		89.4	70-130	0.614	25	
o-Xylene	0.0179	0.0020	mg/Kg wet	0.0200		89.4	70-130	1.00	25	
Surrogate: 1,2-Dichloroethane-d4	0.0504		mg/Kg wet	0.0500		101	70-130			
Surrogate: Toluene-d8	0.0490		mg/Kg wet	0.0500		98.0	70-130			
Surrogate: 4-Bromofluorobenzene	0.0505		mg/Kg wet	0.0500		101	70-130			

Matrix Spike (B213971-MS1)

Source: 18I1225-04

Prepared & Analyzed: 10/04/18

<b>Acetone</b>	0.608	0.12	mg/Kg dry	0.239	ND	<b>254</b> *	70-130			MS-15
Acrylonitrile	0.0219	0.0072	mg/Kg dry	0.0239	ND	91.4	70-130			
tert-Amyl Methyl Ether (TAME)	0.0230	0.0012	mg/Kg dry	0.0239	ND	96.2	70-130			
Benzene	0.0203	0.0024	mg/Kg dry	0.0239	ND	84.7	70-130			
Bromobenzene	0.0212	0.0024	mg/Kg dry	0.0239	ND	88.4	70-130			
Bromochloromethane	0.0235	0.0024	mg/Kg dry	0.0239	ND	98.2	70-130			
Bromodichloromethane	0.0211	0.0024	mg/Kg dry	0.0239	ND	88.1	70-130			
Bromoform	0.0231	0.0024	mg/Kg dry	0.0239	ND	96.7	70-130			
<b>Bromomethane</b>	0.0163	0.012	mg/Kg dry	0.0239	ND	<b>68.1</b> *	70-130			
<b>2-Butanone (MEK)</b>	0.436	0.048	mg/Kg dry	0.239	ND	<b>182</b> *	70-130			

MS-07A, V-34

MS-15

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B213971 - SW-846 5035</b>										
<b>Matrix Spike (B213971-MS1)</b>	<b>Source: 18I1225-04</b>			<b>Prepared &amp; Analyzed: 10/04/18</b>						
tert-Butyl Alcohol (TBA)	0.221	0.048	mg/Kg dry	0.239	ND	92.4	70-130			
n-Butylbenzene	0.0218	0.0024	mg/Kg dry	0.0239	ND	91.0	70-130			
sec-Butylbenzene	0.0222	0.0024	mg/Kg dry	0.0239	ND	92.7	70-130			
tert-Butylbenzene	0.0212	0.0024	mg/Kg dry	0.0239	ND	88.7	70-130			
tert-Butyl Ethyl Ether (TBEE)	0.0214	0.0012	mg/Kg dry	0.0239	ND	89.4	70-130			
Carbon Disulfide	0.0217	0.0072	mg/Kg dry	0.0239	ND	90.8	70-130			
Carbon Tetrachloride	0.0216	0.0024	mg/Kg dry	0.0239	ND	90.2	70-130			
Chlorobenzene	0.0227	0.0024	mg/Kg dry	0.0239	ND	94.9	70-130			
Chlorodibromomethane	0.0242	0.0012	mg/Kg dry	0.0239	ND	101	70-130			
Chloroethane	0.0189	0.024	mg/Kg dry	0.0239	ND	78.8	70-130			J
Chloroform	0.0206	0.0048	mg/Kg dry	0.0239	ND	86.2	70-130			
Chloromethane	0.0198	0.012	mg/Kg dry	0.0239	ND	82.6	70-130			
2-Chlorotoluene	0.0217	0.0024	mg/Kg dry	0.0239	ND	90.8	70-130			
4-Chlorotoluene	0.0214	0.0024	mg/Kg dry	0.0239	ND	89.5	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	0.0237	0.0024	mg/Kg dry	0.0239	ND	99.0	70-130			
1,2-Dibromoethane (EDB)	0.0235	0.0012	mg/Kg dry	0.0239	ND	98.1	70-130			
Dibromomethane	0.0230	0.0024	mg/Kg dry	0.0239	ND	96.0	70-130			
1,2-Dichlorobenzene	0.0229	0.0024	mg/Kg dry	0.0239	ND	95.6	70-130			
1,3-Dichlorobenzene	0.0224	0.0024	mg/Kg dry	0.0239	ND	93.7	70-130			
1,4-Dichlorobenzene	0.0214	0.0024	mg/Kg dry	0.0239	ND	89.3	70-130			
trans-1,4-Dichloro-2-butene	0.0227	0.0048	mg/Kg dry	0.0239	ND	95.0	70-130			
Dichlorodifluoromethane (Freon 12)	0.0201	0.024	mg/Kg dry	0.0239	ND	84.1	70-130			J
1,1-Dichloroethane	0.0213	0.0024	mg/Kg dry	0.0239	ND	89.0	70-130			
1,2-Dichloroethane	0.0220	0.0024	mg/Kg dry	0.0239	ND	92.1	70-130			
1,1-Dichloroethylene	0.0200	0.0048	mg/Kg dry	0.0239	ND	83.6	70-130			
cis-1,2-Dichloroethylene	0.0206	0.0024	mg/Kg dry	0.0239	ND	86.0	70-130			
trans-1,2-Dichloroethylene	0.0210	0.0024	mg/Kg dry	0.0239	ND	87.7	70-130			
1,2-Dichloropropane	0.0218	0.0024	mg/Kg dry	0.0239	ND	91.2	70-130			
1,3-Dichloropropane	0.0234	0.0012	mg/Kg dry	0.0239	ND	97.7	70-130			
2,2-Dichloropropane	0.0200	0.0024	mg/Kg dry	0.0239	ND	83.5	70-130			
1,1-Dichloropropene	0.0205	0.0024	mg/Kg dry	0.0239	ND	85.7	70-130			
cis-1,3-Dichloropropene	0.0227	0.0012	mg/Kg dry	0.0239	ND	94.8	70-130			
trans-1,3-Dichloropropene	0.0225	0.0012	mg/Kg dry	0.0239	ND	94.2	70-130			
Diethyl Ether	0.0245	0.024	mg/Kg dry	0.0239	ND	102	70-130			
Diisopropyl Ether (DIPE)	0.0215	0.0012	mg/Kg dry	0.0239	ND	89.8	70-130			
1,4-Dioxane	0.300	0.12	mg/Kg dry	0.239	ND	125	70-130			V-36
Ethylbenzene	0.0213	0.0024	mg/Kg dry	0.0239	ND	89.2	70-130			
Hexachlorobutadiene	0.0211	0.0024	mg/Kg dry	0.0239	ND	88.3	70-130			
<b>2-Hexanone (MBK)</b>	0.370	0.024	mg/Kg dry	0.239	ND	<b>154</b> *	70-130			MS-15
Isopropylbenzene (Cumene)	0.0229	0.0024	mg/Kg dry	0.0239	ND	95.8	70-130			
p-Isopropyltoluene (p-Cymene)	0.0208	0.0024	mg/Kg dry	0.0239	ND	86.8	70-130			
<b>Methyl Acetate</b>	0.0990	0.0024	mg/Kg dry	0.0239	ND	<b>414</b> *	70-130			MS-15
Methyl tert-Butyl Ether (MTBE)	0.0231	0.0048	mg/Kg dry	0.0239	ND	96.4	70-130			
Methyl Cyclohexane	0.0198	0.0024	mg/Kg dry	0.0239	ND	82.8	70-130			
Methylene Chloride	0.0280	0.024	mg/Kg dry	0.0239	ND	117	70-130			
4-Methyl-2-pentanone (MIBK)	0.263	0.024	mg/Kg dry	0.239	ND	110	70-130			
Naphthalene	0.0212	0.0048	mg/Kg dry	0.0239	ND	88.6	70-130			
n-Propylbenzene	0.0220	0.0024	mg/Kg dry	0.0239	ND	91.8	70-130			
Styrene	0.0220	0.0024	mg/Kg dry	0.0239	ND	92.0	70-130			
1,1,1,2-Tetrachloroethane	0.0222	0.0024	mg/Kg dry	0.0239	ND	92.9	70-130			
1,1,2,2-Tetrachloroethane	0.0236	0.0012	mg/Kg dry	0.0239	ND	98.8	70-130			
<b>Tetrachloroethylene</b>	0.231	0.0024	mg/Kg dry	0.0239	0.391	<b>-669</b> *	70-130			MS-07A

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B213971 - SW-846 5035</b>										
<b>Matrix Spike (B213971-MS1)</b>										
		<b>Source: 18I1225-04</b>			Prepared & Analyzed: 10/04/18					
Tetrahydrofuran	0.0250	0.012	mg/Kg dry	0.0239	ND	104	70-130			
Toluene	0.0199	0.0024	mg/Kg dry	0.0239	ND	83.1	70-130			
1,2,3-Trichlorobenzene	0.0225	0.0024	mg/Kg dry	0.0239	ND	94.0	70-130			
1,2,4-Trichlorobenzene	0.0245	0.0024	mg/Kg dry	0.0239	ND	102	70-130			
1,3,5-Trichlorobenzene	0.0233	0.0024	mg/Kg dry	0.0239	ND	97.2	70-130			
1,1,1-Trichloroethane	0.0192	0.0024	mg/Kg dry	0.0239	ND	80.2	70-130			
1,1,2-Trichloroethane	0.0217	0.0024	mg/Kg dry	0.0239	ND	90.6	70-130			
Trichloroethylene	0.0248	0.0024	mg/Kg dry	0.0239	0.00751	72.1	70-130			
Trichlorofluoromethane (Freon 11)	0.0193	0.012	mg/Kg dry	0.0239	ND	80.7	70-130			
1,2,3-Trichloropropane	0.0241	0.0024	mg/Kg dry	0.0239	ND	100	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0202	0.012	mg/Kg dry	0.0239	ND	84.4	70-130			
1,2,4-Trimethylbenzene	0.0210	0.0024	mg/Kg dry	0.0239	ND	87.9	70-130			
1,3,5-Trimethylbenzene	0.0218	0.0024	mg/Kg dry	0.0239	ND	91.1	70-130			
Vinyl Chloride	0.0191	0.012	mg/Kg dry	0.0239	ND	79.9	70-130			
m+p Xylene	0.0422	0.0048	mg/Kg dry	0.0479	ND	88.2	70-130			
o-Xylene	0.0216	0.0024	mg/Kg dry	0.0239	ND	90.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0615		mg/Kg dry	0.0598		103	70-130			
Surrogate: Toluene-d8	0.0599		mg/Kg dry	0.0598		100	70-130			
Surrogate: 4-Bromofluorobenzene	0.0603		mg/Kg dry	0.0598		101	70-130			
<b>Matrix Spike Dup (B213971-MSD1)</b>										
		<b>Source: 18I1225-04</b>			Prepared & Analyzed: 10/04/18					
Acetone	0.509	0.11	mg/Kg dry	0.228	ND	223 *	70-130	17.7	30	MS-15
Acrylonitrile	0.0195	0.0068	mg/Kg dry	0.0228	ND	85.4	70-130	11.5	30	
tert-Amyl Methyl Ether (TAME)	0.0207	0.0011	mg/Kg dry	0.0228	ND	90.9	70-130	10.4	30	
Benzene	0.0191	0.0023	mg/Kg dry	0.0228	ND	83.7	70-130	5.96	30	
Bromobenzene	0.0192	0.0023	mg/Kg dry	0.0228	ND	84.1	70-130	9.75	30	
Bromochloromethane	0.0216	0.0023	mg/Kg dry	0.0228	ND	94.6	70-130	8.50	30	
Bromodichloromethane	0.0186	0.0023	mg/Kg dry	0.0228	ND	81.7	70-130	12.3	30	
Bromoform	0.0201	0.0023	mg/Kg dry	0.0228	ND	88.2	70-130	13.9	30	
Bromomethane	0.0157	0.011	mg/Kg dry	0.0228	ND	68.6 *	70-130	4.04	30	MS-07A, V-34
2-Butanone (MEK)	0.361	0.046	mg/Kg dry	0.228	ND	158 *	70-130	18.9	30	MS-15
tert-Butyl Alcohol (TBA)	0.198	0.046	mg/Kg dry	0.228	ND	86.9	70-130	10.9	30	
n-Butylbenzene	0.0189	0.0023	mg/Kg dry	0.0228	ND	82.9	70-130	14.1	30	
sec-Butylbenzene	0.0206	0.0023	mg/Kg dry	0.0228	ND	90.2	70-130	7.50	30	
tert-Butylbenzene	0.0188	0.0023	mg/Kg dry	0.0228	ND	82.4	70-130	12.1	30	
tert-Butyl Ethyl Ether (TBEE)	0.0204	0.0011	mg/Kg dry	0.0228	ND	89.2	70-130	4.99	30	
Carbon Disulfide	0.0197	0.0068	mg/Kg dry	0.0228	ND	86.4	70-130	9.73	30	
Carbon Tetrachloride	0.0205	0.0023	mg/Kg dry	0.0228	ND	90.0	70-130	4.99	30	
Chlorobenzene	0.0199	0.0023	mg/Kg dry	0.0228	ND	87.4	70-130	13.0	30	
Chlorodibromomethane	0.0213	0.0011	mg/Kg dry	0.0228	ND	93.5	70-130	12.7	30	
Chloroethane	0.0186	0.023	mg/Kg dry	0.0228	ND	81.3	70-130	1.65	30	J
Chloroform	0.0194	0.0046	mg/Kg dry	0.0228	ND	84.9	70-130	6.29	30	
Chloromethane	0.0184	0.011	mg/Kg dry	0.0228	ND	80.5	70-130	7.34	30	
2-Chlorotoluene	0.0194	0.0023	mg/Kg dry	0.0228	ND	85.2	70-130	11.1	30	
4-Chlorotoluene	0.0191	0.0023	mg/Kg dry	0.0228	ND	83.9	70-130	11.2	30	
1,2-Dibromo-3-chloropropane (DBCP)	0.0229	0.0023	mg/Kg dry	0.0228	ND	100	70-130	3.47	30	
1,2-Dibromoethane (EDB)	0.0205	0.0011	mg/Kg dry	0.0228	ND	89.9	70-130	13.5	30	
Dibromomethane	0.0210	0.0023	mg/Kg dry	0.0228	ND	92.1	70-130	8.91	30	
1,2-Dichlorobenzene	0.0197	0.0023	mg/Kg dry	0.0228	ND	86.5	70-130	14.7	30	
1,3-Dichlorobenzene	0.0200	0.0023	mg/Kg dry	0.0228	ND	87.7	70-130	11.4	30	
1,4-Dichlorobenzene	0.0191	0.0023	mg/Kg dry	0.0228	ND	83.5	70-130	11.5	30	
trans-1,4-Dichloro-2-butene	0.0202	0.0046	mg/Kg dry	0.0228	ND	88.7	70-130	11.6	30	

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B213971 - SW-846 5035</b>										
<b>Matrix Spike Dup (B213971-MSD1)</b>										
		<b>Source: 1811225-04</b>			Prepared & Analyzed: 10/04/18					
Dichlorodifluoromethane (Freon 12)	0.0183	0.023	mg/Kg dry	0.0228	ND	80.2	70-130	9.51	30	J
1,1-Dichloroethane	0.0198	0.0023	mg/Kg dry	0.0228	ND	86.8	70-130	7.27	30	
1,2-Dichloroethane	0.0199	0.0023	mg/Kg dry	0.0228	ND	87.0	70-130	10.5	30	
1,1-Dichloroethylene	0.0186	0.0046	mg/Kg dry	0.0228	ND	81.5	70-130	7.31	30	
cis-1,2-Dichloroethylene	0.0185	0.0023	mg/Kg dry	0.0228	ND	81.2	70-130	10.5	30	
trans-1,2-Dichloroethylene	0.0200	0.0023	mg/Kg dry	0.0228	ND	87.8	70-130	4.66	30	
1,2-Dichloropropane	0.0206	0.0023	mg/Kg dry	0.0228	ND	90.4	70-130	5.65	30	
1,3-Dichloropropane	0.0208	0.0011	mg/Kg dry	0.0228	ND	91.0	70-130	11.9	30	
2,2-Dichloropropane	0.0185	0.0023	mg/Kg dry	0.0228	ND	81.1	70-130	7.68	30	
1,1-Dichloropropene	0.0192	0.0023	mg/Kg dry	0.0228	ND	84.0	70-130	6.77	30	
cis-1,3-Dichloropropene	0.0196	0.0011	mg/Kg dry	0.0228	ND	85.9	70-130	14.6	30	
trans-1,3-Dichloropropene	0.0196	0.0011	mg/Kg dry	0.0228	ND	85.8	70-130	14.1	30	
Diethyl Ether	0.0207	0.023	mg/Kg dry	0.0228	ND	90.6	70-130	16.8	30	J
Diisopropyl Ether (DIPE)	0.0202	0.0011	mg/Kg dry	0.0228	ND	88.7	70-130	6.00	30	
1,4-Dioxane	0.241	0.11	mg/Kg dry	0.228	ND	106	70-130	21.8	30	V-36
Ethylbenzene	0.0191	0.0023	mg/Kg dry	0.0228	ND	83.5	70-130	11.4	30	
Hexachlorobutadiene	0.0183	0.0023	mg/Kg dry	0.0228	ND	80.2	70-130	14.4	30	
<b>2-Hexanone (MBK)</b>	0.298	0.023	mg/Kg dry	0.228	ND	<b>131</b>	* 70-130	21.4	30	MS-15
Isopropylbenzene (Cumene)	0.0200	0.0023	mg/Kg dry	0.0228	ND	87.7	70-130	13.6	30	
p-Isopropyltoluene (p-Cymene)	0.0186	0.0023	mg/Kg dry	0.0228	ND	81.7	70-130	10.8	30	
<b>Methyl Acetate</b>	0.0910	0.0023	mg/Kg dry	0.0228	ND	<b>399</b>	* 70-130	8.39	30	MS-15
Methyl tert-Butyl Ether (MTBE)	0.0220	0.0046	mg/Kg dry	0.0228	ND	96.2	70-130	4.98	30	
Methyl Cyclohexane	0.0178	0.0023	mg/Kg dry	0.0228	ND	78.1	70-130	10.6	30	
Methylene Chloride	0.0261	0.023	mg/Kg dry	0.0228	ND	114	70-130	7.10	30	
4-Methyl-2-pentanone (MIBK)	0.224	0.023	mg/Kg dry	0.228	ND	98.1	70-130	16.1	30	
Naphthalene	0.0193	0.0046	mg/Kg dry	0.0228	ND	84.5	70-130	9.50	30	
n-Propylbenzene	0.0193	0.0023	mg/Kg dry	0.0228	ND	84.8	70-130	12.7	30	
Styrene	0.0191	0.0023	mg/Kg dry	0.0228	ND	83.5	70-130	14.4	30	
1,1,1,2-Tetrachloroethane	0.0203	0.0023	mg/Kg dry	0.0228	ND	89.1	70-130	8.94	30	
1,1,2,2-Tetrachloroethane	0.0208	0.0011	mg/Kg dry	0.0228	ND	91.3	70-130	12.6	30	
<b>Tetrachloroethylene</b>	0.289	0.0023	mg/Kg dry	0.0228	0.391	<b>-449</b>	* 70-130	22.1	30	MS-07A
Tetrahydrofuran	0.0230	0.011	mg/Kg dry	0.0228	ND	101	70-130	8.28	30	
Toluene	0.0179	0.0023	mg/Kg dry	0.0228	ND	78.4	70-130	10.6	30	
1,2,3-Trichlorobenzene	0.0198	0.0023	mg/Kg dry	0.0228	ND	86.6	70-130	13.0	30	
1,2,4-Trichlorobenzene	0.0213	0.0023	mg/Kg dry	0.0228	ND	93.5	70-130	13.7	30	
1,3,5-Trichlorobenzene	0.0205	0.0023	mg/Kg dry	0.0228	ND	90.0	70-130	12.5	30	
1,1,1-Trichloroethane	0.0181	0.0023	mg/Kg dry	0.0228	ND	79.4	70-130	5.77	30	
1,1,2-Trichloroethane	0.0193	0.0023	mg/Kg dry	0.0228	ND	84.5	70-130	11.7	30	
Trichloroethylene	0.0243	0.0023	mg/Kg dry	0.0228	0.00751	73.4	70-130	2.10	30	
Trichlorofluoromethane (Freon 11)	0.0176	0.011	mg/Kg dry	0.0228	ND	77.0	70-130	9.46	30	
1,2,3-Trichloropropane	0.0208	0.0023	mg/Kg dry	0.0228	ND	91.2	70-130	14.5	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0192	0.011	mg/Kg dry	0.0228	ND	84.3	70-130	4.89	30	
1,2,4-Trimethylbenzene	0.0188	0.0023	mg/Kg dry	0.0228	ND	82.5	70-130	11.1	30	
1,3,5-Trimethylbenzene	0.0191	0.0023	mg/Kg dry	0.0228	ND	83.9	70-130	13.0	30	
Vinyl Chloride	0.0175	0.011	mg/Kg dry	0.0228	ND	76.7	70-130	8.85	30	
m+p Xylene	0.0372	0.0046	mg/Kg dry	0.0456	ND	81.6	70-130	12.6	30	
o-Xylene	0.0189	0.0023	mg/Kg dry	0.0228	ND	83.0	70-130	13.1	30	
Surrogate: 1,2-Dichloroethane-d4	0.0589		mg/Kg dry	0.0570		103	70-130			
Surrogate: Toluene-d8	0.0568		mg/Kg dry	0.0570		99.6	70-130			
Surrogate: 4-Bromofluorobenzene	0.0585		mg/Kg dry	0.0570		103	70-130			

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**QUALITY CONTROL**

**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B214232 - SW-846 5035**

**Blank (B214232-BLK1)**

Prepared & Analyzed: 10/08/18

Acetone	ND	0.10	mg/Kg wet							
Acrylonitrile	ND	0.0060	mg/Kg wet							
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg wet							
Benzene	ND	0.0020	mg/Kg wet							
Bromobenzene	ND	0.0020	mg/Kg wet							
Bromochloromethane	ND	0.0020	mg/Kg wet							
Bromodichloromethane	ND	0.0020	mg/Kg wet							
Bromoform	ND	0.0020	mg/Kg wet							
Bromomethane	ND	0.010	mg/Kg wet							V-34
2-Butanone (MEK)	ND	0.040	mg/Kg wet							
tert-Butyl Alcohol (TBA)	ND	0.040	mg/Kg wet							
n-Butylbenzene	ND	0.0020	mg/Kg wet							
sec-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg wet							
Carbon Disulfide	ND	0.0060	mg/Kg wet							
Carbon Tetrachloride	ND	0.0020	mg/Kg wet							
Chlorobenzene	ND	0.0020	mg/Kg wet							
Chlorodibromomethane	ND	0.0010	mg/Kg wet							
Chloroethane	ND	0.020	mg/Kg wet							
Chloroform	ND	0.0040	mg/Kg wet							
Chloromethane	ND	0.010	mg/Kg wet							
2-Chlorotoluene	ND	0.0020	mg/Kg wet							
4-Chlorotoluene	ND	0.0020	mg/Kg wet							
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg wet							
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg wet							
Dibromomethane	ND	0.0020	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.0020	mg/Kg wet							
trans-1,4-Dichloro-2-butene	ND	0.0040	mg/Kg wet							
Dichlorodifluoromethane (Freon 12)	ND	0.020	mg/Kg wet							
1,1-Dichloroethane	ND	0.0020	mg/Kg wet							
1,2-Dichloroethane	ND	0.0020	mg/Kg wet							
1,1-Dichloroethylene	ND	0.0040	mg/Kg wet							
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
1,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,3-Dichloropropane	ND	0.0010	mg/Kg wet							
2,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,1-Dichloropropene	ND	0.0020	mg/Kg wet							
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
Diethyl Ether	ND	0.020	mg/Kg wet							
Diisopropyl Ether (DIPE)	ND	0.0010	mg/Kg wet							
1,4-Dioxane	ND	0.10	mg/Kg wet							
Ethylbenzene	ND	0.0020	mg/Kg wet							
Hexachlorobutadiene	ND	0.0020	mg/Kg wet							
2-Hexanone (MBK)	ND	0.020	mg/Kg wet							
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg wet							
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg wet							
Methyl Acetate	ND	0.0020	mg/Kg wet							



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**QUALITY CONTROL**

**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B214232 - SW-846 5035**

**Blank (B214232-BLK1)**

Prepared & Analyzed: 10/08/18

Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg wet							
Methyl Cyclohexane	ND	0.0020	mg/Kg wet							
Methylene Chloride	ND	0.020	mg/Kg wet							
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg wet							
Naphthalene	ND	0.0040	mg/Kg wet							
n-Propylbenzene	ND	0.0020	mg/Kg wet							
Styrene	ND	0.0020	mg/Kg wet							
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg wet							
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg wet							
Tetrachloroethylene	ND	0.0020	mg/Kg wet							
Tetrahydrofuran	ND	0.010	mg/Kg wet							
Toluene	ND	0.0020	mg/Kg wet							
1,2,3-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,3,5-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,1,1-Trichloroethane	ND	0.0020	mg/Kg wet							
1,1,2-Trichloroethane	ND	0.0020	mg/Kg wet							
Trichloroethylene	ND	0.0020	mg/Kg wet							
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg wet							
1,2,3-Trichloropropane	ND	0.0020	mg/Kg wet							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.010	mg/Kg wet							
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg wet							
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg wet							
Vinyl Chloride	ND	0.010	mg/Kg wet							
m+p Xylene	ND	0.0040	mg/Kg wet							
o-Xylene	ND	0.0020	mg/Kg wet							
Surrogate: 1,2-Dichloroethane-d4	0.0534		mg/Kg wet	0.0500		107	70-130			
Surrogate: Toluene-d8	0.0499		mg/Kg wet	0.0500		99.9	70-130			
Surrogate: 4-Bromofluorobenzene	0.0500		mg/Kg wet	0.0500		100	70-130			

**LCS (B214232-BS1)**

Prepared & Analyzed: 10/08/18

Acetone	0.275	0.10	mg/Kg wet	0.200		138	70-160			†
Acrylonitrile	0.0191	0.0060	mg/Kg wet	0.0200		95.7	70-130			
tert-Amyl Methyl Ether (TAME)	0.0199	0.0010	mg/Kg wet	0.0200		99.6	70-130			
Benzene	0.0188	0.0020	mg/Kg wet	0.0200		94.2	70-130			
Bromobenzene	0.0186	0.0020	mg/Kg wet	0.0200		93.1	70-130			
Bromochloromethane	0.0219	0.0020	mg/Kg wet	0.0200		109	70-130			
Bromodichloromethane	0.0185	0.0020	mg/Kg wet	0.0200		92.6	70-130			
Bromoform	0.0194	0.0020	mg/Kg wet	0.0200		96.8	70-130			
Bromomethane	0.0110	0.010	mg/Kg wet	0.0200		55.1	40-130		V-34	†
2-Butanone (MEK)	0.239	0.040	mg/Kg wet	0.200		120	70-160			†
tert-Butyl Alcohol (TBA)	0.199	0.040	mg/Kg wet	0.200		99.7	40-130			†
n-Butylbenzene	0.0187	0.0020	mg/Kg wet	0.0200		93.5	70-130			
sec-Butylbenzene	0.0200	0.0020	mg/Kg wet	0.0200		99.9	70-130			
tert-Butylbenzene	0.0181	0.0020	mg/Kg wet	0.0200		90.6	70-160			†
tert-Butyl Ethyl Ether (TBEE)	0.0201	0.0010	mg/Kg wet	0.0200		100	70-130			
Carbon Disulfide	0.0196	0.0060	mg/Kg wet	0.0200		97.8	70-130			
Carbon Tetrachloride	0.0203	0.0020	mg/Kg wet	0.0200		102	70-130			
Chlorobenzene	0.0196	0.0020	mg/Kg wet	0.0200		98.0	70-130			
Chlorodibromomethane	0.0202	0.0010	mg/Kg wet	0.0200		101	70-130			
Chloroethane	0.0166	0.020	mg/Kg wet	0.0200		82.9	70-130			
Chloroform	0.0194	0.0040	mg/Kg wet	0.0200		97.2	70-130			

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B214232 - SW-846 5035</b>										
<b>LCS (B214232-BS1)</b>										
Prepared & Analyzed: 10/08/18										
Chloromethane	0.0177	0.010	mg/Kg wet	0.0200		88.3	70-130			
2-Chlorotoluene	0.0186	0.0020	mg/Kg wet	0.0200		93.1	70-130			
4-Chlorotoluene	0.0194	0.0020	mg/Kg wet	0.0200		97.2	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	0.0226	0.0020	mg/Kg wet	0.0200		113	70-130			
1,2-Dibromoethane (EDB)	0.0200	0.0010	mg/Kg wet	0.0200		100	70-130			
Dibromomethane	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130			
1,2-Dichlorobenzene	0.0198	0.0020	mg/Kg wet	0.0200		98.8	70-130			
1,3-Dichlorobenzene	0.0195	0.0020	mg/Kg wet	0.0200		97.7	70-130			
1,4-Dichlorobenzene	0.0190	0.0020	mg/Kg wet	0.0200		94.9	70-130			
trans-1,4-Dichloro-2-butene	0.0191	0.0040	mg/Kg wet	0.0200		95.5	70-130			
Dichlorodifluoromethane (Freon 12)	0.0172	0.020	mg/Kg wet	0.0200		85.9	40-160			J †
1,1-Dichloroethane	0.0198	0.0020	mg/Kg wet	0.0200		98.8	70-130			
1,2-Dichloroethane	0.0196	0.0020	mg/Kg wet	0.0200		98.1	70-130			
1,1-Dichloroethylene	0.0184	0.0040	mg/Kg wet	0.0200		92.2	70-130			
cis-1,2-Dichloroethylene	0.0187	0.0020	mg/Kg wet	0.0200		93.4	70-130			
trans-1,2-Dichloroethylene	0.0199	0.0020	mg/Kg wet	0.0200		99.4	70-130			
1,2-Dichloropropane	0.0196	0.0020	mg/Kg wet	0.0200		97.9	70-130			
1,3-Dichloropropane	0.0192	0.0010	mg/Kg wet	0.0200		96.1	70-130			
2,2-Dichloropropane	0.0185	0.0020	mg/Kg wet	0.0200		92.7	70-130			
1,1-Dichloropropene	0.0200	0.0020	mg/Kg wet	0.0200		99.9	70-130			
cis-1,3-Dichloropropene	0.0206	0.0010	mg/Kg wet	0.0200		103	70-130			
trans-1,3-Dichloropropene	0.0203	0.0010	mg/Kg wet	0.0200		101	70-130			
Diethyl Ether	0.0195	0.020	mg/Kg wet	0.0200		97.4	70-130			J
Diisopropyl Ether (DIPE)	0.0195	0.0010	mg/Kg wet	0.0200		97.7	70-130			
1,4-Dioxane	0.228	0.10	mg/Kg wet	0.200		114	40-160			V-36 †
Ethylbenzene	0.0185	0.0020	mg/Kg wet	0.0200		92.5	70-130			
Hexachlorobutadiene	0.0200	0.0020	mg/Kg wet	0.0200		99.9	70-160			
2-Hexanone (MBK)	0.220	0.020	mg/Kg wet	0.200		110	70-160			†
Isopropylbenzene (Cumene)	0.0205	0.0020	mg/Kg wet	0.0200		103	70-130			
p-Isopropyltoluene (p-Cymene)	0.0180	0.0020	mg/Kg wet	0.0200		90.2	70-130			
<b>Methyl Acetate</b>	0.0829	0.0020	mg/Kg wet	0.0200		<b>414 *</b>	70-130			L-02
Methyl tert-Butyl Ether (MTBE)	0.0208	0.0040	mg/Kg wet	0.0200		104	70-130			
Methyl Cyclohexane	0.0175	0.0020	mg/Kg wet	0.0200		87.7	70-130			
Methylene Chloride	0.0205	0.020	mg/Kg wet	0.0200		102	40-160			†
4-Methyl-2-pentanone (MIBK)	0.214	0.020	mg/Kg wet	0.200		107	70-160			†
Naphthalene	0.0191	0.0040	mg/Kg wet	0.0200		95.7	40-130			†
n-Propylbenzene	0.0191	0.0020	mg/Kg wet	0.0200		95.4	70-130			
Styrene	0.0192	0.0020	mg/Kg wet	0.0200		96.1	70-130			
1,1,1,2-Tetrachloroethane	0.0197	0.0020	mg/Kg wet	0.0200		98.5	70-130			
1,1,2,2-Tetrachloroethane	0.0195	0.0010	mg/Kg wet	0.0200		97.5	70-130			
Tetrachloroethylene	0.0195	0.0020	mg/Kg wet	0.0200		97.7	70-130			
Tetrahydrofuran	0.0174	0.010	mg/Kg wet	0.0200		87.1	70-130			
Toluene	0.0177	0.0020	mg/Kg wet	0.0200		88.5	70-130			
1,2,3-Trichlorobenzene	0.0196	0.0020	mg/Kg wet	0.0200		97.8	70-130			
1,2,4-Trichlorobenzene	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130			
1,3,5-Trichlorobenzene	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130			
1,1,1-Trichloroethane	0.0186	0.0020	mg/Kg wet	0.0200		93.1	70-130			
1,1,2-Trichloroethane	0.0193	0.0020	mg/Kg wet	0.0200		96.4	70-130			
Trichloroethylene	0.0192	0.0020	mg/Kg wet	0.0200		96.2	70-130			
Trichlorofluoromethane (Freon 11)	0.0174	0.010	mg/Kg wet	0.0200		87.1	70-130			
1,2,3-Trichloropropane	0.0196	0.0020	mg/Kg wet	0.0200		97.8	70-130			



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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B214232 - SW-846 5035

LCS (B214232-BS1)

Prepared & Analyzed: 10/08/18

1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0189	0.010	mg/Kg wet	0.0200		94.6	70-130			
1,2,4-Trimethylbenzene	0.0178	0.0020	mg/Kg wet	0.0200		89.1	70-130			
1,3,5-Trimethylbenzene	0.0192	0.0020	mg/Kg wet	0.0200		95.8	70-130			
Vinyl Chloride	0.0176	0.010	mg/Kg wet	0.0200		88.1	40-130			†
m+p Xylene	0.0370	0.0040	mg/Kg wet	0.0400		92.4	70-130			
o-Xylene	0.0189	0.0020	mg/Kg wet	0.0200		94.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0517		mg/Kg wet	0.0500		103	70-130			
Surrogate: Toluene-d8	0.0497		mg/Kg wet	0.0500		99.3	70-130			
Surrogate: 4-Bromofluorobenzene	0.0503		mg/Kg wet	0.0500		101	70-130			

LCS Dup (B214232-BSD1)

Prepared & Analyzed: 10/08/18

Acetone	0.313	0.10	mg/Kg wet	0.200		157	70-160	13.0	25	†
Acrylonitrile	0.0203	0.0060	mg/Kg wet	0.0200		101	70-130	5.78	25	
tert-Amyl Methyl Ether (TAME)	0.0212	0.0010	mg/Kg wet	0.0200		106	70-130	6.41	25	
Benzene	0.0200	0.0020	mg/Kg wet	0.0200		100	70-130	5.97	25	
Bromobenzene	0.0194	0.0020	mg/Kg wet	0.0200		97.1	70-130	4.21	25	
Bromochloromethane	0.0222	0.0020	mg/Kg wet	0.0200		111	70-130	1.36	25	
Bromodichloromethane	0.0189	0.0020	mg/Kg wet	0.0200		94.7	70-130	2.24	25	
Bromoform	0.0201	0.0020	mg/Kg wet	0.0200		101	70-130	3.95	25	
Bromomethane	0.0114	0.010	mg/Kg wet	0.0200		57.2	40-130	3.74	25	V-34 †
2-Butanone (MEK)	0.264	0.040	mg/Kg wet	0.200		132	70-160	9.94	25	†
tert-Butyl Alcohol (TBA)	0.210	0.040	mg/Kg wet	0.200		105	40-130	5.27	25	†
n-Butylbenzene	0.0197	0.0020	mg/Kg wet	0.0200		98.3	70-130	5.01	25	
sec-Butylbenzene	0.0208	0.0020	mg/Kg wet	0.0200		104	70-130	3.83	25	
tert-Butylbenzene	0.0200	0.0020	mg/Kg wet	0.0200		100	70-160	9.96	25	†
tert-Butyl Ethyl Ether (TBEE)	0.0210	0.0010	mg/Kg wet	0.0200		105	70-130	4.48	25	
Carbon Disulfide	0.0204	0.0060	mg/Kg wet	0.0200		102	70-130	4.01	25	
Carbon Tetrachloride	0.0209	0.0020	mg/Kg wet	0.0200		104	70-130	2.81	25	
Chlorobenzene	0.0197	0.0020	mg/Kg wet	0.0200		98.6	70-130	0.610	25	
Chlorodibromomethane	0.0218	0.0010	mg/Kg wet	0.0200		109	70-130	7.82	25	
Chloroethane	0.0179	0.020	mg/Kg wet	0.0200		89.4	70-130	7.54	25	J
Chloroform	0.0201	0.0040	mg/Kg wet	0.0200		100	70-130	3.24	25	
Chloromethane	0.0187	0.010	mg/Kg wet	0.0200		93.7	70-130	5.93	25	
2-Chlorotoluene	0.0197	0.0020	mg/Kg wet	0.0200		98.6	70-130	5.74	25	
4-Chlorotoluene	0.0196	0.0020	mg/Kg wet	0.0200		98.0	70-130	0.820	25	
1,2-Dibromo-3-chloropropane (DBCP)	0.0222	0.0020	mg/Kg wet	0.0200		111	70-130	1.69	25	
1,2-Dibromoethane (EDB)	0.0209	0.0010	mg/Kg wet	0.0200		105	70-130	4.59	25	
Dibromomethane	0.0200	0.0020	mg/Kg wet	0.0200		100	70-130	1.88	25	
1,2-Dichlorobenzene	0.0210	0.0020	mg/Kg wet	0.0200		105	70-130	5.89	25	
1,3-Dichlorobenzene	0.0205	0.0020	mg/Kg wet	0.0200		103	70-130	4.89	25	
1,4-Dichlorobenzene	0.0196	0.0020	mg/Kg wet	0.0200		97.9	70-130	3.11	25	
trans-1,4-Dichloro-2-butene	0.0195	0.0040	mg/Kg wet	0.0200		97.3	70-130	1.87	25	
Dichlorodifluoromethane (Freon 12)	0.0170	0.020	mg/Kg wet	0.0200		85.1	40-160	0.936	25	J †
1,1-Dichloroethane	0.0198	0.0020	mg/Kg wet	0.0200		98.8	70-130	0.00	25	
1,2-Dichloroethane	0.0200	0.0020	mg/Kg wet	0.0200		100	70-130	2.12	25	
1,1-Dichloroethylene	0.0191	0.0040	mg/Kg wet	0.0200		95.5	70-130	3.52	25	
cis-1,2-Dichloroethylene	0.0197	0.0020	mg/Kg wet	0.0200		98.7	70-130	5.52	25	
trans-1,2-Dichloroethylene	0.0203	0.0020	mg/Kg wet	0.0200		102	70-130	2.09	25	
1,2-Dichloropropane	0.0198	0.0020	mg/Kg wet	0.0200		98.8	70-130	0.915	25	
1,3-Dichloropropane	0.0204	0.0010	mg/Kg wet	0.0200		102	70-130	6.05	25	
2,2-Dichloropropane	0.0193	0.0020	mg/Kg wet	0.0200		96.3	70-130	3.81	25	
1,1-Dichloropropene	0.0200	0.0020	mg/Kg wet	0.0200		100	70-130	0.100	25	

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B214232 - SW-846 5035</b>										
<b>LCS Dup (B214232-BSD1)</b>										
Prepared & Analyzed: 10/08/18										
cis-1,3-Dichloropropene	0.0204	0.0010	mg/Kg wet	0.0200		102	70-130	1.27	25	
trans-1,3-Dichloropropene	0.0202	0.0010	mg/Kg wet	0.0200		101	70-130	0.197	25	
Diethyl Ether	0.0220	0.020	mg/Kg wet	0.0200		110	70-130	12.2	25	
Diisopropyl Ether (DIPE)	0.0205	0.0010	mg/Kg wet	0.0200		102	70-130	4.70	25	
1,4-Dioxane	0.259	0.10	mg/Kg wet	0.200		130	40-160	12.8	50	V-36 † ‡
Ethylbenzene	0.0197	0.0020	mg/Kg wet	0.0200		98.6	70-130	6.38	25	
Hexachlorobutadiene	0.0216	0.0020	mg/Kg wet	0.0200		108	70-160	7.98	25	
2-Hexanone (MBK)	0.239	0.020	mg/Kg wet	0.200		120	70-160	8.10	25	†
Isopropylbenzene (Cumene)	0.0208	0.0020	mg/Kg wet	0.0200		104	70-130	1.45	25	
p-Isopropyltoluene (p-Cymene)	0.0189	0.0020	mg/Kg wet	0.0200		94.5	70-130	4.66	25	
<b>Methyl Acetate</b>	0.0885	0.0020	mg/Kg wet	0.0200		<b>442</b> *	70-130	6.54	25	L-02
Methyl tert-Butyl Ether (MTBE)	0.0218	0.0040	mg/Kg wet	0.0200		109	70-130	4.60	25	
Methyl Cyclohexane	0.0190	0.0020	mg/Kg wet	0.0200		94.8	70-130	7.78	25	
Methylene Chloride	0.0223	0.020	mg/Kg wet	0.0200		112	40-160	8.50	25	†
4-Methyl-2-pentanone (MIBK)	0.225	0.020	mg/Kg wet	0.200		112	70-160	4.99	25	†
Naphthalene	0.0195	0.0040	mg/Kg wet	0.0200		97.7	40-130	2.07	25	†
n-Propylbenzene	0.0201	0.0020	mg/Kg wet	0.0200		101	70-130	5.31	25	
Styrene	0.0191	0.0020	mg/Kg wet	0.0200		95.5	70-130	0.626	25	
1,1,1,2-Tetrachloroethane	0.0195	0.0020	mg/Kg wet	0.0200		97.7	70-130	0.815	25	
1,1,2,2-Tetrachloroethane	0.0200	0.0010	mg/Kg wet	0.0200		99.8	70-130	2.33	25	
Tetrachloroethylene	0.0199	0.0020	mg/Kg wet	0.0200		99.4	70-130	1.73	25	
Tetrahydrofuran	0.0205	0.010	mg/Kg wet	0.0200		103	70-130	16.4	25	
Toluene	0.0191	0.0020	mg/Kg wet	0.0200		95.5	70-130	7.61	25	
1,2,3-Trichlorobenzene	0.0196	0.0020	mg/Kg wet	0.0200		98.1	70-130	0.306	25	
1,2,4-Trichlorobenzene	0.0221	0.0020	mg/Kg wet	0.0200		110	70-130	7.90	25	
1,3,5-Trichlorobenzene	0.0209	0.0020	mg/Kg wet	0.0200		104	70-130	1.45	25	
1,1,1-Trichloroethane	0.0195	0.0020	mg/Kg wet	0.0200		97.6	70-130	4.72	25	
1,1,2-Trichloroethane	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130	6.62	25	
Trichloroethylene	0.0195	0.0020	mg/Kg wet	0.0200		97.3	70-130	1.14	25	
Trichlorofluoromethane (Freon 11)	0.0179	0.010	mg/Kg wet	0.0200		89.4	70-130	2.61	25	
1,2,3-Trichloropropane	0.0192	0.0020	mg/Kg wet	0.0200		95.9	70-130	1.96	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0191	0.010	mg/Kg wet	0.0200		95.5	70-130	0.947	25	
1,2,4-Trimethylbenzene	0.0189	0.0020	mg/Kg wet	0.0200		94.5	70-130	5.88	25	
1,3,5-Trimethylbenzene	0.0193	0.0020	mg/Kg wet	0.0200		96.4	70-130	0.624	25	
Vinyl Chloride	0.0179	0.010	mg/Kg wet	0.0200		89.5	40-130	1.58	25	†
m+p Xylene	0.0380	0.0040	mg/Kg wet	0.0400		94.9	70-130	2.62	25	
o-Xylene	0.0192	0.0020	mg/Kg wet	0.0200		95.9	70-130	1.68	25	
Surrogate: 1,2-Dichloroethane-d4	0.0528		mg/Kg wet	0.0500		106	70-130			
Surrogate: Toluene-d8	0.0503		mg/Kg wet	0.0500		101	70-130			
Surrogate: 4-Bromofluorobenzene	0.0496		mg/Kg wet	0.0500		99.2	70-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B213872 - SW-846 3510C

Blank (B213872-BLK1)

Prepared: 10/03/18 Analyzed: 10/04/18

Acenaphthene	ND	5.0	µg/L							
Acenaphthylene	ND	5.0	µg/L							
Acetophenone	ND	10	µg/L							
Aniline	ND	5.0	µg/L							V-05
Anthracene	ND	5.0	µg/L							
Benzidine	ND	20	µg/L							R-05, V-04, V-05
Benzo(a)anthracene	ND	5.0	µg/L							
Benzo(a)pyrene	ND	5.0	µg/L							
Benzo(b)fluoranthene	ND	5.0	µg/L							
Benzo(g,h,i)perylene	ND	5.0	µg/L							
Benzo(k)fluoranthene	ND	5.0	µg/L							
Benzoic Acid	ND	10	µg/L							V-06
Bis(2-chloroethoxy)methane	ND	10	µg/L							
Bis(2-chloroethyl)ether	ND	10	µg/L							V-05
Bis(2-chloroisopropyl)ether	ND	10	µg/L							V-05
Bis(2-Ethylhexyl)phthalate	ND	10	µg/L							
4-Bromophenylphenylether	ND	10	µg/L							
Butylbenzylphthalate	ND	10	µg/L							
Carbazole	ND	10	µg/L							
4-Chloroaniline	ND	10	µg/L							V-34
4-Chloro-3-methylphenol	ND	10	µg/L							
2-Chloronaphthalene	ND	10	µg/L							
2-Chlorophenol	ND	10	µg/L							
4-Chlorophenylphenylether	ND	10	µg/L							
Chrysene	ND	5.0	µg/L							
Dibenz(a,h)anthracene	ND	5.0	µg/L							
Dibenzofuran	ND	5.0	µg/L							
Di-n-butylphthalate	ND	10	µg/L							
1,2-Dichlorobenzene	ND	5.0	µg/L							
1,3-Dichlorobenzene	ND	5.0	µg/L							
1,4-Dichlorobenzene	ND	5.0	µg/L							
3,3-Dichlorobenzidine	ND	10	µg/L							
2,4-Dichlorophenol	ND	10	µg/L							
Diethylphthalate	ND	10	µg/L							
2,4-Dimethylphenol	ND	10	µg/L							
Dimethylphthalate	ND	10	µg/L							
4,6-Dinitro-2-methylphenol	ND	10	µg/L							
2,4-Dinitrophenol	ND	10	µg/L							V-19
2,4-Dinitrotoluene	ND	10	µg/L							V-06
2,6-Dinitrotoluene	ND	10	µg/L							
Di-n-octylphthalate	ND	10	µg/L							
1,2-Diphenylhydrazine (as Azobenzene)	ND	10	µg/L							
Fluoranthene	ND	5.0	µg/L							
Fluorene	ND	5.0	µg/L							
Hexachlorobenzene	ND	10	µg/L							
Hexachlorobutadiene	ND	10	µg/L							V-06
Hexachlorocyclopentadiene	ND	10	µg/L							
Hexachloroethane	ND	10	µg/L							
Indeno(1,2,3-cd)pyrene	ND	5.0	µg/L							
Isophorone	ND	10	µg/L							
1-Methylnaphthalene	ND	5.0	µg/L							
2-Methylnaphthalene	ND	5.0	µg/L							

QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B213872 - SW-846 3510C

Blank (B213872-BLK1)

Prepared: 10/03/18 Analyzed: 10/04/18

2-Methylphenol	ND	10	µg/L							
3/4-Methylphenol	ND	10	µg/L							
Naphthalene	ND	5.0	µg/L							
2-Nitroaniline	ND	10	µg/L							
3-Nitroaniline	ND	10	µg/L							
4-Nitroaniline	ND	10	µg/L							
Nitrobenzene	ND	10	µg/L							
2-Nitrophenol	ND	10	µg/L							
4-Nitrophenol	ND	10	µg/L							
N-Nitrosodimethylamine	ND	10	µg/L							
N-Nitrosodiphenylamine	ND	10	µg/L							
N-Nitrosodi-n-propylamine	ND	10	µg/L							
Pentachloronitrobenzene	ND	10	µg/L							V-06
Pentachlorophenol	ND	10	µg/L							
Phenanthrene	ND	5.0	µg/L							
Phenol	ND	10	µg/L							
Pyrene	ND	5.0	µg/L							
Pyridine	ND	5.0	µg/L							
1,2,4,5-Tetrachlorobenzene	ND	10	µg/L							
1,2,4-Trichlorobenzene	ND	5.0	µg/L							
2,4,5-Trichlorophenol	ND	10	µg/L							
2,4,6-Trichlorophenol	ND	10	µg/L							
Surrogate: 2-Fluorophenol	99.9		µg/L	200		50.0	15-110			
Surrogate: Phenol-d6	73.9		µg/L	200		36.9	15-110			
Surrogate: Nitrobenzene-d5	74.2		µg/L	100		74.2	30-130			
Surrogate: 2-Fluorobiphenyl	82.7		µg/L	100		82.7	30-130			
Surrogate: 2,4,6-Tribromophenol	183		µg/L	200		91.3	15-110			
Surrogate: p-Terphenyl-d14	92.0		µg/L	100		92.0	30-130			

LCS (B213872-BS1)

Prepared: 10/03/18 Analyzed: 10/04/18

Acenaphthene	41.8	5.0	µg/L	50.0		83.5	40-140			
Acenaphthylene	40.4	5.0	µg/L	50.0		80.7	40-140			
Acetophenone	40.0	10	µg/L	50.0		80.0	40-140			
Aniline	30.2	5.0	µg/L	50.0		60.4	40-140			V-05
Anthracene	42.1	5.0	µg/L	50.0		84.2	40-140			
Benzidine	39.8	20	µg/L	50.0		79.6	40-140			R-05, V-04, V-05
Benzo(a)anthracene	42.2	5.0	µg/L	50.0		84.5	40-140			
Benzo(a)pyrene	44.7	5.0	µg/L	50.0		89.4	40-140			
Benzo(b)fluoranthene	43.3	5.0	µg/L	50.0		86.6	40-140			
Benzo(g,h,i)perylene	44.4	5.0	µg/L	50.0		88.7	40-140			
Benzo(k)fluoranthene	45.0	5.0	µg/L	50.0		89.9	40-140			
Benzoic Acid	22.8	10	µg/L	50.0		45.7	10-130			V-06 †
Bis(2-chloroethoxy)methane	43.7	10	µg/L	50.0		87.3	40-140			
Bis(2-chloroethyl)ether	33.6	10	µg/L	50.0		67.1	40-140			V-05
Bis(2-chloroisopropyl)ether	34.4	10	µg/L	50.0		68.7	40-140			V-05
Bis(2-Ethylhexyl)phthalate	41.1	10	µg/L	50.0		82.3	40-140			
4-Bromophenylphenylether	45.4	10	µg/L	50.0		90.7	40-140			
Butylbenzylphthalate	43.3	10	µg/L	50.0		86.7	40-140			
Carbazole	39.7	10	µg/L	50.0		79.3	40-140			
4-Chloroaniline	36.6	10	µg/L	50.0		73.2	40-140			V-34
4-Chloro-3-methylphenol	43.0	10	µg/L	50.0		86.1	30-130			
2-Chloronaphthalene	35.0	10	µg/L	50.0		70.1	40-140			

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Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B213872 - SW-846 3510C</b>										
<b>LCS (B213872-BS1)</b>										
				Prepared: 10/03/18 Analyzed: 10/04/18						
2-Chlorophenol	37.2	10	µg/L	50.0		74.5	30-130			
4-Chlorophenylphenylether	46.2	10	µg/L	50.0		92.4	40-140			
Chrysene	40.0	5.0	µg/L	50.0		80.1	40-140			
Dibenz(a,h)anthracene	42.3	5.0	µg/L	50.0		84.7	40-140			
Dibenzofuran	42.2	5.0	µg/L	50.0		84.5	40-140			
Di-n-butylphthalate	42.6	10	µg/L	50.0		85.1	40-140			
1,2-Dichlorobenzene	35.6	5.0	µg/L	50.0		71.2	40-140			
1,3-Dichlorobenzene	34.4	5.0	µg/L	50.0		68.8	40-140			
1,4-Dichlorobenzene	34.4	5.0	µg/L	50.0		68.9	40-140			
3,3-Dichlorobenzidine	58.9	10	µg/L	50.0		118	40-140			
2,4-Dichlorophenol	44.0	10	µg/L	50.0		88.0	30-130			
Diethylphthalate	44.1	10	µg/L	50.0		88.2	40-140			
2,4-Dimethylphenol	36.1	10	µg/L	50.0		72.2	30-130			
Dimethylphthalate	44.0	10	µg/L	50.0		88.1	40-140			
4,6-Dinitro-2-methylphenol	45.5	10	µg/L	50.0		91.0	30-130			
2,4-Dinitrophenol	50.2	10	µg/L	50.0		100	30-130			V-19
2,4-Dinitrotoluene	47.9	10	µg/L	50.0		95.8	40-140			V-06
2,6-Dinitrotoluene	48.9	10	µg/L	50.0		97.7	40-140			
Di-n-octylphthalate	42.6	10	µg/L	50.0		85.2	40-140			
1,2-Diphenylhydrazine (as Azobenzene)	38.0	10	µg/L	50.0		76.0	40-140			
Fluoranthene	43.1	5.0	µg/L	50.0		86.2	40-140			
Fluorene	42.9	5.0	µg/L	50.0		85.8	40-140			
Hexachlorobenzene	46.0	10	µg/L	50.0		92.0	40-140			
Hexachlorobutadiene	46.0	10	µg/L	50.0		92.1	40-140			V-06
Hexachlorocyclopentadiene	39.4	10	µg/L	50.0		78.7	30-140			†
Hexachloroethane	33.9	10	µg/L	50.0		67.8	40-140			
Indeno(1,2,3-cd)pyrene	43.3	5.0	µg/L	50.0		86.6	40-140			
Isophorone	42.1	10	µg/L	50.0		84.1	40-140			
1-Methylnaphthalene	41.8	5.0	µg/L	50.0		83.5	40-140			
2-Methylnaphthalene	45.8	5.0	µg/L	50.0		91.7	40-140			
2-Methylphenol	32.7	10	µg/L	50.0		65.4	30-130			
3/4-Methylphenol	33.0	10	µg/L	50.0		66.1	30-130			
Naphthalene	39.4	5.0	µg/L	50.0		78.8	40-140			
2-Nitroaniline	47.8	10	µg/L	50.0		95.6	40-140			
3-Nitroaniline	39.8	10	µg/L	50.0		79.6	40-140			
4-Nitroaniline	42.3	10	µg/L	50.0		84.6	40-140			
Nitrobenzene	39.5	10	µg/L	50.0		79.0	40-140			
2-Nitrophenol	43.7	10	µg/L	50.0		87.4	30-130			
4-Nitrophenol	23.0	10	µg/L	50.0		46.0	10-130			†
N-Nitrosodimethylamine	21.9	10	µg/L	50.0		43.9	40-140			
N-Nitrosodiphenylamine	50.3	10	µg/L	50.0		101	40-140			
N-Nitrosodi-n-propylamine	38.1	10	µg/L	50.0		76.2	40-140			
Pentachloronitrobenzene	48.7	10	µg/L	50.0		97.4	40-140			V-06
Pentachlorophenol	39.7	10	µg/L	50.0		79.4	30-130			
Phenanthrene	42.7	5.0	µg/L	50.0		85.4	40-140			
Phenol	17.2	10	µg/L	50.0		34.4	20-130			†
Pyrene	42.5	5.0	µg/L	50.0		84.9	40-140			
Pyridine	19.2	5.0	µg/L	50.0		38.4	10-140			†
1,2,4,5-Tetrachlorobenzene	44.7	10	µg/L	50.0		89.4	40-140			
1,2,4-Trichlorobenzene	41.5	5.0	µg/L	50.0		82.9	40-140			
2,4,5-Trichlorophenol	43.2	10	µg/L	50.0		86.3	30-130			
2,4,6-Trichlorophenol	43.2	10	µg/L	50.0		86.5	30-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B213872 - SW-846 3510C

LCS (B213872-BS1)

Prepared: 10/03/18 Analyzed: 10/04/18

Surrogate: 2-Fluorophenol	101		µg/L	200		50.4	15-110			
Surrogate: Phenol-d6	76.7		µg/L	200		38.4	15-110			
Surrogate: Nitrobenzene-d5	79.8		µg/L	100		79.8	30-130			
Surrogate: 2-Fluorobiphenyl	91.1		µg/L	100		91.1	30-130			
Surrogate: 2,4,6-Tribromophenol	211		µg/L	200		106	15-110			
Surrogate: p-Terphenyl-d14	99.5		µg/L	100		99.5	30-130			

LCS Dup (B213872-BSD1)

Prepared: 10/03/18 Analyzed: 10/04/18

Acenaphthene	39.0	5.0	µg/L	50.0		77.9	40-140	6.99	20	
Acenaphthylene	37.9	5.0	µg/L	50.0		75.8	40-140	6.34	20	
Acetophenone	41.1	10	µg/L	50.0		82.2	40-140	2.64	20	
Aniline	32.5	5.0	µg/L	50.0		65.1	40-140	7.43	50	V-05 ‡
Anthracene	38.9	5.0	µg/L	50.0		77.7	40-140	7.98	20	
<b>Benzidine</b>	13.8	20	µg/L	50.0		<b>27.5</b> *	40-140	<b>97.3</b> *	20	V-05, L-07A, V-04, J
Benzo(a)anthracene	38.8	5.0	µg/L	50.0		77.6	40-140	8.54	20	
Benzo(a)pyrene	41.0	5.0	µg/L	50.0		82.0	40-140	8.59	20	
Benzo(b)fluoranthene	38.6	5.0	µg/L	50.0		77.1	40-140	11.6	20	
Benzo(g,h,i)perylene	41.3	5.0	µg/L	50.0		82.5	40-140	7.24	20	
Benzo(k)fluoranthene	40.2	5.0	µg/L	50.0		80.3	40-140	11.3	20	
Benzoic Acid	23.0	10	µg/L	50.0		45.9	10-130	0.611	50	V-06 † ‡
Bis(2-chloroethoxy)methane	40.7	10	µg/L	50.0		81.4	40-140	7.07	20	
Bis(2-chloroethyl)ether	35.1	10	µg/L	50.0		70.1	40-140	4.34	20	V-05
Bis(2-chloroisopropyl)ether	35.1	10	µg/L	50.0		70.3	40-140	2.27	20	V-05
Bis(2-Ethylhexyl)phthalate	35.8	10	µg/L	50.0		71.7	40-140	13.7	20	
4-Bromophenylphenylether	40.8	10	µg/L	50.0		81.5	40-140	10.7	20	
Butylbenzylphthalate	38.1	10	µg/L	50.0		76.1	40-140	12.9	20	
Carbazole	36.0	10	µg/L	50.0		71.9	40-140	9.84	20	
4-Chloroaniline	38.0	10	µg/L	50.0		75.9	40-140	3.67	20	V-34
4-Chloro-3-methylphenol	42.0	10	µg/L	50.0		83.9	30-130	2.56	20	
2-Chloronaphthalene	36.0	10	µg/L	50.0		72.1	40-140	2.81	20	
2-Chlorophenol	37.6	10	µg/L	50.0		75.2	30-130	0.962	20	
4-Chlorophenylphenylether	42.4	10	µg/L	50.0		84.9	40-140	8.48	20	
Chrysene	37.3	5.0	µg/L	50.0		74.5	40-140	7.19	20	
Dibenz(a,h)anthracene	39.3	5.0	µg/L	50.0		78.7	40-140	7.32	20	
Dibenzofuran	39.7	5.0	µg/L	50.0		79.4	40-140	6.17	20	
Di-n-butylphthalate	37.8	10	µg/L	50.0		75.6	40-140	11.8	20	
1,2-Dichlorobenzene	37.6	5.0	µg/L	50.0		75.3	40-140	5.65	20	
1,3-Dichlorobenzene	36.3	5.0	µg/L	50.0		72.7	40-140	5.49	20	
1,4-Dichlorobenzene	36.2	5.0	µg/L	50.0		72.3	40-140	4.84	20	
3,3-Dichlorobenzidine	55.8	10	µg/L	50.0		112	40-140	5.30	20	
2,4-Dichlorophenol	42.3	10	µg/L	50.0		84.6	30-130	3.96	20	
Diethylphthalate	39.6	10	µg/L	50.0		79.3	40-140	10.6	20	
2,4-Dimethylphenol	36.2	10	µg/L	50.0		72.4	30-130	0.221	20	
Dimethylphthalate	40.9	10	µg/L	50.0		81.8	40-140	7.35	50	‡
4,6-Dinitro-2-methylphenol	42.8	10	µg/L	50.0		85.7	30-130	6.04	50	‡
2,4-Dinitrophenol	47.8	10	µg/L	50.0		95.5	30-130	5.08	50	V-19 ‡
2,4-Dinitrotoluene	44.4	10	µg/L	50.0		88.9	40-140	7.43	20	V-06
2,6-Dinitrotoluene	45.7	10	µg/L	50.0		91.5	40-140	6.64	20	
Di-n-octylphthalate	35.8	10	µg/L	50.0		71.5	40-140	17.5	20	
1,2-Diphenylhydrazine (as Azobenzene)	34.5	10	µg/L	50.0		68.9	40-140	9.74	20	
Fluoranthene	38.8	5.0	µg/L	50.0		77.6	40-140	10.5	20	
Fluorene	39.7	5.0	µg/L	50.0		79.5	40-140	7.67	20	

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B213872 - SW-846 3510C</b>										
<b>LCS Dup (B213872-BSD1)</b>										
					Prepared: 10/03/18 Analyzed: 10/04/18					
Hexachlorobenzene	42.0	10	µg/L	50.0		84.1	40-140	8.95	20	
Hexachlorobutadiene	41.9	10	µg/L	50.0		83.8	40-140	9.37	20	V-06
Hexachlorocyclopentadiene	36.3	10	µg/L	50.0		72.6	30-140	8.11	50	† ‡
Hexachloroethane	35.4	10	µg/L	50.0		70.8	40-140	4.30	50	‡
Indeno(1,2,3-cd)pyrene	40.3	5.0	µg/L	50.0		80.7	40-140	7.15	50	‡
Isophorone	39.6	10	µg/L	50.0		79.2	40-140	6.08	20	
1-Methylnaphthalene	39.8	5.0	µg/L	50.0		79.5	40-140	4.86	20	
2-Methylnaphthalene	44.0	5.0	µg/L	50.0		87.9	40-140	4.14	20	
2-Methylphenol	34.1	10	µg/L	50.0		68.2	30-130	4.25	20	
3/4-Methylphenol	35.0	10	µg/L	50.0		70.0	30-130	5.79	20	
Naphthalene	38.8	5.0	µg/L	50.0		77.5	40-140	1.61	20	
2-Nitroaniline	45.4	10	µg/L	50.0		90.7	40-140	5.26	20	
3-Nitroaniline	39.4	10	µg/L	50.0		78.8	40-140	1.01	20	
4-Nitroaniline	39.7	10	µg/L	50.0		79.4	40-140	6.37	20	
Nitrobenzene	37.7	10	µg/L	50.0		75.5	40-140	4.51	20	
2-Nitrophenol	42.0	10	µg/L	50.0		83.9	30-130	4.04	20	
4-Nitrophenol	22.5	10	µg/L	50.0		45.1	10-130	1.98	50	† ‡
N-Nitrosodimethylamine	24.6	10	µg/L	50.0		49.1	40-140	11.3	20	
N-Nitrosodiphenylamine	46.0	10	µg/L	50.0		91.9	40-140	9.02	20	
N-Nitrosodi-n-propylamine	37.9	10	µg/L	50.0		75.8	40-140	0.553	20	
Pentachloronitrobenzene	48.0	10	µg/L	50.0		96.1	40-140	1.39	20	V-06
Pentachlorophenol	39.5	10	µg/L	50.0		79.0	30-130	0.556	50	‡
Phenanthrene	38.9	5.0	µg/L	50.0		77.8	40-140	9.39	20	
Phenol	17.4	10	µg/L	50.0		34.7	20-130	1.04	20	†
Pyrene	38.6	5.0	µg/L	50.0		77.1	40-140	9.65	20	
Pyridine	15.1	5.0	µg/L	50.0		30.2	10-140	23.8	50	† ‡
1,2,4,5-Tetrachlorobenzene	40.6	10	µg/L	50.0		81.3	40-140	9.47	20	
1,2,4-Trichlorobenzene	40.2	5.0	µg/L	50.0		80.3	40-140	3.23	20	
2,4,5-Trichlorophenol	40.0	10	µg/L	50.0		80.0	30-130	7.55	20	
2,4,6-Trichlorophenol	41.1	10	µg/L	50.0		82.1	30-130	5.17	50	‡
Surrogate: 2-Fluorophenol	104		µg/L	200		52.2	15-110			
Surrogate: Phenol-d6	76.8		µg/L	200		38.4	15-110			
Surrogate: Nitrobenzene-d5	75.6		µg/L	100		75.6	30-130			
Surrogate: 2-Fluorobiphenyl	83.2		µg/L	100		83.2	30-130			
Surrogate: 2,4,6-Tribromophenol	196		µg/L	200		98.0	15-110			
Surrogate: p-Terphenyl-d14	87.6		µg/L	100		87.6	30-130			

**Batch B214250 - SW-846 3546**

**Blank (B214250-BLK1)**

Prepared: 10/08/18 Analyzed: 10/09/18

Acenaphthene	ND	0.17	mg/Kg wet							
Acenaphthylene	ND	0.17	mg/Kg wet							
Acetophenone	ND	0.34	mg/Kg wet							
Aniline	ND	0.34	mg/Kg wet							
Anthracene	ND	0.17	mg/Kg wet							
Benzidine	ND	0.66	mg/Kg wet							V-04, V-05, V-34
Benzo(a)anthracene	ND	0.17	mg/Kg wet							
Benzo(a)pyrene	ND	0.17	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.17	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.17	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.17	mg/Kg wet							
Benzoic Acid	ND	1.0	mg/Kg wet							V-20
Bis(2-chloroethoxy)methane	ND	0.34	mg/Kg wet							



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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B214250 - SW-846 3546

Blank (B214250-BLK1)

Prepared: 10/08/18 Analyzed: 10/09/18

Bis(2-chloroethyl)ether	ND	0.34	mg/Kg wet							
Bis(2-chloroisopropyl)ether	ND	0.34	mg/Kg wet							
Bis(2-Ethylhexyl)phthalate	ND	0.34	mg/Kg wet							
4-Bromophenylphenylether	ND	0.34	mg/Kg wet							
Butylbenzylphthalate	ND	0.34	mg/Kg wet							
Carbazole	ND	0.17	mg/Kg wet							
4-Chloroaniline	ND	0.66	mg/Kg wet							V-34
4-Chloro-3-methylphenol	ND	0.66	mg/Kg wet							
2-Chloronaphthalene	ND	0.34	mg/Kg wet							
2-Chlorophenol	ND	0.34	mg/Kg wet							
4-Chlorophenylphenylether	ND	0.34	mg/Kg wet							
Chrysene	ND	0.17	mg/Kg wet							
Dibenz(a,h)anthracene	ND	0.17	mg/Kg wet							
Dibenzofuran	ND	0.34	mg/Kg wet							
Di-n-butylphthalate	ND	0.34	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.34	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.34	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.34	mg/Kg wet							
3,3-Dichlorobenzidine	ND	0.17	mg/Kg wet							
2,4-Dichlorophenol	ND	0.34	mg/Kg wet							
Diethylphthalate	ND	0.34	mg/Kg wet							
2,4-Dimethylphenol	ND	0.34	mg/Kg wet							
Dimethylphthalate	ND	0.34	mg/Kg wet							
4,6-Dinitro-2-methylphenol	ND	0.34	mg/Kg wet							
2,4-Dinitrophenol	ND	0.66	mg/Kg wet							V-04
2,4-Dinitrotoluene	ND	0.34	mg/Kg wet							
2,6-Dinitrotoluene	ND	0.34	mg/Kg wet							
Di-n-octylphthalate	ND	0.34	mg/Kg wet							
1,2-Diphenylhydrazine (as Azobenzene)	ND	0.34	mg/Kg wet							
Fluoranthene	ND	0.17	mg/Kg wet							
Fluorene	ND	0.17	mg/Kg wet							
Hexachlorobenzene	ND	0.34	mg/Kg wet							
Hexachlorobutadiene	ND	0.34	mg/Kg wet							
Hexachlorocyclopentadiene	ND	0.34	mg/Kg wet							L-04, V-04
Hexachloroethane	ND	0.34	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	ND	0.17	mg/Kg wet							
Isophorone	ND	0.34	mg/Kg wet							
1-Methylnaphthalene	ND	0.17	mg/Kg wet							
2-Methylnaphthalene	ND	0.17	mg/Kg wet							
2-Methylphenol	ND	0.34	mg/Kg wet							
3/4-Methylphenol	ND	0.34	mg/Kg wet							
Naphthalene	ND	0.17	mg/Kg wet							
2-Nitroaniline	ND	0.34	mg/Kg wet							
3-Nitroaniline	ND	0.34	mg/Kg wet							
4-Nitroaniline	ND	0.34	mg/Kg wet							
Nitrobenzene	ND	0.34	mg/Kg wet							
2-Nitrophenol	ND	0.34	mg/Kg wet							
4-Nitrophenol	ND	0.66	mg/Kg wet							
N-Nitrosodimethylamine	ND	0.34	mg/Kg wet							
N-Nitrosodiphenylamine	ND	0.34	mg/Kg wet							
N-Nitrosodi-n-propylamine	ND	0.34	mg/Kg wet							
Pentachloronitrobenzene	ND	0.34	mg/Kg wet							

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**QUALITY CONTROL**

**Semivolatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B214250 - SW-846 3546</b>										
<b>Blank (B214250-BLK1)</b>										
Prepared: 10/08/18 Analyzed: 10/09/18										
Pentachlorophenol	ND	0.34	mg/Kg wet							
Phenanthrene	ND	0.17	mg/Kg wet							
Phenol	ND	0.34	mg/Kg wet							
Pyrene	ND	0.17	mg/Kg wet							
Pyridine	ND	0.34	mg/Kg wet							
1,2,4,5-Tetrachlorobenzene	ND	0.34	mg/Kg wet							
1,2,4-Trichlorobenzene	ND	0.34	mg/Kg wet							
2,4,5-Trichlorophenol	ND	0.34	mg/Kg wet							
2,4,6-Trichlorophenol	ND	0.34	mg/Kg wet							
Surrogate: 2-Fluorophenol	4.77		mg/Kg wet	6.67		71.5	30-130			
Surrogate: Phenol-d6	4.77		mg/Kg wet	6.67		71.5	30-130			
Surrogate: Nitrobenzene-d5	2.34		mg/Kg wet	3.33		70.3	30-130			
Surrogate: 2-Fluorobiphenyl	2.58		mg/Kg wet	3.33		77.4	30-130			
Surrogate: 2,4,6-Tribromophenol	4.64		mg/Kg wet	6.67		69.6	30-130			
Surrogate: p-Terphenyl-d14	2.92		mg/Kg wet	3.33		87.6	30-130			
<b>LCS (B214250-BS1)</b>										
Prepared: 10/08/18 Analyzed: 10/09/18										
Acenaphthene	1.17	0.17	mg/Kg wet	1.67		70.3	40-140			
Acenaphthylene	1.19	0.17	mg/Kg wet	1.67		71.3	40-140			
Acetophenone	1.12	0.34	mg/Kg wet	1.67		67.2	40-140			
Aniline	0.948	0.34	mg/Kg wet	1.67		56.9	10-140			†
Anthracene	1.27	0.17	mg/Kg wet	1.67		75.9	40-140			
Benizidine	1.12	0.66	mg/Kg wet	1.67		67.3	40-140			V-04, V-05, V-34
Benzo(a)anthracene	1.34	0.17	mg/Kg wet	1.67		80.1	40-140			
Benzo(a)pyrene	1.36	0.17	mg/Kg wet	1.67		81.7	40-140			
Benzo(b)fluoranthene	1.28	0.17	mg/Kg wet	1.67		76.7	40-140			
Benzo(g,h,i)perylene	1.40	0.17	mg/Kg wet	1.67		84.0	40-140			
Benzo(k)fluoranthene	1.32	0.17	mg/Kg wet	1.67		79.3	40-140			
Benzoic Acid	1.28	1.0	mg/Kg wet	1.67		76.8	30-130			V-06
Bis(2-chloroethoxy)methane	1.30	0.34	mg/Kg wet	1.67		78.2	40-140			
Bis(2-chloroethyl)ether	1.13	0.34	mg/Kg wet	1.67		67.7	40-140			
Bis(2-chloroisopropyl)ether	1.22	0.34	mg/Kg wet	1.67		73.2	40-140			
Bis(2-Ethylhexyl)phthalate	1.35	0.34	mg/Kg wet	1.67		81.0	40-140			
4-Bromophenylphenylether	1.31	0.34	mg/Kg wet	1.67		78.4	40-140			
Butylbenzylphthalate	1.38	0.34	mg/Kg wet	1.67		83.0	40-140			
Carbazole	1.23	0.17	mg/Kg wet	1.67		73.8	40-140			
4-Chloroaniline	0.809	0.66	mg/Kg wet	1.67		48.5	10-140			V-34 †
4-Chloro-3-methylphenol	1.26	0.66	mg/Kg wet	1.67		75.8	30-130			
2-Chloronaphthalene	1.14	0.34	mg/Kg wet	1.67		68.6	40-140			
2-Chlorophenol	1.15	0.34	mg/Kg wet	1.67		68.8	30-130			
4-Chlorophenylphenylether	1.23	0.34	mg/Kg wet	1.67		73.6	40-140			
Chrysene	1.29	0.17	mg/Kg wet	1.67		77.7	40-140			
Dibenz(a,h)anthracene	1.32	0.17	mg/Kg wet	1.67		79.1	40-140			
Dibenzofuran	1.24	0.34	mg/Kg wet	1.67		74.3	40-140			
Di-n-butylphthalate	1.24	0.34	mg/Kg wet	1.67		74.5	40-140			
1,2-Dichlorobenzene	0.977	0.34	mg/Kg wet	1.67		58.6	40-140			
1,3-Dichlorobenzene	0.928	0.34	mg/Kg wet	1.67		55.7	40-140			
1,4-Dichlorobenzene	0.950	0.34	mg/Kg wet	1.67		57.0	40-140			
3,3-Dichlorobenzidine	1.26	0.17	mg/Kg wet	1.67		75.8	20-140			†
2,4-Dichlorophenol	1.14	0.34	mg/Kg wet	1.67		68.6	30-130			
Diethylphthalate	1.22	0.34	mg/Kg wet	1.67		73.3	40-140			
2,4-Dimethylphenol	1.26	0.34	mg/Kg wet	1.67		75.7	30-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B214250 - SW-846 3546</b>										
<b>LCS (B214250-BS1)</b>										
				Prepared: 10/08/18 Analyzed: 10/09/18						
Dimethylphthalate	1.28	0.34	mg/Kg wet	1.67		76.9	40-140			
4,6-Dinitro-2-methylphenol	1.24	0.34	mg/Kg wet	1.67		74.2	30-130			
2,4-Dinitrophenol	1.08	0.66	mg/Kg wet	1.67		64.7	30-130			V-04
2,4-Dinitrotoluene	1.29	0.34	mg/Kg wet	1.67		77.5	40-140			
2,6-Dinitrotoluene	1.30	0.34	mg/Kg wet	1.67		78.2	40-140			
Di-n-octylphthalate	1.46	0.34	mg/Kg wet	1.67		87.6	40-140			
1,2-Diphenylhydrazine (as Azobenzene)	1.37	0.34	mg/Kg wet	1.67		82.2	40-140			
Fluoranthene	1.23	0.17	mg/Kg wet	1.67		73.6	40-140			
Fluorene	1.19	0.17	mg/Kg wet	1.67		71.5	40-140			
Hexachlorobenzene	1.29	0.34	mg/Kg wet	1.67		77.3	40-140			
Hexachlorobutadiene	1.00	0.34	mg/Kg wet	1.67		60.3	40-140			
<b>Hexachlorocyclopentadiene</b>	0.490	0.34	mg/Kg wet	1.67		<b>29.4</b> *	40-140			L-04, V-04
Hexachloroethane	0.934	0.34	mg/Kg wet	1.67		56.1	40-140			
Indeno(1,2,3-cd)pyrene	1.42	0.17	mg/Kg wet	1.67		85.2	40-140			
Isophorone	1.22	0.34	mg/Kg wet	1.67		73.4	40-140			
1-Methylnaphthalene	1.04	0.17	mg/Kg wet	1.67		62.6	40-140			
2-Methylnaphthalene	1.16	0.17	mg/Kg wet	1.67		69.4	40-140			
2-Methylphenol	1.36	0.34	mg/Kg wet	1.67		81.8	30-130			
3/4-Methylphenol	1.31	0.34	mg/Kg wet	1.67		78.4	30-130			
Naphthalene	1.05	0.17	mg/Kg wet	1.67		63.2	40-140			
2-Nitroaniline	1.29	0.34	mg/Kg wet	1.67		77.4	40-140			
3-Nitroaniline	1.17	0.34	mg/Kg wet	1.67		70.3	30-140			†
4-Nitroaniline	1.18	0.34	mg/Kg wet	1.67		71.0	40-140			
Nitrobenzene	1.08	0.34	mg/Kg wet	1.67		65.1	40-140			
2-Nitrophenol	1.14	0.34	mg/Kg wet	1.67		68.2	30-130			
4-Nitrophenol	1.69	0.66	mg/Kg wet	1.67		101	30-130			
N-Nitrosodimethylamine	1.00	0.34	mg/Kg wet	1.67		60.1	40-140			
N-Nitrosodiphenylamine	1.58	0.34	mg/Kg wet	1.67		94.8	40-140			
N-Nitrosodi-n-propylamine	1.15	0.34	mg/Kg wet	1.67		69.0	40-140			
Pentachloronitrobenzene	1.29	0.34	mg/Kg wet	1.67		77.6	40-140			
Pentachlorophenol	1.10	0.34	mg/Kg wet	1.67		65.8	30-130			
Phenanthrene	1.27	0.17	mg/Kg wet	1.67		76.4	40-140			
Phenol	1.31	0.34	mg/Kg wet	1.67		78.9	30-130			
Pyrene	1.33	0.17	mg/Kg wet	1.67		80.0	40-140			
Pyridine	0.750	0.34	mg/Kg wet	1.67		45.0	30-140			†
1,2,4,5-Tetrachlorobenzene	1.17	0.34	mg/Kg wet	1.67		70.1	40-140			
1,2,4-Trichlorobenzene	1.03	0.34	mg/Kg wet	1.67		61.7	40-140			
2,4,5-Trichlorophenol	1.30	0.34	mg/Kg wet	1.67		78.0	30-130			
2,4,6-Trichlorophenol	1.23	0.34	mg/Kg wet	1.67		73.8	30-130			
Surrogate: 2-Fluorophenol	4.86		mg/Kg wet	6.67		72.9	30-130			
Surrogate: Phenol-d6	5.17		mg/Kg wet	6.67		77.5	30-130			
Surrogate: Nitrobenzene-d5	2.33		mg/Kg wet	3.33		69.8	30-130			
Surrogate: 2-Fluorobiphenyl	2.66		mg/Kg wet	3.33		79.9	30-130			
Surrogate: 2,4,6-Tribromophenol	5.12		mg/Kg wet	6.67		76.9	30-130			
Surrogate: p-Terphenyl-d14	2.92		mg/Kg wet	3.33		87.6	30-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B214250 - SW-846 3546</b>										
<b>LCS Dup (B214250-BSD1)</b>										
					Prepared: 10/08/18 Analyzed: 10/09/18					
Acenaphthene	1.15	0.17	mg/Kg wet	1.67		68.8	40-140	2.16	30	
Acenaphthylene	1.18	0.17	mg/Kg wet	1.67		70.5	40-140	1.16	30	
Acetophenone	1.07	0.34	mg/Kg wet	1.67		64.4	40-140	4.20	30	
Aniline	0.893	0.34	mg/Kg wet	1.67		53.6	10-140	5.97	50	† ‡
Anthracene	1.27	0.17	mg/Kg wet	1.67		76.1	40-140	0.184	30	
Benzidine	1.15	0.66	mg/Kg wet	1.67		68.8	40-140	2.15	30	V-04, V-05, V-34
Benzo(a)anthracene	1.33	0.17	mg/Kg wet	1.67		79.9	40-140	0.275	30	
Benzo(a)pyrene	1.35	0.17	mg/Kg wet	1.67		81.2	40-140	0.614	30	
Benzo(b)fluoranthene	1.36	0.17	mg/Kg wet	1.67		81.6	40-140	6.27	30	
Benzo(g,h,i)perylene	1.39	0.17	mg/Kg wet	1.67		83.3	40-140	0.861	30	
Benzo(k)fluoranthene	1.38	0.17	mg/Kg wet	1.67		82.7	40-140	4.20	30	
Benzoic Acid	1.23	1.0	mg/Kg wet	1.67		73.7	30-130	4.04	50	V-06 ‡
Bis(2-chloroethoxy)methane	1.30	0.34	mg/Kg wet	1.67		77.9	40-140	0.461	30	
Bis(2-chloroethyl)ether	1.12	0.34	mg/Kg wet	1.67		67.1	40-140	0.860	30	
Bis(2-chloroisopropyl)ether	1.20	0.34	mg/Kg wet	1.67		71.8	40-140	1.93	30	
Bis(2-Ethylhexyl)phthalate	1.39	0.34	mg/Kg wet	1.67		83.1	40-140	2.63	30	
4-Bromophenylphenylether	1.31	0.34	mg/Kg wet	1.67		78.8	40-140	0.509	30	
Butylbenzylphthalate	1.39	0.34	mg/Kg wet	1.67		83.1	40-140	0.144	30	
Carbazole	1.25	0.17	mg/Kg wet	1.67		74.7	40-140	1.27	30	
4-Chloroaniline	0.764	0.66	mg/Kg wet	1.67		45.8	10-140	5.77	30	V-34 †
4-Chloro-3-methylphenol	1.13	0.66	mg/Kg wet	1.67		68.0	30-130	10.8	30	
2-Chloronaphthalene	1.08	0.34	mg/Kg wet	1.67		64.6	40-140	5.98	30	
2-Chlorophenol	1.08	0.34	mg/Kg wet	1.67		64.6	30-130	6.26	30	
4-Chlorophenylphenylether	1.23	0.34	mg/Kg wet	1.67		74.1	40-140	0.596	30	
Chrysene	1.28	0.17	mg/Kg wet	1.67		77.1	40-140	0.801	30	
Dibenz(a,h)anthracene	1.28	0.17	mg/Kg wet	1.67		76.6	40-140	3.31	30	
Dibenzofuran	1.21	0.34	mg/Kg wet	1.67		72.4	40-140	2.56	30	
Di-n-butylphthalate	1.30	0.34	mg/Kg wet	1.67		78.1	40-140	4.72	30	
1,2-Dichlorobenzene	0.961	0.34	mg/Kg wet	1.67		57.6	40-140	1.72	30	
1,3-Dichlorobenzene	0.927	0.34	mg/Kg wet	1.67		55.6	40-140	0.108	30	
1,4-Dichlorobenzene	0.941	0.34	mg/Kg wet	1.67		56.5	40-140	0.881	30	
3,3-Dichlorobenzidine	1.30	0.17	mg/Kg wet	1.67		78.0	20-140	2.94	50	† ‡
2,4-Dichlorophenol	1.06	0.34	mg/Kg wet	1.67		63.5	30-130	7.75	30	
Diethylphthalate	1.24	0.34	mg/Kg wet	1.67		74.5	40-140	1.54	30	
2,4-Dimethylphenol	1.17	0.34	mg/Kg wet	1.67		70.5	30-130	7.17	30	
Dimethylphthalate	1.29	0.34	mg/Kg wet	1.67		77.2	40-140	0.415	30	
4,6-Dinitro-2-methylphenol	1.24	0.34	mg/Kg wet	1.67		74.3	30-130	0.135	30	
2,4-Dinitrophenol	0.988	0.66	mg/Kg wet	1.67		59.3	30-130	8.77	30	V-04
2,4-Dinitrotoluene	1.23	0.34	mg/Kg wet	1.67		73.8	40-140	4.84	30	
2,6-Dinitrotoluene	1.29	0.34	mg/Kg wet	1.67		77.3	40-140	1.16	30	
Di-n-octylphthalate	1.66	0.34	mg/Kg wet	1.67		99.3	40-140	12.6	30	
1,2-Diphenylhydrazine (as Azobenzene)	1.36	0.34	mg/Kg wet	1.67		81.8	40-140	0.439	30	
Fluoranthene	1.28	0.17	mg/Kg wet	1.67		76.8	40-140	4.23	30	
Fluorene	1.17	0.17	mg/Kg wet	1.67		70.3	40-140	1.75	30	
Hexachlorobenzene	1.28	0.34	mg/Kg wet	1.67		76.5	40-140	1.01	30	
Hexachlorobutadiene	1.07	0.34	mg/Kg wet	1.67		64.2	40-140	6.33	30	
<b>Hexachlorocyclopentadiene</b>	0.501	0.34	mg/Kg wet	1.67		<b>30.1</b> *	40-140	2.29	30	L-04, V-04
Hexachloroethane	0.933	0.34	mg/Kg wet	1.67		56.0	40-140	0.107	30	
Indeno(1,2,3-cd)pyrene	1.42	0.17	mg/Kg wet	1.67		85.1	40-140	0.141	30	
Isophorone	1.20	0.34	mg/Kg wet	1.67		72.2	40-140	1.65	30	
1-Methylnaphthalene	1.00	0.17	mg/Kg wet	1.67		60.0	40-140	4.24	30	
2-Methylnaphthalene	1.11	0.17	mg/Kg wet	1.67		66.7	40-140	3.94	30	

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B214250 - SW-846 3546

LCS Dup (B214250-BSD1)

Prepared: 10/08/18 Analyzed: 10/09/18

2-Methylphenol	1.11	0.34	mg/Kg wet	1.67		66.7	30-130	20.3	30	
3/4-Methylphenol	1.12	0.34	mg/Kg wet	1.67		67.5	30-130	14.9	30	
Naphthalene	1.06	0.17	mg/Kg wet	1.67		63.9	40-140	1.07	30	
2-Nitroaniline	1.24	0.34	mg/Kg wet	1.67		74.1	40-140	4.38	30	
3-Nitroaniline	1.13	0.34	mg/Kg wet	1.67		67.9	30-140	3.56	30	†
4-Nitroaniline	1.15	0.34	mg/Kg wet	1.67		68.9	40-140	2.97	30	
Nitrobenzene	1.09	0.34	mg/Kg wet	1.67		65.7	40-140	0.949	30	
2-Nitrophenol	1.13	0.34	mg/Kg wet	1.67		67.8	30-130	0.647	30	
4-Nitrophenol	1.62	0.66	mg/Kg wet	1.67		97.3	30-130	3.87	50	‡
N-Nitrosodimethylamine	0.966	0.34	mg/Kg wet	1.67		58.0	40-140	3.69	30	
N-Nitrosodiphenylamine	1.55	0.34	mg/Kg wet	1.67		93.2	40-140	1.66	30	
N-Nitrosodi-n-propylamine	1.08	0.34	mg/Kg wet	1.67		65.0	40-140	5.97	30	
Pentachloronitrobenzene	1.31	0.34	mg/Kg wet	1.67		78.9	40-140	1.64	30	
Pentachlorophenol	1.05	0.34	mg/Kg wet	1.67		62.8	30-130	4.69	30	
Phenanthrene	1.28	0.17	mg/Kg wet	1.67		76.6	40-140	0.261	30	
Phenol	1.08	0.34	mg/Kg wet	1.67		64.8	30-130	19.6	30	
Pyrene	1.27	0.17	mg/Kg wet	1.67		76.2	40-140	4.84	30	
Pyridine	0.719	0.34	mg/Kg wet	1.67		43.1	30-140	4.31	30	†
1,2,4,5-Tetrachlorobenzene	1.23	0.34	mg/Kg wet	1.67		73.6	40-140	4.84	30	
1,2,4-Trichlorobenzene	1.05	0.34	mg/Kg wet	1.67		63.2	40-140	2.40	30	
2,4,5-Trichlorophenol	1.26	0.34	mg/Kg wet	1.67		75.8	30-130	2.91	30	
2,4,6-Trichlorophenol	1.24	0.34	mg/Kg wet	1.67		74.5	30-130	0.998	30	

Surrogate: 2-Fluorophenol	4.57		mg/Kg wet	6.67		68.5	30-130			
Surrogate: Phenol-d6	4.65		mg/Kg wet	6.67		69.7	30-130			
Surrogate: Nitrobenzene-d5	2.28		mg/Kg wet	3.33		68.4	30-130			
Surrogate: 2-Fluorobiphenyl	2.72		mg/Kg wet	3.33		81.7	30-130			
Surrogate: 2,4,6-Tribromophenol	5.04		mg/Kg wet	6.67		75.6	30-130			
Surrogate: p-Terphenyl-d14	2.85		mg/Kg wet	3.33		85.5	30-130			

Matrix Spike (B214250-MS1)

Source: 1811225-04

Prepared: 10/08/18 Analyzed: 10/09/18

Acenaphthene	1.35	0.22	mg/Kg dry	2.12	ND	63.4	40-140			
Acenaphthylene	1.38	0.22	mg/Kg dry	2.12	ND	65.3	40-140			
Acetophenone	1.40	0.43	mg/Kg dry	2.12	ND	65.8	40-140			
Aniline	0.893	0.43	mg/Kg dry	2.12	ND	42.1	40-140			
Anthracene	1.42	0.22	mg/Kg dry	2.12	ND	66.7	40-140			
<b>Benzidine</b>	ND	0.84	mg/Kg dry	2.12	ND	*	40-140			MS-09, V-04, V-05, V-34
Benzo(a)anthracene	1.47	0.22	mg/Kg dry	2.12	ND	69.2	40-140			
Benzo(a)pyrene	1.42	0.22	mg/Kg dry	2.12	ND	66.7	40-140			
Benzo(b)fluoranthene	1.45	0.22	mg/Kg dry	2.12	ND	68.3	40-140			
Benzo(g,h,i)perylene	1.40	0.22	mg/Kg dry	2.12	ND	65.8	40-140			
Benzo(k)fluoranthene	1.50	0.22	mg/Kg dry	2.12	ND	70.8	40-140			
<b>Benzoic Acid</b>	0.294	1.3	mg/Kg dry	2.12	ND	<b>13.8</b>	*	40-140		MS-09, V-06, J
Bis(2-chloroethoxy)methane	1.65	0.43	mg/Kg dry	2.12	ND	77.7	40-140			
Bis(2-chloroethyl)ether	1.43	0.43	mg/Kg dry	2.12	ND	67.3	40-140			
Bis(2-chloroisopropyl)ether	1.55	0.43	mg/Kg dry	2.12	ND	73.1	40-140			
Bis(2-Ethylhexyl)phthalate	1.52	0.43	mg/Kg dry	2.12	ND	71.4	40-140			
4-Bromophenylphenylether	1.54	0.43	mg/Kg dry	2.12	ND	72.3	40-140			
Butylbenzylphthalate	1.55	0.43	mg/Kg dry	2.12	ND	73.0	40-140			
Carbazole	1.35	0.22	mg/Kg dry	2.12	ND	63.7	40-140			
4-Chloroaniline	0.948	0.84	mg/Kg dry	2.12	ND	44.7	40-140			V-34
4-Chloro-3-methylphenol	1.30	0.84	mg/Kg dry	2.12	ND	61.3	30-130			
2-Chloronaphthalene	1.30	0.43	mg/Kg dry	2.12	ND	61.3	40-140			

QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B214250 - SW-846 3546</b>										
<b>Matrix Spike (B214250-MS1)</b>	<b>Source: 18I1225-04</b>			Prepared: 10/08/18 Analyzed: 10/09/18						
2-Chlorophenol	1.32	0.43	mg/Kg dry	2.12	ND	62.3	30-130			
4-Chlorophenylphenylether	1.43	0.43	mg/Kg dry	2.12	ND	67.4	40-140			
Chrysene	1.41	0.22	mg/Kg dry	2.12	ND	66.4	40-140			
Dibenz(a,h)anthracene	1.32	0.22	mg/Kg dry	2.12	ND	62.3	40-140			
Dibenzofuran	1.41	0.43	mg/Kg dry	2.12	ND	66.4	40-140			
Di-n-butylphthalate	1.45	0.43	mg/Kg dry	2.12	ND	68.5	40-140			
1,2-Dichlorobenzene	1.21	0.43	mg/Kg dry	2.12	ND	57.0	40-140			
1,3-Dichlorobenzene	1.16	0.43	mg/Kg dry	2.12	ND	54.8	40-140			
1,4-Dichlorobenzene	1.18	0.43	mg/Kg dry	2.12	ND	55.8	40-140			
3,3-Dichlorobenzidine	1.05	0.22	mg/Kg dry	2.12	ND	49.4	40-140			
2,4-Dichlorophenol	1.07	0.43	mg/Kg dry	2.12	ND	50.4	30-130			
Diethylphthalate	1.41	0.43	mg/Kg dry	2.12	ND	66.3	40-140			
2,4-Dimethylphenol	0.893	0.43	mg/Kg dry	2.12	ND	42.1	30-130			
Dimethylphthalate	1.50	0.43	mg/Kg dry	2.12	ND	70.5	40-140			
4,6-Dinitro-2-methylphenol	1.17	0.43	mg/Kg dry	2.12	ND	55.2	30-130			
2,4-Dinitrophenol	0.645	0.84	mg/Kg dry	2.12	ND	30.4	30-130			V-04, J
2,4-Dinitrotoluene	1.40	0.43	mg/Kg dry	2.12	ND	65.8	40-140			
2,6-Dinitrotoluene	1.47	0.43	mg/Kg dry	2.12	ND	69.1	40-140			
Di-n-octylphthalate	1.84	0.43	mg/Kg dry	2.12	ND	86.8	40-140			
1,2-Diphenylhydrazine (as Azobenzene)	1.57	0.43	mg/Kg dry	2.12	ND	74.0	40-140			
Fluoranthene	1.43	0.22	mg/Kg dry	2.12	ND	67.2	40-140			
Fluorene	1.35	0.22	mg/Kg dry	2.12	ND	63.5	40-140			
Hexachlorobenzene	1.48	0.43	mg/Kg dry	2.12	ND	69.8	40-140			
Hexachlorobutadiene	1.37	0.43	mg/Kg dry	2.12	ND	64.4	40-140			
Hexachlorocyclopentadiene	0.774	0.43	mg/Kg dry	2.12	ND	36.5	30-130			V-04
Hexachloroethane	1.21	0.43	mg/Kg dry	2.12	ND	56.9	40-140			
Indeno(1,2,3-cd)pyrene	1.40	0.22	mg/Kg dry	2.12	ND	65.9	40-140			
Isophorone	1.52	0.43	mg/Kg dry	2.12	ND	71.8	40-140			
1-Methylnaphthalene	1.27	0.22	mg/Kg dry	2.12	ND	60.0	40-140			
2-Methylnaphthalene	1.42	0.22	mg/Kg dry	2.12	ND	67.0	40-140			
2-Methylphenol	1.11	0.43	mg/Kg dry	2.12	ND	52.1	30-130			
3/4-Methylphenol	1.25	0.43	mg/Kg dry	2.12	ND	59.0	30-130			
Naphthalene	1.37	0.22	mg/Kg dry	2.12	ND	64.3	40-140			
2-Nitroaniline	1.39	0.43	mg/Kg dry	2.12	ND	65.4	40-140			
3-Nitroaniline	1.25	0.43	mg/Kg dry	2.12	ND	59.0	40-140			
4-Nitroaniline	1.16	0.43	mg/Kg dry	2.12	ND	54.7	40-140			
Nitrobenzene	1.38	0.43	mg/Kg dry	2.12	ND	65.2	40-140			
2-Nitrophenol	1.41	0.43	mg/Kg dry	2.12	ND	66.3	30-130			
4-Nitrophenol	1.70	0.84	mg/Kg dry	2.12	ND	80.2	30-130			
N-Nitrosodimethylamine	1.21	0.43	mg/Kg dry	2.12	ND	57.0	40-140			
N-Nitrosodiphenylamine	1.65	0.43	mg/Kg dry	2.12	ND	77.7	40-140			
N-Nitrosodi-n-propylamine	1.40	0.43	mg/Kg dry	2.12	ND	65.8	40-140			
Pentachloronitrobenzene	1.47	0.43	mg/Kg dry	2.12	ND	69.5	40-140			
Pentachlorophenol	0.860	0.43	mg/Kg dry	2.12	ND	40.5	30-130			
Phenanthrene	1.44	0.22	mg/Kg dry	2.12	ND	67.7	40-140			
Phenol	1.33	0.43	mg/Kg dry	2.12	ND	62.5	30-130			
Pyrene	1.41	0.22	mg/Kg dry	2.12	ND	66.4	40-140			
Pyridine	0.877	0.43	mg/Kg dry	2.12	ND	41.3	40-140			
1,2,4,5-Tetrachlorobenzene	1.53	0.43	mg/Kg dry	2.12	ND	72.1	40-140			
1,2,4-Trichlorobenzene	1.35	0.43	mg/Kg dry	2.12	ND	63.4	40-140			
2,4,5-Trichlorophenol	1.36	0.43	mg/Kg dry	2.12	ND	63.9	30-130			
2,4,6-Trichlorophenol	1.32	0.43	mg/Kg dry	2.12	ND	62.1	30-130			



QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
<b>Batch B214250 - SW-846 3546</b>											
<b>Matrix Spike (B214250-MS1) Source: 18I1225-04 Prepared: 10/08/18 Analyzed: 10/09/18</b>											
Surrogate: 2-Fluorophenol	5.17		mg/Kg dry	8.49		60.9	30-130				
Surrogate: Phenol-d6	5.48		mg/Kg dry	8.49		64.6	30-130				
Surrogate: Nitrobenzene-d5	2.96		mg/Kg dry	4.24		69.8	30-130				
Surrogate: 2-Fluorobiphenyl	3.27		mg/Kg dry	4.24		77.0	30-130				
Surrogate: 2,4,6-Tribromophenol	4.58		mg/Kg dry	8.49		54.0	30-130				
Surrogate: p-Terphenyl-d14	3.13		mg/Kg dry	4.24		73.7	30-130				
<b>Matrix Spike Dup (B214250-MSD1) Source: 18I1225-04 Prepared: 10/08/18 Analyzed: 10/09/18</b>											
Acenaphthene	1.36	0.22	mg/Kg dry	2.12	ND	64.0	40-140	1.00	30		
Acenaphthylene	1.40	0.22	mg/Kg dry	2.12	ND	65.9	40-140	0.976	30		
Acetophenone	1.52	0.43	mg/Kg dry	2.12	ND	71.8	40-140	8.84	30		
Aniline	1.04	0.43	mg/Kg dry	2.12	ND	48.9	40-140	15.0	30		
Anthracene	1.41	0.22	mg/Kg dry	2.12	ND	66.6	40-140	0.0900	30		
<b>Benzidine</b>	ND	0.84	mg/Kg dry	2.12	ND	*	40-140		30	V-05, V-34, MS-09, V-04	
Benzo(a)anthracene	1.49	0.22	mg/Kg dry	2.12	ND	70.3	40-140	1.55	30		
Benzo(a)pyrene	1.44	0.22	mg/Kg dry	2.12	ND	67.9	40-140	1.72	30		
Benzo(b)fluoranthene	1.48	0.22	mg/Kg dry	2.12	ND	69.8	40-140	2.06	30		
Benzo(g,h,i)perylene	1.36	0.22	mg/Kg dry	2.12	ND	64.0	40-140	2.78	30		
Benzo(k)fluoranthene	1.50	0.22	mg/Kg dry	2.12	ND	70.8	40-140	0.0282	30		
<b>Benzoic Acid</b>	0.334	1.3	mg/Kg dry	2.12	ND	<b>15.8</b>	*	40-140	13.0	30	MS-09, V-06, J
Bis(2-chloroethoxy)methane	1.70	0.43	mg/Kg dry	2.12	ND	80.3	40-140	3.37	30		
Bis(2-chloroethyl)ether	1.55	0.43	mg/Kg dry	2.12	ND	73.2	40-140	8.28	30		
Bis(2-chloroisopropyl)ether	1.68	0.43	mg/Kg dry	2.12	ND	79.0	40-140	7.76	30		
Bis(2-Ethylhexyl)phthalate	1.53	0.43	mg/Kg dry	2.12	ND	72.3	40-140	1.22	30		
4-Bromophenylphenylether	1.61	0.43	mg/Kg dry	2.12	ND	75.9	40-140	4.80	30		
Butylbenzylphthalate	1.54	0.43	mg/Kg dry	2.12	ND	72.8	40-140	0.357	30		
Carbazole	1.35	0.22	mg/Kg dry	2.12	ND	63.4	40-140	0.378	30		
4-Chloroaniline	1.04	0.84	mg/Kg dry	2.12	ND	49.0	40-140	9.26	30	V-34	
4-Chloro-3-methylphenol	1.33	0.84	mg/Kg dry	2.12	ND	62.5	30-130	2.00	30		
2-Chloronaphthalene	1.32	0.43	mg/Kg dry	2.12	ND	62.3	40-140	1.65	30		
2-Chlorophenol	1.45	0.43	mg/Kg dry	2.12	ND	68.2	30-130	8.98	30		
4-Chlorophenylphenylether	1.42	0.43	mg/Kg dry	2.12	ND	67.0	40-140	0.565	30		
Chrysene	1.43	0.22	mg/Kg dry	2.12	ND	67.3	40-140	1.41	30		
Dibenz(a,h)anthracene	1.31	0.22	mg/Kg dry	2.12	ND	61.5	40-140	1.32	30		
Dibenzofuran	1.40	0.43	mg/Kg dry	2.12	ND	66.2	40-140	0.392	30		
Di-n-butylphthalate	1.44	0.43	mg/Kg dry	2.12	ND	67.9	40-140	0.880	30		
1,2-Dichlorobenzene	1.31	0.43	mg/Kg dry	2.12	ND	61.7	40-140	7.85	30		
1,3-Dichlorobenzene	1.23	0.43	mg/Kg dry	2.12	ND	57.8	40-140	5.26	30		
1,4-Dichlorobenzene	1.27	0.43	mg/Kg dry	2.12	ND	59.7	40-140	6.82	30		
3,3-Dichlorobenzidine	1.08	0.22	mg/Kg dry	2.12	ND	50.8	40-140	2.87	30		
2,4-Dichlorophenol	1.04	0.43	mg/Kg dry	2.12	ND	48.8	30-130	3.18	30		
Diethylphthalate	1.38	0.43	mg/Kg dry	2.12	ND	65.2	40-140	1.64	30		
2,4-Dimethylphenol	0.807	0.43	mg/Kg dry	2.12	ND	38.0	30-130	10.1	30		
Dimethylphthalate	1.51	0.43	mg/Kg dry	2.12	ND	71.3	40-140	1.18	30		
4,6-Dinitro-2-methylphenol	1.22	0.43	mg/Kg dry	2.12	ND	57.7	30-130	4.39	30		
<b>2,4-Dinitrophenol</b>	0.605	0.84	mg/Kg dry	2.12	ND	<b>28.5</b>	*	30-130	6.32	30	MS-22, V-04, J
2,4-Dinitrotoluene	1.35	0.43	mg/Kg dry	2.12	ND	63.7	40-140	3.15	30		
2,6-Dinitrotoluene	1.47	0.43	mg/Kg dry	2.12	ND	69.1	40-140	0.0289	30		
Di-n-octylphthalate	1.82	0.43	mg/Kg dry	2.12	ND	85.7	40-140	1.21	30		
1,2-Diphenylhydrazine (as Azobenzene)	1.67	0.43	mg/Kg dry	2.12	ND	78.7	40-140	6.08	30		
Fluoranthene	1.41	0.22	mg/Kg dry	2.12	ND	66.7	40-140	0.837	30		
Fluorene	1.34	0.22	mg/Kg dry	2.12	ND	63.0	40-140	0.696	30		



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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B214250 - SW-846 3546</b>										
<b>Matrix Spike Dup (B214250-MSD1)</b>	<b>Source: 1811225-04</b>			Prepared: 10/08/18 Analyzed: 10/09/18						
Hexachlorobenzene	1.52	0.43	mg/Kg dry	2.12	ND	71.6	40-140	2.49	30	
Hexachlorobutadiene	1.36	0.43	mg/Kg dry	2.12	ND	64.1	40-140	0.498	30	
Hexachlorocyclopentadiene	0.906	0.43	mg/Kg dry	2.12	ND	42.7	30-130	15.7	30	V-04
Hexachloroethane	1.29	0.43	mg/Kg dry	2.12	ND	60.6	40-140	6.30	30	
Indeno(1,2,3-cd)pyrene	1.34	0.22	mg/Kg dry	2.12	ND	63.0	40-140	4.47	30	
Isophorone	1.56	0.43	mg/Kg dry	2.12	ND	73.6	40-140	2.45	30	
1-Methylnaphthalene	1.33	0.22	mg/Kg dry	2.12	ND	62.6	40-140	4.14	30	
2-Methylnaphthalene	1.46	0.22	mg/Kg dry	2.12	ND	68.9	40-140	2.77	30	
2-Methylphenol	1.20	0.43	mg/Kg dry	2.12	ND	56.7	30-130	8.35	30	
3/4-Methylphenol	1.39	0.43	mg/Kg dry	2.12	ND	65.4	30-130	10.2	30	
Naphthalene	1.39	0.22	mg/Kg dry	2.12	ND	65.7	40-140	2.03	30	
2-Nitroaniline	1.39	0.43	mg/Kg dry	2.12	ND	65.7	40-140	0.549	30	
3-Nitroaniline	1.22	0.43	mg/Kg dry	2.12	ND	57.3	40-140	2.92	30	
4-Nitroaniline	1.08	0.43	mg/Kg dry	2.12	ND	51.1	40-140	6.81	30	
Nitrobenzene	1.41	0.43	mg/Kg dry	2.12	ND	66.6	40-140	2.15	30	
2-Nitrophenol	1.43	0.43	mg/Kg dry	2.12	ND	67.5	30-130	1.79	30	
4-Nitrophenol	1.59	0.84	mg/Kg dry	2.12	ND	74.8	30-130	7.04	30	
N-Nitrosodimethylamine	1.26	0.43	mg/Kg dry	2.12	ND	59.5	40-140	4.29	30	
N-Nitrosodiphenylamine	1.68	0.43	mg/Kg dry	2.12	ND	79.1	40-140	1.71	30	
N-Nitrosodi-n-propylamine	1.55	0.43	mg/Kg dry	2.12	ND	73.0	40-140	10.4	30	
Pentachloronitrobenzene	1.49	0.43	mg/Kg dry	2.12	ND	70.3	40-140	1.23	30	
Pentachlorophenol	0.867	0.43	mg/Kg dry	2.12	ND	40.8	30-130	0.737	30	
Phenanthrene	1.46	0.22	mg/Kg dry	2.12	ND	68.6	40-140	1.35	30	
Phenol	1.46	0.43	mg/Kg dry	2.12	ND	68.6	30-130	9.34	30	
Pyrene	1.43	0.22	mg/Kg dry	2.12	ND	67.4	40-140	1.43	30	
Pyridine	0.875	0.43	mg/Kg dry	2.12	ND	41.2	40-140	0.194	30	
1,2,4,5-Tetrachlorobenzene	1.56	0.43	mg/Kg dry	2.12	ND	73.7	40-140	2.14	30	
1,2,4-Trichlorobenzene	1.38	0.43	mg/Kg dry	2.12	ND	65.2	40-140	2.74	30	
2,4,5-Trichlorophenol	1.41	0.43	mg/Kg dry	2.12	ND	66.5	30-130	3.96	30	
2,4,6-Trichlorophenol	1.31	0.43	mg/Kg dry	2.12	ND	61.5	30-130	0.874	30	
Surrogate: 2-Fluorophenol	5.62		mg/Kg dry	8.49		66.2	30-130			
Surrogate: Phenol-d6	6.12		mg/Kg dry	8.49		72.1	30-130			
Surrogate: Nitrobenzene-d5	3.02		mg/Kg dry	4.24		71.1	30-130			
Surrogate: 2-Fluorobiphenyl	3.41		mg/Kg dry	4.24		80.3	30-130			
Surrogate: 2,4,6-Tribromophenol	4.38		mg/Kg dry	8.49		51.6	30-130			
Surrogate: p-Terphenyl-d14	3.13		mg/Kg dry	4.24		73.8	30-130			

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QUALITY CONTROL

Organochloride Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B213585 - SW-846 3546

Blank (B213585-BLK1)

Prepared: 09/28/18 Analyzed: 10/03/18

alpha-Chlordane	ND	0.0050	mg/Kg wet							
alpha-Chlordane [2C]	ND	0.0050	mg/Kg wet							
gamma-Chlordane	ND	0.0050	mg/Kg wet							
gamma-Chlordane [2C]	ND	0.0050	mg/Kg wet							
Alachlor	ND	0.020	mg/Kg wet							
Alachlor [2C]	ND	0.020	mg/Kg wet							
Aldrin	ND	0.0050	mg/Kg wet							
Aldrin [2C]	ND	0.0050	mg/Kg wet							
alpha-BHC	ND	0.0050	mg/Kg wet							
alpha-BHC [2C]	ND	0.0050	mg/Kg wet							
beta-BHC	ND	0.0050	mg/Kg wet							
beta-BHC [2C]	ND	0.0050	mg/Kg wet							
delta-BHC	ND	0.0050	mg/Kg wet							
delta-BHC [2C]	ND	0.0050	mg/Kg wet							
gamma-BHC (Lindane)	ND	0.0020	mg/Kg wet							
gamma-BHC (Lindane) [2C]	ND	0.0020	mg/Kg wet							
Chlordane	ND	0.020	mg/Kg wet							
Chlordane [2C]	ND	0.020	mg/Kg wet							
4,4'-DDD	ND	0.0040	mg/Kg wet							
4,4'-DDD [2C]	ND	0.0040	mg/Kg wet							
4,4'-DDE	ND	0.0040	mg/Kg wet							
4,4'-DDE [2C]	ND	0.0040	mg/Kg wet							
4,4'-DDT	ND	0.0040	mg/Kg wet							
4,4'-DDT [2C]	ND	0.0040	mg/Kg wet							
Dieldrin	ND	0.0040	mg/Kg wet							
Dieldrin [2C]	ND	0.0040	mg/Kg wet							
Endosulfan I	ND	0.0050	mg/Kg wet							
Endosulfan I [2C]	ND	0.0050	mg/Kg wet							
Endosulfan II	ND	0.0080	mg/Kg wet							
Endosulfan II [2C]	ND	0.0080	mg/Kg wet							
Endosulfan Sulfate	ND	0.0080	mg/Kg wet							
Endosulfan Sulfate [2C]	ND	0.0080	mg/Kg wet							
Endrin	ND	0.0080	mg/Kg wet							
Endrin [2C]	ND	0.0080	mg/Kg wet							
Endrin Aldehyde	ND	0.0080	mg/Kg wet							
Endrin Aldehyde [2C]	ND	0.0080	mg/Kg wet							
Endrin Ketone	ND	0.0080	mg/Kg wet							
Endrin Ketone [2C]	ND	0.0080	mg/Kg wet							
Heptachlor	ND	0.0050	mg/Kg wet							
Heptachlor [2C]	ND	0.0050	mg/Kg wet							
Heptachlor Epoxide	ND	0.0050	mg/Kg wet							
Heptachlor Epoxide [2C]	ND	0.0050	mg/Kg wet							
Hexachlorobenzene	ND	0.0060	mg/Kg wet							
Hexachlorobenzene [2C]	ND	0.0060	mg/Kg wet							
Methoxychlor	ND	0.050	mg/Kg wet							
Methoxychlor [2C]	ND	0.050	mg/Kg wet							
Toxaphene	ND	0.10	mg/Kg wet							
Toxaphene [2C]	ND	0.10	mg/Kg wet							
Surrogate: Decachlorobiphenyl	0.202		mg/Kg wet	0.200		101	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.210		mg/Kg wet	0.200		105	30-150			
Surrogate: Tetrachloro-m-xylene	0.149		mg/Kg wet	0.200		74.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.183		mg/Kg wet	0.200		91.4	30-150			

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QUALITY CONTROL

Organochloride Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B213585 - SW-846 3546</b>										
<b>LCS (B213585-BS1)</b>										
					Prepared: 09/28/18 Analyzed: 10/03/18					
alpha-Chlordane	0.10	0.0050	mg/Kg wet	0.100		101	40-140			
alpha-Chlordane [2C]	0.10	0.0050	mg/Kg wet	0.100		103	40-140			
gamma-Chlordane	0.10	0.0050	mg/Kg wet	0.100		101	40-140			
gamma-Chlordane [2C]	0.10	0.0050	mg/Kg wet	0.100		103	40-140			
Alachlor	0.11	0.020	mg/Kg wet	0.100		105	40-140			
Alachlor [2C]	0.11	0.020	mg/Kg wet	0.100		111	40-140			
Aldrin	0.10	0.0050	mg/Kg wet	0.100		100	40-140			
Aldrin [2C]	0.099	0.0050	mg/Kg wet	0.100		98.5	40-140			
alpha-BHC	0.091	0.0050	mg/Kg wet	0.100		90.6	40-140			
alpha-BHC [2C]	0.10	0.0050	mg/Kg wet	0.100		101	40-140			V-06
beta-BHC	0.093	0.0050	mg/Kg wet	0.100		92.6	40-140			
beta-BHC [2C]	0.095	0.0050	mg/Kg wet	0.100		95.4	40-140			
delta-BHC	0.10	0.0050	mg/Kg wet	0.100		101	40-140			
delta-BHC [2C]	0.10	0.0050	mg/Kg wet	0.100		101	40-140			
gamma-BHC (Lindane)	0.095	0.0020	mg/Kg wet	0.100		95.5	40-140			
gamma-BHC (Lindane) [2C]	0.098	0.0020	mg/Kg wet	0.100		98.4	40-140			
4,4'-DDD	0.11	0.0040	mg/Kg wet	0.100		110	40-140			
4,4'-DDD [2C]	0.11	0.0040	mg/Kg wet	0.100		109	40-140			
4,4'-DDE	0.10	0.0040	mg/Kg wet	0.100		104	40-140			
4,4'-DDE [2C]	0.10	0.0040	mg/Kg wet	0.100		104	40-140			
4,4'-DDT	0.10	0.0040	mg/Kg wet	0.100		104	40-140			
4,4'-DDT [2C]	0.10	0.0040	mg/Kg wet	0.100		105	40-140			
Dieldrin	0.10	0.0040	mg/Kg wet	0.100		102	40-140			
Dieldrin [2C]	0.10	0.0040	mg/Kg wet	0.100		101	40-140			
Endosulfan I	0.10	0.0050	mg/Kg wet	0.100		100	40-140			
Endosulfan I [2C]	0.10	0.0050	mg/Kg wet	0.100		103	40-140			
Endosulfan II	0.10	0.0080	mg/Kg wet	0.100		104	40-140			
Endosulfan II [2C]	0.11	0.0080	mg/Kg wet	0.100		107	40-140			
Endosulfan Sulfate	0.11	0.0080	mg/Kg wet	0.100		107	40-140			
Endosulfan Sulfate [2C]	0.11	0.0080	mg/Kg wet	0.100		108	40-140			
Endrin	0.099	0.0080	mg/Kg wet	0.100		99.3	40-140			
Endrin [2C]	0.10	0.0080	mg/Kg wet	0.100		102	40-140			
Endrin Aldehyde	0.10	0.0080	mg/Kg wet	0.100		102	40-140			
Endrin Aldehyde [2C]	0.10	0.0080	mg/Kg wet	0.100		102	40-140			
Endrin Ketone	0.11	0.0080	mg/Kg wet	0.100		114	40-140			
Endrin Ketone [2C]	0.11	0.0080	mg/Kg wet	0.100		115	40-140			
Heptachlor	0.097	0.0050	mg/Kg wet	0.100		97.4	40-140			
Heptachlor [2C]	0.10	0.0050	mg/Kg wet	0.100		101	40-140			
Heptachlor Epoxide	0.099	0.0050	mg/Kg wet	0.100		99.0	40-140			
Heptachlor Epoxide [2C]	0.10	0.0050	mg/Kg wet	0.100		101	40-140			
Hexachlorobenzene	0.10	0.0060	mg/Kg wet	0.100		102	40-140			
Hexachlorobenzene [2C]	0.11	0.0060	mg/Kg wet	0.100		112	40-140			V-06
Methoxychlor	0.099	0.050	mg/Kg wet	0.100		99.0	40-140			
Methoxychlor [2C]	0.10	0.050	mg/Kg wet	0.100		102	40-140			
Surrogate: Decachlorobiphenyl	0.203		mg/Kg wet	0.200		102	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.211		mg/Kg wet	0.200		105	30-150			
Surrogate: Tetrachloro-m-xylene	0.168		mg/Kg wet	0.200		84.2	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.206		mg/Kg wet	0.200		103	30-150			

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QUALITY CONTROL

Organochloride Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B213585 - SW-846 3546</b>										
<b>LCS Dup (B213585-BSD1)</b>										
					Prepared: 09/28/18 Analyzed: 10/03/18					
alpha-Chlordane	0.10	0.0050	mg/Kg wet	0.100		103	40-140	2.53	30	
alpha-Chlordane [2C]	0.11	0.0050	mg/Kg wet	0.100		106	40-140	2.92	30	
gamma-Chlordane	0.10	0.0050	mg/Kg wet	0.100		104	40-140	2.76	30	
gamma-Chlordane [2C]	0.11	0.0050	mg/Kg wet	0.100		106	40-140	3.01	30	
Alachlor	0.11	0.020	mg/Kg wet	0.100		108	40-140	2.98	30	
Alachlor [2C]	0.11	0.020	mg/Kg wet	0.100		114	40-140	3.28	30	
Aldrin	0.10	0.0050	mg/Kg wet	0.100		103	40-140	3.12	30	
Aldrin [2C]	0.10	0.0050	mg/Kg wet	0.100		102	40-140	3.14	30	
alpha-BHC	0.096	0.0050	mg/Kg wet	0.100		95.5	40-140	5.31	30	
alpha-BHC [2C]	0.11	0.0050	mg/Kg wet	0.100		108	40-140	5.86	30	V-06
beta-BHC	0.097	0.0050	mg/Kg wet	0.100		97.5	40-140	5.08	30	
beta-BHC [2C]	0.10	0.0050	mg/Kg wet	0.100		100	40-140	4.70	30	
delta-BHC	0.11	0.0050	mg/Kg wet	0.100		106	40-140	4.79	30	
delta-BHC [2C]	0.11	0.0050	mg/Kg wet	0.100		106	40-140	5.02	30	
gamma-BHC (Lindane)	0.10	0.0020	mg/Kg wet	0.100		100	40-140	4.69	30	
gamma-BHC (Lindane) [2C]	0.10	0.0020	mg/Kg wet	0.100		104	40-140	5.29	30	
4,4'-DDD	0.11	0.0040	mg/Kg wet	0.100		111	40-140	1.70	30	
4,4'-DDD [2C]	0.11	0.0040	mg/Kg wet	0.100		112	40-140	2.78	30	
4,4'-DDE	0.11	0.0040	mg/Kg wet	0.100		106	40-140	1.99	30	
4,4'-DDE [2C]	0.11	0.0040	mg/Kg wet	0.100		106	40-140	2.60	30	
4,4'-DDT	0.11	0.0040	mg/Kg wet	0.100		106	40-140	1.73	30	
4,4'-DDT [2C]	0.11	0.0040	mg/Kg wet	0.100		107	40-140	2.51	30	
Dieldrin	0.10	0.0040	mg/Kg wet	0.100		105	40-140	2.59	30	
Dieldrin [2C]	0.10	0.0040	mg/Kg wet	0.100		104	40-140	2.76	30	
Endosulfan I	0.10	0.0050	mg/Kg wet	0.100		103	40-140	2.67	30	
Endosulfan I [2C]	0.11	0.0050	mg/Kg wet	0.100		106	40-140	2.90	30	
Endosulfan II	0.11	0.0080	mg/Kg wet	0.100		106	40-140	2.11	30	
Endosulfan II [2C]	0.11	0.0080	mg/Kg wet	0.100		110	40-140	2.36	30	
Endosulfan Sulfate	0.11	0.0080	mg/Kg wet	0.100		109	40-140	1.80	30	
Endosulfan Sulfate [2C]	0.11	0.0080	mg/Kg wet	0.100		110	40-140	2.14	30	
Endrin	0.10	0.0080	mg/Kg wet	0.100		102	40-140	2.80	30	
Endrin [2C]	0.11	0.0080	mg/Kg wet	0.100		105	40-140	2.71	30	
Endrin Aldehyde	0.10	0.0080	mg/Kg wet	0.100		104	40-140	1.36	30	
Endrin Aldehyde [2C]	0.10	0.0080	mg/Kg wet	0.100		104	40-140	2.15	30	
Endrin Ketone	0.12	0.0080	mg/Kg wet	0.100		116	40-140	1.48	30	
Endrin Ketone [2C]	0.12	0.0080	mg/Kg wet	0.100		117	40-140	1.75	30	
Heptachlor	0.10	0.0050	mg/Kg wet	0.100		100	40-140	3.16	30	
Heptachlor [2C]	0.10	0.0050	mg/Kg wet	0.100		104	40-140	3.25	30	
Heptachlor Epoxide	0.10	0.0050	mg/Kg wet	0.100		102	40-140	2.82	30	
Heptachlor Epoxide [2C]	0.10	0.0050	mg/Kg wet	0.100		104	40-140	3.45	30	
Hexachlorobenzene	0.11	0.0060	mg/Kg wet	0.100		107	40-140	5.22	30	
Hexachlorobenzene [2C]	0.12	0.0060	mg/Kg wet	0.100		118	40-140	5.28	30	V-06
Methoxychlor	0.10	0.050	mg/Kg wet	0.100		101	40-140	1.66	30	
Methoxychlor [2C]	0.10	0.050	mg/Kg wet	0.100		104	40-140	2.25	30	
Surrogate: Decachlorobiphenyl	0.204		mg/Kg wet	0.200		102	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.214		mg/Kg wet	0.200		107	30-150			
Surrogate: Tetrachloro-m-xylene	0.177		mg/Kg wet	0.200		88.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.218		mg/Kg wet	0.200		109	30-150			

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QUALITY CONTROL

Organochloride Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B213585 - SW-846 3546</b>										
<b>Matrix Spike (B213585-MS1)</b>	<b>Source: 18I1225-04</b>			Prepared: 09/28/18 Analyzed: 10/04/18						
Alachlor	0.074	0.025	mg/Kg dry	0.127	ND	58.2	30-150			
Alachlor [2C]	0.075	0.025	mg/Kg dry	0.127	ND	58.9	30-150			
Aldrin	0.068	0.0064	mg/Kg dry	0.127	ND	53.3	30-150			
Aldrin [2C]	0.067	0.0064	mg/Kg dry	0.127	ND	52.8	30-150			
alpha-BHC	0.041	0.0064	mg/Kg dry	0.127	ND	32.4	30-150			R-06
alpha-BHC [2C]	0.048	0.0064	mg/Kg dry	0.127	ND	37.4	30-150			R-06, V-06
beta-BHC	0.051	0.0064	mg/Kg dry	0.127	ND	40.3	30-150			R-06
beta-BHC [2C]	0.053	0.0064	mg/Kg dry	0.127	ND	41.8	30-150			
delta-BHC	0.053	0.0064	mg/Kg dry	0.127	ND	41.4	30-150			R-06
delta-BHC [2C]	0.050	0.0064	mg/Kg dry	0.127	ND	39.5	30-150			R-06, V-06
gamma-BHC (Lindane)	0.048	0.0025	mg/Kg dry	0.127	ND	37.5	30-150			R-06
gamma-BHC (Lindane) [2C]	0.050	0.0025	mg/Kg dry	0.127	ND	39.5	30-150			R-06, V-06
4,4'-DDD	0.074	0.0051	mg/Kg dry	0.127	ND	58.1	30-150			
4,4'-DDD [2C]	0.076	0.0051	mg/Kg dry	0.127	ND	59.3	30-150			
4,4'-DDE	0.073	0.0051	mg/Kg dry	0.127	ND	57.1	30-150			
4,4'-DDE [2C]	0.075	0.0051	mg/Kg dry	0.127	ND	58.7	30-150			
4,4'-DDT	0.076	0.0051	mg/Kg dry	0.127	ND	59.9	30-150			
4,4'-DDT [2C]	0.077	0.0051	mg/Kg dry	0.127	ND	60.5	30-150			
Dieldrin	0.071	0.0051	mg/Kg dry	0.127	ND	55.9	30-150			
Dieldrin [2C]	0.071	0.0051	mg/Kg dry	0.127	ND	55.6	30-150			
Endosulfan I	0.064	0.0064	mg/Kg dry	0.127	ND	50.2	30-150			
Endosulfan I [2C]	0.067	0.0064	mg/Kg dry	0.127	ND	52.8	30-150			
Endosulfan II	0.064	0.010	mg/Kg dry	0.127	ND	50.1	30-150			
Endosulfan II [2C]	0.066	0.010	mg/Kg dry	0.127	ND	52.2	30-150			
Endosulfan Sulfate	0.065	0.010	mg/Kg dry	0.127	ND	51.2	30-150			
Endosulfan Sulfate [2C]	0.064	0.010	mg/Kg dry	0.127	ND	50.4	30-150			
Endrin	0.071	0.010	mg/Kg dry	0.127	ND	55.7	30-150			
Endrin [2C]	0.073	0.010	mg/Kg dry	0.127	ND	57.5	30-150			
Endrin Aldehyde	0.050	0.010	mg/Kg dry	0.127	ND	39.6	30-150			
Endrin Aldehyde [2C]	0.050	0.010	mg/Kg dry	0.127	ND	39.6	30-150			
Endrin Ketone	0.076	0.010	mg/Kg dry	0.127	ND	59.3	30-150			
Endrin Ketone [2C]	0.072	0.010	mg/Kg dry	0.127	ND	56.6	30-150			
Heptachlor	0.063	0.0064	mg/Kg dry	0.127	ND	49.5	30-150			
Heptachlor [2C]	0.065	0.0064	mg/Kg dry	0.127	ND	50.8	30-150			
Heptachlor Epoxide	0.067	0.0064	mg/Kg dry	0.127	ND	52.3	30-150			
Heptachlor Epoxide [2C]	0.068	0.0064	mg/Kg dry	0.127	ND	53.4	30-150			
Hexachlorobenzene	0.061	0.0076	mg/Kg dry	0.127	ND	47.9	30-150			R-06
Hexachlorobenzene [2C]	0.058	0.0076	mg/Kg dry	0.127	ND	45.6	30-150			V-06
Methoxychlor	0.069	0.064	mg/Kg dry	0.127	ND	53.8	30-150			
Methoxychlor [2C]	0.072	0.064	mg/Kg dry	0.127	ND	56.8	30-150			
Surrogate: Decachlorobiphenyl	0.141		mg/Kg dry	0.255		55.5	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.162		mg/Kg dry	0.255		63.5	30-150			
Surrogate: Tetrachloro-m-xylene	0.0778		mg/Kg dry	0.255		30.5	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.0963		mg/Kg dry	0.255		37.8	30-150			

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QUALITY CONTROL

Organochloride Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B213585 - SW-846 3546</b>										
<b>Matrix Spike Dup (B213585-MSD1)</b>										
		<b>Source: 1811225-04</b>			Prepared: 09/28/18 Analyzed: 10/04/18					
Alachlor	0.085	0.025	mg/Kg dry	0.127	ND	66.9	30-150	13.9	30	
Alachlor [2C]	0.088	0.025	mg/Kg dry	0.127	ND	69.2	30-150	16.1	30	
Aldrin	0.079	0.0064	mg/Kg dry	0.127	ND	62.0	30-150	15.1	30	
Aldrin [2C]	0.078	0.0064	mg/Kg dry	0.127	ND	61.3	30-150	15.0	30	
alpha-BHC	0.063	0.0064	mg/Kg dry	0.127	ND	49.8	30-150	<b>42.3</b> *	30	R-06
alpha-BHC [2C]	0.071	0.0064	mg/Kg dry	0.127	ND	55.7	30-150	<b>39.4</b> *	30	R-06, V-06
beta-BHC	0.070	0.0064	mg/Kg dry	0.127	ND	54.9	30-150	<b>30.8</b> *	30	R-06
beta-BHC [2C]	0.072	0.0064	mg/Kg dry	0.127	ND	56.4	30-150	29.7	30	
delta-BHC	0.074	0.0064	mg/Kg dry	0.127	ND	58.2	30-150	<b>33.7</b> *	30	R-06
delta-BHC [2C]	0.071	0.0064	mg/Kg dry	0.127	ND	55.9	30-150	<b>34.5</b> *	30	R-06, V-06
gamma-BHC (Lindane)	0.068	0.0025	mg/Kg dry	0.127	ND	53.3	30-150	<b>34.7</b> *	30	R-06
gamma-BHC (Lindane) [2C]	0.070	0.0025	mg/Kg dry	0.127	ND	55.0	30-150	<b>32.7</b> *	30	R-06, V-06
4,4'-DDD	0.083	0.0051	mg/Kg dry	0.127	ND	65.1	30-150	11.3	30	
4,4'-DDD [2C]	0.084	0.0051	mg/Kg dry	0.127	ND	66.3	30-150	11.1	30	
4,4'-DDE	0.080	0.0051	mg/Kg dry	0.127	ND	62.5	30-150	8.92	30	
4,4'-DDE [2C]	0.083	0.0051	mg/Kg dry	0.127	ND	65.1	30-150	10.4	30	
4,4'-DDT	0.085	0.0051	mg/Kg dry	0.127	ND	66.7	30-150	10.8	30	
4,4'-DDT [2C]	0.085	0.0051	mg/Kg dry	0.127	ND	67.1	30-150	10.4	30	
Dieldrin	0.080	0.0051	mg/Kg dry	0.127	ND	63.0	30-150	11.9	30	
Dieldrin [2C]	0.080	0.0051	mg/Kg dry	0.127	ND	62.7	30-150	12.1	30	
Endosulfan I	0.075	0.0064	mg/Kg dry	0.127	ND	58.5	30-150	15.4	30	
Endosulfan I [2C]	0.078	0.0064	mg/Kg dry	0.127	ND	61.3	30-150	14.7	30	
Endosulfan II	0.074	0.010	mg/Kg dry	0.127	ND	58.5	30-150	15.5	30	
Endosulfan II [2C]	0.077	0.010	mg/Kg dry	0.127	ND	60.8	30-150	15.3	30	
Endosulfan Sulfate	0.075	0.010	mg/Kg dry	0.127	ND	59.1	30-150	14.3	30	
Endosulfan Sulfate [2C]	0.074	0.010	mg/Kg dry	0.127	ND	58.0	30-150	14.1	30	
Endrin	0.080	0.010	mg/Kg dry	0.127	ND	62.9	30-150	12.1	30	
Endrin [2C]	0.083	0.010	mg/Kg dry	0.127	ND	64.8	30-150	12.0	30	
Endrin Aldehyde	0.057	0.010	mg/Kg dry	0.127	ND	45.1	30-150	13.0	30	
Endrin Aldehyde [2C]	0.058	0.010	mg/Kg dry	0.127	ND	45.7	30-150	14.4	30	
Endrin Ketone	0.085	0.010	mg/Kg dry	0.127	ND	67.0	30-150	12.1	30	
Endrin Ketone [2C]	0.081	0.010	mg/Kg dry	0.127	ND	63.8	30-150	12.0	30	
Heptachlor	0.077	0.0064	mg/Kg dry	0.127	ND	60.5	30-150	20.0	30	
Heptachlor [2C]	0.078	0.0064	mg/Kg dry	0.127	ND	61.3	30-150	18.8	30	
Heptachlor Epoxide	0.077	0.0064	mg/Kg dry	0.127	ND	60.7	30-150	14.9	30	
Heptachlor Epoxide [2C]	0.079	0.0064	mg/Kg dry	0.127	ND	62.0	30-150	14.9	30	
Hexachlorobenzene	0.085	0.0076	mg/Kg dry	0.127	ND	67.0	30-150	<b>33.3</b> *	30	R-06
Hexachlorobenzene [2C]	0.078	0.0076	mg/Kg dry	0.127	ND	60.9	30-150	28.8	30	V-06
Methoxychlor	0.077	0.064	mg/Kg dry	0.127	ND	60.8	30-150	12.1	30	
Methoxychlor [2C]	0.082	0.064	mg/Kg dry	0.127	ND	64.1	30-150	12.0	30	
Surrogate: Decachlorobiphenyl	0.154		mg/Kg dry	0.255		60.4	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.179		mg/Kg dry	0.255		70.4	30-150			
Surrogate: Tetrachloro-m-xylene	0.117		mg/Kg dry	0.255		45.9	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.142		mg/Kg dry	0.255		55.8	30-150			

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QUALITY CONTROL

Organochloride Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B213767 - SW-846 3510C</b>										
<b>Blank (B213767-BLK1)</b>										
Prepared: 10/02/18 Analyzed: 10/10/18										
alpha-Chlordane	ND	0.050	µg/L							
alpha-Chlordane [2C]	ND	0.050	µg/L							
gamma-Chlordane	ND	0.050	µg/L							
gamma-Chlordane [2C]	ND	0.050	µg/L							
Alachlor	ND	0.20	µg/L							
Alachlor [2C]	ND	0.20	µg/L							
Aldrin	ND	0.050	µg/L							
Aldrin [2C]	ND	0.050	µg/L							
alpha-BHC	ND	0.050	µg/L							
alpha-BHC [2C]	ND	0.050	µg/L							
beta-BHC	ND	0.050	µg/L							
beta-BHC [2C]	ND	0.050	µg/L							
delta-BHC	ND	0.050	µg/L							
delta-BHC [2C]	ND	0.050	µg/L							
gamma-BHC (Lindane)	ND	0.030	µg/L							
gamma-BHC (Lindane) [2C]	ND	0.030	µg/L							
Chlordane	ND	0.20	µg/L							
Chlordane [2C]	ND	0.20	µg/L							
4,4'-DDD	ND	0.040	µg/L							
4,4'-DDD [2C]	ND	0.040	µg/L							
4,4'-DDE	ND	0.040	µg/L							
4,4'-DDE [2C]	ND	0.040	µg/L							
4,4'-DDT	ND	0.040	µg/L							
4,4'-DDT [2C]	ND	0.040	µg/L							
Dieldrin	ND	0.0020	µg/L							
Dieldrin [2C]	ND	0.0020	µg/L							
Endosulfan I	ND	0.050	µg/L							
Endosulfan I [2C]	ND	0.050	µg/L							
Endosulfan II	ND	0.080	µg/L							
Endosulfan II [2C]	ND	0.080	µg/L							
Endosulfan Sulfate	ND	0.080	µg/L							
Endosulfan Sulfate [2C]	ND	0.080	µg/L							
Endrin	ND	0.080	µg/L							
Endrin [2C]	ND	0.080	µg/L							
Endrin Aldehyde	ND	0.080	µg/L							
Endrin Aldehyde [2C]	ND	0.080	µg/L							
Endrin Ketone	ND	0.080	µg/L							
Endrin Ketone [2C]	ND	0.080	µg/L							
Heptachlor	ND	0.050	µg/L							
Heptachlor [2C]	ND	0.050	µg/L							
Heptachlor Epoxide	ND	0.050	µg/L							
Heptachlor Epoxide [2C]	ND	0.050	µg/L							
Hexachlorobenzene	ND	0.050	µg/L							
Hexachlorobenzene [2C]	ND	0.050	µg/L							
Methoxychlor	ND	0.50	µg/L							
Methoxychlor [2C]	ND	0.50	µg/L							
Toxaphene	ND	1.0	µg/L							
Toxaphene [2C]	ND	1.0	µg/L							
Surrogate: Decachlorobiphenyl	1.58		µg/L	2.00		78.9	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.62		µg/L	2.00		81.1	30-150			
Surrogate: Tetrachloro-m-xylene	1.58		µg/L	2.00		79.2	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.65		µg/L	2.00		82.4	30-150			



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QUALITY CONTROL

Organochloride Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B213767 - SW-846 3510C

LCS (B213767-BS1)

Prepared: 10/02/18 Analyzed: 10/10/18

alpha-Chlordane	0.91	0.050	µg/L	1.00		90.7	0-200			
alpha-Chlordane [2C]	0.96	0.050	µg/L	1.00		96.5	0-200			
gamma-Chlordane	0.89	0.050	µg/L	1.00		88.9	0-200			
gamma-Chlordane [2C]	0.97	0.050	µg/L	1.00		97.0	0-200			
Alachlor	0.94	0.20	µg/L	1.00		94.2	40-140			
Alachlor [2C]	0.97	0.20	µg/L	1.00		97.4	40-140			
Aldrin	0.87	0.050	µg/L	1.00		87.1	40-140			
Aldrin [2C]	0.93	0.050	µg/L	1.00		92.7	40-140			
alpha-BHC	0.87	0.050	µg/L	1.00		87.4	40-140			
alpha-BHC [2C]	0.85	0.050	µg/L	1.00		85.1	40-140			
beta-BHC	0.88	0.050	µg/L	1.00		88.4	40-140			
beta-BHC [2C]	0.89	0.050	µg/L	1.00		89.3	40-140			
delta-BHC	0.99	0.050	µg/L	1.00		99.1	40-140			
delta-BHC [2C]	0.94	0.050	µg/L	1.00		94.0	40-140			
gamma-BHC (Lindane)	0.90	0.030	µg/L	1.00		89.8	40-140			
gamma-BHC (Lindane) [2C]	0.92	0.030	µg/L	1.00		91.7	40-140			
4,4'-DDD	1.0	0.040	µg/L	1.00		99.9	40-140			
4,4'-DDD [2C]	1.0	0.040	µg/L	1.00		105	40-140			
4,4'-DDE	0.95	0.040	µg/L	1.00		94.8	40-140			
4,4'-DDE [2C]	1.0	0.040	µg/L	1.00		101	40-140			
4,4'-DDT	1.0	0.040	µg/L	1.00		99.7	40-140			
4,4'-DDT [2C]	0.94	0.040	µg/L	1.00		93.8	40-140			
Dieldrin	0.93	0.0020	µg/L	1.00		93.5	40-140			
Dieldrin [2C]	0.99	0.0020	µg/L	1.00		99.2	40-140			
Endosulfan I	0.91	0.050	µg/L	1.00		90.7	40-140			
Endosulfan I [2C]	0.96	0.050	µg/L	1.00		95.7	40-140			
Endosulfan II	0.97	0.080	µg/L	1.00		96.6	40-140			
Endosulfan II [2C]	1.0	0.080	µg/L	1.00		100	40-140			
Endosulfan Sulfate	0.99	0.080	µg/L	1.00		99.0	40-140			
Endosulfan Sulfate [2C]	1.0	0.080	µg/L	1.00		100	40-140			
Endrin	0.92	0.080	µg/L	1.00		92.3	40-140			
Endrin [2C]	0.96	0.080	µg/L	1.00		95.7	40-140			
Endrin Aldehyde	0.94	0.080	µg/L	1.00		93.9	40-140			
Endrin Aldehyde [2C]	0.95	0.080	µg/L	1.00		95.1	40-140			
Endrin Ketone	0.99	0.080	µg/L	1.00		99.3	40-140			
Endrin Ketone [2C]	0.99	0.080	µg/L	1.00		98.8	40-140			
Heptachlor	0.67	0.050	µg/L	1.00		67.3	40-140			
Heptachlor [2C]	0.89	0.050	µg/L	1.00		88.9	40-140			
Heptachlor Epoxide	0.89	0.050	µg/L	1.00		89.2	40-140			
Heptachlor Epoxide [2C]	0.93	0.050	µg/L	1.00		92.9	40-140			
Hexachlorobenzene	0.88	0.050	µg/L	1.00		88.2	40-140			
Hexachlorobenzene [2C]	0.88	0.050	µg/L	1.00		87.8	40-140			
Methoxychlor	0.97	0.50	µg/L	1.00		96.8	40-140			
Methoxychlor [2C]	1.0	0.50	µg/L	1.00		101	40-140			
Surrogate: Decachlorobiphenyl	1.55		µg/L	2.00		77.6	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.61		µg/L	2.00		80.5	30-150			
Surrogate: Tetrachloro-m-xylene	1.67		µg/L	2.00		83.7	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.73		µg/L	2.00		86.4	30-150			

QUALITY CONTROL

Organochloride Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B213767 - SW-846 3510C</b>										
<b>LCS Dup (B213767-BSD1)</b>										
					Prepared: 10/02/18 Analyzed: 10/10/18					
alpha-Chlordane	0.83	0.050	µg/L	1.00		82.7	0-200	9.23		
alpha-Chlordane [2C]	0.89	0.050	µg/L	1.00		88.5	0-200	8.58		
gamma-Chlordane	0.81	0.050	µg/L	1.00		81.1	0-200	9.17		
gamma-Chlordane [2C]	0.89	0.050	µg/L	1.00		89.3	0-200	8.26		
Alachlor	0.85	0.20	µg/L	1.00		85.2	40-140	10.0	20	
Alachlor [2C]	0.90	0.20	µg/L	1.00		89.9	40-140	8.08	20	
Aldrin	0.80	0.050	µg/L	1.00		79.8	40-140	8.68	20	
Aldrin [2C]	0.85	0.050	µg/L	1.00		85.4	40-140	8.12	20	
alpha-BHC	0.79	0.050	µg/L	1.00		79.5	40-140	9.49	20	
alpha-BHC [2C]	0.79	0.050	µg/L	1.00		78.8	40-140	7.67	20	
beta-BHC	0.81	0.050	µg/L	1.00		80.9	40-140	8.76	20	
beta-BHC [2C]	0.82	0.050	µg/L	1.00		81.9	40-140	8.66	20	
delta-BHC	0.94	0.050	µg/L	1.00		93.9	40-140	5.43	20	
delta-BHC [2C]	0.91	0.050	µg/L	1.00		90.9	40-140	3.27	20	
gamma-BHC (Lindane)	0.82	0.030	µg/L	1.00		81.5	40-140	9.67	20	
gamma-BHC (Lindane) [2C]	0.84	0.030	µg/L	1.00		83.9	40-140	8.84	20	
4,4'-DDD	0.91	0.040	µg/L	1.00		90.6	40-140	9.80	20	
4,4'-DDD [2C]	0.95	0.040	µg/L	1.00		95.5	40-140	9.49	20	
4,4'-DDE	0.88	0.040	µg/L	1.00		88.0	40-140	7.45	20	
4,4'-DDE [2C]	0.94	0.040	µg/L	1.00		94.3	40-140	7.32	20	
4,4'-DDT	0.90	0.040	µg/L	1.00		90.0	40-140	10.2	20	
4,4'-DDT [2C]	0.85	0.040	µg/L	1.00		85.0	40-140	9.79	20	
Dieldrin	0.86	0.0020	µg/L	1.00		86.3	40-140	8.04	20	
Dieldrin [2C]	0.92	0.0020	µg/L	1.00		91.8	40-140	7.77	20	
Endosulfan I	0.83	0.050	µg/L	1.00		83.4	40-140	8.40	20	
Endosulfan I [2C]	0.89	0.050	µg/L	1.00		88.7	40-140	7.56	20	
Endosulfan II	0.88	0.080	µg/L	1.00		88.1	40-140	9.20	20	
Endosulfan II [2C]	0.92	0.080	µg/L	1.00		92.1	40-140	8.57	20	
Endosulfan Sulfate	0.94	0.080	µg/L	1.00		94.1	40-140	5.07	20	
Endosulfan Sulfate [2C]	0.96	0.080	µg/L	1.00		95.5	40-140	4.93	20	
Endrin	0.85	0.080	µg/L	1.00		84.7	40-140	8.53	20	
Endrin [2C]	0.88	0.080	µg/L	1.00		87.9	40-140	8.51	20	
Endrin Aldehyde	0.89	0.080	µg/L	1.00		89.0	40-140	5.35	20	
Endrin Aldehyde [2C]	0.91	0.080	µg/L	1.00		90.7	40-140	4.73	20	
Endrin Ketone	0.90	0.080	µg/L	1.00		89.6	40-140	10.3	20	
Endrin Ketone [2C]	0.90	0.080	µg/L	1.00		89.5	40-140	9.89	20	
Heptachlor	0.62	0.050	µg/L	1.00		61.7	40-140	8.56	20	
Heptachlor [2C]	0.83	0.050	µg/L	1.00		82.6	40-140	7.40	20	
Heptachlor Epoxide	0.82	0.050	µg/L	1.00		82.5	40-140	7.91	20	
Heptachlor Epoxide [2C]	0.86	0.050	µg/L	1.00		85.9	40-140	7.84	20	
Hexachlorobenzene	0.81	0.050	µg/L	1.00		81.2	40-140	8.28	20	
Hexachlorobenzene [2C]	0.82	0.050	µg/L	1.00		82.0	40-140	6.92	20	
Methoxychlor	0.90	0.50	µg/L	1.00		89.7	40-140	7.61	20	
Methoxychlor [2C]	0.93	0.50	µg/L	1.00		93.2	40-140	7.69	20	
Surrogate: Decachlorobiphenyl	1.10		µg/L	2.00		55.2	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.14		µg/L	2.00		57.1	30-150			
Surrogate: Tetrachloro-m-xylene	1.51		µg/L	2.00		75.7	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.60		µg/L	2.00		79.8	30-150			

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**QUALITY CONTROL**

**Polychlorinated Biphenyls By GC/ECD - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B213584 - SW-846 3546</b>										
<b>Blank (B213584-BLK1)</b>										
Prepared: 09/28/18 Analyzed: 10/01/18										
Aroclor-1016	ND	0.020	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1221	ND	0.020	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1232	ND	0.020	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1242	ND	0.020	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1248	ND	0.020	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1254	ND	0.020	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1260	ND	0.020	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1262	ND	0.020	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1268	ND	0.020	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.020	mg/Kg wet							
Surrogate: Decachlorobiphenyl	0.154		mg/Kg wet	0.200		77.0	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.145		mg/Kg wet	0.200		72.4	30-150			
Surrogate: Tetrachloro-m-xylene	0.162		mg/Kg wet	0.200		80.8	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.164		mg/Kg wet	0.200		82.0	30-150			
<b>LCS (B213584-BS1)</b>										
Prepared: 09/28/18 Analyzed: 10/01/18										
Aroclor-1016	0.18	0.020	mg/Kg wet	0.200		88.4	40-140			
Aroclor-1016 [2C]	0.17	0.020	mg/Kg wet	0.200		84.1	40-140			
Aroclor-1260	0.17	0.020	mg/Kg wet	0.200		87.0	40-140			
Aroclor-1260 [2C]	0.16	0.020	mg/Kg wet	0.200		82.0	40-140			
Surrogate: Decachlorobiphenyl	0.167		mg/Kg wet	0.200		83.5	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.156		mg/Kg wet	0.200		78.2	30-150			
Surrogate: Tetrachloro-m-xylene	0.172		mg/Kg wet	0.200		86.2	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.173		mg/Kg wet	0.200		86.6	30-150			
<b>LCS Dup (B213584-BSD1)</b>										
Prepared: 09/28/18 Analyzed: 10/01/18										
Aroclor-1016	0.17	0.020	mg/Kg wet	0.200		84.6	40-140	4.39	30	
Aroclor-1016 [2C]	0.16	0.020	mg/Kg wet	0.200		82.1	40-140	2.45	30	
Aroclor-1260	0.17	0.020	mg/Kg wet	0.200		85.5	40-140	1.71	30	
Aroclor-1260 [2C]	0.16	0.020	mg/Kg wet	0.200		81.0	40-140	1.11	30	
Surrogate: Decachlorobiphenyl	0.161		mg/Kg wet	0.200		80.7	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.153		mg/Kg wet	0.200		76.5	30-150			
Surrogate: Tetrachloro-m-xylene	0.159		mg/Kg wet	0.200		79.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.160		mg/Kg wet	0.200		80.0	30-150			

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QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B213584 - SW-846 3546

Matrix Spike (B213584-MS1)

Source: 18I1225-04

Prepared: 09/28/18 Analyzed: 10/03/18

Aroclor-1016	0.27	0.10	mg/Kg dry	0.255	ND	105	40-140			
Aroclor-1016 [2C]	0.31	0.10	mg/Kg dry	0.255	ND	124	40-140			
Aroclor-1260	0.27	0.10	mg/Kg dry	0.255	ND	105	40-140			
Aroclor-1260 [2C]	0.29	0.10	mg/Kg dry	0.255	ND	113	40-140			
Surrogate: Decachlorobiphenyl	0.274		mg/Kg dry	0.255		108	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.298		mg/Kg dry	0.255		117	30-150			
Surrogate: Tetrachloro-m-xylene	0.270		mg/Kg dry	0.255		106	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.299		mg/Kg dry	0.255		118	30-150			

Matrix Spike Dup (B213584-MSD1)

Source: 18I1225-04

Prepared: 09/28/18 Analyzed: 10/03/18

Aroclor-1016	0.27	0.10	mg/Kg dry	0.255	ND	107	40-140	1.76	30	
Aroclor-1016 [2C]	0.32	0.10	mg/Kg dry	0.255	ND	125	40-140	1.45	30	
Aroclor-1260	0.28	0.10	mg/Kg dry	0.255	ND	111	40-140	5.53	30	
Aroclor-1260 [2C]	0.30	0.10	mg/Kg dry	0.255	ND	117	40-140	3.52	30	
Surrogate: Decachlorobiphenyl	0.289		mg/Kg dry	0.255		113	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.308		mg/Kg dry	0.255		121	30-150			
Surrogate: Tetrachloro-m-xylene	0.276		mg/Kg dry	0.255		108	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.306		mg/Kg dry	0.255		120	30-150			

Batch B213766 - SW-846 3510C

Blank (B213766-BLK1)

Prepared: 10/02/18 Analyzed: 10/03/18

Aroclor-1016	ND	0.20	µg/L							
Aroclor-1016 [2C]	ND	0.20	µg/L							
Aroclor-1221	ND	0.20	µg/L							
Aroclor-1221 [2C]	ND	0.20	µg/L							
Aroclor-1232	ND	0.20	µg/L							
Aroclor-1232 [2C]	ND	0.20	µg/L							
Aroclor-1242	ND	0.20	µg/L							
Aroclor-1242 [2C]	ND	0.20	µg/L							
Aroclor-1248	ND	0.20	µg/L							
Aroclor-1248 [2C]	ND	0.20	µg/L							
Aroclor-1254	ND	0.20	µg/L							
Aroclor-1254 [2C]	ND	0.20	µg/L							
Aroclor-1260	ND	0.20	µg/L							
Aroclor-1260 [2C]	ND	0.20	µg/L							
Aroclor-1262	ND	0.20	µg/L							
Aroclor-1262 [2C]	ND	0.20	µg/L							
Aroclor-1268	ND	0.20	µg/L							
Aroclor-1268 [2C]	ND	0.20	µg/L							
Surrogate: Decachlorobiphenyl	1.66		µg/L	2.00		82.8	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.79		µg/L	2.00		89.4	30-150			
Surrogate: Tetrachloro-m-xylene	1.62		µg/L	2.00		81.2	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.76		µg/L	2.00		87.8	30-150			

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**QUALITY CONTROL**

**Polychlorinated Biphenyls By GC/ECD - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B213766 - SW-846 3510C**

**LCS (B213766-BS1)**

Prepared: 10/02/18 Analyzed: 10/03/18

Aroclor-1016	0.51	0.20	µg/L	0.500		101	40-140			
Aroclor-1016 [2C]	0.54	0.20	µg/L	0.500		108	40-140			
Aroclor-1260	0.48	0.20	µg/L	0.500		95.6	40-140			
Aroclor-1260 [2C]	0.53	0.20	µg/L	0.500		105	40-140			
Surrogate: Decachlorobiphenyl	1.63		µg/L	2.00		81.5	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.76		µg/L	2.00		87.9	30-150			
Surrogate: Tetrachloro-m-xylene	1.54		µg/L	2.00		76.9	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.66		µg/L	2.00		83.1	30-150			

**LCS Dup (B213766-BSD1)**

Prepared: 10/02/18 Analyzed: 10/03/18

Aroclor-1016	0.49	0.20	µg/L	0.500		97.0	40-140	4.14	20	
Aroclor-1016 [2C]	0.51	0.20	µg/L	0.500		102	40-140	5.85	20	
Aroclor-1260	0.49	0.20	µg/L	0.500		98.0	40-140	2.48	20	
Aroclor-1260 [2C]	0.53	0.20	µg/L	0.500		106	40-140	0.717	20	
Surrogate: Decachlorobiphenyl	1.47		µg/L	2.00		73.5	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.58		µg/L	2.00		79.2	30-150			
Surrogate: Tetrachloro-m-xylene	1.57		µg/L	2.00		78.6	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.70		µg/L	2.00		84.9	30-150			

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**QUALITY CONTROL**

**Metals Analyses (Total) - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B213917 - SW-846 3005A**

**Blank (B213917-BLK1)**

Prepared: 10/03/18 Analyzed: 10/04/18

Aluminum	ND	0.050	mg/L							
Antimony	ND	0.050	mg/L							
Arsenic	ND	0.010	mg/L							
Barium	ND	0.050	mg/L							
Beryllium	ND	0.0040	mg/L							
Cadmium	ND	0.0040	mg/L							
Calcium	ND	0.15	mg/L							
Chromium	ND	0.010	mg/L							
Cobalt	ND	0.050	mg/L							
Copper	ND	0.010	mg/L							
Iron	ND	0.050	mg/L							
Lead	ND	0.010	mg/L							
Magnesium	ND	0.15	mg/L							
Manganese	ND	0.010	mg/L							
Nickel	ND	0.010	mg/L							
Potassium	ND	2.0	mg/L							
Selenium	ND	0.050	mg/L							
Silver	ND	0.0050	mg/L							
Sodium	ND	2.0	mg/L							
Thallium	ND	0.050	mg/L							
Vanadium	ND	0.010	mg/L							
Zinc	ND	0.020	mg/L							

**LCS (B213917-BS1)**

Prepared: 10/03/18 Analyzed: 10/04/18

Aluminum	0.517	0.050	mg/L	0.500		103	80-120			
Antimony	0.513	0.050	mg/L	0.500		103	80-120			
Arsenic	0.486	0.010	mg/L	0.500		97.3	80-120			
Barium	0.495	0.050	mg/L	0.500		99.1	80-120			
Beryllium	0.490	0.0040	mg/L	0.500		98.0	80-120			
Cadmium	0.498	0.0040	mg/L	0.500		99.6	80-120			
Calcium	3.99	0.15	mg/L	4.00		99.9	80-120			
Chromium	0.490	0.010	mg/L	0.500		98.0	80-120			
Cobalt	0.493	0.050	mg/L	0.500		98.5	80-120			
Copper	0.945	0.010	mg/L	1.00		94.5	80-120			
Iron	3.94	0.050	mg/L	4.00		98.4	80-120			
Lead	0.496	0.010	mg/L	0.500		99.1	80-120			
Magnesium	3.87	0.15	mg/L	4.00		96.7	80-120			
Manganese	0.499	0.010	mg/L	0.500		99.8	80-120			
Nickel	0.492	0.010	mg/L	0.500		98.4	80-120			
Potassium	3.82	2.0	mg/L	4.00		95.4	80-120			
Selenium	0.495	0.050	mg/L	0.500		99.1	80-120			
Silver	0.505	0.0050	mg/L	0.500		101	80-120			
Sodium	3.97	2.0	mg/L	4.00		99.3	80-120			
Thallium	0.481	0.050	mg/L	0.500		96.3	80-120			
Vanadium	0.491	0.010	mg/L	0.500		98.1	80-120			
Zinc	0.993	0.020	mg/L	1.00		99.3	80-120			

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**QUALITY CONTROL**

**Metals Analyses (Total) - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B213917 - SW-846 3005A</b>										
<b>LCS Dup (B213917-BSD1)</b>										
				Prepared: 10/03/18 Analyzed: 10/04/18						
Aluminum	0.485	0.050	mg/L	0.500		97.0	80-120	6.35	20	
Antimony	0.521	0.050	mg/L	0.500		104	80-120	1.50	20	
Arsenic	0.498	0.010	mg/L	0.500		99.7	80-120	2.47	20	
Barium	0.510	0.050	mg/L	0.500		102	80-120	2.99	20	
Beryllium	0.489	0.0040	mg/L	0.500		97.8	80-120	0.239	20	
Cadmium	0.514	0.0040	mg/L	0.500		103	80-120	3.13	20	
Calcium	4.10	0.15	mg/L	4.00		102	80-120	2.51	20	
Chromium	0.504	0.010	mg/L	0.500		101	80-120	2.92	20	
Cobalt	0.508	0.050	mg/L	0.500		102	80-120	3.07	20	
Copper	0.966	0.010	mg/L	1.00		96.6	80-120	2.26	20	
Iron	4.03	0.050	mg/L	4.00		101	80-120	2.33	20	
Lead	0.505	0.010	mg/L	0.500		101	80-120	1.94	20	
Magnesium	3.95	0.15	mg/L	4.00		98.8	80-120	2.16	20	
Manganese	0.508	0.010	mg/L	0.500		102	80-120	1.81	20	
Nickel	0.507	0.010	mg/L	0.500		101	80-120	2.99	20	
Potassium	3.77	2.0	mg/L	4.00		94.1	80-120	1.34	20	
Selenium	0.509	0.050	mg/L	0.500		102	80-120	2.74	20	
Silver	0.521	0.0050	mg/L	0.500		104	80-120	3.07	20	
Sodium	3.99	2.0	mg/L	4.00		99.7	80-120	0.356	20	
Thallium	0.504	0.050	mg/L	0.500		101	80-120	4.54	20	
Vanadium	0.504	0.010	mg/L	0.500		101	80-120	2.65	20	
Zinc	1.02	0.020	mg/L	1.00		102	80-120	2.77	20	

**Batch B214020 - SW-846 7470A Prep**

<b>Blank (B214020-BLK1)</b>										
				Prepared: 10/03/18 Analyzed: 10/04/18						
Mercury	0.000038	0.00010	mg/L							J
<b>LCS (B214020-BS1)</b>										
				Prepared: 10/03/18 Analyzed: 10/04/18						
Mercury	0.00188	0.00010	mg/L	0.00200		94.1	80-120			
<b>LCS Dup (B214020-BSD1)</b>										
				Prepared: 10/03/18 Analyzed: 10/04/18						
Mercury	0.00185	0.00010	mg/L	0.00200		92.4	80-120	1.84	20	

**Batch B214328 - SW-846 3050B**

<b>Blank (B214328-BLK1)</b>										
				Prepared: 10/09/18 Analyzed: 10/10/18						
Aluminum	ND	1.7	mg/Kg wet							
Antimony	ND	1.7	mg/Kg wet							
Arsenic	ND	1.7	mg/Kg wet							
Barium	ND	1.7	mg/Kg wet							
Beryllium	ND	0.17	mg/Kg wet							
Cadmium	ND	0.17	mg/Kg wet							
Calcium	7.5	5.0	mg/Kg wet							B-07
Chromium	ND	0.33	mg/Kg wet							
Cobalt	ND	1.7	mg/Kg wet							
Copper	ND	0.33	mg/Kg wet							
Iron	ND	1.7	mg/Kg wet							
Lead	ND	0.50	mg/Kg wet							
Magnesium	ND	5.0	mg/Kg wet							
Manganese	ND	0.33	mg/Kg wet							
Nickel	ND	0.33	mg/Kg wet							
Potassium	ND	67	mg/Kg wet							
Selenium	ND	3.3	mg/Kg wet							



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**QUALITY CONTROL**

**Metals Analyses (Total) - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B214328 - SW-846 3050B**

**Blank (B214328-BLK1)**

Prepared: 10/09/18 Analyzed: 10/10/18

Silver	ND	0.33	mg/Kg wet							
Sodium	ND	67	mg/Kg wet							
Thallium	ND	1.7	mg/Kg wet							
Vanadium	ND	0.67	mg/Kg wet							
Zinc	0.90	0.67	mg/Kg wet							B-07

**LCS (B214328-BS1)**

Prepared: 10/09/18 Analyzed: 10/10/18

Aluminum	6810	5.1	mg/Kg wet	8360		81.5	49.6-150.7			
Antimony	71.4	5.1	mg/Kg wet	75.5		94.5	3.8-196			
Arsenic	160	5.1	mg/Kg wet	161		99.2	83.2-116.8			
Barium	256	5.1	mg/Kg wet	260		98.5	82.7-117.3			
Beryllium	96.7	0.51	mg/Kg wet	97.6		99.1	83.4-116.8			
Cadmium	204	0.51	mg/Kg wet	211		96.9	83.4-116.6			
Calcium	4410	15	mg/Kg wet	4760		92.6	81.7-118.5			B
Chromium	133	1.0	mg/Kg wet	136		97.4	82.4-117.6			
Cobalt	47.8	5.1	mg/Kg wet	48.2		99.2	84.2-115.6			
Copper	164	1.0	mg/Kg wet	166		98.8	83.7-115.7			
Iron	12000	5.1	mg/Kg wet	14100		84.9	60.1-139.7			
Lead	107	1.5	mg/Kg wet	111		96.8	83-117.1			
Magnesium	2050	15	mg/Kg wet	2340		87.6	76.1-123.9			
Manganese	215	1.0	mg/Kg wet	228		94.4	82.5-117.5			
Nickel	90.5	1.0	mg/Kg wet	91.9		98.5	82.9-117.5			
Potassium	2120	200	mg/Kg wet	2020		105	69.8-130.2			
Selenium	182	10	mg/Kg wet	191		95.1	79.6-120.9			
Silver	44.4	1.0	mg/Kg wet	43.3		102	79.9-119.9			
Sodium	230	200	mg/Kg wet	218		105	72.9-127.5			
Thallium	161	5.1	mg/Kg wet	156		103	81.4-119.2			
Vanadium	53.6	2.0	mg/Kg wet	56.7		94.6	79-121.2			
Zinc	199	2.0	mg/Kg wet	199		99.9	81.4-119.1			B

**LCS Dup (B214328-BS1)**

Prepared: 10/09/18 Analyzed: 10/10/18

Aluminum	6940	4.8	mg/Kg wet	8360		83.0	49.6-150.7	1.84	30	
Antimony	71.9	4.8	mg/Kg wet	75.5		95.2	3.8-196	0.741	30	
Arsenic	166	4.8	mg/Kg wet	161		103	83.2-116.8	3.69	30	
Barium	265	4.8	mg/Kg wet	260		102	82.7-117.3	3.37	30	
Beryllium	101	0.48	mg/Kg wet	97.6		103	83.4-116.8	4.12	30	
Cadmium	211	0.48	mg/Kg wet	211		99.9	83.4-116.6	3.08	30	
Calcium	4670	14	mg/Kg wet	4760		98.2	81.7-118.5	5.77	30	B
Chromium	138	0.96	mg/Kg wet	136		102	82.4-117.6	4.14	30	
Cobalt	49.4	4.8	mg/Kg wet	48.2		103	84.2-115.6	3.33	30	
Copper	173	0.96	mg/Kg wet	166		104	83.7-115.7	5.46	30	
Iron	12700	4.8	mg/Kg wet	14100		90.1	60.1-139.7	5.92	30	
Lead	111	1.4	mg/Kg wet	111		99.5	83-117.1	2.79	30	
Magnesium	2090	14	mg/Kg wet	2340		89.2	76.1-123.9	1.79	30	
Manganese	233	0.96	mg/Kg wet	228		102	82.5-117.5	7.78	30	
Nickel	94.1	0.96	mg/Kg wet	91.9		102	82.9-117.5	3.86	30	
Potassium	2150	190	mg/Kg wet	2020		106	69.8-130.2	1.23	30	
Selenium	189	9.6	mg/Kg wet	191		99.1	79.6-120.9	4.18	30	
Silver	46.7	0.96	mg/Kg wet	43.3		108	79.9-119.9	5.07	30	
Sodium	231	190	mg/Kg wet	218		106	72.9-127.5	0.750	30	
Thallium	167	4.8	mg/Kg wet	156		107	81.4-119.2	3.58	30	
Vanadium	55.7	1.9	mg/Kg wet	56.7		98.2	79-121.2	3.72	30	
Zinc	206	1.9	mg/Kg wet	199		104	81.4-119.1	3.65	30	B

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**QUALITY CONTROL**

**Metals Analyses (Total) - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B214328 - SW-846 3050B**

**MRL Check (B214328-MRL1)**

Prepared: 10/09/18 Analyzed: 10/10/18

Lead	0.570	0.50	mg/Kg wet	0.500		114	80-120			
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**Matrix Spike (B214328-MS1)**

**Source: 18I1225-04**

Prepared: 10/09/18 Analyzed: 10/10/18

<b>Aluminum</b>	8470	2.1	mg/Kg dry	21.2	8290	<b>825</b>	*	75-125		MS-19
<b>Antimony</b>	9.00	2.1	mg/Kg dry	21.2	ND	<b>42.4</b>	*	75-125		MS-07A
Arsenic	32.5	2.1	mg/Kg dry	21.2	11.7	98.0		75-125		
<b>Barium</b>	215	2.1	mg/Kg dry	21.2	219	<b>-22.2</b>	*	75-125		MS-19
Beryllium	21.1	0.21	mg/Kg dry	21.2	1.12	94.3		75-125		
Cadmium	21.1	0.21	mg/Kg dry	21.2	0.556	97.0		75-125		
<b>Calcium</b>	7030	6.4	mg/Kg dry	170	6570	<b>269</b>	*	75-125		MS-19, B
Chromium	36.4	0.42	mg/Kg dry	21.2	15.2	99.8		75-125		
Cobalt	30.0	2.1	mg/Kg dry	21.2	10.2	93.2		75-125		
<b>Copper</b>	111	0.42	mg/Kg dry	42.4	52.5	<b>138</b>	*	75-125		MS-22
<b>Iron</b>	15000	21	mg/Kg dry	170	17800	<b>-1610</b>	*	75-125		MS-19
<b>Lead</b>	822	0.64	mg/Kg dry	21.2	470	<b>1660</b>	*	75-125		MS-19
<b>Magnesium</b>	1960	64	mg/Kg dry	170	2350	<b>-231</b>	*	75-125		MS-22
<b>Manganese</b>	378	0.42	mg/Kg dry	21.2	417	<b>-187</b>	*	75-125		MS-19
Nickel	43.9	0.42	mg/Kg dry	21.2	21.5	106		75-125		
Potassium	1340	850	mg/Kg dry	170	1190	90.5		75-125		
Selenium	17.0	4.2	mg/Kg dry	21.2	ND	80.1		75-125		
Silver	21.8	0.42	mg/Kg dry	21.2	ND	103		75-125		
Sodium	409	85	mg/Kg dry	170	207	119		75-125		
Thallium	25.4	2.1	mg/Kg dry	21.2	ND	120		75-125		
Vanadium	52.5	0.85	mg/Kg dry	21.2	30.8	102		75-125		
Zinc	246	0.85	mg/Kg dry	42.4	195	119		75-125		B

**Matrix Spike Dup (B214328-MSD1)**

**Source: 18I1225-04**

Prepared: 10/09/18 Analyzed: 10/10/18

<b>Aluminum</b>	8900	2.1	mg/Kg dry	21.2	8290	<b>2830</b>	*	75-125	4.91	35	MS-19	
<b>Antimony</b>	8.99	2.1	mg/Kg dry	21.2	ND	<b>42.4</b>	*	75-125	0.0928	35	MS-07A	
Arsenic	31.2	2.1	mg/Kg dry	21.2	11.7	91.9		75-125	4.11	35		
<b>Barium</b>	247	2.1	mg/Kg dry	21.2	219	<b>129</b>	*	75-125	13.9	35	MS-19	
Beryllium	20.6	0.21	mg/Kg dry	21.2	1.12	91.6		75-125	2.73	35		
Cadmium	20.4	0.21	mg/Kg dry	21.2	0.556	93.3		75-125	3.76	35		
<b>Calcium</b>	7500	6.4	mg/Kg dry	170	6570	<b>548</b>	*	75-125	6.52	35	MS-19, B	
Chromium	34.9	0.42	mg/Kg dry	21.2	15.2	92.6		75-125	4.32	35		
Cobalt	29.7	2.1	mg/Kg dry	21.2	10.2	91.8		75-125	1.03	35		
Copper	99.3	0.42	mg/Kg dry	42.4	52.5	110		75-125	11.3	35		
<b>Iron</b>	21200	21	mg/Kg dry	170	17800	<b>2050</b>	*	75-125	34.3	35	MS-19	
<b>Lead</b>	736	0.64	mg/Kg dry	21.2	470	<b>1250</b>	*	75-125	11.0	35	MS-19	
Magnesium	2560	64	mg/Kg dry	170	2350	125		75-125	26.8	35		
<b>Manganese</b>	589	0.42	mg/Kg dry	21.2	417	<b>808</b>	*	75-125	<b>43.7</b>	*	35	MS-19
Nickel	41.2	0.42	mg/Kg dry	21.2	21.5	92.6		75-125	6.50	35		
<b>Potassium</b>	1260	850	mg/Kg dry	170	1190	<b>43.2</b>	*	75-125	6.17	35	MS-19	
<b>Selenium</b>	15.3	4.2	mg/Kg dry	21.2	ND	<b>72.3</b>	*	75-125	10.2	35	MS-22	
Silver	21.1	0.42	mg/Kg dry	21.2	ND	99.3		75-125	3.55	35		
Sodium	371	85	mg/Kg dry	170	207	96.8		75-125	9.77	35		
Thallium	24.6	2.1	mg/Kg dry	21.2	ND	116		75-125	3.50	35		
Vanadium	55.5	0.85	mg/Kg dry	21.2	30.8	117		75-125	5.72	35		
Zinc	240	0.85	mg/Kg dry	42.4	195	105		75-125	2.38	35	B	

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**QUALITY CONTROL**

**Metals Analyses (Total) - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B214451 - SW-846 7471</b>										
<b>Blank (B214451-BLK1)</b>										
					Prepared: 10/10/18 Analyzed: 10/11/18					
Mercury	0.0039	0.025	mg/Kg wet							J
<b>LCS (B214451-BS1)</b>										
					Prepared: 10/10/18 Analyzed: 10/11/18					
Mercury	12.2	1.9	mg/Kg wet	11.5		106	71.6-127.8			
<b>LCS Dup (B214451-BSD1)</b>										
					Prepared: 10/10/18 Analyzed: 10/11/18					
Mercury	12.2	1.9	mg/Kg wet	11.5		106	71.6-127.8	0.350	30	
<b>Matrix Spike (B214451-MS1)</b>										
					<b>Source: 1811225-04</b>		Prepared: 10/10/18 Analyzed: 10/11/18			
Mercury	2.85	0.16	mg/Kg dry	0.218	2.43	<b>190</b>	* 75-125			MS-19
<b>Matrix Spike Dup (B214451-MSD1)</b>										
					<b>Source: 1811225-04</b>		Prepared: 10/10/18 Analyzed: 10/11/18			
Mercury	3.25	0.16	mg/Kg dry	0.217	2.43	<b>374</b>	* 75-125	13.0	35	MS-19

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**QUALITY CONTROL**

**Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B213870 - SW-846 9014</b>										
<b>Blank (B213870-BLK1)</b>				Prepared & Analyzed: 10/03/18						
Cyanide	ND	0.010	mg/L							
<b>LCS (B213870-BS1)</b>				Prepared & Analyzed: 10/03/18						
Cyanide	0.76	0.020	mg/L	0.756		100	80-120			
<b>LCS Dup (B213870-BSD1)</b>				Prepared & Analyzed: 10/03/18						
Cyanide	0.75	0.020	mg/L	0.756		99.0	80-120	1.29	20	
<b>Batch B213925 - SW-846 9014</b>										
<b>Blank (B213925-BLK1)</b>				Prepared: 10/03/18 Analyzed: 10/05/18						
Cyanide	ND	0.43	mg/Kg wet							
<b>LCS (B213925-BS1)</b>				Prepared: 10/03/18 Analyzed: 10/05/18						
Cyanide	61	2.2	mg/Kg wet	61.9		97.8	80-120			
<b>LCS Dup (B213925-BSD1)</b>				Prepared: 10/03/18 Analyzed: 10/05/18						
Cyanide	64	2.2	mg/Kg wet	62.2		102	80-120	4.90	20	
<b>Matrix Spike (B213925-MS1)</b>				<b>Source: 18I1225-04</b> Prepared: 10/03/18 Analyzed: 10/05/18						
Cyanide	21	0.57	mg/Kg dry	21.5	1.4	89.2	75-125			
<b>Matrix Spike Dup (B213925-MSD1)</b>				<b>Source: 18I1225-04</b> Prepared: 10/03/18 Analyzed: 10/05/18						
Cyanide	21	0.57	mg/Kg dry	21.6	1.4	91.5	75-125	2.64	35	
<b>Batch B214323 - % Solids</b>										
<b>Duplicate (B214323-DUP1)</b>				<b>Source: 18I1225-04</b> Prepared: 10/09/18 Analyzed: 10/10/18						
% Solids	78.2		% Wt		78.5			0.417	20	

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## BREAKDOWN REPORT

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**Lab Sample ID:** S027958-PEM1 **Analyzed:** 10/03/2018

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**Column Number:** 1  
**Analyte** **% Breakdown**  
4,4'-DDT [1] 3.86  
Endrin [1] 2.75

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**Column Number:** 2  
**Analyte** **% Breakdown**  
4,4'-DDT [2] 4.59  
Endrin [2] 3.05

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## BREAKDOWN REPORT

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**Lab Sample ID:** S027958-PEM2 **Analyzed:** 10/03/2018

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**Column Number:** 1  
**Analyte** **% Breakdown**  
4,4'-DDT [1] 5.90  
Endrin [1] 3.65

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**Column Number:** 2  
**Analyte** **% Breakdown**  
4,4'-DDT [2] 6.97  
Endrin [2] 3.96

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## BREAKDOWN REPORT

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**Lab Sample ID:** S027958-PEM3 **Analyzed:** 10/03/2018

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**Column Number:** 1  
**Analyte** **% Breakdown**  
4,4'-DDT [1] 3.80  
Endrin [1] 2.99

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## BREAKDOWN REPORT

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**Lab Sample ID:** S027958-PEM3 **Analyzed:** 10/03/2018

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**Column Number:** 2  
**Analyte** **% Breakdown**  
4,4'-DDT [2] 4.46  
Endrin [2] 3.31

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## BREAKDOWN REPORT

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**Lab Sample ID:** S027958-PEM4 **Analyzed:** 10/04/2018

---

**Column Number:** 1  
**Analyte** **% Breakdown**  
4,4'-DDT [1] 3.53  
Endrin [1] 2.85

---

**Column Number:** 2  
**Analyte** **% Breakdown**  
4,4'-DDT [2] 4.08  
Endrin [2] 2.94

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## BREAKDOWN REPORT

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**Lab Sample ID:** S028135-PEM1 **Analyzed:** 10/08/2018

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**Column Number:** 1  
**Analyte** **% Breakdown**  
4,4'-DDT [1] 0.52  
Endrin [1] 3.06

---

**Column Number:** 2  
**Analyte** **% Breakdown**  
4,4'-DDT [2] 0.54  
Endrin [2] 3.16

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## BREAKDOWN REPORT

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## BREAKDOWN REPORT

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**Lab Sample ID:** S028135-PEM2 **Analyzed:** 10/09/2018

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**Column Number:** 1  
**Analyte** **% Breakdown**  
4,4'-DDT [1] 0.51  
Endrin [1] 3.25

---

**Column Number:** 2  
**Analyte** **% Breakdown**  
4,4'-DDT [2] 0.52  
Endrin [2] 3.22

---

## BREAKDOWN REPORT

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**Lab Sample ID:** S028135-PEM3 **Analyzed:** 10/09/2018

---

**Column Number:** 1  
**Analyte** **% Breakdown**  
4,4'-DDT [1] 1.56  
Endrin [1] 2.76

---

**Column Number:** 2  
**Analyte** **% Breakdown**  
4,4'-DDT [2] 1.66  
Endrin [2] 2.65

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## BREAKDOWN REPORT

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**Lab Sample ID:** S028135-PEM4 **Analyzed:** 10/09/2018

---

**Column Number:** 1  
**Analyte** **% Breakdown**  
4,4'-DDT [1] 1.22  
Endrin [1] 2.59

---



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BREAKDOWN REPORT

Lab Sample ID: S028135-PEM4 Analyzed: 10/09/2018

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Column Number: 2

Analyte	% Breakdown
4,4'-DDT [2]	1.24
Endrin [2]	2.42

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BREAKDOWN REPORT

Lab Sample ID: S028135-PEM5 Analyzed: 10/10/2018

---

Column Number: 1

Analyte	% Breakdown
4,4'-DDT [1]	1.08
Endrin [1]	1.92

---

Column Number: 2

Analyte	% Breakdown
4,4'-DDT [2]	1.13
Endrin [2]	1.91

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BREAKDOWN REPORT

Lab Sample ID: S028135-PEM6 Analyzed: 10/10/2018

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Column Number: 1

Analyte	% Breakdown
4,4'-DDT [1]	1.27
Endrin [1]	1.98

---

Column Number: 2

Analyte	% Breakdown
4,4'-DDT [2]	1.25
Endrin [2]	1.88

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**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**

401075-SS-01-00-12

*SW-846 8081B*

Lab Sample ID: 1811225-01 Date(s) Analyzed 10/04/2018 10/04/2018

Instrument ID (1): ECD2 Instrument ID (2): ECD2

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
4,4'-DDE	1	6.707	6.679	6.739	0.0038	
	2	6.561	6.533	6.593	0.0048	23.3
4,4'-DDT	1	7.354	7.325	7.385	0.0068	
	2	7.209	7.181	7.241	0.0090	27.8

**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**

**401075-SS-02-00-12**

*SW-846 8081B*

Lab Sample ID: 18I1225-03 Date(s) Analyzed 10/04/2018 10/04/2018  
 Instrument ID (1): ECD2 Instrument ID (2): ECD2  
 GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
4,4'-DDE	1	6.716	6.679	6.739	0.0030	
	2	6.563	6.533	6.593	0.0036	18.2
4,4'-DDT	1	7.361	7.325	7.385	0.011	
	2	7.195	7.181	7.241	0.010	9.5
Aroclor-1268	1	0.000	0.000	0.000	0.047	
	2	0.000	0.000	0.000	0.043	8.9

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**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**

LCS

*SW-846 8082A*

Lab Sample ID: B213584-BS1 Date(s) Analyzed 10/01/2018 10/01/2018

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.18	
	2	0.000	0.000	0.000	0.17	5.7
Aroclor-1260	1	0.000	0.000	0.000	0.17	
	2	0.000	0.000	0.000	0.16	6.1

**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**

LCS Dup

*SW-846 8082A*Lab Sample ID: B213584-BSD1 Date(s) Analyzed 10/01/2018 10/01/2018

Instrument ID (1): \_\_\_\_\_ Instrument ID (2): \_\_\_\_\_

GC Column (1): ID: \_\_\_\_\_ (mm) GC Column (2): ID: \_\_\_\_\_ (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.17	
	2	0.000	0.000	0.000	0.16	6.1
Aroclor-1260	1	0.000	0.000	0.000	0.17	
	2	0.000	0.000	0.000	0.16	6.1

**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**

**Matrix Spike**

*SW-846 8082A*

Lab Sample ID:                   B213584-MS1                                        Date(s) Analyzed           10/03/2018                     10/03/2018          

Instrument ID (1):                   ECD1                                        Instrument ID (2):                   ECD1                  

GC Column (1):                      ID:                      (mm)                      GC Column (2):                      ID:                      (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.27	
	2	0.000	0.000	0.000	0.31	13.8
Aroclor-1260	1	0.000	0.000	0.000	0.27	
	2	0.000	0.000	0.000	0.29	7.1

**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**

**Matrix Spike Dup**

*SW-846 8082A*

Lab Sample ID:           B213584-MSD1                                Date(s) Analyzed           10/03/2018                     10/03/2018          

Instrument ID (1):           ECD1                                                Instrument ID (2):           ECD1          

GC Column (1):                                      ID:                      (mm)                      GC Column (2):                                      ID:                      (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.27	
	2	0.000	0.000	0.000	0.32	16.9
Aroclor-1260	1	0.000	0.000	0.000	0.28	
	2	0.000	0.000	0.000	0.30	6.9

**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**  
*SW-846 8081B*

<b>LCS</b>
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Lab Sample ID:                   B213585-BS1                                        Date(s) Analyzed           10/03/2018                     10/03/2018          

Instrument ID (1):                   ECD2                                        Instrument ID (2):                   ECD2                  

GC Column (1):                      ID:                      (mm)                      GC Column (2):                      ID:                      (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
4,4'-DDD	1	7.145	7.117	7.177	0.11	
	2	6.979	6.949	7.009	0.11	0.0
4,4'-DDE	1	6.709	6.681	6.741	0.10	
	2	6.562	6.533	6.593	0.10	0.0
4,4'-DDT	1	7.356	7.327	7.387	0.10	
	2	7.210	7.180	7.240	0.10	0.0
Alachlor	1	6.154	6.125	6.185	0.11	
	2	5.787	5.758	5.818	0.11	0.0
Aldrin	1	6.058	6.028	6.088	0.10	
	2	5.833	5.804	5.864	0.099	1.0
alpha-BHC	1	5.365	5.336	5.396	0.091	
	2	5.184	5.155	5.215	0.10	9.4
alpha-Chlordane	1	6.651	6.622	6.682	0.10	
	2	6.432	6.402	6.462	0.10	0.0
beta-BHC	1	5.612	5.584	5.644	0.093	
	2	5.435	5.406	5.466	0.095	2.1
delta-BHC	1	5.724	5.696	5.756	0.10	
	2	5.605	5.576	5.636	0.10	0.0
Dieldrin	1	6.920	6.892	6.952	0.10	
	2	6.657	6.628	6.688	0.10	0.0
Endosulfan I	1	6.747	6.719	6.779	0.10	
	2	6.466	6.437	6.497	0.10	0.0
Endosulfan II	1	7.256	7.227	7.287	0.10	
	2	7.029	6.999	7.059	0.11	9.5
Endosulfan Sulfate	1	7.910	7.880	7.940	0.11	
	2	7.498	7.468	7.528	0.11	0.0
Endrin	1	7.090	7.060	7.120	0.099	
	2	6.871	6.841	6.901	0.10	1.0
Endrin Aldehyde	1	7.574	7.545	7.605	0.10	
	2	7.285	7.255	7.315	0.10	0.0
Endrin Ketone	1	8.109	8.081	8.141	0.11	



**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**

<b>LCS</b>
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*SW-846 8081B*

Lab Sample ID:                     B213585-BS1                                          Date(s) Analyzed           10/03/2018                     10/03/2018          

Instrument ID (1):                     ECD2                                          Instrument ID (2):                     ECD2                    

GC Column (1):                      ID:                      (mm)                      GC Column (2):                      ID:                      (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
	2	7.899	7.869	7.929	0.11	0.0
gamma-BHC (Lindane)	1	5.559	5.530	5.590	0.095	
	2	5.383	5.354	5.414	0.098	2.1
gamma-Chlordane	1	6.556	6.528	6.588	0.10	
	2	6.331	6.302	6.362	0.10	0.0
Heptachlor	1	5.860	5.831	5.891	0.097	
	2	5.638	5.609	5.669	0.10	3.1
Heptachlor Epoxide	1	6.470	6.441	6.501	0.099	
	2	6.204	6.175	6.235	0.10	1.0
Hexachlorobenzene	1	5.262	5.234	5.294	0.10	
	2	5.103	5.074	5.134	0.11	9.5
Methoxychlor	1	7.736	7.707	7.767	0.099	
	2	7.757	7.726	7.786	0.10	1.0

**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**  
*SW-846 8081B*

<b>LCS Dup</b>
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Lab Sample ID:                     B213585-BSD1                          Date(s) Analyzed           10/03/2018                     10/03/2018          

Instrument ID (1):                     ECD2                          Instrument ID (2):                     ECD2                    

GC Column (1):                                    ID:                                    (mm)      GC Column (2):                                    ID:                                    (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
4,4'-DDD	1	7.145	7.117	7.177	0.11	
	2	6.978	6.949	7.009	0.11	0.0
4,4'-DDE	1	6.710	6.681	6.741	0.11	
	2	6.562	6.533	6.593	0.11	0.0
4,4'-DDT	1	7.355	7.327	7.387	0.11	
	2	7.211	7.180	7.240	0.11	0.0
Alachlor	1	6.155	6.125	6.185	0.11	
	2	5.788	5.758	5.818	0.11	0.0
Aldrin	1	6.057	6.028	6.088	0.10	
	2	5.834	5.804	5.864	0.10	0.0
alpha-BHC	1	5.365	5.336	5.396	0.096	
	2	5.185	5.155	5.215	0.11	13.6
alpha-Chlordane	1	6.652	6.622	6.682	0.10	
	2	6.431	6.402	6.462	0.11	9.5
beta-BHC	1	5.613	5.584	5.644	0.097	
	2	5.436	5.406	5.466	0.10	2.0
delta-BHC	1	5.724	5.696	5.756	0.11	
	2	5.606	5.576	5.636	0.11	0.0
Dieldrin	1	6.920	6.892	6.952	0.10	
	2	6.658	6.628	6.688	0.10	9.5
Endosulfan I	1	6.748	6.719	6.779	0.10	
	2	6.466	6.437	6.497	0.11	9.5
Endosulfan II	1	7.255	7.227	7.287	0.11	
	2	7.029	6.999	7.059	0.11	0.0
Endosulfan Sulfate	1	7.910	7.880	7.940	0.11	
	2	7.498	7.468	7.528	0.11	0.0
Endrin	1	7.089	7.060	7.120	0.10	
	2	6.872	6.841	6.901	0.11	9.5
Endrin Aldehyde	1	7.574	7.545	7.605	0.10	
	2	7.285	7.255	7.315	0.10	0.0
Endrin Ketone	1	8.109	8.081	8.141	0.12	

**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**  
*SW-846 8081B*

LCS Dup

Lab Sample ID:                     B213585-BSD1                                          Date(s) Analyzed           10/03/2018                     10/03/2018          

Instrument ID (1):                     ECD2                                          Instrument ID (2):                     ECD2                    

GC Column (1):                      ID:                      (mm)                      GC Column (2):                      ID:                      (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
	2	7.898	7.869	7.929	0.12	0.0
gamma-BHC (Lindane)	1	5.559	5.530	5.590	0.10	
	2	5.384	5.354	5.414	0.10	0.0
gamma-Chlordane	1	6.557	6.528	6.588	0.10	
	2	6.332	6.302	6.362	0.11	9.5
Heptachlor	1	5.860	5.831	5.891	0.10	
	2	5.639	5.609	5.669	0.10	0.0
Heptachlor Epoxide	1	6.470	6.441	6.501	0.10	
	2	6.205	6.175	6.235	0.10	0.0
Hexachlorobenzene	1	5.262	5.234	5.294	0.11	
	2	5.104	5.074	5.134	0.12	8.7
Methoxychlor	1	7.736	7.707	7.767	0.10	
	2	7.757	7.726	7.786	0.10	0.0

**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**

**Matrix Spike**

*SW-846 8081B*

Lab Sample ID:                     B213585-MS1                                          Date(s) Analyzed           10/04/2018                     10/04/2018          

Instrument ID (1):                     ECD2                                          Instrument ID (2):                     ECD2                    

GC Column (1):                      ID:                      (mm)                      GC Column (2):                      ID:                      (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
4,4'-DDD	1	7.143	7.114	7.174	0.074	
	2	6.977	6.947	7.007	0.076	2.7
4,4'-DDE	1	6.708	6.679	6.739	0.073	
	2	6.561	6.531	6.591	0.075	2.7
4,4'-DDT	1	7.355	7.325	7.385	0.076	
	2	7.209	7.178	7.238	0.077	1.3
Alachlor	1	6.153	6.124	6.184	0.074	
	2	5.787	5.757	5.817	0.075	1.3
Aldrin	1	6.055	6.027	6.087	0.068	
	2	5.832	5.802	5.862	0.067	1.5
alpha-BHC	1	5.363	5.335	5.395	0.041	
	2	5.184	5.154	5.214	0.048	15.7
beta-BHC	1	5.611	5.582	5.642	0.051	
	2	5.434	5.405	5.465	0.053	3.9
delta-BHC	1	5.722	5.693	5.753	0.053	
	2	5.605	5.575	5.635	0.050	5.8
Dieldrin	1	6.918	6.889	6.949	0.071	
	2	6.656	6.626	6.686	0.071	0.0
Endosulfan I	1	6.745	6.716	6.776	0.064	
	2	6.464	6.435	6.495	0.067	4.6
Endosulfan II	1	7.254	7.224	7.284	0.064	
	2	7.028	6.998	7.058	0.066	3.1
Endosulfan Sulfate	1	7.908	7.879	7.939	0.065	
	2	7.496	7.466	7.526	0.064	1.6
Endrin	1	7.088	7.059	7.119	0.071	
	2	6.870	6.840	6.900	0.073	2.8
Endrin Aldehyde	1	7.572	7.543	7.603	0.050	
	2	7.283	7.253	7.313	0.050	0.0
Endrin Ketone	1	8.108	8.078	8.138	0.076	
	2	7.896	7.867	7.927	0.072	5.4
gamma-BHC (Lindane)	1	5.558	5.529	5.589	0.048	

**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**

**Matrix Spike**

*SW-846 8081B*

Lab Sample ID:                   B213585-MS1                                        Date(s) Analyzed           10/04/2018                     10/04/2018          

Instrument ID (1):                   ECD2                                        Instrument ID (2):                   ECD2                  

