



APTIM
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January 6, 2020

Project # 631010697

Mr. Joseph T. Martella, II
Rhode Island Department of Environmental Management
Office of Waste Management
235 Promenade Street
Providence, RI 02908-5767

**Subject: Status Report: June 2019 through November 2019 Activities
Former Gorham Manufacturing Facility
333 Adelaide Avenue, Providence, RI
Site Remediation Case No. 97-030**

Dear Mr. Martella:

Aptim Environmental & Infrastructure, LLC. (APTIM), formerly CB&I Environmental & Infrastructure, Inc., has prepared this status report on behalf of Textron Inc. (Textron). This status report is associated with the remediation of tetrachloroethene (PCE) contaminated groundwater at the former Gorham Manufacturing Facility at 333 Adelaide Avenue, Providence, Rhode Island (**Figure 1**).

PCE is the primary contaminant of concern for groundwater in this area. As discussed in the Remedial Action Work Plan (RAWP) and subsequent revisions, the PCE source area in the vicinity of the former building W is the area of concern with a site-specific remedial goal of 7,700 micrograms per liter ($\mu\text{g/L}$). This area was treated using in-situ applications of sodium permanganate several years ago. **Figure 2** shows the most recent treatment area. Since 2013, a groundwater extraction and treatment system has operated at the site to mitigate the flow of impacted groundwater and improve overall site groundwater quality.

This status report describes groundwater monitoring activities conducted at the site by APTIM. This report includes results of groundwater sampling and analysis conducted in August and November of 2019.

Field Activities

Limited VOC Sampling Activities August and November 2019

Limited groundwater gauging and sampling was conducted on August 7, 2019 and November 14, 2019. Monitoring wells MW-112, MW-116D, and MW-116S were sampled for volatile organic compound (VOC) analysis. Groundwater elevation results for the gauging of these wells are included in **Table 2**.

Groundwater Sampling

Groundwater samples were collected for VOC analysis (EPA Method 8260C) from the three monitoring wells (MW-112, MW-116D, and MW-116S) on August 7 and November 14, 2019. Groundwater samples were delivered to Con-Test Analytical Laboratory in East Longmeadow, Massachusetts for analysis.

Semi-Annual Groundwater Sampling Activities November 2019

The monitoring wells that comprise the larger semi-annual groundwater monitoring program were monitored for field parameters and sampled for analysis on November 13 and 14, 2019.

Monitoring Activities

Field parameters were measured in treatment area wells and compliance wells on November 13 and 14, 2019. Field measurements included oxidation/reduction potential (ORP), dissolved oxygen (DO), pH, temperature, and specific conductance (SC). Groundwater elevation and LNAPL thickness measurements were also collected. Field parameter and groundwater elevation results are presented in **Tables 1** and **2**, respectively.

Semi-Annual Groundwater Sampling

On November 13 and 14, 2019 groundwater samples were collected for analysis for VOCs (EPA Method 8260C-D) from 22 monitoring wells within and around the treatment area, including the compliance wells. One duplicate sample was collected from MW-101S (MW-101S DUP) for VOC analysis. One duplicate sample was collected for total petroleum hydrocarbon (TPH) analysis (modified EPA Method 8015C) from monitoring well CW-6. Samples were also collected for dissolved lead analysis (EPA Method 6020B) from monitoring wells MW-109D and GZA-3. One duplicate sample was also collected from GZA-3 (GZA-3 DUP) for lead analysis. Groundwater samples were delivered to Con-Test Analytical Laboratory in East Longmeadow, Massachusetts for analysis.

Summary of Analytical Data

A summary of the analytical data associated with the groundwater sampling conducted on August 7, and November 13 and 14, 2019 is contained in **Table 3**. A copy of each laboratory analytical report is also attached to this report. Measured PCE concentrations were below the treatment goal of 7,700 µg/L in all wells sampled during these sampling events. During this reporting period the highest PCE concentrations were detected in wells MW-201D at 4700 µg/L and MW-218D at 1600 µg/L on November 13 and 14, 2019, respectively.

A summary of the compliance well results is contained in **Table 4**. The results for the compliance well sampling indicate that an exceedance of the compliance standard occurred for PCE at the Adelaide Avenue well MW-209D on November 14, 2019. (Note that due to sample dilution by the laboratory, the

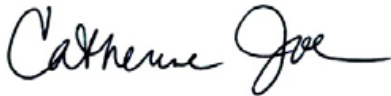
analytical reporting limits for vinyl chloride, in well MW-112 on August 7, 2019 and well MW-209D on November 14, 2019, were above the compound specific compliance standard).

Future Activities

Future limited sampling will be conducted in February 2020 and the larger semi-annual sampling event will be conducted in May 2020.

If you have any questions regarding this report, please do not hesitate to contact me directly at 617-794-1767 or via e-mail at catherine.joe@aptim.com.