GC Column (1):                      ID:                      (mm)                      GC Column (2):                      ID:                      (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
	2	5.382	5.353	5.413	0.050	4.1
Heptachlor	1	5.858	5.829	5.889	0.063	
	2	5.637	5.608	5.668	0.065	3.1
Heptachlor Epoxide	1	6.469	6.439	6.499	0.067	
	2	6.204	6.173	6.233	0.068	1.5
Hexachlorobenzene	1	5.262	5.232	5.292	0.061	
	2	5.103	5.073	5.133	0.058	5.0
Methoxychlor	1	7.735	7.706	7.766	0.069	
	2	7.756	7.725	7.785	0.072	4.3

**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**

**Matrix Spike Dup**

*SW-846 8081B*

Lab Sample ID:                     B213585-MSD1                          Date(s) Analyzed           10/04/2018                     10/04/2018          

Instrument ID (1):                     ECD2                          Instrument ID (2):                     ECD2                    

GC Column (1):                                    ID:                                    (mm)      GC Column (2):                                    ID:                                    (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
4,4'-DDD	1	7.143	7.114	7.174	0.083	
	2	6.977	6.947	7.007	0.084	1.2
4,4'-DDE	1	6.708	6.679	6.739	0.080	
	2	6.561	6.531	6.591	0.083	3.7
4,4'-DDT	1	7.354	7.325	7.385	0.085	
	2	7.209	7.178	7.238	0.085	0.0
Alachlor	1	6.154	6.124	6.184	0.085	
	2	5.787	5.757	5.817	0.088	3.5
Aldrin	1	6.056	6.027	6.087	0.079	
	2	5.832	5.802	5.862	0.078	1.3
alpha-BHC	1	5.364	5.335	5.395	0.063	
	2	5.184	5.154	5.214	0.071	11.9
beta-BHC	1	5.611	5.582	5.642	0.070	
	2	5.434	5.405	5.465	0.072	2.8
delta-BHC	1	5.723	5.693	5.753	0.074	
	2	5.605	5.575	5.635	0.071	4.1
Dieldrin	1	6.919	6.889	6.949	0.080	
	2	6.656	6.626	6.686	0.080	0.0
Endosulfan I	1	6.746	6.716	6.776	0.075	
	2	6.465	6.435	6.495	0.078	3.9
Endosulfan II	1	7.254	7.224	7.284	0.074	
	2	7.028	6.998	7.058	0.077	2.6
Endosulfan Sulfate	1	7.908	7.879	7.939	0.075	
	2	7.496	7.466	7.526	0.074	1.3
Endrin	1	7.089	7.059	7.119	0.080	
	2	6.870	6.840	6.900	0.083	3.7
Endrin Aldehyde	1	7.572	7.543	7.603	0.057	
	2	7.283	7.253	7.313	0.058	1.7
Endrin Ketone	1	8.108	8.078	8.138	0.085	
	2	7.897	7.867	7.927	0.081	4.8
gamma-BHC (Lindane)	1	5.558	5.529	5.589	0.068	

**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**

**Matrix Spike Dup**

*SW-846 8081B*

Lab Sample ID:                     B213585-MSD1                                          Date(s) Analyzed           10/04/2018                     10/04/2018          

Instrument ID (1):                     ECD2                                          Instrument ID (2):                     ECD2                    

GC Column (1):                      ID:                      (mm)                      GC Column (2):                      ID:                      (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
	2	5.383	5.353	5.413	0.070	2.9
Heptachlor	1	5.858	5.829	5.889	0.077	
	2	5.637	5.608	5.668	0.078	1.3
Heptachlor Epoxide	1	6.469	6.439	6.499	0.077	
	2	6.204	6.173	6.233	0.079	2.6
Hexachlorobenzene	1	5.262	5.232	5.292	0.085	
	2	5.102	5.073	5.133	0.078	8.6
Methoxychlor	1	7.735	7.706	7.766	0.077	
	2	7.755	7.725	7.785	0.082	6.3

**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**  
*SW-846 8082A*

LCS
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Lab Sample ID:                   B213766-BS1                                        Date(s) Analyzed           10/03/2018                     10/03/2018          

Instrument ID (1):                   ECD 9                                        Instrument ID (2):                   ECD 9                  

GC Column (1):                      ID:                      (mm)                      GC Column (2):                      ID:                      (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.51	
	2	0.000	0.000	0.000	0.54	5.7
Aroclor-1260	1	0.000	0.000	0.000	0.48	
	2	0.000	0.000	0.000	0.53	9.9



**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**  
*SW-846 8082A*

<b>LCS Dup</b>
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Lab Sample ID:                     B213766-BSD1                                          Date(s) Analyzed           10/03/2018                     10/03/2018          

Instrument ID (1):                     ECD 9                                          Instrument ID (2):                     ECD 9                    

GC Column (1):                      ID:                      (mm)                      GC Column (2):                      ID:                      (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.49	
	2	0.000	0.000	0.000	0.51	4.0
Aroclor-1260	1	0.000	0.000	0.000	0.49	
	2	0.000	0.000	0.000	0.53	7.8

**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**  
*SW-846 8081B*

<b>LCS</b>
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Lab Sample ID:                     B213767-BS1                          Date(s) Analyzed           10/10/2018                     10/10/2018          

Instrument ID (1):                     ECD6A                          Instrument ID (2):                     ECD6B                    

GC Column (1):                                    ID:                                    (mm)      GC Column (2):                                    ID:                                    (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
4,4'-DDD	1	6.973	6.944	7.004	1.0	
	2	7.074	7.043	7.103	1.0	0.0
4,4'-DDE	1	6.551	6.521	6.581	0.95	
	2	6.651	6.621	6.681	1.0	5.1
4,4'-DDT	1	7.181	7.152	7.212	1.0	
	2	7.307	7.277	7.337	0.94	6.2
Alachlor	1	6.009	5.980	6.040	0.94	
	2	5.863	5.832	5.892	0.97	3.1
Aldrin	1	5.918	5.888	5.948	0.87	
	2	5.913	5.883	5.943	0.93	6.7
alpha-BHC	1	5.254	5.224	5.284	0.87	
	2	5.249	5.219	5.279	0.85	2.3
alpha-Chlordane	1	6.491	6.462	6.522	0.91	
	2	6.521	6.491	6.551	0.96	5.4
beta-BHC	1	5.489	5.458	5.518	0.88	
	2	5.508	5.476	5.536	0.89	1.1
delta-BHC	1	5.594	5.565	5.625	0.99	
	2	5.681	5.651	5.711	0.94	5.2
Dieldrin	1	6.750	6.721	6.781	0.93	
	2	6.751	6.722	6.782	0.99	5.2
Endosulfan I	1	6.582	6.552	6.612	0.91	
	2	6.557	6.527	6.587	0.96	5.4
Endosulfan II	1	7.075	7.045	7.105	0.97	
	2	7.129	7.099	7.159	1.0	3.1
Endosulfan Sulfate	1	7.713	7.685	7.745	0.99	
	2	7.600	7.572	7.632	1.0	1.0
Endrin	1	6.914	6.885	6.945	0.92	
	2	6.969	6.939	6.999	0.96	4.3
Endrin Aldehyde	1	7.384	7.355	7.415	0.94	
	2	7.386	7.357	7.417	0.95	1.1
Endrin Ketone	1	7.926	7.896	7.956	0.99	

**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**

LCS

*SW-846 8081B*

Lab Sample ID:                     B213767-BS1                                          Date(s) Analyzed           10/10/2018                     10/10/2018          

Instrument ID (1):                     ECD6A                                          Instrument ID (2):                     ECD6B                    

GC Column (1):                      ID:                      (mm)                      GC Column (2):                      ID:                      (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
	2	8.000	7.970	8.030	0.99	0.0
gamma-BHC (Lindane)	1	5.437	5.408	5.468	0.90	
	2	5.453	5.422	5.482	0.92	2.2
gamma-Chlordane	1	6.399	6.370	6.430	0.89	
	2	6.420	6.390	6.450	0.97	8.6
Heptachlor	1	5.729	5.699	5.759	0.67	
	2	5.713	5.683	5.743	0.89	28.2
Heptachlor Epoxide	1	6.313	6.284	6.344	0.89	
	2	6.291	6.261	6.321	0.93	4.4
Hexachlorobenzene	1	5.158	5.129	5.189	0.88	
	2	5.167	5.137	5.197	0.88	0.0
Methoxychlor	1	7.559	7.530	7.590	0.97	
	2	7.855	7.826	7.886	1.0	3.1

**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**  
*SW-846 8081B*

**LCS Dup**

Lab Sample ID:                     B213767-BSD1                          Date(s) Analyzed           10/10/2018                     10/10/2018            
 Instrument ID (1):                     ECD6A                          Instrument ID (2):                     ECD6B                      
 GC Column (1):                                    ID:                                    (mm)      GC Column (2):                                    ID:                                    (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
4,4'-DDD	1	6.974	6.944	7.004	0.91	
	2	7.074	7.043	7.103	0.95	4.3
4,4'-DDE	1	6.551	6.521	6.581	0.88	
	2	6.651	6.621	6.681	0.94	6.6
4,4'-DDT	1	7.181	7.152	7.212	0.90	
	2	7.307	7.277	7.337	0.85	5.7
Alachlor	1	6.009	5.980	6.040	0.85	
	2	5.863	5.832	5.892	0.90	5.7
Aldrin	1	5.918	5.888	5.948	0.80	
	2	5.913	5.883	5.943	0.85	6.1
alpha-BHC	1	5.254	5.224	5.284	0.79	
	2	5.249	5.219	5.279	0.79	1.3
alpha-Chlordane	1	6.491	6.462	6.522	0.83	
	2	6.521	6.491	6.551	0.89	7.0
beta-BHC	1	5.489	5.458	5.518	0.81	
	2	5.508	5.476	5.536	0.82	1.2
delta-BHC	1	5.594	5.565	5.625	0.94	
	2	5.681	5.651	5.711	0.91	3.2
Dieldrin	1	6.750	6.721	6.781	0.86	
	2	6.752	6.722	6.782	0.92	6.7
Endosulfan I	1	6.582	6.552	6.612	0.83	
	2	6.558	6.527	6.587	0.89	7.0
Endosulfan II	1	7.074	7.045	7.105	0.88	
	2	7.129	7.099	7.159	0.92	4.4
Endosulfan Sulfate	1	7.713	7.685	7.745	0.94	
	2	7.600	7.572	7.632	0.96	2.1
Endrin	1	6.914	6.885	6.945	0.85	
	2	6.969	6.939	6.999	0.88	3.5
Endrin Aldehyde	1	7.384	7.355	7.415	0.89	
	2	7.386	7.357	7.417	0.91	2.2
Endrin Ketone	1	7.926	7.896	7.956	0.90	

**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**  
*SW-846 8081B*

LCS Dup

Lab Sample ID: B213767-BSD1 Date(s) Analyzed 10/10/2018 10/10/2018  
 Instrument ID (1): ECD6A Instrument ID (2): ECD6B  
 GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
	2	8.000	7.970	8.030	0.90	0.0
gamma-BHC (Lindane)	1	5.438	5.408	5.468	0.82	
	2	5.452	5.422	5.482	0.84	2.4
gamma-Chlordane	1	6.399	6.370	6.430	0.81	
	2	6.420	6.390	6.450	0.89	9.4
Heptachlor	1	5.728	5.699	5.759	0.62	
	2	5.713	5.683	5.743	0.83	29.0
Heptachlor Epoxide	1	6.314	6.284	6.344	0.82	
	2	6.291	6.261	6.321	0.86	3.6
Hexachlorobenzene	1	5.158	5.129	5.189	0.81	
	2	5.167	5.137	5.197	0.82	1.2
Methoxychlor	1	7.559	7.530	7.590	0.90	
	2	7.856	7.826	7.886	0.93	3.3

**FLAG/QUALIFIER SUMMARY**

- \* QC result is outside of established limits.
  - † Wide recovery limits established for difficult compound.
  - ‡ Wide RPD limits established for difficult compound.
  - # Data exceeded client recommended or regulatory level
  - ND Not Detected
  - RL Reporting Limit is at the level of quantitation (LOQ)
  - DL Detection Limit is the lower limit of detection determined by the MDL study
  - MCL Maximum Contaminant Level
- Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
- No results have been blank subtracted unless specified in the case narrative section.
- B Analyte is found in the associated laboratory blank as well as in the sample.
  - B-07 Data is not affected by elevated level in laboratory blank since sample result is >10x level found in the blank.
  - DL-03 Elevated reporting limit due to matrix.
  - J Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
  - L-02 Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.
  - L-04 Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.
  - L-07 Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
  - L-07A Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD outside of control limits. Reduced precision anticipated for any reported result for this compound.
  - MS-07A Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.
  - MS-09 Matrix spike recovery and/or matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated.
  - MS-15 Matrix spike and matrix spike duplicate recoveries are outside of control limits. Data validation is not affected since results for this compound in this sample are "not detected", and recovery bias is on the high side.
  - MS-19 Sample to spike ratio is greater than or equal to 4:1. Spiked amount is not representative of the native amount in the sample. Appropriate or meaningful recoveries cannot be calculated.
  - MS-22 Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.
  - PR-15 According to the NY ELAP program, all voa results less than 0.2mg/Kg are estimated and biased low if not collected according to SW-846 5035-L/5035A-L.
  - R-05 Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
  - R-06 Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.
  - V-04 Initial calibration did not meet method specifications. Compound was calibrated using a response factor where %RSD is outside of method specified criteria. Reported result is estimated.
  - V-05 Continuing calibration did not meet method specifications and was biased on the low side for this compound.
  - V-06 Continuing calibration did not meet method specifications and was biased on the high side for this compound.
  - V-19 Initial calibration did not meet method specifications. Compound was calibrated using linear regression with correlation coefficient <0.99. Reported result is estimated.
  - V-20 Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.
  - V-34 Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.
  - V-36 Initial calibration verification (ICV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

**CERTIFICATIONS**

**Certified Analyses included in this Report**

Analyte	Certifications
<i>SW-846 6010D in Soil</i>	
Aluminum	CT,NH,NY,ME,VA,NC
Antimony	CT,NH,NY,ME,VA,NC
Arsenic	CT,NH,NY,ME,VA,NC
Barium	CT,NH,NY,ME,VA,NC
Beryllium	CT,NH,NY,ME,VA,NC
Cadmium	CT,NH,NY,ME,VA,NC
Calcium	CT,NH,NY,ME,VA,NC
Chromium	CT,NH,NY,ME,VA,NC
Cobalt	CT,NH,NY,ME,VA,NC
Copper	CT,NH,NY,ME,VA,NC
Iron	CT,NH,NY,ME,VA,NC
Lead	CT,NH,NY,AIHA,ME,VA,NC
Magnesium	CT,NH,NY,ME,VA,NC
Manganese	CT,NH,NY,ME,VA,NC
Nickel	CT,NH,NY,ME,VA,NC
Potassium	CT,NH,NY,ME,VA,NC
Selenium	CT,NH,NY,ME,VA,NC
Silver	CT,NH,NY,ME,VA,NC
Sodium	CT,NH,NY,ME,VA,NC
Thallium	CT,NH,NY,ME,VA,NC
Vanadium	CT,NH,NY,ME,VA,NC
Zinc	CT,NH,NY,ME,VA,NC
<i>SW-846 6010D in Water</i>	
Aluminum	CT,NH,NY,ME,VA,NC
Antimony	CT,NH,NY,ME,VA,NC
Arsenic	CT,NH,NY,ME,VA,RI,NC
Barium	CT,NH,NY,ME,VA,NC
Beryllium	CT,NH,NY,ME,VA,NC
Cadmium	CT,NH,NY,ME,VA,NC
Calcium	CT,NH,NY,ME,VA,NC
Chromium	CT,NH,NY,ME,VA,NC
Cobalt	CT,NH,NY,ME,VA,NC
Copper	CT,NH,NY,ME,VA,NC
Iron	CT,NH,NY,ME,VA,NC
Lead	CT,NH,NY,ME,VA,NC
Magnesium	CT,NH,NY,ME,VA,NC
Manganese	CT,NH,NY,ME,VA,NC
Nickel	CT,NH,NY,ME,VA,NC
Potassium	CT,NH,NY,ME,VA,NC
Selenium	CT,NH,NY,ME,VA,NC
Silver	CT,NH,NY,ME,VA,NC
Sodium	CT,NH,NY,ME,VA,NC
Thallium	CT,NH,NY,VA,NC
Vanadium	CT,NH,NY,ME,VA,NC
Zinc	CT,NH,NY,ME,VA,NC
<i>SW-846 7470A in Water</i>	

**CERTIFICATIONS**

**Certified Analyses included in this Report**

Analyte	Certifications
<b>SW-846 7470A in Water</b>	
Mercury	CT,NH,NY,NC,ME,VA
<b>SW-846 7471B in Soil</b>	
Mercury	CT,NH,NY,NC,ME,VA
<b>SW-846 8081B in Soil</b>	
Alachlor	NC
Alachlor [2C]	NC
Aldrin	CT,NH,NY,ME,NC,VA
Aldrin [2C]	CT,NH,NY,ME,NC,VA
alpha-BHC	CT,NH,NY,ME,NC,VA
alpha-BHC [2C]	CT,NH,NY,ME,NC,VA
beta-BHC	CT,NH,NY,ME,NC,VA
beta-BHC [2C]	CT,NH,NY,ME,NC,VA
delta-BHC	CT,NH,NY,ME,NC,VA
delta-BHC [2C]	CT,NH,NY,ME,NC,VA
gamma-BHC (Lindane)	CT,NH,NY,ME,NC,VA
gamma-BHC (Lindane) [2C]	CT,NH,NY,ME,NC,VA
Chlordane	CT,NH,NY,ME,NC,VA
Chlordane [2C]	CT,NH,NY,ME,NC,VA
4,4'-DDD	CT,NH,NY,ME,NC,VA
4,4'-DDD [2C]	CT,NH,NY,ME,NC,VA
4,4'-DDE	CT,NH,NY,ME,NC,VA
4,4'-DDE [2C]	CT,NH,NY,ME,NC,VA
4,4'-DDT	CT,NH,NY,ME,NC,VA
4,4'-DDT [2C]	CT,NH,NY,ME,NC,VA
Dieldrin	CT,NH,NY,ME,NC,VA
Dieldrin [2C]	CT,NH,NY,ME,NC,VA
Endosulfan I	CT,NH,NY,ME,NC,VA
Endosulfan I [2C]	CT,NH,NY,ME,NC,VA
Endosulfan II	CT,NH,NY,ME,NC,VA
Endosulfan II [2C]	CT,NH,NY,ME,NC,VA
Endosulfan Sulfate	CT,NH,NY,ME,NC,VA
Endosulfan Sulfate [2C]	CT,NH,NY,ME,NC,VA
Endrin	CT,NH,NY,ME,NC,VA
Endrin [2C]	CT,NH,NY,ME,NC,VA
Endrin Aldehyde	CT,NH,NY,ME,NC,VA
Endrin Aldehyde [2C]	CT,NH,NY,ME,NC,VA
Endrin Ketone	NC
Endrin Ketone [2C]	NC
Heptachlor	CT,NH,NY,ME,NC,VA
Heptachlor [2C]	CT,NH,NY,ME,NC,VA
Heptachlor Epoxide	CT,NH,NY,ME,NC,VA
Heptachlor Epoxide [2C]	CT,NH,NY,ME,NC,VA
Hexachlorobenzene	NC
Hexachlorobenzene [2C]	NC
Methoxychlor	CT,NH,NY,ME,NC,VA
Methoxychlor [2C]	CT,NH,NY,ME,NC,VA



**CERTIFICATIONS**

**Certified Analyses included in this Report**

Analyte	Certifications
<b>SW-846 8081B in Soil</b>	
Toxaphene	CT,NH,NY,ME,NC,VA
Toxaphene [2C]	CT,NH,NY,ME,NC,VA
<b>SW-846 8081B in Water</b>	
Alachlor	NC
Alachlor [2C]	NC
Aldrin	CT,NH,NY,ME,NC,VA
Aldrin [2C]	CT,NH,NY,ME,NC,VA
alpha-BHC	CT,NH,NY,ME,NC,VA
alpha-BHC [2C]	CT,NH,NY,ME,NC,VA
beta-BHC	CT,NH,NY,ME,NC,VA
beta-BHC [2C]	CT,NH,NY,ME,NC,VA
delta-BHC	CT,NH,NY,ME,NC,VA
delta-BHC [2C]	CT,NH,NY,ME,NC,VA
gamma-BHC (Lindane)	CT,NH,NY,ME,NC,VA
gamma-BHC (Lindane) [2C]	CT,NH,NY,ME,NC,VA
Chlordane	CT,NH,NY,ME,NC,VA
Chlordane [2C]	CT,NH,NY,ME,NC,VA
4,4'-DDD	CT,NH,NY,ME,NC,VA
4,4'-DDD [2C]	CT,NH,NY,ME,NC,VA
4,4'-DDE	CT,NH,NY,ME,NC,VA
4,4'-DDE [2C]	CT,NH,NY,ME,NC,VA
4,4'-DDT	CT,NH,NY,ME,NC,VA
4,4'-DDT [2C]	CT,NH,NY,ME,NC,VA
Dieldrin	CT,NH,NY,ME,NC,VA
Dieldrin [2C]	CT,NH,NY,ME,NC,VA
Endosulfan I	CT,NH,NY,ME,NC,VA
Endosulfan I [2C]	CT,NH,NY,ME,NC,VA
Endosulfan II	CT,NH,NY,ME,NC,VA
Endosulfan II [2C]	CT,NH,NY,ME,NC,VA
Endosulfan Sulfate	CT,NH,NY,ME,NC,VA
Endosulfan Sulfate [2C]	CT,NH,NY,ME,NC,VA
Endrin	CT,NH,NY,ME,NC,VA
Endrin [2C]	CT,NH,NY,ME,NC,VA
Endrin Aldehyde	CT,NH,NY,ME,NC,VA
Endrin Aldehyde [2C]	CT,NH,NY,ME,NC,VA
Endrin Ketone	NC
Endrin Ketone [2C]	NC
Heptachlor	CT,NH,NY,ME,NC,VA
Heptachlor [2C]	CT,NH,NY,ME,NC,VA
Heptachlor Epoxide	CT,NH,NY,ME,NC,VA
Heptachlor Epoxide [2C]	CT,NH,NY,ME,NC,VA
Hexachlorobenzene	NC
Hexachlorobenzene [2C]	NC
Methoxychlor	CT,NH,NY,ME,NC,VA
Methoxychlor [2C]	CT,NH,NY,ME,NC,VA
Toxaphene	CT,NH,NY,ME,NC,VA

**CERTIFICATIONS**

**Certified Analyses included in this Report**

Analyte	Certifications
<b>SW-846 8081B in Water</b>	
Toxaphene [2C]	CT,NH,NY,ME,NC,VA
<b>SW-846 8082A in Soil</b>	
Aroclor-1016	CT,NH,NY,NC,ME,VA
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1221	CT,NH,NY,NC,ME,VA
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1232	CT,NH,NY,NC,ME,VA
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1242	CT,NH,NY,NC,ME,VA
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1248	CT,NH,NY,NC,ME,VA
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1254	CT,NH,NY,NC,ME,VA
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1260	CT,NH,NY,NC,ME,VA
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1262	NH,NY,NC,ME,VA
Aroclor-1262 [2C]	NH,NY,NC,ME,VA
Aroclor-1268	NH,NY,NC,ME,VA
Aroclor-1268 [2C]	NH,NY,NC,ME,VA
<b>SW-846 8082A in Water</b>	
Aroclor-1016	CT,NH,NY,NC,ME,VA
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1221	CT,NH,NY,NC,ME,VA
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1232	CT,NH,NY,NC,ME,VA
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1242	CT,NH,NY,NC,ME,VA
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1248	CT,NH,NY,NC,ME,VA
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1254	CT,NH,NY,NC,ME,VA
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1260	CT,NH,NY,NC,ME,VA
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1262	NH,NY,NC,ME,VA
Aroclor-1262 [2C]	NH,NY,NC,ME,VA
Aroclor-1268	NH,NY,NC,ME,VA
Aroclor-1268 [2C]	NH,NY,NC,ME,VA
<b>SW-846 8260C in Soil</b>	
Acetone	CT,NH,NY,ME,VA
Acrylonitrile	CT,NH,NY,ME,VA
Benzene	CT,NH,NY,ME,VA
Bromobenzene	NH,NY,ME,VA
Bromochloromethane	NH,NY,ME,VA
Bromodichloromethane	CT,NH,NY,ME,VA

**CERTIFICATIONS**

**Certified Analyses included in this Report**

Analyte	Certifications
<i>SW-846 8260C in Soil</i>	
Bromoform	CT,NH,NY,ME,VA
Bromomethane	CT,NH,NY,ME,VA
2-Butanone (MEK)	CT,NH,NY,ME,VA
tert-Butyl Alcohol (TBA)	NY
n-Butylbenzene	CT,NH,NY,ME,VA
sec-Butylbenzene	CT,NH,NY,ME,VA
tert-Butylbenzene	CT,NH,NY,ME,VA
Carbon Disulfide	CT,NH,NY,ME,VA
Carbon Tetrachloride	CT,NH,NY,ME,VA
Chlorobenzene	CT,NH,NY,ME,VA
Chlorodibromomethane	CT,NH,NY,ME,VA
Chloroethane	CT,NH,NY,ME,VA
Chloroform	CT,NH,NY,ME,VA
Chloromethane	CT,NH,NY,ME,VA
2-Chlorotoluene	CT,NH,NY,ME,VA
4-Chlorotoluene	CT,NH,NY,ME,VA
1,2-Dibromo-3-chloropropane (DBCP)	NY
Dibromomethane	NH,NY,ME,VA
1,2-Dichlorobenzene	CT,NH,NY,ME,VA
1,3-Dichlorobenzene	CT,NH,NY,ME,VA
1,4-Dichlorobenzene	CT,NH,NY,ME,VA
trans-1,4-Dichloro-2-butene	NY
Dichlorodifluoromethane (Freon 12)	NH,NY,ME,VA
1,1-Dichloroethane	CT,NH,NY,ME,VA
1,2-Dichloroethane	CT,NH,NY,ME,VA
1,1-Dichloroethylene	CT,NH,NY,ME,VA
cis-1,2-Dichloroethylene	CT,NH,NY,ME,VA
trans-1,2-Dichloroethylene	CT,NH,NY,ME,VA
1,2-Dichloropropane	CT,NH,NY,ME,VA
1,3-Dichloropropane	NH,NY,ME,VA
2,2-Dichloropropane	NH,NY,ME,VA
1,1-Dichloropropene	NH,NY,ME,VA
cis-1,3-Dichloropropene	CT,NH,NY,ME,VA
trans-1,3-Dichloropropene	CT,NH,NY,ME,VA
1,4-Dioxane	NY
Ethylbenzene	CT,NH,NY,ME,VA
Hexachlorobutadiene	NH,NY,ME,VA
2-Hexanone (MBK)	CT,NH,NY,ME,VA
Isopropylbenzene (Cumene)	CT,NH,NY,ME,VA
p-Isopropyltoluene (p-Cymene)	NH,NY
Methyl Acetate	NY
Methyl tert-Butyl Ether (MTBE)	NY,VA
Methyl Cyclohexane	NY
Methylene Chloride	CT,NH,NY,ME,VA
4-Methyl-2-pentanone (MIBK)	CT,NH,NY,VA
Naphthalene	NH,NY,ME,VA
n-Propylbenzene	NH,NY

## CERTIFICATIONS

## Certified Analyses included in this Report

Analyte	Certifications
<b><i>SW-846 8260C in Soil</i></b>	
Styrene	CT,NH,NY,ME,VA
1,1,1,2-Tetrachloroethane	CT,NH,NY,ME,VA
1,1,2,2-Tetrachloroethane	CT,NH,NY,ME,VA
Tetrachloroethylene	CT,NH,NY,ME,VA
Toluene	CT,NH,NY,ME,VA
1,2,3-Trichlorobenzene	NY,ME
1,2,4-Trichlorobenzene	NH,NY,ME,VA
1,3,5-Trichlorobenzene	ME
1,1,1-Trichloroethane	CT,NH,NY,ME,VA
1,1,2-Trichloroethane	CT,NH,NY,ME,VA
Trichloroethylene	CT,NH,NY,ME,VA
Trichlorofluoromethane (Freon 11)	CT,NH,NY,ME,VA
1,2,3-Trichloropropane	NH,NY,ME,VA
1,2,4-Trimethylbenzene	CT,NH,NY,ME,VA
1,3,5-Trimethylbenzene	CT,NH,NY,ME,VA
Vinyl Chloride	CT,NH,NY,ME,VA
m+p Xylene	CT,NH,NY,ME,VA
o-Xylene	CT,NH,NY,ME,VA
<b><i>SW-846 8260C in Water</i></b>	
Acetone	CT,ME,NH,VA,NY
Acrylonitrile	CT,ME,NH,VA,NY
tert-Amyl Methyl Ether (TAME)	ME,NH,VA,NY
Benzene	CT,ME,NH,VA,NY
Bromobenzene	NY
Bromochloromethane	ME,NH,VA,NY
Bromodichloromethane	CT,ME,NH,VA,NY
Bromoform	CT,ME,NH,VA,NY
Bromomethane	CT,ME,NH,VA,NY
2-Butanone (MEK)	CT,ME,NH,VA,NY
tert-Butyl Alcohol (TBA)	ME,NH,VA,NY
n-Butylbenzene	ME,VA,NY
sec-Butylbenzene	ME,VA,NY
tert-Butylbenzene	ME,VA,NY
tert-Butyl Ethyl Ether (TBEE)	ME,NH,VA,NY
Carbon Disulfide	CT,ME,NH,VA,NY
Carbon Tetrachloride	CT,ME,NH,VA,NY
Chlorobenzene	CT,ME,NH,VA,NY
Chlorodibromomethane	CT,ME,NH,VA,NY
Chloroethane	CT,ME,NH,VA,NY
Chloroform	CT,ME,NH,VA,NY
Chloromethane	CT,ME,NH,VA,NY
2-Chlorotoluene	ME,NH,VA,NY
4-Chlorotoluene	ME,NH,VA,NY
1,2-Dibromo-3-chloropropane (DBCP)	NY
1,2-Dibromoethane (EDB)	NY
Dibromomethane	ME,NH,VA,NY

**CERTIFICATIONS**

**Certified Analyses included in this Report**

<b>Analyte</b>	<b>Certifications</b>
<i>SW-846 8260C in Water</i>	
1,2-Dichlorobenzene	CT,ME,NH,VA,NY
1,3-Dichlorobenzene	CT,ME,NH,VA,NY
1,4-Dichlorobenzene	CT,ME,NH,VA,NY
trans-1,4-Dichloro-2-butene	ME,NH,VA,NY
Dichlorodifluoromethane (Freon 12)	ME,NH,VA,NY
1,1-Dichloroethane	CT,ME,NH,VA,NY
1,2-Dichloroethane	CT,ME,NH,VA,NY
1,1-Dichloroethylene	CT,ME,NH,VA,NY
cis-1,2-Dichloroethylene	ME,NY
trans-1,2-Dichloroethylene	CT,ME,NH,VA,NY
1,2-Dichloropropane	CT,ME,NH,VA,NY
1,3-Dichloropropane	ME,VA,NY
2,2-Dichloropropane	ME,NH,VA,NY
1,1-Dichloropropene	ME,NH,VA,NY
cis-1,3-Dichloropropene	CT,ME,NH,VA,NY
trans-1,3-Dichloropropene	CT,ME,NH,VA,NY
Diethyl Ether	NY
Diisopropyl Ether (DIPE)	ME,NH,VA,NY
1,4-Dioxane	NY
Ethylbenzene	CT,ME,NH,VA,NY
Hexachlorobutadiene	CT,ME,NH,VA,NY
2-Hexanone (MBK)	CT,ME,NH,VA,NY
Isopropylbenzene (Cumene)	ME,VA,NY
p-Isopropyltoluene (p-Cymene)	CT,ME,NH,VA,NY
Methyl Acetate	NY
Methyl tert-Butyl Ether (MTBE)	CT,ME,NH,VA,NY
Methyl Cyclohexane	NY
Methylene Chloride	CT,ME,NH,VA,NY
4-Methyl-2-pentanone (MIBK)	CT,ME,NH,VA,NY
Naphthalene	ME,NH,VA,NY
n-Propylbenzene	CT,ME,NH,VA,NY
Styrene	CT,ME,NH,VA,NY
1,1,1,2-Tetrachloroethane	CT,ME,NH,VA,NY
1,1,2,2-Tetrachloroethane	CT,ME,NH,VA,NY
Tetrachloroethylene	CT,ME,NH,VA,NY
Toluene	CT,ME,NH,VA,NY
1,2,3-Trichlorobenzene	ME,NH,VA,NY
1,2,4-Trichlorobenzene	CT,ME,NH,VA,NY
1,3,5-Trichlorobenzene	ME
1,1,1-Trichloroethane	CT,ME,NH,VA,NY
1,1,2-Trichloroethane	CT,ME,NH,VA,NY
Trichloroethylene	CT,ME,NH,VA,NY
Trichlorofluoromethane (Freon 11)	CT,ME,NH,VA,NY
1,2,3-Trichloropropane	ME,NH,VA,NY
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	VA,NY
1,2,4-Trimethylbenzene	ME,VA,NY
1,3,5-Trimethylbenzene	ME,VA,NY

**CERTIFICATIONS**

**Certified Analyses included in this Report**

<b>Analyte</b>	<b>Certifications</b>
<b><i>SW-846 8260C in Water</i></b>	
Vinyl Chloride	CT,ME,NH,VA,NY
m+p Xylene	CT,ME,NH,VA,NY
o-Xylene	CT,ME,NH,VA,NY
<b><i>SW-846 8270D in Soil</i></b>	
Acenaphthene	CT,NY,NH,ME,NC,VA
Acenaphthylene	CT,NY,NH,ME,NC,VA
Acetophenone	NY,NH,ME,NC,VA
Aniline	NY,NH,ME,NC,VA
Anthracene	CT,NY,NH,ME,NC,VA
Benzidine	CT,NY,NH,ME,NC,VA
Benzo(a)anthracene	CT,NY,NH,ME,NC,VA
Benzo(a)pyrene	CT,NY,NH,ME,NC,VA
Benzo(b)fluoranthene	CT,NY,NH,ME,NC,VA
Benzo(g,h,i)perylene	CT,NY,NH,ME,NC,VA
Benzo(k)fluoranthene	CT,NY,NH,ME,NC,VA
Benzoic Acid	NY,NH,ME,NC,VA
Bis(2-chloroethoxy)methane	CT,NY,NH,ME,NC,VA
Bis(2-chloroethyl)ether	CT,NY,NH,ME,NC,VA
Bis(2-chloroisopropyl)ether	CT,NY,NH,ME,NC,VA
Bis(2-Ethylhexyl)phthalate	CT,NY,NH,ME,NC,VA
4-Bromophenylphenylether	CT,NY,NH,ME,NC,VA
Butylbenzylphthalate	CT,NY,NH,ME,NC,VA
Carbazole	NC
4-Chloroaniline	CT,NY,NH,ME,NC,VA
4-Chloro-3-methylphenol	CT,NY,NH,ME,NC,VA
2-Chloronaphthalene	CT,NY,NH,NC,VA
2-Chlorophenol	CT,NY,NH,ME,NC,VA
4-Chlorophenylphenylether	CT,NY,NH,ME,NC,VA
Chrysene	CT,NY,NH,ME,NC,VA
Dibenz(a,h)anthracene	CT,NY,NH,ME,NC,VA
Dibenzofuran	CT,NY,NH,ME,NC,VA
Di-n-butylphthalate	CT,NY,NH,ME,NC,VA
1,2-Dichlorobenzene	NY,NH,ME,NC,VA
1,3-Dichlorobenzene	NY,NH,ME,NC,VA
1,4-Dichlorobenzene	NY,NH,ME,NC,VA
3,3-Dichlorobenzidine	CT,NY,NH,ME,NC,VA
2,4-Dichlorophenol	CT,NY,NH,ME,NC,VA
Diethylphthalate	CT,NY,NH,ME,NC,VA
2,4-Dimethylphenol	CT,NY,NH,ME,NC,VA
Dimethylphthalate	CT,NY,NH,ME,NC,VA
4,6-Dinitro-2-methylphenol	CT,NY,NH,ME,NC,VA
2,4-Dinitrophenol	CT,NY,NH,ME,NC,VA
2,4-Dinitrotoluene	CT,NY,NH,ME,NC,VA
2,6-Dinitrotoluene	CT,NY,NH,ME,NC,VA
Di-n-octylphthalate	CT,NY,NH,ME,NC,VA
1,2-Diphenylhydrazine (as Azobenzene)	NY,NH,ME,NC,VA

**CERTIFICATIONS**

**Certified Analyses included in this Report**

Analyte	Certifications
<i>SW-846 8270D in Soil</i>	
Fluoranthene	CT,NY,NH,ME,NC,VA
Fluorene	NY,NH,ME,NC,VA
Hexachlorobenzene	CT,NY,NH,ME,NC,VA
Hexachlorobutadiene	CT,NY,NH,ME,NC,VA
Hexachlorocyclopentadiene	CT,NY,NH,ME,NC,VA
Hexachloroethane	CT,NY,NH,ME,NC,VA
Indeno(1,2,3-cd)pyrene	CT,NY,NH,ME,NC,VA
Isophorone	CT,NY,NH,ME,NC,VA
1-Methylnaphthalene	NC
2-Methylnaphthalene	CT,NY,NH,ME,NC,VA
2-Methylphenol	CT,NY,NH,ME,NC,VA
3/4-Methylphenol	CT,NY,NH,ME,NC,VA
Naphthalene	CT,NY,NH,ME,NC,VA
2-Nitroaniline	CT,NY,NH,ME,NC,VA
3-Nitroaniline	CT,NY,NH,ME,NC,VA
4-Nitroaniline	CT,NY,NH,ME,NC,VA
Nitrobenzene	CT,NY,NH,ME,NC,VA
2-Nitrophenol	CT,NY,NH,ME,NC,VA
4-Nitrophenol	CT,NY,NH,ME,NC,VA
N-Nitrosodimethylamine	CT,NY,NH,ME,NC,VA
N-Nitrosodiphenylamine	CT,NY,NH,ME,NC,VA
N-Nitrosodi-n-propylamine	CT,NY,NH,ME,NC,VA
Pentachloronitrobenzene	NY,NC
Pentachlorophenol	CT,NY,NH,ME,NC,VA
Phenanthrene	CT,NY,NH,ME,NC,VA
Phenol	CT,NY,NH,ME,NC,VA
Pyrene	CT,NY,NH,ME,NC,VA
Pyridine	CT,NY,NH,ME,NC,VA
1,2,4,5-Tetrachlorobenzene	NY,NC
1,2,4-Trichlorobenzene	CT,NY,NH,ME,NC,VA
2,4,5-Trichlorophenol	CT,NY,NH,ME,NC,VA
2,4,6-Trichlorophenol	CT,NY,NH,ME,NC,VA
2-Fluorophenol	NC
<i>SW-846 8270D in Water</i>	
Acenaphthene	CT,NY,NC,ME,NH,VA
Acenaphthylene	CT,NY,NC,ME,NH,VA
Acetophenone	NY,NC
Aniline	CT,NY,NC,ME,VA
Anthracene	CT,NY,NC,ME,NH,VA
Benzidine	CT,NY,NC,ME,NH,VA
Benzo(a)anthracene	CT,NY,NC,ME,NH,VA
Benzo(a)pyrene	CT,NY,NC,ME,NH,VA
Benzo(b)fluoranthene	CT,NY,NC,ME,NH,VA
Benzo(g,h,i)perylene	CT,NY,NC,ME,NH,VA
Benzo(k)fluoranthene	CT,NY,NC,ME,NH,VA
Benzoic Acid	NY,NC,ME,NH,VA

## CERTIFICATIONS

## Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8270D in Water</i>	
Bis(2-chloroethoxy)methane	CT,NY,NC,ME,NH,VA
Bis(2-chloroethyl)ether	CT,NY,NC,ME,NH,VA
Bis(2-chloroisopropyl)ether	CT,NY,NC,ME,NH,VA
Bis(2-Ethylhexyl)phthalate	CT,NY,NC,ME,NH,VA
4-Bromophenylphenylether	CT,NY,NC,ME,NH,VA
Butylbenzylphthalate	CT,NY,NC,ME,NH,VA
Carbazole	NC
4-Chloroaniline	CT,NY,NC,ME,NH,VA
4-Chloro-3-methylphenol	CT,NY,NC,ME,NH,VA
2-Chloronaphthalene	CT,NY,NC,ME,NH,VA
2-Chlorophenol	CT,NY,NC,ME,NH,VA
4-Chlorophenylphenylether	CT,NY,NC,ME,NH,VA
Chrysene	CT,NY,NC,ME,NH,VA
Dibenz(a,h)anthracene	CT,NY,NC,ME,NH,VA
Dibenzofuran	CT,NY,NC,ME,NH,VA
Di-n-butylphthalate	CT,NY,NC,ME,NH,VA
1,2-Dichlorobenzene	CT,NY,NC,ME,NH,VA
1,3-Dichlorobenzene	CT,NY,NC,ME,NH,VA
1,4-Dichlorobenzene	CT,NY,NC,ME,NH,VA
3,3-Dichlorobenzidine	CT,NY,NC,ME,NH,VA
2,4-Dichlorophenol	CT,NY,NC,ME,NH,VA
Diethylphthalate	CT,NY,NC,ME,NH,VA
2,4-Dimethylphenol	CT,NY,NC,ME,NH,VA
Dimethylphthalate	CT,NY,NC,ME,NH,VA
4,6-Dinitro-2-methylphenol	CT,NY,NC,ME,NH,VA
2,4-Dinitrophenol	CT,NY,NC,ME,NH,VA
2,4-Dinitrotoluene	CT,NY,NC,ME,NH,VA
2,6-Dinitrotoluene	CT,NY,NC,ME,NH,VA
Di-n-octylphthalate	CT,NY,NC,ME,NH,VA
1,2-Diphenylhydrazine (as Azobenzene)	NY,NC
Fluoranthene	CT,NY,NC,ME,NH,VA
Fluorene	NY,NC,ME,NH,VA
Hexachlorobenzene	CT,NY,NC,ME,NH,VA
Hexachlorobutadiene	CT,NY,NC,ME,NH,VA
Hexachlorocyclopentadiene	CT,NY,NC,ME,NH,VA
Hexachloroethane	CT,NY,NC,ME,NH,VA
Indeno(1,2,3-cd)pyrene	CT,NY,NC,ME,NH,VA
Isophorone	CT,NY,NC,ME,NH,VA
1-Methylnaphthalene	NC
2-Methylnaphthalene	CT,NY,NC,ME,NH,VA
2-Methylphenol	CT,NY,NC,NH,VA
3/4-Methylphenol	CT,NY,NC,NH,VA
Naphthalene	CT,NY,NC,ME,NH,VA
2-Nitroaniline	CT,NY,NC,ME,NH,VA
3-Nitroaniline	CT,NY,NC,ME,NH,VA
4-Nitroaniline	CT,NY,NC,ME,NH,VA
Nitrobenzene	CT,NY,NC,ME,NH,VA



**CERTIFICATIONS**

**Certified Analyses included in this Report**

Analyte	Certifications
<b>SW-846 8270D in Water</b>	
2-Nitrophenol	CT,NY,NC,ME,NH,VA
4-Nitrophenol	CT,NY,NC,ME,NH,VA
N-Nitrosodimethylamine	CT,NY,NC,ME,NH,VA
N-Nitrosodiphenylamine	CT,NY,NC,ME,NH,VA
N-Nitrosodi-n-propylamine	CT,NY,NC,ME,NH,VA
Pentachloronitrobenzene	NC
Pentachlorophenol	CT,NY,NC,ME,NH,VA
Phenanthrene	CT,NY,NC,ME,NH,VA
Phenol	CT,NY,NC,ME,NH,VA
Pyrene	CT,NY,NC,ME,NH,VA
Pyridine	CT,NY,NC,ME,NH,VA
1,2,4,5-Tetrachlorobenzene	NY,NC
1,2,4-Trichlorobenzene	CT,NY,NC,ME,NH,VA
2,4,5-Trichlorophenol	CT,NY,NC,ME,NH,VA
2,4,6-Trichlorophenol	CT,NY,NC,ME,NH,VA
2-Fluorophenol	NC
<b>SW-846 9014 in Soil</b>	
Cyanide	NY,CT,NC,ME,NH,VA
<b>SW-846 9014 in Water</b>	
Cyanide	NY,CT,NH,NC,ME,VA

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2005	100033	03/1/2020
MA	Massachusetts DEP	M-MA100	06/30/2019
CT	Connecticut Department of Public Health	PH-0567	09/30/2019
NY	New York State Department of Health	10899 NELAP	04/1/2019
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2019
RI	Rhode Island Department of Health	LAO00112	12/30/2018
NC	North Carolina Div. of Water Quality	652	12/31/2018
NJ	New Jersey DEP	MA007 NELAP	06/30/2019
FL	Florida Department of Health	E871027 NELAP	06/30/2019
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2019
ME	State of Maine	2011028	06/9/2019
VA	Commonwealth of Virginia	460217	12/14/2018
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2019
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2019
NC-DW	North Carolina Department of Health	25703	07/31/2019

Phone: 413-525-2332  
Fax: 413-525-6405  
Email: info@contestlabs.com

EA Engineering

6712 Brooklawn Pkwy, Suite 104, Syracuse, NY 13206

PM - 315-565-6565 / Sampler 315-412-2684

Admiral Cleaners

Watervliet, NY

1490738/0003

Chris Schroer

northeastap@east.com; cschroer@east.com

Stephen Soldner - ssoldner@east.com

181225



Company Name: ACD

Address:

Phone:

Project Name:

Project Location:

Project Number:

Project Manager:

Con-Test Quote Name/Number:

Invoice Recipient:

Sampled By:

Requested Turnaround Time  
 7-Day  10-Day  14-Day

Due Date: \_\_\_\_\_

Rush-Approval Required  
 1-Day  3-Day  4-Day

Data Delivery  
 PDF  EXCEL  CAT B

Other: \_\_\_\_\_

CLP Like Data Pkg Required:

Email To: [cschroer@east.com](mailto:cschroer@east.com)

Fax To #: \_\_\_\_\_

# of Containers: \_\_\_\_\_

Preservation Code: \_\_\_\_\_

Container Code: \_\_\_\_\_

Dissolved Metals Samples  
 Field Filtered  
 Lab to Filter

Orthophosphate Samples  
 Field Filtered  
 Lab to Filter

Matrix Codes:  
 GW = Ground Water  
 WW = Waste Water  
 DW = Drinking Water  
 A = Air  
 S = Soil  
 SL = Sludge  
 SOL = Solid  
 O = Other (please define)

Preservation Codes:  
 I = Iced  
 H = HCL  
 M = Methanol  
 N = Nitric Acid  
 S = Sulfuric Acid  
 B = Sodium Bisulfate  
 X = Sodium Hydroxide  
 T = Sodium Thiosulfate  
 O = Other (please define)

Container Codes:  
 A = Amber Glass  
 G = Glass  
 P = Plastic  
 ST = Sterile  
 V = Vial  
 S = Summa Canister  
 T = Tedlar Bag  
 O = Other (please define)

ANALYSIS REQUESTED

Con-Test Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	Matrix Code	Conc Code
1	401075-SS-01-00-12	09/27/2018	1116	X	Y	S	U
2	401075-SS-01-12-24	09/ /2018	1115		X	S	
3	401075-SS-02-00-12	09/ /2018	1145			S	
4	401075-SS-02-12-24	09/ /2018	1146			S	
5	401075-SS-04-00-12	09/ /2018	1035			S	
6	401075-SS-04-12-24	09/ /2018	1100			S	
7	401075-SS-06-00-12	09/ /2018	1125			S	
8	401075-SS-06-12-24	09/ /2018	1124			S	
9	401075-FD-092618	09/27/2018	-			S	
10	401075-RB-092618	09/27/2018	-			W	

Please use the following codes to indicate possible sample concentration within the Conc Code column above:  
 H - High; M - Medium; L - Low; C - Clean; U - Unknown

Comments: Trip Blank included for VOC analysis

GRAB FOR VOC, COMPOSITE FOR ALL OTHERS

Relinquished by: (signature) Stephen Soldner - EA Date/Time: 9/27/18 09:20

Received by: (signature) Stephen Soldner - EA Date/Time: 9/27/18 9:30 AM

Relinquished by: (signature) Stephen Soldner - EA Date/Time: 9/27/18 12:15 PM

Received by: (signature) Stephen Soldner - EA Date/Time: 9/27/18 12:15

Relinquished by: (signature) Stephen Soldner - EA Date/Time: 9/27/18 16:00

Received by: (signature) Stephen Soldner - EA Date/Time: 9/27/18 2:24-2

Program & Regulatory Information  
 AWQ STDS  NY TOGS  
 NYC Sewer Discharge  NY CP-51  
 Part 360 GW (Landfill)  
 NY Restricted Use  
 NY Unrestricted Use  
 NY Part 375

Deliverables  
 Enhanced Data Package  
 NYSDEC EQJIS EDD  
 EQJIS (Standard) EDD  
 NY Regulatory EDD  
 NY Regs Hits-Only EDD

Project Entity  
 Government\*  Municipality  MWRA  WRTA  
 Federal  21 J  School  
 City  Brownfield  MBTA

Other  
 Chromatogram  
 AIHA-LAP, LLC

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples \_\_\_\_\_



**con-test**  
ANALYTICAL LABORATORY

Doc# 277 - Rev 5 2017

**Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False**

Client EA Engineering

Received By ESD Date 9-27-18 Time 16:00

How were the samples received? In Cooler T No Cooler \_\_\_\_\_ On Ice T No Ice \_\_\_\_\_  
Direct from Sampling \_\_\_\_\_ Ambient \_\_\_\_\_ Melted Ice \_\_\_\_\_

Were samples within Temperature? 2-6°C T By Gun # 577 Actual Temp - 2.6, 2.4  
By Blank # \_\_\_\_\_ Actual Temp - \_\_\_\_\_

Was Custody Seal Intact? NA Were Samples Tampered with? NA  
Was COC Relinquished? T Does Chain Agree With Samples? T

Are there broken/leaking/loose caps on any samples? F

Is COC in ink/ Legible? T Were samples received within holding time? T

Did COC include all pertinent Information? Client T Analysis T Sampler Name T  
Project F ID's T Collection Dates/Times T

Are Sample labels filled out and legible? T

Are there Lab to Filters? F

Are there Rushes? F

Are there Short Holds? F

Is there enough Volume? T

Is there Headspace where applicable? F

Proper Media/Containers Used? T

Were trip blanks received? ET

Do all samples have the proper pH? NA

Who was notified? \_\_\_\_\_

Who was notified? \_\_\_\_\_

Who was notified? \_\_\_\_\_

MS/MSD? DET

Is splitting samples required? F

On COC? F

Acid \_\_\_\_\_ Base \_\_\_\_\_

Vials	#	Containers:	#	#	#	#
Unp-		1 Liter Amb.	6	1 Liter Plastic		16 oz Amb.
HCL-	5	500 mL Amb.		500 mL Plastic		8oz Amb/Clear
Meoh-		250 mL Amb.		250 mL Plastic	2	4oz Amb/Clear
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear
DI-		Other Plastic		Other Glass		Encore
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:
Sulfuric-		Perchlorate		Ziplock		

**Unused Media**

Vials	#	Containers:	#	#	#	#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear
DI-		Other Plastic		Other Glass		Encore
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:
Sulfuric-		Perchlorate		Ziplock		

**Comments:**

-TB not on COC.

## Aaron Benoit

---

**From:** Soldner, Stephen  
**Sent:** Friday, September 28, 2018 12:55 PM  
**To:** Aaron Benoit  
**Cc:** Jessica Hoffman  
**Subject:** RE: FW:  
**Attachments:** image001.jpg; image002.png; image003.png; image005.jpg

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

**Categories:** Immediate, Con-Test Item

Yes, please proceed with full analysis per the bottlere/labels.

Thanks

---

From: Aaron Benoit [aaron.benoit@contestlabs.com]  
 Sent: Friday, September 28, 2018 11:56 AM  
 To: Soldner, Stephen  
 Cc: Jessica Hoffman  
 Subject: FW:

Hi Stephen,

Please see attached COC for Admiral Cleaners. We received vials and bottles for 18I1225-10 ID:401075-RB-0926-18. Only VOC analysis was checked off. Do you need all analyses run?

Please click on survey link below for a quick survey.

Thanks,  
 Aaron

Aaron L. Benoit  
 Project Manager  
 Con-Test Analytical Laboratory  
 40 Spruce Street  
 East Longmeadow, MA 01028  
 Tel: (413) 525-2332 x47  
 Fax: (413) 525-6405

[aaron.benoit@contestlabs.com](mailto:aaron.benoit@contestlabs.com)<mailto:aaron.benoit@contestlabs.com>

[ConTest Color logo]

[www.contestlabs.com](https://na01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.contestlabs.com%2F&data=01%7C01%7Csolidner%40eaest.com%7Cccb8afb9b94d44dcfa1b08d6255ab4e1%7C037230a09aa24474a7fd1ffe5d8e4bfc%7C1&sdata=8H0ruiHMrlw0QgDFKH90hF6AGmLuu2XSanH30DjvupE%3D&reserved=0)<https://na01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.contestlabs.com%2F&data=01%7C01%7Csolidner%40eaest.com%7Cccb8afb9b94d44dcfa1b08d6255ab4e1%7C037230a09aa24474a7fd1ffe5d8e4bfc%7C1&sdata=8H0ruiHMrlw0QgDFKH90hF6AGmLuu2XSanH30DjvupE%3D&reserved=0> | See us on: [cid:image001.png@01CE1C21.047925F0]

<<https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.facebook.com%2Fcontestlabs&data=01%7C01%7Csolidner%40eaest.com%7Cccb8afb9b94d44dcfa1b08d6255ab4e1%7C037230a09aa24474a7fd1ffe5d8e4bfc%7C1&sdata=S7%2FQ2oPi8NwJHwp1gWBzUr0igFV%2BrzebCH49arVPvLo%3D&reserved=0>>

[cid:image002.png@01CE1C21.047925F0]

<<https://na01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.linkedin.com%2Fcompany%2Fcon-test-analytical-laboratory&data=01%7C01%7Csolidner%40eaest.com%7Cccb8afb9b94d44dcfa1b08d6255ab4e1%7C037230a09>>

[aa24474a7fd1ffe5d8e4bfc%7C1&sdata=1NPQKd2440fsUGgqb8F71qdocOwQ67P4V%2F0xjTYX3VI%3D&reserved=0](https://na01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fsurvey.constantcontact.com%2Fsurvey%2Fa07ed4edh3zis9aj7h5%2Fstart&data=01%7C01%7C50d9aa24474a7fd1ffe5d8e4bfc%7C1&sdata=1NPQKd2440fsUGgqb8F71qdocOwQ67P4V%2F0xjTYX3VI%3D&reserved=0)

>

View your sample results on our website. Contact your project chemist for more information. We value your feedback.

Con-Test is committed to quality and continuously improving deliverables and services to our clients. Complete the short survey regarding your experience with Con-Test using the following link:

Each entry will be entered for a \$100 gift card in a monthly drawing Survey  
Link<<https://na01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fsurvey.constantcontact.com%2Fsurvey%2Fa07ed4edh3zis9aj7h5%2Fstart&data=01%7C01%7C50d9aa24474a7fd1ffe5d8e4bfc%7C1&sdata=2Kc36Zf5vWeXfvqXFf4gHwAAkV%2BjsXV3iNvnfwGqEeU%3D&reserved=0>>  
[cid:image005.jpg@01D45722.57FADD30]

October 16, 2018

Christopher Schroer  
EA Engineering, Science & Tech. - NY  
6712 Brooklawn Parkway, Suite 104  
Syracuse, NY 13211

Project Location: Watervliet, NY  
Client Job Number:  
Project Number: 1490378.0003  
Laboratory Work Order Number: 18J0071

Enclosed are results of analyses for samples received by the laboratory on October 2, 2018. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, reading "Jessica Hoffman", is displayed on a light blue rectangular background. The signature is written in a cursive, flowing style.

Jessica L. Hoffman  
Project Manager

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Chain of Custody/Sample Receipt

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39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

EA Engineering, Science & Tech. - NY  
 6712 Brooklawn Parkway, Suite 104  
 Syracuse, NY 13211  
 ATTN: Christopher Schroer

REPORT DATE: 10/16/2018

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 1490378.0003

**ANALYTICAL SUMMARY**

WORK ORDER NUMBER: 18J0071

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Watervliet, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
401075-SB-07R 8.5-9	18J0071-01	Soil		SM 2540G SW-846 8260C	
401075-SB-08 5-5.5	18J0071-02	Soil		SM 2540G SW-846 8260C	
401075-SB-09 5-5.5	18J0071-03	Soil		SM 2540G SW-846 8260C	
401075-SB-10 12-12.5	18J0071-04	Soil		SM 2540G SW-846 8260C	
401075-SB-11 10.5-11	18J0071-05	Soil		SM 2540G SW-846 8260C	
401075-SB-12 0.2-1	18J0071-06	Soil		SM 2540G SW-846 8260C	
401075-SB-13 4.5-5	18J0071-07	Soil		SM 2540G SW-846 8260C	
401075-SB-14 5-6	18J0071-08	Soil		SM 2540G SW-846 8260C	
401075-SB-15 10-11	18J0071-09	Soil		SM 2540G SW-846 8260C	
401075-SB-16 5-5.5	18J0071-10	Soil		SM 2540G SW-846 8260C	
401075-SB-17 5-5.7	18J0071-11	Soil		SM 2540G SW-846 8260C	
401075-SB-FD 092818	18J0071-12	Soil		SM 2540G SW-846 8260C	
401075-RB 092818	18J0071-13	Water		SW-846 8260C	
401075-SB-7R 14.5-15	18J0071-14	Soil		SM 2540G SW-846 8260C	

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

EA Engineering, Science & Tech. - NY  
 6712 Brooklawn Parkway, Suite 104  
 Syracuse, NY 13211  
 ATTN: Christopher Schroer

REPORT DATE: 10/16/2018

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 1490378.0003

**ANALYTICAL SUMMARY**

WORK ORDER NUMBER: 18J0071

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Watervliet, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
401075-Waste Char	18J0071-15	Soil		SM 2540G	
				SM21-22 2510B	
				Modified	
				SW-846 1030	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8081B	
				SW-846 8082A	
				SW-846 8151A	
				SW-846 8260C	
				SW-846 8270D	
				SW-846 9014	
				SW-846 9030A	
				SW-846 9045C	
401075-TB	18J0071-16	Trip Blank Soil		SW-846 9095B	
				SW-846 8260C	

#### CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

For method 8151, TCLP samples were derivatized on 10/14/18.

For method 8151, TCLP sample analysis bracketed by LCS to monitor esterification. All recoveries in the bracketing LCS met method criteria.

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

SW-846 8081B

**Qualifications:**

V-06

Continuing calibration did not meet method specifications and was biased on the high side for this compound.

**Analyte & Samples(s) Qualified:****gamma-BHC (Lindane)**

B214690-BS1, B214690-BSD1, B214690-MS1

SW-846 8151A

**Qualifications:**

V-05

Continuing calibration did not meet method specifications and was biased on the low side for this compound.

**Analyte & Samples(s) Qualified:****2,4-D**

B214714-BS1, B214714-BSD1

SW-846 8260C

**Qualifications:**

E

Reported result is estimated. Value reported over verified calibration range.

**Analyte & Samples(s) Qualified:****Tetrachloroethylene**

18J0071-02[401075-SB-08 5-5.5]

L-02

Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.

**Analyte & Samples(s) Qualified:****Methyl Acetate**

B214002-BS1, B214002-BSD1, B214073-BS1, B214073-BSD1, B214073-MS1, B214073-MSD1, B214232-BS1, B214232-BSD1, B214252-BS1, B214252-BSD1, B214295-BS1, B214295-BSD1, S028114-CCV1

L-07

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

**Analyte & Samples(s) Qualified:****Hexachlorobutadiene**

B214002-BS1

MS-07A

Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.

**Analyte & Samples(s) Qualified:****Bromomethane**

18J0071-01[401075-SB-07R 8.5-9], B214073-MS1, B214073-MSD1

**Chloroethane**

18J0071-01[401075-SB-07R 8.5-9], B214073-MS1, B214073-MSD1

**Dichlorodifluoromethane (Freon 11)**

18J0071-01[401075-SB-07R 8.5-9], B214073-MS1, B214073-MSD1

**Dichlorofluoromethane (Freon 21)**

B214073-MS1, B214073-MSD1

MS-12

Matrix spike recovery and matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a high bias for reported result or non-homogeneous sample aliquots cannot be eliminated.

**Analyte & Samples(s) Qualified:****n-Butylbenzene**

18J0071-01[401075-SB-07R 8.5-9], B214073-MS1, B214073-MSD1

**p-Isopropyltoluene (p-Cymene)**

18J0071-01[401075-SB-07R 8.5-9], B214073-MS1, B214073-MSD1

**sec-Butylbenzene**

18J0071-01[401075-SB-07R 8.5-9], B214073-MS1, B214073-MSD1

**MS-15**

Matrix spike and matrix spike duplicate recoveries are outside of control limits. Data validation is not affected since results for this compound in this sample are "not detected", and recovery bias is on the high side.

**Analyte & Samples(s) Qualified:****1,1,2,2-Tetrachloroethane**

B214073-MS1, B214073-MSD1

**2-Chlorotoluene**

B214073-MS1, B214073-MSD1

**4-Chlorotoluene**

B214073-MS1, B214073-MSD1

**Acetone**

B214073-MS1, B214073-MSD1

**Hexachlorobutadiene**

B214073-MS1, B214073-MSD1

**Methyl Acetate**

B214073-MS1, B214073-MSD1

**MS-19**

Sample to spike ratio is greater than or equal to 4:1. Spiked amount is not representative of the native amount in the sample. Appropriate or meaningful recoveries cannot be calculated.

**Analyte & Samples(s) Qualified:****1,2,4-Trimethylbenzene**

18J0071-01[401075-SB-07R 8.5-9], B214073-MS1, B214073-MSD1

**1,3,5-Trimethylbenzene**

18J0071-01[401075-SB-07R 8.5-9], B214073-MS1, B214073-MSD1

**Tetrachloroethylene**

18J0071-01[401075-SB-07R 8.5-9], B214073-MS1, B214073-MSD1

**MS-22**

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.

**Analyte & Samples(s) Qualified:****Isopropylbenzene (Cumene)**

B214073-MSD1

**Naphthalene**

B214073-MSD1

**n-Propylbenzene**

B214073-MSD1

**Trichlorofluoromethane (Freon 11)**

B214073-MSD1

**PR-15**

According to the NY ELAP program, all voa results less than 0.2mg/Kg are estimated and biased low if not collected according to SW-846 5035-L/5035A-L.

**Analyte & Samples(s) Qualified:**

18J0071-03[401075-SB-09 5-5.5], 18J0071-04[401075-SB-10 12-12.5], 18J0071-05[401075-SB-11 10.5-11], 18J0071-06[401075-SB-12 0.2-1], 18J0071-07[401075-SB-13 4.5-5], 18J0071-08[401075-SB-14 5-6], 18J0071-09[401075-SB-15 10-11], 18J0071-09RE1[401075-SB-15 10-11], 18J0071-10[401075-SB-16 5-5.5], 18J0071-10RE1[401075-SB-16 5-5.5], 18J0071-11[401075-SB-17 5-5.7], 18J0071-12[401075-SB-FD 092818]

**R-05**

Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.

**Analyte & Samples(s) Qualified:****Bromomethane**

18J0071-07[401075-SB-13 4.5-5], 18J0071-08[401075-SB-14 5-6], B214252-BLK1, B214252-BS1, B214252-BSD1

**RL-11**

Elevated reporting limit due to high concentration of target compounds.

**Analyte & Samples(s) Qualified:**

18J0071-01[401075-SB-07R 8.5-9], 18J0071-02[401075-SB-08 5-5.5], 18J0071-14[401075-SB-7R 14.5-15]

**S-03**

Surrogate recovery outside of control limits due to suspected sample matrix interference.

**Analyte & Samples(s) Qualified:****1,2-Dichloroethane-d4**

18J0071-10[401075-SB-16 5-5.5]

**4-Bromofluorobenzene**

18J0071-09[401075-SB-15 10-11], 18J0071-09RE1[401075-SB-15 10-11], 18J0071-10[401075-SB-16 5-5.5]

**V-05**

Continuing calibration did not meet method specifications and was biased on the low side for this compound.

**Analyte & Samples(s) Qualified:****Acetone**

18J0071-13[401075-RB 092818], 18J0071-16[401075-TB], B214002-BLK1, B214002-BS1, B214002-BSD1, S028051-CCV1

**Dichlorodifluoromethane (Freon 1)**

18J0071-01[401075-SB-07R 8.5-9], 18J0071-02[401075-SB-08 5-5.5], 18J0071-14[401075-SB-7R 14.5-15], B214073-BLK1, B214073-BS1, B214073-BSD1, B214073-MS1, B214073-MSD1, S028114-CCV1

**Methyl Acetate**

18J0071-01[401075-SB-07R 8.5-9], 18J0071-02[401075-SB-08 5-5.5], 18J0071-13[401075-RB 092818], 18J0071-14[401075-SB-7R 14.5-15], 18J0071-16[401075-TB], B214002-BLK1, B214002-BS1, B214002-BSD1, B214073-BLK1, B214073-BS1, B214073-BSD1, B214073-MS1, B214073-MSD1, S028051-CCV1, S028114-CCV1

**V-17**

Internal standard area <50% of associated calibration standard internal standard area. Reanalysis yielded similar internal standard non-conformance.

**Analyte & Samples(s) Qualified:****1,2,3-Trichlorobenzene**

18J0071-09[401075-SB-15 10-11], 18J0071-09RE1[401075-SB-15 10-11], 18J0071-10[401075-SB-16 5-5.5], 18J0071-10RE1[401075-SB-16 5-5.5]

**1,2,4-Trichlorobenzene**

18J0071-09[401075-SB-15 10-11], 18J0071-09RE1[401075-SB-15 10-11], 18J0071-10[401075-SB-16 5-5.5], 18J0071-10RE1[401075-SB-16 5-5.5]

**1,2,4-Trimethylbenzene**

18J0071-09[401075-SB-15 10-11], 18J0071-09RE1[401075-SB-15 10-11], 18J0071-10[401075-SB-16 5-5.5], 18J0071-10RE1[401075-SB-16 5-5.5]

**1,2-Dibromo-3-chloropropane (DB)**

18J0071-09[401075-SB-15 10-11], 18J0071-09RE1[401075-SB-15 10-11], 18J0071-10[401075-SB-16 5-5.5], 18J0071-10RE1[401075-SB-16 5-5.5]

**1,2-Dichlorobenzene**

18J0071-09[401075-SB-15 10-11], 18J0071-09RE1[401075-SB-15 10-11], 18J0071-10[401075-SB-16 5-5.5], 18J0071-10RE1[401075-SB-16 5-5.5]

**1,3,5-Trichlorobenzene**

18J0071-09[401075-SB-15 10-11], 18J0071-09RE1[401075-SB-15 10-11], 18J0071-10[401075-SB-16 5-5.5], 18J0071-10RE1[401075-SB-16 5-5.5]

**1,3-Dichlorobenzene**

18J0071-09[401075-SB-15 10-11], 18J0071-09RE1[401075-SB-15 10-11], 18J0071-10[401075-SB-16 5-5.5], 18J0071-10RE1[401075-SB-16 5-5.5]

**1,4-Dichlorobenzene**

18J0071-09[401075-SB-15 10-11], 18J0071-09RE1[401075-SB-15 10-11], 18J0071-10[401075-SB-16 5-5.5], 18J0071-10RE1[401075-SB-16 5-5.5]

**1,4-Dichlorobenzene-d4**

18J0071-09[401075-SB-15 10-11], 18J0071-09RE1[401075-SB-15 10-11], 18J0071-10[401075-SB-16 5-5.5], 18J0071-10RE1[401075-SB-16 5-5.5]

**Hexachlorobutadiene**

18J0071-09[401075-SB-15 10-11], 18J0071-09RE1[401075-SB-15 10-11], 18J0071-10[401075-SB-16 5-5.5], 18J0071-10RE1[401075-SB-16 5-5.5]

**Naphthalene**

18J0071-09[401075-SB-15 10-11], 18J0071-09RE1[401075-SB-15 10-11], 18J0071-10[401075-SB-16 5-5.5], 18J0071-10RE1[401075-SB-16 5-5.5]

**n-Butylbenzene**

18J0071-09[401075-SB-15 10-11], 18J0071-09RE1[401075-SB-15 10-11], 18J0071-10[401075-SB-16 5-5.5], 18J0071-10RE1[401075-SB-16 5-5.5]

**p-Isopropyltoluene (p-Cymene)**

18J0071-09[401075-SB-15 10-11], 18J0071-09RE1[401075-SB-15 10-11], 18J0071-10[401075-SB-16 5-5.5], 18J0071-10RE1[401075-SB-16 5-5.5]

**sec-Butylbenzene**

18J0071-09[401075-SB-15 10-11], 18J0071-09RE1[401075-SB-15 10-11], 18J0071-10[401075-SB-16 5-5.5], 18J0071-10RE1[401075-SB-16 5-5.5]

**tert-Butylbenzene**

18J0071-09[401075-SB-15 10-11], 18J0071-09RE1[401075-SB-15 10-11], 18J0071-10[401075-SB-16 5-5.5], 18J0071-10RE1[401075-SB-16 5-5.5]

**V-20**

Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

**Analyte & Samples(s) Qualified:****1,2-Dibromo-3-chloropropane (DB)**

B214252-BS1, B214252-BSD1, S028107-CCV1

**Bromomethane**

B214002-BS1, B214002-BSD1, B214073-BS1, B214073-BSD1, B214073-MS1, B214073-MSD1, S028051-CCV1, S028114-CCV1

**Hexachlorobutadiene**

B214002-BS1, B214002-BSD1, S028051-CCV1

**V-34**

Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.

**Analyte & Samples(s) Qualified:****Bromomethane**

18J0071-03[401075-SB-09 5-5.5], 18J0071-04[401075-SB-10 12-12.5], 18J0071-05[401075-SB-11 10.5-11], 18J0071-06[401075-SB-12 0.2-1], 18J0071-07[401075-SB-13 4.5-5], 18J0071-08[401075-SB-14 5-6], 18J0071-09[401075-SB-15 10-11], 18J0071-09RE1[401075-SB-15 10-11], 18J0071-10[401075-SB-16 5-5.5], 18J0071-10RE1[401075-SB-16 5-5.5], 18J0071-11[401075-SB-17 5-5.7], 18J0071-12[401075-SB-FD 092818], B214232-BLK1, B214232-BS1, B214232-BSD1, B214252-BLK1, B214252-BS1, B214252-BSD1, B214295-BLK1, B214295-BS1, B214295-BSD1, S028105-CCV1, S028107-CCV1, S028157-CCV1

**V-36**

Initial calibration verification (ICV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

**Analyte & Samples(s) Qualified:****1,4-Dioxane**

B214232-BS1, B214232-BSD1, B214252-BS1, B214252-BSD1, B214295-BS1, B214295-BSD1, S028105-CCV1, S028107-CCV1, S028157-CCV1

**SW-846 9045C****Qualifications:****H-03**

Sample received after recommended holding time was exceeded.

**Analyte & Samples(s) Qualified:****pH**

18J0071-15[401075-Waste Char], B213909-DUP1

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington  
Project Manager



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-SB-07R 8.5-9

Sampled: 9/28/2018 09:30

Sample ID: 18J0071-01

Sample Matrix: Soil

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	2.8	0.54	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
Acrylonitrile	ND	0.28	0.032	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.028	0.0059	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
Benzene	ND	0.056	0.0067	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
Bromobenzene	ND	0.056	0.0084	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
Bromochloromethane	ND	0.056	0.012	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
Bromodichloromethane	ND	0.056	0.017	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
Bromoform	ND	0.11	0.012	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
Bromomethane	ND	0.11	0.053	mg/Kg dry	1	MS-07A	SW-846 8260C	10/5/18	10/8/18 11:27	EEH
2-Butanone (MEK)	ND	1.1	0.13	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
tert-Butyl Alcohol (TBA)	ND	1.1	0.12	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
n-Butylbenzene	2.3	0.056	0.0084	mg/Kg dry	1	MS-12	SW-846 8260C	10/5/18	10/8/18 11:27	EEH
sec-Butylbenzene	0.92	0.056	0.0073	mg/Kg dry	1	MS-12	SW-846 8260C	10/5/18	10/8/18 11:27	EEH
tert-Butylbenzene	0.097	0.056	0.0068	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.028	0.0053	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
Carbon Disulfide	ND	0.17	0.057	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
Carbon Tetrachloride	ND	0.056	0.014	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
Chlorobenzene	ND	0.056	0.0090	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
Chlorodibromomethane	ND	0.028	0.0058	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
Chloroethane	ND	0.11	0.016	mg/Kg dry	1	MS-07A	SW-846 8260C	10/5/18	10/8/18 11:27	EEH
Chloroform	ND	0.11	0.012	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
Chloromethane	ND	0.11	0.031	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
2-Chlorotoluene	ND	0.056	0.0067	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
4-Chlorotoluene	ND	0.056	0.0078	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.28	0.021	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
1,2-Dibromoethane (EDB)	ND	0.028	0.0083	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
Dibromomethane	ND	0.056	0.0090	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
1,2-Dichlorobenzene	ND	0.056	0.0095	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
1,3-Dichlorobenzene	ND	0.056	0.0095	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
1,4-Dichlorobenzene	ND	0.056	0.0084	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
trans-1,4-Dichloro-2-butene	ND	0.11	0.017	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
Dichlorodifluoromethane (Freon 12)	ND	0.11	0.016	mg/Kg dry	1	V-05, MS-07A	SW-846 8260C	10/5/18	10/8/18 11:27	EEH
1,1-Dichloroethane	ND	0.056	0.0089	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
1,2-Dichloroethane	ND	0.056	0.011	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
1,1-Dichloroethylene	ND	0.056	0.012	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
cis-1,2-Dichloroethylene	1.1	0.056	0.0082	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
trans-1,2-Dichloroethylene	ND	0.056	0.0084	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
1,2-Dichloropropane	ND	0.056	0.0073	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
1,3-Dichloropropane	ND	0.028	0.0073	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
2,2-Dichloropropane	ND	0.056	0.012	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
1,1-Dichloropropene	ND	0.11	0.0072	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
cis-1,3-Dichloropropene	ND	0.028	0.0067	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
trans-1,3-Dichloropropene	ND	0.028	0.0063	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
Diethyl Ether	ND	0.11	0.012	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH

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Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-SB-07R 8.5-9

Sampled: 9/28/2018 09:30

Sample ID: 18J0071-01

Sample Matrix: Soil

Sample Flags: RL-11

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.028	0.010	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
1,4-Dioxane	ND	2.8	1.5	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
Ethylbenzene	0.40	0.056	0.0073	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
Hexachlorobutadiene	ND	0.056	0.033	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
2-Hexanone (MBK)	ND	0.56	0.085	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
Isopropylbenzene (Cumene)	0.47	0.056	0.0067	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
p-Isopropyltoluene (p-Cymene)	1.1	0.056	0.0084	mg/Kg dry	1	MS-12	SW-846 8260C	10/5/18	10/8/18 11:27	EEH
Methyl Acetate	ND	0.56	0.024	mg/Kg dry	1	V-05	SW-846 8260C	10/5/18	10/8/18 11:27	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.056	0.0050	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
Methyl Cyclohexane	0.040	0.056	0.035	mg/Kg dry	1	J	SW-846 8260C	10/5/18	10/8/18 11:27	EEH
Methylene Chloride	ND	0.28	0.18	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
4-Methyl-2-pentanone (MIBK)	ND	0.56	0.082	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
Naphthalene	1.3	0.11	0.0068	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
n-Propylbenzene	1.4	0.056	0.0073	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
Styrene	ND	0.056	0.0084	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
1,1,1,2-Tetrachloroethane	ND	0.056	0.0067	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
1,1,2,2-Tetrachloroethane	ND	0.028	0.0090	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
Tetrachloroethylene	9.6	0.056	0.015	mg/Kg dry	1	MS-19	SW-846 8260C	10/5/18	10/8/18 11:27	EEH
Tetrahydrofuran	ND	0.56	0.060	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
Toluene	0.024	0.056	0.0095	mg/Kg dry	1	J	SW-846 8260C	10/5/18	10/8/18 11:27	EEH
1,2,3-Trichlorobenzene	ND	0.28	0.0078	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
1,2,4-Trichlorobenzene	ND	0.056	0.011	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
1,3,5-Trichlorobenzene	ND	0.056	0.0095	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
1,1,1-Trichloroethane	ND	0.056	0.0073	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
1,1,2-Trichloroethane	ND	0.056	0.013	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
Trichloroethylene	0.17	0.056	0.011	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
Trichlorofluoromethane (Freon 11)	ND	0.11	0.0082	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
1,2,3-Trichloropropane	ND	0.11	0.012	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.056	0.011	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
1,2,4-Trimethylbenzene	9.4	0.056	0.010	mg/Kg dry	1	MS-19	SW-846 8260C	10/5/18	10/8/18 11:27	EEH
1,3,5-Trimethylbenzene	3.3	0.056	0.0073	mg/Kg dry	1	MS-19	SW-846 8260C	10/5/18	10/8/18 11:27	EEH
Vinyl Chloride	ND	0.11	0.0075	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
m+p Xylene	0.69	0.11	0.014	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
o-Xylene	0.46	0.056	0.0073	mg/Kg dry	1		SW-846 8260C	10/5/18	10/8/18 11:27	EEH
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		81.8	70-130						10/8/18 11:27	
Toluene-d8		101	70-130						10/8/18 11:27	
4-Bromofluorobenzene		93.4	70-130						10/8/18 11:27	

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-SB-07R 8.5-9

Sampled: 9/28/2018 09:30

Sample ID: 18J0071-01

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	84.2		% Wt	1		SM 2540G	10/9/18	10/9/18 17:10	DMP

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Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-SB-08 5-5.5

Sampled: 9/28/2018 12:20

Sample ID: 18J0071-02

Sample Matrix: Soil

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	11	2.2	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
Acrylonitrile	ND	1.1	0.13	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.11	0.024	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
Benzene	ND	0.23	0.027	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
Bromobenzene	ND	0.23	0.034	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
Bromochloromethane	ND	0.23	0.051	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
Bromodichloromethane	ND	0.23	0.067	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
Bromoform	ND	0.45	0.048	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
Bromomethane	ND	0.45	0.21	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
2-Butanone (MEK)	ND	4.5	0.54	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
tert-Butyl Alcohol (TBA)	ND	4.5	0.49	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
n-Butylbenzene	26	0.23	0.034	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
sec-Butylbenzene	10	0.23	0.030	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
tert-Butylbenzene	0.95	0.23	0.027	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.11	0.022	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
Carbon Disulfide	ND	0.68	0.23	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
Carbon Tetrachloride	ND	0.23	0.056	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
Chlorobenzene	ND	0.23	0.036	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
Chlorodibromomethane	ND	0.11	0.024	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
Chloroethane	ND	0.45	0.064	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
Chloroform	ND	0.45	0.050	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
Chloromethane	ND	0.45	0.13	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
2-Chlorotoluene	ND	0.23	0.027	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
4-Chlorotoluene	ND	0.23	0.032	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	1.1	0.084	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
1,2-Dibromoethane (EDB)	ND	0.11	0.034	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
Dibromomethane	ND	0.23	0.036	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
1,2-Dichlorobenzene	ND	0.23	0.039	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
1,3-Dichlorobenzene	ND	0.23	0.039	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
1,4-Dichlorobenzene	ND	0.23	0.034	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
trans-1,4-Dichloro-2-butene	ND	0.45	0.070	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
Dichlorodifluoromethane (Freon 12)	ND	0.45	0.065	mg/Kg dry	4	V-05	SW-846 8260C	10/5/18	10/8/18 11:54	EEH
1,1-Dichloroethane	ND	0.23	0.036	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
1,2-Dichloroethane	ND	0.23	0.044	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
1,1-Dichloroethylene	ND	0.23	0.048	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
cis-1,2-Dichloroethylene	2.2	0.23	0.033	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
trans-1,2-Dichloroethylene	ND	0.23	0.034	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
1,2-Dichloropropane	ND	0.23	0.030	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
1,3-Dichloropropane	ND	0.11	0.030	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
2,2-Dichloropropane	ND	0.23	0.048	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
1,1-Dichloropropene	ND	0.45	0.029	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
cis-1,3-Dichloropropene	ND	0.11	0.027	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
trans-1,3-Dichloropropene	ND	0.11	0.025	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
Diethyl Ether	ND	0.45	0.050	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-SB-08 5-5.5

Sampled: 9/28/2018 12:20

Sample ID: 18J0071-02

Sample Matrix: Soil

Sample Flags: RL-11

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.11	0.041	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
1,4-Dioxane	ND	11	6.0	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
Ethylbenzene	3.8	0.23	0.030	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
Hexachlorobutadiene	ND	0.23	0.13	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
2-Hexanone (MBK)	ND	2.3	0.35	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
Isopropylbenzene (Cumene)	4.8	0.23	0.027	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
p-Isopropyltoluene (p-Cymene)	12	0.23	0.034	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
Methyl Acetate	ND	2.3	0.095	mg/Kg dry	4	V-05	SW-846 8260C	10/5/18	10/8/18 11:54	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.23	0.020	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
Methyl Cyclohexane	0.35	0.23	0.14	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
Methylene Chloride	ND	1.1	0.72	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
4-Methyl-2-pentanone (MIBK)	ND	2.3	0.33	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
Naphthalene	11	0.45	0.027	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
n-Propylbenzene	14	0.23	0.030	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
Styrene	ND	0.23	0.034	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
1,1,1,2-Tetrachloroethane	ND	0.23	0.027	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
1,1,2,2-Tetrachloroethane	ND	0.11	0.036	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
Tetrachloroethylene	100	5.7	1.5	mg/Kg dry	100		SW-846 8260C	10/5/18	10/8/18 14:32	EEH
Tetrachloroethylene	110	0.23	0.062	mg/Kg dry	4	E	SW-846 8260C	10/5/18	10/8/18 11:54	EEH
Tetrahydrofuran	ND	2.3	0.24	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
Toluene	0.23	0.23	0.039	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
1,2,3-Trichlorobenzene	ND	1.1	0.032	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
1,2,4-Trichlorobenzene	ND	0.23	0.043	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
1,3,5-Trichlorobenzene	ND	0.23	0.039	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
1,1,1-Trichloroethane	ND	0.23	0.030	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
1,1,2-Trichloroethane	ND	0.23	0.054	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
Trichloroethylene	1.4	0.23	0.045	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
Trichlorofluoromethane (Freon 11)	ND	0.45	0.033	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
1,2,3-Trichloropropane	ND	0.45	0.049	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.23	0.044	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
1,2,4-Trimethylbenzene	87	5.7	1.0	mg/Kg dry	100		SW-846 8260C	10/5/18	10/8/18 14:32	EEH
1,3,5-Trimethylbenzene	33	0.23	0.030	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
Vinyl Chloride	ND	0.45	0.030	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
m+p Xylene	6.6	0.45	0.058	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH
o-Xylene	4.3	0.23	0.030	mg/Kg dry	4		SW-846 8260C	10/5/18	10/8/18 11:54	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	79.9	70-130	10/8/18 14:32
1,2-Dichloroethane-d4	81.2	70-130	10/8/18 11:54
Toluene-d8	102	70-130	10/8/18 11:54
Toluene-d8	99.8	70-130	10/8/18 14:32
4-Bromofluorobenzene	94.8	70-130	10/8/18 14:32
4-Bromofluorobenzene	79.2	70-130	10/8/18 11:54

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-SB-08 5-5.5

Sampled: 9/28/2018 12:20

Sample ID: 18J0071-02

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	84.4		% Wt	1		SM 2540G	10/9/18	10/9/18 17:11	DMP

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY  
 Date Received: 10/2/2018  
 Field Sample #: 401075-SB-09 5-5.5  
 Sample ID: 18J0071-03  
 Sample Matrix: Soil

Sample Description:  
 Sampled: 9/28/2018 13:45

Work Order: 18J0071

Sample Flags: PR-15

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.10	0.023	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
Acrylonitrile	ND	0.0060	0.0025	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0010	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
Benzene	ND	0.0020	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
Bromobenzene	ND	0.0020	0.00080	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
Bromochloromethane	ND	0.0020	0.0014	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
Bromodichloromethane	ND	0.0020	0.00060	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
Bromoform	ND	0.0020	0.0014	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
Bromomethane	ND	0.010	0.0042	mg/Kg dry	1	V-34	SW-846 8260C	10/8/18	10/8/18 13:53	MFF
2-Butanone (MEK)	ND	0.040	0.018	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
tert-Butyl Alcohol (TBA)	ND	0.040	0.021	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
n-Butylbenzene	ND	0.0020	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
sec-Butylbenzene	ND	0.0020	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
tert-Butylbenzene	ND	0.0020	0.00090	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	0.00060	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
Carbon Disulfide	ND	0.0060	0.0043	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
Carbon Tetrachloride	ND	0.0020	0.00080	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
Chlorobenzene	ND	0.0020	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
Chlorodibromomethane	ND	0.0010	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
Chloroethane	ND	0.020	0.0015	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
Chloroform	ND	0.0040	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
Chloromethane	ND	0.010	0.0064	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
2-Chlorotoluene	ND	0.0020	0.00080	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
4-Chlorotoluene	ND	0.0020	0.00080	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
1,2-Dibromoethane (EDB)	ND	0.0010	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
Dibromomethane	ND	0.0020	0.00060	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
1,2-Dichlorobenzene	ND	0.0020	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
1,3-Dichlorobenzene	ND	0.0020	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
1,4-Dichlorobenzene	ND	0.0020	0.00080	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
trans-1,4-Dichloro-2-butene	ND	0.0040	0.0021	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.020	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
1,1-Dichloroethane	ND	0.0020	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
1,2-Dichloroethane	ND	0.0020	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
1,1-Dichloroethylene	ND	0.0040	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
cis-1,2-Dichloroethylene	0.0018	0.0020	0.00080	mg/Kg dry	1	J	SW-846 8260C	10/8/18	10/8/18 13:53	MFF
trans-1,2-Dichloroethylene	0.0010	0.0020	0.00090	mg/Kg dry	1	J	SW-846 8260C	10/8/18	10/8/18 13:53	MFF
1,2-Dichloropropane	ND	0.0020	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
1,3-Dichloropropane	ND	0.0010	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
2,2-Dichloropropane	ND	0.0020	0.00090	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
1,1-Dichloropropene	ND	0.0020	0.00090	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
cis-1,3-Dichloropropene	ND	0.0010	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
trans-1,3-Dichloropropene	ND	0.0010	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
Diethyl Ether	ND	0.020	0.0018	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF



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Project Location: Watervliet, NY  
 Date Received: 10/2/2018  
 Field Sample #: 401075-SB-09 5-5.5  
 Sample ID: 18J0071-03  
 Sample Matrix: Soil

Sample Description:  
 Sampled: 9/28/2018 13:45

Work Order: 18J0071

Sample Flags: PR-15

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0010	0.00060	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
1,4-Dioxane	ND	0.10	0.058	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
Ethylbenzene	ND	0.0020	0.00080	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
Hexachlorobutadiene	ND	0.0020	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
2-Hexanone (MBK)	ND	0.020	0.011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
Isopropylbenzene (Cumene)	ND	0.0020	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0020	0.00080	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
Methyl Acetate	ND	0.0020	0.0016	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	0.00090	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
Methyl Cyclohexane	ND	0.0020	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
Methylene Chloride	ND	0.020	0.0071	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.020	0.0076	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
Naphthalene	ND	0.0040	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
n-Propylbenzene	ND	0.0020	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
Styrene	ND	0.0020	0.00060	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
1,1,1,2-Tetrachloroethane	ND	0.0020	0.0018	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
1,1,2,2-Tetrachloroethane	ND	0.0020	0.00090	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
Tetrachloroethylene	0.079	0.0020	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
Tetrahydrofuran	ND	0.010	0.0022	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
Toluene	ND	0.0020	0.00080	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
1,2,3-Trichlorobenzene	ND	0.0020	0.00060	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
1,2,4-Trichlorobenzene	ND	0.0020	0.00080	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
1,3,5-Trichlorobenzene	ND	0.0020	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
1,1,1-Trichloroethane	ND	0.0020	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
1,1,2-Trichloroethane	ND	0.0020	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
Trichloroethylene	0.0099	0.0020	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
Trichlorofluoromethane (Freon 11)	ND	0.010	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
1,2,3-Trichloropropane	ND	0.0020	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.010	0.00090	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
1,2,4-Trimethylbenzene	ND	0.0020	0.00080	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
1,3,5-Trimethylbenzene	ND	0.0020	0.00060	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
Vinyl Chloride	ND	0.010	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
m+p Xylene	ND	0.0040	0.0017	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
o-Xylene	ND	0.0020	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 13:53	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		100	70-130					10/8/18	13:53	
Toluene-d8		95.8	70-130					10/8/18	13:53	
4-Bromofluorobenzene		98.1	70-130					10/8/18	13:53	



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-SB-09 5-5.5

Sampled: 9/28/2018 13:45

Sample ID: 18J0071-03

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	88.1		% Wt	1		SM 2540G	10/9/18	10/9/18 17:11	DMP

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-SB-10 12-12.5

Sampled: 9/28/2018 08:55

Sample ID: 18J0071-04

Sample Matrix: Soil

Sample Flags: PR-15

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.12	0.027	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
Acrylonitrile	ND	0.0069	0.0029	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0012	0.00081	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
Benzene	ND	0.0023	0.00081	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
Bromobenzene	ND	0.0023	0.00092	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
Bromochloromethane	ND	0.0023	0.0016	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
Bromodichloromethane	ND	0.0023	0.00069	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
Bromoform	ND	0.0023	0.0016	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
Bromomethane	ND	0.012	0.0048	mg/Kg dry	1	V-34	SW-846 8260C	10/8/18	10/8/18 14:21	MFF
2-Butanone (MEK)	ND	0.046	0.020	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
tert-Butyl Alcohol (TBA)	ND	0.046	0.024	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
n-Butylbenzene	ND	0.0023	0.00081	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
sec-Butylbenzene	ND	0.0023	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
tert-Butylbenzene	ND	0.0023	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0012	0.00069	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
Carbon Disulfide	ND	0.0069	0.0049	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
Carbon Tetrachloride	ND	0.0023	0.00092	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
Chlorobenzene	ND	0.0023	0.00081	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
Chlorodibromomethane	ND	0.0012	0.00081	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
Chloroethane	ND	0.023	0.0017	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
Chloroform	ND	0.0046	0.00081	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
Chloromethane	ND	0.012	0.0074	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
2-Chlorotoluene	ND	0.0023	0.00092	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
4-Chlorotoluene	ND	0.0023	0.00092	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0023	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
1,2-Dibromoethane (EDB)	ND	0.0012	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
Dibromomethane	ND	0.0023	0.00069	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
1,2-Dichlorobenzene	ND	0.0023	0.00081	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
1,3-Dichlorobenzene	ND	0.0023	0.00081	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
1,4-Dichlorobenzene	ND	0.0023	0.00092	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
trans-1,4-Dichloro-2-butene	ND	0.0046	0.0024	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.023	0.0015	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
1,1-Dichloroethane	ND	0.0023	0.00081	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
1,2-Dichloroethane	ND	0.0023	0.0015	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
1,1-Dichloroethylene	ND	0.0046	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
cis-1,2-Dichloroethylene	0.00097	0.0023	0.00092	mg/Kg dry	1	J	SW-846 8260C	10/8/18	10/8/18 14:21	MFF
trans-1,2-Dichloroethylene	ND	0.0023	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
1,2-Dichloropropane	ND	0.0023	0.0015	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
1,3-Dichloropropane	ND	0.0012	0.00081	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
2,2-Dichloropropane	ND	0.0023	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
1,1-Dichloropropene	ND	0.0023	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
cis-1,3-Dichloropropene	ND	0.0012	0.00081	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
trans-1,3-Dichloropropene	ND	0.0012	0.00081	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
Diethyl Ether	ND	0.023	0.0021	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-SB-10 12-12.5

Sampled: 9/28/2018 08:55

Sample ID: 18J0071-04

Sample Matrix: Soil

Sample Flags: PR-15

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0012	0.00069	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
1,4-Dioxane	ND	0.12	0.066	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
Ethylbenzene	ND	0.0023	0.00092	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
Hexachlorobutadiene	ND	0.0023	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
2-Hexanone (MBK)	ND	0.023	0.013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
Isopropylbenzene (Cumene)	ND	0.0023	0.00081	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0023	0.00092	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
Methyl Acetate	ND	0.0023	0.0018	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0046	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
Methyl Cyclohexane	ND	0.0023	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
Methylene Chloride	ND	0.023	0.0082	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.023	0.0087	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
Naphthalene	ND	0.0046	0.00081	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
n-Propylbenzene	ND	0.0023	0.00081	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
Styrene	ND	0.0023	0.00069	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
1,1,1,2-Tetrachloroethane	ND	0.0023	0.0021	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
1,1,2,2-Tetrachloroethane	ND	0.0023	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
Tetrachloroethylene	ND	0.0023	0.0015	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
Tetrahydrofuran	ND	0.012	0.0025	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
Toluene	ND	0.0023	0.00092	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
1,2,3-Trichlorobenzene	ND	0.0023	0.00069	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
1,2,4-Trichlorobenzene	ND	0.0023	0.00092	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
1,3,5-Trichlorobenzene	ND	0.0023	0.00081	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
1,1,1-Trichloroethane	ND	0.0023	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
1,1,2-Trichloroethane	ND	0.0023	0.0014	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
Trichloroethylene	ND	0.0023	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
Trichlorofluoromethane (Freon 11)	ND	0.012	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
1,2,3-Trichloropropane	ND	0.0023	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.012	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
1,2,4-Trimethylbenzene	ND	0.0023	0.00092	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
1,3,5-Trimethylbenzene	ND	0.0023	0.00069	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
Vinyl Chloride	ND	0.012	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
m+p Xylene	ND	0.0046	0.0020	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
o-Xylene	ND	0.0023	0.00081	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:21	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		103	70-130						10/8/18 14:21	
Toluene-d8		97.7	70-130						10/8/18 14:21	
4-Bromofluorobenzene		99.4	70-130						10/8/18 14:21	

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Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-SB-10 12-12.5

Sampled: 9/28/2018 08:55

Sample ID: 18J0071-04

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	83.3		% Wt	1		SM 2540G	10/9/18	10/9/18 17:11	DMP

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Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-SB-11 10.5-11