Respectfully submitted,
Aptim Environmental & Infrastructure, LLC



Catherine Joe
Project Manager

Attachments

Table 1 – Summary Field Parameters
Table 2 – Groundwater Elevation Data
Table 3 – Groundwater Analytical Results Detected Compounds – June – November 2019
Table 4 – Groundwater Analytical Results in Compliance Wells – June – November 2019

Figure 1 – Site Plan
Figure 2 – Injection Well Locations

Attachment A - Laboratory Analytical Reports

cc: Craig Roy, RIDEM OWR - email
Greg Simpson, Textron - email
Herbert Colby, Wood PLC - email
Robert Azar, Providence Redevelopment Agency - email
Jeff Morgan, Stop & Shop - email
Ronald Ruth, Sherin and Lodgen - email

CERTIFICATIONS

The following certifications are provided pursuant to Rule 9.19 of the Remediation Regulations:

I, Catherine Joe, as an authorized representative of Aptim Environmental & Infrastructure, LLC., and the person responsible for the preparation of this Status Report dated January 6, 2020, certify that the information contained in this report is complete and accurate to the best of my knowledge.



Catherine Joe
Project Manager

1/7/2020

Date:

We, Textron, Inc., as the party responsible for submittal of this Status Report, certify that this report is a complete and accurate representation of the contaminated site and the release, and contains all known facts surrounding the release, to the best of our knowledge.

Certification on behalf of Textron Inc.



Gregory L. Simpson
Project Manager

1/7/2020

Date:

TABLES

Table 1
Summary Field Parameters
June 2019 - November 2019

Former Gorham Manufacturing Facility
Providence, Rhode Island

Location	Date	Dissolved Oxygen mg/L	Oxidation Reduction Potential mV	pH unit	Specific Conductivity mS/cm	Temperature C°
MW-101D	11/13/2019	2.04	145.5	6.1	0.167	11.25
MW-101S	11/13/2019	0.41	55.7	5.85	0.302	11.44
MW-112	11/14/2019	4.66	202.8	6.03	0.935	12.01
MW-116D	11/14/2019	4.15	287.4	5.56	0.701	12.08
MW-116S	11/14/2019	6.88	269	5.88	0.152	12.45
MW-201D	11/13/2019	3.94	85.1	6.33	0.825	13.02
MW-202D	11/13/2019	0.31	140.5	6.5	1.128	12.88
MW-202S	11/13/2019	1.77	93.2	6.16	0.304	12.76
MW-207D	11/13/2019	2.72	211.6	6.24	0.066	12.66
MW-207S	11/13/2019	3.04	142.1	6.58	0.095	12.44
MW-209D	11/14/2019	1.18	15.5	6.91	0.717	12.19
MW-216D	11/13/2019	0.6	-7	6.57	0.884	12.25
MW-216S	11/13/2019	1.01	-106.5	6.77	0.945	12.14
MW-217D	11/14/2019	2.73	92.1	5.83	0.158	12.75
MW-217S	11/14/2019	3.05	43.6	6.47	1.627	11.96
MW-218D	11/14/2019	1.14	265.1	6.06	0.725	12.59
MW-218S	11/14/2019	2.95	284.6	5.99	0.801	12.43

Notes:

C° = degrees Celsius

mS/cm = millisiemens per centimeter

mg/L = milligrams per liter

mV = milli volts

TABLE 2
GROUNDWATER ELEVATION DATA
(June 2019 - November 2019)
Former Gorham Manufacturing Facility
Providence, Rhode Island

Location	Date	Reference Elevation (Feet)	Depth to Water (Feet)	Depth to LNAPL (Feet)	LNAPL Thickness (Feet)	Groundwater Elevation (Feet)	Notes
CW-01	11/14/2019	99.52	25.97	---	---	73.55	DTB = 54.16 FT
CW-02	11/14/2019	98.86	25.45	---	---	73.41	DTB = 54.65 FT
CW-06	11/14/2019	99.52	25.38	---	---	74.14	DTB = 33.31 FT
GZA-3	11/14/2019	NA	19.15	---	---	NA	DTB = 22.01 FT
MW-101D	11/13/2019	98.91	25.62	---	---	73.29	DTB = 46.20 FT
MW-101S	11/13/2019	98.9	25.65	---	---	73.25	DTB = 28.15 FT
MW-109D	11/14/2019	NA	19.4	---	---	NA	DTB = 74.65 FT
MW-112	8/7/2019	100.63	26.55	---	---	74.08	DTB = 34.76 FT
MW-112	11/14/2019	100.63	27.38	---	---	73.25	DTB = 34.75 FT
MW-116D	8/7/2019	98.92	20.65	---	---	78.27	DTB = 44.65 FT
MW-116D	11/14/2019	98.92	25.6	---	---	73.32	DTB = 44.24 FT
MW-116S	8/7/2019	99.4	21.35	---	---	78.05	DTB = 28.65 FT
MW-116S	11/14/2019	99.4	26.01	---	---	73.39	DTB = 29.03 FT
MW-201D	11/13/2019	98.8	25.42	---	---	73.38	DTB = 47.39 FT
MW-202D	11/13/2019	98.17	24.85	---	---	73.32	DTB = 46.75 FT
MW-202S	11/13/2019	98.06	24.8	---	---	73.26	DTB = 37.94 FT
MW-207D	11/13/2019	98.18	24.98	---	---	73.20	DTB = 50.66 FT
MW-207S	11/13/2019	98.28	24.81	---	---	73.47	DTB = 37.40 FT
MW-209D	11/14/2019	99.9	27.03	---	---	72.87	DTB = 62.31 FT
MW-216D	11/13/2019	98.69	26.22	---	---	72.47	DTB = 39.65 FT
MW-216S	11/13/2019	99.58	26.1	---	---	73.48	DTB = 29.66 FT
MW-217D	11/14/2019	98.65	25.45	---	---	73.20	DTB = 46.67 FT
MW-217S	11/14/2019	98.71	25.47	---	---	73.24	DTB = 26.27 FT
MW-218D	11/14/2019	99.67	26.35	---	---	73.32	DTB = 46.78 FT
MW-218S	11/14/2019	99.61	26.2	---	---	73.41	DTB = 29.50 FT
MW-220S	11/14/2019	99.41	21.42	---	---	77.99	DTB = 31.68 FT
MW-221S	11/14/2019	98.92	21.46	---	<0.01	77.46	