Sampled: 9/28/2018 15:40

Sample ID: 18J0071-05

Sample Matrix: Soil

Sample Flags: PR-15

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.10	0.024	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
Acrylonitrile	ND	0.0062	0.0026	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0010	0.00072	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
Benzene	ND	0.0021	0.00072	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
Bromobenzene	ND	0.0021	0.00082	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
Bromochloromethane	ND	0.0021	0.0014	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
Bromodichloromethane	ND	0.0021	0.00062	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
Bromoform	ND	0.0021	0.0014	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
Bromomethane	ND	0.010	0.0043	mg/Kg dry	1	V-34	SW-846 8260C	10/8/18	10/8/18 14:50	MFF
2-Butanone (MEK)	ND	0.041	0.018	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
tert-Butyl Alcohol (TBA)	ND	0.041	0.021	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
n-Butylbenzene	ND	0.0021	0.00072	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
sec-Butylbenzene	ND	0.0021	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
tert-Butylbenzene	ND	0.0021	0.00092	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	0.00062	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
Carbon Disulfide	ND	0.0062	0.0044	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
Carbon Tetrachloride	ND	0.0021	0.00082	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
Chlorobenzene	ND	0.0021	0.00072	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
Chlorodibromomethane	ND	0.0010	0.00072	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
Chloroethane	ND	0.021	0.0015	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
Chloroform	ND	0.0041	0.00072	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
Chloromethane	ND	0.010	0.0066	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
2-Chlorotoluene	ND	0.0021	0.00082	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
4-Chlorotoluene	ND	0.0021	0.00082	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0021	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
1,2-Dibromoethane (EDB)	ND	0.0010	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
Dibromomethane	ND	0.0021	0.00062	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
1,2-Dichlorobenzene	ND	0.0021	0.00072	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
1,3-Dichlorobenzene	ND	0.0021	0.00072	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
1,4-Dichlorobenzene	ND	0.0021	0.00082	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
trans-1,4-Dichloro-2-butene	ND	0.0041	0.0022	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.021	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
1,1-Dichloroethane	ND	0.0021	0.00072	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
1,2-Dichloroethane	ND	0.0021	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
1,1-Dichloroethylene	ND	0.0041	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
cis-1,2-Dichloroethylene	0.0018	0.0021	0.00082	mg/Kg dry	1	J	SW-846 8260C	10/8/18	10/8/18 14:50	MFF
trans-1,2-Dichloroethylene	ND	0.0021	0.00092	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
1,2-Dichloropropane	ND	0.0021	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
1,3-Dichloropropane	ND	0.0010	0.00072	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
2,2-Dichloropropane	ND	0.0021	0.00092	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
1,1-Dichloropropene	ND	0.0021	0.00092	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
cis-1,3-Dichloropropene	ND	0.0010	0.00072	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
trans-1,3-Dichloropropene	ND	0.0010	0.00072	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
Diethyl Ether	ND	0.021	0.0018	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF

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Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-SB-11 10.5-11

Sampled: 9/28/2018 15:40

Sample ID: 18J0071-05

Sample Matrix: Soil

Sample Flags: PR-15

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0010	0.00062	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
1,4-Dioxane	ND	0.10	0.059	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
Ethylbenzene	ND	0.0021	0.00082	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
Hexachlorobutadiene	ND	0.0021	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
2-Hexanone (MBK)	ND	0.021	0.011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
Isopropylbenzene (Cumene)	ND	0.0021	0.00072	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0021	0.00082	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
Methyl Acetate	ND	0.0021	0.0016	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0041	0.00092	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
Methyl Cyclohexane	ND	0.0021	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
Methylene Chloride	ND	0.021	0.0073	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.021	0.0078	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
Naphthalene	ND	0.0041	0.00072	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
n-Propylbenzene	ND	0.0021	0.00072	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
Styrene	ND	0.0021	0.00062	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
1,1,1,2-Tetrachloroethane	ND	0.0021	0.0018	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
1,1,2,2-Tetrachloroethane	ND	0.0021	0.00092	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
Tetrachloroethylene	0.016	0.0021	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
Tetrahydrofuran	ND	0.010	0.0023	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
Toluene	ND	0.0021	0.00082	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
1,2,3-Trichlorobenzene	ND	0.0021	0.00062	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
1,2,4-Trichlorobenzene	ND	0.0021	0.00082	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
1,3,5-Trichlorobenzene	ND	0.0021	0.00072	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
1,1,1-Trichloroethane	ND	0.0021	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
1,1,2-Trichloroethane	ND	0.0021	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
Trichloroethylene	0.0012	0.0021	0.0010	mg/Kg dry	1	J	SW-846 8260C	10/8/18	10/8/18 14:50	MFF
Trichlorofluoromethane (Freon 11)	ND	0.010	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
1,2,3-Trichloropropane	ND	0.0021	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.010	0.00092	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
1,2,4-Trimethylbenzene	ND	0.0021	0.00082	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
1,3,5-Trimethylbenzene	ND	0.0021	0.00062	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
Vinyl Chloride	ND	0.010	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
m+p Xylene	ND	0.0041	0.0017	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
o-Xylene	ND	0.0021	0.00072	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 14:50	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		103	70-130					10/8/18	14:50	
Toluene-d8		95.4	70-130					10/8/18	14:50	
4-Bromofluorobenzene		96.0	70-130					10/8/18	14:50	

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-SB-11 10.5-11

Sampled: 9/28/2018 15:40

Sample ID: 18J0071-05

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	81.4		% Wt	1		SM 2540G	10/9/18	10/9/18 17:11	DMP

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Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-SB-12 0.2-1

Sampled: 9/28/2018 16:15

Sample ID: 18J0071-06

Sample Matrix: Soil

Sample Flags: PR-15

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	2.9	0.10	0.024	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
Acrylonitrile	ND	0.0060	0.0025	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0010	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
Benzene	ND	0.0020	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
Bromobenzene	ND	0.0020	0.00080	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
Bromochloromethane	ND	0.0020	0.0014	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
Bromodichloromethane	ND	0.0020	0.00060	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
Bromoform	ND	0.0020	0.0014	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
Bromomethane	ND	0.010	0.0042	mg/Kg dry	1	V-34	SW-846 8260C	10/8/18	10/8/18 15:45	MFF
2-Butanone (MEK)	ND	0.040	0.018	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
tert-Butyl Alcohol (TBA)	ND	0.040	0.021	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
n-Butylbenzene	ND	0.0020	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
sec-Butylbenzene	ND	0.0020	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
tert-Butylbenzene	ND	0.0020	0.00090	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	0.00060	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
Carbon Disulfide	ND	0.0060	0.0043	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
Carbon Tetrachloride	ND	0.0020	0.00080	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
Chlorobenzene	ND	0.0020	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
Chlorodibromomethane	ND	0.0010	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
Chloroethane	ND	0.020	0.0015	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
Chloroform	ND	0.0040	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
Chloromethane	ND	0.010	0.0064	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
2-Chlorotoluene	ND	0.0020	0.00080	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
4-Chlorotoluene	ND	0.0020	0.00080	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
1,2-Dibromoethane (EDB)	ND	0.0010	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
Dibromomethane	ND	0.0020	0.00060	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
1,2-Dichlorobenzene	ND	0.0020	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
1,3-Dichlorobenzene	ND	0.0020	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
1,4-Dichlorobenzene	ND	0.0020	0.00080	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
trans-1,4-Dichloro-2-butene	ND	0.0040	0.0021	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.020	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
1,1-Dichloroethane	ND	0.0020	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
1,2-Dichloroethane	ND	0.0020	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
1,1-Dichloroethylene	ND	0.0040	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
cis-1,2-Dichloroethylene	ND	0.0020	0.00080	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
trans-1,2-Dichloroethylene	ND	0.0020	0.00090	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
1,2-Dichloropropane	ND	0.0020	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
1,3-Dichloropropane	ND	0.0010	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
2,2-Dichloropropane	ND	0.0020	0.00090	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
1,1-Dichloropropene	ND	0.0020	0.00090	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
cis-1,3-Dichloropropene	ND	0.0010	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
trans-1,3-Dichloropropene	ND	0.0010	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
Diethyl Ether	ND	0.020	0.0018	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF



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Project Location: Watervliet, NY  
 Date Received: 10/2/2018  
 Field Sample #: 401075-SB-12 0.2-1  
 Sample ID: 18J0071-06  
 Sample Matrix: Soil

Sample Description:  
 Sampled: 9/28/2018 16:15

Work Order: 18J0071

Sample Flags: PR-15

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0010	0.00060	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
1,4-Dioxane	ND	0.10	0.058	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
Ethylbenzene	ND	0.0020	0.00080	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
Hexachlorobutadiene	ND	0.0020	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
2-Hexanone (MBK)	ND	0.020	0.011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
Isopropylbenzene (Cumene)	ND	0.0020	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0020	0.00080	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
Methyl Acetate	ND	0.0020	0.0016	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	0.00090	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
Methyl Cyclohexane	ND	0.0020	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
Methylene Chloride	ND	0.020	0.0071	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.020	0.0076	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
Naphthalene	ND	0.0040	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
n-Propylbenzene	ND	0.0020	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
Styrene	ND	0.0020	0.00060	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
1,1,1,2-Tetrachloroethane	ND	0.0020	0.0018	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
1,1,2,2-Tetrachloroethane	ND	0.0020	0.00090	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
Tetrachloroethylene	ND	0.0020	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
Tetrahydrofuran	ND	0.010	0.0022	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
Toluene	ND	0.0020	0.00080	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
1,2,3-Trichlorobenzene	ND	0.0020	0.00060	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
1,2,4-Trichlorobenzene	ND	0.0020	0.00080	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
1,3,5-Trichlorobenzene	ND	0.0020	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
1,1,1-Trichloroethane	ND	0.0020	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
1,1,2-Trichloroethane	ND	0.0020	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
Trichloroethylene	ND	0.0020	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
Trichlorofluoromethane (Freon 11)	ND	0.010	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
1,2,3-Trichloropropane	ND	0.0020	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.010	0.00090	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
1,2,4-Trimethylbenzene	ND	0.0020	0.00080	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
1,3,5-Trimethylbenzene	ND	0.0020	0.00060	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
Vinyl Chloride	ND	0.010	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
m+p Xylene	ND	0.0040	0.0017	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
o-Xylene	ND	0.0020	0.00070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:45	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		106	70-130					10/8/18	15:45	
Toluene-d8		95.0	70-130					10/8/18	15:45	
4-Bromofluorobenzene		97.4	70-130					10/8/18	15:45	

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Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-SB-12 0.2-1

Sampled: 9/28/2018 16:15

Sample ID: 18J0071-06

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	87.6		% Wt	1		SM 2540G	10/9/18	10/9/18 17:11	DMP

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Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-SB-13 4.5-5

Sampled: 9/27/2018 10:50

Sample ID: 18J0071-07

Sample Matrix: Soil

Sample Flags: PR-15

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.097	0.023	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
Acrylonitrile	ND	0.0058	0.0024	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00097	0.00068	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
Benzene	ND	0.0019	0.00068	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
Bromobenzene	ND	0.0019	0.00078	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
Bromochloromethane	ND	0.0019	0.0014	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
Bromodichloromethane	ND	0.0019	0.00058	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
Bromoform	ND	0.0019	0.0014	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
Bromomethane	ND	0.0097	0.0041	mg/Kg dry	1	R-05, V-34	SW-846 8260C	10/8/18	10/8/18 20:26	MFF
2-Butanone (MEK)	ND	0.039	0.017	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
tert-Butyl Alcohol (TBA)	ND	0.039	0.020	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
n-Butylbenzene	ND	0.0019	0.00068	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
sec-Butylbenzene	ND	0.0019	0.00097	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
tert-Butylbenzene	ND	0.0019	0.00087	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00097	0.00058	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
Carbon Disulfide	ND	0.0058	0.0042	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
Carbon Tetrachloride	ND	0.0019	0.00078	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
Chlorobenzene	ND	0.0019	0.00068	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
Chlorodibromomethane	ND	0.00097	0.00068	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
Chloroethane	ND	0.019	0.0015	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
Chloroform	0.0011	0.0039	0.00068	mg/Kg dry	1	J	SW-846 8260C	10/8/18	10/8/18 20:26	MFF
Chloromethane	ND	0.0097	0.0062	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
2-Chlorotoluene	ND	0.0019	0.00078	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
4-Chlorotoluene	ND	0.0019	0.00078	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0019	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
1,2-Dibromoethane (EDB)	ND	0.00097	0.00097	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
Dibromomethane	ND	0.0019	0.00058	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
1,2-Dichlorobenzene	ND	0.0019	0.00068	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
1,3-Dichlorobenzene	ND	0.0019	0.00068	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
1,4-Dichlorobenzene	ND	0.0019	0.00078	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
trans-1,4-Dichloro-2-butene	ND	0.0039	0.0020	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.019	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
1,1-Dichloroethane	ND	0.0019	0.00068	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
1,2-Dichloroethane	ND	0.0019	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
1,1-Dichloroethylene	ND	0.0039	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
cis-1,2-Dichloroethylene	ND	0.0019	0.00078	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
trans-1,2-Dichloroethylene	ND	0.0019	0.00087	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
1,2-Dichloropropane	ND	0.0019	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
1,3-Dichloropropane	ND	0.00097	0.00068	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
2,2-Dichloropropane	ND	0.0019	0.00087	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
1,1-Dichloropropene	ND	0.0019	0.00087	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
cis-1,3-Dichloropropene	ND	0.00097	0.00068	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
trans-1,3-Dichloropropene	ND	0.00097	0.00068	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
Diethyl Ether	ND	0.019	0.0017	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY  
 Date Received: 10/2/2018  
 Field Sample #: 401075-SB-13 4.5-5  
 Sample ID: 18J0071-07  
 Sample Matrix: Soil

Sample Description:  
 Sampled: 9/27/2018 10:50

Work Order: 18J0071

Sample Flags: PR-15

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.00097	0.00058	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
1,4-Dioxane	ND	0.097	0.056	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
Ethylbenzene	ND	0.0019	0.00078	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
Hexachlorobutadiene	ND	0.0019	0.00097	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
2-Hexanone (MBK)	ND	0.019	0.011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
Isopropylbenzene (Cumene)	ND	0.0019	0.00068	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0019	0.00078	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
Methyl Acetate	ND	0.0019	0.0016	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0039	0.00087	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
Methyl Cyclohexane	ND	0.0019	0.00097	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
Methylene Chloride	ND	0.019	0.0069	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.019	0.0074	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
Naphthalene	ND	0.0039	0.00068	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
n-Propylbenzene	ND	0.0019	0.00068	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
Styrene	ND	0.0019	0.00058	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
1,1,1,2-Tetrachloroethane	ND	0.0019	0.0017	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
1,1,2,2-Tetrachloroethane	ND	0.0019	0.00087	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
Tetrachloroethylene	ND	0.0019	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
Tetrahydrofuran	ND	0.0097	0.0021	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
Toluene	ND	0.0019	0.00078	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
1,2,3-Trichlorobenzene	ND	0.0019	0.00058	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
1,2,4-Trichlorobenzene	ND	0.0019	0.00078	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
1,3,5-Trichlorobenzene	ND	0.0019	0.00068	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
1,1,1-Trichloroethane	ND	0.0019	0.00097	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
1,1,2-Trichloroethane	ND	0.0019	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
Trichloroethylene	ND	0.0019	0.00097	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0097	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
1,2,3-Trichloropropane	ND	0.0019	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0097	0.00087	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
1,2,4-Trimethylbenzene	0.0010	0.0019	0.00078	mg/Kg dry	1	J	SW-846 8260C	10/8/18	10/8/18 20:26	MFF
1,3,5-Trimethylbenzene	ND	0.0019	0.00058	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
Vinyl Chloride	ND	0.0097	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
m+p Xylene	0.0020	0.0039	0.0016	mg/Kg dry	1	J	SW-846 8260C	10/8/18	10/8/18 20:26	MFF
o-Xylene	ND	0.0019	0.00068	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:26	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		110	70-130					10/8/18	20:26	
Toluene-d8		96.6	70-130					10/8/18	20:26	
4-Bromofluorobenzene		84.2	70-130					10/8/18	20:26	

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Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-SB-13 4.5-5

Sampled: 9/27/2018 10:50

Sample ID: 18J0071-07

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	96.1		% Wt	1		SM 2540G	10/9/18	10/9/18 17:11	DMP

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Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-SB-14 5-6

Sampled: 9/27/2018 08:40

Sample ID: 18J0071-08

Sample Matrix: Soil

Sample Flags: PR-15

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.094	0.022	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
Acrylonitrile	ND	0.0057	0.0024	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00094	0.00066	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
Benzene	ND	0.0019	0.00066	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
Bromobenzene	ND	0.0019	0.00075	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
Bromochloromethane	ND	0.0019	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
Bromodichloromethane	ND	0.0019	0.00057	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
Bromoform	ND	0.0019	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
Bromomethane	ND	0.0094	0.0040	mg/Kg dry	1	R-05, V-34	SW-846 8260C	10/8/18	10/8/18 20:54	MFF
2-Butanone (MEK)	ND	0.038	0.016	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
tert-Butyl Alcohol (TBA)	ND	0.038	0.020	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
n-Butylbenzene	ND	0.0019	0.00066	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
sec-Butylbenzene	ND	0.0019	0.00094	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
tert-Butylbenzene	ND	0.0019	0.00085	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00094	0.00057	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
Carbon Disulfide	ND	0.0057	0.0041	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
Carbon Tetrachloride	ND	0.0019	0.00075	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
Chlorobenzene	ND	0.0019	0.00066	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
Chlorodibromomethane	ND	0.00094	0.00066	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
Chloroethane	ND	0.019	0.0014	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
Chloroform	ND	0.0038	0.00066	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
Chloromethane	ND	0.0094	0.0060	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
2-Chlorotoluene	ND	0.0019	0.00075	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
4-Chlorotoluene	ND	0.0019	0.00075	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0019	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
1,2-Dibromoethane (EDB)	ND	0.00094	0.00094	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
Dibromomethane	ND	0.0019	0.00057	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
1,2-Dichlorobenzene	ND	0.0019	0.00066	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
1,3-Dichlorobenzene	ND	0.0019	0.00066	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
1,4-Dichlorobenzene	ND	0.0019	0.00075	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
trans-1,4-Dichloro-2-butene	ND	0.0038	0.0020	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.019	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
1,1-Dichloroethane	ND	0.0019	0.00066	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
1,2-Dichloroethane	ND	0.0019	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
1,1-Dichloroethylene	ND	0.0038	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
cis-1,2-Dichloroethylene	ND	0.0019	0.00075	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
trans-1,2-Dichloroethylene	ND	0.0019	0.00085	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
1,2-Dichloropropane	ND	0.0019	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
1,3-Dichloropropane	ND	0.00094	0.00066	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
2,2-Dichloropropane	ND	0.0019	0.00085	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
1,1-Dichloropropene	ND	0.0019	0.00085	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
cis-1,3-Dichloropropene	ND	0.00094	0.00066	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
trans-1,3-Dichloropropene	ND	0.00094	0.00066	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
Diethyl Ether	ND	0.019	0.0017	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF

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Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-SB-14 5-6

Sampled: 9/27/2018 08:40

Sample ID: 18J0071-08

Sample Matrix: Soil

Sample Flags: PR-15

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.00094	0.00057	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
1,4-Dioxane	ND	0.094	0.054	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
Ethylbenzene	ND	0.0019	0.00075	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
Hexachlorobutadiene	ND	0.0019	0.00094	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
2-Hexanone (MBK)	ND	0.019	0.010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
Isopropylbenzene (Cumene)	ND	0.0019	0.00066	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0019	0.00075	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
Methyl Acetate	ND	0.0019	0.0015	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0038	0.00085	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
Methyl Cyclohexane	ND	0.0019	0.00094	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
Methylene Chloride	ND	0.019	0.0067	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.019	0.0072	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
Naphthalene	ND	0.0038	0.00066	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
n-Propylbenzene	ND	0.0019	0.00066	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
Styrene	ND	0.0019	0.00057	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
1,1,1,2-Tetrachloroethane	ND	0.0019	0.0017	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
1,1,2,2-Tetrachloroethane	ND	0.0019	0.00085	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
Tetrachloroethylene	ND	0.0019	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
Tetrahydrofuran	ND	0.0094	0.0021	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
Toluene	ND	0.0019	0.00075	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
1,2,3-Trichlorobenzene	ND	0.0019	0.00057	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
1,2,4-Trichlorobenzene	ND	0.0019	0.00075	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
1,3,5-Trichlorobenzene	ND	0.0019	0.00066	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
1,1,1-Trichloroethane	ND	0.0019	0.00094	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
1,1,2-Trichloroethane	ND	0.0019	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
Trichloroethylene	ND	0.0019	0.00094	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0094	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
1,2,3-Trichloropropane	ND	0.0019	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0094	0.00085	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
1,2,4-Trimethylbenzene	ND	0.0019	0.00075	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
1,3,5-Trimethylbenzene	ND	0.0019	0.00057	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
Vinyl Chloride	ND	0.0094	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
m+p Xylene	ND	0.0038	0.0016	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
o-Xylene	ND	0.0019	0.00066	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 20:54	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		111	70-130					10/8/18	20:54	
Toluene-d8		96.3	70-130					10/8/18	20:54	
4-Bromofluorobenzene		87.4	70-130					10/8/18	20:54	

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-SB-14 5-6

Sampled: 9/27/2018 08:40

Sample ID: 18J0071-08

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	96.1		% Wt	1		SM 2540G	10/9/18	10/9/18 17:11	DMP



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Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-SB-15 10-11

Sampled: 9/26/2018 14:05

Sample ID: 18J0071-09

Sample Matrix: Soil

Sample Flags: PR-15

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.13	0.030	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Acetone	ND	0.11	0.025	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
Acrylonitrile	ND	0.0077	0.0032	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Acrylonitrile	ND	0.0065	0.0027	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0013	0.00089	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0011	0.00076	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
Benzene	ND	0.0026	0.00089	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Benzene	ND	0.0022	0.00076	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
Bromobenzene	ND	0.0026	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Bromobenzene	ND	0.0022	0.00087	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
Bromochloromethane	ND	0.0026	0.0018	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Bromochloromethane	ND	0.0022	0.0015	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
Bromodichloromethane	ND	0.0026	0.00077	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Bromodichloromethane	ND	0.0022	0.00065	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
Bromoform	ND	0.0022	0.0015	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
Bromoform	ND	0.0026	0.0018	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Bromomethane	ND	0.013	0.0054	mg/Kg dry	1	V-34	SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Bromomethane	ND	0.011	0.0046	mg/Kg dry	1	V-34	SW-846 8260C	10/8/18	10/8/18 15:18	MFF
2-Butanone (MEK)	ND	0.051	0.022	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
2-Butanone (MEK)	ND	0.043	0.019	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
tert-Butyl Alcohol (TBA)	ND	0.051	0.027	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
tert-Butyl Alcohol (TBA)	ND	0.043	0.023	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
n-Butylbenzene	ND	0.0026	0.00089	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 7:24	MFF
n-Butylbenzene	ND	0.0022	0.00076	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/8/18 15:18	MFF
sec-Butylbenzene	ND	0.0026	0.0013	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 7:24	MFF
sec-Butylbenzene	ND	0.0022	0.0011	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/8/18 15:18	MFF
tert-Butylbenzene	ND	0.0026	0.0011	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 7:24	MFF
tert-Butylbenzene	ND	0.0022	0.00098	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/8/18 15:18	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0013	0.00077	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0011	0.00065	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
Carbon Disulfide	ND	0.0077	0.0055	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Carbon Disulfide	ND	0.0065	0.0047	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
Carbon Tetrachloride	ND	0.0026	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Carbon Tetrachloride	ND	0.0022	0.00087	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
Chlorobenzene	ND	0.0026	0.00089	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Chlorobenzene	ND	0.0022	0.00076	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
Chlorodibromomethane	ND	0.0013	0.00089	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Chlorodibromomethane	ND	0.0011	0.00076	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
Chloroethane	ND	0.026	0.0019	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Chloroethane	ND	0.022	0.0016	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
Chloroform	ND	0.0051	0.00089	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Chloroform	ND	0.0043	0.00076	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
Chloromethane	ND	0.013	0.0082	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Chloromethane	ND	0.011	0.0070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-SB-15 10-11

Sampled: 9/26/2018 14:05

Sample ID: 18J0071-09

Sample Matrix: Soil

Sample Flags: PR-15

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Chlorotoluene	ND	0.0026	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
2-Chlorotoluene	ND	0.0022	0.00087	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
4-Chlorotoluene	ND	0.0026	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
4-Chlorotoluene	ND	0.0022	0.00087	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0026	0.0014	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 7:24	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0022	0.0012	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/8/18 15:18	MFF
1,2-Dibromoethane (EDB)	ND	0.0013	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
1,2-Dibromoethane (EDB)	ND	0.0011	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
Dibromomethane	ND	0.0026	0.00077	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Dibromomethane	ND	0.0022	0.00065	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
1,2-Dichlorobenzene	ND	0.0026	0.00089	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 7:24	MFF
1,2-Dichlorobenzene	ND	0.0022	0.00076	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/8/18 15:18	MFF
1,3-Dichlorobenzene	ND	0.0026	0.00089	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 7:24	MFF
1,3-Dichlorobenzene	ND	0.0022	0.00076	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/8/18 15:18	MFF
1,4-Dichlorobenzene	ND	0.0022	0.00087	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/8/18 15:18	MFF
1,4-Dichlorobenzene	ND	0.0026	0.0010	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 7:24	MFF
trans-1,4-Dichloro-2-butene	ND	0.0051	0.0027	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
trans-1,4-Dichloro-2-butene	ND	0.0043	0.0023	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.026	0.0017	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.022	0.0014	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
1,1-Dichloroethane	ND	0.0026	0.00089	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
1,1-Dichloroethane	ND	0.0022	0.00076	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
1,2-Dichloroethane	ND	0.0026	0.0017	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
1,2-Dichloroethane	ND	0.0022	0.0014	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
1,1-Dichloroethylene	ND	0.0051	0.0014	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
1,1-Dichloroethylene	ND	0.0043	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
cis-1,2-Dichloroethylene	ND	0.0026	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
cis-1,2-Dichloroethylene	ND	0.0022	0.00087	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
trans-1,2-Dichloroethylene	ND	0.0026	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
trans-1,2-Dichloroethylene	ND	0.0022	0.00098	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
1,2-Dichloropropane	ND	0.0026	0.0017	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
1,2-Dichloropropane	ND	0.0022	0.0014	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
1,3-Dichloropropane	ND	0.0013	0.00089	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
1,3-Dichloropropane	ND	0.0011	0.00076	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
2,2-Dichloropropane	ND	0.0026	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
2,2-Dichloropropane	ND	0.0022	0.00098	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
1,1-Dichloropropene	ND	0.0026	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
1,1-Dichloropropene	ND	0.0022	0.00098	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
cis-1,3-Dichloropropene	ND	0.0013	0.00089	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
cis-1,3-Dichloropropene	ND	0.0011	0.00076	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
trans-1,3-Dichloropropene	ND	0.0013	0.00089	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
trans-1,3-Dichloropropene	ND	0.0011	0.00076	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
Diethyl Ether	ND	0.026	0.0023	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Diethyl Ether	ND	0.022	0.0020	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF

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Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-SB-15 10-11

Sampled: 9/26/2018 14:05

Sample ID: 18J0071-09

Sample Matrix: Soil

Sample Flags: PR-15

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0013	0.00077	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Diisopropyl Ether (DIPE)	ND	0.0011	0.00065	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
1,4-Dioxane	ND	0.13	0.073	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
1,4-Dioxane	ND	0.11	0.063	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
Ethylbenzene	ND	0.0026	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Ethylbenzene	ND	0.0022	0.00087	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
Hexachlorobutadiene	ND	0.0026	0.0013	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Hexachlorobutadiene	ND	0.0022	0.0011	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/8/18 15:18	MFF
2-Hexanone (MBK)	ND	0.026	0.014	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
2-Hexanone (MBK)	ND	0.022	0.012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
Isopropylbenzene (Cumene)	ND	0.0026	0.00089	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Isopropylbenzene (Cumene)	ND	0.0022	0.00076	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0026	0.0010	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 7:24	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0022	0.00087	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/8/18 15:18	MFF
Methyl Acetate	ND	0.0026	0.0020	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Methyl Acetate	ND	0.0022	0.0017	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0051	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0043	0.00098	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
Methyl Cyclohexane	ND	0.0026	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Methyl Cyclohexane	ND	0.0022	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
Methylene Chloride	ND	0.026	0.0091	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Methylene Chloride	ND	0.022	0.0077	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.026	0.0097	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.022	0.0083	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
Naphthalene	ND	0.0051	0.00089	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Naphthalene	ND	0.0043	0.00076	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/8/18 15:18	MFF
n-Propylbenzene	ND	0.0026	0.00089	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
n-Propylbenzene	ND	0.0022	0.00076	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
Styrene	ND	0.0026	0.00077	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Styrene	ND	0.0022	0.00065	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
1,1,1,2-Tetrachloroethane	ND	0.0022	0.0020	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
1,1,1,2-Tetrachloroethane	ND	0.0026	0.0023	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
1,1,2,2-Tetrachloroethane	ND	0.0026	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
1,1,2,2-Tetrachloroethane	ND	0.0022	0.00098	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
Tetrachloroethylene	ND	0.0026	0.0017	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Tetrachloroethylene	ND	0.0022	0.0014	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
Tetrahydrofuran	ND	0.013	0.0028	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Tetrahydrofuran	ND	0.011	0.0024	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
Toluene	ND	0.0026	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Toluene	ND	0.0022	0.00087	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
1,2,3-Trichlorobenzene	ND	0.0026	0.00077	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 7:24	MFF
1,2,3-Trichlorobenzene	ND	0.0022	0.00065	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/8/18 15:18	MFF
1,2,4-Trichlorobenzene	ND	0.0026	0.0010	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 7:24	MFF
1,2,4-Trichlorobenzene	ND	0.0022	0.00087	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/8/18 15:18	MFF

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY  
 Date Received: 10/2/2018  
 Field Sample #: 401075-SB-15 10-11  
 Sample ID: 18J0071-09  
 Sample Matrix: Soil

Sample Description:  
 Sampled: 9/26/2018 14:05

Work Order: 18J0071

Sample Flags: PR-15

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,3,5-Trichlorobenzene	ND	0.0026	0.00089	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 7:24	MFF
1,3,5-Trichlorobenzene	ND	0.0022	0.00076	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/8/18 15:18	MFF
1,1,1-Trichloroethane	ND	0.0026	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
1,1,1-Trichloroethane	ND	0.0022	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
1,1,2-Trichloroethane	ND	0.0026	0.0015	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
1,1,2-Trichloroethane	ND	0.0022	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
Trichloroethylene	ND	0.0026	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Trichloroethylene	ND	0.0022	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
Trichlorofluoromethane (Freon 11)	ND	0.013	0.0014	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Trichlorofluoromethane (Freon 11)	ND	0.011	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
1,2,3-Trichloropropane	ND	0.0026	0.0014	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
1,2,3-Trichloropropane	ND	0.0022	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.013	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.011	0.00098	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
1,2,4-Trimethylbenzene	ND	0.0026	0.0010	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 7:24	MFF
1,2,4-Trimethylbenzene	ND	0.0022	0.00087	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/8/18 15:18	MFF
1,3,5-Trimethylbenzene	ND	0.0026	0.00077	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
1,3,5-Trimethylbenzene	ND	0.0022	0.00065	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
Vinyl Chloride	ND	0.013	0.0014	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
Vinyl Chloride	ND	0.011	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
m+p Xylene	ND	0.0051	0.0022	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
m+p Xylene	ND	0.0043	0.0018	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF
o-Xylene	ND	0.0026	0.00089	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:24	MFF
o-Xylene	ND	0.0022	0.00076	mg/Kg dry	1		SW-846 8260C	10/8/18	10/8/18 15:18	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	123	70-130	
1,2-Dichloroethane-d4	115	70-130	
Toluene-d8	87.1	70-130	
Toluene-d8	90.9	70-130	
<b>4-Bromofluorobenzene</b>	<b>52.2</b>	<b>*</b> 70-130	S-03
<b>4-Bromofluorobenzene</b>	<b>60.2</b>	<b>*</b> 70-130	S-03

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-SB-15 10-11

Sampled: 9/26/2018 14:05

Sample ID: 18J0071-09

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/PHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	92.2		% Wt	1		SM 2540G	10/9/18	10/9/18 17:12	DMP

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-SB-16 5-5.5

Sampled: 9/27/2018 16:00

Sample ID: 18J0071-10

Sample Matrix: Soil

Sample Flags: PR-15

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.091	0.021	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Acetone	ND	0.17	0.039	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
Acrylonitrile	ND	0.0055	0.0023	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Acrylonitrile	ND	0.0099	0.0041	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00091	0.00064	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0017	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
Benzene	ND	0.0018	0.00064	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Benzene	ND	0.0033	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
Bromobenzene	ND	0.0018	0.00073	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Bromobenzene	ND	0.0033	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
Bromochloromethane	ND	0.0018	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Bromochloromethane	ND	0.0033	0.0023	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
Bromodichloromethane	ND	0.0018	0.00055	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Bromodichloromethane	ND	0.0033	0.00099	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
Bromoform	ND	0.0018	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Bromoform	ND	0.0033	0.0023	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
Bromomethane	ND	0.0091	0.0038	mg/Kg dry	1	V-34	SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Bromomethane	ND	0.017	0.0070	mg/Kg dry	1	V-34	SW-846 8260C	10/8/18	10/9/18 12:27	MFF
2-Butanone (MEK)	ND	0.037	0.016	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
2-Butanone (MEK)	ND	0.066	0.029	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
tert-Butyl Alcohol (TBA)	ND	0.037	0.019	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
tert-Butyl Alcohol (TBA)	ND	0.066	0.035	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
n-Butylbenzene	ND	0.0018	0.00064	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 7:51	MFF
n-Butylbenzene	ND	0.0033	0.0012	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 12:27	MFF
sec-Butylbenzene	ND	0.0018	0.00091	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 7:51	MFF
sec-Butylbenzene	ND	0.0033	0.0017	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 12:27	MFF
tert-Butylbenzene	ND	0.0018	0.00082	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 7:51	MFF
tert-Butylbenzene	ND	0.0033	0.0015	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 12:27	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00091	0.00055	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0017	0.00099	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
Carbon Disulfide	ND	0.0055	0.0039	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Carbon Disulfide	ND	0.0099	0.0071	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
Carbon Tetrachloride	ND	0.0018	0.00073	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Carbon Tetrachloride	ND	0.0033	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
Chlorobenzene	ND	0.0018	0.00064	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Chlorobenzene	ND	0.0033	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
Chlorodibromomethane	ND	0.00091	0.00064	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Chlorodibromomethane	ND	0.0017	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
Chloroethane	ND	0.018	0.0014	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Chloroethane	ND	0.033	0.0025	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
Chloroform	0.0024	0.0037	0.00064	mg/Kg dry	1	J	SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Chloroform	0.0021	0.0066	0.0012	mg/Kg dry	1	J	SW-846 8260C	10/8/18	10/9/18 12:27	MFF
Chloromethane	ND	0.0091	0.0058	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Chloromethane	ND	0.017	0.011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY  
 Date Received: 10/2/2018  
 Field Sample #: 401075-SB-16 5-5.5  
 Sample ID: 18J0071-10

Sample Description:  
 Sampled: 9/27/2018 16:00

Work Order: 18J0071

Sample Matrix: Soil  
 Sample Flags: PR-15

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Chlorotoluene	ND	0.0018	0.00073	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
2-Chlorotoluene	ND	0.0033	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
4-Chlorotoluene	ND	0.0018	0.00073	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
4-Chlorotoluene	ND	0.0033	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0018	0.0010	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 7:51	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0033	0.0018	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 12:27	MFF
1,2-Dibromoethane (EDB)	ND	0.00091	0.00091	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
1,2-Dibromoethane (EDB)	ND	0.0017	0.0017	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
Dibromomethane	ND	0.0018	0.00055	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Dibromomethane	ND	0.0033	0.00099	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
1,2-Dichlorobenzene	ND	0.0018	0.00064	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 7:51	MFF
1,2-Dichlorobenzene	ND	0.0033	0.0012	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 12:27	MFF
1,3-Dichlorobenzene	ND	0.0018	0.00064	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 7:51	MFF
1,3-Dichlorobenzene	ND	0.0033	0.0012	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 12:27	MFF
1,4-Dichlorobenzene	ND	0.0018	0.00073	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 7:51	MFF
1,4-Dichlorobenzene	ND	0.0033	0.0013	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 12:27	MFF
trans-1,4-Dichloro-2-butene	ND	0.0037	0.0019	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
trans-1,4-Dichloro-2-butene	ND	0.0066	0.0035	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.018	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.033	0.0022	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
1,1-Dichloroethane	ND	0.0018	0.00064	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
1,1-Dichloroethane	ND	0.0033	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
1,2-Dichloroethane	ND	0.0018	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
1,2-Dichloroethane	ND	0.0033	0.0022	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
1,1-Dichloroethylene	ND	0.0037	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
1,1-Dichloroethylene	ND	0.0066	0.0018	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
cis-1,2-Dichloroethylene	ND	0.0018	0.00073	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
cis-1,2-Dichloroethylene	ND	0.0033	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
trans-1,2-Dichloroethylene	ND	0.0018	0.00082	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
trans-1,2-Dichloroethylene	ND	0.0033	0.0015	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
1,2-Dichloropropane	ND	0.0018	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
1,2-Dichloropropane	ND	0.0033	0.0022	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
1,3-Dichloropropane	ND	0.00091	0.00064	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
1,3-Dichloropropane	ND	0.0017	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
2,2-Dichloropropane	ND	0.0018	0.00082	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
2,2-Dichloropropane	ND	0.0033	0.0015	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
1,1-Dichloropropene	ND	0.0018	0.00082	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
1,1-Dichloropropene	ND	0.0033	0.0015	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
cis-1,3-Dichloropropene	ND	0.00091	0.00064	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
cis-1,3-Dichloropropene	ND	0.0017	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
trans-1,3-Dichloropropene	ND	0.00091	0.00064	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
trans-1,3-Dichloropropene	ND	0.0017	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
Diethyl Ether	ND	0.018	0.0016	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Diethyl Ether	ND	0.033	0.0030	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY  
 Date Received: 10/2/2018  
 Field Sample #: 401075-SB-16 5-5.5  
 Sample ID: 18J0071-10  
 Sample Matrix: Soil

Sample Description:  
 Sampled: 9/27/2018 16:00

Work Order: 18J0071

Sample Flags: PR-15

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.00091	0.00055	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Diisopropyl Ether (DIPE)	ND	0.0017	0.00099	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
1,4-Dioxane	ND	0.091	0.053	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
1,4-Dioxane	ND	0.17	0.095	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
Ethylbenzene	ND	0.0018	0.00073	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Ethylbenzene	ND	0.0033	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
Hexachlorobutadiene	ND	0.0018	0.00091	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Hexachlorobutadiene	ND	0.0033	0.0017	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 12:27	MFF
2-Hexanone (MBK)	ND	0.018	0.010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
2-Hexanone (MBK)	ND	0.033	0.018	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
Isopropylbenzene (Cumene)	ND	0.0018	0.00064	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Isopropylbenzene (Cumene)	ND	0.0033	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0018	0.00073	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 7:51	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0033	0.0013	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 12:27	MFF
Methyl Acetate	ND	0.0018	0.0015	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Methyl Acetate	ND	0.0033	0.0027	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0037	0.00082	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0066	0.0015	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
Methyl Cyclohexane	ND	0.0018	0.00091	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Methyl Cyclohexane	ND	0.0033	0.0017	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
Methylene Chloride	ND	0.018	0.0065	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Methylene Chloride	ND	0.033	0.012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.018	0.0069	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.033	0.013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
Naphthalene	ND	0.0037	0.00064	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Naphthalene	ND	0.0066	0.0012	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 12:27	MFF
n-Propylbenzene	ND	0.0018	0.00064	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
n-Propylbenzene	ND	0.0033	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
Styrene	ND	0.0018	0.00055	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Styrene	ND	0.0033	0.00099	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
1,1,1,2-Tetrachloroethane	ND	0.0018	0.0016	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
1,1,1,2-Tetrachloroethane	ND	0.0033	0.0030	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
1,1,2,2-Tetrachloroethane	ND	0.0018	0.00082	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
1,1,2,2-Tetrachloroethane	ND	0.0033	0.0015	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
Tetrachloroethylene	ND	0.0018	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Tetrachloroethylene	ND	0.0033	0.0022	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
Tetrahydrofuran	ND	0.0091	0.0020	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Tetrahydrofuran	ND	0.017	0.0036	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
Toluene	ND	0.0018	0.00073	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Toluene	ND	0.0033	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
1,2,3-Trichlorobenzene	ND	0.0018	0.00055	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 7:51	MFF
1,2,3-Trichlorobenzene	ND	0.0033	0.00099	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 12:27	MFF
1,2,4-Trichlorobenzene	ND	0.0018	0.00073	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 7:51	MFF
1,2,4-Trichlorobenzene	ND	0.0033	0.0013	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 12:27	MFF



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY  
 Date Received: 10/2/2018  
**Field Sample #: 401075-SB-16 5-5.5**  
**Sample ID: 18J0071-10**  
 Sample Matrix: Soil  
 Sample Flags: PR-15

Sample Description:  
 Sampled: 9/27/2018 16:00

Work Order: 18J0071

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,3,5-Trichlorobenzene	ND	0.0018	0.00064	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 7:51	MFF
1,3,5-Trichlorobenzene	ND	0.0033	0.0012	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 12:27	MFF
1,1,1-Trichloroethane	ND	0.0018	0.00091	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
1,1,1-Trichloroethane	ND	0.0033	0.0017	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
1,1,2-Trichloroethane	ND	0.0018	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
1,1,2-Trichloroethane	ND	0.0033	0.0020	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
Trichloroethylene	ND	0.0018	0.00091	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Trichloroethylene	ND	0.0033	0.0017	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0091	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Trichlorofluoromethane (Freon 11)	ND	0.017	0.0018	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
1,2,3-Trichloropropane	ND	0.0018	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
1,2,3-Trichloropropane	ND	0.0033	0.0018	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0091	0.00082	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.017	0.0015	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
1,2,4-Trimethylbenzene	ND	0.0018	0.00073	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 7:51	MFF
1,2,4-Trimethylbenzene	ND	0.0033	0.0013	mg/Kg dry	1	V-17	SW-846 8260C	10/8/18	10/9/18 12:27	MFF
1,3,5-Trimethylbenzene	ND	0.0018	0.00055	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
1,3,5-Trimethylbenzene	ND	0.0033	0.00099	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
Vinyl Chloride	ND	0.0091	0.0010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
Vinyl Chloride	ND	0.017	0.0018	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
m+p Xylene	ND	0.0037	0.0016	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
m+p Xylene	ND	0.0066	0.0028	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF
o-Xylene	ND	0.0018	0.00064	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 7:51	MFF
o-Xylene	ND	0.0033	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 12:27	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	Date/Time Analyzed
<b>1,2-Dichloroethane-d4</b>	<b>131</b> *	70-130	S-03	10/9/18 7:51
1,2-Dichloroethane-d4	113	70-130		10/9/18 12:27
Toluene-d8	88.4	70-130		10/9/18 7:51
Toluene-d8	92.9	70-130		10/9/18 12:27
<b>4-Bromofluorobenzene</b>	<b>45.1</b> *	70-130	S-03	10/9/18 7:51
4-Bromofluorobenzene	70.4	70-130		10/9/18 12:27

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-SB-16 5-5.5

Sampled: 9/27/2018 16:00

Sample ID: 18J0071-10

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	97.1		% Wt	1		SM 2540G	10/9/18	10/9/18 17:12	DMP

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY  
 Date Received: 10/2/2018  
 Field Sample #: 401075-SB-17 5-5.7  
 Sample ID: 18J0071-11  
 Sample Matrix: Soil  
 Sample Flags: PR-15

Sample Description:  
 Sampled: 9/27/2018 13:45

Work Order: 18J0071

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.16	0.036	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
Acrylonitrile	ND	0.0093	0.0039	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0016	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
Benzene	ND	0.0031	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
Bromobenzene	ND	0.0031	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
Bromochloromethane	ND	0.0031	0.0022	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
Bromodichloromethane	ND	0.0031	0.00093	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
Bromoform	ND	0.0031	0.0022	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
Bromomethane	ND	0.016	0.0065	mg/Kg dry	1	V-34	SW-846 8260C	10/8/18	10/9/18 8:19	MFF
2-Butanone (MEK)	ND	0.062	0.027	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
tert-Butyl Alcohol (TBA)	ND	0.062	0.033	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
n-Butylbenzene	ND	0.0031	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
sec-Butylbenzene	ND	0.0031	0.0016	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
tert-Butylbenzene	ND	0.0031	0.0014	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0016	0.00093	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
Carbon Disulfide	ND	0.0093	0.0067	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
Carbon Tetrachloride	ND	0.0031	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
Chlorobenzene	ND	0.0031	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
Chlorodibromomethane	ND	0.0016	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
Chloroethane	ND	0.031	0.0023	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
Chloroform	ND	0.0062	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
Chloromethane	ND	0.016	0.010	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
2-Chlorotoluene	ND	0.0031	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
4-Chlorotoluene	ND	0.0031	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0031	0.0017	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
1,2-Dibromoethane (EDB)	ND	0.0016	0.0016	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
Dibromomethane	ND	0.0031	0.00093	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
1,2-Dichlorobenzene	ND	0.0031	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
1,3-Dichlorobenzene	ND	0.0031	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
1,4-Dichlorobenzene	ND	0.0031	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
trans-1,4-Dichloro-2-butene	ND	0.0062	0.0033	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.031	0.0020	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
1,1-Dichloroethane	ND	0.0031	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
1,2-Dichloroethane	ND	0.0031	0.0020	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
1,1-Dichloroethylene	ND	0.0062	0.0017	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
cis-1,2-Dichloroethylene	ND	0.0031	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
trans-1,2-Dichloroethylene	ND	0.0031	0.0014	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
1,2-Dichloropropane	ND	0.0031	0.0020	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
1,3-Dichloropropane	ND	0.0016	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
2,2-Dichloropropane	ND	0.0031	0.0014	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
1,1-Dichloropropene	ND	0.0031	0.0014	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
cis-1,3-Dichloropropene	ND	0.0016	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
trans-1,3-Dichloropropene	ND	0.0016	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
Diethyl Ether	ND	0.031	0.0028	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY  
 Date Received: 10/2/2018  
 Field Sample #: 401075-SB-17 5-5.7  
 Sample ID: 18J0071-11

Sample Description:  
 Sampled: 9/27/2018 13:45

Work Order: 18J0071

Sample Matrix: Soil  
 Sample Flags: PR-15

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0016	0.00093	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
1,4-Dioxane	ND	0.16	0.090	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
Ethylbenzene	ND	0.0031	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
Hexachlorobutadiene	ND	0.0031	0.0016	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
2-Hexanone (MBK)	ND	0.031	0.017	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
Isopropylbenzene (Cumene)	ND	0.0031	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0031	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
Methyl Acetate	ND	0.0031	0.0025	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0062	0.0014	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
Methyl Cyclohexane	ND	0.0031	0.0016	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
Methylene Chloride	ND	0.031	0.011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.031	0.012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
Naphthalene	ND	0.0062	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
n-Propylbenzene	ND	0.0031	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
Styrene	ND	0.0031	0.00093	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
1,1,1,2-Tetrachloroethane	ND	0.0031	0.0028	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
1,1,2,2-Tetrachloroethane	ND	0.0031	0.0014	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
Tetrachloroethylene	ND	0.0031	0.0020	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
Tetrahydrofuran	ND	0.016	0.0034	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
Toluene	ND	0.0031	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
1,2,3-Trichlorobenzene	ND	0.0031	0.00093	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
1,2,4-Trichlorobenzene	ND	0.0031	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
1,3,5-Trichlorobenzene	ND	0.0031	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
1,1,1-Trichloroethane	ND	0.0031	0.0016	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
1,1,2-Trichloroethane	ND	0.0031	0.0019	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
Trichloroethylene	ND	0.0031	0.0016	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
Trichlorofluoromethane (Freon 11)	ND	0.016	0.0017	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
1,2,3-Trichloropropane	ND	0.0031	0.0017	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.016	0.0014	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
1,2,4-Trimethylbenzene	ND	0.0031	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
1,3,5-Trimethylbenzene	ND	0.0031	0.00093	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
Vinyl Chloride	ND	0.016	0.0017	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
m+p Xylene	ND	0.0062	0.0026	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
o-Xylene	ND	0.0031	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:19	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		102	70-130						10/9/18 8:19	
Toluene-d8		97.0	70-130						10/9/18 8:19	
4-Bromofluorobenzene		96.9	70-130						10/9/18 8:19	

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-SB-17 5-5.7

Sampled: 9/27/2018 13:45

Sample ID: 18J0071-11

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	87.0		% Wt	1		SM 2540G	10/9/18	10/9/18 17:12	DMP

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY  
 Date Received: 10/2/2018  
 Field Sample #: 401075-SB-FD 092818  
 Sample ID: 18J0071-12

Sample Description:  
 Sampled: 9/28/2018 00:00

Work Order: 18J0071

Sample Matrix: Soil  
 Sample Flags: PR-15

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.11	0.025	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
Acrylonitrile	ND	0.0065	0.0027	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0011	0.00076	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
Benzene	ND	0.0022	0.00076	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
Bromobenzene	ND	0.0022	0.00087	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
Bromochloromethane	ND	0.0022	0.0015	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
Bromodichloromethane	ND	0.0022	0.00065	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
Bromoform	ND	0.0022	0.0015	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
Bromomethane	ND	0.011	0.0046	mg/Kg dry	1	V-34	SW-846 8260C	10/8/18	10/9/18 8:46	MFF
2-Butanone (MEK)	ND	0.043	0.019	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
tert-Butyl Alcohol (TBA)	ND	0.043	0.023	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
n-Butylbenzene	ND	0.0022	0.00076	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
sec-Butylbenzene	ND	0.0022	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
tert-Butylbenzene	ND	0.0022	0.00098	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0011	0.00065	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
Carbon Disulfide	ND	0.0065	0.0047	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
Carbon Tetrachloride	ND	0.0022	0.00087	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
Chlorobenzene	ND	0.0022	0.00076	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
Chlorodibromomethane	ND	0.0011	0.00076	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
Chloroethane	ND	0.022	0.0016	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
Chloroform	ND	0.0043	0.00076	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
Chloromethane	ND	0.011	0.0070	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
2-Chlorotoluene	ND	0.0022	0.00087	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
4-Chlorotoluene	ND	0.0022	0.00087	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0022	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
1,2-Dibromoethane (EDB)	ND	0.0011	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
Dibromomethane	ND	0.0022	0.00065	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
1,2-Dichlorobenzene	ND	0.0022	0.00076	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
1,3-Dichlorobenzene	ND	0.0022	0.00076	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
1,4-Dichlorobenzene	ND	0.0022	0.00087	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
trans-1,4-Dichloro-2-butene	ND	0.0043	0.0023	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.022	0.0014	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
1,1-Dichloroethane	ND	0.0022	0.00076	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
1,2-Dichloroethane	ND	0.0022	0.0014	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
1,1-Dichloroethylene	ND	0.0043	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
cis-1,2-Dichloroethylene	ND	0.0022	0.00087	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
trans-1,2-Dichloroethylene	ND	0.0022	0.00098	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
1,2-Dichloropropane	ND	0.0022	0.0014	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
1,3-Dichloropropane	ND	0.0011	0.00076	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
2,2-Dichloropropane	ND	0.0022	0.00098	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
1,1-Dichloropropene	ND	0.0022	0.00098	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
cis-1,3-Dichloropropene	ND	0.0011	0.00076	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
trans-1,3-Dichloropropene	ND	0.0011	0.00076	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
Diethyl Ether	ND	0.022	0.0020	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY  
 Date Received: 10/2/2018  
 Field Sample #: 401075-SB-FD 092818  
 Sample ID: 18J0071-12

Sample Description:  
 Sampled: 9/28/2018 00:00

Work Order: 18J0071

Sample Matrix: Soil  
 Sample Flags: PR-15

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0011	0.00065	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
1,4-Dioxane	ND	0.11	0.063	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
Ethylbenzene	ND	0.0022	0.00087	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
Hexachlorobutadiene	ND	0.0022	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
2-Hexanone (MBK)	ND	0.022	0.012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
Isopropylbenzene (Cumene)	ND	0.0022	0.00076	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0022	0.00087	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
Methyl Acetate	ND	0.0022	0.0017	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0043	0.00098	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
Methyl Cyclohexane	ND	0.0022	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
Methylene Chloride	ND	0.022	0.0077	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.022	0.0083	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
Naphthalene	ND	0.0043	0.00076	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
n-Propylbenzene	ND	0.0022	0.00076	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
Styrene	ND	0.0022	0.00065	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
1,1,1,2-Tetrachloroethane	ND	0.0022	0.0020	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
1,1,2,2-Tetrachloroethane	ND	0.0022	0.00098	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
Tetrachloroethylene	ND	0.0022	0.0014	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
Tetrahydrofuran	ND	0.011	0.0024	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
Toluene	ND	0.0022	0.00087	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
1,2,3-Trichlorobenzene	ND	0.0022	0.00065	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
1,2,4-Trichlorobenzene	ND	0.0022	0.00087	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
1,3,5-Trichlorobenzene	ND	0.0022	0.00076	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
1,1,1-Trichloroethane	ND	0.0022	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
1,1,2-Trichloroethane	ND	0.0022	0.0013	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
Trichloroethylene	ND	0.0022	0.0011	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
Trichlorofluoromethane (Freon 11)	ND	0.011	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
1,2,3-Trichloropropane	ND	0.0022	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.011	0.00098	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
1,2,4-Trimethylbenzene	ND	0.0022	0.00087	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
1,3,5-Trimethylbenzene	ND	0.0022	0.00065	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
Vinyl Chloride	ND	0.011	0.0012	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
m+p Xylene	ND	0.0043	0.0018	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
o-Xylene	ND	0.0022	0.00076	mg/Kg dry	1		SW-846 8260C	10/8/18	10/9/18 8:46	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		102	70-130						10/9/18 8:46	
Toluene-d8		96.0	70-130						10/9/18 8:46	
4-Bromofluorobenzene		93.4	70-130						10/9/18 8:46	

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-SB-FD 092818

Sampled: 9/28/2018 00:00

Sample ID: 18J0071-12

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	84.6		% Wt	1		SM 2540G	10/9/18	10/9/18 17:12	DMP



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY  
 Date Received: 10/2/2018  
 Field Sample #: 401075-RB 092818  
 Sample ID: 18J0071-13  
 Sample Matrix: Water

Sample Description:  
 Sampled: 9/28/2018 14:55

Work Order: 18J0071

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	9.7	µg/L	1	V-05	SW-846 8260C	10/4/18	10/4/18 20:26	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
Bromodichloromethane	ND	0.50	0.30	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
Bromoform	ND	2.0	0.21	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
tert-Butylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.095	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
Carbon Tetrachloride	ND	5.0	0.25	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
Chloroform	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
Chloromethane	ND	2.0	0.55	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.37	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.15	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.28	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
2,2-Dichloropropane	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY  
 Date Received: 10/2/2018  
 Field Sample #: 401075-RB 092818  
 Sample ID: 18J0071-13  
 Sample Matrix: Water

Sample Description:  
 Sampled: 9/28/2018 14:55

Work Order: 18J0071

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
Hexachlorobutadiene	ND	0.60	0.59	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
Methyl Acetate	ND	1.0	0.42	µg/L	1	V-05	SW-846 8260C	10/4/18	10/4/18 20:26	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
Methyl Cyclohexane	ND	1.0	0.63	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
Tetrachloroethylene	ND	1.0	0.27	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
Toluene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
1,1,1-Trichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
1,1,2-Trichloroethane	ND	1.0	0.24	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
Trichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
1,2,3-Trichloropropane	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.20	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
m+p Xylene	ND	2.0	0.26	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:26	EEH
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		81.7	70-130						10/4/18 20:26	
Toluene-d8		99.0	70-130						10/4/18 20:26	
4-Bromofluorobenzene		99.1	70-130						10/4/18 20:26	

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Project Location: Watervliet, NY  
 Date Received: 10/2/2018  
 Field Sample #: 401075-SB-7R 14.5-15  
 Sample ID: 18J0071-14

Sample Description:  
 Sampled: 9/28/2018 09:42

Work Order: 18J0071

Sample Matrix: Soil  
 Sample Flags: RL-11

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	52	10	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
Acrylonitrile	ND	5.2	0.60	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.52	0.11	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
Benzene	ND	1.0	0.12	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
Bromobenzene	ND	1.0	0.16	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
Bromochloromethane	ND	1.0	0.23	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
Bromodichloromethane	ND	1.0	0.31	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
Bromoform	ND	2.1	0.22	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
Bromomethane	ND	2.1	0.97	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
2-Butanone (MEK)	ND	21	2.4	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
tert-Butyl Alcohol (TBA)	ND	21	2.2	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
n-Butylbenzene	ND	1.0	0.16	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
sec-Butylbenzene	ND	1.0	0.13	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
tert-Butylbenzene	ND	1.0	0.13	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.52	0.098	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
Carbon Disulfide	ND	3.1	1.1	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
Carbon Tetrachloride	ND	1.0	0.26	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
Chlorobenzene	ND	1.0	0.17	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
Chlorodibromomethane	ND	0.52	0.11	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
Chloroethane	ND	2.1	0.29	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
Chloroform	ND	2.1	0.23	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
Chloromethane	ND	2.1	0.57	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
2-Chlorotoluene	ND	1.0	0.12	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
4-Chlorotoluene	ND	1.0	0.14	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.2	0.38	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
1,2-Dibromoethane (EDB)	ND	0.52	0.15	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
Dibromomethane	ND	1.0	0.17	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
1,2-Dichlorobenzene	ND	1.0	0.18	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
1,3-Dichlorobenzene	ND	1.0	0.18	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
1,4-Dichlorobenzene	ND	1.0	0.16	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
trans-1,4-Dichloro-2-butene	ND	2.1	0.32	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.1	0.29	mg/Kg dry	20	V-05	SW-846 8260C	10/5/18	10/8/18 12:46	EEH
1,1-Dichloroethane	ND	1.0	0.16	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
1,2-Dichloroethane	ND	1.0	0.20	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
1,1-Dichloroethylene	ND	1.0	0.22	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.15	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.16	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
1,2-Dichloropropane	ND	1.0	0.13	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
1,3-Dichloropropane	ND	0.52	0.13	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
2,2-Dichloropropane	ND	1.0	0.22	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
1,1-Dichloropropene	ND	2.1	0.13	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
cis-1,3-Dichloropropene	ND	0.52	0.12	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
trans-1,3-Dichloropropene	ND	0.52	0.12	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
Diethyl Ether	ND	2.1	0.23	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH

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Project Location: Watervliet, NY  
 Date Received: 10/2/2018  
 Field Sample #: 401075-SB-7R 14.5-15  
 Sample ID: 18J0071-14

Sample Description:  
 Sampled: 9/28/2018 09:42

Work Order: 18J0071

Sample Matrix: Soil  
 Sample Flags: RL-11

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.52	0.19	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
1,4-Dioxane	ND	52	27	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
Ethylbenzene	ND	1.0	0.13	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
Hexachlorobutadiene	ND	1.0	0.61	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
2-Hexanone (MBK)	ND	10	1.6	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.12	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.16	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
Methyl Acetate	ND	10	0.43	mg/Kg dry	20	V-05	SW-846 8260C	10/5/18	10/8/18 12:46	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.093	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
Methyl Cyclohexane	ND	1.0	0.65	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
Methylene Chloride	ND	5.2	3.3	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
Naphthalene	ND	2.1	0.13	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
n-Propylbenzene	ND	1.0	0.13	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
Styrene	ND	1.0	0.16	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
1,1,2,2-Tetrachloroethane	ND	0.52	0.17	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
Tetrachloroethylene	330	21	5.6	mg/Kg dry	400		SW-846 8260C	10/5/18	10/8/18 15:51	EEH
Tetrahydrofuran	ND	10	1.1	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
Toluene	ND	1.0	0.18	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
1,2,3-Trichlorobenzene	ND	5.2	0.14	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.20	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.18	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
1,1,1-Trichloroethane	ND	1.0	0.14	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
1,1,2-Trichloroethane	ND	1.0	0.24	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
Trichloroethylene	0.87	1.0	0.21	mg/Kg dry	20	J	SW-846 8260C	10/5/18	10/8/18 12:46	EEH
Trichlorofluoromethane (Freon 11)	ND	2.1	0.15	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
1,2,3-Trichloropropane	ND	2.1	0.22	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.20	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.19	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.13	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
Vinyl Chloride	ND	2.1	0.14	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
m+p Xylene	ND	2.1	0.26	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH
o-Xylene	ND	1.0	0.14	mg/Kg dry	20		SW-846 8260C	10/5/18	10/8/18 12:46	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	81.1	70-130	10/8/18 15:51
1,2-Dichloroethane-d4	80.8	70-130	10/8/18 12:46
Toluene-d8	101	70-130	10/8/18 12:46
Toluene-d8	101	70-130	10/8/18 15:51
4-Bromofluorobenzene	96.8	70-130	10/8/18 15:51
4-Bromofluorobenzene	98.5	70-130	10/8/18 12:46

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-SB-7R 14.5-15

Sampled: 9/28/2018 09:42

Sample ID: 18J0071-14

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/PHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	93.5		% Wt	1		SM 2540G	10/9/18	10/9/18 17:12	DMP

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-Waste Char

Sampled: 9/28/2018 15:00

Sample ID: 18J0071-15

Sample Matrix: Soil

**Polychlorinated Biphenyls By GC/ECD**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.084	0.051	mg/Kg dry	4		SW-846 8082A	10/8/18	10/9/18 22:13	TG
Aroclor-1221 [1]	ND	0.084	0.055	mg/Kg dry	4		SW-846 8082A	10/8/18	10/9/18 22:13	TG
Aroclor-1232 [1]	ND	0.084	0.038	mg/Kg dry	4		SW-846 8082A	10/8/18	10/9/18 22:13	TG
Aroclor-1242 [1]	ND	0.084	0.042	mg/Kg dry	4		SW-846 8082A	10/8/18	10/9/18 22:13	TG
Aroclor-1248 [1]	ND	0.084	0.051	mg/Kg dry	4		SW-846 8082A	10/8/18	10/9/18 22:13	TG
Aroclor-1254 [1]	ND	0.084	0.055	mg/Kg dry	4		SW-846 8082A	10/8/18	10/9/18 22:13	TG
Aroclor-1260 [1]	ND	0.084	0.059	mg/Kg dry	4		SW-846 8082A	10/8/18	10/9/18 22:13	TG
Aroclor-1262 [1]	ND	0.084	0.042	mg/Kg dry	4		SW-846 8082A	10/8/18	10/9/18 22:13	TG
Aroclor-1268 [1]	ND	0.084	0.034	mg/Kg dry	4		SW-846 8082A	10/8/18	10/9/18 22:13	TG
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
Decachlorobiphenyl [1]		50.0	30-150						10/9/18 22:13	
Decachlorobiphenyl [2]		52.8	30-150						10/9/18 22:13	
Tetrachloro-m-xylene [1]		58.4	30-150						10/9/18 22:13	
Tetrachloro-m-xylene [2]		62.7	30-150						10/9/18 22:13	

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Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-Waste Char

Sampled: 9/28/2018 15:00

Sample ID: 18J0071-15

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	8.5	1.8	0.91	mg/Kg dry	1		SW-846 6010D	10/12/18	10/15/18 17:45	MJH
Barium	130	1.8	0.89	mg/Kg dry	1		SW-846 6010D	10/12/18	10/15/18 17:45	MJH
Cadmium	0.15	0.18	0.11	mg/Kg dry	1	J	SW-846 6010D	10/12/18	10/15/18 17:45	MJH
Chromium	23	0.36	0.22	mg/Kg dry	1		SW-846 6010D	10/12/18	10/15/18 17:45	MJH
Lead	36	0.54	0.32	mg/Kg dry	1		SW-846 6010D	10/12/18	10/15/18 17:45	MJH
Mercury	0.12	0.028	0.0028	mg/Kg dry	1		SW-846 7471B	10/12/18	10/15/18 10:46	AJL
Selenium	ND	3.6	3.0	mg/Kg dry	1		SW-846 6010D	10/12/18	10/15/18 17:45	MJH
Silver	ND	0.36	0.21	mg/Kg dry	1		SW-846 6010D	10/12/18	10/15/18 17:45	MJH

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Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-Waste Char

Sampled: 9/28/2018 15:00

Sample ID: 18J0071-15

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Free Liquid	Absent		present/absent	1		SW-846 9095B	10/3/18	10/3/18 9:00	LL
Ignitability	Absent		present/absent	1		SW-846 1030	10/3/18	10/3/18 14:45	LED
pH @21.2°C	8.9		pH Units	1	H-03	SW-846 9045C	10/2/18	10/2/18 19:32	LED
Reactive Cyanide	ND	3.9	mg/Kg	1		SW-846 9014	10/10/18	10/10/18 18:15	DJM
Reactive Sulfide	ND	20	mg/Kg	1		SW-846 9030A	10/10/18	10/10/18 17:50	DJM
Specific conductance	21	2.0	µmhos/cm	1		SM21-22 2510B Modified	10/12/18	10/12/18 12:30	EC
% Solids	92.2		% Wt	1		SM 2540G	10/9/18	10/9/18 17:12	DMP



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-Waste Char

Sampled: 9/28/2018 15:00

Sample ID: 18J0071-15

Sample Matrix: Soil

TCLP - Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Benzene	ND	0.010	mg/L	10		SW-846 8260C	10/12/18	10/13/18 1:30	EEH
2-Butanone (MEK)	ND	0.20	mg/L	10		SW-846 8260C	10/12/18	10/13/18 1:30	EEH
Carbon Tetrachloride	ND	0.050	mg/L	10		SW-846 8260C	10/12/18	10/13/18 1:30	EEH
Chlorobenzene	ND	0.010	mg/L	10		SW-846 8260C	10/12/18	10/13/18 1:30	EEH
Chloroform	ND	0.020	mg/L	10		SW-846 8260C	10/12/18	10/13/18 1:30	EEH
1,4-Dichlorobenzene	ND	0.010	mg/L	10		SW-846 8260C	10/12/18	10/13/18 1:30	EEH
1,2-Dichloroethane	ND	0.010	mg/L	10		SW-846 8260C	10/12/18	10/13/18 1:30	EEH
1,1-Dichloroethylene	ND	0.010	mg/L	10		SW-846 8260C	10/12/18	10/13/18 1:30	EEH
Tetrachloroethylene	ND	0.010	mg/L	10		SW-846 8260C	10/12/18	10/13/18 1:30	EEH
Trichloroethylene	ND	0.010	mg/L	10		SW-846 8260C	10/12/18	10/13/18 1:30	EEH
Vinyl Chloride	ND	0.020	mg/L	10		SW-846 8260C	10/12/18	10/13/18 1:30	EEH
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		81.3	70-130					10/13/18 1:30	
Toluene-d8		102	70-130					10/13/18 1:30	
4-Bromofluorobenzene		96.1	70-130					10/13/18 1:30	

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY  
 Date Received: 10/2/2018  
**Field Sample #: 401075-Waste Char**  
**Sample ID: 18J0071-15**  
 Sample Matrix: Soil

Sample Description:  
 Sampled: 9/28/2018 15:00

Work Order: 18J0071

**TCLP - Semivolatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2,4-Dinitrotoluene	ND	0.050	mg/L	1		SW-846 8270D	10/12/18	10/15/18 10:36	BGL
Hexachlorobenzene	ND	0.050	mg/L	1		SW-846 8270D	10/12/18	10/15/18 10:36	BGL
Hexachlorobutadiene	ND	0.050	mg/L	1		SW-846 8270D	10/12/18	10/15/18 10:36	BGL
Hexachloroethane	ND	0.050	mg/L	1		SW-846 8270D	10/12/18	10/15/18 10:36	BGL
2-Methylphenol	ND	0.050	mg/L	1		SW-846 8270D	10/12/18	10/15/18 10:36	BGL
3/4-Methylphenol	ND	0.050	mg/L	1		SW-846 8270D	10/12/18	10/15/18 10:36	BGL
Nitrobenzene	ND	0.050	mg/L	1		SW-846 8270D	10/12/18	10/15/18 10:36	BGL
Pentachlorophenol	ND	0.050	mg/L	1		SW-846 8270D	10/12/18	10/15/18 10:36	BGL
Pyridine	ND	0.025	mg/L	1		SW-846 8270D	10/12/18	10/15/18 10:36	BGL
2,4,5-Trichlorophenol	ND	0.050	mg/L	1		SW-846 8270D	10/12/18	10/15/18 10:36	BGL
2,4,6-Trichlorophenol	ND	0.050	mg/L	1		SW-846 8270D	10/12/18	10/15/18 10:36	BGL
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
2-Fluorophenol		80.0	15-110					10/15/18 10:36	
Phenol-d6		84.7	15-110					10/15/18 10:36	
Nitrobenzene-d5		96.1	30-130					10/15/18 10:36	
2-Fluorobiphenyl		88.7	30-130					10/15/18 10:36	
2,4,6-Tribromophenol		98.7	15-110					10/15/18 10:36	
p-Terphenyl-d14		101	30-130					10/15/18 10:36	

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-Waste Char

Sampled: 9/28/2018 15:00

Sample ID: 18J0071-15

Sample Matrix: Soil

**TCLP - Organochloride Pesticides by GC/ECD**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
gamma-BHC (Lindane) [2]	ND	0.030	µg/L	1		SW-846 8081B	10/12/18	10/16/18 3:03	TG
Chlordane [1]	ND	0.20	µg/L	1		SW-846 8081B	10/12/18	10/16/18 3:03	TG
Endrin [1]	ND	0.080	µg/L	1		SW-846 8081B	10/12/18	10/16/18 3:03	TG
Heptachlor [1]	ND	0.050	µg/L	1		SW-846 8081B	10/12/18	10/16/18 3:03	TG
Heptachlor epoxide [1]	ND	0.050	µg/L	1		SW-846 8081B	10/12/18	10/16/18 3:03	TG
Methoxychlor [1]	ND	0.50	µg/L	1		SW-846 8081B	10/12/18	10/16/18 3:03	TG
Toxaphene [1]	ND	1.0	µg/L	1		SW-846 8081B	10/12/18	10/16/18 3:03	TG
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		46.3	30-150					10/16/18 3:03	
Decachlorobiphenyl [2]		49.6	30-150					10/16/18 3:03	
Tetrachloro-m-xylene [1]		87.4	30-150					10/16/18 3:03	
Tetrachloro-m-xylene [2]		85.2	30-150					10/16/18 3:03	

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-Waste Char

Sampled: 9/28/2018 15:00

Sample ID: 18J0071-15

Sample Matrix: Soil

TCLP - Herbicides by GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2,4-D [2]	ND	0.050	mg/L	1		SW-846 8151A	10/13/18	10/15/18 22:29	TG
2,4,5-TP (Silvex) [2]	ND	0.0050	mg/L	1		SW-846 8151A	10/13/18	10/15/18 22:29	TG
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
2,4-Dichlorophenylacetic acid [1]		81.7	30-150					10/15/18 22:29	
2,4-Dichlorophenylacetic acid [2]		80.5	30-150					10/15/18 22:29	

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-TB

Sampled: 9/28/2018 00:00

Sample ID: 18J0071-16

Sample Matrix: Trip Blank Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	9.7	µg/L	1	V-05	SW-846 8260C	10/4/18	10/4/18 20:52	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
Bromodichloromethane	ND	0.50	0.30	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
Bromoform	ND	2.0	0.21	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
tert-Butylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.095	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
Carbon Tetrachloride	ND	5.0	0.25	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
Chloroform	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
Chloromethane	ND	2.0	0.55	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.37	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.15	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.28	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
2,2-Dichloropropane	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0071

Date Received: 10/2/2018

Field Sample #: 401075-TB

Sampled: 9/28/2018 00:00

Sample ID: 18J0071-16

Sample Matrix: Trip Blank Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
Hexachlorobutadiene	ND	0.60	0.59	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
Methyl Acetate	ND	1.0	0.42	µg/L	1	V-05	SW-846 8260C	10/4/18	10/4/18 20:52	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
Methyl Cyclohexane	ND	1.0	0.63	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
Tetrachloroethylene	ND	1.0	0.27	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
Toluene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
1,1,1-Trichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
1,1,2-Trichloroethane	ND	1.0	0.24	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
Trichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
1,2,3-Trichloropropane	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.20	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
m+p Xylene	ND	2.0	0.26	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/4/18	10/4/18 20:52	EEH
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		83.9	70-130						10/4/18 20:52	
Toluene-d8		99.8	70-130						10/4/18 20:52	
4-Bromofluorobenzene		96.3	70-130						10/4/18 20:52	

**Sample Extraction Data**

**Prep Method: % Solids-SM 2540G**

Lab Number [Field ID]	Batch	Date
18J0071-01 [401075-SB-07R 8.5-9]	B214347	10/09/18
18J0071-02 [401075-SB-08 5-5.5]	B214347	10/09/18
18J0071-03 [401075-SB-09 5-5.5]	B214347	10/09/18
18J0071-04 [401075-SB-10 12-12.5]	B214347	10/09/18
18J0071-05 [401075-SB-11 10.5-11]	B214347	10/09/18
18J0071-06 [401075-SB-12 0.2-1]	B214347	10/09/18
18J0071-07 [401075-SB-13 4.5-5]	B214347	10/09/18
18J0071-08 [401075-SB-14 5-6]	B214347	10/09/18
18J0071-09 [401075-SB-15 10-11]	B214347	10/09/18
18J0071-10 [401075-SB-16 5-5.5]	B214347	10/09/18
18J0071-11 [401075-SB-17 5-5.7]	B214347	10/09/18
18J0071-12 [401075-SB-FD 092818]	B214347	10/09/18
18J0071-14 [401075-SB-7R 14.5-15]	B214347	10/09/18
18J0071-15 [401075-Waste Char]	B214347	10/09/18

**SM21-22 2510B Modified**

Lab Number [Field ID]	Batch	Initial [g]	Date
18J0071-15 [401075-Waste Char]	B214631	1.00	10/12/18

**SW-846 1030**

Lab Number [Field ID]	Batch	Initial [g]	Date
18J0071-15 [401075-Waste Char]	B213937	50.0	10/03/18

**Prep Method: SW-846 3050B-SW-846 6010D**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
18J0071-15 [401075-Waste Char]	B214694	1.50	50.0	10/12/18

**Prep Method: SW-846 7471-SW-846 7471B**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
18J0071-15 [401075-Waste Char]	B214669	0.588	50.0	10/12/18

**Prep Method: SW-846 3510C-SW-846 8081B**

Leachates were extracted on 10/9/2018 per SW-846 1311 in Batch B214380

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18J0071-15 [401075-Waste Char]	B214690	500	5.00	10/12/18

**Prep Method: SW-846 3546-SW-846 8082A**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
18J0071-15 [401075-Waste Char]	B214272	10.3	10.0	10/08/18

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

**Sample Extraction Data**

**Prep Method: SW-846 3510C-SW-846 8151A**

**Leachates were extracted on 10/9/2018 per SW-846 1311 in Batch B214380**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18J0071-15 [401075-Waste Char]	B214714	10.0	5.00	10/13/18

**Prep Method: SW-846 5035/5030B-SW-846 8260C**

Lab Number [Field ID]	Batch	Sample Amount(g)	Methanol Volume(mL)	Methanol Aliquot(mL)	Final Volume(mL)	Date
18J0071-01 [401075-SB-07R 8.5-9]	B214073	15.9	15.0	1	50	10/05/18
18J0071-02 [401075-SB-08 5-5.5]	B214073	15.6	15.0	0.25	50	10/05/18
18J0071-02RE1 [401075-SB-08 5-5.5]	B214073	15.6	15.0	0.01	50	10/05/18
18J0071-14 [401075-SB-7R 14.5-15]	B214073	15.5	15.0	0.05	50	10/05/18
18J0071-14RE1 [401075-SB-7R 14.5-15]	B214073	15.5	15.0	0.0025	50	10/05/18

**Prep Method: SW-846 5035-SW-846 8260C**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
18J0071-03 [401075-SB-09 5-5.5]	B214232	5.66	10.0	10/08/18
18J0071-04 [401075-SB-10 12-12.5]	B214232	5.22	10.0	10/08/18
18J0071-05 [401075-SB-11 10.5-11]	B214232	5.98	10.0	10/08/18
18J0071-06 [401075-SB-12 0.2-1]	B214232	5.68	10.0	10/08/18
18J0071-09 [401075-SB-15 10-11]	B214232	4.99	10.0	10/08/18

**Prep Method: SW-846 5035-SW-846 8260C**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
18J0071-07 [401075-SB-13 4.5-5]	B214252	5.36	10.0	10/08/18
18J0071-08 [401075-SB-14 5-6]	B214252	5.52	10.0	10/08/18

**Prep Method: SW-846 5035-SW-846 8260C**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
18J0071-09RE1 [401075-SB-15 10-11]	B214295	4.25	10.0	10/08/18
18J0071-10 [401075-SB-16 5-5.5]	B214295	5.64	10.0	10/08/18
18J0071-10RE1 [401075-SB-16 5-5.5]	B214295	3.11	10.0	10/08/18
18J0071-11 [401075-SB-17 5-5.7]	B214295	3.69	10.0	10/08/18
18J0071-12 [401075-SB-FD 092818]	B214295	5.44	10.0	10/08/18

**Prep Method: SW-846 5035/5030B-SW-846 8260C**

**Leachates were extracted on 10/11/2018 per SW-846 1311 in Batch B214583**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
18J0071-15 [401075-Waste Char]	B214640	5.00	5.00	10/12/18

**Prep Method: SW-846 5030B-SW-846 8260C**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18J0071-13 [401075-RB 092818]	B214002	5	5.00	10/04/18
18J0071-16 [401075-TB]	B214002	5	5.00	10/04/18



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**Sample Extraction Data**

**Prep Method: SW-846 3510C-SW-846 8270D**

**Leachates were extracted on 10/9/2018 per SW-846 1311 in Batch B214380**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18J0071-15 [401075-Waste Char]	B214689	200	1.00	10/12/18

**SW-846 9014**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
18J0071-15 [401075-Waste Char]	B214452	25.5	250	10/10/18

**SW-846 9030A**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
18J0071-15 [401075-Waste Char]	B214453	25.5	250	10/10/18

**SW-846 9045C**

Lab Number [Field ID]	Batch	Initial [g]	Date
18J0071-15 [401075-Waste Char]	B213909	20.0	10/02/18

**SW-846 9095B**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
18J0071-15 [401075-Waste Char]	B213832	100	100	10/03/18

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**QUALITY CONTROL**

**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B214002 - SW-846 5030B**

**Blank (B214002-BLK1)**

Prepared & Analyzed: 10/04/18

Acetone	ND	50	µg/L							V-05
Acrylonitrile	ND	5.0	µg/L							
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L							
Benzene	ND	1.0	µg/L							
Bromobenzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	0.50	µg/L							
Bromoform	ND	1.0	µg/L							
Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	20	µg/L							
tert-Butyl Alcohol (TBA)	ND	20	µg/L							
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L							
Carbon Disulfide	ND	4.0	µg/L							
Carbon Tetrachloride	ND	5.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
Dibromomethane	ND	1.0	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							
1,1-Dichloropropene	ND	2.0	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
Diethyl Ether	ND	2.0	µg/L							
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							
Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	0.60	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl Acetate	ND	1.0	µg/L							

V-05

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B214002 - SW-846 5030B

Blank (B214002-BLK1)

Prepared & Analyzed: 10/04/18

Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methyl Cyclohexane	ND	1.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Naphthalene	ND	2.0	µg/L							
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Tetrahydrofuran	ND	10	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							
1,2,4-Trichlorobenzene	ND	1.0	µg/L							
1,3,5-Trichlorobenzene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							
1,2,3-Trichloropropane	ND	2.0	µg/L							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
1,3,5-Trimethylbenzene	ND	1.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	20.6		µg/L	25.0		82.2	70-130			
Surrogate: Toluene-d8	25.3		µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	24.5		µg/L	25.0		98.0	70-130			

LCS (B214002-BS1)

Prepared & Analyzed: 10/04/18

Acetone	125	50	µg/L	100		125	70-160			V-05 †
Acrylonitrile	10.7	5.0	µg/L	10.0		107	70-130			
tert-Amyl Methyl Ether (TAME)	9.76	0.50	µg/L	10.0		97.6	70-130			
Benzene	9.92	1.0	µg/L	10.0		99.2	70-130			
Bromobenzene	10.4	1.0	µg/L	10.0		104	70-130			
Bromochloromethane	11.6	1.0	µg/L	10.0		116	70-130			
Bromodichloromethane	9.72	0.50	µg/L	10.0		97.2	70-130			
Bromoform	10.9	1.0	µg/L	10.0		109	70-130			
Bromomethane	8.76	2.0	µg/L	10.0		87.6	40-160			V-20 †
2-Butanone (MEK)	107	20	µg/L	100		107	40-160			†
tert-Butyl Alcohol (TBA)	92.3	20	µg/L	100		92.3	40-160			†
n-Butylbenzene	11.4	1.0	µg/L	10.0		114	70-130			
sec-Butylbenzene	11.6	1.0	µg/L	10.0		116	70-130			
tert-Butylbenzene	11.4	1.0	µg/L	10.0		114	70-130			
tert-Butyl Ethyl Ether (TBEE)	9.89	0.50	µg/L	10.0		98.9	70-130			
Carbon Disulfide	11.0	4.0	µg/L	10.0		110	70-130			
Carbon Tetrachloride	8.54	5.0	µg/L	10.0		85.4	70-130			
Chlorobenzene	10.7	1.0	µg/L	10.0		107	70-130			
Chlorodibromomethane	10.6	0.50	µg/L	10.0		106	70-130			
Chloroethane	8.43	2.0	µg/L	10.0		84.3	70-130			
Chloroform	9.39	2.0	µg/L	10.0		93.9	70-130			

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B214002 - SW-846 5030B</b>										
<b>LCS (B214002-BS1)</b>										
Prepared & Analyzed: 10/04/18										
Chloromethane	9.10	2.0	µg/L	10.0		91.0	40-160			†
2-Chlorotoluene	10.6	1.0	µg/L	10.0		106	70-130			
4-Chlorotoluene	10.4	1.0	µg/L	10.0		104	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	9.45	5.0	µg/L	10.0		94.5	70-130			
1,2-Dibromoethane (EDB)	10.0	0.50	µg/L	10.0		100	70-130			
Dibromomethane	10.1	1.0	µg/L	10.0		101	70-130			
1,2-Dichlorobenzene	10.8	1.0	µg/L	10.0		108	70-130			
1,3-Dichlorobenzene	11.3	1.0	µg/L	10.0		113	70-130			
1,4-Dichlorobenzene	10.5	1.0	µg/L	10.0		105	70-130			
trans-1,4-Dichloro-2-butene	10.2	2.0	µg/L	10.0		102	70-130			
Dichlorodifluoromethane (Freon 12)	6.47	2.0	µg/L	10.0		64.7	40-160			†
1,1-Dichloroethane	10.2	1.0	µg/L	10.0		102	70-130			
1,2-Dichloroethane	8.62	1.0	µg/L	10.0		86.2	70-130			
1,1-Dichloroethylene	9.33	1.0	µg/L	10.0		93.3	70-130			
cis-1,2-Dichloroethylene	9.75	1.0	µg/L	10.0		97.5	70-130			
trans-1,2-Dichloroethylene	10.4	1.0	µg/L	10.0		104	70-130			
1,2-Dichloropropane	11.4	1.0	µg/L	10.0		114	70-130			
1,3-Dichloropropane	9.86	0.50	µg/L	10.0		98.6	70-130			
2,2-Dichloropropane	10.3	1.0	µg/L	10.0		103	40-130			†
1,1-Dichloropropene	9.34	2.0	µg/L	10.0		93.4	70-130			
cis-1,3-Dichloropropene	10.6	0.50	µg/L	10.0		106	70-130			
trans-1,3-Dichloropropene	10.6	0.50	µg/L	10.0		106	70-130			
Diethyl Ether	10.2	2.0	µg/L	10.0		102	70-130			
Diisopropyl Ether (DIPE)	10.0	0.50	µg/L	10.0		100	70-130			
1,4-Dioxane	92.0	50	µg/L	100		92.0	40-130			†
Ethylbenzene	11.0	1.0	µg/L	10.0		110	70-130			
<b>Hexachlorobutadiene</b>	13.2	0.60	µg/L	10.0		<b>132</b> *	70-130			L-07, V-20
2-Hexanone (MBK)	105	10	µg/L	100		105	70-160			†
Isopropylbenzene (Cumene)	11.6	1.0	µg/L	10.0		116	70-130			
p-Isopropyltoluene (p-Cymene)	11.4	1.0	µg/L	10.0		114	70-130			
<b>Methyl Acetate</b>	19.4	1.0	µg/L	10.0		<b>194</b> *	70-130			L-02, V-05
Methyl tert-Butyl Ether (MTBE)	9.80	1.0	µg/L	10.0		98.0	70-130			
Methyl Cyclohexane	11.5	1.0	µg/L	10.0		115	70-130			
Methylene Chloride	9.14	5.0	µg/L	10.0		91.4	70-130			
4-Methyl-2-pentanone (MIBK)	99.6	10	µg/L	100		99.6	70-160			†
Naphthalene	10.1	2.0	µg/L	10.0		101	40-130			†
n-Propylbenzene	10.5	1.0	µg/L	10.0		105	70-130			
Styrene	11.0	1.0	µg/L	10.0		110	70-130			
1,1,1,2-Tetrachloroethane	11.0	1.0	µg/L	10.0		110	70-130			
1,1,2,2-Tetrachloroethane	11.0	0.50	µg/L	10.0		110	70-130			
Tetrachloroethylene	11.3	1.0	µg/L	10.0		113	70-130			
Tetrahydrofuran	9.93	10	µg/L	10.0		99.3	70-130			J
Toluene	10.6	1.0	µg/L	10.0		106	70-130			
1,2,3-Trichlorobenzene	10.8	5.0	µg/L	10.0		108	70-130			
1,2,4-Trichlorobenzene	10.9	1.0	µg/L	10.0		109	70-130			
1,3,5-Trichlorobenzene	11.3	1.0	µg/L	10.0		113	70-130			
1,1,1-Trichloroethane	9.18	1.0	µg/L	10.0		91.8	70-130			
1,1,2-Trichloroethane	10.5	1.0	µg/L	10.0		105	70-130			
Trichloroethylene	10.6	1.0	µg/L	10.0		106	70-130			
Trichlorofluoromethane (Freon 11)	7.63	2.0	µg/L	10.0		76.3	70-130			
1,2,3-Trichloropropane	10.2	2.0	µg/L	10.0		102	70-130			

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

**QUALITY CONTROL**

**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B214002 - SW-846 5030B**

**LCS (B214002-BS1)**

Prepared & Analyzed: 10/04/18

1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.70	1.0	µg/L	10.0		97.0	70-130			
1,2,4-Trimethylbenzene	10.4	1.0	µg/L	10.0		104	70-130			
1,3,5-Trimethylbenzene	10.4	1.0	µg/L	10.0		104	70-130			
Vinyl Chloride	8.96	2.0	µg/L	10.0		89.6	40-160			†
m+p Xylene	21.2	2.0	µg/L	20.0		106	70-130			
o-Xylene	10.7	1.0	µg/L	10.0		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	20.6		µg/L	25.0		82.6	70-130			
Surrogate: Toluene-d8	25.3		µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	24.3		µg/L	25.0		97.3	70-130			

**LCS Dup (B214002-BSD1)**

Prepared & Analyzed: 10/04/18

Acetone	98.7	50	µg/L	100		98.7	70-160	23.1	25	V-05	†
Acrylonitrile	9.72	5.0	µg/L	10.0		97.2	70-130	9.22	25		
tert-Amyl Methyl Ether (TAME)	9.19	0.50	µg/L	10.0		91.9	70-130	6.02	25		
Benzene	9.41	1.0	µg/L	10.0		94.1	70-130	5.28	25		
Bromobenzene	9.94	1.0	µg/L	10.0		99.4	70-130	4.43	25		
Bromochloromethane	10.8	1.0	µg/L	10.0		108	70-130	7.07	25		
Bromodichloromethane	9.06	0.50	µg/L	10.0		90.6	70-130	7.03	25		
Bromoform	10.4	1.0	µg/L	10.0		104	70-130	4.14	25		
Bromomethane	8.84	2.0	µg/L	10.0		88.4	40-160	0.909	25	V-20	†
2-Butanone (MEK)	92.7	20	µg/L	100		92.7	40-160	14.3	25		†
tert-Butyl Alcohol (TBA)	90.5	20	µg/L	100		90.5	40-160	1.98	25		†
n-Butylbenzene	10.8	1.0	µg/L	10.0		108	70-130	5.42	25		
sec-Butylbenzene	10.8	1.0	µg/L	10.0		108	70-130	7.05	25		
tert-Butylbenzene	10.7	1.0	µg/L	10.0		107	70-130	5.96	25		
tert-Butyl Ethyl Ether (TBEE)	9.31	0.50	µg/L	10.0		93.1	70-130	6.04	25		
Carbon Disulfide	9.59	4.0	µg/L	10.0		95.9	70-130	13.2	25		
Carbon Tetrachloride	7.99	5.0	µg/L	10.0		79.9	70-130	6.65	25		
Chlorobenzene	10.4	1.0	µg/L	10.0		104	70-130	3.04	25		
Chlorodibromomethane	10.0	0.50	µg/L	10.0		100	70-130	5.81	25		
Chloroethane	8.13	2.0	µg/L	10.0		81.3	70-130	3.62	25		
Chloroform	8.71	2.0	µg/L	10.0		87.1	70-130	7.51	25		
Chloromethane	8.86	2.0	µg/L	10.0		88.6	40-160	2.67	25		†
2-Chlorotoluene	10.4	1.0	µg/L	10.0		104	70-130	1.05	25		
4-Chlorotoluene	10.0	1.0	µg/L	10.0		100	70-130	3.43	25		
1,2-Dibromo-3-chloropropane (DBCP)	9.52	5.0	µg/L	10.0		95.2	70-130	0.738	25		
1,2-Dibromoethane (EDB)	10.0	0.50	µg/L	10.0		100	70-130	0.0997	25		
Dibromomethane	9.84	1.0	µg/L	10.0		98.4	70-130	2.21	25		
1,2-Dichlorobenzene	10.3	1.0	µg/L	10.0		103	70-130	4.08	25		
1,3-Dichlorobenzene	10.7	1.0	µg/L	10.0		107	70-130	5.37	25		
1,4-Dichlorobenzene	9.91	1.0	µg/L	10.0		99.1	70-130	5.40	25		
trans-1,4-Dichloro-2-butene	9.77	2.0	µg/L	10.0		97.7	70-130	3.82	25		
Dichlorodifluoromethane (Freon 12)	6.30	2.0	µg/L	10.0		63.0	40-160	2.66	25		†
1,1-Dichloroethane	9.46	1.0	µg/L	10.0		94.6	70-130	8.02	25		
1,2-Dichloroethane	8.42	1.0	µg/L	10.0		84.2	70-130	2.35	25		
1,1-Dichloroethylene	8.61	1.0	µg/L	10.0		86.1	70-130	8.03	25		
cis-1,2-Dichloroethylene	9.13	1.0	µg/L	10.0		91.3	70-130	6.57	25		
trans-1,2-Dichloroethylene	9.66	1.0	µg/L	10.0		96.6	70-130	7.86	25		
1,2-Dichloropropane	10.6	1.0	µg/L	10.0		106	70-130	7.29	25		
1,3-Dichloropropane	9.36	0.50	µg/L	10.0		93.6	70-130	5.20	25		
2,2-Dichloropropane	9.56	1.0	µg/L	10.0		95.6	40-130	7.45	25		†
1,1-Dichloropropene	8.90	2.0	µg/L	10.0		89.0	70-130	4.82	25		

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B214002 - SW-846 5030B

LCS Dup (B214002-BSD1)

Prepared & Analyzed: 10/04/18

cis-1,3-Dichloropropene	9.92	0.50	µg/L	10.0		99.2	70-130	7.00	25	
trans-1,3-Dichloropropene	10.2	0.50	µg/L	10.0		102	70-130	4.61	25	
Diethyl Ether	9.68	2.0	µg/L	10.0		96.8	70-130	5.52	25	
Diisopropyl Ether (DIPE)	9.52	0.50	µg/L	10.0		95.2	70-130	4.92	25	
1,4-Dioxane	94.0	50	µg/L	100		94.0	40-130	2.12	50	† ‡
Ethylbenzene	10.7	1.0	µg/L	10.0		107	70-130	3.13	25	
Hexachlorobutadiene	12.3	0.60	µg/L	10.0		123	70-130	6.90	25	V-20
2-Hexanone (MBK)	92.7	10	µg/L	100		92.7	70-160	12.2	25	†
Isopropylbenzene (Cumene)	11.3	1.0	µg/L	10.0		113	70-130	2.27	25	
p-Isopropyltoluene (p-Cymene)	10.8	1.0	µg/L	10.0		108	70-130	5.32	25	
Methyl Acetate	18.1	1.0	µg/L	10.0		181 *	70-130	6.84	25	L-02, V-05
Methyl tert-Butyl Ether (MTBE)	9.18	1.0	µg/L	10.0		91.8	70-130	6.53	25	
Methyl Cyclohexane	10.6	1.0	µg/L	10.0		106	70-130	7.96	25	
Methylene Chloride	8.68	5.0	µg/L	10.0		86.8	70-130	5.16	25	
4-Methyl-2-pentanone (MIBK)	93.4	10	µg/L	100		93.4	70-160	6.51	25	†
Naphthalene	9.75	2.0	µg/L	10.0		97.5	40-130	3.63	25	†
n-Propylbenzene	10.1	1.0	µg/L	10.0		101	70-130	3.89	25	
Styrene	10.7	1.0	µg/L	10.0		107	70-130	3.04	25	
1,1,1,2-Tetrachloroethane	10.9	1.0	µg/L	10.0		109	70-130	1.19	25	
1,1,2,2-Tetrachloroethane	10.6	0.50	µg/L	10.0		106	70-130	3.90	25	
Tetrachloroethylene	10.4	1.0	µg/L	10.0		104	70-130	8.41	25	
Tetrahydrofuran	9.08	10	µg/L	10.0		90.8	70-130	8.94	25	J
Toluene	9.91	1.0	µg/L	10.0		99.1	70-130	7.20	25	
1,2,3-Trichlorobenzene	10.4	5.0	µg/L	10.0		104	70-130	3.87	25	
1,2,4-Trichlorobenzene	9.93	1.0	µg/L	10.0		99.3	70-130	9.68	25	
1,3,5-Trichlorobenzene	10.8	1.0	µg/L	10.0		108	70-130	4.44	25	
1,1,1-Trichloroethane	8.74	1.0	µg/L	10.0		87.4	70-130	4.91	25	
1,1,2-Trichloroethane	10.0	1.0	µg/L	10.0		100	70-130	4.58	25	
Trichloroethylene	9.87	1.0	µg/L	10.0		98.7	70-130	7.51	25	
Trichlorofluoromethane (Freon 11)	7.31	2.0	µg/L	10.0		73.1	70-130	4.28	25	
1,2,3-Trichloropropane	9.68	2.0	µg/L	10.0		96.8	70-130	5.04	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.33	1.0	µg/L	10.0		93.3	70-130	3.89	25	
1,2,4-Trimethylbenzene	9.97	1.0	µg/L	10.0		99.7	70-130	4.41	25	
1,3,5-Trimethylbenzene	10.1	1.0	µg/L	10.0		101	70-130	3.13	25	
Vinyl Chloride	8.32	2.0	µg/L	10.0		83.2	40-160	7.41	25	†
m+p Xylene	20.8	2.0	µg/L	20.0		104	70-130	2.33	25	
o-Xylene	10.3	1.0	µg/L	10.0		103	70-130	3.80	25	
Surrogate: 1,2-Dichloroethane-d4	20.4		µg/L	25.0		81.4	70-130			
Surrogate: Toluene-d8	25.2		µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	25.1		µg/L	25.0		100	70-130			

Batch B214073 - SW-846 5035/5030B

Blank (B214073-BLK1)

Prepared: 10/05/18 Analyzed: 10/08/18

Acetone	ND	2.5	mg/Kg wet							
Acrylonitrile	ND	0.25	mg/Kg wet							
tert-Amyl Methyl Ether (TAME)	ND	0.025	mg/Kg wet							
Benzene	ND	0.050	mg/Kg wet							
Bromobenzene	ND	0.050	mg/Kg wet							
Bromochloromethane	ND	0.050	mg/Kg wet							
Bromodichloromethane	ND	0.050	mg/Kg wet							
Bromoform	ND	0.050	mg/Kg wet							

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**QUALITY CONTROL**

**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B214073 - SW-846 5035/5030B**

**Blank (B214073-BLK1)**

Prepared: 10/05/18 Analyzed: 10/08/18

Bromomethane	ND	0.10	mg/Kg wet							
2-Butanone (MEK)	ND	1.0	mg/Kg wet							
tert-Butyl Alcohol (TBA)	ND	1.0	mg/Kg wet							
n-Butylbenzene	ND	0.050	mg/Kg wet							
sec-Butylbenzene	ND	0.050	mg/Kg wet							
tert-Butylbenzene	ND	0.050	mg/Kg wet							
tert-Butyl Ethyl Ether (TBEE)	ND	0.025	mg/Kg wet							
Carbon Disulfide	ND	0.15	mg/Kg wet							
Carbon Tetrachloride	ND	0.050	mg/Kg wet							
Chlorobenzene	ND	0.050	mg/Kg wet							
Chlorodibromomethane	ND	0.025	mg/Kg wet							
Chloroethane	ND	0.10	mg/Kg wet							
Chloroform	ND	0.10	mg/Kg wet							
Chloromethane	ND	0.10	mg/Kg wet							
2-Chlorotoluene	ND	0.050	mg/Kg wet							
4-Chlorotoluene	ND	0.050	mg/Kg wet							
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.25	mg/Kg wet							
1,2-Dibromoethane (EDB)	ND	0.025	mg/Kg wet							
Dibromomethane	ND	0.050	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.050	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.050	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.050	mg/Kg wet							
trans-1,4-Dichloro-2-butene	ND	0.10	mg/Kg wet							
Dichlorodifluoromethane (Freon 12)	ND	0.10	mg/Kg wet							V-05
1,1-Dichloroethane	ND	0.050	mg/Kg wet							
1,2-Dichloroethane	ND	0.050	mg/Kg wet							
1,1-Dichloroethylene	ND	0.050	mg/Kg wet							
cis-1,2-Dichloroethylene	ND	0.050	mg/Kg wet							
trans-1,2-Dichloroethylene	ND	0.050	mg/Kg wet							
Dichlorofluoromethane (Freon 21)	ND	0.050	mg/Kg wet							
1,2-Dichloropropane	ND	0.050	mg/Kg wet							
1,3-Dichloropropane	ND	0.025	mg/Kg wet							
2,2-Dichloropropane	ND	0.050	mg/Kg wet							
1,1-Dichloropropene	ND	0.10	mg/Kg wet							
cis-1,3-Dichloropropene	ND	0.025	mg/Kg wet							
trans-1,3-Dichloropropene	ND	0.025	mg/Kg wet							
Diethyl Ether	ND	0.10	mg/Kg wet							
Difluorochloromethane (Freon 22)	ND	0.050	mg/Kg wet							
Diisopropyl Ether (DIPE)	ND	0.025	mg/Kg wet							
1,4-Dioxane	ND	2.5	mg/Kg wet							
Ethylbenzene	ND	0.050	mg/Kg wet							
Hexachlorobutadiene	ND	0.050	mg/Kg wet							
2-Hexanone (MBK)	ND	0.50	mg/Kg wet							
Isopropylbenzene (Cumene)	ND	0.050	mg/Kg wet							
p-Isopropyltoluene (p-Cymene)	ND	0.050	mg/Kg wet							
Methyl Acetate	ND	0.50	mg/Kg wet							V-05
Methyl tert-Butyl Ether (MTBE)	ND	0.050	mg/Kg wet							
Methyl Cyclohexane	ND	0.050	mg/Kg wet							
Methylene Chloride	ND	0.25	mg/Kg wet							
4-Methyl-2-pentanone (MIBK)	ND	0.50	mg/Kg wet							
Naphthalene	ND	0.10	mg/Kg wet							
n-Propylbenzene	ND	0.050	mg/Kg wet							

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**QUALITY CONTROL**

**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B214073 - SW-846 5035/5030B**

**Blank (B214073-BLK1)**

Prepared: 10/05/18 Analyzed: 10/08/18

Styrene	ND	0.050	mg/Kg wet							
1,1,1,2-Tetrachloroethane	ND	0.050	mg/Kg wet							
1,1,2,2-Tetrachloroethane	ND	0.025	mg/Kg wet							
Tetrachloroethylene	ND	0.050	mg/Kg wet							
Tetrahydrofuran	ND	0.50	mg/Kg wet							
Toluene	ND	0.050	mg/Kg wet							
1,2,3-Trichlorobenzene	ND	0.25	mg/Kg wet							
1,2,4-Trichlorobenzene	ND	0.050	mg/Kg wet							
1,3,5-Trichlorobenzene	ND	0.050	mg/Kg wet							
1,1,1-Trichloroethane	ND	0.050	mg/Kg wet							
1,1,2-Trichloroethane	ND	0.050	mg/Kg wet							
Trichloroethylene	ND	0.050	mg/Kg wet							
Trichlorofluoromethane (Freon 11)	ND	0.10	mg/Kg wet							
1,2,3-Trichloropropane	ND	0.10	mg/Kg wet							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.050	mg/Kg wet							
1,2,4-Trimethylbenzene	ND	0.050	mg/Kg wet							
1,3,5-Trimethylbenzene	ND	0.050	mg/Kg wet							
Vinyl Chloride	ND	0.10	mg/Kg wet							
m+p Xylene	ND	0.10	mg/Kg wet							
o-Xylene	ND	0.050	mg/Kg wet							
Surrogate: 1,2-Dichloroethane-d4	0.0207		mg/Kg wet	0.0250		82.9	70-130			
Surrogate: Toluene-d8	0.0251		mg/Kg wet	0.0250		100	70-130			
Surrogate: 4-Bromofluorobenzene	0.0240		mg/Kg wet	0.0250		96.1	70-130			

**LCS (B214073-BS1)**

Prepared: 10/05/18 Analyzed: 10/08/18

Acetone	0.0878	0.057	mg/Kg wet	0.113		77.5	70-160			†
Acrylonitrile	0.0110	0.0057	mg/Kg wet	0.0113		96.8	70-130			
tert-Amyl Methyl Ether (TAME)	0.0108	0.00057	mg/Kg wet	0.0113		95.5	70-130			
Benzene	0.0108	0.0011	mg/Kg wet	0.0113		95.1	70-130			
Bromobenzene	0.0112	0.0011	mg/Kg wet	0.0113		98.6	70-130			
Bromochloromethane	0.0128	0.0011	mg/Kg wet	0.0113		113	70-130			
Bromodichloromethane	0.0108	0.0011	mg/Kg wet	0.0113		95.3	70-130			
Bromoform	0.0120	0.0011	mg/Kg wet	0.0113		106	70-130			
Bromomethane	0.00933	0.0023	mg/Kg wet	0.0113		82.3	40-130	V-20		†
2-Butanone (MEK)	0.0926	0.023	mg/Kg wet	0.113		81.7	70-160			†
tert-Butyl Alcohol (TBA)	0.0928	0.023	mg/Kg wet	0.113		81.9	40-130			†
n-Butylbenzene	0.0127	0.0011	mg/Kg wet	0.0113		112	70-130			
sec-Butylbenzene	0.0130	0.0011	mg/Kg wet	0.0113		114	70-130			
tert-Butylbenzene	0.0129	0.0011	mg/Kg wet	0.0113		114	70-160			†
tert-Butyl Ethyl Ether (TBEE)	0.0107	0.00057	mg/Kg wet	0.0113		94.1	70-130			
Carbon Disulfide	0.0114	0.0034	mg/Kg wet	0.0113		100	70-130			
Carbon Tetrachloride	0.00970	0.0011	mg/Kg wet	0.0113		85.6	70-130			
Chlorobenzene	0.0116	0.0011	mg/Kg wet	0.0113		102	70-130			
Chlorodibromomethane	0.0118	0.00057	mg/Kg wet	0.0113		104	70-130			
Chloroethane	0.0105	0.0023	mg/Kg wet	0.0113		92.8	70-130			
Chloroform	0.0103	0.0023	mg/Kg wet	0.0113		90.5	70-130			
Chloromethane	0.00971	0.0023	mg/Kg wet	0.0113		85.7	70-130			
2-Chlorotoluene	0.0114	0.0011	mg/Kg wet	0.0113		100	70-130			
4-Chlorotoluene	0.0111	0.0011	mg/Kg wet	0.0113		98.3	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	0.0107	0.0057	mg/Kg wet	0.0113		94.4	70-130			
1,2-Dibromoethane (EDB)	0.0112	0.00057	mg/Kg wet	0.0113		98.9	70-130			
Dibromomethane	0.0109	0.0011	mg/Kg wet	0.0113		96.4	70-130			



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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B214073 - SW-846 5035/5030B</b>										
<b>LCS (B214073-BS1)</b>										
					Prepared: 10/05/18 Analyzed: 10/08/18					
1,2-Dichlorobenzene	0.0120	0.0011	mg/Kg wet	0.0113		106	70-130			
1,3-Dichlorobenzene	0.0126	0.0011	mg/Kg wet	0.0113		111	70-130			
1,4-Dichlorobenzene	0.0118	0.0011	mg/Kg wet	0.0113		104	70-130			
trans-1,4-Dichloro-2-butene	0.0112	0.0023	mg/Kg wet	0.0113		98.7	70-130			
Dichlorodifluoromethane (Freon 12)	0.00643	0.0023	mg/Kg wet	0.0113		56.7	40-160			V-05 †
1,1-Dichloroethane	0.0114	0.0011	mg/Kg wet	0.0113		100	70-130			
1,2-Dichloroethane	0.00966	0.0011	mg/Kg wet	0.0113		85.2	70-130			
1,1-Dichloroethylene	0.0100	0.0011	mg/Kg wet	0.0113		88.2	70-130			
cis-1,2-Dichloroethylene	0.0107	0.0011	mg/Kg wet	0.0113		94.1	70-130			
trans-1,2-Dichloroethylene	0.0114	0.0011	mg/Kg wet	0.0113		100	70-130			
Dichlorofluoromethane (Freon 21)	0.0105	0.0011	mg/Kg wet	0.0113		92.3	70-130			
1,2-Dichloropropane	0.0126	0.0011	mg/Kg wet	0.0113		112	70-130			
1,3-Dichloropropane	0.0103	0.00057	mg/Kg wet	0.0113		91.3	70-130			
2,2-Dichloropropane	0.0113	0.0011	mg/Kg wet	0.0113		99.3	70-130			
1,1-Dichloropropene	0.0103	0.0023	mg/Kg wet	0.0113		90.7	70-130			
cis-1,3-Dichloropropene	0.0119	0.00057	mg/Kg wet	0.0113		105	70-130			
trans-1,3-Dichloropropene	0.0120	0.00057	mg/Kg wet	0.0113		106	70-130			
Diethyl Ether	0.0111	0.0023	mg/Kg wet	0.0113		98.0	70-130			
Difluorochloromethane (Freon 22)	0.0101	0.0011	mg/Kg wet	0.0113		89.3	70-130			
Diisopropyl Ether (DIPE)	0.0111	0.00057	mg/Kg wet	0.0113		97.6	70-130			
1,4-Dioxane	0.102	0.057	mg/Kg wet	0.113		89.8	40-160			†
Ethylbenzene	0.0119	0.0011	mg/Kg wet	0.0113		105	70-130			
Hexachlorobutadiene	0.0147	0.0011	mg/Kg wet	0.0113		130	70-160			
2-Hexanone (MBK)	0.0994	0.011	mg/Kg wet	0.113		87.7	70-160			†
Isopropylbenzene (Cumene)	0.0126	0.0011	mg/Kg wet	0.0113		112	70-130			
p-Isopropyltoluene (p-Cymene)	0.0127	0.0011	mg/Kg wet	0.0113		112	70-130			
<b>Methyl Acetate</b>	0.0204	0.011	mg/Kg wet	0.0113		<b>180</b> *	70-130			V-05, L-02
Methyl tert-Butyl Ether (MTBE)	0.0108	0.0011	mg/Kg wet	0.0113		94.9	70-130			
Methyl Cyclohexane	0.0130	0.0011	mg/Kg wet	0.0113		115	70-130			
Methylene Chloride	0.00994	0.0057	mg/Kg wet	0.0113		87.7	40-160			†
4-Methyl-2-pentanone (MIBK)	0.103	0.011	mg/Kg wet	0.113		91.1	70-160			†
Naphthalene	0.0110	0.0023	mg/Kg wet	0.0113		97.1	40-130			†
n-Propylbenzene	0.0114	0.0011	mg/Kg wet	0.0113		100	70-130			
Styrene	0.0118	0.0011	mg/Kg wet	0.0113		104	70-130			
1,1,1,2-Tetrachloroethane	0.0126	0.0011	mg/Kg wet	0.0113		111	70-130			
1,1,2,2-Tetrachloroethane	0.0114	0.00057	mg/Kg wet	0.0113		100	70-130			
Tetrachloroethylene	0.0125	0.0011	mg/Kg wet	0.0113		111	70-130			
Tetrahydrofuran	0.0101	0.011	mg/Kg wet	0.0113		89.2	70-130			J
Toluene	0.0117	0.0011	mg/Kg wet	0.0113		103	70-130			
1,2,3-Trichlorobenzene	0.0118	0.0057	mg/Kg wet	0.0113		104	70-130			
1,2,4-Trichlorobenzene	0.0125	0.0011	mg/Kg wet	0.0113		110	70-130			
1,3,5-Trichlorobenzene	0.0124	0.0011	mg/Kg wet	0.0113		110	70-130			
1,1,1-Trichloroethane	0.0103	0.0011	mg/Kg wet	0.0113		90.6	70-130			
1,1,2-Trichloroethane	0.0116	0.0011	mg/Kg wet	0.0113		102	70-130			
Trichloroethylene	0.0114	0.0011	mg/Kg wet	0.0113		101	70-130			
Trichlorofluoromethane (Freon 11)	0.00847	0.0023	mg/Kg wet	0.0113		74.7	70-130			
1,2,3-Trichloropropane	0.0108	0.0023	mg/Kg wet	0.0113		94.9	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0111	0.0011	mg/Kg wet	0.0113		98.1	70-130			
1,2,4-Trimethylbenzene	0.0117	0.0011	mg/Kg wet	0.0113		103	70-130			
1,3,5-Trimethylbenzene	0.0115	0.0011	mg/Kg wet	0.0113		101	70-130			
Vinyl Chloride	0.00943	0.0023	mg/Kg wet	0.0113		83.2	40-130			†

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B214073 - SW-846 5035/5030B

LCS (B214073-BS1)

Prepared: 10/05/18 Analyzed: 10/08/18

m+p Xylene	0.0230	0.0023	mg/Kg wet	0.0227		101	70-130			
o-Xylene	0.0115	0.0011	mg/Kg wet	0.0113		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0232		mg/Kg wet	0.0283		81.9	70-130			
Surrogate: Toluene-d8	0.0289		mg/Kg wet	0.0283		102	70-130			
Surrogate: 4-Bromofluorobenzene	0.0274		mg/Kg wet	0.0283		96.6	70-130			

LCS Dup (B214073-BS1)

Prepared: 10/05/18 Analyzed: 10/08/18

Acetone	0.0936	0.057	mg/Kg wet	0.113		82.6	70-160	6.42	25	†
Acrylonitrile	0.0107	0.0057	mg/Kg wet	0.0113		94.2	70-130	2.72	25	
tert-Amyl Methyl Ether (TAME)	0.0106	0.00057	mg/Kg wet	0.0113		93.3	70-130	2.33	25	
Benzene	0.0104	0.0011	mg/Kg wet	0.0113		91.5	70-130	3.86	25	
Bromobenzene	0.0112	0.0011	mg/Kg wet	0.0113		98.8	70-130	0.203	25	
Bromochloromethane	0.0121	0.0011	mg/Kg wet	0.0113		107	70-130	5.45	25	
Bromodichloromethane	0.0105	0.0011	mg/Kg wet	0.0113		92.9	70-130	2.55	25	
Bromoform	0.0122	0.0011	mg/Kg wet	0.0113		108	70-130	1.78	25	
Bromomethane	0.0101	0.0023	mg/Kg wet	0.0113		88.9	40-130	7.71	25	V-20 †
2-Butanone (MEK)	0.0973	0.023	mg/Kg wet	0.113		85.9	70-160	5.00	25	†
tert-Butyl Alcohol (TBA)	0.103	0.023	mg/Kg wet	0.113		90.7	40-130	10.2	25	†
n-Butylbenzene	0.0121	0.0011	mg/Kg wet	0.0113		107	70-130	4.57	25	
sec-Butylbenzene	0.0124	0.0011	mg/Kg wet	0.0113		109	70-130	4.38	25	
tert-Butylbenzene	0.0123	0.0011	mg/Kg wet	0.0113		109	70-160	4.50	25	†
tert-Butyl Ethyl Ether (TBEE)	0.0106	0.00057	mg/Kg wet	0.0113		93.3	70-130	0.854	25	
Carbon Disulfide	0.0108	0.0034	mg/Kg wet	0.0113		94.9	70-130	5.73	25	
Carbon Tetrachloride	0.00923	0.0011	mg/Kg wet	0.0113		81.4	70-130	5.03	25	
Chlorobenzene	0.0115	0.0011	mg/Kg wet	0.0113		102	70-130	0.588	25	
Chlorodibromomethane	0.0116	0.00057	mg/Kg wet	0.0113		102	70-130	1.84	25	
Chloroethane	0.00953	0.0023	mg/Kg wet	0.0113		84.1	70-130	9.84	25	
Chloroform	0.00989	0.0023	mg/Kg wet	0.0113		87.3	70-130	3.60	25	
Chloromethane	0.00912	0.0023	mg/Kg wet	0.0113		80.5	70-130	6.26	25	
2-Chlorotoluene	0.0115	0.0011	mg/Kg wet	0.0113		101	70-130	1.19	25	
4-Chlorotoluene	0.0111	0.0011	mg/Kg wet	0.0113		98.0	70-130	0.306	25	
1,2-Dibromo-3-chloropropane (DBCP)	0.0104	0.0057	mg/Kg wet	0.0113		91.9	70-130	2.68	25	
1,2-Dibromoethane (EDB)	0.0110	0.00057	mg/Kg wet	0.0113		96.9	70-130	2.04	25	
Dibromomethane	0.0106	0.0011	mg/Kg wet	0.0113		93.5	70-130	3.05	25	
1,2-Dichlorobenzene	0.0117	0.0011	mg/Kg wet	0.0113		104	70-130	2.39	25	
1,3-Dichlorobenzene	0.0120	0.0011	mg/Kg wet	0.0113		106	70-130	5.08	25	
1,4-Dichlorobenzene	0.0113	0.0011	mg/Kg wet	0.0113		99.9	70-130	3.73	25	
trans-1,4-Dichloro-2-butene	0.0115	0.0023	mg/Kg wet	0.0113		102	70-130	2.99	25	
Dichlorodifluoromethane (Freon 12)	0.00615	0.0023	mg/Kg wet	0.0113		54.3	40-160	4.32	25	V-05 †
1,1-Dichloroethane	0.0107	0.0011	mg/Kg wet	0.0113		94.1	70-130	6.38	25	
1,2-Dichloroethane	0.00947	0.0011	mg/Kg wet	0.0113		83.6	70-130	1.90	25	
1,1-Dichloroethylene	0.00963	0.0011	mg/Kg wet	0.0113		85.0	70-130	3.70	25	
cis-1,2-Dichloroethylene	0.0103	0.0011	mg/Kg wet	0.0113		91.1	70-130	3.24	25	
trans-1,2-Dichloroethylene	0.0103	0.0011	mg/Kg wet	0.0113		90.9	70-130	9.93	25	
Dichlorofluoromethane (Freon 21)	0.0100	0.0011	mg/Kg wet	0.0113		88.6	70-130	4.09	25	
1,2-Dichloropropane	0.0124	0.0011	mg/Kg wet	0.0113		109	70-130	1.99	25	
1,3-Dichloropropane	0.0105	0.00057	mg/Kg wet	0.0113		92.8	70-130	1.63	25	
2,2-Dichloropropane	0.0107	0.0011	mg/Kg wet	0.0113		94.7	70-130	4.74	25	
1,1-Dichloropropene	0.00987	0.0023	mg/Kg wet	0.0113		87.1	70-130	4.05	25	
cis-1,3-Dichloropropene	0.0115	0.00057	mg/Kg wet	0.0113		101	70-130	3.30	25	
trans-1,3-Dichloropropene	0.0117	0.00057	mg/Kg wet	0.0113		103	70-130	2.77	25	
Diethyl Ether	0.0113	0.0023	mg/Kg wet	0.0113		99.4	70-130	1.42	25	

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B214073 - SW-846 5035/5030B

LCS Dup (B214073-BSD1)

Prepared: 10/05/18 Analyzed: 10/08/18

Difluorochloromethane (Freon 22)	0.00929	0.0011	mg/Kg wet	0.0113		82.0	70-130	8.52	25	
Diisopropyl Ether (DIPE)	0.0109	0.00057	mg/Kg wet	0.0113		95.8	70-130	1.86	25	
1,4-Dioxane	0.107	0.057	mg/Kg wet	0.113		94.5	40-160	5.06	50	† ‡
Ethylbenzene	0.0118	0.0011	mg/Kg wet	0.0113		104	70-130	0.574	25	
Hexachlorobutadiene	0.0135	0.0011	mg/Kg wet	0.0113		119	70-160	8.28	25	
2-Hexanone (MBK)	0.106	0.011	mg/Kg wet	0.113		93.7	70-160	6.60	25	†
Isopropylbenzene (Cumene)	0.0123	0.0011	mg/Kg wet	0.0113		109	70-130	2.54	25	
p-Isopropyltoluene (p-Cymene)	0.0124	0.0011	mg/Kg wet	0.0113		109	70-130	2.71	25	
Methyl Acetate	0.0215	0.011	mg/Kg wet	0.0113		190 *	70-130	5.25	25	L-02, V-05
Methyl tert-Butyl Ether (MTBE)	0.0102	0.0011	mg/Kg wet	0.0113		89.9	70-130	5.41	25	
Methyl Cyclohexane	0.0117	0.0011	mg/Kg wet	0.0113		103	70-130	11.1	25	
Methylene Chloride	0.00986	0.0057	mg/Kg wet	0.0113		87.0	40-160	0.801	25	†
4-Methyl-2-pentanone (MIBK)	0.108	0.011	mg/Kg wet	0.113		95.2	70-160	4.37	25	†
Naphthalene	0.0110	0.0023	mg/Kg wet	0.0113		97.3	40-130	0.206	25	†
n-Propylbenzene	0.0114	0.0011	mg/Kg wet	0.0113		100	70-130	0.299	25	
Styrene	0.0117	0.0011	mg/Kg wet	0.0113		103	70-130	0.580	25	
1,1,1,2-Tetrachloroethane	0.0124	0.0011	mg/Kg wet	0.0113		109	70-130	1.27	25	
1,1,2,2-Tetrachloroethane	0.0119	0.00057	mg/Kg wet	0.0113		105	70-130	4.68	25	
Tetrachloroethylene	0.0119	0.0011	mg/Kg wet	0.0113		105	70-130	5.48	25	
Tetrahydrofuran	0.0106	0.011	mg/Kg wet	0.0113		93.3	70-130	4.49	25	J
Toluene	0.0112	0.0011	mg/Kg wet	0.0113		98.9	70-130	4.06	25	
1,2,3-Trichlorobenzene	0.0118	0.0057	mg/Kg wet	0.0113		104	70-130	0.480	25	
1,2,4-Trichlorobenzene	0.0116	0.0011	mg/Kg wet	0.0113		102	70-130	7.46	25	
1,3,5-Trichlorobenzene	0.0121	0.0011	mg/Kg wet	0.0113		107	70-130	2.59	25	
1,1,1-Trichloroethane	0.00971	0.0011	mg/Kg wet	0.0113		85.7	70-130	5.56	25	
1,1,2-Trichloroethane	0.0114	0.0011	mg/Kg wet	0.0113		100	70-130	2.07	25	
Trichloroethylene	0.0110	0.0011	mg/Kg wet	0.0113		96.7	70-130	3.95	25	
Trichlorofluoromethane (Freon 11)	0.00827	0.0023	mg/Kg wet	0.0113		73.0	70-130	2.30	25	
1,2,3-Trichloropropane	0.0110	0.0023	mg/Kg wet	0.0113		97.1	70-130	2.29	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0102	0.0011	mg/Kg wet	0.0113		90.4	70-130	8.17	25	
1,2,4-Trimethylbenzene	0.0113	0.0011	mg/Kg wet	0.0113		99.9	70-130	3.44	25	
1,3,5-Trimethylbenzene	0.0112	0.0011	mg/Kg wet	0.0113		99.2	70-130	2.00	25	
Vinyl Chloride	0.00917	0.0023	mg/Kg wet	0.0113		80.9	40-130	2.80	25	†
m+p Xylene	0.0228	0.0023	mg/Kg wet	0.0227		101	70-130	0.693	25	
o-Xylene	0.0112	0.0011	mg/Kg wet	0.0113		99.0	70-130	2.59	25	
Surrogate: 1,2-Dichloroethane-d4	0.0230		mg/Kg wet	0.0283		81.3	70-130			
Surrogate: Toluene-d8	0.0289		mg/Kg wet	0.0283		102	70-130			
Surrogate: 4-Bromofluorobenzene	0.0280		mg/Kg wet	0.0283		98.7	70-130			

Matrix Spike (B214073-MS1)

Source: 18J0071-01

Prepared: 10/05/18 Analyzed: 10/08/18

Acetone	9.44	2.8	mg/Kg dry	5.60	ND	168 *	70-130			MS-15
Acrylonitrile	0.494	0.28	mg/Kg dry	0.560	ND	88.1	70-130			
tert-Amyl Methyl Ether (TAME)	0.543	0.028	mg/Kg dry	0.560	ND	96.9	70-130			
Benzene	0.549	0.056	mg/Kg dry	0.560	ND	98.0	70-130			
Bromobenzene	0.657	0.056	mg/Kg dry	0.560	ND	117	70-130			
Bromochloromethane	0.611	0.056	mg/Kg dry	0.560	ND	109	70-130			
Bromodichloromethane	0.512	0.056	mg/Kg dry	0.560	ND	91.4	70-130			
Bromoform	0.514	0.056	mg/Kg dry	0.560	ND	91.7	70-130			
Bromomethane	0.266	0.11	mg/Kg dry	0.560	ND	47.4 *	70-130			MS-07A, V-20
2-Butanone (MEK)	7.29	1.1	mg/Kg dry	5.60	ND	130	70-130			
tert-Butyl Alcohol (TBA)	5.05	1.1	mg/Kg dry	5.60	ND	90.2	70-130			
n-Butylbenzene	3.06	0.056	mg/Kg dry	0.560	2.25	145 *	70-130			

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B214073 - SW-846 5035/5030B</b>										
<b>Matrix Spike (B214073-MS1)</b>	<b>Source: 18J0071-01</b>			Prepared: 10/05/18 Analyzed: 10/08/18						
sec-Butylbenzene	1.64	0.056	mg/Kg dry	0.560	0.924	127	70-130			MS-12
tert-Butylbenzene	0.742	0.056	mg/Kg dry	0.560	0.0969	115	70-130			
tert-Butyl Ethyl Ether (TBEE)	0.532	0.028	mg/Kg dry	0.560	ND	95.0	70-130			
Carbon Disulfide	0.472	0.17	mg/Kg dry	0.560	ND	84.3	70-130			
Carbon Tetrachloride	0.467	0.056	mg/Kg dry	0.560	ND	83.4	70-130			
Chlorobenzene	0.573	0.056	mg/Kg dry	0.560	ND	102	70-130			
Chlorodibromomethane	0.560	0.028	mg/Kg dry	0.560	ND	99.9	70-130			
<b>Chloroethane</b>	0.137	0.11	mg/Kg dry	0.560	ND	<b>24.5</b>	* 70-130			MS-07A
Chloroform	0.504	0.11	mg/Kg dry	0.560	ND	90.0	70-130			
Chloromethane	0.523	0.11	mg/Kg dry	0.560	ND	93.3	70-130			
<b>2-Chlorotoluene</b>	1.44	0.056	mg/Kg dry	0.560	ND	<b>257</b>	* 70-130			MS-15
<b>4-Chlorotoluene</b>	0.903	0.056	mg/Kg dry	0.560	ND	<b>161</b>	* 70-130			MS-15
1,2-Dibromo-3-chloropropane (DBCP)	0.553	0.28	mg/Kg dry	0.560	ND	98.7	70-130			
1,2-Dibromoethane (EDB)	0.555	0.028	mg/Kg dry	0.560	ND	99.0	70-130			
Dibromomethane	0.519	0.056	mg/Kg dry	0.560	ND	92.7	70-130			
1,2-Dichlorobenzene	0.552	0.056	mg/Kg dry	0.560	ND	98.5	70-130			
1,3-Dichlorobenzene	0.606	0.056	mg/Kg dry	0.560	ND	108	70-130			
1,4-Dichlorobenzene	0.550	0.056	mg/Kg dry	0.560	ND	98.1	70-130			
trans-1,4-Dichloro-2-butene	0.436	0.11	mg/Kg dry	0.560	ND	77.9	70-130			
<b>Dichlorodifluoromethane (Freon 12)</b>	0.301	0.11	mg/Kg dry	0.560	ND	<b>53.8</b>	* 70-130			MS-07A, V-05
1,1-Dichloroethane	0.562	0.056	mg/Kg dry	0.560	ND	100	70-130			
1,2-Dichloroethane	0.451	0.056	mg/Kg dry	0.560	ND	80.6	70-130			
1,1-Dichloroethylene	0.508	0.056	mg/Kg dry	0.560	ND	90.6	70-130			
cis-1,2-Dichloroethylene	1.69	0.056	mg/Kg dry	0.560	1.06	112	70-130			
trans-1,2-Dichloroethylene	0.561	0.056	mg/Kg dry	0.560	ND	100	70-130			
<b>Dichlorofluoromethane (Freon 21)</b>	0.250	0.056	mg/Kg dry	0.560	ND	<b>44.7</b>	* 70-130			MS-07A
1,2-Dichloropropane	0.604	0.056	mg/Kg dry	0.560	ND	108	70-130			
1,3-Dichloropropane	0.542	0.028	mg/Kg dry	0.560	ND	96.7	70-130			
2,2-Dichloropropane	0.536	0.056	mg/Kg dry	0.560	ND	95.6	70-130			
1,1-Dichloropropene	0.537	0.11	mg/Kg dry	0.560	ND	95.8	70-130			
cis-1,3-Dichloropropene	0.563	0.028	mg/Kg dry	0.560	ND	100	70-130			
trans-1,3-Dichloropropene	0.590	0.028	mg/Kg dry	0.560	ND	105	70-130			
Diethyl Ether	0.525	0.11	mg/Kg dry	0.560	ND	93.8	70-130			
Difluorochloromethane (Freon 22)	0.501	0.056	mg/Kg dry	0.560	ND	89.5	70-130			
Diisopropyl Ether (DIPE)	0.546	0.028	mg/Kg dry	0.560	ND	97.5	70-130			
1,4-Dioxane	4.88	2.8	mg/Kg dry	5.60	ND	87.0	70-130			
Ethylbenzene	1.01	0.056	mg/Kg dry	0.560	0.399	109	70-130			
<b>Hexachlorobutadiene</b>	0.921	0.056	mg/Kg dry	0.560	ND	<b>164</b>	* 70-130			MS-15
2-Hexanone (MBK)	7.04	0.56	mg/Kg dry	5.60	ND	126	70-130			
Isopropylbenzene (Cumene)	1.14	0.056	mg/Kg dry	0.560	0.466	120	70-130			
p-Isopropyltoluene (p-Cymene)	1.82	0.056	mg/Kg dry	0.560	1.11	127	70-130			MS-12
<b>Methyl Acetate</b>	1.15	0.56	mg/Kg dry	0.560	ND	<b>206</b>	* 70-130			L-02, MS-15, V-05
Methyl tert-Butyl Ether (MTBE)	0.493	0.056	mg/Kg dry	0.560	ND	88.0	70-130			
Methyl Cyclohexane	0.683	0.056	mg/Kg dry	0.560	0.0398	115	70-130			
Methylene Chloride	0.500	0.28	mg/Kg dry	0.560	ND	89.2	70-130			
4-Methyl-2-pentanone (MIBK)	5.11	0.56	mg/Kg dry	5.60	ND	91.2	70-130			
Naphthalene	1.86	0.11	mg/Kg dry	0.560	1.28	104	70-130			
n-Propylbenzene	2.01	0.056	mg/Kg dry	0.560	1.39	111	70-130			
Styrene	0.630	0.056	mg/Kg dry	0.560	ND	112	70-130			
1,1,1,2-Tetrachloroethane	0.578	0.056	mg/Kg dry	0.560	ND	103	70-130			
<b>1,1,2,2-Tetrachloroethane</b>	1.19	0.028	mg/Kg dry	0.560	ND	<b>213</b>	* 70-130			MS-15
<b>Tetrachloroethylene</b>	11.0	0.056	mg/Kg dry	0.560	9.63	<b>250</b>	* 70-130			MS-19

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B214073 - SW-846 5035/5030B</b>										
<b>Matrix Spike (B214073-MS1)</b>										
		<b>Source: 18J0071-01</b>			Prepared: 10/05/18 Analyzed: 10/08/18					
Tetrahydrofuran	0.497	0.56	mg/Kg dry	0.560	ND	88.7	70-130			J
Toluene	0.608	0.056	mg/Kg dry	0.560	0.0235	104	70-130			
1,2,3-Trichlorobenzene	0.597	0.28	mg/Kg dry	0.560	ND	106	70-130			
1,2,4-Trichlorobenzene	0.604	0.056	mg/Kg dry	0.560	ND	108	70-130			
1,3,5-Trichlorobenzene	0.613	0.056	mg/Kg dry	0.560	ND	109	70-130			
1,1,1-Trichloroethane	0.509	0.056	mg/Kg dry	0.560	ND	90.9	70-130			
1,1,2-Trichloroethane	0.622	0.056	mg/Kg dry	0.560	ND	111	70-130			
Trichloroethylene	0.776	0.056	mg/Kg dry	0.560	0.168	109	70-130			
Trichlorofluoromethane (Freon 11)	0.401	0.11	mg/Kg dry	0.560	ND	71.6	70-130			
1,2,3-Trichloropropane	0.530	0.11	mg/Kg dry	0.560	ND	94.7	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.515	0.056	mg/Kg dry	0.560	ND	91.9	70-130			
<b>1,2,4-Trimethylbenzene</b>	10.4	0.056	mg/Kg dry	0.560	9.43	<b>172</b> *	70-130			MS-19
1,3,5-Trimethylbenzene	3.98	0.056	mg/Kg dry	0.560	3.26	130	70-130			MS-19
Vinyl Chloride	0.504	0.11	mg/Kg dry	0.560	ND	89.9	70-130			
m+p Xylene	1.89	0.11	mg/Kg dry	1.12	0.688	107	70-130			
o-Xylene	1.08	0.056	mg/Kg dry	0.560	0.462	110	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0229		mg/Kg dry	0.0280		81.9	70-130			
Surrogate: Toluene-d8	0.0288		mg/Kg dry	0.0280		103	70-130			
Surrogate: 4-Bromofluorobenzene	0.0257		mg/Kg dry	0.0280		91.8	70-130			
<b>Matrix Spike Dup (B214073-MSD1)</b>										
		<b>Source: 18J0071-01</b>			Prepared: 10/05/18 Analyzed: 10/08/18					
<b>Acetone</b>	8.96	2.8	mg/Kg dry	5.60	ND	<b>160</b> *	70-130	5.14	30	MS-15
Acrylonitrile	0.507	0.28	mg/Kg dry	0.560	ND	90.5	70-130	2.69	30	
tert-Amyl Methyl Ether (TAME)	0.530	0.028	mg/Kg dry	0.560	ND	94.7	70-130	2.30	30	
Benzene	0.534	0.056	mg/Kg dry	0.560	ND	95.4	70-130	2.69	30	
Bromobenzene	0.673	0.056	mg/Kg dry	0.560	ND	120	70-130	2.53	30	
Bromochloromethane	0.589	0.056	mg/Kg dry	0.560	ND	105	70-130	3.73	30	
Bromodichloromethane	0.541	0.056	mg/Kg dry	0.560	ND	96.5	70-130	5.43	30	
Bromoform	0.543	0.056	mg/Kg dry	0.560	ND	96.9	70-130	5.51	30	
<b>Bromomethane</b>	0.201	0.11	mg/Kg dry	0.560	ND	<b>35.9</b> *	70-130	27.6	30	MS-07A, V-20
2-Butanone (MEK)	7.23	1.1	mg/Kg dry	5.60	ND	129	70-130	0.864	30	
tert-Butyl Alcohol (TBA)	4.93	1.1	mg/Kg dry	5.60	ND	87.9	70-130	2.47	30	
<b>n-Butylbenzene</b>	3.20	0.056	mg/Kg dry	0.560	2.25	<b>169</b> *	70-130	4.32	30	MS-12
<b>sec-Butylbenzene</b>	1.73	0.056	mg/Kg dry	0.560	0.924	<b>144</b> *	70-130	5.53	30	MS-12
tert-Butylbenzene	0.800	0.056	mg/Kg dry	0.560	0.0969	126	70-130	7.55	30	
tert-Butyl Ethyl Ether (TBEE)	0.524	0.028	mg/Kg dry	0.560	ND	93.6	70-130	1.48	30	
Carbon Disulfide	0.460	0.17	mg/Kg dry	0.560	ND	82.1	70-130	2.64	30	
Carbon Tetrachloride	0.470	0.056	mg/Kg dry	0.560	ND	83.9	70-130	0.598	30	
Chlorobenzene	0.593	0.056	mg/Kg dry	0.560	ND	106	70-130	3.46	30	
Chlorodibromomethane	0.576	0.028	mg/Kg dry	0.560	ND	103	70-130	2.96	30	
<b>Chloroethane</b>	0.133	0.11	mg/Kg dry	0.560	ND	<b>23.7</b> *	70-130	3.32	30	MS-07A
Chloroform	0.504	0.11	mg/Kg dry	0.560	ND	89.9	70-130	0.111	30	
Chloromethane	0.454	0.11	mg/Kg dry	0.560	ND	81.0	70-130	14.1	30	
<b>2-Chlorotoluene</b>	1.32	0.056	mg/Kg dry	0.560	ND	<b>235</b> *	70-130	8.95	30	MS-15
<b>4-Chlorotoluene</b>	0.934	0.056	mg/Kg dry	0.560	ND	<b>167</b> *	70-130	3.41	30	MS-15
1,2-Dibromo-3-chloropropane (DBCP)	0.602	0.28	mg/Kg dry	0.560	ND	108	70-130	8.54	30	
1,2-Dibromoethane (EDB)	0.587	0.028	mg/Kg dry	0.560	ND	105	70-130	5.60	30	
Dibromomethane	0.535	0.056	mg/Kg dry	0.560	ND	95.5	70-130	2.98	30	
1,2-Dichlorobenzene	0.598	0.056	mg/Kg dry	0.560	ND	107	70-130	7.99	30	
1,3-Dichlorobenzene	0.630	0.056	mg/Kg dry	0.560	ND	112	70-130	3.90	30	
1,4-Dichlorobenzene	0.582	0.056	mg/Kg dry	0.560	ND	104	70-130	5.74	30	
trans-1,4-Dichloro-2-butene	0.519	0.11	mg/Kg dry	0.560	ND	92.6	70-130	17.2	30	

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B214073 - SW-846 5035/5030B</b>										
<b>Matrix Spike Dup (B214073-MSD1)</b>										
		<b>Source: 18J0071-01</b>			Prepared: 10/05/18 Analyzed: 10/08/18					
<b>Dichlorodifluoromethane (Freon 12)</b>	0.276	0.11	mg/Kg dry	0.560	ND	<b>49.3</b> *	70-130	8.73	30	V-05, MS-07A
1,1-Dichloroethane	0.545	0.056	mg/Kg dry	0.560	ND	97.3	70-130	3.04	30	
1,2-Dichloroethane	0.457	0.056	mg/Kg dry	0.560	ND	81.6	70-130	1.23	30	
1,1-Dichloroethylene	0.490	0.056	mg/Kg dry	0.560	ND	87.4	70-130	3.60	30	
cis-1,2-Dichloroethylene	1.68	0.056	mg/Kg dry	0.560	1.06	110	70-130	0.831	30	
trans-1,2-Dichloroethylene	0.532	0.056	mg/Kg dry	0.560	ND	95.0	70-130	5.33	30	
<b>Dichlorofluoromethane (Freon 21)</b>	0.230	0.056	mg/Kg dry	0.560	ND	<b>41.1</b> *	70-130	8.39	30	MS-07A
1,2-Dichloropropane	0.629	0.056	mg/Kg dry	0.560	ND	112	70-130	3.91	30	
1,3-Dichloropropane	0.552	0.028	mg/Kg dry	0.560	ND	98.6	70-130	1.95	30	
2,2-Dichloropropane	0.518	0.056	mg/Kg dry	0.560	ND	92.4	70-130	3.40	30	
1,1-Dichloropropene	0.523	0.11	mg/Kg dry	0.560	ND	93.3	70-130	2.64	30	
cis-1,3-Dichloropropene	0.584	0.028	mg/Kg dry	0.560	ND	104	70-130	3.62	30	
trans-1,3-Dichloropropene	0.597	0.028	mg/Kg dry	0.560	ND	106	70-130	1.13	30	
Diethyl Ether	0.494	0.11	mg/Kg dry	0.560	ND	88.1	70-130	6.27	30	
Difluorochloromethane (Freon 22)	0.434	0.056	mg/Kg dry	0.560	ND	77.4	70-130	14.5	30	
Diisopropyl Ether (DIPE)	0.522	0.028	mg/Kg dry	0.560	ND	93.2	70-130	4.51	30	
1,4-Dioxane	5.57	2.8	mg/Kg dry	5.60	ND	99.4	70-130	13.2	30	
Ethylbenzene	1.06	0.056	mg/Kg dry	0.560	0.399	119	70-130	5.13	30	
<b>Hexachlorobutadiene</b>	1.01	0.056	mg/Kg dry	0.560	ND	<b>181</b> *	70-130	9.39	30	MS-15
2-Hexanone (MBK)	7.24	0.56	mg/Kg dry	5.60	ND	129	70-130	2.85	30	
Isopropylbenzene (Cumene)	1.18	0.056	mg/Kg dry	0.560	0.466	128	70-130	3.66	30	MS-22
<b>p-Isopropyltoluene (p-Cymene)</b>	1.94	0.056	mg/Kg dry	0.560	1.11	<b>148</b> *	70-130	6.19	30	MS-12
<b>Methyl Acetate</b>	1.11	0.56	mg/Kg dry	0.560	ND	<b>199</b> *	70-130	3.36	30	L-02, MS-15, V-05
Methyl tert-Butyl Ether (MTBE)	0.490	0.056	mg/Kg dry	0.560	ND	87.5	70-130	0.570	30	
Methyl Cyclohexane	0.687	0.056	mg/Kg dry	0.560	0.0398	116	70-130	0.491	30	
Methylene Chloride	0.478	0.28	mg/Kg dry	0.560	ND	85.4	70-130	4.35	30	
4-Methyl-2-pentanone (MIBK)	5.48	0.56	mg/Kg dry	5.60	ND	97.9	70-130	7.07	30	
Naphthalene	2.01	0.11	mg/Kg dry	0.560	1.28	130	70-130	7.56	30	MS-22
n-Propylbenzene	2.11	0.056	mg/Kg dry	0.560	1.39	129	70-130	4.84	30	MS-22
Styrene	0.660	0.056	mg/Kg dry	0.560	ND	118	70-130	4.69	30	
1,1,1,2-Tetrachloroethane	0.636	0.056	mg/Kg dry	0.560	ND	114	70-130	9.60	30	
<b>1,1,2,2-Tetrachloroethane</b>	1.22	0.028	mg/Kg dry	0.560	ND	<b>218</b> *	70-130	2.18	30	MS-15
<b>Tetrachloroethylene</b>	11.1	0.056	mg/Kg dry	0.560	9.63	<b>269</b> *	70-130	0.950	30	MS-19
Tetrahydrofuran	0.511	0.56	mg/Kg dry	0.560	ND	91.2	70-130	2.78	30	J
Toluene	0.629	0.056	mg/Kg dry	0.560	0.0235	108	70-130	3.35	30	
1,2,3-Trichlorobenzene	0.609	0.28	mg/Kg dry	0.560	ND	109	70-130	2.04	30	
1,2,4-Trichlorobenzene	0.639	0.056	mg/Kg dry	0.560	ND	114	70-130	5.50	30	
1,3,5-Trichlorobenzene	0.665	0.056	mg/Kg dry	0.560	ND	119	70-130	8.24	30	
1,1,1-Trichloroethane	0.505	0.056	mg/Kg dry	0.560	ND	90.1	70-130	0.884	30	
1,1,2-Trichloroethane	0.601	0.056	mg/Kg dry	0.560	ND	107	70-130	3.48	30	
Trichloroethylene	0.789	0.056	mg/Kg dry	0.560	0.168	111	70-130	1.65	30	
<b>Trichlorofluoromethane (Freon 11)</b>	0.375	0.11	mg/Kg dry	0.560	ND	<b>67.0</b> *	70-130	6.64	30	MS-22
1,2,3-Trichloropropane	0.574	0.11	mg/Kg dry	0.560	ND	102	70-130	7.91	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.508	0.056	mg/Kg dry	0.560	ND	90.7	70-130	1.31	30	
<b>1,2,4-Trimethylbenzene</b>	10.9	0.056	mg/Kg dry	0.560	9.43	<b>269</b> *	70-130	5.09	30	MS-19
<b>1,3,5-Trimethylbenzene</b>	4.08	0.056	mg/Kg dry	0.560	3.26	<b>148</b> *	70-130	2.49	30	MS-19
Vinyl Chloride	0.468	0.11	mg/Kg dry	0.560	ND	83.6	70-130	7.26	30	
m+p Xylene	1.96	0.11	mg/Kg dry	1.12	0.688	114	70-130	3.69	20	
o-Xylene	1.10	0.056	mg/Kg dry	0.560	0.462	115	70-130	2.31	30	
Surrogate: 1,2-Dichloroethane-d4	0.0225		mg/Kg dry	0.0280		80.3	70-130			
Surrogate: Toluene-d8	0.0288		mg/Kg dry	0.0280		103	70-130			



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**QUALITY CONTROL**

**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B214073 - SW-846 5035/5030B**

**Matrix Spike Dup (B214073-MSD1)**

**Source: 18J0071-01**

Prepared: 10/05/18 Analyzed: 10/08/18

Surrogate: 4-Bromofluorobenzene	0.0260		mg/Kg dry	0.0280		92.7	70-130			
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**Batch B214232 - SW-846 5035**

**Blank (B214232-BLK1)**

Prepared & Analyzed: 10/08/18

Acetone	ND	0.10	mg/Kg wet							
Acrylonitrile	ND	0.0060	mg/Kg wet							
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg wet							
Benzene	ND	0.0020	mg/Kg wet							
Bromobenzene	ND	0.0020	mg/Kg wet							
Bromochloromethane	ND	0.0020	mg/Kg wet							
Bromodichloromethane	ND	0.0020	mg/Kg wet							
Bromoform	ND	0.0020	mg/Kg wet							
Bromomethane	ND	0.010	mg/Kg wet							
2-Butanone (MEK)	ND	0.040	mg/Kg wet							
tert-Butyl Alcohol (TBA)	ND	0.040	mg/Kg wet							
n-Butylbenzene	ND	0.0020	mg/Kg wet							
sec-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg wet							
Carbon Disulfide	ND	0.0060	mg/Kg wet							
Carbon Tetrachloride	ND	0.0020	mg/Kg wet							
Chlorobenzene	ND	0.0020	mg/Kg wet							
Chlorodibromomethane	ND	0.0010	mg/Kg wet							
Chloroethane	ND	0.020	mg/Kg wet							
Chloroform	ND	0.0040	mg/Kg wet							
Chloromethane	ND	0.010	mg/Kg wet							
2-Chlorotoluene	ND	0.0020	mg/Kg wet							
4-Chlorotoluene	ND	0.0020	mg/Kg wet							
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg wet							
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg wet							
Dibromomethane	ND	0.0020	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.0020	mg/Kg wet							
trans-1,4-Dichloro-2-butene	ND	0.0040	mg/Kg wet							
Dichlorodifluoromethane (Freon 12)	ND	0.020	mg/Kg wet							
1,1-Dichloroethane	ND	0.0020	mg/Kg wet							
1,2-Dichloroethane	ND	0.0020	mg/Kg wet							
1,1-Dichloroethylene	ND	0.0040	mg/Kg wet							
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
1,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,3-Dichloropropane	ND	0.0010	mg/Kg wet							
2,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,1-Dichloropropene	ND	0.0020	mg/Kg wet							
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
Diethyl Ether	ND	0.020	mg/Kg wet							
Diisopropyl Ether (DIPE)	ND	0.0010	mg/Kg wet							
1,4-Dioxane	ND	0.10	mg/Kg wet							
Ethylbenzene	ND	0.0020	mg/Kg wet							

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B214232 - SW-846 5035

Blank (B214232-BLK1)

Prepared & Analyzed: 10/08/18

Hexachlorobutadiene	ND	0.0020	mg/Kg wet							
2-Hexanone (MBK)	ND	0.020	mg/Kg wet							
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg wet							
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg wet							
Methyl Acetate	ND	0.0020	mg/Kg wet							
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg wet							
Methyl Cyclohexane	ND	0.0020	mg/Kg wet							
Methylene Chloride	ND	0.020	mg/Kg wet							
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg wet							
Naphthalene	ND	0.0040	mg/Kg wet							
n-Propylbenzene	ND	0.0020	mg/Kg wet							
Styrene	ND	0.0020	mg/Kg wet							
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg wet							
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg wet							
Tetrachloroethylene	ND	0.0020	mg/Kg wet							
Tetrahydrofuran	ND	0.010	mg/Kg wet							
Toluene	ND	0.0020	mg/Kg wet							
1,2,3-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,3,5-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,1,1-Trichloroethane	ND	0.0020	mg/Kg wet							
1,1,2-Trichloroethane	ND	0.0020	mg/Kg wet							
Trichloroethylene	ND	0.0020	mg/Kg wet							
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg wet							
1,2,3-Trichloropropane	ND	0.0020	mg/Kg wet							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.010	mg/Kg wet							
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg wet							
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg wet							
Vinyl Chloride	ND	0.010	mg/Kg wet							
m+p Xylene	ND	0.0040	mg/Kg wet							
o-Xylene	ND	0.0020	mg/Kg wet							
Surrogate: 1,2-Dichloroethane-d4	0.0534		mg/Kg wet	0.0500		107	70-130			
Surrogate: Toluene-d8	0.0499		mg/Kg wet	0.0500		99.9	70-130			
Surrogate: 4-Bromofluorobenzene	0.0500		mg/Kg wet	0.0500		100	70-130			

LCS (B214232-BS1)

Prepared & Analyzed: 10/08/18

Acetone	0.275	0.10	mg/Kg wet	0.200		138	70-160			†
Acrylonitrile	0.0191	0.0060	mg/Kg wet	0.0200		95.7	70-130			
tert-Amyl Methyl Ether (TAME)	0.0199	0.0010	mg/Kg wet	0.0200		99.6	70-130			
Benzene	0.0188	0.0020	mg/Kg wet	0.0200		94.2	70-130			
Bromobenzene	0.0186	0.0020	mg/Kg wet	0.0200		93.1	70-130			
Bromochloromethane	0.0219	0.0020	mg/Kg wet	0.0200		109	70-130			
Bromodichloromethane	0.0185	0.0020	mg/Kg wet	0.0200		92.6	70-130			
Bromoform	0.0194	0.0020	mg/Kg wet	0.0200		96.8	70-130			
Bromomethane	0.0110	0.010	mg/Kg wet	0.0200		55.1	40-130		V-34	†
2-Butanone (MEK)	0.239	0.040	mg/Kg wet	0.200		120	70-160			†
tert-Butyl Alcohol (TBA)	0.199	0.040	mg/Kg wet	0.200		99.7	40-130			†
n-Butylbenzene	0.0187	0.0020	mg/Kg wet	0.0200		93.5	70-130			
sec-Butylbenzene	0.0200	0.0020	mg/Kg wet	0.0200		99.9	70-130			
tert-Butylbenzene	0.0181	0.0020	mg/Kg wet	0.0200		90.6	70-160			†
tert-Butyl Ethyl Ether (TBEE)	0.0201	0.0010	mg/Kg wet	0.0200		100	70-130			
Carbon Disulfide	0.0196	0.0060	mg/Kg wet	0.0200		97.8	70-130			



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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B214232 - SW-846 5035</b>										
<b>LCS (B214232-BS1)</b>										
Prepared & Analyzed: 10/08/18										
Carbon Tetrachloride	0.0203	0.0020	mg/Kg wet	0.0200		102	70-130			
Chlorobenzene	0.0196	0.0020	mg/Kg wet	0.0200		98.0	70-130			
Chlorodibromomethane	0.0202	0.0010	mg/Kg wet	0.0200		101	70-130			
Chloroethane	0.0166	0.020	mg/Kg wet	0.0200		82.9	70-130			J
Chloroform	0.0194	0.0040	mg/Kg wet	0.0200		97.2	70-130			
Chloromethane	0.0177	0.010	mg/Kg wet	0.0200		88.3	70-130			
2-Chlorotoluene	0.0186	0.0020	mg/Kg wet	0.0200		93.1	70-130			
4-Chlorotoluene	0.0194	0.0020	mg/Kg wet	0.0200		97.2	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	0.0226	0.0020	mg/Kg wet	0.0200		113	70-130			
1,2-Dibromoethane (EDB)	0.0200	0.0010	mg/Kg wet	0.0200		100	70-130			
Dibromomethane	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130			
1,2-Dichlorobenzene	0.0198	0.0020	mg/Kg wet	0.0200		98.8	70-130			
1,3-Dichlorobenzene	0.0195	0.0020	mg/Kg wet	0.0200		97.7	70-130			
1,4-Dichlorobenzene	0.0190	0.0020	mg/Kg wet	0.0200		94.9	70-130			
trans-1,4-Dichloro-2-butene	0.0191	0.0040	mg/Kg wet	0.0200		95.5	70-130			
Dichlorodifluoromethane (Freon 12)	0.0172	0.020	mg/Kg wet	0.0200		85.9	40-160			J †
1,1-Dichloroethane	0.0198	0.0020	mg/Kg wet	0.0200		98.8	70-130			
1,2-Dichloroethane	0.0196	0.0020	mg/Kg wet	0.0200		98.1	70-130			
1,1-Dichloroethylene	0.0184	0.0040	mg/Kg wet	0.0200		92.2	70-130			
cis-1,2-Dichloroethylene	0.0187	0.0020	mg/Kg wet	0.0200		93.4	70-130			
trans-1,2-Dichloroethylene	0.0199	0.0020	mg/Kg wet	0.0200		99.4	70-130			
1,2-Dichloropropane	0.0196	0.0020	mg/Kg wet	0.0200		97.9	70-130			
1,3-Dichloropropane	0.0192	0.0010	mg/Kg wet	0.0200		96.1	70-130			
2,2-Dichloropropane	0.0185	0.0020	mg/Kg wet	0.0200		92.7	70-130			
1,1-Dichloropropene	0.0200	0.0020	mg/Kg wet	0.0200		99.9	70-130			
cis-1,3-Dichloropropene	0.0206	0.0010	mg/Kg wet	0.0200		103	70-130			
trans-1,3-Dichloropropene	0.0203	0.0010	mg/Kg wet	0.0200		101	70-130			
Diethyl Ether	0.0195	0.020	mg/Kg wet	0.0200		97.4	70-130			J
Diisopropyl Ether (DIPE)	0.0195	0.0010	mg/Kg wet	0.0200		97.7	70-130			
1,4-Dioxane	0.228	0.10	mg/Kg wet	0.200		114	40-160			V-36 †
Ethylbenzene	0.0185	0.0020	mg/Kg wet	0.0200		92.5	70-130			
Hexachlorobutadiene	0.0200	0.0020	mg/Kg wet	0.0200		99.9	70-160			
2-Hexanone (MBK)	0.220	0.020	mg/Kg wet	0.200		110	70-160			†
Isopropylbenzene (Cumene)	0.0205	0.0020	mg/Kg wet	0.0200		103	70-130			
p-Isopropyltoluene (p-Cymene)	0.0180	0.0020	mg/Kg wet	0.0200		90.2	70-130			
<b>Methyl Acetate</b>	0.0829	0.0020	mg/Kg wet	0.0200		<b>414</b> *	70-130			L-02
Methyl tert-Butyl Ether (MTBE)	0.0208	0.0040	mg/Kg wet	0.0200		104	70-130			
Methyl Cyclohexane	0.0175	0.0020	mg/Kg wet	0.0200		87.7	70-130			
Methylene Chloride	0.0205	0.020	mg/Kg wet	0.0200		102	40-160			†
4-Methyl-2-pentanone (MIBK)	0.214	0.020	mg/Kg wet	0.200		107	70-160			†
Naphthalene	0.0191	0.0040	mg/Kg wet	0.0200		95.7	40-130			†
n-Propylbenzene	0.0191	0.0020	mg/Kg wet	0.0200		95.4	70-130			
Styrene	0.0192	0.0020	mg/Kg wet	0.0200		96.1	70-130			
1,1,1,2-Tetrachloroethane	0.0197	0.0020	mg/Kg wet	0.0200		98.5	70-130			
1,1,2,2-Tetrachloroethane	0.0195	0.0010	mg/Kg wet	0.0200		97.5	70-130			
Tetrachloroethylene	0.0195	0.0020	mg/Kg wet	0.0200		97.7	70-130			
Tetrahydrofuran	0.0174	0.010	mg/Kg wet	0.0200		87.1	70-130			
Toluene	0.0177	0.0020	mg/Kg wet	0.0200		88.5	70-130			
1,2,3-Trichlorobenzene	0.0196	0.0020	mg/Kg wet	0.0200		97.8	70-130			
1,2,4-Trichlorobenzene	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130			
1,3,5-Trichlorobenzene	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130			
1,1,1-Trichloroethane	0.0186	0.0020	mg/Kg wet	0.0200		93.1	70-130			

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B214232 - SW-846 5035</b>										
<b>LCS (B214232-BS1)</b>										
Prepared & Analyzed: 10/08/18										
1,1,2-Trichloroethane	0.0193	0.0020	mg/Kg wet	0.0200		96.4	70-130			
Trichloroethylene	0.0192	0.0020	mg/Kg wet	0.0200		96.2	70-130			
Trichlorofluoromethane (Freon 11)	0.0174	0.010	mg/Kg wet	0.0200		87.1	70-130			
1,2,3-Trichloropropane	0.0196	0.0020	mg/Kg wet	0.0200		97.8	70-130			
1,1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0189	0.010	mg/Kg wet	0.0200		94.6	70-130			
1,2,4-Trimethylbenzene	0.0178	0.0020	mg/Kg wet	0.0200		89.1	70-130			
1,3,5-Trimethylbenzene	0.0192	0.0020	mg/Kg wet	0.0200		95.8	70-130			
Vinyl Chloride	0.0176	0.010	mg/Kg wet	0.0200		88.1	40-130			†
m+p Xylene	0.0370	0.0040	mg/Kg wet	0.0400		92.4	70-130			
o-Xylene	0.0189	0.0020	mg/Kg wet	0.0200		94.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0517		mg/Kg wet	0.0500		103	70-130			
Surrogate: Toluene-d8	0.0497		mg/Kg wet	0.0500		99.3	70-130			
Surrogate: 4-Bromofluorobenzene	0.0503		mg/Kg wet	0.0500		101	70-130			
<b>LCS Dup (B214232-BS1)</b>										
Prepared & Analyzed: 10/08/18										
Acetone	0.313	0.10	mg/Kg wet	0.200		157	70-160	13.0	25	†
Acrylonitrile	0.0203	0.0060	mg/Kg wet	0.0200		101	70-130	5.78	25	
tert-Amyl Methyl Ether (TAME)	0.0212	0.0010	mg/Kg wet	0.0200		106	70-130	6.41	25	
Benzene	0.0200	0.0020	mg/Kg wet	0.0200		100	70-130	5.97	25	
Bromobenzene	0.0194	0.0020	mg/Kg wet	0.0200		97.1	70-130	4.21	25	
Bromochloromethane	0.0222	0.0020	mg/Kg wet	0.0200		111	70-130	1.36	25	
Bromodichloromethane	0.0189	0.0020	mg/Kg wet	0.0200		94.7	70-130	2.24	25	
Bromoform	0.0201	0.0020	mg/Kg wet	0.0200		101	70-130	3.95	25	
Bromomethane	0.0114	0.010	mg/Kg wet	0.0200		57.2	40-130	3.74	25	V-34 †
2-Butanone (MEK)	0.264	0.040	mg/Kg wet	0.200		132	70-160	9.94	25	†
tert-Butyl Alcohol (TBA)	0.210	0.040	mg/Kg wet	0.200		105	40-130	5.27	25	†
n-Butylbenzene	0.0197	0.0020	mg/Kg wet	0.0200		98.3	70-130	5.01	25	
sec-Butylbenzene	0.0208	0.0020	mg/Kg wet	0.0200		104	70-130	3.83	25	
tert-Butylbenzene	0.0200	0.0020	mg/Kg wet	0.0200		100	70-160	9.96	25	†
tert-Butyl Ethyl Ether (TBEE)	0.0210	0.0010	mg/Kg wet	0.0200		105	70-130	4.48	25	
Carbon Disulfide	0.0204	0.0060	mg/Kg wet	0.0200		102	70-130	4.01	25	
Carbon Tetrachloride	0.0209	0.0020	mg/Kg wet	0.0200		104	70-130	2.81	25	
Chlorobenzene	0.0197	0.0020	mg/Kg wet	0.0200		98.6	70-130	0.610	25	
Chlorodibromomethane	0.0218	0.0010	mg/Kg wet	0.0200		109	70-130	7.82	25	
Chloroethane	0.0179	0.020	mg/Kg wet	0.0200		89.4	70-130	7.54	25	J
Chloroform	0.0201	0.0040	mg/Kg wet	0.0200		100	70-130	3.24	25	
Chloromethane	0.0187	0.010	mg/Kg wet	0.0200		93.7	70-130	5.93	25	
2-Chlorotoluene	0.0197	0.0020	mg/Kg wet	0.0200		98.6	70-130	5.74	25	
4-Chlorotoluene	0.0196	0.0020	mg/Kg wet	0.0200		98.0	70-130	0.820	25	
1,2-Dibromo-3-chloropropane (DBCP)	0.0222	0.0020	mg/Kg wet	0.0200		111	70-130	1.69	25	
1,2-Dibromoethane (EDB)	0.0209	0.0010	mg/Kg wet	0.0200		105	70-130	4.59	25	
Dibromomethane	0.0200	0.0020	mg/Kg wet	0.0200		100	70-130	1.88	25	
1,2-Dichlorobenzene	0.0210	0.0020	mg/Kg wet	0.0200		105	70-130	5.89	25	
1,3-Dichlorobenzene	0.0205	0.0020	mg/Kg wet	0.0200		103	70-130	4.89	25	
1,4-Dichlorobenzene	0.0196	0.0020	mg/Kg wet	0.0200		97.9	70-130	3.11	25	
trans-1,4-Dichloro-2-butene	0.0195	0.0040	mg/Kg wet	0.0200		97.3	70-130	1.87	25	
Dichlorodifluoromethane (Freon 12)	0.0170	0.020	mg/Kg wet	0.0200		85.1	40-160	0.936	25	J †
1,1-Dichloroethane	0.0198	0.0020	mg/Kg wet	0.0200		98.8	70-130	0.00	25	
1,2-Dichloroethane	0.0200	0.0020	mg/Kg wet	0.0200		100	70-130	2.12	25	
1,1-Dichloroethylene	0.0191	0.0040	mg/Kg wet	0.0200		95.5	70-130	3.52	25	
cis-1,2-Dichloroethylene	0.0197	0.0020	mg/Kg wet	0.0200		98.7	70-130	5.52	25	
trans-1,2-Dichloroethylene	0.0203	0.0020	mg/Kg wet	0.0200		102	70-130	2.09	25	

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B214232 - SW-846 5035</b>										
<b>LCS Dup (B214232-BSD1)</b>										
				Prepared & Analyzed: 10/08/18						
1,2-Dichloropropane	0.0198	0.0020	mg/Kg wet	0.0200		98.8	70-130	0.915	25	
1,3-Dichloropropane	0.0204	0.0010	mg/Kg wet	0.0200		102	70-130	6.05	25	
2,2-Dichloropropane	0.0193	0.0020	mg/Kg wet	0.0200		96.3	70-130	3.81	25	
1,1-Dichloropropene	0.0200	0.0020	mg/Kg wet	0.0200		100	70-130	0.100	25	
cis-1,3-Dichloropropene	0.0204	0.0010	mg/Kg wet	0.0200		102	70-130	1.27	25	
trans-1,3-Dichloropropene	0.0202	0.0010	mg/Kg wet	0.0200		101	70-130	0.197	25	
Diethyl Ether	0.0220	0.020	mg/Kg wet	0.0200		110	70-130	12.2	25	
Diisopropyl Ether (DIPE)	0.0205	0.0010	mg/Kg wet	0.0200		102	70-130	4.70	25	
1,4-Dioxane	0.259	0.10	mg/Kg wet	0.200		130	40-160	12.8	50	V-36 † ‡
Ethylbenzene	0.0197	0.0020	mg/Kg wet	0.0200		98.6	70-130	6.38	25	
Hexachlorobutadiene	0.0216	0.0020	mg/Kg wet	0.0200		108	70-160	7.98	25	
2-Hexanone (MBK)	0.239	0.020	mg/Kg wet	0.200		120	70-160	8.10	25	†
Isopropylbenzene (Cumene)	0.0208	0.0020	mg/Kg wet	0.0200		104	70-130	1.45	25	
p-Isopropyltoluene (p-Cymene)	0.0189	0.0020	mg/Kg wet	0.0200		94.5	70-130	4.66	25	
<b>Methyl Acetate</b>	0.0885	0.0020	mg/Kg wet	0.0200		<b>442</b> *	70-130	6.54	25	L-02
Methyl tert-Butyl Ether (MTBE)	0.0218	0.0040	mg/Kg wet	0.0200		109	70-130	4.60	25	
Methyl Cyclohexane	0.0190	0.0020	mg/Kg wet	0.0200		94.8	70-130	7.78	25	
Methylene Chloride	0.0223	0.020	mg/Kg wet	0.0200		112	40-160	8.50	25	†
4-Methyl-2-pentanone (MIBK)	0.225	0.020	mg/Kg wet	0.200		112	70-160	4.99	25	†
Naphthalene	0.0195	0.0040	mg/Kg wet	0.0200		97.7	40-130	2.07	25	†
n-Propylbenzene	0.0201	0.0020	mg/Kg wet	0.0200		101	70-130	5.31	25	
Styrene	0.0191	0.0020	mg/Kg wet	0.0200		95.5	70-130	0.626	25	
1,1,1,2-Tetrachloroethane	0.0195	0.0020	mg/Kg wet	0.0200		97.7	70-130	0.815	25	
1,1,2,2-Tetrachloroethane	0.0200	0.0010	mg/Kg wet	0.0200		99.8	70-130	2.33	25	
Tetrachloroethylene	0.0199	0.0020	mg/Kg wet	0.0200		99.4	70-130	1.73	25	
Tetrahydrofuran	0.0205	0.010	mg/Kg wet	0.0200		103	70-130	16.4	25	
Toluene	0.0191	0.0020	mg/Kg wet	0.0200		95.5	70-130	7.61	25	
1,2,3-Trichlorobenzene	0.0196	0.0020	mg/Kg wet	0.0200		98.1	70-130	0.306	25	
1,2,4-Trichlorobenzene	0.0221	0.0020	mg/Kg wet	0.0200		110	70-130	7.90	25	
1,3,5-Trichlorobenzene	0.0209	0.0020	mg/Kg wet	0.0200		104	70-130	1.45	25	
1,1,1-Trichloroethane	0.0195	0.0020	mg/Kg wet	0.0200		97.6	70-130	4.72	25	
1,1,2-Trichloroethane	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130	6.62	25	
Trichloroethylene	0.0195	0.0020	mg/Kg wet	0.0200		97.3	70-130	1.14	25	
Trichlorofluoromethane (Freon 11)	0.0179	0.010	mg/Kg wet	0.0200		89.4	70-130	2.61	25	
1,2,3-Trichloropropane	0.0192	0.0020	mg/Kg wet	0.0200		95.9	70-130	1.96	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0191	0.010	mg/Kg wet	0.0200		95.5	70-130	0.947	25	
1,2,4-Trimethylbenzene	0.0189	0.0020	mg/Kg wet	0.0200		94.5	70-130	5.88	25	
1,3,5-Trimethylbenzene	0.0193	0.0020	mg/Kg wet	0.0200		96.4	70-130	0.624	25	
Vinyl Chloride	0.0179	0.010	mg/Kg wet	0.0200		89.5	40-130	1.58	25	†
m+p Xylene	0.0380	0.0040	mg/Kg wet	0.0400		94.9	70-130	2.62	25	
o-Xylene	0.0192	0.0020	mg/Kg wet	0.0200		95.9	70-130	1.68	25	
Surrogate: 1,2-Dichloroethane-d4	0.0528		mg/Kg wet	0.0500		106	70-130			
Surrogate: Toluene-d8	0.0503		mg/Kg wet	0.0500		101	70-130			
Surrogate: 4-Bromofluorobenzene	0.0496		mg/Kg wet	0.0500		99.2	70-130			

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**QUALITY CONTROL**

**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B214252 - SW-846 5035**

**Blank (B214252-BLK1)**

Prepared & Analyzed: 10/08/18

Acetone	ND	0.10	mg/Kg wet							
Acrylonitrile	ND	0.0060	mg/Kg wet							
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg wet							
Benzene	ND	0.0020	mg/Kg wet							
Bromobenzene	ND	0.0020	mg/Kg wet							
Bromochloromethane	ND	0.0020	mg/Kg wet							
Bromodichloromethane	ND	0.0020	mg/Kg wet							
Bromoform	ND	0.0020	mg/Kg wet							
Bromomethane	ND	0.010	mg/Kg wet							
2-Butanone (MEK)	ND	0.040	mg/Kg wet							
tert-Butyl Alcohol (TBA)	ND	0.040	mg/Kg wet							
n-Butylbenzene	ND	0.0020	mg/Kg wet							
sec-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg wet							
Carbon Disulfide	ND	0.0060	mg/Kg wet							
Carbon Tetrachloride	ND	0.0020	mg/Kg wet							
Chlorobenzene	ND	0.0020	mg/Kg wet							
Chlorodibromomethane	ND	0.0010	mg/Kg wet							
Chloroethane	ND	0.020	mg/Kg wet							
Chloroform	ND	0.0040	mg/Kg wet							
Chloromethane	ND	0.010	mg/Kg wet							
2-Chlorotoluene	ND	0.0020	mg/Kg wet							
4-Chlorotoluene	ND	0.0020	mg/Kg wet							
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg wet							
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg wet							
Dibromomethane	ND	0.0020	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.0020	mg/Kg wet							
trans-1,4-Dichloro-2-butene	ND	0.0040	mg/Kg wet							
Dichlorodifluoromethane (Freon 12)	ND	0.020	mg/Kg wet							
1,1-Dichloroethane	ND	0.0020	mg/Kg wet							
1,2-Dichloroethane	ND	0.0020	mg/Kg wet							
1,1-Dichloroethylene	ND	0.0040	mg/Kg wet							
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
1,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,3-Dichloropropane	ND	0.0010	mg/Kg wet							
2,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,1-Dichloropropene	ND	0.0020	mg/Kg wet							
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
Diethyl Ether	ND	0.020	mg/Kg wet							
Diisopropyl Ether (DIPE)	ND	0.0010	mg/Kg wet							
1,4-Dioxane	ND	0.10	mg/Kg wet							
Ethylbenzene	ND	0.0020	mg/Kg wet							
Hexachlorobutadiene	ND	0.0020	mg/Kg wet							
2-Hexanone (MBK)	ND	0.020	mg/Kg wet							
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg wet							
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg wet							
Methyl Acetate	ND	0.0020	mg/Kg wet							

R-05, V-34

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B214252 - SW-846 5035

Blank (B214252-BLK1)

Prepared & Analyzed: 10/08/18

Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg wet							
Methyl Cyclohexane	ND	0.0020	mg/Kg wet							
Methylene Chloride	ND	0.020	mg/Kg wet							
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg wet							
Naphthalene	ND	0.0040	mg/Kg wet							
n-Propylbenzene	ND	0.0020	mg/Kg wet							
Styrene	ND	0.0020	mg/Kg wet							
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg wet							
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg wet							
Tetrachloroethylene	ND	0.0020	mg/Kg wet							
Tetrahydrofuran	ND	0.010	mg/Kg wet							
Toluene	ND	0.0020	mg/Kg wet							
1,2,3-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,3,5-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,1,1-Trichloroethane	ND	0.0020	mg/Kg wet							
1,1,2-Trichloroethane	ND	0.0020	mg/Kg wet							
Trichloroethylene	ND	0.0020	mg/Kg wet							
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg wet							
1,2,3-Trichloropropane	ND	0.0020	mg/Kg wet							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.010	mg/Kg wet							
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg wet							
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg wet							
Vinyl Chloride	ND	0.010	mg/Kg wet							
m+p Xylene	ND	0.0040	mg/Kg wet							
o-Xylene	ND	0.0020	mg/Kg wet							
Surrogate: 1,2-Dichloroethane-d4	0.0508		mg/Kg wet	0.0500		102	70-130			
Surrogate: Toluene-d8	0.0489		mg/Kg wet	0.0500		97.7	70-130			
Surrogate: 4-Bromofluorobenzene	0.0481		mg/Kg wet	0.0500		96.3	70-130			

LCS (B214252-BS1)

Prepared & Analyzed: 10/08/18

Acetone	0.216	0.10	mg/Kg wet	0.200		108	70-160			†
Acrylonitrile	0.0179	0.0060	mg/Kg wet	0.0200		89.5	70-130			
tert-Amyl Methyl Ether (TAME)	0.0183	0.0010	mg/Kg wet	0.0200		91.7	70-130			
Benzene	0.0180	0.0020	mg/Kg wet	0.0200		90.1	70-130			
Bromobenzene	0.0197	0.0020	mg/Kg wet	0.0200		98.5	70-130			
Bromochloromethane	0.0191	0.0020	mg/Kg wet	0.0200		95.7	70-130			
Bromodichloromethane	0.0176	0.0020	mg/Kg wet	0.0200		88.2	70-130			
Bromoform	0.0210	0.0020	mg/Kg wet	0.0200		105	70-130			
Bromomethane	0.00842	0.010	mg/Kg wet	0.0200		42.1	40-130	R-05, V-34, J		†
2-Butanone (MEK)	0.210	0.040	mg/Kg wet	0.200		105	70-160			†
tert-Butyl Alcohol (TBA)	0.188	0.040	mg/Kg wet	0.200		94.1	40-130			†
n-Butylbenzene	0.0197	0.0020	mg/Kg wet	0.0200		98.4	70-130			
sec-Butylbenzene	0.0201	0.0020	mg/Kg wet	0.0200		100	70-130			
tert-Butylbenzene	0.0199	0.0020	mg/Kg wet	0.0200		99.6	70-160			†
tert-Butyl Ethyl Ether (TBEE)	0.0187	0.0010	mg/Kg wet	0.0200		93.3	70-130			
Carbon Disulfide	0.0180	0.0060	mg/Kg wet	0.0200		90.2	70-130			
Carbon Tetrachloride	0.0187	0.0020	mg/Kg wet	0.0200		93.4	70-130			
Chlorobenzene	0.0203	0.0020	mg/Kg wet	0.0200		101	70-130			
Chlorodibromomethane	0.0199	0.0010	mg/Kg wet	0.0200		99.6	70-130			
Chloroethane	0.0155	0.020	mg/Kg wet	0.0200		77.7	70-130			
Chloroform	0.0181	0.0040	mg/Kg wet	0.0200		90.6	70-130			

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B214252 - SW-846 5035</b>										
<b>LCS (B214252-BS1)</b>										
Prepared & Analyzed: 10/08/18										
Chloromethane	0.0164	0.010	mg/Kg wet	0.0200		81.9	70-130			
2-Chlorotoluene	0.0192	0.0020	mg/Kg wet	0.0200		96.0	70-130			
4-Chlorotoluene	0.0201	0.0020	mg/Kg wet	0.0200		101	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	0.0218	0.0020	mg/Kg wet	0.0200		109	70-130			V-20
1,2-Dibromoethane (EDB)	0.0194	0.0010	mg/Kg wet	0.0200		97.2	70-130			
Dibromomethane	0.0191	0.0020	mg/Kg wet	0.0200		95.4	70-130			
1,2-Dichlorobenzene	0.0211	0.0020	mg/Kg wet	0.0200		106	70-130			
1,3-Dichlorobenzene	0.0213	0.0020	mg/Kg wet	0.0200		107	70-130			
1,4-Dichlorobenzene	0.0201	0.0020	mg/Kg wet	0.0200		101	70-130			
trans-1,4-Dichloro-2-butene	0.0193	0.0040	mg/Kg wet	0.0200		96.4	70-130			
Dichlorodifluoromethane (Freon 12)	0.0155	0.020	mg/Kg wet	0.0200		77.5	40-160			J †
1,1-Dichloroethane	0.0180	0.0020	mg/Kg wet	0.0200		89.8	70-130			
1,2-Dichloroethane	0.0191	0.0020	mg/Kg wet	0.0200		95.3	70-130			
1,1-Dichloroethylene	0.0166	0.0040	mg/Kg wet	0.0200		83.1	70-130			
cis-1,2-Dichloroethylene	0.0165	0.0020	mg/Kg wet	0.0200		82.3	70-130			
trans-1,2-Dichloroethylene	0.0180	0.0020	mg/Kg wet	0.0200		90.2	70-130			
1,2-Dichloropropane	0.0191	0.0020	mg/Kg wet	0.0200		95.3	70-130			
1,3-Dichloropropane	0.0187	0.0010	mg/Kg wet	0.0200		93.4	70-130			
2,2-Dichloropropane	0.0166	0.0020	mg/Kg wet	0.0200		83.1	70-130			
1,1-Dichloropropene	0.0172	0.0020	mg/Kg wet	0.0200		86.1	70-130			
cis-1,3-Dichloropropene	0.0188	0.0010	mg/Kg wet	0.0200		94.1	70-130			
trans-1,3-Dichloropropene	0.0187	0.0010	mg/Kg wet	0.0200		93.6	70-130			
Diethyl Ether	0.0195	0.020	mg/Kg wet	0.0200		97.5	70-130			J
Diisopropyl Ether (DIPE)	0.0183	0.0010	mg/Kg wet	0.0200		91.6	70-130			
1,4-Dioxane	0.194	0.10	mg/Kg wet	0.200		97.2	40-160			V-36 †
Ethylbenzene	0.0189	0.0020	mg/Kg wet	0.0200		94.5	70-130			
Hexachlorobutadiene	0.0205	0.0020	mg/Kg wet	0.0200		102	70-160			†
2-Hexanone (MBK)	0.216	0.020	mg/Kg wet	0.200		108	70-160			†
Isopropylbenzene (Cumene)	0.0209	0.0020	mg/Kg wet	0.0200		104	70-130			
p-Isopropyltoluene (p-Cymene)	0.0193	0.0020	mg/Kg wet	0.0200		96.6	70-130			
<b>Methyl Acetate</b>	0.0770	0.0020	mg/Kg wet	0.0200		<b>385</b> *	70-130			L-02
Methyl tert-Butyl Ether (MTBE)	0.0193	0.0040	mg/Kg wet	0.0200		96.7	70-130			
Methyl Cyclohexane	0.0177	0.0020	mg/Kg wet	0.0200		88.3	70-130			
Methylene Chloride	0.0189	0.020	mg/Kg wet	0.0200		94.6	40-160			J †
4-Methyl-2-pentanone (MIBK)	0.208	0.020	mg/Kg wet	0.200		104	70-160			†
Naphthalene	0.0205	0.0040	mg/Kg wet	0.0200		102	40-130			†
n-Propylbenzene	0.0197	0.0020	mg/Kg wet	0.0200		98.6	70-130			
Styrene	0.0197	0.0020	mg/Kg wet	0.0200		98.4	70-130			
1,1,1,2-Tetrachloroethane	0.0212	0.0020	mg/Kg wet	0.0200		106	70-130			
1,1,2,2-Tetrachloroethane	0.0208	0.0010	mg/Kg wet	0.0200		104	70-130			
Tetrachloroethylene	0.0180	0.0020	mg/Kg wet	0.0200		90.1	70-130			
Tetrahydrofuran	0.0180	0.010	mg/Kg wet	0.0200		90.2	70-130			
Toluene	0.0174	0.0020	mg/Kg wet	0.0200		87.0	70-130			
1,2,3-Trichlorobenzene	0.0211	0.0020	mg/Kg wet	0.0200		106	70-130			
1,2,4-Trichlorobenzene	0.0216	0.0020	mg/Kg wet	0.0200		108	70-130			
1,3,5-Trichlorobenzene	0.0215	0.0020	mg/Kg wet	0.0200		108	70-130			
1,1,1-Trichloroethane	0.0168	0.0020	mg/Kg wet	0.0200		83.9	70-130			
1,1,2-Trichloroethane	0.0190	0.0020	mg/Kg wet	0.0200		95.1	70-130			
Trichloroethylene	0.0183	0.0020	mg/Kg wet	0.0200		91.3	70-130			
Trichlorofluoromethane (Freon 11)	0.0163	0.010	mg/Kg wet	0.0200		81.5	70-130			
1,2,3-Trichloropropane	0.0207	0.0020	mg/Kg wet	0.0200		103	70-130			

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B214252 - SW-846 5035

LCS (B214252-BS1)

Prepared & Analyzed: 10/08/18

1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0175	0.010	mg/Kg wet	0.0200		87.4	70-130			
1,2,4-Trimethylbenzene	0.0194	0.0020	mg/Kg wet	0.0200		97.2	70-130			
1,3,5-Trimethylbenzene	0.0198	0.0020	mg/Kg wet	0.0200		99.2	70-130			
Vinyl Chloride	0.0154	0.010	mg/Kg wet	0.0200		77.1	40-130			†
m+p Xylene	0.0374	0.0040	mg/Kg wet	0.0400		93.6	70-130			
o-Xylene	0.0191	0.0020	mg/Kg wet	0.0200		95.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0511		mg/Kg wet	0.0500		102	70-130			
Surrogate: Toluene-d8	0.0484		mg/Kg wet	0.0500		96.8	70-130			
Surrogate: 4-Bromofluorobenzene	0.0491		mg/Kg wet	0.0500		98.1	70-130			

LCS Dup (B214252-BSD1)

Prepared & Analyzed: 10/08/18

Acetone	0.208	0.10	mg/Kg wet	0.200		104	70-160	4.19	25	†
Acrylonitrile	0.0184	0.0060	mg/Kg wet	0.0200		92.0	70-130	2.75	25	
tert-Amyl Methyl Ether (TAME)	0.0190	0.0010	mg/Kg wet	0.0200		94.9	70-130	3.43	25	
Benzene	0.0185	0.0020	mg/Kg wet	0.0200		92.5	70-130	2.63	25	
Bromobenzene	0.0191	0.0020	mg/Kg wet	0.0200		95.7	70-130	2.88	25	
Bromochloromethane	0.0202	0.0020	mg/Kg wet	0.0200		101	70-130	5.49	25	
Bromodichloromethane	0.0175	0.0020	mg/Kg wet	0.0200		87.3	70-130	1.03	25	
Bromoform	0.0191	0.0020	mg/Kg wet	0.0200		95.3	70-130	9.59	25	
Bromomethane	0.0118	0.010	mg/Kg wet	0.0200		59.1	40-130	33.6 *	25	R-05, V-34 †
2-Butanone (MEK)	0.204	0.040	mg/Kg wet	0.200		102	70-160	2.82	25	†
tert-Butyl Alcohol (TBA)	0.187	0.040	mg/Kg wet	0.200		93.4	40-130	0.821	25	†
n-Butylbenzene	0.0198	0.0020	mg/Kg wet	0.0200		99.2	70-130	0.810	25	
sec-Butylbenzene	0.0213	0.0020	mg/Kg wet	0.0200		107	70-130	5.89	25	
tert-Butylbenzene	0.0200	0.0020	mg/Kg wet	0.0200		99.9	70-160	0.301	25	†
tert-Butyl Ethyl Ether (TBEE)	0.0190	0.0010	mg/Kg wet	0.0200		95.1	70-130	1.91	25	
Carbon Disulfide	0.0182	0.0060	mg/Kg wet	0.0200		91.2	70-130	1.10	25	
Carbon Tetrachloride	0.0187	0.0020	mg/Kg wet	0.0200		93.5	70-130	0.107	25	
Chlorobenzene	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130	1.76	25	
Chlorodibromomethane	0.0202	0.0010	mg/Kg wet	0.0200		101	70-130	1.30	25	
Chloroethane	0.0162	0.020	mg/Kg wet	0.0200		80.9	70-130	4.04	25	J
Chloroform	0.0190	0.0040	mg/Kg wet	0.0200		94.9	70-130	4.64	25	
Chloromethane	0.0163	0.010	mg/Kg wet	0.0200		81.5	70-130	0.490	25	
2-Chlorotoluene	0.0201	0.0020	mg/Kg wet	0.0200		100	70-130	4.48	25	
4-Chlorotoluene	0.0199	0.0020	mg/Kg wet	0.0200		99.6	70-130	0.999	25	
1,2-Dibromo-3-chloropropane (DBCP)	0.0225	0.0020	mg/Kg wet	0.0200		112	70-130	3.25	25	V-20
1,2-Dibromoethane (EDB)	0.0197	0.0010	mg/Kg wet	0.0200		98.6	70-130	1.43	25	
Dibromomethane	0.0190	0.0020	mg/Kg wet	0.0200		94.8	70-130	0.631	25	
1,2-Dichlorobenzene	0.0210	0.0020	mg/Kg wet	0.0200		105	70-130	0.475	25	
1,3-Dichlorobenzene	0.0209	0.0020	mg/Kg wet	0.0200		104	70-130	2.09	25	
1,4-Dichlorobenzene	0.0196	0.0020	mg/Kg wet	0.0200		98.2	70-130	2.51	25	
trans-1,4-Dichloro-2-butene	0.0190	0.0040	mg/Kg wet	0.0200		95.0	70-130	1.46	25	
Dichlorodifluoromethane (Freon 12)	0.0155	0.020	mg/Kg wet	0.0200		77.6	40-160	0.129	25	J †
1,1-Dichloroethane	0.0185	0.0020	mg/Kg wet	0.0200		92.3	70-130	2.75	25	
1,2-Dichloroethane	0.0191	0.0020	mg/Kg wet	0.0200		95.3	70-130	0.00	25	
1,1-Dichloroethylene	0.0174	0.0040	mg/Kg wet	0.0200		87.2	70-130	4.82	25	
cis-1,2-Dichloroethylene	0.0177	0.0020	mg/Kg wet	0.0200		88.7	70-130	7.49	25	
trans-1,2-Dichloroethylene	0.0188	0.0020	mg/Kg wet	0.0200		93.9	70-130	4.02	25	
1,2-Dichloropropane	0.0189	0.0020	mg/Kg wet	0.0200		94.5	70-130	0.843	25	
1,3-Dichloropropane	0.0192	0.0010	mg/Kg wet	0.0200		95.9	70-130	2.64	25	
2,2-Dichloropropane	0.0173	0.0020	mg/Kg wet	0.0200		86.4	70-130	3.89	25	
1,1-Dichloropropene	0.0175	0.0020	mg/Kg wet	0.0200		87.5	70-130	1.61	25	



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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B214252 - SW-846 5035

LCS Dup (B214252-BSD1)

Prepared & Analyzed: 10/08/18

cis-1,3-Dichloropropene	0.0187	0.0010	mg/Kg wet	0.0200		93.6	70-130	0.533	25	
trans-1,3-Dichloropropene	0.0188	0.0010	mg/Kg wet	0.0200		94.1	70-130	0.533	25	
Diethyl Ether	0.0186	0.020	mg/Kg wet	0.0200		92.9	70-130	4.83	25	J
Diisopropyl Ether (DIPE)	0.0186	0.0010	mg/Kg wet	0.0200		93.2	70-130	1.73	25	
1,4-Dioxane	0.218	0.10	mg/Kg wet	0.200		109	40-160	11.3	50	V-36 † ‡
Ethylbenzene	0.0196	0.0020	mg/Kg wet	0.0200		98.2	70-130	3.84	25	
Hexachlorobutadiene	0.0204	0.0020	mg/Kg wet	0.0200		102	70-160	0.490	25	
2-Hexanone (MBK)	0.205	0.020	mg/Kg wet	0.200		103	70-160	5.12	25	†
Isopropylbenzene (Cumene)	0.0212	0.0020	mg/Kg wet	0.0200		106	70-130	1.52	25	
p-Isopropyltoluene (p-Cymene)	0.0194	0.0020	mg/Kg wet	0.0200		97.1	70-130	0.516	25	
Methyl Acetate	0.0789	0.0020	mg/Kg wet	0.0200		394 *	70-130	2.44	25	L-02
Methyl tert-Butyl Ether (MTBE)	0.0196	0.0040	mg/Kg wet	0.0200		98.1	70-130	1.44	25	
Methyl Cyclohexane	0.0180	0.0020	mg/Kg wet	0.0200		90.2	70-130	2.13	25	
Methylene Chloride	0.0197	0.020	mg/Kg wet	0.0200		98.5	40-160	4.04	25	J †
4-Methyl-2-pentanone (MIBK)	0.205	0.020	mg/Kg wet	0.200		103	70-160	1.45	25	†
Naphthalene	0.0190	0.0040	mg/Kg wet	0.0200		94.8	40-130	7.71	25	†
n-Propylbenzene	0.0195	0.0020	mg/Kg wet	0.0200		97.3	70-130	1.33	25	
Styrene	0.0196	0.0020	mg/Kg wet	0.0200		98.2	70-130	0.203	25	
1,1,1,2-Tetrachloroethane	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130	3.85	25	
1,1,2,2-Tetrachloroethane	0.0195	0.0010	mg/Kg wet	0.0200		97.3	70-130	6.75	25	
Tetrachloroethylene	0.0185	0.0020	mg/Kg wet	0.0200		92.5	70-130	2.63	25	
Tetrahydrofuran	0.0174	0.010	mg/Kg wet	0.0200		87.0	70-130	3.61	25	
Toluene	0.0179	0.0020	mg/Kg wet	0.0200		89.6	70-130	2.94	25	
1,2,3-Trichlorobenzene	0.0196	0.0020	mg/Kg wet	0.0200		98.0	70-130	7.37	25	
1,2,4-Trichlorobenzene	0.0205	0.0020	mg/Kg wet	0.0200		102	70-130	5.51	25	
1,3,5-Trichlorobenzene	0.0212	0.0020	mg/Kg wet	0.0200		106	70-130	1.41	25	
1,1,1-Trichloroethane	0.0172	0.0020	mg/Kg wet	0.0200		85.8	70-130	2.24	25	
1,1,2-Trichloroethane	0.0183	0.0020	mg/Kg wet	0.0200		91.7	70-130	3.64	25	
Trichloroethylene	0.0187	0.0020	mg/Kg wet	0.0200		93.7	70-130	2.59	25	
Trichlorofluoromethane (Freon 11)	0.0170	0.010	mg/Kg wet	0.0200		84.8	70-130	3.97	25	
1,2,3-Trichloropropane	0.0186	0.0020	mg/Kg wet	0.0200		93.2	70-130	10.4	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0178	0.010	mg/Kg wet	0.0200		89.2	70-130	2.04	25	
1,2,4-Trimethylbenzene	0.0190	0.0020	mg/Kg wet	0.0200		94.9	70-130	2.39	25	
1,3,5-Trimethylbenzene	0.0197	0.0020	mg/Kg wet	0.0200		98.4	70-130	0.810	25	
Vinyl Chloride	0.0159	0.010	mg/Kg wet	0.0200		79.3	40-130	2.81	25	†
m+p Xylene	0.0390	0.0040	mg/Kg wet	0.0400		97.4	70-130	4.03	25	
o-Xylene	0.0194	0.0020	mg/Kg wet	0.0200		97.1	70-130	1.56	25	
Surrogate: 1,2-Dichloroethane-d4	0.0507		mg/Kg wet	0.0500		101	70-130			
Surrogate: Toluene-d8	0.0483		mg/Kg wet	0.0500		96.5	70-130			
Surrogate: 4-Bromofluorobenzene	0.0499		mg/Kg wet	0.0500		99.8	70-130			

Batch B214295 - SW-846 5035

Blank (B214295-BLK1)

Prepared & Analyzed: 10/09/18

Acetone	ND	0.10	mg/Kg wet							
Acrylonitrile	ND	0.0060	mg/Kg wet							
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg wet							
Benzene	ND	0.0020	mg/Kg wet							
Bromobenzene	ND	0.0020	mg/Kg wet							
Bromochloromethane	ND	0.0020	mg/Kg wet							
Bromodichloromethane	ND	0.0020	mg/Kg wet							
Bromoform	ND	0.0020	mg/Kg wet							



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**QUALITY CONTROL**

**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B214295 - SW-846 5035**

**Blank (B214295-BLK1)**

Prepared & Analyzed: 10/09/18

Bromomethane	ND	0.010	mg/Kg wet							V-34
2-Butanone (MEK)	ND	0.040	mg/Kg wet							
tert-Butyl Alcohol (TBA)	ND	0.040	mg/Kg wet							
n-Butylbenzene	ND	0.0020	mg/Kg wet							
sec-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg wet							
Carbon Disulfide	ND	0.0060	mg/Kg wet							
Carbon Tetrachloride	ND	0.0020	mg/Kg wet							
Chlorobenzene	ND	0.0020	mg/Kg wet							
Chlorodibromomethane	ND	0.0010	mg/Kg wet							
Chloroethane	ND	0.020	mg/Kg wet							
Chloroform	ND	0.0040	mg/Kg wet							
Chloromethane	ND	0.010	mg/Kg wet							
2-Chlorotoluene	ND	0.0020	mg/Kg wet							
4-Chlorotoluene	ND	0.0020	mg/Kg wet							
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg wet							
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg wet							
Dibromomethane	ND	0.0020	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.0020	mg/Kg wet							
trans-1,4-Dichloro-2-butene	ND	0.0040	mg/Kg wet							
Dichlorodifluoromethane (Freon 12)	ND	0.020	mg/Kg wet							
1,1-Dichloroethane	ND	0.0020	mg/Kg wet							
1,2-Dichloroethane	ND	0.0020	mg/Kg wet							
1,1-Dichloroethylene	ND	0.0040	mg/Kg wet							
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
1,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,3-Dichloropropane	ND	0.0010	mg/Kg wet							
2,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,1-Dichloropropene	ND	0.0020	mg/Kg wet							
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
Diethyl Ether	ND	0.020	mg/Kg wet							
Diisopropyl Ether (DIPE)	ND	0.0010	mg/Kg wet							
1,4-Dioxane	ND	0.10	mg/Kg wet							
Ethylbenzene	ND	0.0020	mg/Kg wet							
Hexachlorobutadiene	ND	0.0020	mg/Kg wet							
2-Hexanone (MBK)	ND	0.020	mg/Kg wet							
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg wet							
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg wet							
Methyl Acetate	ND	0.0020	mg/Kg wet							
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg wet							
Methyl Cyclohexane	ND	0.0020	mg/Kg wet							
Methylene Chloride	ND	0.020	mg/Kg wet							
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg wet							
Naphthalene	ND	0.0040	mg/Kg wet							
n-Propylbenzene	ND	0.0020	mg/Kg wet							
Styrene	ND	0.0020	mg/Kg wet							
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg wet							

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B214295 - SW-846 5035

Blank (B214295-BLK1)

Prepared & Analyzed: 10/09/18

1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg wet							
Tetrachloroethylene	ND	0.0020	mg/Kg wet							
Tetrahydrofuran	ND	0.010	mg/Kg wet							
Toluene	ND	0.0020	mg/Kg wet							
1,2,3-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,3,5-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,1,1-Trichloroethane	ND	0.0020	mg/Kg wet							
1,1,2-Trichloroethane	ND	0.0020	mg/Kg wet							
Trichloroethylene	ND	0.0020	mg/Kg wet							
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg wet							
1,2,3-Trichloropropane	ND	0.0020	mg/Kg wet							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.010	mg/Kg wet							
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg wet							
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg wet							
Vinyl Chloride	ND	0.010	mg/Kg wet							
m+p Xylene	ND	0.0040	mg/Kg wet							
o-Xylene	ND	0.0020	mg/Kg wet							
Surrogate: 1,2-Dichloroethane-d4	0.0506		mg/Kg wet	0.0500		101	70-130			
Surrogate: Toluene-d8	0.0479		mg/Kg wet	0.0500		95.8	70-130			
Surrogate: 4-Bromofluorobenzene	0.0479		mg/Kg wet	0.0500		95.8	70-130			

LCS (B214295-BS1)

Prepared & Analyzed: 10/09/18

Acetone	0.314	0.10	mg/Kg wet	0.200		157	70-160			†
Acrylonitrile	0.0192	0.0060	mg/Kg wet	0.0200		95.9	70-130			
tert-Amyl Methyl Ether (TAME)	0.0196	0.0010	mg/Kg wet	0.0200		98.1	70-130			
Benzene	0.0183	0.0020	mg/Kg wet	0.0200		91.4	70-130			
Bromobenzene	0.0186	0.0020	mg/Kg wet	0.0200		93.2	70-130			
Bromochloromethane	0.0213	0.0020	mg/Kg wet	0.0200		107	70-130			
Bromodichloromethane	0.0175	0.0020	mg/Kg wet	0.0200		87.4	70-130			
Bromoform	0.0195	0.0020	mg/Kg wet	0.0200		97.5	70-130			
Bromomethane	0.0101	0.010	mg/Kg wet	0.0200		50.5	40-130		V-34	†
2-Butanone (MEK)	0.254	0.040	mg/Kg wet	0.200		127	70-160			†
tert-Butyl Alcohol (TBA)	0.183	0.040	mg/Kg wet	0.200		91.6	40-130			†
n-Butylbenzene	0.0200	0.0020	mg/Kg wet	0.0200		100	70-130			
sec-Butylbenzene	0.0208	0.0020	mg/Kg wet	0.0200		104	70-130			
tert-Butylbenzene	0.0193	0.0020	mg/Kg wet	0.0200		96.7	70-160			†
tert-Butyl Ethyl Ether (TBEE)	0.0191	0.0010	mg/Kg wet	0.0200		95.5	70-130			
Carbon Disulfide	0.0179	0.0060	mg/Kg wet	0.0200		89.3	70-130			
Carbon Tetrachloride	0.0196	0.0020	mg/Kg wet	0.0200		98.1	70-130			
Chlorobenzene	0.0201	0.0020	mg/Kg wet	0.0200		100	70-130			
Chlorodibromomethane	0.0207	0.0010	mg/Kg wet	0.0200		103	70-130			
Chloroethane	0.0156	0.020	mg/Kg wet	0.0200		78.1	70-130			J
Chloroform	0.0182	0.0040	mg/Kg wet	0.0200		91.2	70-130			
Chloromethane	0.0163	0.010	mg/Kg wet	0.0200		81.5	70-130			
2-Chlorotoluene	0.0194	0.0020	mg/Kg wet	0.0200		97.1	70-130			
4-Chlorotoluene	0.0195	0.0020	mg/Kg wet	0.0200		97.6	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	0.0212	0.0020	mg/Kg wet	0.0200		106	70-130			
1,2-Dibromoethane (EDB)	0.0188	0.0010	mg/Kg wet	0.0200		93.9	70-130			
Dibromomethane	0.0200	0.0020	mg/Kg wet	0.0200		100	70-130			
1,2-Dichlorobenzene	0.0202	0.0020	mg/Kg wet	0.0200		101	70-130			
1,3-Dichlorobenzene	0.0213	0.0020	mg/Kg wet	0.0200		106	70-130			

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B214295 - SW-846 5035</b>										
<b>LCS (B214295-BS1)</b>										
Prepared & Analyzed: 10/09/18										
1,4-Dichlorobenzene	0.0200	0.0020	mg/Kg wet	0.0200		100	70-130			
trans-1,4-Dichloro-2-butene	0.0189	0.0040	mg/Kg wet	0.0200		94.7	70-130			
Dichlorodifluoromethane (Freon 12)	0.0156	0.020	mg/Kg wet	0.0200		78.1	40-160			J †
1,1-Dichloroethane	0.0185	0.0020	mg/Kg wet	0.0200		92.7	70-130			
1,2-Dichloroethane	0.0192	0.0020	mg/Kg wet	0.0200		96.2	70-130			
1,1-Dichloroethylene	0.0177	0.0040	mg/Kg wet	0.0200		88.3	70-130			
cis-1,2-Dichloroethylene	0.0176	0.0020	mg/Kg wet	0.0200		87.9	70-130			
trans-1,2-Dichloroethylene	0.0185	0.0020	mg/Kg wet	0.0200		92.5	70-130			
1,2-Dichloropropane	0.0198	0.0020	mg/Kg wet	0.0200		98.8	70-130			
1,3-Dichloropropane	0.0193	0.0010	mg/Kg wet	0.0200		96.4	70-130			
2,2-Dichloropropane	0.0168	0.0020	mg/Kg wet	0.0200		84.1	70-130			
1,1-Dichloropropene	0.0182	0.0020	mg/Kg wet	0.0200		91.2	70-130			
cis-1,3-Dichloropropene	0.0190	0.0010	mg/Kg wet	0.0200		95.0	70-130			
trans-1,3-Dichloropropene	0.0196	0.0010	mg/Kg wet	0.0200		98.0	70-130			
Diethyl Ether	0.0190	0.020	mg/Kg wet	0.0200		94.9	70-130			J
Diisopropyl Ether (DIPE)	0.0188	0.0010	mg/Kg wet	0.0200		94.2	70-130			
1,4-Dioxane	0.226	0.10	mg/Kg wet	0.200		113	40-160			V-36 †
Ethylbenzene	0.0190	0.0020	mg/Kg wet	0.0200		94.9	70-130			
Hexachlorobutadiene	0.0198	0.0020	mg/Kg wet	0.0200		99.0	70-160			
2-Hexanone (MBK)	0.229	0.020	mg/Kg wet	0.200		115	70-160			†
Isopropylbenzene (Cumene)	0.0201	0.0020	mg/Kg wet	0.0200		101	70-130			
p-Isopropyltoluene (p-Cymene)	0.0193	0.0020	mg/Kg wet	0.0200		96.5	70-130			
<b>Methyl Acetate</b>	0.0796	0.0020	mg/Kg wet	0.0200		<b>398</b> *	70-130			L-02
Methyl tert-Butyl Ether (MTBE)	0.0198	0.0040	mg/Kg wet	0.0200		99.2	70-130			
Methyl Cyclohexane	0.0183	0.0020	mg/Kg wet	0.0200		91.6	70-130			
Methylene Chloride	0.0204	0.020	mg/Kg wet	0.0200		102	40-160			†
4-Methyl-2-pentanone (MIBK)	0.206	0.020	mg/Kg wet	0.200		103	70-160			†
Naphthalene	0.0201	0.0040	mg/Kg wet	0.0200		100	40-130			†
n-Propylbenzene	0.0197	0.0020	mg/Kg wet	0.0200		98.7	70-130			
Styrene	0.0195	0.0020	mg/Kg wet	0.0200		97.5	70-130			
1,1,1,2-Tetrachloroethane	0.0198	0.0020	mg/Kg wet	0.0200		99.2	70-130			
1,1,2,2-Tetrachloroethane	0.0201	0.0010	mg/Kg wet	0.0200		100	70-130			
Tetrachloroethylene	0.0192	0.0020	mg/Kg wet	0.0200		95.9	70-130			
Tetrahydrofuran	0.0186	0.010	mg/Kg wet	0.0200		92.9	70-130			
Toluene	0.0177	0.0020	mg/Kg wet	0.0200		88.3	70-130			
1,2,3-Trichlorobenzene	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130			
1,2,4-Trichlorobenzene	0.0223	0.0020	mg/Kg wet	0.0200		112	70-130			
1,3,5-Trichlorobenzene	0.0219	0.0020	mg/Kg wet	0.0200		110	70-130			
1,1,1-Trichloroethane	0.0174	0.0020	mg/Kg wet	0.0200		86.8	70-130			
1,1,2-Trichloroethane	0.0187	0.0020	mg/Kg wet	0.0200		93.5	70-130			
Trichloroethylene	0.0189	0.0020	mg/Kg wet	0.0200		94.6	70-130			
Trichlorofluoromethane (Freon 11)	0.0167	0.010	mg/Kg wet	0.0200		83.5	70-130			
1,2,3-Trichloropropane	0.0196	0.0020	mg/Kg wet	0.0200		97.8	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0183	0.010	mg/Kg wet	0.0200		91.7	70-130			
1,2,4-Trimethylbenzene	0.0190	0.0020	mg/Kg wet	0.0200		94.8	70-130			
1,3,5-Trimethylbenzene	0.0192	0.0020	mg/Kg wet	0.0200		96.1	70-130			
Vinyl Chloride	0.0160	0.010	mg/Kg wet	0.0200		80.2	40-130			†
m+p Xylene	0.0384	0.0040	mg/Kg wet	0.0400		96.0	70-130			
o-Xylene	0.0193	0.0020	mg/Kg wet	0.0200		96.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0511		mg/Kg wet	0.0500		102	70-130			
Surrogate: Toluene-d8	0.0480		mg/Kg wet	0.0500		95.9	70-130			

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B214295 - SW-846 5035

LCS (B214295-BS1)

Prepared & Analyzed: 10/09/18

Surrogate: 4-Bromofluorobenzene	0.0473		mg/Kg wet	0.0500		94.5	70-130			
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LCS Dup (B214295-BS1)

Prepared & Analyzed: 10/09/18

Acetone	0.289	0.10	mg/Kg wet	0.200		144	70-160	8.32	25	†
Acrylonitrile	0.0189	0.0060	mg/Kg wet	0.0200		94.6	70-130	1.36	25	
tert-Amyl Methyl Ether (TAME)	0.0188	0.0010	mg/Kg wet	0.0200		94.0	70-130	4.27	25	
Benzene	0.0186	0.0020	mg/Kg wet	0.0200		93.0	70-130	1.74	25	
Bromobenzene	0.0197	0.0020	mg/Kg wet	0.0200		98.5	70-130	5.53	25	
Bromochloromethane	0.0202	0.0020	mg/Kg wet	0.0200		101	70-130	5.69	25	
Bromodichloromethane	0.0179	0.0020	mg/Kg wet	0.0200		89.4	70-130	2.26	25	
Bromoform	0.0201	0.0020	mg/Kg wet	0.0200		101	70-130	3.13	25	
Bromomethane	0.0115	0.010	mg/Kg wet	0.0200		57.7	40-130	13.3	25	V-34 †
2-Butanone (MEK)	0.242	0.040	mg/Kg wet	0.200		121	70-160	4.94	25	†
tert-Butyl Alcohol (TBA)	0.196	0.040	mg/Kg wet	0.200		98.1	40-130	6.89	25	†
n-Butylbenzene	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130	2.76	25	
sec-Butylbenzene	0.0210	0.0020	mg/Kg wet	0.0200		105	70-130	1.24	25	
tert-Butylbenzene	0.0190	0.0020	mg/Kg wet	0.0200		95.2	70-160	1.56	25	†
tert-Butyl Ethyl Ether (TBEE)	0.0187	0.0010	mg/Kg wet	0.0200		93.7	70-130	1.90	25	
Carbon Disulfide	0.0182	0.0060	mg/Kg wet	0.0200		90.9	70-130	1.78	25	
Carbon Tetrachloride	0.0197	0.0020	mg/Kg wet	0.0200		98.3	70-130	0.204	25	
Chlorobenzene	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130	2.46	25	
Chlorodibromomethane	0.0203	0.0010	mg/Kg wet	0.0200		102	70-130	1.66	25	
Chloroethane	0.0161	0.020	mg/Kg wet	0.0200		80.7	70-130	3.27	25	J
Chloroform	0.0187	0.0040	mg/Kg wet	0.0200		93.3	70-130	2.28	25	
Chloromethane	0.0159	0.010	mg/Kg wet	0.0200		79.7	70-130	2.23	25	
2-Chlorotoluene	0.0191	0.0020	mg/Kg wet	0.0200		95.7	70-130	1.45	25	
4-Chlorotoluene	0.0199	0.0020	mg/Kg wet	0.0200		99.7	70-130	2.13	25	
1,2-Dibromo-3-chloropropane (DBCP)	0.0251	0.0020	mg/Kg wet	0.0200		125	70-130	16.6	25	
1,2-Dibromoethane (EDB)	0.0205	0.0010	mg/Kg wet	0.0200		103	70-130	8.85	25	
Dibromomethane	0.0193	0.0020	mg/Kg wet	0.0200		96.5	70-130	3.56	25	
1,2-Dichlorobenzene	0.0215	0.0020	mg/Kg wet	0.0200		108	70-130	6.33	25	
1,3-Dichlorobenzene	0.0207	0.0020	mg/Kg wet	0.0200		104	70-130	2.57	25	
1,4-Dichlorobenzene	0.0207	0.0020	mg/Kg wet	0.0200		103	70-130	3.05	25	
trans-1,4-Dichloro-2-butene	0.0210	0.0040	mg/Kg wet	0.0200		105	70-130	10.4	25	
Dichlorodifluoromethane (Freon 12)	0.0141	0.020	mg/Kg wet	0.0200		70.4	40-160	10.4	25	J †
1,1-Dichloroethane	0.0187	0.0020	mg/Kg wet	0.0200		93.4	70-130	0.752	25	
1,2-Dichloroethane	0.0193	0.0020	mg/Kg wet	0.0200		96.3	70-130	0.104	25	
1,1-Dichloroethylene	0.0184	0.0040	mg/Kg wet	0.0200		92.0	70-130	4.10	25	
cis-1,2-Dichloroethylene	0.0178	0.0020	mg/Kg wet	0.0200		88.8	70-130	1.02	25	
trans-1,2-Dichloroethylene	0.0188	0.0020	mg/Kg wet	0.0200		94.0	70-130	1.61	25	
1,2-Dichloropropane	0.0189	0.0020	mg/Kg wet	0.0200		94.3	70-130	4.66	25	
1,3-Dichloropropane	0.0182	0.0010	mg/Kg wet	0.0200		91.1	70-130	5.65	25	
2,2-Dichloropropane	0.0174	0.0020	mg/Kg wet	0.0200		86.9	70-130	3.27	25	
1,1-Dichloropropene	0.0181	0.0020	mg/Kg wet	0.0200		90.5	70-130	0.770	25	
cis-1,3-Dichloropropene	0.0192	0.0010	mg/Kg wet	0.0200		96.2	70-130	1.26	25	
trans-1,3-Dichloropropene	0.0194	0.0010	mg/Kg wet	0.0200		96.8	70-130	1.23	25	
Diethyl Ether	0.0188	0.020	mg/Kg wet	0.0200		93.8	70-130	1.17	25	J
Diisopropyl Ether (DIPE)	0.0188	0.0010	mg/Kg wet	0.0200		93.9	70-130	0.319	25	
1,4-Dioxane	0.295	0.10	mg/Kg wet	0.200		147	40-160	26.6	50	V-36 † ‡
Ethylbenzene	0.0192	0.0020	mg/Kg wet	0.0200		95.8	70-130	0.944	25	
Hexachlorobutadiene	0.0214	0.0020	mg/Kg wet	0.0200		107	70-160	7.86	25	
2-Hexanone (MBK)	0.226	0.020	mg/Kg wet	0.200		113	70-160	1.47	25	†

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B214295 - SW-846 5035</b>										
<b>LCS Dup (B214295-BSD1)</b>										
Prepared & Analyzed: 10/09/18										
Isopropylbenzene (Cumene)	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130	1.48	25	
p-Isopropyltoluene (p-Cymene)	0.0195	0.0020	mg/Kg wet	0.0200		97.3	70-130	0.826	25	
<b>Methyl Acetate</b>	0.0814	0.0020	mg/Kg wet	0.0200		<b>407</b> *	70-130	2.26	25	L-02
Methyl tert-Butyl Ether (MTBE)	0.0202	0.0040	mg/Kg wet	0.0200		101	70-130	1.80	25	
Methyl Cyclohexane	0.0170	0.0020	mg/Kg wet	0.0200		85.2	70-130	7.24	25	
Methylene Chloride	0.0195	0.020	mg/Kg wet	0.0200		97.5	40-160	4.71	25	J †
4-Methyl-2-pentanone (MIBK)	0.210	0.020	mg/Kg wet	0.200		105	70-160	1.94	25	†
Naphthalene	0.0201	0.0040	mg/Kg wet	0.0200		101	40-130	0.199	25	†
n-Propylbenzene	0.0199	0.0020	mg/Kg wet	0.0200		99.4	70-130	0.707	25	
Styrene	0.0195	0.0020	mg/Kg wet	0.0200		97.6	70-130	0.103	25	
1,1,1,2-Tetrachloroethane	0.0201	0.0020	mg/Kg wet	0.0200		101	70-130	1.50	25	
1,1,2,2-Tetrachloroethane	0.0201	0.0010	mg/Kg wet	0.0200		100	70-130	0.199	25	
Tetrachloroethylene	0.0198	0.0020	mg/Kg wet	0.0200		99.2	70-130	3.38	25	
Tetrahydrofuran	0.0200	0.010	mg/Kg wet	0.0200		100	70-130	7.56	25	
Toluene	0.0176	0.0020	mg/Kg wet	0.0200		87.8	70-130	0.568	25	
1,2,3-Trichlorobenzene	0.0213	0.0020	mg/Kg wet	0.0200		107	70-130	3.33	25	
1,2,4-Trichlorobenzene	0.0223	0.0020	mg/Kg wet	0.0200		111	70-130	0.180	25	
1,3,5-Trichlorobenzene	0.0216	0.0020	mg/Kg wet	0.0200		108	70-130	1.38	25	
1,1,1-Trichloroethane	0.0171	0.0020	mg/Kg wet	0.0200		85.7	70-130	1.28	25	
1,1,2-Trichloroethane	0.0184	0.0020	mg/Kg wet	0.0200		92.1	70-130	1.51	25	
Trichloroethylene	0.0187	0.0020	mg/Kg wet	0.0200		93.5	70-130	1.17	25	
Trichlorofluoromethane (Freon 11)	0.0168	0.010	mg/Kg wet	0.0200		83.9	70-130	0.478	25	
1,2,3-Trichloropropane	0.0207	0.0020	mg/Kg wet	0.0200		104	70-130	5.76	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0173	0.010	mg/Kg wet	0.0200		86.5	70-130	5.84	25	
1,2,4-Trimethylbenzene	0.0198	0.0020	mg/Kg wet	0.0200		99.0	70-130	4.33	25	
1,3,5-Trimethylbenzene	0.0196	0.0020	mg/Kg wet	0.0200		98.1	70-130	2.06	25	
Vinyl Chloride	0.0161	0.010	mg/Kg wet	0.0200		80.3	40-130	0.125	25	†
m+p Xylene	0.0383	0.0040	mg/Kg wet	0.0400		95.7	70-130	0.313	25	
o-Xylene	0.0190	0.0020	mg/Kg wet	0.0200		95.2	70-130	1.36	25	
Surrogate: 1,2-Dichloroethane-d4	0.0516		mg/Kg wet	0.0500		103	70-130			
Surrogate: Toluene-d8	0.0479		mg/Kg wet	0.0500		95.8	70-130			
Surrogate: 4-Bromofluorobenzene	0.0485		mg/Kg wet	0.0500		97.0	70-130			

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**QUALITY CONTROL**

**Polychlorinated Biphenyls By GC/ECD - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B214272 - SW-846 3546</b>										
<b>Blank (B214272-BLK1)</b>										
Prepared: 10/08/18 Analyzed: 10/09/18										
Aroclor-1016	ND	0.020	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1221	ND	0.020	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1232	ND	0.020	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1242	ND	0.020	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1248	ND	0.020	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1254	ND	0.020	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1260	ND	0.020	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1262	ND	0.020	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1268	ND	0.020	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.020	mg/Kg wet							
Surrogate: Decachlorobiphenyl	0.154		mg/Kg wet	0.200		77.0	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.150		mg/Kg wet	0.200		75.1	30-150			
Surrogate: Tetrachloro-m-xylene	0.176		mg/Kg wet	0.200		87.9	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.177		mg/Kg wet	0.200		88.7	30-150			
<b>LCS (B214272-BS1)</b>										
Prepared: 10/08/18 Analyzed: 10/09/18										
Aroclor-1016	0.17	0.020	mg/Kg wet	0.200		87.4	40-140			
Aroclor-1016 [2C]	0.17	0.020	mg/Kg wet	0.200		84.6	40-140			
Aroclor-1260	0.15	0.020	mg/Kg wet	0.200		75.8	40-140			
Aroclor-1260 [2C]	0.15	0.020	mg/Kg wet	0.200		77.1	40-140			
Surrogate: Decachlorobiphenyl	0.132		mg/Kg wet	0.200		66.0	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.130		mg/Kg wet	0.200		64.9	30-150			
Surrogate: Tetrachloro-m-xylene	0.159		mg/Kg wet	0.200		79.5	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.161		mg/Kg wet	0.200		80.3	30-150			
<b>LCS Dup (B214272-BSD1)</b>										
Prepared: 10/08/18 Analyzed: 10/09/18										
Aroclor-1016	0.19	0.020	mg/Kg wet	0.200		97.3	40-140	10.7	30	
Aroclor-1016 [2C]	0.19	0.020	mg/Kg wet	0.200		93.5	40-140	9.96	30	
Aroclor-1260	0.17	0.020	mg/Kg wet	0.200		87.2	40-140	14.0	30	
Aroclor-1260 [2C]	0.17	0.020	mg/Kg wet	0.200		87.0	40-140	12.0	30	
Surrogate: Decachlorobiphenyl	0.154		mg/Kg wet	0.200		77.1	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.151		mg/Kg wet	0.200		75.4	30-150			
Surrogate: Tetrachloro-m-xylene	0.175		mg/Kg wet	0.200		87.5	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.175		mg/Kg wet	0.200		87.7	30-150			

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**QUALITY CONTROL**

**Metals Analyses (Total) - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B214669 - SW-846 7471</b>										
<b>Blank (B214669-BLK1)</b> Prepared: 10/12/18 Analyzed: 10/15/18										
Mercury	ND	0.025	mg/Kg wet							
<b>LCS (B214669-BS1)</b> Prepared: 10/12/18 Analyzed: 10/15/18										
Mercury	13.2	1.9	mg/Kg wet	11.5		115	71.6-127.8			
<b>LCS Dup (B214669-BSD1)</b> Prepared: 10/12/18 Analyzed: 10/15/18										
Mercury	12.0	1.9	mg/Kg wet	11.5		104	71.6-127.8	9.57	30	
<b>Batch B214694 - SW-846 3050B</b>										
<b>Blank (B214694-BLK1)</b> Prepared: 10/12/18 Analyzed: 10/15/18										
Arsenic	ND	1.7	mg/Kg wet							
Barium	ND	1.7	mg/Kg wet							
Cadmium	ND	0.17	mg/Kg wet							
Chromium	ND	0.33	mg/Kg wet							
Lead	ND	0.50	mg/Kg wet							
Selenium	ND	3.3	mg/Kg wet							
Silver	ND	0.33	mg/Kg wet							
<b>LCS (B214694-BS1)</b> Prepared: 10/12/18 Analyzed: 10/15/18										
Arsenic	141	5.0	mg/Kg wet	161		87.6	83.2-116.8			
Barium	236	5.0	mg/Kg wet	260		90.7	82.7-117.3			
Cadmium	185	0.50	mg/Kg wet	211		87.4	83.4-116.6			
Chromium	123	0.99	mg/Kg wet	136		90.7	82.4-117.6			
Lead	99.5	1.5	mg/Kg wet	111		89.7	83-117.1			
Selenium	171	9.9	mg/Kg wet	191		89.3	79.6-120.9			
Silver	39.8	0.99	mg/Kg wet	43.3		91.9	79.9-119.9			
<b>LCS Dup (B214694-BSD1)</b> Prepared: 10/12/18 Analyzed: 10/15/18										
Arsenic	138	4.9	mg/Kg wet	161		85.8	83.2-116.8	2.01	30	
Barium	233	4.9	mg/Kg wet	260		89.8	82.7-117.3	1.05	30	
Cadmium	185	0.49	mg/Kg wet	211		87.8	83.4-116.6	0.388	30	
Chromium	122	0.98	mg/Kg wet	136		89.6	82.4-117.6	1.20	30	
Lead	96.3	1.5	mg/Kg wet	111		86.8	83-117.1	3.29	30	
Selenium	167	9.8	mg/Kg wet	191		87.4	79.6-120.9	2.23	30	
Silver	38.8	0.98	mg/Kg wet	43.3		89.5	79.9-119.9	2.66	30	
<b>MRL Check (B214694-MRL1)</b> Prepared: 10/12/18 Analyzed: 10/15/18										
Lead	1.00	0.50	mg/Kg wet	1.00		100	80-120			

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**QUALITY CONTROL**

**Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B213909 - SW-846 9045C</b>										
<b>LCS (B213909-BS1)</b>				Prepared & Analyzed: 10/02/18						
pH	6.03		pH Units	6.00		101	90-110			
<b>Duplicate (B213909-DUP1)</b>				<b>Source: 18J0071-15</b>		Prepared & Analyzed: 10/02/18				
pH	8.9		pH Units		8.9			0.383	5	H-03
<b>Batch B214347 - % Solids</b>										
<b>Duplicate (B214347-DUP1)</b>				<b>Source: 18J0071-01</b>		Prepared & Analyzed: 10/09/18				
% Solids	84.2		% Wt		84.2			0.0542	20	
<b>Batch B214452 - SW-846 9014</b>										
<b>Blank (B214452-BLK1)</b>				Prepared & Analyzed: 10/10/18						
Reactive Cyanide	ND	0.40	mg/Kg							
<b>LCS (B214452-BS1)</b>				Prepared & Analyzed: 10/10/18						
Reactive Cyanide	10	0.40	mg/Kg	10.0		104	83.6-111			
<b>Batch B214453 - SW-846 9030A</b>										
<b>Blank (B214453-BLK1)</b>				Prepared & Analyzed: 10/10/18						
Reactive Sulfide	ND	2.0	mg/Kg							
<b>LCS (B214453-BS1)</b>				Prepared & Analyzed: 10/10/18						
Reactive Sulfide	15	2.0	mg/Kg	14.8		103	54.9-121			
<b>Batch B214631 - SM21-22 2510B Modified</b>										
<b>Blank (B214631-BLK1)</b>				Prepared & Analyzed: 10/12/18						
Specific conductance	ND	2.0	µmhos/cm							
<b>LCS (B214631-BS1)</b>				Prepared & Analyzed: 10/12/18						
Specific conductance	190		µmhos/cm	192		99.6	90-110			
<b>Duplicate (B214631-DUP1)</b>				<b>Source: 18J0071-15</b>		Prepared & Analyzed: 10/12/18				
Specific conductance	20	2.0	µmhos/cm		21			1.60	21	



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**QUALITY CONTROL**

**TCLP - Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B214640 - SW-846 5035/5030B**

**Blank (B214640-BLK1)**

Prepared: 10/12/18 Analyzed: 10/13/18

Benzene	ND	0.010	mg/L							
2-Butanone (MEK)	ND	0.20	mg/L							
Carbon Tetrachloride	ND	0.050	mg/L							
Chlorobenzene	ND	0.010	mg/L							
Chloroform	ND	0.020	mg/L							
1,4-Dichlorobenzene	ND	0.010	mg/L							
1,2-Dichloroethane	ND	0.010	mg/L							
1,1-Dichloroethylene	ND	0.010	mg/L							
Tetrachloroethylene	ND	0.010	mg/L							
Trichloroethylene	ND	0.010	mg/L							
Vinyl Chloride	ND	0.020	mg/L							
Surrogate: 1,2-Dichloroethane-d4	0.0200		mg/L	0.0250		79.9	70-130			
Surrogate: Toluene-d8	0.0253		mg/L	0.0250		101	70-130			
Surrogate: 4-Bromofluorobenzene	0.0242		mg/L	0.0250		96.7	70-130			

**LCS (B214640-BS1)**

Prepared & Analyzed: 10/12/18

Benzene	0.00987	0.0010	mg/L	0.0100		98.7	70-130			
2-Butanone (MEK)	0.101	0.020	mg/L	0.100		101	40-160			†
Carbon Tetrachloride	0.00868	0.0050	mg/L	0.0100		86.8	70-130			
Chlorobenzene	0.0106	0.0010	mg/L	0.0100		106	70-130			
Chloroform	0.00939	0.0020	mg/L	0.0100		93.9	70-130			
1,4-Dichlorobenzene	0.0104	0.0010	mg/L	0.0100		104	70-130			
1,2-Dichloroethane	0.00854	0.0010	mg/L	0.0100		85.4	70-130			
1,1-Dichloroethylene	0.00916	0.0010	mg/L	0.0100		91.6	70-130			
Tetrachloroethylene	0.0116	0.0010	mg/L	0.0100		116	70-130			
Trichloroethylene	0.0108	0.0010	mg/L	0.0100		108	70-130			
Vinyl Chloride	0.00849	0.0020	mg/L	0.0100		84.9	40-160			†
Surrogate: 1,2-Dichloroethane-d4	0.0200		mg/L	0.0250		80.0	70-130			
Surrogate: Toluene-d8	0.0249		mg/L	0.0250		99.7	70-130			
Surrogate: 4-Bromofluorobenzene	0.0245		mg/L	0.0250		98.1	70-130			

**LCS Dup (B214640-BSD1)**

Prepared: 10/12/18 Analyzed: 10/13/18

Benzene	0.00940	0.0010	mg/L	0.0100		94.0	70-130	4.88	25	
2-Butanone (MEK)	0.0907	0.020	mg/L	0.100		90.7	40-160	11.0	25	†
Carbon Tetrachloride	0.00807	0.0050	mg/L	0.0100		80.7	70-130	7.28	25	
Chlorobenzene	0.0104	0.0010	mg/L	0.0100		104	70-130	2.28	25	
Chloroform	0.00883	0.0020	mg/L	0.0100		88.3	70-130	6.15	25	
1,4-Dichlorobenzene	0.00972	0.0010	mg/L	0.0100		97.2	70-130	6.28	25	
1,2-Dichloroethane	0.00833	0.0010	mg/L	0.0100		83.3	70-130	2.49	25	
1,1-Dichloroethylene	0.00855	0.0010	mg/L	0.0100		85.5	70-130	6.89	25	
Tetrachloroethylene	0.0108	0.0010	mg/L	0.0100		108	70-130	6.53	25	
Trichloroethylene	0.0104	0.0010	mg/L	0.0100		104	70-130	4.62	25	
Vinyl Chloride	0.00780	0.0020	mg/L	0.0100		78.0	40-160	8.47	25	†
Surrogate: 1,2-Dichloroethane-d4	0.0198		mg/L	0.0250		79.0	70-130			
Surrogate: Toluene-d8	0.0254		mg/L	0.0250		102	70-130			
Surrogate: 4-Bromofluorobenzene	0.0244		mg/L	0.0250		97.4	70-130			

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QUALITY CONTROL

TCLP - Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B214689 - SW-846 3510C</b>										
<b>Blank (B214689-BLK1)</b>										
Prepared: 10/12/18 Analyzed: 10/15/18										
2,4-Dinitrotoluene	ND	0.050	mg/L							
Hexachlorobenzene	ND	0.050	mg/L							
Hexachlorobutadiene	ND	0.050	mg/L							
Hexachloroethane	ND	0.050	mg/L							
2-Methylphenol	ND	0.050	mg/L							
3/4-Methylphenol	ND	0.050	mg/L							
Nitrobenzene	ND	0.050	mg/L							
Pentachlorophenol	ND	0.050	mg/L							
Pyridine	ND	0.025	mg/L							
2,4,5-Trichlorophenol	ND	0.050	mg/L							
2,4,6-Trichlorophenol	ND	0.050	mg/L							
Surrogate: 2-Fluorophenol	0.736		mg/L	1.00		73.6	15-110			
Surrogate: Phenol-d6	0.789		mg/L	1.00		78.9	15-110			
Surrogate: Nitrobenzene-d5	0.490		mg/L	0.500		98.1	30-130			
Surrogate: 2-Fluorobiphenyl	0.447		mg/L	0.500		89.5	30-130			
Surrogate: 2,4,6-Tribromophenol	1.08		mg/L	1.00		108	15-110			
Surrogate: p-Terphenyl-d14	0.515		mg/L	0.500		103	30-130			
<b>Blank (B214689-BLK2)</b>										
Prepared: 10/12/18 Analyzed: 10/15/18										
2,4-Dinitrotoluene	ND	0.050	mg/L							
Hexachlorobenzene	ND	0.050	mg/L							
Hexachlorobutadiene	ND	0.050	mg/L							
Hexachloroethane	ND	0.050	mg/L							
2-Methylphenol	ND	0.050	mg/L							
3/4-Methylphenol	ND	0.050	mg/L							
Nitrobenzene	ND	0.050	mg/L							
Pentachlorophenol	ND	0.050	mg/L							
Pyridine	ND	0.025	mg/L							
2,4,5-Trichlorophenol	ND	0.050	mg/L							
2,4,6-Trichlorophenol	ND	0.050	mg/L							
Surrogate: 2-Fluorophenol	0.738		mg/L	1.00		73.8	15-110			
Surrogate: Phenol-d6	0.772		mg/L	1.00		77.2	15-110			
Surrogate: Nitrobenzene-d5	0.472		mg/L	0.500		94.4	30-130			
Surrogate: 2-Fluorobiphenyl	0.445		mg/L	0.500		88.9	30-130			
Surrogate: 2,4,6-Tribromophenol	1.02		mg/L	1.00		102	15-110			
Surrogate: p-Terphenyl-d14	0.502		mg/L	0.500		100	30-130			
<b>LCS (B214689-BS1)</b>										
Prepared: 10/12/18 Analyzed: 10/15/18										
2,4-Dinitrotoluene	0.220	0.050	mg/L	0.250		87.9	40-140			
Hexachlorobenzene	0.212	0.050	mg/L	0.250		84.9	40-140			
Hexachlorobutadiene	0.183	0.050	mg/L	0.250		73.1	40-140			
Hexachloroethane	0.189	0.050	mg/L	0.250		75.4	40-140			
2-Methylphenol	0.198	0.050	mg/L	0.250		79.1	30-130			
3/4-Methylphenol	0.216	0.050	mg/L	0.250		86.4	30-130			
Nitrobenzene	0.218	0.050	mg/L	0.250		87.2	40-140			
Pentachlorophenol	0.167	0.050	mg/L	0.250		66.7	30-130			
Pyridine	0.117	0.025	mg/L	0.250		46.8	10-140			†
2,4,5-Trichlorophenol	0.212	0.050	mg/L	0.250		84.7	30-130			
2,4,6-Trichlorophenol	0.215	0.050	mg/L	0.250		85.9	30-130			
Surrogate: 2-Fluorophenol	0.806		mg/L	1.00		80.6	15-110			
Surrogate: Phenol-d6	0.858		mg/L	1.00		85.8	15-110			
Surrogate: Nitrobenzene-d5	0.475		mg/L	0.500		95.1	30-130			

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QUALITY CONTROL

TCLP - Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B214689 - SW-846 3510C

LCS (B214689-BS1)

Prepared: 10/12/18 Analyzed: 10/15/18

Surrogate: 2-Fluorobiphenyl	0.468		mg/L	0.500		93.6	30-130			
Surrogate: 2,4,6-Tribromophenol	1.07		mg/L	1.00		107	15-110			
Surrogate: p-Terphenyl-d14	0.500		mg/L	0.500		100	30-130			

LCS Dup (B214689-BSD1)

Prepared: 10/12/18 Analyzed: 10/15/18

2,4-Dinitrotoluene	0.217	0.050	mg/L	0.250		86.8	40-140	1.26	20	
Hexachlorobenzene	0.203	0.050	mg/L	0.250		81.1	40-140	4.55	20	
Hexachlorobutadiene	0.185	0.050	mg/L	0.250		74.0	40-140	1.20	20	
Hexachloroethane	0.187	0.050	mg/L	0.250		74.6	40-140	1.07	50	‡
2-Methylphenol	0.197	0.050	mg/L	0.250		79.0	30-130	0.202	20	
3/4-Methylphenol	0.212	0.050	mg/L	0.250		85.0	30-130	1.68	20	
Nitrobenzene	0.221	0.050	mg/L	0.250		88.6	40-140	1.55	20	
Pentachlorophenol	0.157	0.050	mg/L	0.250		63.0	30-130	5.80	50	‡
Pyridine	0.128	0.025	mg/L	0.250		51.1	10-140	8.71	50	† ‡
2,4,5-Trichlorophenol	0.208	0.050	mg/L	0.250		83.2	30-130	1.88	20	
2,4,6-Trichlorophenol	0.207	0.050	mg/L	0.250		82.6	30-130	3.82	50	‡
Surrogate: 2-Fluorophenol	0.768		mg/L	1.00		76.8	15-110			
Surrogate: Phenol-d6	0.791		mg/L	1.00		79.1	15-110			
Surrogate: Nitrobenzene-d5	0.470		mg/L	0.500		94.1	30-130			
Surrogate: 2-Fluorobiphenyl	0.450		mg/L	0.500		90.0	30-130			
Surrogate: 2,4,6-Tribromophenol	1.03		mg/L	1.00		103	15-110			
Surrogate: p-Terphenyl-d14	0.454		mg/L	0.500		90.8	30-130			

Matrix Spike (B214689-MS1)

Source: 18J0071-15

Prepared: 10/12/18 Analyzed: 10/15/18

2,4-Dinitrotoluene	0.232	0.050	mg/L	0.250	ND	92.7	40-140			
Hexachlorobenzene	0.204	0.050	mg/L	0.250	ND	81.8	40-140			
Hexachlorobutadiene	0.195	0.050	mg/L	0.250	ND	77.8	40-140			
Hexachloroethane	0.197	0.050	mg/L	0.250	ND	79.0	40-140			
2-Methylphenol	0.203	0.050	mg/L	0.250	ND	81.2	40-140			
3/4-Methylphenol	0.224	0.050	mg/L	0.250	ND	89.6	40-140			
Nitrobenzene	0.234	0.050	mg/L	0.250	ND	93.7	40-140			
Pentachlorophenol	0.109	0.050	mg/L	0.250	ND	43.5	40-140			
Pyridine	0.124	0.025	mg/L	0.250	ND	49.7	40-140			
2,4,5-Trichlorophenol	0.209	0.050	mg/L	0.250	ND	83.7	40-140			
2,4,6-Trichlorophenol	0.210	0.050	mg/L	0.250	ND	83.9	40-140			
Surrogate: 2-Fluorophenol	0.802		mg/L	1.00		80.2	15-110			
Surrogate: Phenol-d6	0.863		mg/L	1.00		86.3	15-110			
Surrogate: Nitrobenzene-d5	0.500		mg/L	0.500		100	30-130			
Surrogate: 2-Fluorobiphenyl	0.463		mg/L	0.500		92.7	30-130			
Surrogate: 2,4,6-Tribromophenol	1.07		mg/L	1.00		107	15-110			
Surrogate: p-Terphenyl-d14	0.497		mg/L	0.500		99.5	30-130			

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**QUALITY CONTROL**

**TCLP - Organochloride Pesticides by GC/ECD - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B214690 - SW-846 3510C</b>										
<b>Blank (B214690-BLK1)</b>										
Prepared: 10/12/18 Analyzed: 10/15/18										
gamma-BHC (Lindane)	ND	0.030	µg/L							
gamma-BHC (Lindane) [2C]	ND	0.030	µg/L							
Chlordane	ND	0.20	µg/L							
Chlordane [2C]	ND	0.20	µg/L							
Endrin	ND	0.080	µg/L							
Endrin [2C]	ND	0.080	µg/L							
Heptachlor	ND	0.050	µg/L							
Heptachlor [2C]	ND	0.050	µg/L							
Heptachlor Epoxide	ND	0.050	µg/L							
Heptachlor Epoxide [2C]	ND	0.050	µg/L							
Methoxychlor	ND	0.50	µg/L							
Methoxychlor [2C]	ND	0.50	µg/L							
Toxaphene	ND	1.0	µg/L							
Toxaphene [2C]	ND	1.0	µg/L							
Surrogate: Decachlorobiphenyl	1.61		µg/L	2.00		80.3	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.57		µg/L	2.00		78.5	30-150			
Surrogate: Tetrachloro-m-xylene	1.56		µg/L	2.00		77.9	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.49		µg/L	2.00		74.6	30-150			
<b>LCS (B214690-BS1)</b>										
Prepared: 10/12/18 Analyzed: 10/15/18										
gamma-BHC (Lindane)	0.90	0.030	µg/L	1.00		90.1	40-140			V-06
gamma-BHC (Lindane) [2C]	0.84	0.030	µg/L	1.00		84.2	40-140			
Endrin	0.96	0.080	µg/L	1.00		95.8	40-140			
Endrin [2C]	0.91	0.080	µg/L	1.00		91.1	40-140			
Heptachlor	0.87	0.050	µg/L	1.00		87.1	40-140			
Heptachlor [2C]	0.86	0.050	µg/L	1.00		86.3	40-140			
Heptachlor Epoxide	0.95	0.050	µg/L	1.00		95.1	40-140			
Heptachlor Epoxide [2C]	0.87	0.050	µg/L	1.00		87.4	40-140			
Methoxychlor	1.0	0.50	µg/L	1.00		102	40-140			
Methoxychlor [2C]	0.85	0.50	µg/L	1.00		84.8	40-140			
Surrogate: Decachlorobiphenyl	1.24		µg/L	2.00		61.9	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.25		µg/L	2.00		62.6	30-150			
Surrogate: Tetrachloro-m-xylene	1.71		µg/L	2.00		85.7	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.67		µg/L	2.00		83.6	30-150			
<b>LCS Dup (B214690-BSD1)</b>										
Prepared: 10/12/18 Analyzed: 10/15/18										
gamma-BHC (Lindane)	0.98	0.030	µg/L	1.00		98.4	40-140	8.80	20	V-06
gamma-BHC (Lindane) [2C]	0.90	0.030	µg/L	1.00		90.1	40-140	6.75	20	
Endrin	1.0	0.080	µg/L	1.00		103	40-140	7.16	20	
Endrin [2C]	0.98	0.080	µg/L	1.00		97.6	40-140	6.90	20	
Heptachlor	0.94	0.050	µg/L	1.00		93.9	40-140	7.53	20	
Heptachlor [2C]	0.94	0.050	µg/L	1.00		93.5	40-140	7.98	20	
Heptachlor Epoxide	1.0	0.050	µg/L	1.00		102	40-140	7.49	20	
Heptachlor Epoxide [2C]	0.94	0.050	µg/L	1.00		94.4	40-140	7.77	20	
Methoxychlor	1.1	0.50	µg/L	1.00		110	40-140	8.03	20	
Methoxychlor [2C]	0.76	0.50	µg/L	1.00		76.1	40-140	10.8	20	
Surrogate: Decachlorobiphenyl	1.82		µg/L	2.00		90.9	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.95		µg/L	2.00		97.3	30-150			
Surrogate: Tetrachloro-m-xylene	1.88		µg/L	2.00		94.0	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.81		µg/L	2.00		90.4	30-150			

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QUALITY CONTROL

TCLP - Organochloride Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B214690 - SW-846 3510C

Matrix Spike (B214690-MS1)

Source: 18J0071-15

Prepared: 10/12/18 Analyzed: 10/16/18

gamma-BHC (Lindane)	0.94	0.030	µg/L	1.00	ND	94.1	30-150			V-06
gamma-BHC (Lindane) [2C]	0.88	0.030	µg/L	1.00	ND	87.7	30-150			
Endrin	0.99	0.080	µg/L	1.00	ND	99.3	30-150			
Endrin [2C]	0.94	0.080	µg/L	1.00	ND	93.7	30-150			
Heptachlor	0.89	0.050	µg/L	1.00	ND	89.1	30-150			
Heptachlor [2C]	0.84	0.050	µg/L	1.00	ND	83.9	30-150			
Heptachlor Epoxide	1.0	0.050	µg/L	1.00	ND	100	30-150			
Heptachlor Epoxide [2C]	0.92	0.050	µg/L	1.00	ND	92.0	30-150			
Methoxychlor	0.98	0.50	µg/L	1.00	ND	98.3	30-150			
Methoxychlor [2C]	0.91	0.50	µg/L	1.00	ND	90.8	30-150			
Surrogate: Decachlorobiphenyl	0.921		µg/L	2.00		46.1	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.986		µg/L	2.00		49.3	30-150			
Surrogate: Tetrachloro-m-xylene	1.68		µg/L	2.00		84.0	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.61		µg/L	2.00		80.3	30-150			

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**QUALITY CONTROL**

**TCLP - Herbicides by GC/ECD - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B214714 - SW-846 3510C</b>										
<b>Blank (B214714-BLK1)</b>										
					Prepared: 10/13/18 Analyzed: 10/15/18					
2,4-D	ND	0.050	mg/L							
2,4-D [2C]	ND	0.050	mg/L							
2,4,5-TP (Silvex)	ND	0.0050	mg/L							
2,4,5-TP (Silvex) [2C]	ND	0.0050	mg/L							
Surrogate: 2,4-Dichlorophenylacetic acid	0.172		mg/L	0.200		86.1	30-150			
Surrogate: 2,4-Dichlorophenylacetic acid [2C]	0.171		mg/L	0.200		85.4	30-150			
<b>LCS (B214714-BS1)</b>										
					Prepared: 10/13/18 Analyzed: 10/15/18					
2,4-D	0.196	0.050	mg/L	0.250		78.4	40-140			V-05
2,4-D [2C]	0.219	0.050	mg/L	0.250		87.6	40-140			
2,4,5-TP (Silvex)	0.0232	0.0050	mg/L	0.0250		93.0	40-140			
2,4,5-TP (Silvex) [2C]	0.0250	0.0050	mg/L	0.0250		99.9	40-140			
Surrogate: 2,4-Dichlorophenylacetic acid	0.198		mg/L	0.200		99.0	30-150			
Surrogate: 2,4-Dichlorophenylacetic acid [2C]	0.183		mg/L	0.200		91.5	30-150			
<b>LCS Dup (B214714-BSD1)</b>										
					Prepared: 10/13/18 Analyzed: 10/15/18					
2,4-D	0.206	0.050	mg/L	0.250		82.2	40-140	4.82	20	V-05
2,4-D [2C]	0.233	0.050	mg/L	0.250		93.0	40-140	6.05	20	
2,4,5-TP (Silvex)	0.0241	0.0050	mg/L	0.0250		96.5	40-140	3.71	20	
2,4,5-TP (Silvex) [2C]	0.0259	0.0050	mg/L	0.0250		103	40-140	3.48	20	
Surrogate: 2,4-Dichlorophenylacetic acid	0.199		mg/L	0.200		99.4	30-150			
Surrogate: 2,4-Dichlorophenylacetic acid [2C]	0.185		mg/L	0.200		92.7	30-150			
<b>Matrix Spike (B214714-MS1)</b>										
					Source: 18J0071-15 Prepared: 10/13/18 Analyzed: 10/15/18					
2,4-D	0.194	0.050	mg/L	0.250	ND	77.6	30-150			
2,4-D [2C]	0.236	0.050	mg/L	0.250	ND	94.3	30-150			
2,4,5-TP (Silvex)	0.0256	0.0050	mg/L	0.0250	ND	102	30-150			
2,4,5-TP (Silvex) [2C]	0.0249	0.0050	mg/L	0.0250	ND	99.8	30-150			
Surrogate: 2,4-Dichlorophenylacetic acid	0.192		mg/L	0.200		96.1	30-150			
Surrogate: 2,4-Dichlorophenylacetic acid [2C]	0.210		mg/L	0.200		105	30-150			

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## BREAKDOWN REPORT

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**Lab Sample ID:** S028346-PEM1 **Analyzed:** 10/15/2018

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**Column Number:** 1  
**Analyte** **% Breakdown**  
4,4'-DDT [1] 2.76  
Endrin [1] 4.53

---

**Column Number:** 2  
**Analyte** **% Breakdown**  
4,4'-DDT [2] 3.56  
Endrin [2] 1.71

---

## BREAKDOWN REPORT

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**Lab Sample ID:** S028346-PEM2 **Analyzed:** 10/15/2018

---

**Column Number:** 1  
**Analyte** **% Breakdown**  
4,4'-DDT [1] 8.60  
Endrin [1] 3.09

---

**Column Number:** 2  
**Analyte** **% Breakdown**  
4,4'-DDT [2] 10.00  
Endrin [2] 0.48

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## BREAKDOWN REPORT

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**Lab Sample ID:** S028346-PEM3 **Analyzed:** 10/16/2018

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**Column Number:** 1  
**Analyte** **% Breakdown**  
4,4'-DDT [1] 4.81  
Endrin [1] 3.76

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BREAKDOWN REPORT

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Lab Sample ID: S028346-PEM3 Analyzed: 10/16/2018

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Column Number: 2

Analyte	% Breakdown
4,4'-DDT [2]	5.88
Endrin [2]	0.85

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**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**

LCS
-----

*SW-846 8082A*

Lab Sample ID:           B214272-BS1                                Date(s) Analyzed           10/09/2018                     10/09/2018          

Instrument ID (1):           ECD3                                                Instrument ID (2):           ECD3          

GC Column (1):                                      ID:                                      (mm)                      GC Column (2):                                      ID:                                      (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.17	
	2	0.000	0.000	0.000	0.17	5.7
Aroclor-1260	1	0.000	0.000	0.000	0.15	
	2	0.000	0.000	0.000	0.15	0.0

**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**  
*SW-846 8082A*

<b>LCS Dup</b>
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Lab Sample ID:                     B214272-BSD1                                          Date(s) Analyzed           10/09/2018                     10/09/2018          

Instrument ID (1):                     ECD3                                          Instrument ID (2):                     ECD3                    

GC Column (1):                      ID:                      (mm)                      GC Column (2):                      ID:                      (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.19	
	2	0.000	0.000	0.000	0.19	5.1
Aroclor-1260	1	0.000	0.000	0.000	0.17	
	2	0.000	0.000	0.000	0.17	0.0

**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**

<b>LCS</b>
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*SW-846 8081B*

Lab Sample ID:                     B214690-BS1                                          Date(s) Analyzed           10/15/2018                     10/15/2018          

Instrument ID (1):                     ECD2                                          Instrument ID (2):                     ECD2                    

GC Column (1):                      ID:                      (mm)                      GC Column (2):                      ID:                      (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Endrin	1	6.875	0.000	0.000	0.96	
	2	6.654	0.000	0.000	0.91	5.4
gamma-BHC (Lindane)	1	5.402	0.000	0.000	0.90	
	2	5.233	0.000	0.000	0.84	6.9
Heptachlor	1	5.688	0.000	0.000	0.87	
	2	5.472	0.000	0.000	0.86	1.2
Heptachlor Epoxide	1	6.275	0.000	0.000	0.95	
	2	6.012	0.000	0.000	0.87	8.8
Methoxychlor	1	7.523	0.000	0.000	1.0	
	2	7.268	0.000	0.000	0.85	16.2

**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**

LCS Dup

*SW-846 8081B*

Lab Sample ID:                   B214690-BSD1                                        Date(s) Analyzed           10/15/2018                     10/15/2018          

Instrument ID (1):                   ECD2                                        Instrument ID (2):                   ECD2                  

GC Column (1):                      ID:                      (mm)                      GC Column (2):                      ID:                      (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Endrin	1	6.876	0.000	0.000	1.0	
	2	6.654	0.000	0.000	0.98	2.0
gamma-BHC (Lindane)	1	5.402	0.000	0.000	0.98	
	2	5.232	0.000	0.000	0.90	8.5
Heptachlor	1	5.688	0.000	0.000	0.94	
	2	5.471	0.000	0.000	0.94	0.0
Heptachlor Epoxide	1	6.275	0.000	0.000	1.0	
	2	6.012	0.000	0.000	0.94	6.2
Methoxychlor	1	7.524	0.000	0.000	1.1	
	2	7.268	0.000	0.000	0.76	36.6

**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**

**Matrix Spike**

*SW-846 8081B*

Lab Sample ID:                     B214690-MS1                                          Date(s) Analyzed           10/16/2018                     10/16/2018          

Instrument ID (1):                     ECD2                                          Instrument ID (2):                     ECD2                    

GC Column (1):                      ID:                      (mm)                      GC Column (2):                      ID:                      (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Endrin	1	6.873	0.000	0.000	0.99	
	2	6.652	0.000	0.000	0.94	5.2
gamma-BHC (Lindane)	1	5.401	0.000	0.000	0.94	
	2	5.231	0.000	0.000	0.88	6.6
Heptachlor	1	5.686	0.000	0.000	0.89	
	2	5.470	0.000	0.000	0.84	5.8
Heptachlor Epoxide	1	6.273	0.000	0.000	1.0	
	2	6.010	0.000	0.000	0.92	8.3
Methoxychlor	1	7.521	0.000	0.000	0.98	
	2	7.267	0.000	0.000	0.91	7.4

**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**

<b>LCS</b>
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*SW-846 8151A*

Lab Sample ID:                   B214714-BS1                                        Date(s) Analyzed           10/15/2018                     10/15/2018          

Instrument ID (1):                   ECD 8                                        Instrument ID (2):                   ECD 8                  

GC Column (1):                      ID:                      (mm)                      GC Column (2):                      ID:                      (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
2,4,5-TP (Silvex)	1	13.048	0.000	0.000	0.0232	
	2	13.098	0.000	0.000	0.0250	8.3
2,4-D	1	11.389	0.000	0.000	0.196	
	2	11.513	0.000	0.000	0.219	9.1

**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**  
*SW-846 8151A*

<b>LCS Dup</b>
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Lab Sample ID:                   B214714-BSD1                                        Date(s) Analyzed           10/15/2018                     10/15/2018          

Instrument ID (1):                   ECD 8                                        Instrument ID (2):                   ECD 8                  

GC Column (1):                      ID:                      (mm)                      GC Column (2):                      ID:                      (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
2,4,5-TP (Silvex)	1	13.053	0.000	0.000	0.0241	
	2	13.100	0.000	0.000	0.0259	7.6
2,4-D	1	11.395	0.000	0.000	0.206	
	2	11.516	0.000	0.000	0.233	10.4

**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**  
*SW-846 8151A*

**Matrix Spike**

Lab Sample ID: B214714-MS1 Date(s) Analyzed 10/15/2018 10/15/2018

Instrument ID (1): ECD 8 Instrument ID (2): ECD 8

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
2,4,5-TP (Silvex)	1	13.054	0.000	0.000	0.0256	
	2	13.101	0.000	0.000	0.0249	4.3
2,4-D	1	11.395	0.000	0.000	0.194	
	2	11.515	0.000	0.000	0.236	21.6



**FLAG/QUALIFIER SUMMARY**

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
E	Reported result is estimated. Value reported over verified calibration range.
H-03	Sample received after recommended holding time was exceeded.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
L-02	Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.
L-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
MS-07A	Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.
MS-12	Matrix spike recovery and matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a high bias for reported result or non-homogeneous sample aliquots cannot be eliminated.
MS-15	Matrix spike and matrix spike duplicate recoveries are outside of control limits. Data validation is not affected since results for this compound in this sample are "not detected", and recovery bias is on the high side.
MS-19	Sample to spike ratio is greater than or equal to 4:1. Spiked amount is not representative of the native amount in the sample. Appropriate or meaningful recoveries cannot be calculated.
MS-22	Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.
PR-15	According to the NY ELAP program, all voa results less than 0.2mg/Kg are estimated and biased low if not collected according to SW-846 5035-L/5035A-L.
R-05	Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
RL-11	Elevated reporting limit due to high concentration of target compounds.
S-03	Surrogate recovery outside of control limits due to suspected sample matrix interference.
V-05	Continuing calibration did not meet method specifications and was biased on the low side for this compound.
V-06	Continuing calibration did not meet method specifications and was biased on the high side for this compound.
V-17	Internal standard area <50% of associated calibration standard internal standard area. Reanalysis yielded similar internal standard non-conformance.
V-20	Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.
V-34	Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.
V-36	Initial calibration verification (ICV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

**CERTIFICATIONS**

**Certified Analyses included in this Report**

Analyte	Certifications
<b>SW-846 1030 in Soil</b>	
Ignitability	NY,NH,CT,NC,ME,VA
<b>SW-846 6010D in Soil</b>	
Arsenic	CT,NH,NY,ME,VA,NC
Barium	CT,NH,NY,ME,VA,NC
Cadmium	CT,NH,NY,ME,VA,NC
Chromium	CT,NH,NY,ME,VA,NC
Lead	CT,NH,NY,AIHA,ME,VA,NC
Selenium	CT,NH,NY,ME,VA,NC
Silver	CT,NH,NY,ME,VA,NC
<b>SW-846 7470A in Water</b>	
Mercury	CT,NH,NY,NC,ME,VA
<b>SW-846 7471B in Soil</b>	
Mercury	CT,NH,NY,NC,ME,VA
<b>SW-846 8081B in Water</b>	
gamma-BHC (Lindane)	CT,ME,NC,NH,NY,VA
gamma-BHC (Lindane) [2C]	CT,ME,NC,NH,NY,VA
Chlordane	CT,ME,NC,NH,NY,VA
Chlordane [2C]	CT,ME,NC,NH,NY,VA
Endrin	CT,ME,NC,NH,NY,VA
Endrin [2C]	CT,ME,NC,NH,NY,VA
Heptachlor	CT,ME,NC,NH,NY,VA
Heptachlor [2C]	CT,ME,NC,NH,NY,VA
Heptachlor Epoxide	CT,ME,NC,NH,NY,VA
Heptachlor Epoxide [2C]	CT,ME,NC,NH,NY,VA
Hexachlorobenzene	NC
Methoxychlor	CT,ME,NC,NH,NY,VA
Methoxychlor [2C]	CT,ME,NC,NH,NY,VA
Toxaphene	CT,ME,NC,NH,NY,VA
Toxaphene [2C]	CT,ME,NC,NH,NY,VA
<b>SW-846 8082A in Product/Solid</b>	
Aroclor-1016	CT,NH,NY,NC,ME,VA
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1221	CT,NH,NY,NC,ME,VA
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1232	CT,NH,NY,NC,ME,VA
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1242	CT,NH,NY,NC,ME,VA
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1248	CT,NH,NY,NC,ME,VA
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1254	CT,NH,NY,NC,ME,VA
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1260	CT,NH,NY,NC,ME,VA
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1262	NH,NY,NC,ME,VA

**CERTIFICATIONS**

**Certified Analyses included in this Report**

Analyte	Certifications
<b>SW-846 8082A in Product/Solid</b>	
Aroclor-1262 [2C]	NH,NY,NC,ME,VA
Aroclor-1268	NH,NY,NC,ME,VA
Aroclor-1268 [2C]	NH,NY,NC,ME,VA
<b>SW-846 8082A in Soil</b>	
Aroclor-1016	CT,NH,NY,NC,ME,VA
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1221	CT,NH,NY,NC,ME,VA
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1232	CT,NH,NY,NC,ME,VA
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1242	CT,NH,NY,NC,ME,VA
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1248	CT,NH,NY,NC,ME,VA
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1254	CT,NH,NY,NC,ME,VA
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1260	CT,NH,NY,NC,ME,VA
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1262	NH,NY,NC,ME,VA
Aroclor-1262 [2C]	NH,NY,NC,ME,VA
Aroclor-1268	NH,NY,NC,ME,VA
Aroclor-1268 [2C]	NH,NY,NC,ME,VA
<b>SW-846 8082A in Water</b>	
Aroclor-1016	CT,NH,NY,NC,ME,VA
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1221	CT,NH,NY,NC,ME,VA
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1232	CT,NH,NY,NC,ME,VA
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1242	CT,NH,NY,NC,ME,VA
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1248	CT,NH,NY,NC,ME,VA
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1254	CT,NH,NY,NC,ME,VA
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1260	CT,NH,NY,NC,ME,VA
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1262	NH,NY,NC,ME,VA
Aroclor-1262 [2C]	NH,NY,NC,ME,VA
Aroclor-1268	NH,NY,NC,ME,VA
Aroclor-1268 [2C]	NH,NY,NC,ME,VA
<b>SW-846 8260C in Soil</b>	
Acetone	CT,NH,NY,ME,VA
Acetone	CT,NH,NY,ME,VA
Acetone	ME,NY,VA
Acrylonitrile	CT,NH,NY,ME,VA

**CERTIFICATIONS**

**Certified Analyses included in this Report**

Analyte	Certifications
<i>SW-846 8260C in Soil</i>	
Acrylonitrile	CT,NH,NY,ME,VA
Benzene	ME,NY,CT,NC,VA
Benzene	CT,NH,NY,ME,VA
Benzene	CT,NH,NY,ME,VA
Bromobenzene	ME,NY,VA
Bromobenzene	NH,NY,ME,VA
Bromobenzene	NH,NY,ME,VA
Bromochloromethane	ME,NY,VA
Bromochloromethane	NH,NY,ME,VA
Bromochloromethane	NH,NY,ME,VA
Bromodichloromethane	ME,NY,VA
Bromodichloromethane	CT,NH,NY,ME,VA
Bromodichloromethane	CT,NH,NY,ME,VA
Bromoform	CT,NH,NY,ME,VA
Bromoform	ME,NY,VA
Bromoform	CT,NH,NY,ME,VA
Bromomethane	CT,NH,NY,ME,VA
Bromomethane	CT,NH,NY,ME,VA
Bromomethane	ME,NY,VA
2-Butanone (MEK)	CT,NH,NY,ME,VA
2-Butanone (MEK)	ME,NY,CT,NC,VA
2-Butanone (MEK)	CT,NH,NY,ME,VA
tert-Butyl Alcohol (TBA)	NY
n-Butylbenzene	ME,NY,VA
n-Butylbenzene	CT,NH,NY,ME,VA
n-Butylbenzene	CT,NH,NY,ME,VA
sec-Butylbenzene	ME,NY,VA
sec-Butylbenzene	CT,NH,NY,ME,VA
sec-Butylbenzene	CT,NH,NY,ME,VA
tert-Butylbenzene	CT,NH,NY,ME,VA
tert-Butylbenzene	CT,NH,NY,ME,VA
tert-Butylbenzene	ME,NY,VA
Carbon Disulfide	ME,VA
Carbon Disulfide	CT,NH,NY,ME,VA
Carbon Disulfide	CT,NH,NY,ME,VA
Carbon Tetrachloride	CT,NH,NY,ME,VA
Carbon Tetrachloride	ME,NY,CT,NC,VA
Carbon Tetrachloride	CT,NH,NY,ME,VA
Chlorobenzene	CT,NH,NY,ME,VA
Chlorobenzene	CT,NH,NY,ME,VA
Chlorobenzene	ME,NY,CT,NC,VA
Chlorodibromomethane	CT,NH,NY,ME,VA
Chlorodibromomethane	CT,NH,NY,ME,VA
Chlorodibromomethane	ME,NY,VA
Chloroethane	CT,NH,NY,ME,VA
Chloroethane	CT,NH,NY,ME,VA
Chloroethane	ME,NY,VA

**CERTIFICATIONS**

**Certified Analyses included in this Report**

Analyte	Certifications
<i>SW-846 8260C in Soil</i>	
Chloroform	CT,NH,NY,ME,VA
Chloroform	ME,NY,CT,NC,VA
Chloroform	CT,NH,NY,ME,VA
Chloromethane	ME,NY,VA
Chloromethane	CT,NH,NY,ME,VA
Chloromethane	CT,NH,NY,ME,VA
2-Chlorotoluene	CT,NH,NY,ME,VA
2-Chlorotoluene	ME,NY,VA
2-Chlorotoluene	CT,NH,NY,ME,VA
4-Chlorotoluene	CT,NH,NY,ME,VA
4-Chlorotoluene	CT,NH,NY,ME,VA
4-Chlorotoluene	ME,NY,VA
1,2-Dibromo-3-chloropropane (DBCP)	NY
1,2-Dibromo-3-chloropropane (DBCP)	NY
Dibromomethane	NH,NY,ME,VA
Dibromomethane	NH,NY,ME,VA
Dibromomethane	ME,NY,VA
1,2-Dichlorobenzene	CT,NH,NY,ME,VA
1,2-Dichlorobenzene	ME,NY,VA
1,2-Dichlorobenzene	CT,NH,NY,ME,VA
1,3-Dichlorobenzene	CT,NH,NY,ME,VA
1,3-Dichlorobenzene	CT,NH,NY,ME,VA
1,3-Dichlorobenzene	ME,NY,VA
1,4-Dichlorobenzene	ME,NY,CT,NC,VA
1,4-Dichlorobenzene	CT,NH,NY,ME,VA
1,4-Dichlorobenzene	CT,NH,NY,ME,VA
trans-1,4-Dichloro-2-butene	NY
Dichlorodifluoromethane (Freon 12)	NH,NY,ME,VA
Dichlorodifluoromethane (Freon 12)	NY,ME,VA
Dichlorodifluoromethane (Freon 12)	ME,NY,VA
1,1-Dichloroethane	ME,NY,VA
1,1-Dichloroethane	CT,NH,NY,ME,VA
1,1-Dichloroethane	CT,NH,NY,ME,VA
1,2-Dichloroethane	CT,NH,NY,ME,VA
1,2-Dichloroethane	CT,NH,NY,ME,VA
1,2-Dichloroethane	ME,NY,CT,NC,VA
1,1-Dichloroethylene	CT,NH,NY,ME,VA
1,1-Dichloroethylene	CT,NH,NY,ME,VA
1,1-Dichloroethylene	ME,NY,CT,NC,VA
cis-1,2-Dichloroethylene	ME,NY,VA
cis-1,2-Dichloroethylene	CT,NH,NY,ME,VA
cis-1,2-Dichloroethylene	CT,NH,NY,ME,VA
trans-1,2-Dichloroethylene	CT,NH,NY,ME,VA
trans-1,2-Dichloroethylene	ME,NY,VA
trans-1,2-Dichloroethylene	CT,NH,NY,ME,VA
1,2-Dichloropropane	CT,NH,NY,ME,VA
1,2-Dichloropropane	ME,NY,VA

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260C in Soil</i>	
1,2-Dichloropropane	CT,NH,NY,ME,VA
1,3-Dichloropropane	ME,NY,VA
1,3-Dichloropropane	NH,NY,ME,VA
1,3-Dichloropropane	NH,NY,ME,VA
2,2-Dichloropropane	NH,NY,ME,VA
2,2-Dichloropropane	ME,NY,VA
2,2-Dichloropropane	NH,NY,ME,VA
1,1-Dichloropropene	ME,NY,VA
1,1-Dichloropropene	NH,NY,ME,VA
1,1-Dichloropropene	NH,NY,ME,VA
cis-1,3-Dichloropropene	CT,NH,NY,ME,VA
cis-1,3-Dichloropropene	ME,NY,VA
cis-1,3-Dichloropropene	CT,NH,NY,ME,VA
trans-1,3-Dichloropropene	CT,NH,NY,ME,VA
trans-1,3-Dichloropropene	ME,NY,VA
trans-1,3-Dichloropropene	CT,NH,NY,ME,VA
1,4-Dioxane	NY
Ethylbenzene	CT,NH,NY,ME,VA
Ethylbenzene	CT,NH,NY,ME,VA
Ethylbenzene	ME,NY,VA
Hexachlorobutadiene	NH,NY,ME,VA
Hexachlorobutadiene	NH,NY,ME,VA
Hexachlorobutadiene	ME,NY,VA
2-Hexanone (MBK)	CT,NH,NY,ME,VA
2-Hexanone (MBK)	CT,NH,NY,ME,VA
2-Hexanone (MBK)	ME,NY,VA
Isopropylbenzene (Cumene)	CT,NH,NY,ME,VA
Isopropylbenzene (Cumene)	CT,NH,NY,ME,VA
Isopropylbenzene (Cumene)	ME,NY,VA
p-Isopropyltoluene (p-Cymene)	NY
p-Isopropyltoluene (p-Cymene)	NH,NY
p-Isopropyltoluene (p-Cymene)	NH,NY
Methyl Acetate	NY
Methyl tert-Butyl Ether (MTBE)	NY,VA
Methyl tert-Butyl Ether (MTBE)	NY,VA
Methyl tert-Butyl Ether (MTBE)	NY,VA
Methyl Cyclohexane	NY
Methylene Chloride	CT,NH,NY,ME,VA
Methylene Chloride	CT,NH,NY,ME,VA
Methylene Chloride	ME,NY,VA
4-Methyl-2-pentanone (MIBK)	NY,VA
4-Methyl-2-pentanone (MIBK)	CT,NH,NY,VA
4-Methyl-2-pentanone (MIBK)	CT,NH,NY,VA
Naphthalene	NH,NY,ME,VA
Naphthalene	NH,NY,ME,VA
Naphthalene	ME,NY,VA
n-Propylbenzene	NH,NY

**CERTIFICATIONS**

**Certified Analyses included in this Report**

Analyte	Certifications
<i>SW-846 8260C in Soil</i>	
n-Propylbenzene	NY
n-Propylbenzene	NH, NY
Styrene	CT, NH, NY, ME, VA
Styrene	CT, NH, NY, ME, VA
Styrene	ME, NY, VA
1,1,1,2-Tetrachloroethane	CT, NH, NY, ME, VA
1,1,1,2-Tetrachloroethane	ME, NY, VA
1,1,1,2-Tetrachloroethane	CT, NH, NY, ME, VA
1,1,2,2-Tetrachloroethane	ME, NY, VA
1,1,2,2-Tetrachloroethane	CT, NH, NY, ME, VA
1,1,2,2-Tetrachloroethane	CT, NH, NY, ME, VA
Tetrachloroethylene	CT, NH, NY, ME, VA
Tetrachloroethylene	ME, NY, CT, NC, VA
Tetrachloroethylene	CT, NH, NY, ME, VA
Toluene	CT, NH, NY, ME, VA
Toluene	CT, NH, NY, ME, VA
Toluene	ME, NY, VA
1,2,3-Trichlorobenzene	NY, ME
1,2,4-Trichlorobenzene	NH, NY, ME, VA
1,2,4-Trichlorobenzene	ME, NY, VA
1,2,4-Trichlorobenzene	NH, NY, ME, VA
1,3,5-Trichlorobenzene	ME
1,1,1-Trichloroethane	CT, NH, NY, ME, VA
1,1,1-Trichloroethane	ME, NY, VA
1,1,1-Trichloroethane	CT, NH, NY, ME, VA
1,1,2-Trichloroethane	ME, NY, VA
1,1,2-Trichloroethane	CT, NH, NY, ME, VA
1,1,2-Trichloroethane	CT, NH, NY, ME, VA
Trichloroethylene	CT, NH, NY, ME, VA
Trichloroethylene	CT, NH, NY, ME, VA
Trichloroethylene	ME, NY, CT, NC, VA
Trichlorofluoromethane (Freon 11)	CT, NH, NY, ME, VA
Trichlorofluoromethane (Freon 11)	CT, NH, NY, VA
Trichlorofluoromethane (Freon 11)	NY, VA
1,2,3-Trichloropropane	ME, NY, VA
1,2,3-Trichloropropane	NH, NY, ME, VA
1,2,3-Trichloropropane	NH, NY, ME, VA
1,2,4-Trimethylbenzene	CT, NH, NY, ME, VA
1,2,4-Trimethylbenzene	CT, NH, NY, ME, VA
1,2,4-Trimethylbenzene	ME, NY, VA
1,3,5-Trimethylbenzene	CT, NH, NY, ME, VA
1,3,5-Trimethylbenzene	CT, NH, NY, ME, VA
1,3,5-Trimethylbenzene	ME, NY, VA
Vinyl Chloride	CT, NH, NY, ME, VA
Vinyl Chloride	CT, NH, NY, ME, VA
Vinyl Chloride	ME, NY, CT, NC, VA
m+p Xylene	ME, VA

**CERTIFICATIONS**

**Certified Analyses included in this Report**

Analyte	Certifications
<i>SW-846 8260C in Soil</i>	
m+p Xylene	CT,NH,NY,ME,VA
m+p Xylene	CT,NH,NY,ME,VA
o-Xylene	CT,NH,NY,ME,VA
o-Xylene	ME,VA
o-Xylene	CT,NH,NY,ME,VA
<i>SW-846 8260C in Water</i>	
Acetone	ME,NY,VA
Acetone	CT,ME,NH,VA,NY
Acrylonitrile	CT,ME,NH,VA,NY
tert-Amyl Methyl Ether (TAME)	ME,NH,VA,NY
tert-Amyl Methyl Ether (TAME)	NY,VA
Benzene	ME,NY,CT,NC,VA
Benzene	CT,ME,NH,VA,NY
Bromobenzene	NY
Bromochloromethane	ME,NY,VA
Bromochloromethane	ME,NH,VA,NY
Bromodichloromethane	ME,NY,VA
Bromodichloromethane	CT,ME,NH,VA,NY
Bromoform	CT,ME,NH,VA,NY
Bromoform	ME,NY,VA
Bromomethane	CT,ME,NH,VA,NY
Bromomethane	ME,NY,VA
2-Butanone (MEK)	ME,NY,CT,NC,VA
2-Butanone (MEK)	CT,ME,NH,VA,NY
tert-Butyl Alcohol (TBA)	ME,NH,VA,NY
n-Butylbenzene	ME,VA,NY
n-Butylbenzene	ME,NY,VA
sec-Butylbenzene	ME,NY,VA
sec-Butylbenzene	ME,VA,NY
tert-Butylbenzene	ME,VA,NY
tert-Butylbenzene	ME,NY,VA
tert-Butyl Ethyl Ether (TBEE)	ME,NH,VA,NY
tert-Butyl Ethyl Ether (TBEE)	ME,NY,VA
Carbon Disulfide	ME,NY,VA
Carbon Disulfide	CT,ME,NH,VA,NY
Carbon Tetrachloride	CT,ME,NH,VA,NY
Carbon Tetrachloride	ME,NY,CT,NC,VA
Chlorobenzene	ME,NY,CT,NC,VA
Chlorobenzene	CT,ME,NH,VA,NY
Chlorodibromomethane	CT,ME,NH,VA,NY
Chlorodibromomethane	ME,NY,VA
Chloroethane	CT,ME,NH,VA,NY
Chloroethane	ME,NY,VA
Chloroform	CT,ME,NH,VA,NY
Chloroform	ME,NY,CT,NC,VA
Chloromethane	CT,ME,NH,VA,NY



## CERTIFICATIONS

## Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260C in Water</i>	
Chloromethane	ME,NY,VA
2-Chlorotoluene	ME,NY,VA
2-Chlorotoluene	ME,NH,VA,NY
4-Chlorotoluene	ME,NH,VA,NY
4-Chlorotoluene	ME,NY,VA
1,2-Dibromo-3-chloropropane (DBCP)	NY
1,2-Dibromo-3-chloropropane (DBCP)	NY
1,2-Dibromoethane (EDB)	NY
1,2-Dibromoethane (EDB)	NY
Dibromomethane	ME,NH,VA,NY
Dibromomethane	ME,NY,VA
1,2-Dichlorobenzene	CT,ME,NH,VA,NY
1,2-Dichlorobenzene	ME,NY,VA
1,3-Dichlorobenzene	ME,NY,VA
1,3-Dichlorobenzene	CT,ME,NH,VA,NY
1,4-Dichlorobenzene	ME,NY,CT,NC,VA
1,4-Dichlorobenzene	CT,ME,NH,VA,NY
trans-1,4-Dichloro-2-butene	ME,NH,VA,NY
Dichlorodifluoromethane (Freon 12)	ME,NH,VA,NY
Dichlorodifluoromethane (Freon 12)	ME,NY,VA
1,1-Dichloroethane	CT,ME,NH,VA,NY
1,1-Dichloroethane	ME,NY,VA
1,2-Dichloroethane	CT,ME,NH,VA,NY
1,2-Dichloroethane	ME,NY,CT,NC,VA
1,1-Dichloroethylene	ME,NY,CT,NC,VA
1,1-Dichloroethylene	CT,ME,NH,VA,NY
cis-1,2-Dichloroethylene	ME,NY
cis-1,2-Dichloroethylene	ME,NY
trans-1,2-Dichloroethylene	CT,ME,NH,VA,NY
trans-1,2-Dichloroethylene	ME,NY,VA
1,2-Dichloropropane	ME,NY,VA
1,2-Dichloropropane	CT,ME,NH,VA,NY
1,3-Dichloropropane	ME,VA,NY
1,3-Dichloropropane	ME,NY,VA
2,2-Dichloropropane	ME,NY,VA
2,2-Dichloropropane	ME,NH,VA,NY
1,1-Dichloropropene	ME,NY,VA
1,1-Dichloropropene	ME,NH,VA,NY
cis-1,3-Dichloropropene	CT,ME,NH,VA,NY
cis-1,3-Dichloropropene	ME,NY,VA
trans-1,3-Dichloropropene	ME,NY,VA
trans-1,3-Dichloropropene	CT,ME,NH,VA,NY
Diethyl Ether	NY
Diisopropyl Ether (DIPE)	ME,NY,VA
Diisopropyl Ether (DIPE)	ME,NH,VA,NY
1,4-Dioxane	NY
Ethylbenzene	CT,ME,NH,VA,NY

**CERTIFICATIONS**

**Certified Analyses included in this Report**

Analyte	Certifications
<i>SW-846 8260C in Water</i>	
Ethylbenzene	ME,NY,VA
Hexachlorobutadiene	ME,NY,VA
Hexachlorobutadiene	CT,ME,NH,VA,NY
2-Hexanone (MBK)	ME,NY,VA
2-Hexanone (MBK)	CT,ME,NH,VA,NY
Isopropylbenzene (Cumene)	ME,NY,VA
Isopropylbenzene (Cumene)	ME,VA,NY
p-Isopropyltoluene (p-Cymene)	CT,ME,NH,VA,NY
p-Isopropyltoluene (p-Cymene)	ME,NY
Methyl Acetate	NY
Methyl tert-Butyl Ether (MTBE)	ME,NY,VA
Methyl tert-Butyl Ether (MTBE)	CT,ME,NH,VA,NY
Methyl Cyclohexane	NY
Methylene Chloride	CT,ME,NH,VA,NY
Methylene Chloride	ME,NY,VA
4-Methyl-2-pentanone (MIBK)	CT,ME,NH,VA,NY
4-Methyl-2-pentanone (MIBK)	ME,NY,VA
Naphthalene	ME,NH,VA,NY
Naphthalene	ME,NY,VA
n-Propylbenzene	ME,NY,VA
n-Propylbenzene	CT,ME,NH,VA,NY
Styrene	ME,NY,VA
Styrene	CT,ME,NH,VA,NY
1,1,1,2-Tetrachloroethane	CT,ME,NH,VA,NY
1,1,1,2-Tetrachloroethane	ME,NY,VA
1,1,2,2-Tetrachloroethane	CT,ME,NH,VA,NY
1,1,2,2-Tetrachloroethane	ME,NY,VA
Tetrachloroethylene	CT,ME,NH,VA,NY
Tetrachloroethylene	ME,NY,CT,NC,VA
Tetrahydrofuran	NY
Toluene	ME,NY,VA
Toluene	CT,ME,NH,VA,NY
1,2,3-Trichlorobenzene	ME,NY,VA
1,2,3-Trichlorobenzene	ME,NH,VA,NY
1,2,4-Trichlorobenzene	ME,NY,VA
1,2,4-Trichlorobenzene	CT,ME,NH,VA,NY
1,3,5-Trichlorobenzene	ME
1,1,1-Trichloroethane	ME,NY,VA
1,1,1-Trichloroethane	CT,ME,NH,VA,NY
1,1,2-Trichloroethane	ME,NY,VA
1,1,2-Trichloroethane	CT,ME,NH,VA,NY
Trichloroethylene	ME,NY,CT,NC,VA
Trichloroethylene	CT,ME,NH,VA,NY
Trichlorofluoromethane (Freon 11)	ME,NY,VA
Trichlorofluoromethane (Freon 11)	CT,ME,NH,VA,NY
1,2,3-Trichloropropane	ME,NY,VA
1,2,3-Trichloropropane	ME,NH,VA,NY

**CERTIFICATIONS**

**Certified Analyses included in this Report**

Analyte	Certifications
<b>SW-846 8260C in Water</b>	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	VA,NY
1,2,4-Trimethylbenzene	ME,VA,NY
1,2,4-Trimethylbenzene	ME,NY,VA
1,3,5-Trimethylbenzene	ME,VA,NY
1,3,5-Trimethylbenzene	ME,NY,VA
Vinyl Chloride	CT,ME,NH,VA,NY
Vinyl Chloride	ME,NY,CT,NC,VA
m+p Xylene	CT,ME,NH,VA,NY
m+p Xylene	ME,VA
o-Xylene	ME,VA
o-Xylene	CT,ME,NH,VA,NY
<b>SW-846 8270D in Water</b>	
1,2-Dichlorobenzene	ME,NC,NH,NY,VA
1,3-Dichlorobenzene	ME,NC,NH,NY,VA
1,4-Dichlorobenzene	ME,NC,NH,NY,VA
2,4-Dinitrotoluene	ME,NC,NH,CT,NY,VA
Hexachlorobenzene	ME,NC,NH,CT,NY,VA
Hexachlorobutadiene	ME,NC,NH,CT,NY,VA
Hexachloroethane	ME,NC,NH,CT,NY,VA
2-Methylphenol	ME,NC,NH,CT
3/4-Methylphenol	ME,NC,NH,CT
Naphthalene	ME,NC,NH,NY,VA
Nitrobenzene	ME,NC,NH,CT,NY,VA
Pentachlorophenol	ME,NC,NH,CT,NY,VA
Pyridine	ME,NC,NH,CT,NY,VA
1,2,4-Trichlorobenzene	ME,NC,NH,NY,VA
2,4,5-Trichlorophenol	ME,NC,NH,CT,NY,VA
2,4,6-Trichlorophenol	ME,NC,NH,CT,NY,VA
2-Fluorophenol	NC
<b>SW-846 9095B in Soil</b>	
Free Liquid	NY

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2005	100033	03/1/2020
MA	Massachusetts DEP	M-MA100	06/30/2019
CT	Connecticut Department of Public Health	PH-0567	09/30/2019
NY	New York State Department of Health	10899 NELAP	04/1/2019
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2019
RI	Rhode Island Department of Health	LAO00112	12/30/2018
NC	North Carolina Div. of Water Quality	652	12/31/2018
NJ	New Jersey DEP	MA007 NELAP	06/30/2019
FL	Florida Department of Health	E871027 NELAP	06/30/2019
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2019
ME	State of Maine	2011028	06/9/2019
VA	Commonwealth of Virginia	460217	12/14/2018
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2019
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2019
NC-DW	North Carolina Department of Health	25703	07/31/2019

CHAIN OF CUSTODY RECORD (New York)

**18J0071**  
**con-test**  
 ANALYTICAL LABORATORY  
 Company Name: EA Engineering  
 Address: 6712 Brooklawn Pkwy, Suite 104, Syracuse, NY 13206  
 Phone: 315-525-2332  
 Fax: 315-525-6405  
 Email: info@contestlabs.com

Project Name: Admiral Cleaners  
 Project Location: Watervliet, NY  
 Project Number: 1490738/0003  
 Project Manager: Chris Schroer  
 Con-Test Quote Name/Number:  
 Invoice Recipient: northeastap@east.com; cschroer@east.com  
 Sampled By: Stephen Soldner - ssoldner@east.com

Requested Turnaround Time:  7-Day  10-Day   
 Due Date:  
 Rush-Approval Required:  1-Day  3-Day   
 2-Day  4-Day  
 Data Delivery:  EXCEL   
 Format: PDF  Cat B  
 Other:  
 CLP Like Data Pkg Required:   
 Email To: cschroer@east.com  
 Fax To #: VOC - 82608

Con-Test Work Order #	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	Matrix Code	Conc Code
01	401075-SB-07R - 8.5 - 9.0	09/28/2018	09/30	X	X	S	H*
02	401075-SB-08 - 05 - 5.5	09/28/2018	1220	X	X	S	H*
03	401075-SB-09 - 05 - 5.5	09/28/2018	1345	X	X	S	U
04	401075-SB-10 - 12 - 12.5	09/28/2018	0855	X	X	S	U
05	401075-SB-11 - 10.5 - 11'	09/28/2018	1540	X	X	S	U
06	401075-SB-12 - 0.2 - 1	09/28/2018	1615	X	X	S	U
07	401075-SB-13 - 4.5 - 05	09/27/2018	1050	X	X	S	U
08	401075-SB-14 - 05 - 06'	09/27/2018	0840	X	X	S	U
09	401075-SB-15 - 10 - 11'	09/26/2018	1405	X	X	S	U
10	401075-SB-16 - 0.5 - 5.5	09/27/2018	1600	X	X	S	U

Comments: Trip Blank included for VOC analysis

\*PID reading at 07R was 1456 ppm at SB-08, the MS/MSD collected at 07R. PID reading was 305

Note: NYSDEC Full Cat B Deliverables

Relinquished by: (signature) Stephen Soldner - EA  
 Date/Time: 10/1/18 1430

Received by: (signature) [Signature]  
 Date/Time: 10/2/18 5:10 PM

Relinquished by: (signature) [Signature]  
 Date/Time: 10/2/18 1400

Received by: (signature) [Signature]  
 Date/Time: 10/2/18 1800

Relinquished by: (signature) [Signature]  
 Date/Time: 10/2/18 18:00

Program & Regulatory Information:  
 AWQ STDS  NY TOGS  
 NYC Sewer Discharge  NY CP-51  
 Part 360 GW (Landfill)  
 NY Restricted Use  
 NY Unrestricted Use  
 NY Part 375

Enhanced Data Package:  
 NYSDEC EQUIS EDD  
 EQUIS (Standard) EDD  
 NY Regulatory EDD  
 NY Regs Hits-Only EDD

Deliverables:  
 Chromatogram  
 AIHA-LAP, LLC

Project Entity:  Government\*  Municipality  City  
 Federal  21 J  Brownfield  
 City  MBTA

Other:  MWRA  WRTA  School  MBTA

PCB ONLY:  
 Soxhlet  
 Non Soxhlet

Doc # 380 Rev 1\_03242017  
 39 Spruce Street  
 East Longmeadow, MA 01028

http://www.contestlabs.com  
 CHAIN OF CUSTODY RECORD (New York)

1850071  
 Phone: 413-525-2332  
 Fax: 413-525-6405  
 Email: info@contestlabs.com

**Company Name:** EA Engineering  
**Address:** 6712 Brooklawn Pkwy, Suite 104, Syracuse, NY 13206  
**Phone:** PM - 315-565-6565 / Sampler 315-412-2684  
**Project Name:** Admiral Cleaners  
**Project Location:** Watervliet, NY  
**Project Number:** 1490738/0003  
**Project Manager:** Chris Schroer  
**Con-Test Quote Name/Number:**  
**Invoice Recipient:** northeastap@east.com; cschroer@east.com  
**Sampled By:** Stephen Soldner · ssoldner@east.com

**Requested Turnaround Time:** 7-Day  10-Day   
**Due Date:**  
**Rush-Approval Required:** 1-Day  3-Day  2-Day  4-Day   
**Data Delivery:** Format: PDF  EXCEL   
 Other: Cat B   
**CLP Like Data Pkg Required:**   
**Email To:** cschroer@east.com  
**Fax To #:**

Con-Test Work Order #	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	Matrix Code	Con. Code
11	401075-SB-17 - 05 - 5.7	09/27/2018	1345		X	S	U
12	401075-SB-FD-092818	09/28/2018	-		X	S	U
13	401075-RB-092818	09/28/2018	1455		X	WS	U
14	401075-SB-FR-14.5-15	9/28/18	0942		X	S	H*
15	401075-WasteChar	9/28/18	1500		X	S	U
16	401075-TB	9/28/18	-		X	W	U

**ANALYSIS REQUESTED**

TCLP VOL  
 TCLP 5 VOL Test/Here  
 RCRA 8 Metals  
 Total PCBs  
 PH  
 Ignitability  
 Reactive Cyanide  
 Reactive Sulfide  
 Conductivity  
 Paint Filter Free Ions

VOC - 82608

**Matrix Codes:**  
 GW = Ground Water  
 WW = Waste Water  
 DW = Drinking Water  
 A = Air  
 S = Soil  
 SL = Sludge  
 SOL = Solid  
 O = Other (please define)

**Preservation Codes:**  
 I = Iced  
 H = HCL  
 M = Methanol  
 N = Nitric Acid  
 S = Sulfuric Acid  
 B = Sodium Bisulfate  
 X = Sodium Hydroxide  
 T = Sodium  
 Thiosulfate  
 O = Other (please define)

**Container Codes:**  
 A = Amber Glass  
 G = Glass  
 P = Plastic  
 ST = Sterile  
 V = Vial  
 S = Summa Canister  
 T = Tediator Bag  
 O = Other (please define)

**Orthophosphate Samples:**  
 Field Filtered  
 Lab to Filter

**Dissolved Metals Samples:**  
 Field Filtered  
 Lab to Filter

**Comments:** Trip Blank included for VOC analysis  
 \*PID reading for SB-FR-14.5-15 was 715,000 ppm  
 \*Waste Char sample consists of 1-4oz jar, 2-8oz jars, and 1-1lb oz jar

**Relinquished by:** (signature) Erica Trice  
 Date/Time: 10/11/18 1630  
 Received by: (signature) Stephen Soldner - EA  
 Date/Time: 10-2-18 5:10AM  
 Relinquished by: (signature) J. M. B.  
 Date/Time: 10-2-18 1400  
 Relinquished by: (signature) Paul Travel  
 Date/Time: 10-2-18 1400  
 Relinquished by: (signature) Paul Travel  
 Date/Time: 11-3-18 1800  
 Relinquished by: (signature) Paul Travel  
 Date/Time: 10-2-18 18:00

**Program & Regulatory Information**

AWQ STDS  NY TOGS   
 NYC Sewer Discharge  NY CP-51   
 Part 360 GW (Landfill)   
 NY Restricted Use   
 NY Unrestricted Use   
 NY Part 375

**Deliverables**

Enhanced Data Package   
 NYSDEC EQUIS EDD   
 EQUIS (Standard) EDD   
 NY Regulatory EDD   
 NY Regs Hits-Only EDD

**Project Entity**

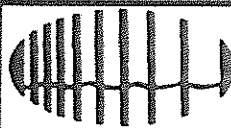
Government  
 Federal  
 City

**Other:** Municipality  WRTA   
 School  MBTA   
 Chromatogram   
 ALPHA-LAP, LLC

**PCB ONLY**

Soxhlet   
 Non Soxhlet

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples \_\_\_\_\_



**con-test**<sup>®</sup>  
ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client EA Engineering

Received By PB Date 10-2-18 Time 18:00

How were the samples received? In Cooler T No Cooler \_\_\_\_\_ On Ice T No Ice \_\_\_\_\_  
Direct from Sampling \_\_\_\_\_ Ambient \_\_\_\_\_ Melted Ice \_\_\_\_\_

Were samples within Temperature? 2-6°C T By Gun # 577 Actual Temp - 2.3  
By Blank # \_\_\_\_\_ Actual Temp - \_\_\_\_\_

Was Custody Seal Intact? NA Were Samples Tampered with? NA  
Was COC Relinquished? T Does Chain Agree With Samples? T

Are there broken/leaking/loose caps on any samples? F

Is COC in ink/ Legible? T Were samples received within holding time? T

Did COC include all Client T Analysis T Sampler Name T  
pertinent Information? Project F ID's T Collection Dates/Times T

Are Sample labels filled out and legible? T

Are there Lab to Filters? F Who was notified? \_\_\_\_\_

Are there Rushes? F Who was notified? \_\_\_\_\_

Are there Short Holds? F Who was notified? \_\_\_\_\_

Is there enough Volume? T

Is there Headspace where applicable? F MS/MSD? T

Proper Media/Containers Used? T Is splitting samples required? F

Were trip blanks received? T On COC? T

Do all samples have the proper pH? NA Acid \_\_\_\_\_ Base \_\_\_\_\_

Vials	#	Containers:	#	#	#	#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.
HCL-	<u>6</u>	500 mL Amb.		500 mL Plastic		8oz <u>Amb</u> /Clear
Meoh-		250 mL Amb.		250 mL Plastic		4oz <u>Amb</u> /Clear
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear
DI-		Other Plastic		Other Glass		Encore
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:
Sulfuric-		Perchlorate		Ziplock		

**Unused Media**

Vials	#	Containers:	#	#	#	#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear
DI-		Other Plastic		Other Glass		Encore
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:
Sulfuric-		Perchlorate		Ziplock		

Comments:

October 30, 2018

Christopher Schroer  
EA Engineering, Science & Tech. - NY  
6712 Brooklawn Parkway, Suite 104  
Syracuse, NY 13211

Project Location: Watervliet, NY  
Client Job Number:  
Project Number: 1490378.0003  
Laboratory Work Order Number: 18J0859

Enclosed are results of analyses for samples received by the laboratory on October 16, 2018. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Jessica L. Hoffman  
Project Manager



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39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

EA Engineering, Science & Tech. - NY  
 6712 Brooklawn Parkway, Suite 104  
 Syracuse, NY 13211  
 ATTN: Christopher Schroer

REPORT DATE: 10/30/2018

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 1490378.0003

**ANALYTICAL SUMMARY**

WORK ORDER NUMBER: 18J0859

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Watervliet, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
401075-MW-01	18J0859-01	Ground Water		SW-846 8260C	
401075-MW-02	18J0859-02	Ground Water		SW-846 8260C	
401075-MW-03	18J0859-03	Ground Water		SW-846 8260C	
401075-MW-04	18J0859-04	Ground Water		SW-846 8260C	
401075-MW-05	18J0859-05	Ground Water		SW-846 8260C	
401075-MW-06	18J0859-06	Ground Water		SW-846 8260C	
401075-MW-07	18J0859-07	Ground Water		SW-846 8260C	
401075-MW-07R	18J0859-08	Ground Water		SW-846 8260C	
401075-MW-08	18J0859-09	Ground Water		SW-846 8260C	
401075-MW-09	18J0859-10	Ground Water		SW-846 8260C	
401075-MW-10	18J0859-11	Ground Water		SW-846 8260C	
401075-MW-11	18J0859-12	Ground Water		SW-846 8260C	
401075-MW-12	18J0859-13	Ground Water		SW-846 8260C	
401075-MW-14	18J0859-14	Ground Water		SW-846 8260C	
401075-MW-15	18J0859-15	Ground Water		SW-846 8260C	
401075-MW-16	18J0859-16	Ground Water		SW-846 8260C	
401075-MW-17	18J0859-17	Ground Water		SW-846 8260C	
401075-DUP	18J0859-18	Ground Water		SW-846 8260C	
401075-TB01	18J0859-19	Trip Blank Water		SW-846 8260C	
401075-MW-10	18J0859-20	Ground Water		SW-846 8270D	

**CASE NARRATIVE SUMMARY**

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332  
SW-846 8260C

---

**Qualifications:**

---

**L-02**

Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.

**Analyte & Samples(s) Qualified:****Acetone**

B215777-BS1, B215777-BSD1

**Acrylonitrile**

B215777-BS1, B215777-BSD1

---

**MS-07A**

Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.

**Analyte & Samples(s) Qualified:****cis-1,2-Dichloroethylene**

18J0859-06[401075-MW-06], B215845-MS1, B215845-MSD1

---

**MS-23**

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is outside of the method specified criteria. Reduced precision anticipated for any reported result for this compound.

**Analyte & Samples(s) Qualified:****Bromomethane**

B215845-MS1

**Chloromethane**

B215845-MSD1

---

**MS-24**

Either matrix spike or matrix spike duplicate is outside of control limits, but the other is within limits. Analysis is in control based on laboratory fortified blank recovery.

**Analyte & Samples(s) Qualified:****Hexachlorobutadiene**

B215845-MSD1

**Isopropylbenzene (Cumene)**

B215845-MSD1

---

**R-05**

Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.

**Analyte & Samples(s) Qualified:****1,2,3-Trichloropropane**

18J0859-19[401075-TB01], B215777-BLK1, B215777-BS1, B215777-BSD1

---

**R-06**

Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.

**Analyte & Samples(s) Qualified:****Bromomethane**

18J0859-06[401075-MW-06], B215845-MS1, B215845-MSD1

**Chloromethane**

18J0859-06[401075-MW-06], B215845-MS1, B215845-MSD1

**Vinyl Chloride**

B215845-MS1, B215845-MSD1

---

**RL-11**

Elevated reporting limit due to high concentration of target compounds.

**Analyte & Samples(s) Qualified:**

18J0859-01[401075-MW-01], 18J0859-05[401075-MW-05], 18J0859-06[401075-MW-06], 18J0859-08[401075-MW-07R], 18J0859-18[401075-DUP]

**V-05**

Continuing calibration did not meet method specifications and was biased on the low side for this compound.

**Analyte & Samples(s) Qualified:****Carbon Tetrachloride**

18J0859-19[401075-TB01], B215777-BLK1, B215777-BS1, B215777-BSD1, S028749-CCV1

**Dichlorodifluoromethane (Freon 1)**

18J0859-01[401075-MW-01], 18J0859-02[401075-MW-02], 18J0859-03[401075-MW-03], 18J0859-04[401075-MW-04], 18J0859-05[401075-MW-05], 18J0859-06[401075-MW-06], 18J0859-07[401075-MW-07], 18J0859-08[401075-MW-07R], 18J0859-09[401075-MW-08], 18J0859-10[401075-MW-09], 18J0859-11[401075-MW-10], 18J0859-12[401075-MW-11], 18J0859-13[401075-MW-12], 18J0859-14[401075-MW-14], 18J0859-15[401075-MW-15], 18J0859-16[401075-MW-16], 18J0859-17[401075-MW-17], 18J0859-18[401075-DUP], 18J0859-19[401075-TB01], B215777-BLK1, B215777-BS1, B215777-BSD1, B215845-BLK1, B215845-BS1, B215845-BSD1, B215845-MS1, B215845-MSD1, S028749-CCV1, S028813-CCV1

**Methyl Acetate**

18J0859-01[401075-MW-01], 18J0859-02[401075-MW-02], 18J0859-03[401075-MW-03], 18J0859-04[401075-MW-04], 18J0859-05[401075-MW-05], 18J0859-06[401075-MW-06], 18J0859-07[401075-MW-07], 18J0859-08[401075-MW-07R], 18J0859-09[401075-MW-08], 18J0859-10[401075-MW-09], 18J0859-11[401075-MW-10], 18J0859-12[401075-MW-11], 18J0859-13[401075-MW-12], 18J0859-14[401075-MW-14], 18J0859-15[401075-MW-15], 18J0859-16[401075-MW-16], 18J0859-17[401075-MW-17], 18J0859-18[401075-DUP], 18J0859-19[401075-TB01], B215777-BLK1, B215777-BS1, B215777-BSD1, B215845-BLK1, B215845-BS1, B215845-BSD1, B215845-MS1, B215845-MSD1, S028749-CCV1, S028813-CCV1

**Trichlorofluoromethane (Freon 11)**

18J0859-19[401075-TB01], B215777-BLK1, B215777-BS1, B215777-BSD1, S028749-CCV1

**V-20**

Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

**Analyte & Samples(s) Qualified:****Acrylonitrile**

B215777-BS1, B215777-BSD1, B215845-BS1, B215845-BSD1, S028749-CCV1, S028813-CCV1

**Bromomethane**

B215777-BS1, B215777-BSD1, B215845-BS1, B215845-BSD1, S028749-CCV1, S028813-CCV1

**Chloromethane**

B215777-BS1, B215777-BSD1, S028749-CCV1

**Diethyl Ether**

B215777-BS1, B215777-BSD1, B215845-BS1, B215845-BSD1, S028749-CCV1, S028813-CCV1

**Hexachlorobutadiene**

B215845-BS1, B215845-BSD1, S028813-CCV1

**Methylene Chloride**

B215845-BS1, B215845-BSD1, S028813-CCV1

**tert-Butyl Alcohol (TBA)**

B215845-BS1, B215845-BSD1, S028813-CCV1

**V-36**

Initial calibration verification (ICV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

**Analyte & Samples(s) Qualified:****Bromochloromethane**

B215777-BS1, B215777-BSD1, B215845-BS1, B215845-BSD1, S028749-CCV1, S028813-CCV1

**Hexachlorobutadiene**

B215777-BS1, B215777-BSD1, B215845-BS1, B215845-BSD1, S028749-CCV1, S028813-CCV1

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington  
Project Manager

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-MW-01

Sampled: 10/16/2018 10:00

Sample ID: 18J0859-01

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	500	97	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
Acrylonitrile	ND	50	5.8	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
tert-Amyl Methyl Ether (TAME)	ND	5.0	1.1	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
Benzene	ND	10	1.2	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
Bromobenzene	ND	10	1.5	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
Bromochloromethane	ND	10	2.2	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
Bromodichloromethane	ND	5.0	3.0	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
Bromoform	ND	20	2.1	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
Bromomethane	ND	20	9.4	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
2-Butanone (MEK)	ND	200	24	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
tert-Butyl Alcohol (TBA)	ND	200	22	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
n-Butylbenzene	ND	10	1.5	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
sec-Butylbenzene	ND	10	1.3	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
tert-Butylbenzene	ND	10	1.2	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	5.0	0.95	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
Carbon Disulfide	ND	40	10	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
Carbon Tetrachloride	ND	50	2.5	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
Chlorobenzene	ND	10	1.6	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
Chlorodibromomethane	ND	5.0	1.0	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
Chloroethane	ND	20	2.8	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
Chloroform	ND	20	2.2	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
Chloromethane	ND	20	5.5	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
2-Chlorotoluene	ND	10	1.2	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
4-Chlorotoluene	ND	10	1.4	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	50	3.7	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
1,2-Dibromoethane (EDB)	ND	5.0	1.5	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
Dibromomethane	ND	10	1.6	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
1,2-Dichlorobenzene	ND	10	1.7	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
1,3-Dichlorobenzene	ND	10	1.7	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
1,4-Dichlorobenzene	ND	10	1.5	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
trans-1,4-Dichloro-2-butene	ND	20	3.1	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
Dichlorodifluoromethane (Freon 12)	ND	20	2.8	µg/L	10	V-05	SW-846 8260C	10/29/18	10/29/18 16:47	MFF
1,1-Dichloroethane	ND	10	1.6	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
1,2-Dichloroethane	ND	10	1.9	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
1,1-Dichloroethylene	ND	10	2.1	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
cis-1,2-Dichloroethylene	110	10	1.5	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
trans-1,2-Dichloroethylene	1.8	10	1.5	µg/L	10	J	SW-846 8260C	10/29/18	10/29/18 16:47	MFF
1,2-Dichloropropane	ND	10	1.3	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
1,3-Dichloropropane	ND	5.0	1.3	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
2,2-Dichloropropane	ND	10	2.1	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
1,1-Dichloropropene	ND	20	1.3	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
cis-1,3-Dichloropropene	ND	5.0	1.2	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
trans-1,3-Dichloropropene	ND	5.0	1.1	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
Diethyl Ether	ND	20	2.2	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-MW-01

Sampled: 10/16/2018 10:00

Sample ID: 18J0859-01

Sample Matrix: Ground Water

Sample Flags: RL-11

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	5.0	1.8	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
1,4-Dioxane	ND	500	260	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
Ethylbenzene	ND	10	1.3	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
Hexachlorobutadiene	ND	6.0	5.9	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
2-Hexanone (MBK)	ND	100	15	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
Isopropylbenzene (Cumene)	ND	10	1.2	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
p-Isopropyltoluene (p-Cymene)	ND	10	1.5	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
Methyl Acetate	ND	10	4.2	µg/L	10	V-05	SW-846 8260C	10/29/18	10/29/18 16:47	MFF
Methyl tert-Butyl Ether (MTBE)	ND	10	0.90	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
Methyl Cyclohexane	ND	10	6.3	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
Methylene Chloride	ND	50	32	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
4-Methyl-2-pentanone (MIBK)	ND	100	15	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
Naphthalene	ND	20	1.2	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
n-Propylbenzene	ND	10	1.3	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
Styrene	ND	10	1.5	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
1,1,1,2-Tetrachloroethane	ND	10	1.2	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
1,1,2,2-Tetrachloroethane	ND	5.0	1.6	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
Tetrachloroethylene	440	10	2.7	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
Tetrahydrofuran	ND	100	11	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
Toluene	ND	10	1.7	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
1,2,3-Trichlorobenzene	ND	50	1.4	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
1,2,4-Trichlorobenzene	ND	10	1.9	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
1,3,5-Trichlorobenzene	ND	10	1.7	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
1,1,1-Trichloroethane	ND	10	1.3	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
1,1,2-Trichloroethane	ND	10	2.4	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
Trichloroethylene	77	10	2.0	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
Trichlorofluoromethane (Freon 11)	ND	20	1.5	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
1,2,3-Trichloropropane	ND	20	2.2	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	10	2.0	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
1,2,4-Trimethylbenzene	ND	10	1.8	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
1,3,5-Trimethylbenzene	ND	10	1.3	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
Vinyl Chloride	ND	20	1.3	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
m+p Xylene	ND	20	2.6	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
o-Xylene	ND	10	1.3	µg/L	10		SW-846 8260C	10/29/18	10/29/18 16:47	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		85.6	70-130					10/29/18	16:47	
Toluene-d8		99.6	70-130					10/29/18	16:47	
4-Bromofluorobenzene		97.2	70-130					10/29/18	16:47	



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY  
 Date Received: 10/16/2018  
**Field Sample #: 401075-MW-02**  
**Sample ID: 18J0859-02**  
 Sample Matrix: Ground Water

Sample Description:

Work Order: 18J0859

Sampled: 10/16/2018 10:35

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	9.7	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
Bromodichloromethane	ND	0.50	0.30	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
Bromoform	ND	2.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
tert-Butylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.095	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
Carbon Tetrachloride	ND	5.0	0.25	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
Chloroform	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
Chloromethane	ND	2.0	0.55	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.37	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.28	µg/L	1	V-05	SW-846 8260C	10/29/18	10/29/18 9:18	MFF
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
cis-1,2-Dichloroethylene	2.1	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
2,2-Dichloropropane	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY  
 Date Received: 10/16/2018  
 Field Sample #: 401075-MW-02  
 Sample ID: 18J0859-02  
 Sample Matrix: Ground Water

Sample Description:

Work Order: 18J0859

Sampled: 10/16/2018 10:35

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
Hexachlorobutadiene	ND	0.60	0.59	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
Methyl Acetate	ND	1.0	0.42	µg/L	1	V-05	SW-846 8260C	10/29/18	10/29/18 9:18	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
Methyl Cyclohexane	ND	1.0	0.63	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
Tetrachloroethylene	28	1.0	0.27	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
Toluene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
1,1,1-Trichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
1,1,2-Trichloroethane	ND	1.0	0.24	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
Trichloroethylene	1.4	1.0	0.20	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
1,2,3-Trichloropropane	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.20	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
m+p Xylene	ND	2.0	0.26	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:18	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		83.8	70-130					10/29/18	9:18	
Toluene-d8		101	70-130					10/29/18	9:18	
4-Bromofluorobenzene		99.7	70-130					10/29/18	9:18	

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-MW-03

Sampled: 10/15/2018 14:00

Sample ID: 18J0859-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	9.7	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
Bromodichloromethane	ND	0.50	0.30	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
Bromoform	ND	2.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
tert-Butylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.095	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
Carbon Tetrachloride	ND	5.0	0.25	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
Chloroform	1.6	2.0	0.22	µg/L	1	J	SW-846 8260C	10/29/18	10/29/18 9:44	MFF
Chloromethane	ND	2.0	0.55	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.37	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.28	µg/L	1	V-05	SW-846 8260C	10/29/18	10/29/18 9:44	MFF
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
cis-1,2-Dichloroethylene	3.9	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
2,2-Dichloropropane	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-MW-03

Sampled: 10/15/2018 14:00

Sample ID: 18J0859-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
Hexachlorobutadiene	ND	0.60	0.59	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
Methyl Acetate	ND	1.0	0.42	µg/L	1	V-05	SW-846 8260C	10/29/18	10/29/18 9:44	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
Methyl Cyclohexane	ND	1.0	0.63	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
Tetrachloroethylene	8.9	1.0	0.27	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
Toluene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
1,1,1-Trichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
1,1,2-Trichloroethane	ND	1.0	0.24	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
Trichloroethylene	1.5	1.0	0.20	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
1,2,3-Trichloropropane	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.20	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
m+p Xylene	ND	2.0	0.26	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 9:44	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		83.5	70-130					10/29/18	9:44	
Toluene-d8		101	70-130					10/29/18	9:44	
4-Bromofluorobenzene		97.2	70-130					10/29/18	9:44	

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-MW-04

Sampled: 10/16/2018 09:35

Sample ID: 18J0859-04

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	9.7	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
Bromodichloromethane	ND	0.50	0.30	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
Bromoform	ND	2.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
tert-Butylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.095	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
Carbon Tetrachloride	ND	5.0	0.25	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
Chloroform	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
Chloromethane	ND	2.0	0.55	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.37	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.28	µg/L	1	V-05	SW-846 8260C	10/29/18	10/29/18 10:11	MFF
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
1,1-Dichloroethylene	0.23	1.0	0.21	µg/L	1	J	SW-846 8260C	10/29/18	10/29/18 10:11	MFF
cis-1,2-Dichloroethylene	69	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
trans-1,2-Dichloroethylene	0.30	1.0	0.15	µg/L	1	J	SW-846 8260C	10/29/18	10/29/18 10:11	MFF
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
2,2-Dichloropropane	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-MW-04

Sampled: 10/16/2018 09:35

Sample ID: 18J0859-04

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
Hexachlorobutadiene	ND	0.60	0.59	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
Methyl Acetate	ND	1.0	0.42	µg/L	1	V-05	SW-846 8260C	10/29/18	10/29/18 10:11	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
Methyl Cyclohexane	ND	1.0	0.63	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
Tetrachloroethylene	9.4	1.0	0.27	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
Toluene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
1,1,1-Trichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
1,1,2-Trichloroethane	ND	1.0	0.24	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
Trichloroethylene	2.7	1.0	0.20	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
1,2,3-Trichloropropane	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.20	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
m+p Xylene	ND	2.0	0.26	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:11	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		83.0	70-130					10/29/18	10:11	
Toluene-d8		100	70-130					10/29/18	10:11	
4-Bromofluorobenzene		98.4	70-130					10/29/18	10:11	



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-MW-05

Sampled: 10/16/2018 11:55

Sample ID: 18J0859-05

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	250	48	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
Acrylonitrile	ND	25	2.9	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
tert-Amyl Methyl Ether (TAME)	ND	2.5	0.53	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
Benzene	ND	5.0	0.60	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
Bromobenzene	ND	5.0	0.75	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
Bromochloromethane	ND	5.0	1.1	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
Bromodichloromethane	ND	2.5	1.5	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
Bromoform	ND	10	1.0	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
Bromomethane	ND	10	4.7	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
2-Butanone (MEK)	ND	100	12	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
tert-Butyl Alcohol (TBA)	ND	100	11	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
n-Butylbenzene	ND	5.0	0.75	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
sec-Butylbenzene	ND	5.0	0.65	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
tert-Butylbenzene	ND	5.0	0.60	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	2.5	0.48	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
Carbon Disulfide	ND	20	5.1	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
Carbon Tetrachloride	ND	25	1.2	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
Chlorobenzene	ND	5.0	0.80	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
Chlorodibromomethane	ND	2.5	0.52	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
Chloroethane	ND	10	1.4	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
Chloroform	ND	10	1.1	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
Chloromethane	ND	10	2.8	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
2-Chlorotoluene	ND	5.0	0.60	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
4-Chlorotoluene	ND	5.0	0.70	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	25	1.8	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
1,2-Dibromoethane (EDB)	ND	2.5	0.74	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
Dibromomethane	ND	5.0	0.80	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
1,2-Dichlorobenzene	ND	5.0	0.85	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
1,3-Dichlorobenzene	ND	5.0	0.85	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
1,4-Dichlorobenzene	ND	5.0	0.75	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
trans-1,4-Dichloro-2-butene	ND	10	1.6	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
Dichlorodifluoromethane (Freon 12)	ND	10	1.4	µg/L	5	V-05	SW-846 8260C	10/29/18	10/29/18 15:54	MFF
1,1-Dichloroethane	ND	5.0	0.79	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
1,2-Dichloroethane	ND	5.0	0.97	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
1,1-Dichloroethylene	2.2	5.0	1.0	µg/L	5	J	SW-846 8260C	10/29/18	10/29/18 15:54	MFF
cis-1,2-Dichloroethylene	740	5.0	0.74	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
trans-1,2-Dichloroethylene	4.2	5.0	0.75	µg/L	5	J	SW-846 8260C	10/29/18	10/29/18 15:54	MFF
1,2-Dichloropropane	ND	5.0	0.65	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
1,3-Dichloropropane	ND	2.5	0.65	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
2,2-Dichloropropane	ND	5.0	1.1	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
1,1-Dichloropropene	ND	10	0.64	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
cis-1,3-Dichloropropene	ND	2.5	0.60	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
trans-1,3-Dichloropropene	ND	2.5	0.56	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
Diethyl Ether	ND	10	1.1	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-MW-05

Sampled: 10/16/2018 11:55

Sample ID: 18J0859-05

Sample Matrix: Ground Water

Sample Flags: RL-11

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	2.5	0.90	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
1,4-Dioxane	ND	250	130	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
Ethylbenzene	ND	5.0	0.65	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
Hexachlorobutadiene	ND	3.0	2.9	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
2-Hexanone (MBK)	ND	50	7.6	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
Isopropylbenzene (Cumene)	ND	5.0	0.60	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
p-Isopropyltoluene (p-Cymene)	ND	5.0	0.75	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
Methyl Acetate	ND	5.0	2.1	µg/L	5	V-05	SW-846 8260C	10/29/18	10/29/18 15:54	MFF
Methyl tert-Butyl Ether (MTBE)	ND	5.0	0.45	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
Methyl Cyclohexane	ND	5.0	3.2	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
Methylene Chloride	ND	25	16	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
4-Methyl-2-pentanone (MIBK)	ND	50	7.3	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
Naphthalene	ND	10	0.60	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
n-Propylbenzene	ND	5.0	0.65	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
Styrene	ND	5.0	0.75	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
1,1,1,2-Tetrachloroethane	ND	5.0	0.60	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
1,1,2,2-Tetrachloroethane	ND	2.5	0.80	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
Tetrachloroethylene	51	5.0	1.4	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
Tetrahydrofuran	ND	50	5.4	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
Toluene	1.1	5.0	0.85	µg/L	5	J	SW-846 8260C	10/29/18	10/29/18 15:54	MFF
1,2,3-Trichlorobenzene	ND	25	0.70	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
1,2,4-Trichlorobenzene	ND	5.0	0.95	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
1,3,5-Trichlorobenzene	ND	5.0	0.85	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
1,1,1-Trichloroethane	ND	5.0	0.66	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
1,1,2-Trichloroethane	ND	5.0	1.2	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
Trichloroethylene	26	5.0	1.0	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
Trichlorofluoromethane (Freon 11)	ND	10	0.74	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
1,2,3-Trichloropropane	ND	10	1.1	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	0.98	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
1,2,4-Trimethylbenzene	ND	5.0	0.90	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
1,3,5-Trimethylbenzene	ND	5.0	0.65	µg/L	5		SW-846 8260C	10/29/18	10/29/18 15:54	MFF
Vinyl Chloride	2.9	10	0.66	µg/L	5	J	SW-846 8260C	10/29/18	10/29/18 15:54	MFF
m+p Xylene	1.6	10	1.3	µg/L	5	J	SW-846 8260C	10/29/18	10/29/18 15:54	MFF
o-Xylene	0.95	5.0	0.66	µg/L	5	J	SW-846 8260C	10/29/18	10/29/18 15:54	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		83.2	70-130					10/29/18	15:54	
Toluene-d8		100	70-130					10/29/18	15:54	
4-Bromofluorobenzene		98.8	70-130					10/29/18	15:54	



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-MW-06

Sampled: 10/15/2018 13:04

Sample ID: 18J0859-06

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	5000	970	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
Acrylonitrile	ND	500	58	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
tert-Amyl Methyl Ether (TAME)	ND	50	11	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
Benzene	ND	100	12	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
Bromobenzene	ND	100	15	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
Bromochloromethane	ND	100	22	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
Bromodichloromethane	ND	50	30	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
Bromoform	ND	200	21	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
Bromomethane	ND	200	94	µg/L	100	R-06	SW-846 8260C	10/29/18	10/29/18 16:20	MFF
2-Butanone (MEK)	ND	2000	240	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
tert-Butyl Alcohol (TBA)	ND	2000	220	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
n-Butylbenzene	ND	100	15	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
sec-Butylbenzene	ND	100	13	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
tert-Butylbenzene	ND	100	12	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	50	9.5	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
Carbon Disulfide	ND	400	100	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
Carbon Tetrachloride	ND	500	25	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
Chlorobenzene	ND	100	16	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
Chlorodibromomethane	ND	50	10	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
Chloroethane	ND	200	28	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
Chloroform	ND	200	22	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
Chloromethane	ND	200	55	µg/L	100	R-06	SW-846 8260C	10/29/18	10/29/18 16:20	MFF
2-Chlorotoluene	ND	100	12	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
4-Chlorotoluene	ND	100	14	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	500	37	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
1,2-Dibromoethane (EDB)	ND	50	15	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
Dibromomethane	ND	100	16	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
1,2-Dichlorobenzene	ND	100	17	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
1,3-Dichlorobenzene	ND	100	17	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
1,4-Dichlorobenzene	ND	100	15	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
trans-1,4-Dichloro-2-butene	ND	200	31	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
Dichlorodifluoromethane (Freon 12)	ND	200	28	µg/L	100	V-05	SW-846 8260C	10/29/18	10/29/18 16:20	MFF
1,1-Dichloroethane	ND	100	16	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
1,2-Dichloroethane	ND	100	19	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
1,1-Dichloroethylene	22	100	21	µg/L	100	J	SW-846 8260C	10/29/18	10/29/18 16:20	MFF
cis-1,2-Dichloroethylene	16000	100	15	µg/L	100	MS-07A	SW-846 8260C	10/29/18	10/29/18 16:20	MFF
trans-1,2-Dichloroethylene	27	100	15	µg/L	100	J	SW-846 8260C	10/29/18	10/29/18 16:20	MFF
1,2-Dichloropropane	ND	100	13	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
1,3-Dichloropropane	ND	50	13	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
2,2-Dichloropropane	ND	100	21	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
1,1-Dichloropropene	ND	200	13	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
cis-1,3-Dichloropropene	ND	50	12	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
trans-1,3-Dichloropropene	ND	50	11	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
Diethyl Ether	ND	200	22	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-MW-06

Sampled: 10/15/2018 13:04

Sample ID: 18J0859-06

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	50	18	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
1,4-Dioxane	ND	5000	2600	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
Ethylbenzene	ND	100	13	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
Hexachlorobutadiene	ND	60	59	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
2-Hexanone (MBK)	ND	1000	150	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
Isopropylbenzene (Cumene)	ND	100	12	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
p-Isopropyltoluene (p-Cymene)	ND	100	15	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
Methyl Acetate	ND	100	42	µg/L	100	V-05	SW-846 8260C	10/29/18	10/29/18 16:20	MFF
Methyl tert-Butyl Ether (MTBE)	ND	100	9.0	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
Methyl Cyclohexane	ND	100	63	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
Methylene Chloride	ND	500	320	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
4-Methyl-2-pentanone (MIBK)	ND	1000	150	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
Naphthalene	ND	200	12	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
n-Propylbenzene	ND	100	13	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
Styrene	ND	100	15	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
1,1,1,2-Tetrachloroethane	ND	100	12	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
1,1,2,2-Tetrachloroethane	ND	50	16	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
Tetrachloroethylene	ND	100	27	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
Tetrahydrofuran	ND	1000	110	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
Toluene	ND	100	17	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
1,2,3-Trichlorobenzene	ND	500	14	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
1,2,4-Trichlorobenzene	ND	100	19	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
1,3,5-Trichlorobenzene	ND	100	17	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
1,1,1-Trichloroethane	ND	100	13	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
1,1,2-Trichloroethane	ND	100	24	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
Trichloroethylene	180	100	20	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
Trichlorofluoromethane (Freon 11)	ND	200	15	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
1,2,3-Trichloropropane	ND	200	22	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	100	20	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
1,2,4-Trimethylbenzene	ND	100	18	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
1,3,5-Trimethylbenzene	ND	100	13	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
Vinyl Chloride	41	200	13	µg/L	100	J	SW-846 8260C	10/29/18	10/29/18 16:20	MFF
m+p Xylene	ND	200	26	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
o-Xylene	ND	100	13	µg/L	100		SW-846 8260C	10/29/18	10/29/18 16:20	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		83.1	70-130					10/29/18	16:20	
Toluene-d8		102	70-130					10/29/18	16:20	
4-Bromofluorobenzene		97.1	70-130					10/29/18	16:20	

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-MW-07

Sampled: 10/16/2018 09:34

Sample ID: 18J0859-07

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	9.7	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
Bromodichloromethane	ND	0.50	0.30	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
Bromoform	ND	2.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
tert-Butylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.095	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
Carbon Tetrachloride	ND	5.0	0.25	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
Chloroform	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
Chloromethane	ND	2.0	0.55	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.37	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.28	µg/L	1	V-05	SW-846 8260C	10/29/18	10/29/18 10:37	MFF
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
1,1-Dichloroethylene	0.38	1.0	0.21	µg/L	1	J	SW-846 8260C	10/29/18	10/29/18 10:37	MFF
cis-1,2-Dichloroethylene	160	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
trans-1,2-Dichloroethylene	3.6	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
2,2-Dichloropropane	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-MW-07

Sampled: 10/16/2018 09:34

Sample ID: 18J0859-07

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
Hexachlorobutadiene	ND	0.60	0.59	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
Methyl Acetate	ND	1.0	0.42	µg/L	1	V-05	SW-846 8260C	10/29/18	10/29/18 10:37	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
Methyl Cyclohexane	ND	1.0	0.63	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
Tetrachloroethylene	23	1.0	0.27	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
Toluene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
1,1,1-Trichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
1,1,2-Trichloroethane	ND	1.0	0.24	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
Trichloroethylene	29	1.0	0.20	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
1,2,3-Trichloropropane	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.20	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
m+p Xylene	ND	2.0	0.26	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 10:37	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		82.8	70-130					10/29/18	10:37	
Toluene-d8		101	70-130					10/29/18	10:37	
4-Bromofluorobenzene		94.2	70-130					10/29/18	10:37	

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-MW-07R

Sampled: 10/15/2018 14:20

Sample ID: 18J0859-08

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	10000	1900	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
Acrylonitrile	ND	1000	120	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
tert-Amyl Methyl Ether (TAME)	ND	100	21	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
Benzene	ND	200	24	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
Bromobenzene	ND	200	30	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
Bromochloromethane	ND	200	45	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
Bromodichloromethane	ND	100	59	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
Bromoform	ND	400	42	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
Bromomethane	ND	400	190	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
2-Butanone (MEK)	ND	4000	470	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
tert-Butyl Alcohol (TBA)	ND	4000	430	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
n-Butylbenzene	ND	200	30	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
sec-Butylbenzene	ND	200	26	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
tert-Butylbenzene	ND	200	24	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	100	19	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
Carbon Disulfide	ND	800	200	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
Carbon Tetrachloride	ND	1000	49	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
Chlorobenzene	ND	200	32	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
Chlorodibromomethane	ND	100	21	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
Chloroethane	ND	400	56	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
Chloroform	ND	400	44	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
Chloromethane	ND	400	110	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
2-Chlorotoluene	ND	200	24	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
4-Chlorotoluene	ND	200	28	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	1000	74	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
1,2-Dibromoethane (EDB)	ND	100	30	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
Dibromomethane	ND	200	32	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
1,2-Dichlorobenzene	ND	200	34	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
1,3-Dichlorobenzene	ND	200	34	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
1,4-Dichlorobenzene	ND	200	30	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
trans-1,4-Dichloro-2-butene	ND	400	62	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
Dichlorodifluoromethane (Freon 12)	ND	400	57	µg/L	200	V-05	SW-846 8260C	10/29/18	10/29/18 17:13	MFF
1,1-Dichloroethane	ND	200	32	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
1,2-Dichloroethane	ND	200	39	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
1,1-Dichloroethylene	ND	200	42	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
cis-1,2-Dichloroethylene	1500	200	29	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
trans-1,2-Dichloroethylene	ND	200	30	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
1,2-Dichloropropane	ND	200	26	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
1,3-Dichloropropane	ND	100	26	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
2,2-Dichloropropane	ND	200	43	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
1,1-Dichloropropene	ND	400	26	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
cis-1,3-Dichloropropene	ND	100	24	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
trans-1,3-Dichloropropene	ND	100	22	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
Diethyl Ether	ND	400	44	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-MW-07R

Sampled: 10/15/2018 14:20

Sample ID: 18J0859-08

Sample Matrix: Ground Water

Sample Flags: RL-11

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	100	36	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
1,4-Dioxane	ND	10000	5300	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
Ethylbenzene	ND	200	26	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
Hexachlorobutadiene	ND	120	120	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
2-Hexanone (MBK)	ND	2000	300	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
Isopropylbenzene (Cumene)	ND	200	24	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
p-Isopropyltoluene (p-Cymene)	ND	200	30	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
Methyl Acetate	ND	200	84	µg/L	200	V-05	SW-846 8260C	10/29/18	10/29/18 17:13	MFF
Methyl tert-Butyl Ether (MTBE)	ND	200	18	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
Methyl Cyclohexane	ND	200	130	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
Methylene Chloride	ND	1000	640	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
4-Methyl-2-pentanone (MIBK)	ND	2000	290	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
Naphthalene	ND	400	24	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
n-Propylbenzene	ND	200	26	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
Styrene	ND	200	30	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
1,1,1,2-Tetrachloroethane	ND	200	24	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
1,1,2,2-Tetrachloroethane	ND	100	32	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
Tetrachloroethylene	11000	200	54	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
Tetrahydrofuran	ND	2000	210	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
Toluene	ND	200	34	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
1,2,3-Trichlorobenzene	ND	1000	28	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
1,2,4-Trichlorobenzene	ND	200	38	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
1,3,5-Trichlorobenzene	ND	200	34	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
1,1,1-Trichloroethane	ND	200	26	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
1,1,2-Trichloroethane	ND	200	47	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
Trichloroethylene	1600	200	40	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
Trichlorofluoromethane (Freon 11)	ND	400	29	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
1,2,3-Trichloropropane	ND	400	43	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	200	39	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
1,2,4-Trimethylbenzene	ND	200	36	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
1,3,5-Trimethylbenzene	ND	200	26	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
Vinyl Chloride	ND	400	27	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
m+p Xylene	ND	400	51	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
o-Xylene	ND	200	26	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:13	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		85.4	70-130					10/29/18	17:13	
Toluene-d8		86.4	70-130					10/29/18	17:13	
4-Bromofluorobenzene		96.6	70-130					10/29/18	17:13	



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-MW-08

Sampled: 10/16/2018 10:20

Sample ID: 18J0859-09

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	9.7	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
Bromodichloromethane	ND	0.50	0.30	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
Bromoform	ND	2.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
tert-Butylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.095	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
Carbon Tetrachloride	ND	5.0	0.25	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
Chloroform	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
Chloromethane	ND	2.0	0.55	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.37	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.28	µg/L	1	V-05	SW-846 8260C	10/29/18	10/29/18 11:56	MFF
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
cis-1,2-Dichloroethylene	0.36	1.0	0.15	µg/L	1	J	SW-846 8260C	10/29/18	10/29/18 11:56	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
2,2-Dichloropropane	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY  
 Date Received: 10/16/2018  
**Field Sample #: 401075-MW-08**  
**Sample ID: 18J0859-09**  
 Sample Matrix: Ground Water

Sample Description:  
 Sampled: 10/16/2018 10:20

Work Order: 18J0859

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
Hexachlorobutadiene	ND	0.60	0.59	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
Methyl Acetate	ND	1.0	0.42	µg/L	1	V-05	SW-846 8260C	10/29/18	10/29/18 11:56	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
Methyl Cyclohexane	ND	1.0	0.63	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
Tetrachloroethylene	1.5	1.0	0.27	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
Toluene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
1,1,1-Trichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
1,1,2-Trichloroethane	ND	1.0	0.24	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
Trichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
1,2,3-Trichloropropane	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.20	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
m+p Xylene	ND	2.0	0.26	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 11:56	MFF
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	84.2		70-130				10/29/18 11:56			
Toluene-d8	99.7		70-130				10/29/18 11:56			
4-Bromofluorobenzene	95.3		70-130				10/29/18 11:56			



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-MW-09

Sampled: 10/16/2018 08:40

Sample ID: 18J0859-10

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	9.7	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
Bromodichloromethane	ND	0.50	0.30	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
Bromoform	ND	2.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
tert-Butylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.095	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
Carbon Tetrachloride	ND	5.0	0.25	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
Chloroform	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
Chloromethane	ND	2.0	0.55	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.37	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.28	µg/L	1	V-05	SW-846 8260C	10/29/18	10/29/18 12:23	MFF
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
cis-1,2-Dichloroethylene	5.6	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
trans-1,2-Dichloroethylene	0.67	1.0	0.15	µg/L	1	J	SW-846 8260C	10/29/18	10/29/18 12:23	MFF
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
2,2-Dichloropropane	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-MW-09

Sampled: 10/16/2018 08:40

Sample ID: 18J0859-10

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
Hexachlorobutadiene	ND	0.60	0.59	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
Methyl Acetate	ND	1.0	0.42	µg/L	1	V-05	SW-846 8260C	10/29/18	10/29/18 12:23	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
Methyl Cyclohexane	ND	1.0	0.63	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
Tetrachloroethylene	32	1.0	0.27	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
Toluene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
1,1,1-Trichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
1,1,2-Trichloroethane	ND	1.0	0.24	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
Trichloroethylene	3.4	1.0	0.20	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
1,2,3-Trichloropropane	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.20	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
m+p Xylene	ND	2.0	0.26	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:23	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		84.1	70-130					10/29/18	12:23	
Toluene-d8		99.5	70-130					10/29/18	12:23	
4-Bromofluorobenzene		96.6	70-130					10/29/18	12:23	

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-MW-10

Sampled: 10/15/2018 17:15

Sample ID: 18J0859-11

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	9.7	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
Bromodichloromethane	ND	0.50	0.30	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
Bromoform	ND	2.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
tert-Butylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.095	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
Carbon Tetrachloride	ND	5.0	0.25	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
Chloroform	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
Chloromethane	ND	2.0	0.55	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.37	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.28	µg/L	1	V-05	SW-846 8260C	10/29/18	10/29/18 12:49	MFF
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
cis-1,2-Dichloroethylene	2.0	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
2,2-Dichloropropane	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY  
 Date Received: 10/16/2018  
 Field Sample #: 401075-MW-10  
 Sample ID: 18J0859-11  
 Sample Matrix: Ground Water

Sample Description:

Work Order: 18J0859

Sampled: 10/15/2018 17:15

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
Hexachlorobutadiene	ND	0.60	0.59	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
Methyl Acetate	ND	1.0	0.42	µg/L	1	V-05	SW-846 8260C	10/29/18	10/29/18 12:49	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
Methyl Cyclohexane	ND	1.0	0.63	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
Tetrachloroethylene	2.8	1.0	0.27	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
Toluene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
1,1,1-Trichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
1,1,2-Trichloroethane	ND	1.0	0.24	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
Trichloroethylene	0.39	1.0	0.20	µg/L	1	J	SW-846 8260C	10/29/18	10/29/18 12:49	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
1,2,3-Trichloropropane	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.20	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
m+p Xylene	ND	2.0	0.26	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 12:49	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		84.0	70-130					10/29/18	12:49	
Toluene-d8		99.4	70-130					10/29/18	12:49	
4-Bromofluorobenzene		95.8	70-130					10/29/18	12:49	

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-MW-11

Sampled: 10/16/2018 11:10

Sample ID: 18J0859-12

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	9.7	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
Bromodichloromethane	ND	0.50	0.30	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
Bromoform	ND	2.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
tert-Butylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.095	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
Carbon Tetrachloride	ND	5.0	0.25	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
Chloroform	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
Chloromethane	ND	2.0	0.55	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.37	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.28	µg/L	1	V-05	SW-846 8260C	10/29/18	10/29/18 13:16	MFF
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
cis-1,2-Dichloroethylene	0.31	1.0	0.15	µg/L	1	J	SW-846 8260C	10/29/18	10/29/18 13:16	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
2,2-Dichloropropane	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-MW-11

Sampled: 10/16/2018 11:10

Sample ID: 18J0859-12

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
Hexachlorobutadiene	ND	0.60	0.59	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
Methyl Acetate	ND	1.0	0.42	µg/L	1	V-05	SW-846 8260C	10/29/18	10/29/18 13:16	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
Methyl Cyclohexane	ND	1.0	0.63	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
Tetrachloroethylene	0.54	1.0	0.27	µg/L	1	J	SW-846 8260C	10/29/18	10/29/18 13:16	MFF
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
Toluene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
1,1,1-Trichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
1,1,2-Trichloroethane	ND	1.0	0.24	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
Trichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
1,2,3-Trichloropropane	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.20	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
m+p Xylene	ND	2.0	0.26	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:16	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		84.2	70-130					10/29/18	13:16	
Toluene-d8		99.6	70-130					10/29/18	13:16	
4-Bromofluorobenzene		98.3	70-130					10/29/18	13:16	



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-MW-12

Sampled: 10/16/2018 09:20

Sample ID: 18J0859-13

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	9.7	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
Bromodichloromethane	ND	0.50	0.30	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
Bromoform	ND	2.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
tert-Butylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.095	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
Carbon Tetrachloride	ND	5.0	0.25	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
Chloroform	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
Chloromethane	ND	2.0	0.55	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.37	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.28	µg/L	1	V-05	SW-846 8260C	10/29/18	10/29/18 13:42	MFF
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
2,2-Dichloropropane	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY  
 Date Received: 10/16/2018  
 Field Sample #: 401075-MW-12  
 Sample ID: 18J0859-13  
 Sample Matrix: Ground Water

Sample Description:

Work Order: 18J0859

Sampled: 10/16/2018 09:20

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
Hexachlorobutadiene	ND	0.60	0.59	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
Methyl Acetate	ND	1.0	0.42	µg/L	1	V-05	SW-846 8260C	10/29/18	10/29/18 13:42	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
Methyl Cyclohexane	ND	1.0	0.63	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
Tetrachloroethylene	1.9	1.0	0.27	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
Toluene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
1,1,1-Trichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
1,1,2-Trichloroethane	ND	1.0	0.24	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
Trichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
1,2,3-Trichloropropane	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.20	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
m+p Xylene	ND	2.0	0.26	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 13:42	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		83.9	70-130					10/29/18	13:42	
Toluene-d8		99.8	70-130					10/29/18	13:42	
4-Bromofluorobenzene		95.5	70-130					10/29/18	13:42	



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-MW-14

Sampled: 10/16/2018 08:50

Sample ID: 18J0859-14

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	9.7	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
Bromodichloromethane	ND	0.50	0.30	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
Bromoform	ND	2.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
tert-Butyl Alcohol (TBA)	3.1	20	2.2	µg/L	1	J	SW-846 8260C	10/29/18	10/29/18 14:08	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
tert-Butylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.095	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
Carbon Tetrachloride	ND	5.0	0.25	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
Chloroform	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
Chloromethane	ND	2.0	0.55	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.37	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.28	µg/L	1	V-05	SW-846 8260C	10/29/18	10/29/18 14:08	MFF
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
cis-1,2-Dichloroethylene	0.47	1.0	0.15	µg/L	1	J	SW-846 8260C	10/29/18	10/29/18 14:08	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
2,2-Dichloropropane	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-MW-14

Sampled: 10/16/2018 08:50

Sample ID: 18J0859-14

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
Hexachlorobutadiene	ND	0.60	0.59	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
Methyl Acetate	ND	1.0	0.42	µg/L	1	V-05	SW-846 8260C	10/29/18	10/29/18 14:08	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
Methyl Cyclohexane	ND	1.0	0.63	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
Tetrachloroethylene	3.5	1.0	0.27	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
Toluene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
1,1,1-Trichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
1,1,2-Trichloroethane	ND	1.0	0.24	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
Trichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
1,2,3-Trichloropropane	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.20	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
1,2,4-Trimethylbenzene	0.21	1.0	0.18	µg/L	1	J	SW-846 8260C	10/29/18	10/29/18 14:08	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
m+p Xylene	ND	2.0	0.26	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:08	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		85.9	70-130					10/29/18	14:08	
Toluene-d8		99.8	70-130					10/29/18	14:08	
4-Bromofluorobenzene		97.7	70-130					10/29/18	14:08	

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-MW-15

Sampled: 10/15/2018 15:28

Sample ID: 18J0859-15

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	9.7	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
Bromodichloromethane	0.81	0.50	0.30	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
Bromoform	ND	2.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
tert-Butylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.095	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
Carbon Tetrachloride	ND	5.0	0.25	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
Chloroform	12	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
Chloromethane	ND	2.0	0.55	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.37	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.28	µg/L	1	V-05	SW-846 8260C	10/29/18	10/29/18 14:35	MFF
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
2,2-Dichloropropane	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-MW-15

Sampled: 10/15/2018 15:28

Sample ID: 18J0859-15

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
Hexachlorobutadiene	ND	0.60	0.59	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
Methyl Acetate	ND	1.0	0.42	µg/L	1	V-05	SW-846 8260C	10/29/18	10/29/18 14:35	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
Methyl Cyclohexane	ND	1.0	0.63	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
Tetrachloroethylene	1.8	1.0	0.27	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
Toluene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
1,1,1-Trichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
1,1,2-Trichloroethane	ND	1.0	0.24	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
Trichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
1,2,3-Trichloropropane	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.20	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
m+p Xylene	ND	2.0	0.26	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 14:35	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		85.0	70-130					10/29/18	14:35	
Toluene-d8		99.8	70-130					10/29/18	14:35	
4-Bromofluorobenzene		96.8	70-130					10/29/18	14:35	

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-MW-16

Sampled: 10/15/2018 16:50

Sample ID: 18J0859-16

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	9.7	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
Bromodichloromethane	ND	0.50	0.30	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
Bromoform	ND	2.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
tert-Butylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.095	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
Carbon Tetrachloride	ND	5.0	0.25	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
Chloroform	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
Chloromethane	ND	2.0	0.55	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.37	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.28	µg/L	1	V-05	SW-846 8260C	10/29/18	10/29/18 15:01	MFF
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
2,2-Dichloropropane	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-MW-16

Sampled: 10/15/2018 16:50

Sample ID: 18J0859-16

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
Hexachlorobutadiene	ND	0.60	0.59	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
Methyl Acetate	ND	1.0	0.42	µg/L	1	V-05	SW-846 8260C	10/29/18	10/29/18 15:01	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
Methyl Cyclohexane	ND	1.0	0.63	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
Tetrachloroethylene	ND	1.0	0.27	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
Toluene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
1,1,1-Trichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
1,1,2-Trichloroethane	ND	1.0	0.24	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
Trichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
1,2,3-Trichloropropane	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.20	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
m+p Xylene	ND	2.0	0.26	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:01	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		86.4	70-130					10/29/18	15:01	
Toluene-d8		101	70-130					10/29/18	15:01	
4-Bromofluorobenzene		97.8	70-130					10/29/18	15:01	



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-MW-17

Sampled: 10/15/2018 16:38

Sample ID: 18J0859-17

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	9.7	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
Bromodichloromethane	ND	0.50	0.30	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
Bromoform	ND	2.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
tert-Butylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.095	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
Carbon Tetrachloride	ND	5.0	0.25	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
Chloroform	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
Chloromethane	ND	2.0	0.55	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.37	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.28	µg/L	1	V-05	SW-846 8260C	10/29/18	10/29/18 15:27	MFF
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
2,2-Dichloropropane	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-MW-17

Sampled: 10/15/2018 16:38

Sample ID: 18J0859-17

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
Hexachlorobutadiene	ND	0.60	0.59	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
Methyl Acetate	ND	1.0	0.42	µg/L	1	V-05	SW-846 8260C	10/29/18	10/29/18 15:27	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
Methyl Cyclohexane	ND	1.0	0.63	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
Tetrachloroethylene	ND	1.0	0.27	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
Toluene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
1,1,1-Trichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
1,1,2-Trichloroethane	ND	1.0	0.24	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
Trichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
1,2,3-Trichloropropane	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.20	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
m+p Xylene	ND	2.0	0.26	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/29/18	10/29/18 15:27	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		85.9	70-130					10/29/18	15:27	
Toluene-d8		99.7	70-130					10/29/18	15:27	
4-Bromofluorobenzene		95.6	70-130					10/29/18	15:27	



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-DUP

Sampled: 10/15/2018 00:00

Sample ID: 18J0859-18

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	10000	1900	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
Acrylonitrile	ND	1000	120	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
tert-Amyl Methyl Ether (TAME)	ND	100	21	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
Benzene	ND	200	24	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
Bromobenzene	ND	200	30	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
Bromochloromethane	ND	200	45	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
Bromodichloromethane	ND	100	59	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
Bromoform	ND	400	42	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
Bromomethane	ND	400	190	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
2-Butanone (MEK)	ND	4000	470	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
tert-Butyl Alcohol (TBA)	ND	4000	430	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
n-Butylbenzene	ND	200	30	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
sec-Butylbenzene	ND	200	26	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
tert-Butylbenzene	ND	200	24	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	100	19	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
Carbon Disulfide	ND	800	200	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
Carbon Tetrachloride	ND	1000	49	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
Chlorobenzene	ND	200	32	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
Chlorodibromomethane	ND	100	21	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
Chloroethane	ND	400	56	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
Chloroform	ND	400	44	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
Chloromethane	ND	400	110	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
2-Chlorotoluene	ND	200	24	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
4-Chlorotoluene	ND	200	28	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	1000	74	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
1,2-Dibromoethane (EDB)	ND	100	30	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
Dibromomethane	ND	200	32	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
1,2-Dichlorobenzene	ND	200	34	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
1,3-Dichlorobenzene	ND	200	34	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
1,4-Dichlorobenzene	ND	200	30	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
trans-1,4-Dichloro-2-butene	ND	400	62	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
Dichlorodifluoromethane (Freon 12)	ND	400	57	µg/L	200	V-05	SW-846 8260C	10/29/18	10/29/18 17:39	MFF
1,1-Dichloroethane	ND	200	32	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
1,2-Dichloroethane	ND	200	39	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
1,1-Dichloroethylene	ND	200	42	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
cis-1,2-Dichloroethylene	1400	200	29	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
trans-1,2-Dichloroethylene	ND	200	30	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
1,2-Dichloropropane	ND	200	26	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
1,3-Dichloropropane	ND	100	26	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
2,2-Dichloropropane	ND	200	43	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
1,1-Dichloropropene	ND	400	26	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
cis-1,3-Dichloropropene	ND	100	24	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
trans-1,3-Dichloropropene	ND	100	22	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
Diethyl Ether	ND	400	44	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-DUP

Sampled: 10/15/2018 00:00

Sample ID: 18J0859-18

Sample Matrix: Ground Water

Sample Flags: RL-11

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	100	36	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
1,4-Dioxane	ND	10000	5300	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
Ethylbenzene	ND	200	26	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
Hexachlorobutadiene	ND	120	120	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
2-Hexanone (MBK)	ND	2000	300	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
Isopropylbenzene (Cumene)	ND	200	24	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
p-Isopropyltoluene (p-Cymene)	ND	200	30	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
Methyl Acetate	ND	200	84	µg/L	200	V-05	SW-846 8260C	10/29/18	10/29/18 17:39	MFF
Methyl tert-Butyl Ether (MTBE)	ND	200	18	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
Methyl Cyclohexane	ND	200	130	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
Methylene Chloride	ND	1000	640	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
4-Methyl-2-pentanone (MIBK)	ND	2000	290	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
Naphthalene	ND	400	24	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
n-Propylbenzene	ND	200	26	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
Styrene	ND	200	30	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
1,1,1,2-Tetrachloroethane	ND	200	24	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
1,1,2,2-Tetrachloroethane	ND	100	32	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
Tetrachloroethylene	14000	200	54	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
Tetrahydrofuran	ND	2000	210	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
Toluene	ND	200	34	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
1,2,3-Trichlorobenzene	ND	1000	28	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
1,2,4-Trichlorobenzene	ND	200	38	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
1,3,5-Trichlorobenzene	ND	200	34	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
1,1,1-Trichloroethane	ND	200	26	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
1,1,2-Trichloroethane	ND	200	47	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
Trichloroethylene	1600	200	40	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
Trichlorofluoromethane (Freon 11)	ND	400	29	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
1,2,3-Trichloropropane	ND	400	43	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	200	39	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
1,2,4-Trimethylbenzene	ND	200	36	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
1,3,5-Trimethylbenzene	ND	200	26	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
Vinyl Chloride	ND	400	27	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
m+p Xylene	ND	400	51	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
o-Xylene	ND	200	26	µg/L	200		SW-846 8260C	10/29/18	10/29/18 17:39	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		82.1	70-130					10/29/18	17:39	
Toluene-d8		99.9	70-130					10/29/18	17:39	
4-Bromofluorobenzene		96.3	70-130					10/29/18	17:39	

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-TB01

Sampled: 10/14/2018 00:00

Sample ID: 18J0859-19

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	9.7	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
Bromodichloromethane	ND	0.50	0.30	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
Bromoform	ND	2.0	0.21	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
tert-Butylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.095	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
Carbon Tetrachloride	ND	5.0	0.25	µg/L	1	V-05	SW-846 8260C	10/26/18	10/26/18 20:58	MFF
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
Chloroform	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
Chloromethane	ND	2.0	0.55	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.37	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.15	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.28	µg/L	1	V-05	SW-846 8260C	10/26/18	10/26/18 20:58	MFF
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
2,2-Dichloropropane	ND	1.0	0.21	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-TB01

Sampled: 10/14/2018 00:00

Sample ID: 18J0859-19

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
Hexachlorobutadiene	ND	0.60	0.59	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
Methyl Acetate	ND	1.0	0.42	µg/L	1	V-05	SW-846 8260C	10/26/18	10/26/18 20:58	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
Methyl Cyclohexane	ND	1.0	0.63	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
Tetrachloroethylene	ND	1.0	0.27	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
Toluene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
1,1,1-Trichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
1,1,2-Trichloroethane	ND	1.0	0.24	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
Trichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1	V-05	SW-846 8260C	10/26/18	10/26/18 20:58	MFF
1,2,3-Trichloropropane	ND	2.0	0.22	µg/L	1	R-05	SW-846 8260C	10/26/18	10/26/18 20:58	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.20	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
m+p Xylene	ND	2.0	0.26	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260C	10/26/18	10/26/18 20:58	MFF
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		82.2	70-130						10/26/18 20:58	
Toluene-d8		100	70-130						10/26/18 20:58	
4-Bromofluorobenzene		96.9	70-130						10/26/18 20:58	

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0859

Date Received: 10/16/2018

Field Sample #: 401075-MW-10

Sampled: 10/16/2018 09:50

Sample ID: 18J0859-20

Sample Matrix: Ground Water

**1,4-Dioxane by isotope dilution GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	1.4	0.20	0.033	µg/L	1		SW-846 8270D	10/21/18	10/29/18 13:30	IMR
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,4-Dioxane-d8	26.6		15-110				10/29/18 13:30			

**Sample Extraction Data**

**Prep Method: SW-846 5030B-SW-846 8260C**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18J0859-19 [401075-TB01]	B215777	5	5.00	10/26/18

**Prep Method: SW-846 5030B-SW-846 8260C**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18J0859-01 [401075-MW-01]	B215845	0.5	5.00	10/29/18
18J0859-02 [401075-MW-02]	B215845	5	5.00	10/29/18
18J0859-03 [401075-MW-03]	B215845	5	5.00	10/29/18
18J0859-04 [401075-MW-04]	B215845	5	5.00	10/29/18
18J0859-05 [401075-MW-05]	B215845	1	5.00	10/29/18
18J0859-06 [401075-MW-06]	B215845	0.05	5.00	10/29/18
18J0859-07 [401075-MW-07]	B215845	5	5.00	10/29/18
18J0859-08 [401075-MW-07R]	B215845	0.025	5.00	10/29/18
18J0859-09 [401075-MW-08]	B215845	5	5.00	10/29/18
18J0859-10 [401075-MW-09]	B215845	5	5.00	10/29/18
18J0859-11 [401075-MW-10]	B215845	5	5.00	10/29/18
18J0859-12 [401075-MW-11]	B215845	5	5.00	10/29/18
18J0859-13 [401075-MW-12]	B215845	5	5.00	10/29/18
18J0859-14 [401075-MW-14]	B215845	5	5.00	10/29/18
18J0859-15 [401075-MW-15]	B215845	5	5.00	10/29/18
18J0859-16 [401075-MW-16]	B215845	5	5.00	10/29/18
18J0859-17 [401075-MW-17]	B215845	5	5.00	10/29/18
18J0859-18 [401075-DUP]	B215845	0.025	5.00	10/29/18

**Prep Method: SW-846 3510C-SW-846 8270D**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18J0859-20 [401075-MW-10]	B215290	1000	1.00	10/21/18

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B215777 - SW-846 5030B

Blank (B215777-BLK1)

Prepared & Analyzed: 10/26/18

Acetone	ND	50	µg/L							
Acrylonitrile	ND	5.0	µg/L							
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L							
Benzene	ND	1.0	µg/L							
Bromobenzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	0.50	µg/L							
Bromoform	ND	1.0	µg/L							
Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	20	µg/L							
tert-Butyl Alcohol (TBA)	ND	20	µg/L							
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L							
Carbon Disulfide	ND	4.0	µg/L							
Carbon Tetrachloride	ND	5.0	µg/L							V-05
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
Dibromomethane	ND	1.0	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							V-05
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							
1,1-Dichloropropene	ND	2.0	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
Diethyl Ether	ND	2.0	µg/L							
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							
Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	0.60	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl Acetate	ND	1.0	µg/L							

V-05

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

**QUALITY CONTROL**

**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B215777 - SW-846 5030B**

**Blank (B215777-BLK1)**

Prepared & Analyzed: 10/26/18

Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methyl Cyclohexane	ND	1.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Naphthalene	ND	2.0	µg/L							
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Tetrahydrofuran	ND	10	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							
1,2,4-Trichlorobenzene	ND	1.0	µg/L							
1,3,5-Trichlorobenzene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							V-05
1,2,3-Trichloropropane	ND	2.0	µg/L							R-05
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
1,3,5-Trimethylbenzene	ND	1.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	20.6		µg/L	25.0		82.4	70-130			
Surrogate: Toluene-d8	25.1		µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	23.9		µg/L	25.0		95.4	70-130			

**LCS (B215777-BS1)**

Prepared & Analyzed: 10/26/18

Acetone	164	50	µg/L	100		164 *	70-160			L-02 †
Acrylonitrile	13.4	5.0	µg/L	10.0		134 *	70-130			L-02, V-20
tert-Amyl Methyl Ether (TAME)	9.49	0.50	µg/L	10.0		94.9	70-130			
Benzene	9.65	1.0	µg/L	10.0		96.5	70-130			
Bromobenzene	10.1	1.0	µg/L	10.0		101	70-130			
Bromochloromethane	11.5	1.0	µg/L	10.0		115	70-130			V-36
Bromodichloromethane	9.54	0.50	µg/L	10.0		95.4	70-130			
Bromoform	10.4	1.0	µg/L	10.0		104	70-130			
Bromomethane	9.92	2.0	µg/L	10.0		99.2	40-160			V-20 †
2-Butanone (MEK)	109	20	µg/L	100		109	40-160			†
tert-Butyl Alcohol (TBA)	114	20	µg/L	100		114	40-160			†
n-Butylbenzene	10.2	1.0	µg/L	10.0		102	70-130			
sec-Butylbenzene	10.4	1.0	µg/L	10.0		104	70-130			
tert-Butylbenzene	10.7	1.0	µg/L	10.0		107	70-130			
tert-Butyl Ethyl Ether (TBEE)	9.72	0.50	µg/L	10.0		97.2	70-130			
Carbon Disulfide	11.9	4.0	µg/L	10.0		119	70-130			
Carbon Tetrachloride	7.90	5.0	µg/L	10.0		79.0	70-130			V-05
Chlorobenzene	10.4	1.0	µg/L	10.0		104	70-130			
Chlorodibromomethane	10.3	0.50	µg/L	10.0		103	70-130			
Chloroethane	11.6	2.0	µg/L	10.0		116	70-130			
Chloroform	9.09	2.0	µg/L	10.0		90.9	70-130			



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B215777 - SW-846 5030B</b>										
<b>LCS (B215777-BS1)</b>										
Prepared & Analyzed: 10/26/18										
Chloromethane	9.65	2.0	µg/L	10.0		96.5	40-160			V-20 †
2-Chlorotoluene	10.1	1.0	µg/L	10.0		101	70-130			
4-Chlorotoluene	9.81	1.0	µg/L	10.0		98.1	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	9.28	5.0	µg/L	10.0		92.8	70-130			
1,2-Dibromoethane (EDB)	10.4	0.50	µg/L	10.0		104	70-130			
Dibromomethane	9.77	1.0	µg/L	10.0		97.7	70-130			
1,2-Dichlorobenzene	10.6	1.0	µg/L	10.0		106	70-130			
1,3-Dichlorobenzene	11.2	1.0	µg/L	10.0		112	70-130			
1,4-Dichlorobenzene	10.2	1.0	µg/L	10.0		102	70-130			
trans-1,4-Dichloro-2-butene	8.81	2.0	µg/L	10.0		88.1	70-130			
Dichlorodifluoromethane (Freon 12)	5.95	2.0	µg/L	10.0		59.5	40-160			V-05 †
1,1-Dichloroethane	10.1	1.0	µg/L	10.0		101	70-130			
1,2-Dichloroethane	8.64	1.0	µg/L	10.0		86.4	70-130			
1,1-Dichloroethylene	10.4	1.0	µg/L	10.0		104	70-130			
cis-1,2-Dichloroethylene	9.44	1.0	µg/L	10.0		94.4	70-130			
trans-1,2-Dichloroethylene	12.3	1.0	µg/L	10.0		123	70-130			
1,2-Dichloropropane	11.1	1.0	µg/L	10.0		111	70-130			
1,3-Dichloropropane	9.61	0.50	µg/L	10.0		96.1	70-130			
2,2-Dichloropropane	8.30	1.0	µg/L	10.0		83.0	40-130			†
1,1-Dichloropropene	8.63	2.0	µg/L	10.0		86.3	70-130			
cis-1,3-Dichloropropene	10.2	0.50	µg/L	10.0		102	70-130			
trans-1,3-Dichloropropene	10.3	0.50	µg/L	10.0		103	70-130			
Diethyl Ether	12.8	2.0	µg/L	10.0		128	70-130			V-20
Diisopropyl Ether (DIPE)	10.4	0.50	µg/L	10.0		104	70-130			
1,4-Dioxane	101	50	µg/L	100		101	40-130			†
Ethylbenzene	10.4	1.0	µg/L	10.0		104	70-130			
Hexachlorobutadiene	12.2	0.60	µg/L	10.0		122	70-130			V-36
2-Hexanone (MBK)	105	10	µg/L	100		105	70-160			†
Isopropylbenzene (Cumene)	10.9	1.0	µg/L	10.0		109	70-130			
p-Isopropyltoluene (p-Cymene)	10.5	1.0	µg/L	10.0		105	70-130			
Methyl Acetate	9.59	1.0	µg/L	10.0		95.9	70-130			V-05
Methyl tert-Butyl Ether (MTBE)	11.8	1.0	µg/L	10.0		118	70-130			
Methyl Cyclohexane	9.02	1.0	µg/L	10.0		90.2	70-130			
Methylene Chloride	12.4	5.0	µg/L	10.0		124	70-130			
4-Methyl-2-pentanone (MIBK)	100	10	µg/L	100		100	70-160			†
Naphthalene	9.43	2.0	µg/L	10.0		94.3	40-130			†
n-Propylbenzene	9.69	1.0	µg/L	10.0		96.9	70-130			
Styrene	10.6	1.0	µg/L	10.0		106	70-130			
1,1,1,2-Tetrachloroethane	10.9	1.0	µg/L	10.0		109	70-130			
1,1,1,2,2-Tetrachloroethane	10.2	0.50	µg/L	10.0		102	70-130			
Tetrachloroethylene	10.5	1.0	µg/L	10.0		105	70-130			
Tetrahydrofuran	9.72	10	µg/L	10.0		97.2	70-130			J
Toluene	10.2	1.0	µg/L	10.0		102	70-130			
1,2,3-Trichlorobenzene	9.83	5.0	µg/L	10.0		98.3	70-130			
1,2,4-Trichlorobenzene	10.1	1.0	µg/L	10.0		101	70-130			
1,3,5-Trichlorobenzene	10.7	1.0	µg/L	10.0		107	70-130			
1,1,1-Trichloroethane	8.55	1.0	µg/L	10.0		85.5	70-130			
1,1,2-Trichloroethane	10.5	1.0	µg/L	10.0		105	70-130			
Trichloroethylene	10.1	1.0	µg/L	10.0		101	70-130			
Trichlorofluoromethane (Freon 11)	7.59	2.0	µg/L	10.0		75.9	70-130			V-05
1,2,3-Trichloropropane	7.65	2.0	µg/L	10.0		76.5	70-130			R-05

**QUALITY CONTROL**

**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B215777 - SW-846 5030B**

**LCS (B215777-BS1)**

Prepared & Analyzed: 10/26/18

1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.40	1.0	µg/L	10.0		94.0	70-130			
1,2,4-Trimethylbenzene	9.94	1.0	µg/L	10.0		99.4	70-130			
1,3,5-Trimethylbenzene	9.89	1.0	µg/L	10.0		98.9	70-130			
Vinyl Chloride	8.26	2.0	µg/L	10.0		82.6	40-160			†
m+p Xylene	20.3	2.0	µg/L	20.0		101	70-130			
o-Xylene	10.4	1.0	µg/L	10.0		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	20.8		µg/L	25.0		83.4	70-130			
Surrogate: Toluene-d8	25.2		µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	24.5		µg/L	25.0		98.1	70-130			

**LCS Dup (B215777-BSD1)**

Prepared & Analyzed: 10/26/18

Acetone	179	50	µg/L	100		179 *	70-160	8.61	25	L-02	†
Acrylonitrile	13.3	5.0	µg/L	10.0		133 *	70-130	0.225	25	L-02, V-20	
tert-Amyl Methyl Ether (TAME)	9.73	0.50	µg/L	10.0		97.3	70-130	2.50	25		
Benzene	9.62	1.0	µg/L	10.0		96.2	70-130	0.311	25		
Bromobenzene	10.3	1.0	µg/L	10.0		103	70-130	2.45	25		
Bromochloromethane	11.3	1.0	µg/L	10.0		113	70-130	1.66	25	V-36	
Bromodichloromethane	9.49	0.50	µg/L	10.0		94.9	70-130	0.525	25		
Bromoform	10.5	1.0	µg/L	10.0		105	70-130	0.863	25		
Bromomethane	11.2	2.0	µg/L	10.0		112	40-160	12.4	25	V-20	†
2-Butanone (MEK)	117	20	µg/L	100		117	40-160	7.24	25		†
tert-Butyl Alcohol (TBA)	120	20	µg/L	100		120	40-160	4.97	25		†
n-Butylbenzene	9.99	1.0	µg/L	10.0		99.9	70-130	1.79	25		
sec-Butylbenzene	10.4	1.0	µg/L	10.0		104	70-130	0.481	25		
tert-Butylbenzene	10.7	1.0	µg/L	10.0		107	70-130	0.187	25		
tert-Butyl Ethyl Ether (TBEE)	9.86	0.50	µg/L	10.0		98.6	70-130	1.43	25		
Carbon Disulfide	11.8	4.0	µg/L	10.0		118	70-130	0.846	25		
Carbon Tetrachloride	7.76	5.0	µg/L	10.0		77.6	70-130	1.79	25	V-05	
Chlorobenzene	10.5	1.0	µg/L	10.0		105	70-130	0.191	25		
Chlorodibromomethane	10.3	0.50	µg/L	10.0		103	70-130	0.00	25		
Chloroethane	10.7	2.0	µg/L	10.0		107	70-130	8.36	25		
Chloroform	9.15	2.0	µg/L	10.0		91.5	70-130	0.658	25		
Chloromethane	9.44	2.0	µg/L	10.0		94.4	40-160	2.20	25	V-20	†
2-Chlorotoluene	10.2	1.0	µg/L	10.0		102	70-130	0.0986	25		
4-Chlorotoluene	9.83	1.0	µg/L	10.0		98.3	70-130	0.204	25		
1,2-Dibromo-3-chloropropane (DBCP)	9.11	5.0	µg/L	10.0		91.1	70-130	1.85	25		
1,2-Dibromoethane (EDB)	10.3	0.50	µg/L	10.0		103	70-130	0.290	25		
Dibromomethane	10.1	1.0	µg/L	10.0		101	70-130	2.92	25		
1,2-Dichlorobenzene	10.8	1.0	µg/L	10.0		108	70-130	1.50	25		
1,3-Dichlorobenzene	11.0	1.0	µg/L	10.0		110	70-130	1.35	25		
1,4-Dichlorobenzene	10.1	1.0	µg/L	10.0		101	70-130	0.296	25		
trans-1,4-Dichloro-2-butene	9.58	2.0	µg/L	10.0		95.8	70-130	8.37	25		
Dichlorodifluoromethane (Freon 12)	5.62	2.0	µg/L	10.0		56.2	40-160	5.70	25	V-05	†
1,1-Dichloroethane	9.85	1.0	µg/L	10.0		98.5	70-130	2.21	25		
1,2-Dichloroethane	8.67	1.0	µg/L	10.0		86.7	70-130	0.347	25		
1,1-Dichloroethylene	10.6	1.0	µg/L	10.0		106	70-130	1.62	25		
cis-1,2-Dichloroethylene	9.34	1.0	µg/L	10.0		93.4	70-130	1.06	25		
trans-1,2-Dichloroethylene	11.8	1.0	µg/L	10.0		118	70-130	4.30	25		
1,2-Dichloropropane	11.1	1.0	µg/L	10.0		111	70-130	0.361	25		
1,3-Dichloropropane	9.69	0.50	µg/L	10.0		96.9	70-130	0.829	25		
2,2-Dichloropropane	8.20	1.0	µg/L	10.0		82.0	40-130	1.21	25		†
1,1-Dichloropropene	8.62	2.0	µg/L	10.0		86.2	70-130	0.116	25		

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B215777 - SW-846 5030B

LCS Dup (B215777-BSD1)

Prepared & Analyzed: 10/26/18

cis-1,3-Dichloropropene	10.5	0.50	µg/L	10.0		105	70-130	2.32	25	
trans-1,3-Dichloropropene	10.1	0.50	µg/L	10.0		101	70-130	2.55	25	
Diethyl Ether	12.8	2.0	µg/L	10.0		128	70-130	0.313	25	V-20
Diisopropyl Ether (DIPE)	10.5	0.50	µg/L	10.0		105	70-130	1.25	25	
1,4-Dioxane	100	50	µg/L	100		100	40-130	0.219	50	† ‡
Ethylbenzene	10.5	1.0	µg/L	10.0		105	70-130	0.573	25	
Hexachlorobutadiene	11.2	0.60	µg/L	10.0		112	70-130	8.64	25	V-36
2-Hexanone (MBK)	110	10	µg/L	100		110	70-160	4.71	25	†
Isopropylbenzene (Cumene)	10.8	1.0	µg/L	10.0		108	70-130	0.461	25	
p-Isopropyltoluene (p-Cymene)	10.2	1.0	µg/L	10.0		102	70-130	3.48	25	
Methyl Acetate	10.7	1.0	µg/L	10.0		107	70-130	10.9	25	V-05
Methyl tert-Butyl Ether (MTBE)	11.5	1.0	µg/L	10.0		115	70-130	2.83	25	
Methyl Cyclohexane	8.79	1.0	µg/L	10.0		87.9	70-130	2.58	25	
Methylene Chloride	12.6	5.0	µg/L	10.0		126	70-130	0.960	25	
4-Methyl-2-pentanone (MIBK)	103	10	µg/L	100		103	70-160	2.98	25	†
Naphthalene	9.62	2.0	µg/L	10.0		96.2	40-130	1.99	25	†
n-Propylbenzene	9.72	1.0	µg/L	10.0		97.2	70-130	0.309	25	
Styrene	10.8	1.0	µg/L	10.0		108	70-130	1.68	25	
1,1,1,2-Tetrachloroethane	10.7	1.0	µg/L	10.0		107	70-130	1.11	25	
1,1,2,2-Tetrachloroethane	10.6	0.50	µg/L	10.0		106	70-130	3.64	25	
Tetrachloroethylene	10.4	1.0	µg/L	10.0		104	70-130	0.956	25	
Tetrahydrofuran	10.2	10	µg/L	10.0		102	70-130	4.62	25	
Toluene	10.4	1.0	µg/L	10.0		104	70-130	1.36	25	
1,2,3-Trichlorobenzene	9.97	5.0	µg/L	10.0		99.7	70-130	1.41	25	
1,2,4-Trichlorobenzene	10.2	1.0	µg/L	10.0		102	70-130	0.590	25	
1,3,5-Trichlorobenzene	10.5	1.0	µg/L	10.0		105	70-130	1.42	25	
1,1,1-Trichloroethane	8.73	1.0	µg/L	10.0		87.3	70-130	2.08	25	
1,1,2-Trichloroethane	10.4	1.0	µg/L	10.0		104	70-130	0.956	25	
Trichloroethylene	10.3	1.0	µg/L	10.0		103	70-130	2.35	25	
Trichlorofluoromethane (Freon 11)	7.66	2.0	µg/L	10.0		76.6	70-130	0.918	25	V-05
1,2,3-Trichloropropane	10.8	2.0	µg/L	10.0		108	70-130	34.6 *	25	R-05
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.46	1.0	µg/L	10.0		94.6	70-130	0.636	25	
1,2,4-Trimethylbenzene	9.89	1.0	µg/L	10.0		98.9	70-130	0.504	25	
1,3,5-Trimethylbenzene	9.81	1.0	µg/L	10.0		98.1	70-130	0.812	25	
Vinyl Chloride	8.55	2.0	µg/L	10.0		85.5	40-160	3.45	25	†
m+p Xylene	20.3	2.0	µg/L	20.0		101	70-130	0.148	25	
o-Xylene	10.3	1.0	µg/L	10.0		103	70-130	0.193	25	
Surrogate: 1,2-Dichloroethane-d4	21.0		µg/L	25.0		84.0	70-130			
Surrogate: Toluene-d8	25.3		µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	24.2		µg/L	25.0		97.0	70-130			

Batch B215845 - SW-846 5030B

Blank (B215845-BLK1)

Prepared & Analyzed: 10/29/18

Acetone	ND	50	µg/L							
Acrylonitrile	ND	5.0	µg/L							
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L							
Benzene	ND	1.0	µg/L							
Bromobenzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	0.50	µg/L							
Bromoform	ND	1.0	µg/L							

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B215845 - SW-846 5030B

Blank (B215845-BLK1)

Prepared & Analyzed: 10/29/18

Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	20	µg/L							
tert-Butyl Alcohol (TBA)	ND	20	µg/L							
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L							
Carbon Disulfide	ND	4.0	µg/L							
Carbon Tetrachloride	ND	5.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
Dibromomethane	ND	1.0	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							V-05
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							
1,1-Dichloropropene	ND	2.0	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
Diethyl Ether	ND	2.0	µg/L							
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							
Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	0.60	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl Acetate	ND	1.0	µg/L							V-05
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methyl Cyclohexane	ND	1.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Naphthalene	ND	2.0	µg/L							
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L							

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

**QUALITY CONTROL**

**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B215845 - SW-846 5030B**

**Blank (B215845-BLK1)**

Prepared & Analyzed: 10/29/18

1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Tetrahydrofuran	ND	10	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							
1,2,4-Trichlorobenzene	ND	1.0	µg/L							
1,3,5-Trichlorobenzene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							
1,2,3-Trichloropropane	ND	2.0	µg/L							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
1,3,5-Trimethylbenzene	ND	1.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	20.7		µg/L	25.0		82.7	70-130			
Surrogate: Toluene-d8	25.3		µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	24.4		µg/L	25.0		97.4	70-130			

**LCS (B215845-BS1)**

Prepared & Analyzed: 10/29/18

Acetone	126	50	µg/L	100		126	70-160			†
Acrylonitrile	13.0	5.0	µg/L	10.0		130	70-130			V-20
tert-Amyl Methyl Ether (TAME)	9.23	0.50	µg/L	10.0		92.3	70-130			
Benzene	9.47	1.0	µg/L	10.0		94.7	70-130			
Bromobenzene	9.89	1.0	µg/L	10.0		98.9	70-130			
Bromochloromethane	10.9	1.0	µg/L	10.0		109	70-130			V-36
Bromodichloromethane	9.37	0.50	µg/L	10.0		93.7	70-130			
Bromoform	11.2	1.0	µg/L	10.0		112	70-130			
Bromomethane	9.61	2.0	µg/L	10.0		96.1	40-160			V-20 †
2-Butanone (MEK)	102	20	µg/L	100		102	40-160			†
tert-Butyl Alcohol (TBA)	135	20	µg/L	100		135	40-160			V-20 †
n-Butylbenzene	10.7	1.0	µg/L	10.0		107	70-130			
sec-Butylbenzene	11.0	1.0	µg/L	10.0		110	70-130			
tert-Butylbenzene	10.8	1.0	µg/L	10.0		108	70-130			
tert-Butyl Ethyl Ether (TBEE)	9.35	0.50	µg/L	10.0		93.5	70-130			
Carbon Disulfide	12.0	4.0	µg/L	10.0		120	70-130			
Carbon Tetrachloride	8.13	5.0	µg/L	10.0		81.3	70-130			
Chlorobenzene	10.1	1.0	µg/L	10.0		101	70-130			
Chlorodibromomethane	10.3	0.50	µg/L	10.0		103	70-130			
Chloroethane	12.3	2.0	µg/L	10.0		123	70-130			
Chloroform	8.83	2.0	µg/L	10.0		88.3	70-130			
Chloromethane	8.88	2.0	µg/L	10.0		88.8	40-160			†
2-Chlorotoluene	9.89	1.0	µg/L	10.0		98.9	70-130			
4-Chlorotoluene	9.84	1.0	µg/L	10.0		98.4	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	10.3	5.0	µg/L	10.0		103	70-130			
1,2-Dibromoethane (EDB)	10.1	0.50	µg/L	10.0		101	70-130			
Dibromomethane	9.70	1.0	µg/L	10.0		97.0	70-130			
1,2-Dichlorobenzene	10.5	1.0	µg/L	10.0		105	70-130			
1,3-Dichlorobenzene	10.7	1.0	µg/L	10.0		107	70-130			

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B215845 - SW-846 5030B</b>										
<b>LCS (B215845-BS1)</b>										
Prepared & Analyzed: 10/29/18										
1,4-Dichlorobenzene	9.95	1.0	µg/L	10.0		99.5	70-130			
trans-1,4-Dichloro-2-butene	10.4	2.0	µg/L	10.0		104	70-130			
Dichlorodifluoromethane (Freon 12)	6.21	2.0	µg/L	10.0		62.1	40-160			V-05 †
1,1-Dichloroethane	9.80	1.0	µg/L	10.0		98.0	70-130			
1,2-Dichloroethane	8.83	1.0	µg/L	10.0		88.3	70-130			
1,1-Dichloroethylene	11.3	1.0	µg/L	10.0		113	70-130			
cis-1,2-Dichloroethylene	9.30	1.0	µg/L	10.0		93.0	70-130			
trans-1,2-Dichloroethylene	11.1	1.0	µg/L	10.0		111	70-130			
1,2-Dichloropropane	10.7	1.0	µg/L	10.0		107	70-130			
1,3-Dichloropropane	9.54	0.50	µg/L	10.0		95.4	70-130			
2,2-Dichloropropane	9.97	1.0	µg/L	10.0		99.7	40-130			†
1,1-Dichloropropene	9.01	2.0	µg/L	10.0		90.1	70-130			
cis-1,3-Dichloropropene	10.4	0.50	µg/L	10.0		104	70-130			
trans-1,3-Dichloropropene	10.6	0.50	µg/L	10.0		106	70-130			
Diethyl Ether	12.6	2.0	µg/L	10.0		126	70-130			V-20
Diisopropyl Ether (DIPE)	10.0	0.50	µg/L	10.0		100	70-130			
1,4-Dioxane	114	50	µg/L	100		114	40-130			†
Ethylbenzene	10.3	1.0	µg/L	10.0		103	70-130			
Hexachlorobutadiene	12.7	0.60	µg/L	10.0		127	70-130			V-20, V-36
2-Hexanone (MBK)	109	10	µg/L	100		109	70-160			†
Isopropylbenzene (Cumene)	10.9	1.0	µg/L	10.0		109	70-130			
p-Isopropyltoluene (p-Cymene)	10.6	1.0	µg/L	10.0		106	70-130			
Methyl Acetate	10.2	1.0	µg/L	10.0		102	70-130			V-05
Methyl tert-Butyl Ether (MTBE)	10.9	1.0	µg/L	10.0		109	70-130			
Methyl Cyclohexane	10.6	1.0	µg/L	10.0		106	70-130			
Methylene Chloride	11.3	5.0	µg/L	10.0		113	70-130			V-20
4-Methyl-2-pentanone (MIBK)	110	10	µg/L	100		110	70-160			†
Naphthalene	10.2	2.0	µg/L	10.0		102	40-130			†
n-Propylbenzene	9.84	1.0	µg/L	10.0		98.4	70-130			
Styrene	10.3	1.0	µg/L	10.0		103	70-130			
1,1,1,2-Tetrachloroethane	11.2	1.0	µg/L	10.0		112	70-130			
1,1,2,2-Tetrachloroethane	10.9	0.50	µg/L	10.0		109	70-130			
Tetrachloroethylene	10.9	1.0	µg/L	10.0		109	70-130			
Tetrahydrofuran	10.8	10	µg/L	10.0		108	70-130			
Toluene	10.2	1.0	µg/L	10.0		102	70-130			
1,2,3-Trichlorobenzene	10.8	5.0	µg/L	10.0		108	70-130			
1,2,4-Trichlorobenzene	10.5	1.0	µg/L	10.0		105	70-130			
1,3,5-Trichlorobenzene	10.6	1.0	µg/L	10.0		106	70-130			
1,1,1-Trichloroethane	8.87	1.0	µg/L	10.0		88.7	70-130			
1,1,2-Trichloroethane	10.4	1.0	µg/L	10.0		104	70-130			
Trichloroethylene	10.5	1.0	µg/L	10.0		105	70-130			
Trichlorofluoromethane (Freon 11)	8.59	2.0	µg/L	10.0		85.9	70-130			
1,2,3-Trichloropropane	8.19	2.0	µg/L	10.0		81.9	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.2	1.0	µg/L	10.0		112	70-130			
1,2,4-Trimethylbenzene	9.69	1.0	µg/L	10.0		96.9	70-130			
1,3,5-Trimethylbenzene	9.72	1.0	µg/L	10.0		97.2	70-130			
Vinyl Chloride	8.56	2.0	µg/L	10.0		85.6	40-160			†
m+p Xylene	20.4	2.0	µg/L	20.0		102	70-130			
o-Xylene	10.2	1.0	µg/L	10.0		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	20.7		µg/L	25.0		82.9	70-130			
Surrogate: Toluene-d8	25.0		µg/L	25.0		100	70-130			

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B215845 - SW-846 5030B

LCS (B215845-BS1)

Prepared & Analyzed: 10/29/18

Surrogate: 4-Bromofluorobenzene	24.7		µg/L	25.0		98.8	70-130			
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LCS Dup (B215845-BS1)

Prepared & Analyzed: 10/29/18

Acetone	118	50	µg/L	100		118	70-160	6.74	25	†
Acrylonitrile	13.0	5.0	µg/L	10.0		130	70-130	0.154	25	V-20
tert-Amyl Methyl Ether (TAME)	8.97	0.50	µg/L	10.0		89.7	70-130	2.86	25	
Benzene	9.08	1.0	µg/L	10.0		90.8	70-130	4.20	25	
Bromobenzene	9.64	1.0	µg/L	10.0		96.4	70-130	2.56	25	
Bromochloromethane	11.1	1.0	µg/L	10.0		111	70-130	1.91	25	V-36
Bromodichloromethane	9.14	0.50	µg/L	10.0		91.4	70-130	2.49	25	
Bromoform	10.3	1.0	µg/L	10.0		103	70-130	8.29	25	
Bromomethane	11.5	2.0	µg/L	10.0		115	40-160	17.6	25	V-20 †
2-Butanone (MEK)	93.6	20	µg/L	100		93.6	40-160	8.98	25	†
tert-Butyl Alcohol (TBA)	124	20	µg/L	100		124	40-160	8.12	25	V-20 †
n-Butylbenzene	10.1	1.0	µg/L	10.0		101	70-130	5.10	25	
sec-Butylbenzene	10.2	1.0	µg/L	10.0		102	70-130	6.79	25	
tert-Butylbenzene	10.3	1.0	µg/L	10.0		103	70-130	4.55	25	
tert-Butyl Ethyl Ether (TBEE)	9.06	0.50	µg/L	10.0		90.6	70-130	3.15	25	
Carbon Disulfide	11.0	4.0	µg/L	10.0		110	70-130	8.54	25	
Carbon Tetrachloride	8.03	5.0	µg/L	10.0		80.3	70-130	1.24	25	
Chlorobenzene	9.80	1.0	µg/L	10.0		98.0	70-130	3.02	25	
Chlorodibromomethane	9.98	0.50	µg/L	10.0		99.8	70-130	3.54	25	
Chloroethane	10.5	2.0	µg/L	10.0		105	70-130	16.1	25	
Chloroform	8.71	2.0	µg/L	10.0		87.1	70-130	1.37	25	
Chloromethane	8.66	2.0	µg/L	10.0		86.6	40-160	2.51	25	†
2-Chlorotoluene	9.89	1.0	µg/L	10.0		98.9	70-130	0.00	25	
4-Chlorotoluene	9.46	1.0	µg/L	10.0		94.6	70-130	3.94	25	
1,2-Dibromo-3-chloropropane (DBCP)	9.44	5.0	µg/L	10.0		94.4	70-130	8.52	25	
1,2-Dibromoethane (EDB)	9.76	0.50	µg/L	10.0		97.6	70-130	3.62	25	
Dibromomethane	9.33	1.0	µg/L	10.0		93.3	70-130	3.89	25	
1,2-Dichlorobenzene	10.1	1.0	µg/L	10.0		101	70-130	3.11	25	
1,3-Dichlorobenzene	10.4	1.0	µg/L	10.0		104	70-130	2.55	25	
1,4-Dichlorobenzene	9.65	1.0	µg/L	10.0		96.5	70-130	3.06	25	
trans-1,4-Dichloro-2-butene	9.42	2.0	µg/L	10.0		94.2	70-130	9.50	25	
Dichlorodifluoromethane (Freon 12)	5.84	2.0	µg/L	10.0		58.4	40-160	6.14	25	V-05 †
1,1-Dichloroethane	9.50	1.0	µg/L	10.0		95.0	70-130	3.11	25	
1,2-Dichloroethane	8.32	1.0	µg/L	10.0		83.2	70-130	5.95	25	
1,1-Dichloroethylene	10.5	1.0	µg/L	10.0		105	70-130	7.24	25	
cis-1,2-Dichloroethylene	9.09	1.0	µg/L	10.0		90.9	70-130	2.28	25	
trans-1,2-Dichloroethylene	11.4	1.0	µg/L	10.0		114	70-130	2.84	25	
1,2-Dichloropropane	10.7	1.0	µg/L	10.0		107	70-130	0.281	25	
1,3-Dichloropropane	9.45	0.50	µg/L	10.0		94.5	70-130	0.948	25	
2,2-Dichloropropane	9.42	1.0	µg/L	10.0		94.2	40-130	5.67	25	†
1,1-Dichloropropene	8.81	2.0	µg/L	10.0		88.1	70-130	2.24	25	
cis-1,3-Dichloropropene	10.0	0.50	µg/L	10.0		100	70-130	3.71	25	
trans-1,3-Dichloropropene	10.2	0.50	µg/L	10.0		102	70-130	3.36	25	
Diethyl Ether	12.2	2.0	µg/L	10.0		122	70-130	3.38	25	V-20
Diisopropyl Ether (DIPE)	9.89	0.50	µg/L	10.0		98.9	70-130	1.60	25	
1,4-Dioxane	104	50	µg/L	100		104	40-130	9.69	50	† ‡
Ethylbenzene	10.2	1.0	µg/L	10.0		102	70-130	1.36	25	
Hexachlorobutadiene	12.0	0.60	µg/L	10.0		120	70-130	5.18	25	V-20, V-36
2-Hexanone (MBK)	101	10	µg/L	100		101	70-160	7.74	25	†

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B215845 - SW-846 5030B

LCS Dup (B215845-BSD1)

Prepared & Analyzed: 10/29/18

Isopropylbenzene (Cumene)	10.5	1.0	µg/L	10.0		105	70-130	3.36	25	
p-Isopropyltoluene (p-Cymene)	10.2	1.0	µg/L	10.0		102	70-130	3.66	25	
Methyl Acetate	10.2	1.0	µg/L	10.0		102	70-130	0.0980	25	V-05
Methyl tert-Butyl Ether (MTBE)	10.9	1.0	µg/L	10.0		109	70-130	0.368	25	
Methyl Cyclohexane	10.1	1.0	µg/L	10.0		101	70-130	5.31	25	
Methylene Chloride	11.8	5.0	µg/L	10.0		118	70-130	4.34	25	V-20
4-Methyl-2-pentanone (MIBK)	103	10	µg/L	100		103	70-160	7.26	25	†
Naphthalene	9.75	2.0	µg/L	10.0		97.5	40-130	5.00	25	†
n-Propylbenzene	9.57	1.0	µg/L	10.0		95.7	70-130	2.78	25	
Styrene	10.0	1.0	µg/L	10.0		100	70-130	2.36	25	
1,1,1,2-Tetrachloroethane	10.7	1.0	µg/L	10.0		107	70-130	5.02	25	
1,1,2,2-Tetrachloroethane	10.4	0.50	µg/L	10.0		104	70-130	4.59	25	
Tetrachloroethylene	10.0	1.0	µg/L	10.0		100	70-130	8.34	25	
Tetrahydrofuran	10.2	10	µg/L	10.0		102	70-130	5.69	25	
Toluene	10.0	1.0	µg/L	10.0		100	70-130	1.58	25	
1,2,3-Trichlorobenzene	10.0	5.0	µg/L	10.0		100	70-130	6.82	25	
1,2,4-Trichlorobenzene	9.93	1.0	µg/L	10.0		99.3	70-130	5.68	25	
1,3,5-Trichlorobenzene	9.92	1.0	µg/L	10.0		99.2	70-130	7.10	25	
1,1,1-Trichloroethane	8.72	1.0	µg/L	10.0		87.2	70-130	1.71	25	
1,1,2-Trichloroethane	10.3	1.0	µg/L	10.0		103	70-130	1.06	25	
Trichloroethylene	9.94	1.0	µg/L	10.0		99.4	70-130	5.57	25	
Trichlorofluoromethane (Freon 11)	8.32	2.0	µg/L	10.0		83.2	70-130	3.19	25	
1,2,3-Trichloropropane	8.07	2.0	µg/L	10.0		80.7	70-130	1.48	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.6	1.0	µg/L	10.0		106	70-130	5.32	25	
1,2,4-Trimethylbenzene	9.35	1.0	µg/L	10.0		93.5	70-130	3.57	25	
1,3,5-Trimethylbenzene	9.33	1.0	µg/L	10.0		93.3	70-130	4.09	25	
Vinyl Chloride	8.38	2.0	µg/L	10.0		83.8	40-160	2.13	25	†
m+p Xylene	19.1	2.0	µg/L	20.0		95.6	70-130	6.52	25	
o-Xylene	9.69	1.0	µg/L	10.0		96.9	70-130	5.03	25	
Surrogate: 1,2-Dichloroethane-d4	21.0		µg/L	25.0		84.0	70-130			
Surrogate: Toluene-d8	25.5		µg/L	25.0		102	70-130			
Surrogate: 4-Bromofluorobenzene	24.5		µg/L	25.0		97.9	70-130			

Matrix Spike (B215845-MS1)

Source: 18J0859-06

Prepared & Analyzed: 10/29/18

Acetone	9410	5000	µg/L	10000	ND	94.1	70-130			
Acrylonitrile	1030	500	µg/L	1000	ND	103	70-130			
tert-Amyl Methyl Ether (TAME)	903	50	µg/L	1000	ND	90.3	70-130			
Benzene	1000	100	µg/L	1000	ND	100	70-130			
Bromobenzene	954	100	µg/L	1000	ND	95.4	70-130			
Bromochloromethane	1260	100	µg/L	1000	ND	126	70-130			
Bromodichloromethane	907	50	µg/L	1000	ND	90.7	70-130			
Bromoform	933	100	µg/L	1000	ND	93.3	70-130			
Bromomethane	615	200	µg/L	1000	ND	61.5 *	70-130			MS-23, R-06
2-Butanone (MEK)	9890	2000	µg/L	10000	ND	98.9	70-130			
tert-Butyl Alcohol (TBA)	9780	2000	µg/L	10000	ND	97.8	70-130			
n-Butylbenzene	1020	100	µg/L	1000	ND	102	70-130			
sec-Butylbenzene	1060	100	µg/L	1000	ND	106	70-130			
tert-Butylbenzene	1060	100	µg/L	1000	ND	106	70-130			
tert-Butyl Ethyl Ether (TBEE)	932	50	µg/L	1000	ND	93.2	70-130			
Carbon Disulfide	920	400	µg/L	1000	ND	92.0	70-130			
Carbon Tetrachloride	874	500	µg/L	1000	ND	87.4	70-130			
Chlorobenzene	1010	100	µg/L	1000	ND	101	70-130			



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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B215845 - SW-846 5030B</b>										
<b>Matrix Spike (B215845-MS1)</b>	<b>Source: 18J0859-06</b>			<b>Prepared &amp; Analyzed: 10/29/18</b>						
Chlorodibromomethane	954	50	µg/L	1000	ND	95.4	70-130			
Chloroethane	1030	200	µg/L	1000	ND	103	70-130			
Chloroform	923	200	µg/L	1000	ND	92.3	70-130			
Chloromethane	907	200	µg/L	1000	ND	90.7	70-130			R-06
2-Chlorotoluene	967	100	µg/L	1000	ND	96.7	70-130			
4-Chlorotoluene	936	100	µg/L	1000	ND	93.6	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	866	500	µg/L	1000	ND	86.6	70-130			
1,2-Dibromoethane (EDB)	967	50	µg/L	1000	ND	96.7	70-130			
Dibromomethane	923	100	µg/L	1000	ND	92.3	70-130			
1,2-Dichlorobenzene	996	100	µg/L	1000	ND	99.6	70-130			
1,3-Dichlorobenzene	1010	100	µg/L	1000	ND	101	70-130			
1,4-Dichlorobenzene	955	100	µg/L	1000	ND	95.5	70-130			
trans-1,4-Dichloro-2-butene	912	200	µg/L	1000	ND	91.2	70-130			
Dichlorodifluoromethane (Freon 12)	721	200	µg/L	1000	ND	72.1	70-130			V-05
1,1-Dichloroethane	1050	100	µg/L	1000	ND	105	70-130			
1,2-Dichloroethane	838	100	µg/L	1000	ND	83.8	70-130			
1,1-Dichloroethylene	1040	100	µg/L	1000	22.0	101	70-130			
<b>cis-1,2-Dichloroethylene</b>	14200	100	µg/L	1000	15700	<b>-155 *</b>	70-130			MS-07A
trans-1,2-Dichloroethylene	1070	100	µg/L	1000	27.0	104	70-130			
1,2-Dichloropropane	1110	100	µg/L	1000	ND	111	70-130			
1,3-Dichloropropane	928	50	µg/L	1000	ND	92.8	70-130			
2,2-Dichloropropane	994	100	µg/L	1000	ND	99.4	70-130			
1,1-Dichloropropene	974	200	µg/L	1000	ND	97.4	70-130			
cis-1,3-Dichloropropene	978	50	µg/L	1000	ND	97.8	70-130			
trans-1,3-Dichloropropene	1010	50	µg/L	1000	ND	101	70-130			
Diethyl Ether	1070	200	µg/L	1000	ND	107	70-130			
Diisopropyl Ether (DIPE)	1120	50	µg/L	1000	ND	112	70-130			
1,4-Dioxane	9630	5000	µg/L	10000	ND	96.3	70-130			
Ethylbenzene	1040	100	µg/L	1000	ND	104	70-130			
Hexachlorobutadiene	1130	60	µg/L	1000	ND	113	70-130			
2-Hexanone (MBK)	10100	1000	µg/L	10000	ND	101	70-130			
Isopropylbenzene (Cumene)	1070	100	µg/L	1000	ND	107	70-130			
p-Isopropyltoluene (p-Cymene)	1000	100	µg/L	1000	ND	100	70-130			
Methyl Acetate	832	100	µg/L	1000	ND	83.2	70-130			V-05
Methyl tert-Butyl Ether (MTBE)	918	100	µg/L	1000	ND	91.8	70-130			
Methyl Cyclohexane	1120	100	µg/L	1000	ND	112	70-130			
Methylene Chloride	1040	500	µg/L	1000	ND	104	70-130			
4-Methyl-2-pentanone (MIBK)	10400	1000	µg/L	10000	ND	104	70-130			
Naphthalene	840	200	µg/L	1000	ND	84.0	70-130			
n-Propylbenzene	981	100	µg/L	1000	ND	98.1	70-130			
Styrene	980	100	µg/L	1000	ND	98.0	70-130			
1,1,1,2-Tetrachloroethane	1020	100	µg/L	1000	ND	102	70-130			
1,1,1,2,2-Tetrachloroethane	999	50	µg/L	1000	ND	99.9	70-130			
Tetrachloroethylene	1160	100	µg/L	1000	ND	116	70-130			
Tetrahydrofuran	1080	1000	µg/L	1000	ND	108	70-130			
Toluene	1020	100	µg/L	1000	ND	102	70-130			
1,2,3-Trichlorobenzene	912	500	µg/L	1000	ND	91.2	70-130			
1,2,4-Trichlorobenzene	893	100	µg/L	1000	ND	89.3	70-130			
1,3,5-Trichlorobenzene	969	100	µg/L	1000	ND	96.9	70-130			
1,1,1-Trichloroethane	906	100	µg/L	1000	ND	90.6	70-130			
1,1,2-Trichloroethane	981	100	µg/L	1000	ND	98.1	70-130			
Trichloroethylene	1180	100	µg/L	1000	175	100	70-130			

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B215845 - SW-846 5030B</b>										
<b>Matrix Spike (B215845-MS1) Source: 18J0859-06 Prepared &amp; Analyzed: 10/29/18</b>										
Trichlorofluoromethane (Freon 11)	820	200	µg/L	1000	ND	82.0	70-130			
1,2,3-Trichloropropane	782	200	µg/L	1000	ND	78.2	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1040	100	µg/L	1000	ND	104	70-130			
1,2,4-Trimethylbenzene	927	100	µg/L	1000	ND	92.7	70-130			
1,3,5-Trimethylbenzene	918	100	µg/L	1000	ND	91.8	70-130			
Vinyl Chloride	899	200	µg/L	1000	41.0	85.8	70-130			R-06
m+p Xylene	1980	200	µg/L	2000	ND	99.0	70-130			
o-Xylene	972	100	µg/L	1000	ND	97.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	21.7		µg/L	25.0		86.8	70-130			
Surrogate: Toluene-d8	25.6		µg/L	25.0		103	70-130			
Surrogate: 4-Bromofluorobenzene	24.3		µg/L	25.0		97.3	70-130			
<b>Matrix Spike Dup (B215845-MSD1) Source: 18J0859-06 Prepared &amp; Analyzed: 10/29/18</b>										
Acetone	11300	5000	µg/L	10000	ND	113	70-130	18.2	30	
Acrylonitrile	1070	500	µg/L	1000	ND	107	70-130	3.33	30	
tert-Amyl Methyl Ether (TAME)	952	50	µg/L	1000	ND	95.2	70-130	5.28	30	
Benzene	1020	100	µg/L	1000	ND	102	70-130	1.58	30	
Bromobenzene	1040	100	µg/L	1000	ND	104	70-130	9.01	30	
Bromochloromethane	1220	100	µg/L	1000	ND	122	70-130	3.79	30	
Bromodichloromethane	1020	50	µg/L	1000	ND	102	70-130	11.8	30	
Bromoform	1190	100	µg/L	1000	ND	119	70-130	24.5	30	
Bromomethane	1220	200	µg/L	1000	ND	122	70-130	65.6 *	30	R-06
2-Butanone (MEK)	9340	2000	µg/L	10000	ND	93.4	70-130	5.74	30	
tert-Butyl Alcohol (TBA)	9940	2000	µg/L	10000	ND	99.4	70-130	1.61	30	
n-Butylbenzene	1140	100	µg/L	1000	ND	114	70-130	11.1	30	
sec-Butylbenzene	1180	100	µg/L	1000	ND	118	70-130	10.1	30	
tert-Butylbenzene	1180	100	µg/L	1000	ND	118	70-130	10.6	30	
tert-Butyl Ethyl Ether (TBEE)	958	50	µg/L	1000	ND	95.8	70-130	2.75	30	
Carbon Disulfide	1110	400	µg/L	1000	ND	111	70-130	18.8	30	
Carbon Tetrachloride	908	500	µg/L	1000	ND	90.8	70-130	3.82	30	
Chlorobenzene	1070	100	µg/L	1000	ND	107	70-130	6.05	30	
Chlorodibromomethane	1070	50	µg/L	1000	ND	107	70-130	11.8	30	
Chloroethane	1170	200	µg/L	1000	ND	117	70-130	12.4	30	
Chloroform	950	200	µg/L	1000	ND	95.0	70-130	2.88	30	
<b>Chloromethane</b>	1320	200	µg/L	1000	ND	132 *	70-130	37.5 *	30	MS-23, R-06
2-Chlorotoluene	1060	100	µg/L	1000	ND	106	70-130	9.55	30	
4-Chlorotoluene	1020	100	µg/L	1000	ND	102	70-130	8.69	30	
1,2-Dibromo-3-chloropropane (DBCP)	932	500	µg/L	1000	ND	93.2	70-130	7.34	30	
1,2-Dibromoethane (EDB)	1030	50	µg/L	1000	ND	103	70-130	6.21	30	
Dibromomethane	1040	100	µg/L	1000	ND	104	70-130	12.2	30	
1,2-Dichlorobenzene	1070	100	µg/L	1000	ND	107	70-130	7.07	30	
1,3-Dichlorobenzene	1140	100	µg/L	1000	ND	114	70-130	11.6	30	
1,4-Dichlorobenzene	1030	100	µg/L	1000	ND	103	70-130	7.94	30	
trans-1,4-Dichloro-2-butene	977	200	µg/L	1000	ND	97.7	70-130	6.88	30	
Dichlorodifluoromethane (Freon 12)	934	200	µg/L	1000	ND	93.4	70-130	25.7	30	V-05
1,1-Dichloroethane	1050	100	µg/L	1000	ND	105	70-130	0.191	30	
1,2-Dichloroethane	895	100	µg/L	1000	ND	89.5	70-130	6.58	30	
1,1-Dichloroethylene	1240	100	µg/L	1000	22.0	122	70-130	18.3	30	
<b>cis-1,2-Dichloroethylene</b>	14400	100	µg/L	1000	15700	-137 *	70-130	1.28	30	MS-07A
trans-1,2-Dichloroethylene	1100	100	µg/L	1000	27.0	108	70-130	2.94	30	
1,2-Dichloropropane	1190	100	µg/L	1000	ND	119	70-130	6.89	30	
1,3-Dichloropropane	1010	50	µg/L	1000	ND	101	70-130	8.36	30	

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B215845 - SW-846 5030B</b>										
<b>Matrix Spike Dup (B215845-MSD1)</b>		<b>Source: 18J0859-06</b>			<b>Prepared &amp; Analyzed: 10/29/18</b>					
2,2-Dichloropropane	1040	100	µg/L	1000	ND	104	70-130	4.33	30	
1,1-Dichloropropene	1010	200	µg/L	1000	ND	101	70-130	3.73	30	
cis-1,3-Dichloropropene	1270	50	µg/L	1000	ND	127	70-130	26.1	30	
trans-1,3-Dichloropropene	1100	50	µg/L	1000	ND	110	70-130	9.38	30	
Diethyl Ether	1260	200	µg/L	1000	ND	126	70-130	16.5	30	
Diisopropyl Ether (DIPE)	1060	50	µg/L	1000	ND	106	70-130	5.61	30	
1,4-Dioxane	10700	5000	µg/L	10000	ND	107	70-130	10.4	30	
Ethylbenzene	1100	100	µg/L	1000	ND	110	70-130	5.59	30	
<b>Hexachlorobutadiene</b>	1320	60	µg/L	1000	ND	<b>132</b>	* 70-130	15.6	30	MS-24
2-Hexanone (MBK)	10200	1000	µg/L	10000	ND	102	70-130	1.62	30	
<b>Isopropylbenzene (Cumene)</b>	1310	100	µg/L	1000	ND	<b>131</b>	* 70-130	20.6	30	MS-24
p-Isopropyltoluene (p-Cymene)	1140	100	µg/L	1000	ND	114	70-130	12.8	30	
Methyl Acetate	967	100	µg/L	1000	ND	96.7	70-130	15.0	30	V-05
Methyl tert-Butyl Ether (MTBE)	979	100	µg/L	1000	ND	97.9	70-130	6.43	30	
Methyl Cyclohexane	1200	100	µg/L	1000	ND	120	70-130	6.38	30	
Methylene Chloride	1220	500	µg/L	1000	ND	122	70-130	15.3	30	
4-Methyl-2-pentanone (MIBK)	11400	1000	µg/L	10000	ND	114	70-130	9.00	30	
Naphthalene	966	200	µg/L	1000	ND	96.6	70-130	14.0	30	
n-Propylbenzene	1060	100	µg/L	1000	ND	106	70-130	7.27	30	
Styrene	1270	100	µg/L	1000	ND	127	70-130	25.5	30	
1,1,1,2-Tetrachloroethane	1110	100	µg/L	1000	ND	111	70-130	9.02	30	
1,1,2,2-Tetrachloroethane	1040	50	µg/L	1000	ND	104	70-130	3.64	30	
Tetrachloroethylene	1220	100	µg/L	1000	ND	122	70-130	4.89	30	
Tetrahydrofuran	952	1000	µg/L	1000	ND	95.2	70-130	13.0	30	J
Toluene	1110	100	µg/L	1000	ND	111	70-130	8.16	30	
1,2,3-Trichlorobenzene	1050	500	µg/L	1000	ND	105	70-130	13.7	30	
1,2,4-Trichlorobenzene	1060	100	µg/L	1000	ND	106	70-130	17.6	30	
1,3,5-Trichlorobenzene	1090	100	µg/L	1000	ND	109	70-130	11.8	30	
1,1,1-Trichloroethane	983	100	µg/L	1000	ND	98.3	70-130	8.15	30	
1,1,2-Trichloroethane	1080	100	µg/L	1000	ND	108	70-130	9.42	30	
Trichloroethylene	1350	100	µg/L	1000	175	117	70-130	13.4	30	
Trichlorofluoromethane (Freon 11)	950	200	µg/L	1000	ND	95.0	70-130	14.7	30	
1,2,3-Trichloropropane	791	200	µg/L	1000	ND	79.1	70-130	1.14	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1240	100	µg/L	1000	ND	124	70-130	17.3	30	
1,2,4-Trimethylbenzene	1020	100	µg/L	1000	ND	102	70-130	9.75	30	
1,3,5-Trimethylbenzene	1030	100	µg/L	1000	ND	103	70-130	11.7	30	
Vinyl Chloride	1280	200	µg/L	1000	41.0	124	70-130	<b>34.8</b>	* 30	R-06
m+p Xylene	2180	200	µg/L	2000	ND	109	70-130	9.39	20	
o-Xylene	1240	100	µg/L	1000	ND	124	70-130	24.0	30	
Surrogate: 1,2-Dichloroethane-d4	20.7		µg/L	25.0			70-130	82.8		
Surrogate: Toluene-d8	25.5		µg/L	25.0			70-130	102		
Surrogate: 4-Bromofluorobenzene	27.1		µg/L	25.0			70-130	109		

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**QUALITY CONTROL**

**1,4-Dioxane by isotope dilution GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B215290 - SW-846 3510C</b>										
<b>Blank (B215290-BLK1)</b>										
				Prepared: 10/21/18 Analyzed: 10/29/18						
1,4-Dioxane	ND	0.20	µg/L							
Surrogate: 1,4-Dioxane-d8	4.17		µg/L	10.0		41.7	15-110			
<b>LCS (B215290-BS1)</b>										
				Prepared: 10/21/18 Analyzed: 10/24/18						
1,4-Dioxane	9.04	0.20	µg/L	10.0		90.4	40-140			
Surrogate: 1,4-Dioxane-d8	5.00		µg/L	10.0		50.0	15-110			
<b>LCS Dup (B215290-BSD1)</b>										
				Prepared: 10/21/18 Analyzed: 10/24/18						
1,4-Dioxane	10.3	0.20	µg/L	10.0		103	40-140	12.9	30	
Surrogate: 1,4-Dioxane-d8	3.81		µg/L	10.0		38.1	15-110			

**FLAG/QUALIFIER SUMMARY**

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
L-02	Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.
MS-07A	Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.
MS-23	Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is outside of the method specified criteria. Reduced precision anticipated for any reported result for this compound.
MS-24	Either matrix spike or matrix spike duplicate is outside of control limits, but the other is within limits. Analysis is in control based on laboratory fortified blank recovery.
R-05	Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
R-06	Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.
RL-11	Elevated reporting limit due to high concentration of target compounds.
V-05	Continuing calibration did not meet method specifications and was biased on the low side for this compound.
V-20	Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.
V-36	Initial calibration verification (ICV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

**CERTIFICATIONS**

**Certified Analyses included in this Report**

Analyte	Certifications
<i>SW-846 8260C in Water</i>	
Acetone	CT,ME,NH,VA,NY
Acrylonitrile	CT,ME,NH,VA,NY
tert-Amyl Methyl Ether (TAME)	ME,NH,VA,NY
Benzene	CT,ME,NH,VA,NY
Bromobenzene	NY
Bromochloromethane	ME,NH,VA,NY
Bromodichloromethane	CT,ME,NH,VA,NY
Bromoform	CT,ME,NH,VA,NY
Bromomethane	CT,ME,NH,VA,NY
2-Butanone (MEK)	CT,ME,NH,VA,NY
tert-Butyl Alcohol (TBA)	ME,NH,VA,NY
n-Butylbenzene	ME,VA,NY
sec-Butylbenzene	ME,VA,NY
tert-Butylbenzene	ME,VA,NY
tert-Butyl Ethyl Ether (TBEE)	ME,NH,VA,NY
Carbon Disulfide	CT,ME,NH,VA,NY
Carbon Tetrachloride	CT,ME,NH,VA,NY
Chlorobenzene	CT,ME,NH,VA,NY
Chlorodibromomethane	CT,ME,NH,VA,NY
Chloroethane	CT,ME,NH,VA,NY
Chloroform	CT,ME,NH,VA,NY
Chloromethane	CT,ME,NH,VA,NY
2-Chlorotoluene	ME,NH,VA,NY
4-Chlorotoluene	ME,NH,VA,NY
1,2-Dibromo-3-chloropropane (DBCP)	NY
1,2-Dibromoethane (EDB)	NY
Dibromomethane	ME,NH,VA,NY
1,2-Dichlorobenzene	CT,ME,NH,VA,NY
1,3-Dichlorobenzene	CT,ME,NH,VA,NY
1,4-Dichlorobenzene	CT,ME,NH,VA,NY
trans-1,4-Dichloro-2-butene	ME,NH,VA,NY
Dichlorodifluoromethane (Freon 12)	ME,NH,VA,NY
1,1-Dichloroethane	CT,ME,NH,VA,NY
1,2-Dichloroethane	CT,ME,NH,VA,NY
1,1-Dichloroethylene	CT,ME,NH,VA,NY
cis-1,2-Dichloroethylene	ME,NY
trans-1,2-Dichloroethylene	CT,ME,NH,VA,NY
1,2-Dichloropropane	CT,ME,NH,VA,NY
1,3-Dichloropropane	ME,VA,NY
2,2-Dichloropropane	ME,NH,VA,NY
1,1-Dichloropropene	ME,NH,VA,NY
cis-1,3-Dichloropropene	CT,ME,NH,VA,NY
trans-1,3-Dichloropropene	CT,ME,NH,VA,NY
Diethyl Ether	NY
Diisopropyl Ether (DIPE)	ME,NH,VA,NY
1,4-Dioxane	NY
Ethylbenzene	CT,ME,NH,VA,NY

**CERTIFICATIONS**

**Certified Analyses included in this Report**

Analyte	Certifications
<i>SW-846 8260C in Water</i>	
Hexachlorobutadiene	CT,ME,NH,VA,NY
2-Hexanone (MBK)	CT,ME,NH,VA,NY
Isopropylbenzene (Cumene)	ME,VA,NY
p-Isopropyltoluene (p-Cymene)	CT,ME,NH,VA,NY
Methyl Acetate	NY
Methyl tert-Butyl Ether (MTBE)	CT,ME,NH,VA,NY
Methyl Cyclohexane	NY
Methylene Chloride	CT,ME,NH,VA,NY
4-Methyl-2-pentanone (MIBK)	CT,ME,NH,VA,NY
Naphthalene	ME,NH,VA,NY
n-Propylbenzene	CT,ME,NH,VA,NY
Styrene	CT,ME,NH,VA,NY
1,1,1,2-Tetrachloroethane	CT,ME,NH,VA,NY
1,1,2,2-Tetrachloroethane	CT,ME,NH,VA,NY
Tetrachloroethylene	CT,ME,NH,VA,NY
Toluene	CT,ME,NH,VA,NY
1,2,3-Trichlorobenzene	ME,NH,VA,NY
1,2,4-Trichlorobenzene	CT,ME,NH,VA,NY
1,3,5-Trichlorobenzene	ME
1,1,1-Trichloroethane	CT,ME,NH,VA,NY
1,1,2-Trichloroethane	CT,ME,NH,VA,NY
Trichloroethylene	CT,ME,NH,VA,NY
Trichlorofluoromethane (Freon 11)	CT,ME,NH,VA,NY
1,2,3-Trichloropropane	ME,NH,VA,NY
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	VA,NY
1,2,4-Trimethylbenzene	ME,VA,NY
1,3,5-Trimethylbenzene	ME,VA,NY
Vinyl Chloride	CT,ME,NH,VA,NY
m+p Xylene	CT,ME,NH,VA,NY
o-Xylene	CT,ME,NH,VA,NY
<i>SW-846 8270D in Water</i>	
1,4-Dioxane	NY

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The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2005	100033	03/1/2020
MA	Massachusetts DEP	M-MA100	06/30/2019
CT	Connecticut Department of Public Health	PH-0567	09/30/2019
NY	New York State Department of Health	10899 NELAP	04/1/2019
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2019
RI	Rhode Island Department of Health	LAO00112	12/30/2018
NC	North Carolina Div. of Water Quality	652	12/31/2018
NJ	New Jersey DEP	MA007 NELAP	06/30/2019
FL	Florida Department of Health	E871027 NELAP	06/30/2019
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2019
ME	State of Maine	2011028	06/9/2019
VA	Commonwealth of Virginia	460217	12/14/2018
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2019
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2019
NC-DW	North Carolina Department of Health	25703	07/31/2019



18J0859  
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EA Engineering

Company Name: 6712 Brooklawn Pkwy, Ste 104 Syracuse, NY 13211  
Phone: 315-565-6565  
Project Name: Admiral Cleaners  
Project Location: Watervliet, NY  
Project Number: 1490738 0003  
Project Manager: Chris Schroer  
Con-Test Quote Name/Number: cschroer@eaest.com  
Invoice Recipient: E. Thieleman / S. Soldner  
Sampled By:

Requested Turnaround Time  
7-Day  10-Day   
Due Date:  
Rush-Approval Required  
1-Day  3-Day   
2-Day  4-Day   
Data Delivery  
Format: PDF  EXCEL   
Other: Cat B   
CLP Like Data Pkg Required:   
Email To: cschroer@eaest.com  
Fax To #:

Con-Test Work Order #	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	Matrix Code	Conc Code
1	401075-MW-01	10/16/18	1000		x	GW	M
2	401075-MW-02	10/16/18	1035		x	GW	
3	401075-MW-03	10/15/18	1400		x	GW	
4	401075-MW-04	10/16/18	0935		x	GW	
5	401075-MW-05	10/16/18	1155		x	GW	
6	401075-MW-06	10/15/18	1304		x	GW	
7	401075-MW-07	10/14/18	0934		x	GW	
8	401075-MW-07R	10/15/18	1420		x	GW	
9	401075-MW-08	10/16/18	1020		x	GW	
10	401075-MW-09	10/16/18	0840		x	GW	

Comments: MS/MSD @ 401075-MW-06

Please use the following codes to indicate possible sample concentration within the Conc Code column above:  
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time:	Program & Regulatory Information	Daily Variables
<i>[Signature]</i>	10/16/18 13:00	<input type="checkbox"/> AWQ STDS <input type="checkbox"/> NYC Sewer Discharge <input type="checkbox"/> Part 360 GW (Landfill) <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NY Part 375	<input checked="" type="checkbox"/> Enhanced Data Package <input type="checkbox"/> NYSDEC EQUIS EDD <input type="checkbox"/> EQUIS (Standard) EDD <input type="checkbox"/> NY Regulatory EDD <input type="checkbox"/> NY Regs Hits-Only EDD
Received by: (signature)	Date/Time:	Project Entity	Other
<i>[Signature]</i>	10-16-18 1500	<input checked="" type="checkbox"/> Government <input type="checkbox"/> Federal <input type="checkbox"/> City	<input type="checkbox"/> MWRA <input type="checkbox"/> WRTA <input type="checkbox"/> Chromatogram <input type="checkbox"/> AIMA-LAP, LLC
Relinquished by: (signature)	Date/Time:	Other	NEHAC and AIMA-LAP, LLC Accredited
<i>[Signature]</i>	10-16-18 1620		
Relinquished by: (signature)	Date/Time:		
<i>[Signature]</i>	10/17/18 1211		
Relinquished by: (signature)	Date/Time:		
<i>[Signature]</i>			
Relinquished by: (signature)	Date/Time:		
<i>[Signature]</i>			

# of Containers PER Sample

Preservation Code

Container Code

**Dissolved Metals Samples**

Field Filtered

Lab to Filter

**Orthophosphate Samples**

Field Filtered

Lab to Filter

**1 Matrix Codes:**  
 GW = Ground Water  
 WW = Waste Water  
 DW = Drinking Water  
 A = Air  
 S = Soil  
 SL = Sludge  
 SOL = Solid  
 O = Other (please define)

**2 Preservation Codes:**  
 I = Iced  
 H = HCL  
 M = Methanol  
 N = Nitric Acid  
 S = Sulfuric Acid  
 B = Sodium Bisulfate  
 X = Sodium Hydroxide  
 T = Sodium Thiosulfate  
 O = Other (please define)

**3 Container Codes:**  
 A = Amber Glass  
 G = Glass  
 P = Plastic  
 ST = Sterile  
 V = Vial  
 S = Summa Canister  
 T = Tedlar Bag  
 O = Other (please define)

**PCB ONLY**  
 Soxhlet  
 Non Soxhlet

ANALYSIS REQUESTED

EPA 537 - PFCs	EPA 8270 SIM - 1,4-Dioxane	RSK-175 - Methane, ethane, ethene	Method 5310B - TOC	D516, SM2320B, SM4500 - Major Anic
8260 - VOCs				

39 Spruce Street  
East Longmeadow, MA 01028

CHAIN OF CUSTODY RECORD (New York)

182059  
Phone: 413-525-2332  
Fax: 413-525-6405  
Email: info@contestlabs.com



**Company Name:** EA Engineering  
**Address:** 6712 Brooklawn Pkwy, Ste 104 Syracuse, NY 13211  
**Phone:** 315-565-6565  
**Project Name:** Admiral Cleaners  
**Project Location:** Watervliet, NY  
**Project Number:** 1490738 0003  
**Project Manager:** Chris Schroer  
**Con-Test Quote Name/Number:** cschroer@east.com  
**Invoice Recipient:** cschroer@east.com  
**Sampled By:** E. Thieteman / S. Soldner

**Requested Turnaround Time:**  
7-Day  10-Day   
**Due Date:**  
Rush-Approval Required  
1-Day  3-Day   
2-Day  4-Day   
**Data Delivery:**  
Format: PDF  EXCEL   
Other: Cat B   
CLP Like Data Pkg Required:   
Email To: cschroer@east.com  
Fax To #:

**# of Containers:** 2  
**Preservation Code:**  
**Container Code:**  
**Matrix Codes:**  
GW = Ground Water  
WW = Waste Water  
DW = Drinking Water  
A = Air  
S = Soil  
SL = Sludge  
SOL = Solid  
O = Other (please define)  
**Preservation Codes:**  
I = Iced  
H = HCL  
M = Methanol  
N = Nitric Acid  
S = Sulfuric Acid  
B = Sodium Bisulfate  
X = Sodium Hydroxide  
T = Sodium Thiosulfate  
O = Other (please define)  
**Container Codes:**  
A = Amber Glass  
G = Glass  
P = Plastic  
ST = Sterile  
V = Vial  
S = Summa Canister  
T = Tedlar Bag  
O = Other (please define)

Con-Test Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	Matrix Code	Conc Code
11	401075-MW-10	10/15/18	1715		x	GW	U
12	401075-MW-11	10/16/18	1110		x	GW	U
13	401075-MW-12	10/16/18	0920		x	GW	U
14	401075-MW-14	10/16/18	0850		x	GW	U
15	401075-MW-15	10/15/18	1528		x	GW	U
16	401075-MW-16	10/15/18	1650		x	GW	U
17	401075-MW-17	10/15/18	1638		x	GW	U
18	401075-DUP	10/15/18			x	GW	U
19	401075-TB01	10/14/18			x	GW	U

**ANALYSIS REQUESTED**  
RSK-175 - Methane, ethane, ethene  
Method 5310B - TOC  
EPA 8270 SIM - 1,4-Dioxane  
EPA 537 - PFCs  
8260 - VOCs

**1 Matrix Codes:**  
GW = Ground Water  
WW = Waste Water  
DW = Drinking Water  
A = Air  
S = Soil  
SL = Sludge  
SOL = Solid  
O = Other (please define)  
**2 Preservation Codes:**  
I = Iced  
H = HCL  
M = Methanol  
N = Nitric Acid  
S = Sulfuric Acid  
B = Sodium Bisulfate  
X = Sodium Hydroxide  
T = Sodium Thiosulfate  
O = Other (please define)  
**3 Container Codes:**  
A = Amber Glass  
G = Glass  
P = Plastic  
ST = Sterile  
V = Vial  
S = Summa Canister  
T = Tedlar Bag  
O = Other (please define)

**Requested Turnaround Time:**  
7-Day  10-Day   
**Due Date:**  
Rush-Approval Required  
1-Day  3-Day   
2-Day  4-Day   
**Data Delivery:**  
Format: PDF  EXCEL   
Other: Cat B   
CLP Like Data Pkg Required:   
Email To: cschroer@east.com  
Fax To #:

**Comments:** 20 401075-MW-10 10/16/18 950  
Please use the following codes to indicate possible sample concentration within the Conc Code column above:  
H - High; M - Medium; L - Low; C - Clean; U - Unknown


**Relinquished by:** (signature) 10/16/18 13:00  
**Received by:** (signature) 10/16/18 1500  
**Relinquished by:** (signature) 10/16/18 1620  
**Received by:** (signature) 10/17/18 1214  
**Relinquished by:** (signature)  
**Received by:** (signature)

**Program & Regulatory Information:**  
AWQ STDS  NY TOGS   
NYC Sewer Discharge  NY CP-51  
Part 360 GW (Landfill)  
NY Restricted Use   
NY Unrestricted Use   
NY Part 375

**Enhanced Data Package:**  
NYSDEC EQUIS EDD   
EQUIS (Standard) EDD   
NY Regulatory EDD   
NY Regs Hits-Only EDD



TRACK ANOTHER SHIPMENT

773492103833 



Delivered  
Wednesday 10/17/2018 at 12:14 pm



**DELIVERED**

Signed for by: BSMITH

**GET STATUS UPDATES**  
**OBTAIN PROOF OF DELIVERY**


**FROM**  
ALBANY, NY US  
**TO**  
EAST LONGMEADOW, MA US

10/17/2018 - Wednesday

12:14 pm

Delivered

East Longmeadow, MA

Expand History 

10/16/2018 - Tuesday

4:36 pm

Shipment information sent to FedEx

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I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples \_\_\_\_\_



**con-test**  
ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

**Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False**

Client EA Engineering  
 Received By RAP Date 10/17/18 Time 12:14  
 How were the samples received? In Cooler T No Cooler \_\_\_\_\_ On Ice T No Ice \_\_\_\_\_  
 Direct from Sampling \_\_\_\_\_ Ambient \_\_\_\_\_ Melted Ice \_\_\_\_\_  
 Were samples within Temperature? 2-6°C T By Gun # 557 Actual Temp - 3.7  
 By Blank # \_\_\_\_\_ Actual Temp - \_\_\_\_\_  
 Was Custody Seal Intact? NA Were Samples Tampered with? NA  
 Was COC Relinquished? T Does Chain Agree With Samples? T  
 Are there broken/leaking/loose caps on any samples? F  
 Is COC in ink/ Legible? T Were samples received within holding time? T  
 Did COC include all pertinent Information? Client T Analysis T Sampler Name T  
 Project T ID's T Collection Dates/Times T  
 Are Sample labels filled out and legible? T  
 Are there Lab to Filters? F Who was notified? \_\_\_\_\_  
 Are there Rushes? F Who was notified? \_\_\_\_\_  
 Are there Short Holds? F Who was notified? \_\_\_\_\_  
 Is there enough Volume? T  
 Is there Headspace where applicable? F MS/MSD? T  
 Proper Media/Containers Used? T Is splitting samples required? F  
 Were trip blanks received? T On COC? T  
 Do all samples have the proper pH? Acid pH: 7 Base \_\_\_\_\_

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.	2	1 Liter Plastic		16 oz Amb.	
HCL-	62	500 mL Amb.		500 mL Plastic		8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear	
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear	
DI-		Other Plastic		Other Glass		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

**Unused Media**

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear	
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear	
DI-		Other Plastic		Other Glass		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

**Comments:**

One of the 1 liter ambies is preserved w/HCL. It had a pH of 7.

**From:** [Scott Basal](#)  
**To:** [Aron Benoit](#); [jessica hoffman](#)  
**Cc:** [Paula Blakeborough](#); [Rebecca Faust](#); [Login Login](#)  
**Subject:** FW: Admiral Cleaners GW bottleware  
**Date:** Friday, October 19, 2018 7:40:43 AM  
**Attachments:** [image001.png](#)  
**Importance:** High

---

See below for correction to EA engineering project **18J0859**:

*“two samples from MW-10...one for VOCs collected on 10/15/2018 at 1715, and the other for 1,4-Dioxane...the 1,4-Dioxane samples is listed on the chain as being collected at the same time as the VOC samples, however, it should read that it was collected on 10/16/2018 at 0950”*

**Scott Basal**

Albany Service Center Manager  
 Con-Test Analytical Laboratory  
 18 Walker Way | Albany, NY 12205  
 Office 518.608.1036  
 Cell 518.210.3218



[www.contestlabs.com](http://www.contestlabs.com)

Please take a look at our ConTest Laboratory Sampling Guide: <https://contestlabs.com/uploads/application/files/sampling-guide-2-2.pdf>  
 Con-Test is committed to quality and continuously improving deliverables and services to our clients. **Complete the short survey** regarding your experience with Con-Test using the following link: [Survey Link](#) Each entry will be entered for a \$100 gift card in a monthly drawing

---

**From:** Thieleman, Erica [mailto:[ethieleman@eaest.com](mailto:ethieleman@eaest.com)]  
**Sent:** Wednesday, October 17, 2018 1:37 PM  
**To:** Scott Basal <[scott.basal@contestlabs.com](mailto:scott.basal@contestlabs.com)>  
**Subject:** RE: Admiral Cleaners GW bottleware

Scott,

I was going through our copy of the COC, and realized we made an error on yesterday's chain. We sent in two samples from MW-10 yesterday, one for VOCs collected on 10/15/2018 at 1715, and the other for 1,4-Dioxane. The 1,4-Dioxane samples is listed on the chain as being collected at the same time as the VOC samples, however, it should read that it was collected on 10/16/2018 at 0950. The 1,4-dioxane sample from MW-10 has the correct information on the label, but we should have put it on a separate line in the chain.

Would you be able to forward this information on to the lab?

Thank you,  
Erica

---

**From:** Scott Basal <[scott.basal@contestlabs.com](mailto:scott.basal@contestlabs.com)>  
**Sent:** Tuesday, October 16, 2018 3:00 PM  
**To:** Thieleman, Erica <[ethieleman@eaest.com](mailto:ethieleman@eaest.com)>  
**Subject:** RE: Admiral Cleaners GW bottleware

Thanks Erica!

---

**From:** Thieleman, Erica [mailto:[ethieleman@eaest.com](mailto:ethieleman@eaest.com)]  
**Sent:** Tuesday, October 16, 2018 12:08 PM  
**To:** Scott Basal <[scott.basal@contestlabs.com](mailto:scott.basal@contestlabs.com)>  
**Subject:** Re: Admiral Cleaners GW bottleware

Will do!

On Oct 16, 2018, at 9:45 AM, Scott Basal <[scott.basal@contestlabs.com](mailto:scott.basal@contestlabs.com)> wrote:

Hi Erica 😊

I received your samples but it looks like maybe you took the original and left me with the copies of the COC. I left you a pink copy on the table by the front door...when you stop by today if you could leave the original and take the pink copy that would be great.

Thank you,  
scott

---

**From:** Thieleman, Erica [mailto:[ethieleman@eaest.com](mailto:ethieleman@eaest.com)]  
**Sent:** Tuesday, October 16, 2018 7:31 AM  
**To:** Scott Basal <[scott.basal@contestlabs.com](mailto:scott.basal@contestlabs.com)>  
**Subject:** Re: Admiral Cleaners GW bottleware

Good morning, Scott,

We swing by the service center on our way to the site and grabbed a replacement bottle. I hope that is ok. We will drop off our remaining samples this afternoon.

Thanks,  
Erica

On Oct 15, 2018, at 7:10 PM, Thieleman, Erica <[ethieleman@eaest.com](mailto:ethieleman@eaest.com)> wrote:

Scott,

We had an unfortunate accident with one of our new 1L ambers after leaving the service center. Is there anyway we could swing by again sometime tomorrow morning to grab another?

Thank you,  
Erica

On Oct 15, 2018, at 6:34 PM, Thieleman, Erica <[ethieleman@eaest.com](mailto:ethieleman@eaest.com)> wrote:

Scott,

Stephen and I dropped off three coolers with samples and one empty cooler. The sample coolers are in the top two lockers and left-middle locker, the chain is in the cooler in the top right locker. One of the coolers has pfc samples, and one has anions, which includes the nitrite (nitrate?) samples that have a 48-hr holding time. The first sample collected today was around 1:30 pm.

We'll drop off our voc samples tomorrow.

Thank you,  
Erica

On Oct 15, 2018, at 11:36 AM, Scott Basal <[scott.basal@contestlabs.com](mailto:scott.basal@contestlabs.com)> wrote:

Ok.

Just an FYI that there is another client dropping off some coolers tonight so if there's no room in the lockers you can leave the coolers wherever and I'll attend to them in the morning...I have plans to meet a courier tomorrow so the samples will get to the lab tomorrow.

I have to leave right at 5PM today.

Thanks 😊  
scott

---

**From:** Thieleman, Erica  
[mailto:[ethieleman@eaest.com](mailto:ethieleman@eaest.com)]  
**Sent:** Monday, October 15, 2018 11:23 AM  
**To:** Scott Basal <[scott.basal@contestlabs.com](mailto:scott.basal@contestlabs.com)>  
**Subject:** Re: Admiral Cleaners GW bottleware

Thank you, Scott! I didn't see this before we got there, we ended up leaving a bit late to return a van. We grabbed our coolers and will probably drop samples off at the end of the day.

Thanks!  
Erica

On Oct 15, 2018, at 9:00 AM, Scott Basal <[scott.basal@contestlabs.com](mailto:scott.basal@contestlabs.com)> wrote:

Hi Erica,

Your bottle order is all set...not sure what you're looking for as far as a trip blank for 1,4-Dioxane but I have two 1-Liters of unpurged DI water next to the coolers in case you need them.

If you can let me know when you'll be here I might have time to go to Bruegger's Bagels...I'd like a bagel and I can get you guys something if you let me know what you want.

**Scott Basal**

*Albany Service Center Manager*  
Con-Test Analytical Laboratory  
18 Walker Way | Albany, NY 12205  
*Office* 518.608.1036  
*Cell* 518.210.3218  
<image001.png>

[www.contestlabs.com](http://www.contestlabs.com)

Please take a look at our ConTest Laboratory Sampling Guide:

<https://contestlabs.com/uploads/application/files/sampling-guide-2-2.pdf>

Con-Test is committed to quality and continuously improving deliverables and services to our clients. **Complete the short**



survey regarding your experience with Contest using the following link: [Survey Link](#) Each entry will be entered for a \$100 gift card in a monthly drawing

---

**From:** Thieleman, Erica  
 [mailto:[ethieleman@eaest.com](mailto:ethieleman@eaest.com)]  
**Sent:** Wednesday, October 10, 2018 4:14 PM  
**To:** Scott Basal  
 <[scott.basal@contestlabs.com](mailto:scott.basal@contestlabs.com)>  
**Cc:** Soldner, Stephen  
 <[ssoldner@eaest.com](mailto:ssoldner@eaest.com)>  
**Subject:** Admiral Cleaners GW  
 bottleware

Scott,

I would like to place another order for bottleware for our Admiral Cleaners site for an event this Monday, Oct 15. I apologize for the late notice.

Could we please get bottleware for the analyses in the table below? If possible, could we please pick them up from the service center on Monday morning?

Samples	Sample matrix	Number of samples
<b>VOCs by EPA 8260B</b>		
Parent and QC Samples	Water	21
Trip Blank	Water	2
<b>PFCs by EPA 537</b>		
Parent and QC Samples	Water	9
<b>1,4-Dioxane by EPA 8270 SIM</b>		
Number of Parent Samples	Water	6
Trip Blank	Water	1

<b>Major Anions</b>		
Number of Parent Samples	Water	3
<b>TOC</b>		
Number of Parent Samples	Water	3
<b>Dissolved Gases</b>		
Number of Parent Samples	Water	9

We will not need any rinse blank samples this time. Please let me know if you have any questions!

Thank you,  
Erica

**Erica Thieleman**

Geologist

*EA Engineering, P.C. and its affiliate EA  
Science and Technology*

6712 Brooklawn Parkway, Suite 104

Syracuse, NY 13211-2158

Office: (315) 565-6562

Cell: (732) 779-0405

Ext. 1880

November 6, 2018

Christopher Schroer  
EA Engineering, Science & Tech. - NY  
6712 Brooklawn Parkway, Suite 104  
Syracuse, NY 13211

Project Location: Watervliet, NY  
Client Job Number:  
Project Number: 1490378.0003  
Laboratory Work Order Number: 18J0765

Enclosed are results of analyses for samples received by the laboratory on October 16, 2018. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Jessica L. Hoffman  
Project Manager

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39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

EA Engineering, Science & Tech. - NY  
 6712 Brooklawn Parkway, Suite 104  
 Syracuse, NY 13211  
 ATTN: Christopher Schroer

REPORT DATE: 11/6/2018

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 1490378.0003

**ANALYTICAL SUMMARY**

WORK ORDER NUMBER: 18J0765

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Watervliet, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
401074-MW-7R	18J0765-01	Water		ASTM D516-11 RSK175 SM 21-22 4500 NO2 B SM 21-22 4500 NO3 F SM 5310B SM21-22 2320B SOP 434-PFAAS SW-846 8270D	
401075-MW-06	18J0765-02	Water		ASTM D516-11 RSK175 SM 21-22 4500 NO2 B SM 21-22 4500 NO3 F SM 5310B SM21-22 2320B SOP 434-PFAAS SW-846 8270D	
401075-MW-15	18J0765-03	Water		SOP 434-PFAAS SW-846 8270D	
401075-MW-10	18J0765-04	Water		ASTM D516-11 RSK175 SM 21-22 4500 NO2 B SM 21-22 4500 NO3 F SM 5310B SM21-22 2320B SOP 434-PFAAS	
401075-FB	18J0765-05	Field Blank		SOP 434-PFAAS	
401075-Dup	18J0765-06	Water		SOP 434-PFAAS SW-846 8270D	

**CASE NARRATIVE SUMMARY**

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

RSK175

**Qualifications:****PR-09**

pH of sample (pH 6) is outside of method specified preservation criteria.

**Analyte & Samples(s) Qualified:**

18J0765-01[401074-MW-7R]

SM 5310B

**Qualifications:****W-18**

Test replicates show more than 10% difference between values.

**Analyte & Samples(s) Qualified:****Total Organic Carbon**

18J0765-04[401075-MW-10]

SM21-22 2320B

**Qualifications:****SM-01**

Sample container does not satisfy method specifications.

**Analyte & Samples(s) Qualified:****Alkalinity**

18J0765-01[401074-MW-7R]

SOP 434-PFAAS

**Qualifications:****MS-08**

Matrix spike recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated.

**Analyte & Samples(s) Qualified:****NMeFOSAA**

B215106-MS1, B215106-MSD1

**Perfluorodecanesulfonic acid (PFD)**

B215106-MS1, B215106-MSD1

**Perfluorododecanoic acid (PFDoA)**

B215106-MS1, B215106-MSD1

**Perfluorohexanesulfonic acid (PFH)**

B215106-MS1, B215106-MSD1

**MS-09**

Matrix spike recovery and/or matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated.

**Analyte & Samples(s) Qualified:****6:2 Fluorotelomersulfonate (6:2 FT)**

B215106-MS1, B215106-MSD1

**Perfluorobutanoic acid (PFBA)**

B215106-MS1, B215106-MSD1

**Perfluorooctanesulfonic acid (PFO)**

B215106-MS1, B215106-MSD1

**MS-15**

Matrix spike and matrix spike duplicate recoveries are outside of control limits. Data validation is not affected since results for this compound in this sample are "not detected", and recovery bias is on the high side.

**Analyte & Samples(s) Qualified:****8:2 Fluorotelomersulfonate (8:2 FT)**

B215106-MS1, B215106-MSD1



**MS-22**

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.

**Analyte & Samples(s) Qualified:****Perfluorodecanoic acid (PFDA)**

B215106-MS1

**Perfluorohexanoic acid (PFHxA)**

B215106-MS1

**Perfluorononanoic acid (PFNA)**

B215106-MS1

**Perfluorotetradecanoic acid (PFTA)**

B215106-MS1

**Perfluorotridecanoic acid (PFTrD)**

B215106-MS1

**Perfluoroundecanoic acid (PFUnA)**

B215106-MS1

**S-19**

Surrogate recovery is outside of control limits, matrix interference suspected. Reanalysis yielded similar surrogate non-conformance.

**Analyte & Samples(s) Qualified:****13C-PFHxA**

18J0765-02[401075-MW-06], B215106-MSD1

**d5-NEtFOSAA**

18J0765-02[401075-MW-06], B215106-MS1, B215106-MSD1

**S-26**

Surrogate outside of control limits.

**Analyte & Samples(s) Qualified:****13C-PFHxA**

18J0765-01[401074-MW-7R], 18J0765-06[401075-Dup]

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington  
Project Manager

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0765

Date Received: 10/16/2018

Field Sample #: 401074-MW-7R

Sampled: 10/15/2018 14:20

Sample ID: 18J0765-01

Sample Matrix: Water

**1,4-Dioxane by isotope dilution GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	23	0.20	0.033	µg/L	1		SW-846 8270D	10/21/18	10/29/18 14:49	IMR
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,4-Dioxane-d8	28.6		15-110						10/29/18 14:49	

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0765

Date Received: 10/16/2018

Field Sample #: 401074-MW-7R

Sampled: 10/15/2018 14:20

Sample ID: 18J0765-01

Sample Matrix: Water

Semivolatile Organic Compounds by - GC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:26	BLM
Perfluorohexanoic acid (PFHxA)	5.8	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:26	BLM
Perfluoroheptanoic acid (PFHpA)	9.3	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:26	BLM
Perfluorobutanoic acid (PFBA)	6.2	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:26	BLM
Perfluorodecanesulfonic acid (PFDS)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:26	BLM
Perfluoroheptanesulfonic acid (PFHpS)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:26	BLM
Perfluorooctanesulfonamide (FOSA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:26	BLM
Perfluoropentanoic acid (PFPeA)	190	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:26	BLM
6:2 Fluorotelomersulfonate (6:2 FTS)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:26	BLM
8:2 Fluorotelomersulfonate (8:2 FTS)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:26	BLM
Perfluorohexanesulfonic acid (PFHxS)	3.9	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:26	BLM
Perfluorooctanoic acid (PFOA)	38	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:26	BLM
Perfluorooctanesulfonic acid (PFOS)	8.9	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:26	BLM
Perfluorononanoic acid (PFNA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:26	BLM
Perfluorodecanoic acid (PFDA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:26	BLM
NMeFOSAA	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:26	BLM
Perfluoroundecanoic acid (PFUnA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:26	BLM
NEtFOSAA	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:26	BLM
Perfluorododecanoic acid (PFDoA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:26	BLM
Perfluorotridecanoic acid (PFTTrDA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:26	BLM
Perfluorotetradecanoic acid (PFTA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:26	BLM
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
13C-PFHxA	57.9	*	70-130		S-26			11/2/18	18:26	
13C-PFDA	98.9		70-130					11/2/18	18:26	
d5-NEtFOSAA	84.7		70-130					11/2/18	18:26	

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0765

Date Received: 10/16/2018

Field Sample #: 401074-MW-7R

Sampled: 10/15/2018 14:20

Sample ID: 18J0765-01

Sample Matrix: Water

Sample Flags: PR-09

Miscellaneous Organic Analyses

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date	Date/Time	Analyst
								Prepared	Analyzed	
Ethane	ND	0.014	0.0036	mg/L	1		RSK175	10/17/18	10/17/18 12:18	BRF
Ethene	ND	0.017	0.0045	mg/L	1		RSK175	10/17/18	10/17/18 12:18	BRF
Methane	0.21	0.0070	0.0015	mg/L	1		RSK175	10/17/18	10/17/18 12:18	BRF

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0765

Date Received: 10/16/2018

Field Sample #: 401074-MW-7R

Sampled: 10/15/2018 14:20

Sample ID: 18J0765-01

Sample Matrix: Water

**Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Alkalinity	2200	1.0	0.90	mg/L	1	SM-01	SM21-22 2320B	10/23/18	10/23/18 19:00	DJM
Nitrate as N	ND	0.050		mg/L	1		SM 21-22 4500 NO3 F	10/24/18	10/24/18 9:39	IS
Nitrite as N	ND	0.010		mg/L	1		SM 21-22 4500 NO2 B	10/17/18	10/17/18 9:00	LL
Sulfate	140	20	9.2	mg/L	10		ASTM D516-11	10/19/18	10/19/18 14:50	IS
Total Organic Carbon	41	1.0		mg/L	2		SM 5310B	10/26/18	10/27/18 3:16	DJM

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0765

Date Received: 10/16/2018

Field Sample #: 401075-MW-06

Sampled: 10/15/2018 13:04

Sample ID: 18J0765-02

Sample Matrix: Water

**1,4-Dioxane by isotope dilution GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	2.5	0.20	0.033	µg/L	1		SW-846 8270D	10/21/18	10/29/18 15:09	IMR
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,4-Dioxane-d8	25.9		15-110				10/29/18 15:09			

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY  
 Date Received: 10/16/2018  
 Field Sample #: 401075-MW-06  
 Sample ID: 18J0765-02  
 Sample Matrix: Water

Sample Description:

Work Order: 18J0765

Sampled: 10/15/2018 13:04

Semivolatile Organic Compounds by - GC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	4.2	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:38	BLM
Perfluorohexanoic acid (PFHxA)	10	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:38	BLM
Perfluoroheptanoic acid (PFHpA)	7.2	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:38	BLM
Perfluorobutanoic acid (PFBA)	5.2	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:38	BLM
Perfluorodecanesulfonic acid (PFDS)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:38	BLM
Perfluoroheptanesulfonic acid (PFHpS)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:38	BLM
Perfluorooctanesulfonamide (FOSA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:38	BLM
Perfluoropentanoic acid (PFPeA)	7.0	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:38	BLM
6:2 Fluorotelomersulfonate (6:2 FTS)	6.0	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:38	BLM
8:2 Fluorotelomersulfonate (8:2 FTS)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:38	BLM
Perfluorohexanesulfonic acid (PFHxS)	14	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:38	BLM
Perfluorooctanoic acid (PFOA)	28	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:38	BLM
Perfluorooctanesulfonic acid (PFOS)	110	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:38	BLM
Perfluorononanoic acid (PFNA)	4.4	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:38	BLM
Perfluorodecanoic acid (PFDA)	2.4	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:38	BLM
NMeFOSAA	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:38	BLM
Perfluoroundecanoic acid (PFUnA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:38	BLM
NEtFOSAA	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:38	BLM
Perfluorododecanoic acid (PFDoA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:38	BLM
Perfluorotridecanoic acid (PFTTrDA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:38	BLM
Perfluorotetradecanoic acid (PFTA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:38	BLM
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
13C-PFHxA	59.4	*	70-130		S-19			11/2/18 18:38		
13C-PFDA	70.3		70-130					11/2/18 18:38		
d5-NEtFOSAA	55.4	*	70-130		S-19			11/2/18 18:38		

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0765

Date Received: 10/16/2018

Field Sample #: 401075-MW-06

Sampled: 10/15/2018 13:04

Sample ID: 18J0765-02

Sample Matrix: Water

Miscellaneous Organic Analyses

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date	Date/Time	Analyst
								Prepared	Analyzed	
Ethane	ND	0.014	0.0036	mg/L	1		RSK175	10/17/18	10/17/18 12:27	BRF
Ethene	ND	0.017	0.0045	mg/L	1		RSK175	10/17/18	10/17/18 12:27	BRF
Methane	3.0	0.0070	0.0015	mg/L	1		RSK175	10/17/18	10/17/18 12:27	BRF



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0765

Date Received: 10/16/2018

Field Sample #: 401075-MW-06

Sampled: 10/15/2018 13:04

Sample ID: 18J0765-02

Sample Matrix: Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Alkalinity	480	1.0	0.90	mg/L	1		SM21-22 2320B	10/23/18	10/23/18 19:00	DJM
Nitrate as N	ND	0.050		mg/L	1		SM 21-22 4500 NO3 F	10/24/18	10/24/18 9:39	IS
Nitrite as N	ND	0.010		mg/L	1		SM 21-22 4500 NO2 B	10/17/18	10/17/18 9:00	LL
Sulfate	17	2.0	0.92	mg/L	1		ASTM D516-11	10/19/18	10/19/18 14:50	IS
Total Organic Carbon	8.4	0.50		mg/L	1		SM 5310B	10/26/18	10/27/18 3:16	DJM

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0765

Date Received: 10/16/2018

Field Sample #: 401075-MW-15

Sampled: 10/15/2018 15:28

Sample ID: 18J0765-03

Sample Matrix: Water

**1,4-Dioxane by isotope dilution GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	0.12	0.20	0.033	µg/L	1	J	SW-846 8270D	10/21/18	10/29/18 15:29	IMR
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,4-Dioxane-d8	25.5		15-110						10/29/18 15:29	

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY  
 Date Received: 10/16/2018  
 Field Sample #: 401075-MW-15  
 Sample ID: 18J0765-03  
 Sample Matrix: Water

Sample Description:

Work Order: 18J0765

Sampled: 10/15/2018 15:28

Semivolatile Organic Compounds by - GC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	5.7	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:51	BLM
Perfluorohexanoic acid (PFHxA)	9.4	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:51	BLM
Perfluoroheptanoic acid (PFHpA)	7.6	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:51	BLM
Perfluorobutanoic acid (PFBA)	2.5	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:51	BLM
Perfluorodecanesulfonic acid (PFDS)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:51	BLM
Perfluoroheptanesulfonic acid (PFHpS)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:51	BLM
Perfluorooctanesulfonamide (FOSA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:51	BLM
Perfluoropentanoic acid (PFPeA)	9.3	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:51	BLM
6:2 Fluorotelomersulfonate (6:2 FTS)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:51	BLM
8:2 Fluorotelomersulfonate (8:2 FTS)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:51	BLM
Perfluorohexanesulfonic acid (PFHxS)	8.5	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:51	BLM
Perfluorooctanoic acid (PFOA)	16	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:51	BLM
Perfluorooctanesulfonic acid (PFOS)	27	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:51	BLM
Perfluorononanoic acid (PFNA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:51	BLM
Perfluorodecanoic acid (PFDA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:51	BLM
NMeFOSAA	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:51	BLM
Perfluoroundecanoic acid (PFUnA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:51	BLM
NEtFOSAA	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:51	BLM
Perfluorododecanoic acid (PFDoA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:51	BLM
Perfluorotridecanoic acid (PFTTrDA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:51	BLM
Perfluorotetradecanoic acid (PFTA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:51	BLM
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
13C-PFHxA		84.9	70-130						11/2/18 18:51	
13C-PFDA		76.0	70-130						11/2/18 18:51	
d5-NEtFOSAA		75.6	70-130						11/2/18 18:51	

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0765

Date Received: 10/16/2018

Field Sample #: 401075-MW-10

Sampled: 10/15/2018 17:15

Sample ID: 18J0765-04

Sample Matrix: Water

Semivolatile Organic Compounds by - GC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	10	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:38	BLM
Perfluorohexanoic acid (PFHxA)	14	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:38	BLM
Perfluoroheptanoic acid (PFHpA)	4.6	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:38	BLM
Perfluorobutanoic acid (PFBA)	4.0	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:38	BLM
Perfluorodecanesulfonic acid (PFDS)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:38	BLM
Perfluoroheptanesulfonic acid (PFHpS)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:38	BLM
Perfluorooctanesulfonamide (FOSA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:38	BLM
Perfluoropentanoic acid (PFPeA)	14	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:38	BLM
6:2 Fluorotelomersulfonate (6:2 FTS)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:38	BLM
8:2 Fluorotelomersulfonate (8:2 FTS)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:38	BLM
Perfluorohexanesulfonic acid (PFHxS)	5.5	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:38	BLM
Perfluorooctanoic acid (PFOA)	12	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:38	BLM
Perfluorooctanesulfonic acid (PFOS)	6.9	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:38	BLM
Perfluorononanoic acid (PFNA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:38	BLM
Perfluorodecanoic acid (PFDA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:38	BLM
NMeFOSAA	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:38	BLM
Perfluoroundecanoic acid (PFUnA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:38	BLM
NEtFOSAA	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:38	BLM
Perfluorododecanoic acid (PFDoA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:38	BLM
Perfluorotridecanoic acid (PFTTrDA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:38	BLM
Perfluorotetradecanoic acid (PFTA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:38	BLM
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
13C-PFHxA		73.3	70-130						11/2/18 19:38	
13C-PFDA		76.0	70-130						11/2/18 19:38	
d5-NEtFOSAA		83.1	70-130						11/2/18 19:38	

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0765

Date Received: 10/16/2018

Field Sample #: 401075-MW-10

Sampled: 10/15/2018 17:15

Sample ID: 18J0765-04

Sample Matrix: Water

Miscellaneous Organic Analyses

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Ethane	ND	0.014	0.0036	mg/L	1		RSK175	10/17/18	10/17/18 13:09	BRF
Ethene	ND	0.017	0.0045	mg/L	1		RSK175	10/17/18	10/17/18 13:09	BRF
Methane	0.0089	0.0070	0.0015	mg/L	1		RSK175	10/17/18	10/17/18 13:09	BRF

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0765

Date Received: 10/16/2018

Field Sample #: 401075-MW-10

Sampled: 10/15/2018 17:15

Sample ID: 18J0765-04

Sample Matrix: Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Alkalinity	720	1.0	0.90	mg/L	1		SM21-22 2320B	10/23/18	10/23/18 19:00	DJM
Nitrate as N	6.1	0.050		mg/L	1		SM 21-22 4500 NO3 F	10/25/18	10/25/18 11:49	IS
Nitrite as N	ND	0.010		mg/L	1		SM 21-22 4500 NO2 B	10/17/18	10/17/18 9:00	LL
Sulfate	160	20	9.2	mg/L	10		ASTM D516-11	10/19/18	10/19/18 14:50	IS
Total Organic Carbon	13	0.50		mg/L	1	W-18	SM 5310B	10/19/18	10/19/18 10:14	LL

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0765

Date Received: 10/16/2018

Field Sample #: 401075-FB

Sampled: 10/15/2018 17:30

Sample ID: 18J0765-05

Sample Matrix: Field Blank

Semivolatile Organic Compounds by - GC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:13	BLM
Perfluorohexanoic acid (PFHxA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:13	BLM
Perfluoroheptanoic acid (PFHpA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:13	BLM
Perfluorobutanoic acid (PFBA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:13	BLM
Perfluorodecanesulfonic acid (PFDS)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:13	BLM
Perfluoroheptanesulfonic acid (PFHpS)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:13	BLM
Perfluorooctanesulfonamide (FOSA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:13	BLM
Perfluoropentanoic acid (PFPeA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:13	BLM
6:2 Fluorotelomersulfonate (6:2 FTS)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:13	BLM
8:2 Fluorotelomersulfonate (8:2 FTS)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:13	BLM
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:13	BLM
Perfluorooctanoic acid (PFOA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:13	BLM
Perfluorooctanesulfonic acid (PFOS)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:13	BLM
Perfluorononanoic acid (PFNA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:13	BLM
Perfluorodecanoic acid (PFDA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:13	BLM
NMeFOSAA	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:13	BLM
Perfluoroundecanoic acid (PFUnA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:13	BLM
NEtFOSAA	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:13	BLM
Perfluorododecanoic acid (PFDoA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:13	BLM
Perfluorotridecanoic acid (PFTTrDA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:13	BLM
Perfluorotetradecanoic acid (PFTA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 18:13	BLM
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
13C-PFHxA		78.5	70-130						11/2/18 18:13	
13C-PFDA		70.2	70-130						11/2/18 18:13	
d5-NEtFOSAA		75.2	70-130						11/2/18 18:13	

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0765

Date Received: 10/16/2018

Field Sample #: 401075-Dup

Sampled: 10/15/2018 00:00

Sample ID: 18J0765-06

Sample Matrix: Water

**1,4-Dioxane by isotope dilution GC/MS**

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	28	0.20	0.033	µg/L	1		SW-846 8270D	10/21/18	10/29/18 15:48	IMR
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,4-Dioxane-d8	25.9		15-110						10/29/18 15:48	



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Watervliet, NY

Sample Description:

Work Order: 18J0765

Date Received: 10/16/2018

Field Sample #: 401075-Dup

Sampled: 10/15/2018 00:00

Sample ID: 18J0765-06

Sample Matrix: Water

Semivolatile Organic Compounds by - GC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	2.6	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:51	BLM
Perfluorohexanoic acid (PFHxA)	7.0	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:51	BLM
Perfluoroheptanoic acid (PFHpA)	9.4	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:51	BLM
Perfluorobutanoic acid (PFBA)	4.5	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:51	BLM
Perfluorodecanesulfonic acid (PFDS)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:51	BLM
Perfluoroheptanesulfonic acid (PFHpS)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:51	BLM
Perfluorooctanesulfonamide (FOSA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:51	BLM
Perfluoropentanoic acid (PFPeA)	170	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:51	BLM
6:2 Fluorotelomersulfonate (6:2 FTS)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:51	BLM
8:2 Fluorotelomersulfonate (8:2 FTS)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:51	BLM
Perfluorohexanesulfonic acid (PFHxS)	3.2	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:51	BLM
Perfluorooctanoic acid (PFOA)	34	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:51	BLM
Perfluorooctanesulfonic acid (PFOS)	6.2	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:51	BLM
Perfluorononanoic acid (PFNA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:51	BLM
Perfluorodecanoic acid (PFDA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:51	BLM
NMeFOSAA	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:51	BLM
Perfluoroundecanoic acid (PFUnA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:51	BLM
NEtFOSAA	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:51	BLM
Perfluorododecanoic acid (PFDoA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:51	BLM
Perfluorotridecanoic acid (PFTTrDA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:51	BLM
Perfluorotetradecanoic acid (PFTA)	ND	2.0	2.0	ng/L	1		SOP 434-PFAAS	10/18/18	11/2/18 19:51	BLM
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
13C-PFHxA	53.8	*	70-130		S-26			11/2/18 19:51		
13C-PFDA	81.8		70-130					11/2/18 19:51		
d5-NEtFOSAA	73.6		70-130					11/2/18 19:51		

**Sample Extraction Data**

**ASTM D516-11**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18J0765-01 [401074-MW-7R]	B215217	100	100	10/19/18
18J0765-02 [401075-MW-06]	B215217	100	100	10/19/18
18J0765-04 [401075-MW-10]	B215217	100	100	10/19/18

**RSK175**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18J0765-01 [401074-MW-7R]	B215153	1.00	1.00	10/17/18
18J0765-02 [401075-MW-06]	B215153	1.00	1.00	10/17/18
18J0765-04 [401075-MW-10]	B215153	1.00	1.00	10/17/18

**SM 21-22 4500 NO2 B**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18J0765-01 [401074-MW-7R]	B214987	50.0	50.0	10/17/18
18J0765-02 [401075-MW-06]	B214987	50.0	50.0	10/17/18
18J0765-04 [401075-MW-10]	B214987	50.0	50.0	10/17/18

**SM 21-22 4500 NO3 F**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18J0765-01 [401074-MW-7R]	B215537	25.0	25.0	10/24/18
18J0765-02 [401075-MW-06]	B215537	25.0	25.0	10/24/18

**SM 21-22 4500 NO3 F**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18J0765-04 [401075-MW-10]	B215650	25.0	25.0	10/25/18

**SM 5310B**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18J0765-04 [401075-MW-10]	B215196	50.0	50.0	10/19/18

**SM 5310B**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18J0765-01 [401074-MW-7R]	B215893	50.0	50.0	10/26/18
18J0765-02 [401075-MW-06]	B215893	50.0	50.0	10/26/18

**SM21-22 2320B**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18J0765-01 [401074-MW-7R]	B215510	100	100	10/23/18
18J0765-02 [401075-MW-06]	B215510	100	100	10/23/18
18J0765-04 [401075-MW-10]	B215510	100	100	10/23/18

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

**Sample Extraction Data**

**Prep Method: EPA 537-SOP 434-PFAAS**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18J0765-01 [401074-MW-7R]	B215106	250	1.00	10/18/18
18J0765-02 [401075-MW-06]	B215106	250	1.00	10/18/18
18J0765-03 [401075-MW-15]	B215106	250	1.00	10/18/18
18J0765-04 [401075-MW-10]	B215106	250	1.00	10/18/18
18J0765-05 [401075-FB]	B215106	250	1.00	10/18/18
18J0765-06 [401075-Dup]	B215106	250	1.00	10/18/18

**Prep Method: SW-846 3510C-SW-846 8270D**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18J0765-01 [401074-MW-7R]	B215290	980	1.00	10/21/18
18J0765-02 [401075-MW-06]	B215290	1000	1.00	10/21/18
18J0765-03 [401075-MW-15]	B215290	1000	1.00	10/21/18
18J0765-06 [401075-Dup]	B215290	1000	1.00	10/21/18

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

**QUALITY CONTROL**

**1,4-Dioxane by isotope dilution GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B215290 - SW-846 3510C</b>										
<b>Blank (B215290-BLK1)</b>				Prepared: 10/21/18 Analyzed: 10/29/18						
1,4-Dioxane	ND	0.20	µg/L							
Surrogate: 1,4-Dioxane-d8	4.17		µg/L	10.0		41.7	15-110			
<b>LCS (B215290-BS1)</b>				Prepared: 10/21/18 Analyzed: 10/24/18						
1,4-Dioxane	9.04	0.20	µg/L	10.0		90.4	40-140			
Surrogate: 1,4-Dioxane-d8	5.00		µg/L	10.0		50.0	15-110			
<b>LCS Dup (B215290-BSD1)</b>				Prepared: 10/21/18 Analyzed: 10/24/18						
1,4-Dioxane	10.3	0.20	µg/L	10.0		103	40-140	12.9	30	
Surrogate: 1,4-Dioxane-d8	3.81		µg/L	10.0		38.1	15-110			
<b>Matrix Spike (B215290-MS1)</b>				<b>Source: 18J0765-02</b>		Prepared: 10/21/18 Analyzed: 10/29/18				
1,4-Dioxane	12.8	0.20	µg/L	10.0	2.51	102	40-140			
Surrogate: 1,4-Dioxane-d8	2.84		µg/L	10.0		28.4	15-110			
<b>Matrix Spike Dup (B215290-MSD1)</b>				<b>Source: 18J0765-02</b>		Prepared: 10/21/18 Analyzed: 10/29/18				
1,4-Dioxane	13.0	0.20	µg/L	10.0	2.51	105	40-140	1.86	20	
Surrogate: 1,4-Dioxane-d8	2.70		µg/L	10.0		27.0	15-110			

QUALITY CONTROL

Semivolatile Organic Compounds by - GC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B215106 - EPA 537</b>										
<b>Blank (B215106-BLK1)</b>										
Prepared: 10/18/18 Analyzed: 11/02/18										
Perfluorobutanesulfonic acid (PFBS)	ND	2.0	ng/L							
Perfluorohexanoic acid (PFHxA)	ND	2.0	ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	2.0	ng/L							
Perfluorobutanoic acid (PFBA)	ND	2.0	ng/L							
Perfluorodecanesulfonic acid (PFDS)	ND	2.0	ng/L							
Perfluoroheptanesulfonic acid (PFHpS)	ND	2.0	ng/L							
Perfluorooctanesulfonamide (FOSA)	ND	2.0	ng/L							
Perfluoropentanoic acid (PFPeA)	ND	2.0	ng/L							
6:2 Fluorotelomersulfonate (6:2 FTS)	ND	2.0	ng/L							
8:2 Fluorotelomersulfonate (8:2 FTS)	ND	2.0	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0	ng/L							
Perfluorooctanoic acid (PFOA)	ND	2.0	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	2.0	ng/L							
Perfluorononanoic acid (PFNA)	ND	2.0	ng/L							
Perfluorodecanoic acid (PFDA)	ND	2.0	ng/L							
NMeFOSAA	ND	2.0	ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	2.0	ng/L							
NEtFOSAA	ND	2.0	ng/L							
Perfluorododecanoic acid (PFDoA)	ND	2.0	ng/L							
Perfluorotridecanoic acid (PFTrDA)	ND	2.0	ng/L							
Perfluorotetradecanoic acid (PFTA)	ND	2.0	ng/L							
Surrogate: 13C-PFHxA	36.3		ng/L	40.0		90.8	70-130			
Surrogate: 13C-PFDA	30.6		ng/L	40.0		76.4	70-130			
Surrogate: d5-NEtFOSAA	118		ng/L	160		73.7	70-130			
<b>LCS (B215106-BS1)</b>										
Prepared: 10/18/18 Analyzed: 11/02/18										
Perfluorobutanesulfonic acid (PFBS)	14.1	2.0	ng/L	17.7		79.7	70-130			
Perfluorohexanoic acid (PFHxA)	14.8	2.0	ng/L	20.0		73.9	70-130			
Perfluoroheptanoic acid (PFHpA)	14.5	2.0	ng/L	20.0		72.6	70-130			
Perfluorobutanoic acid (PFBA)	6.02	2.0	ng/L	20.0		30.1	30-110			
Perfluorodecanesulfonic acid (PFDS)	15.1	2.0	ng/L	19.3		78.2	70-130			
Perfluoroheptanesulfonic acid (PFHpS)	14.7	2.0	ng/L	19.0		77.6	70-130			
Perfluorooctanesulfonamide (FOSA)	10.1	2.0	ng/L	20.0		50.3	30-110			
Perfluoropentanoic acid (PFPeA)	16.7	2.0	ng/L	20.0		83.6	70-130			
6:2 Fluorotelomersulfonate (6:2 FTS)	21.6	2.0	ng/L	19.0		114	70-130			
8:2 Fluorotelomersulfonate (8:2 FTS)	24.0	2.0	ng/L	19.2		125	70-130			
Perfluorohexanesulfonic acid (PFHxS)	13.4	2.0	ng/L	18.2		73.4	70-130			
Perfluorooctanoic acid (PFOA)	17.0	2.0	ng/L	20.0		84.8	70-130			
Perfluorooctanesulfonic acid (PFOS)	17.6	2.0	ng/L	18.5		94.9	70-130			
Perfluorononanoic acid (PFNA)	14.9	2.0	ng/L	20.0		74.7	70-130			
Perfluorodecanoic acid (PFDA)	15.9	2.0	ng/L	20.0		79.3	70-130			
NMeFOSAA	15.2	2.0	ng/L	20.0		76.0	70-130			
Perfluoroundecanoic acid (PFUnA)	15.8	2.0	ng/L	20.0		78.8	70-130			
NEtFOSAA	15.9	2.0	ng/L	20.0		79.4	70-130			
Perfluorododecanoic acid (PFDoA)	15.0	2.0	ng/L	20.0		74.8	70-130			
Perfluorotridecanoic acid (PFTrDA)	14.6	2.0	ng/L	20.0		73.1	70-130			
Perfluorotetradecanoic acid (PFTA)	14.9	2.0	ng/L	20.0		74.6	70-130			
Surrogate: 13C-PFHxA	32.0		ng/L	40.0		80.1	70-130			
Surrogate: 13C-PFDA	30.8		ng/L	40.0		77.0	70-130			
Surrogate: d5-NEtFOSAA	127		ng/L	160		79.1	70-130			

QUALITY CONTROL

Semivolatile Organic Compounds by - GC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B215106 - EPA 537</b>										
<b>Matrix Spike (B215106-MS1)</b>										
<b>Source: 18J0765-02</b> Prepared: 10/18/18 Analyzed: 11/02/18										
Perfluorobutanesulfonic acid (PFBS)	22.8	2.0	ng/L	17.7	4.21	105	70-130			
<b>Perfluorohexanoic acid (PFHxA)</b>	22.5	2.0	ng/L	20.0	10.1	<b>62.0</b>	* 70-130			MS-22
Perfluoroheptanoic acid (PFHpA)	21.8	2.0	ng/L	20.0	7.21	73.1	70-130			
<b>Perfluorobutanoic acid (PFBA)</b>	6.93	2.0	ng/L	20.0	5.16	<b>8.85</b>	* 30-110			MS-09
<b>Perfluorodecanesulfonic acid (PFDS)</b>	12.2	2.0	ng/L	19.3	ND	<b>63.3</b>	* 70-130			MS-08
Perfluoroheptanesulfonic acid (PFHpS)	15.8	2.0	ng/L	19.0	ND	83.1	70-130			
Perfluorooctanesulfonamide (FOSA)	9.41	2.0	ng/L	20.0	ND	47.0	30-110			
Perfluoropentanoic acid (PFPeA)	21.1	2.0	ng/L	20.0	7.02	70.5	70-130			
<b>6:2 Fluorotelomersulfonate (6:2 FTS)</b>	35.8	2.0	ng/L	19.0	6.04	<b>156</b>	* 70-130			MS-09
<b>8:2 Fluorotelomersulfonate (8:2 FTS)</b>	29.6	2.0	ng/L	19.2	ND	<b>154</b>	* 70-130			MS-15
<b>Perfluorohexanesulfonic acid (PFHxS)</b>	18.6	2.0	ng/L	18.2	13.6	<b>27.2</b>	* 70-130			MS-08
Perfluorooctanoic acid (PFOA)	45.1	2.0	ng/L	20.0	27.9	85.9	70-130			
<b>Perfluorooctanesulfonic acid (PFOS)</b>	37.3	2.0	ng/L	18.5	105	<b>-367</b>	* 70-130			MS-09
<b>Perfluorononanoic acid (PFNA)</b>	17.7	2.0	ng/L	20.0	4.42	<b>66.2</b>	* 70-130			MS-22
<b>Perfluorodecanoic acid (PFDA)</b>	13.9	2.0	ng/L	20.0	2.38	<b>57.7</b>	* 70-130			MS-22
<b>NMeFOSAA</b>	12.3	2.0	ng/L	20.0	ND	<b>61.3</b>	* 70-130			MS-08
<b>Perfluoroundecanoic acid (PFUnA)</b>	13.9	2.0	ng/L	20.0	ND	<b>69.5</b>	* 70-130			MS-22
NEtFOSAA	15.6	2.0	ng/L	20.0	ND	78.1	70-130			
<b>Perfluorododecanoic acid (PFDoA)</b>	13.3	2.0	ng/L	20.0	ND	<b>66.7</b>	* 70-130			MS-08
<b>Perfluorotridecanoic acid (PFTTrDA)</b>	12.4	2.0	ng/L	20.0	ND	<b>61.9</b>	* 70-130			MS-22
<b>Perfluorotetradecanoic acid (PFTA)</b>	13.1	2.0	ng/L	20.0	ND	<b>65.4</b>	* 70-130			MS-22
Surrogate: 13C-PFHxA	28.8		ng/L	40.0		72.0	70-130			
Surrogate: 13C-PFDA	28.1		ng/L	40.0		70.3	70-130			
<b>Surrogate: d5-NEtFOSAA</b>	106		ng/L	160		<b>66.0</b>	* 70-130			S-19
<b>Matrix Spike Dup (B215106-MSD1)</b>										
<b>Source: 18J0765-02</b> Prepared: 10/18/18 Analyzed: 11/02/18										
Perfluorobutanesulfonic acid (PFBS)	23.1	2.0	ng/L	17.7	4.21	107	70-130	1.26	30	
Perfluorohexanoic acid (PFHxA)	27.9	2.0	ng/L	20.0	10.1	89.0	70-130	21.5	30	
Perfluoroheptanoic acid (PFHpA)	24.7	2.0	ng/L	20.0	7.21	87.5	70-130	12.4	30	
<b>Perfluorobutanoic acid (PFBA)</b>	7.28	2.0	ng/L	20.0	5.16	<b>10.6</b>	* 30-110	5.02	30	MS-09
<b>Perfluorodecanesulfonic acid (PFDS)</b>	11.9	2.0	ng/L	19.3	ND	<b>61.8</b>	* 70-130	2.39	30	MS-08
Perfluoroheptanesulfonic acid (PFHpS)	16.4	2.0	ng/L	19.0	ND	86.3	70-130	3.79	30	
Perfluorooctanesulfonamide (FOSA)	8.64	2.0	ng/L	20.0	ND	43.2	30-110	8.49	30	
Perfluoropentanoic acid (PFPeA)	21.8	2.0	ng/L	20.0	7.02	74.1	70-130	3.30	30	
<b>6:2 Fluorotelomersulfonate (6:2 FTS)</b>	100	2.0	ng/L	19.0	6.04	<b>496</b>	* 70-130	<b>94.8</b>	* 30	MS-09
<b>8:2 Fluorotelomersulfonate (8:2 FTS)</b>	35.1	2.0	ng/L	19.2	ND	<b>183</b>	* 70-130	17.0	30	MS-15
<b>Perfluorohexanesulfonic acid (PFHxS)</b>	18.9	2.0	ng/L	18.2	13.6	<b>29.2</b>	* 70-130	1.97	30	MS-08
Perfluorooctanoic acid (PFOA)	47.5	2.0	ng/L	20.0	27.9	97.7	70-130	5.12	30	
<b>Perfluorooctanesulfonic acid (PFOS)</b>	40.1	2.0	ng/L	18.5	105	<b>-352</b>	* 70-130	7.34	30	MS-09
Perfluorononanoic acid (PFNA)	22.4	2.0	ng/L	20.0	4.42	89.7	70-130	23.6	30	
Perfluorodecanoic acid (PFDA)	17.8	2.0	ng/L	20.0	2.38	77.0	70-130	24.4	30	
<b>NMeFOSAA</b>	13.7	2.0	ng/L	20.0	ND	<b>68.5</b>	* 70-130	11.1	30	MS-08
Perfluoroundecanoic acid (PFUnA)	14.1	2.0	ng/L	20.0	ND	70.7	70-130	1.69	30	
NEtFOSAA	17.1	2.0	ng/L	20.0	ND	85.4	70-130	8.98	30	
<b>Perfluorododecanoic acid (PFDoA)</b>	14.0	2.0	ng/L	20.0	ND	<b>69.9</b>	* 70-130	4.70	30	MS-08
Perfluorotridecanoic acid (PFTTrDA)	15.0	2.0	ng/L	20.0	ND	75.2	70-130	19.4	30	
Perfluorotetradecanoic acid (PFTA)	15.1	2.0	ng/L	20.0	ND	75.7	70-130	14.5	30	
Surrogate: 13C-PFHxA	27.2		ng/L	40.0		<b>67.9</b>	* 70-130			S-19
Surrogate: 13C-PFDA	28.4		ng/L	40.0		71.1	70-130			
<b>Surrogate: d5-NEtFOSAA</b>	102		ng/L	160		<b>63.9</b>	* 70-130			S-19

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**QUALITY CONTROL**

**Miscellaneous Organic Analyses - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B215153 - RSK175**

**Blank (B215153-BLK1)**

Prepared & Analyzed: 10/17/18

Ethane	ND	0.014	mg/L							
Ethene	ND	0.017	mg/L							
Methane	ND	0.0070	mg/L							

**LCS (B215153-BS1)**

Prepared & Analyzed: 10/17/18

Ethane	0.30		mg/L	0.331		91.4	74.2-130			
Ethene	0.29		mg/L	0.310		93.1	75-118			
Methane	0.16		mg/L	0.176		92.2	79.5-125			

**Duplicate (B215153-DUP1)**

**Source: 18J0765-02**

Prepared & Analyzed: 10/17/18

Ethane	ND	0.014	mg/L		ND			NC	20	
Ethene	ND	0.017	mg/L		ND			NC	20	
Methane	3.00	0.0070	mg/L		2.97			0.802	20	

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**QUALITY CONTROL**

**Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B214987 - SM 21-22 4500 NO2 B</b>										
<b>Blank (B214987-BLK1)</b>				Prepared & Analyzed: 10/17/18						
Nitrite as N	ND	0.010	mg/L							
<b>LCS (B214987-BS1)</b>				Prepared & Analyzed: 10/17/18						
Nitrite as N	0.10	0.010	mg/L	0.100		101	88.1-112			
<b>LCS Dup (B214987-BSD1)</b>				Prepared & Analyzed: 10/17/18						
Nitrite as N	0.10	0.010	mg/L	0.100		102	88.1-112	1.08	5.47	
<b>Matrix Spike (B214987-MS1)</b>				<b>Source: 18J0765-02</b>		Prepared & Analyzed: 10/17/18				
Nitrite as N	0.098	0.010	mg/L	0.100	ND	97.5	59.4-129			
<b>Matrix Spike Dup (B214987-MSD1)</b>				<b>Source: 18J0765-02</b>		Prepared & Analyzed: 10/17/18				
Nitrite as N	0.096	0.010	mg/L	0.100	ND	96.1	59.4-129	1.51	20	
<b>Batch B215196 - SM 5310B</b>										
<b>Blank (B215196-BLK1)</b>				Prepared & Analyzed: 10/19/18						
Total Organic Carbon	ND	0.50	mg/L							
<b>LCS (B215196-BS1)</b>				Prepared & Analyzed: 10/19/18						
Total Organic Carbon	9.90	0.50	mg/L	10.0		99.0	85.1-116			
<b>LCS Dup (B215196-BSD1)</b>				Prepared & Analyzed: 10/19/18						
Total Organic Carbon	10.4	0.50	mg/L	10.0		104	85.1-116	5.25	7.86	
<b>Batch B215217 - ASTM D516-11</b>										
<b>Blank (B215217-BLK1)</b>				Prepared & Analyzed: 10/19/18						
Sulfate	ND	2.0	mg/L							
<b>LCS (B215217-BS1)</b>				Prepared & Analyzed: 10/19/18						
Sulfate	19	2.0	mg/L	20.0		95.4	85.6-110			
<b>LCS Dup (B215217-BSD1)</b>				Prepared & Analyzed: 10/19/18						
Sulfate	20	2.0	mg/L	20.0		100	85.6-110	4.71	5.55	
<b>Matrix Spike (B215217-MS1)</b>				<b>Source: 18J0765-02</b>		Prepared & Analyzed: 10/19/18				
Sulfate	34	2.0	mg/L	20.0	17	84.4	45.6-127			
<b>Matrix Spike Dup (B215217-MSD1)</b>				<b>Source: 18J0765-02</b>		Prepared & Analyzed: 10/19/18				
Sulfate	35	2.0	mg/L	20.0	17	88.1	45.6-127	2.16	20	



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**QUALITY CONTROL**

**Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B215510 - SM21-22 2320B</b>										
<b>Blank (B215510-BLK1)</b>				Prepared & Analyzed: 10/23/18						
Alkalinity	ND	1.0	mg/L							
<b>LCS (B215510-BS1)</b>				Prepared & Analyzed: 10/23/18						
Alkalinity	41	1.0	mg/L	44.4		93.2	86.2-110			
<b>LCS Dup (B215510-BSD1)</b>				Prepared & Analyzed: 10/23/18						
Alkalinity	41	1.0	mg/L	44.4		93.2	86.2-110	0.00	5.57	
<b>Duplicate (B215510-DUP1)</b>				Source: 18J0765-02		Prepared & Analyzed: 10/23/18				
Alkalinity	490	1.0	mg/L		480			0.743	9.3	
<b>Matrix Spike (B215510-MS1)</b>				Source: 18J0765-02		Prepared & Analyzed: 10/23/18				
Alkalinity	530	1.0	mg/L	50.0	480	101	70.3-123			
<b>Batch B215537 - SM 21-22 4500 NO3 F</b>										
<b>Blank (B215537-BLK1)</b>				Prepared & Analyzed: 10/24/18						
Nitrate as N	ND	0.050	mg/L							
<b>LCS (B215537-BS1)</b>				Prepared & Analyzed: 10/24/18						
Nitrate as N	2.8		mg/L	2.50		111	82.5-117			
<b>LCS Dup (B215537-BSD1)</b>				Prepared & Analyzed: 10/24/18						
Nitrate as N	2.8		mg/L	2.50		111	82.5-117	0.360	8.45	
<b>Matrix Spike (B215537-MS1)</b>				Source: 18J0765-02		Prepared & Analyzed: 10/24/18				
Nitrate as N	4.3	0.050	mg/L	4.00	ND	108	57.1-126			
<b>Matrix Spike Dup (B215537-MSD1)</b>				Source: 18J0765-02		Prepared & Analyzed: 10/24/18				
Nitrate as N	4.3	0.050	mg/L	4.00	ND	108	57.1-126	0.00	20	
<b>Batch B215650 - SM 21-22 4500 NO3 F</b>										
<b>Blank (B215650-BLK1)</b>				Prepared & Analyzed: 10/25/18						
Nitrate as N	ND	0.050	mg/L							
<b>LCS (B215650-BS1)</b>				Prepared & Analyzed: 10/25/18						
Nitrate as N	2.7		mg/L	2.50		109	82.5-117			
<b>LCS Dup (B215650-BSD1)</b>				Prepared & Analyzed: 10/25/18						
Nitrate as N	2.8		mg/L	2.50		111	82.5-117	2.18	8.45	

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**QUALITY CONTROL**

**Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B215893 - SM 5310B</b>										
<b>Blank (B215893-BLK1)</b>				Prepared: 10/26/18 Analyzed: 10/27/18						
Total Organic Carbon	ND	0.50	mg/L							
<b>LCS (B215893-BS1)</b>				Prepared: 10/26/18 Analyzed: 10/27/18						
Total Organic Carbon	9.97	0.50	mg/L	10.0		99.7	85.1-116			
<b>LCS Dup (B215893-BSD1)</b>				Prepared: 10/26/18 Analyzed: 10/27/18						
Total Organic Carbon	9.99	0.50	mg/L	10.0		99.9	85.1-116	0.231	7.86	
<b>Duplicate (B215893-DUP1)</b>				<b>Source: 18J0765-02</b>		Prepared: 10/26/18 Analyzed: 10/27/18				
Total Organic Carbon	8.78	0.50	mg/L		8.42			4.25	23.4	
<b>Matrix Spike (B215893-MS1)</b>				<b>Source: 18J0765-02</b>		Prepared: 10/26/18 Analyzed: 10/27/18				
Total Organic Carbon	17.8	0.50	mg/L	10.0	8.42	94.3	49.1-151			

**FLAG/QUALIFIER SUMMARY**

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
MS-08	Matrix spike recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated.
MS-09	Matrix spike recovery and/or matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated.
MS-15	Matrix spike and matrix spike duplicate recoveries are outside of control limits. Data validation is not affected since results for this compound in this sample are "not detected", and recovery bias is on the high side.
MS-22	Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.
PR-09	pH of sample (pH 6) is outside of method specified preservation criteria.
S-19	Surrogate recovery is outside of control limits, matrix interference suspected. Reanalysis yielded similar surrogate non-conformance.
S-26	Surrogate outside of control limits.
SM-01	Sample container does not satisfy method specifications.
W-18	Test replicates show more than 10% difference between values.

**CERTIFICATIONS**

**Certified Analyses included in this Report**

Analyte	Certifications
<b>ASTM D516-11 in Water</b>	
Sulfate	NY,NH,MA,CT,RI,VA,NC
<b>RSK175 in Water</b>	
Ethane	VA,NY,ME
Ethene	VA,NY,ME
Methane	VA,NY,ME
<b>SM 21-22 4500 NO2 B in Water</b>	
Nitrite as N	CT,NH,NY,ME,NC,VA,RI
<b>SM 21-22 4500 NO3 F in Water</b>	
Nitrate as N	CT,MA,NH,NY,RI,ME,NC,VA
<b>SM 5310B in Water</b>	
Total Organic Carbon	CT,NH,NY,RI,NC,MA,VA
<b>SM21-22 2320B in Water</b>	
Alkalinity	CT,MA,NH,NY,RI,NC,ME,VA
<b>SOP 434-PFAAS in Water</b>	
Perfluorobutanesulfonic acid (PFBS)	NH-P
Perfluorohexanoic acid (PFHxA)	NH-P
Perfluoroheptanoic acid (PFHpA)	NH-P
Perfluorobutanoic acid (PFBA)	NH-P
Perfluoropentanoic acid (PFPeA)	NH-P
6:2 Fluorotelomersulfonate (6:2 FTS)	NH-P
8:2 Fluorotelomersulfonate (8:2 FTS)	NH-P
Perfluorohexanesulfonic acid (PFHxS)	NH-P
Perfluorooctanoic acid (PFOA)	NH-P
Perfluorooctanesulfonic acid (PFOS)	NH-P
Perfluorononanoic acid (PFNA)	NH-P
Perfluorodecanoic acid (PFDA)	NH-P
NMeFOSAA	NH-P
Perfluoroundecanoic acid (PFUnA)	NH-P
NEtFOSAA	NH-P
Perfluorododecanoic acid (PFDoA)	NH-P
Perfluorotridecanoic acid (PFTrDA)	NH-P
Perfluorotetradecanoic acid (PFTA)	NH-P
<b>SW-846 8270D in Water</b>	
1,4-Dioxane	NY

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The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2005	100033	03/1/2020
MA	Massachusetts DEP	M-MA100	06/30/2019
CT	Connecticut Department of Public Health	PH-0567	09/30/2019
NY	New York State Department of Health	10899 NELAP	04/1/2019
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2019
RI	Rhode Island Department of Health	LAO00112	12/30/2018
NC	North Carolina Div. of Water Quality	652	12/31/2018
NJ	New Jersey DEP	MA007 NELAP	06/30/2019
FL	Florida Department of Health	E871027 NELAP	06/30/2019
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2019
ME	State of Maine	2011028	06/9/2019
VA	Commonwealth of Virginia	460217	12/14/2018
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2019
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2019
NC-DW	North Carolina Department of Health	25703	07/31/2019

Company Name: EA Engineering  
 Address: 6712 B Coonkawn Pkwy Syracuse NY 13211  
 Phone: 315-505-0565  
 Project Name: Admiral Cleanics  
 Project Location: Watervliet, NY  
 Project Number: 1490738/0003  
 Project Manager: Chris Schroeer  
 Con-Test Quote Name/Number:  
 Invoice Recipient: CSchroeer@east.com  
 Sampled By: E.Thieleman/S.Soldner

Con-Test Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	Matrix Code	Conc Code
1	401075-MW-07R	10/15/18	1420	X	X	U	H
2	401075-MW-06		1304	X	X	U	H
3	401075-MW-15		1528	X	X	U	V
4	401075-MW-10		1715	X	X	U	V
5	401075- <del>MW</del> FB		1730	X	X	U	V
6	401075-DUP		-				H

Comments: MS/MSD collected at MW-06  
 Sulfate + Nitrate are in one bottle together per sample  
 Container code for 1,4-Dioxane is A. EPA 537 instead of EPA 537

Relinquished by: (Signature) *Chris Thieleman* Date/Time: 10/15/18 1830  
 Received by: (Signature) *Chris Thieleman* Date/Time: 10/16/18 9:00am  
 Relinquished by: (Signature) *Chris Thieleman* Date/Time: 10/16/18 12:15 PM  
 Received by: (Signature) *Chris Thieleman* Date/Time: 10/16/18 12:15 PM  
 Relinquished by: (Signature) *Chris Thieleman* Date/Time: 10/16/18 13:00  
 Received by: (Signature) *Chris Thieleman* Date/Time: 10/16/18 13:20

Program & Regulatory Information  
 AWQ STDS  NY TOGS  
 NYC Sewer Discharge  NY CP-51  
 Part 360 GW (Landfill)  
 NY Restricted Use  
 NY Unrestricted Use  
 NY Part 375

Enhanced Data Package  
 NY DEC EQUS EDD  
 EQUS (Standard) EDD  
 NY Regulatory EDD  
 NY Regs Hits-Only EDD

Other:  MWRA  School  MBTA  
 Municipality  21 J  Brownfield  
 Government  Federal  City  
 Project Entity NY DEC  
 WRTA  
 Chromatogram  
 AIFA-LAP, LLC

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples \_\_\_\_\_



**con-test**  
ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

**Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False**

Client EA Engineering  
 Received By RAP Date 10/16/18 Time 1320  
 How were the samples received? In Cooler T No Cooler \_\_\_\_\_ On Ice T No Ice \_\_\_\_\_  
 Direct from Sampling \_\_\_\_\_ Ambient \_\_\_\_\_ Melted Ice \_\_\_\_\_  
 Were samples within Temperature? 2-6°C T By Gun # 557 Actual Temp - 2.1 | 5.5 | 5.1 | 4.9 | 3.2  
 By Blank # \_\_\_\_\_ Actual Temp - \_\_\_\_\_  
 Was Custody Seal Intact? NA Were Samples Tampered with? NA  
 Was COC Relinquished? T Does Chain Agree With Samples? T  
 Are there broken/leaking/loose caps on any samples? F  
 Is COC in ink/ Legible? T Were samples received within holding time? T  
 Did COC include all pertinent information? Client T Analysis T Sampler Name T  
 Project T ID's T Collection Dates/Times T  
 Are Sample labels filled out and legible? T  
 Are there Lab to Filters? F Who was notified? \_\_\_\_\_  
 Are there Rushes? F Who was notified? \_\_\_\_\_  
 Are there Short Holds? F Who was notified? David + Luke  
 Is there enough Volume? T  
 Is there Headspace where applicable? F MS/MSD? T  
 Proper Media/Containers Used? T Is splitting samples required? F  
 Were trip blanks received? F On COC? F  
 Do all samples have the proper pH? Acid pH 2.2 Base \_\_\_\_\_

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.	12	1 Liter Plastic		16 oz Amb.	
HCL-	9	500 mL Amb.		500 mL Plastic	3	8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic	21	4oz Amb/Clear	
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear	
DI-		Other Plastic		Other Glass		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

**Unused Media**

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear	
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear	
DI-		Other Plastic		Other Glass		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

**Comments:**

Did not receive two 1 liter ambers for sample # 5. Client crossed out analysis on COC

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**Client:** Christopher J. Schroer  
EA Engineering, Science, and Technology, Inc.  
6712 Brooklawn Parkway  
Suite 104  
Syracuse, NY 13211

**Phone:**

**Fax:**

**Identifier:** 070PJ

**Date Rec:** 10/19/2018

**Report Date:** 10/24/2018

**Client Project #:** 1490738.0003

**Client Project Name:** NYSDEC Admiral Cleaners

**Purchase Order #:** 17432

**Analysis Requested:** CENSUS

**Reviewed By:**



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**Client:** EA Engineering, Science, and Technology, In  
**Project:** NYSDEC Admiral Cleaners

**MI Project Number:** 070PJ  
**Date Received:** 10/19/2018

**Sample Information**

<b>Client Sample ID:</b>	<b>401075-MW-10</b>	<b>401075-MW-07</b>	<b>401075-MW-06</b>
		<b>R</b>	
Sample Date:	10/18/2018	10/18/2018	10/18/2018
Units:	cells/mL	cells/mL	cells/mL
Analyst/Reviewer:	CB	CB	CB

**Dechlorinating Bacteria**

<i>Dehalococcoides</i>	DHC	<1.30E+00	<b>3.43E+01</b>	<5.00E-01
tceA Reductase	TCE	<1.30E+00	<4.00E-01	<5.00E-01
BAV1 Vinyl Chloride Reductase	BVC	<1.30E+00	<4.00E-01	<5.00E-01
Vinyl Chloride Reductase	VCR	<1.30E+00	<4.00E-01	<5.00E-01

**Legend:**

NA = Not Analyzed    NS = Not Sampled    J = Estimated gene copies below PQL but above LQL    I = Inhibited  
 < = Result not detected

Quality Assurance/Quality Control Data

Samples Received 10/19/2018

Component	Date Prepared	Date Analyzed	Arrival Temperature	Positive Control	Extraction Blank	Negative Control
DHC	10/19/2018	10/24/2018	0 °C	106%	non-detect	non-detect
BVC	10/19/2018	10/24/2018	0 °C	100%	non-detect	non-detect
TCE	10/19/2018	10/24/2018	0 °C	99%	non-detect	non-detect
VCR	10/19/2018	10/24/2018	0 °C	108%	non-detect	non-detect