Notes:
Feet = feet measured below ground surface
NA = Not Available
NM = Not Measured
DTB = Depth to bottom
--- = No LNAPL detected
<0.01 = sheen, no measurable LNAPL Detected

TABLE 3
Groundwater Analytical Results Detected Compounds
June 2019 - November 2019

Former Gorham Manufacturing Facility
Providence, Rhode Island

	Location	CW-01	CW-02	CW-06		GZA-3		MW-101D	MW-101S		MW-109D
	Sample ID	CW-01-20191114	CW-02-20191114	CW-06-20191114	CW-06-20191114FD	GZA-3-20191114	GZA-3-20191114FD	MW-101D-20191113	MW-101S-20191113	MW-101S-20191113FD	MW-109D-20191114
	Sample Date	11/14/2019	11/14/2019	11/14/2019	11/14/2019	11/14/2019	11/14/2019	11/13/2019	11/13/2019	11/13/2019	11/14/2019
	Depth	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
	Sample	N	N	N	FD	N	FD	N	N	FD	N
Parameter	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
VOLATILES											
1,1,1-Trichloroethane	µg/L	< 10	1.4	---	---	< 1	---	< 4	< 25	< 20	< 1
1,1-Dichloroethene	µg/L	< 10	< 1	---	---	< 1	---	< 4	< 25	< 20	< 1
1,2,4-Trimethylbenzene	µg/L	< 10	< 1	---	---	< 1	---	< 4	< 25	< 20	< 1
1,3,5-Trimethylbenzene	µg/L	< 10	< 1	---	---	< 1	---	< 4	< 25	< 20	< 1
cis-1,2-Dichloroethene	µg/L	590	< 1	---	---	< 1	---	< 4	1800	1700	< 1
Ethylbenzene	µg/L	< 10	< 1	---	---	< 1	---	< 4	< 25	< 20	< 1
Naphthalene	µg/L	< 20	< 2	---	---	< 2	---	< 8	< 50	< 40	< 2
o-Xylene	µg/L	< 10	< 1	---	---	< 1	---	< 4	< 25	< 20	< 1
Tetrachloroethene	µg/L	< 10	< 1	---	---	< 1	---	< 4	380	320	< 1
Trichloroethene	µg/L	82	< 1	---	---	< 1	---	< 4	44	42	1
Vinyl chloride	µg/L	< 20	< 2	---	---	10	---	< 8	84	75	< 2
Xylene (total)	µg/L	< 10	< 1	---	---	< 1	---	< 4	< 25	< 20	< 1
TPH											
TPH	mg/L	---	---	8.6	8.7	---	---	---	---	---	---
METALS, DISSOLVED											
Lead	µg/L	---	---	---	---	< 0.5	< 0.5	---	---	---	< 0.5

Notes: < = Less than the laboratory reporting limit
µg/L = Micrograms per liter, parts per billion
mg/L = Milligrams per liter
TPH = Total Petroleum Hydrocarbons
-- = Not analyzed for
N = Primary sample
FD = Field Duplicate

TABLE 3
Groundwater Analytical Results Detected Compounds
June 2019 - November 2019

Former Gorham Manufacturing Facility
Providence, Rhode Island

	Location	MW-112		MW-116D		MW-116S		MW-201D	MW-202D	MW-202S	MW-207D	MW-207S
	Sample ID	MW-112-20190807	MW-112-20191114	MW-116D-20190807	MW-116D-20191114	MW-116S-20190807	MW-116S-20191114	MW-201D-20191113	MW-202D-20191113	MW-202S-20191113	MW-207D-20191113	MW-207S-20191113
	Sample Date	8/7/2019	11/14/2019	8/7/2019	11/14/2019	8/7/2019	11/14/2019	11/13/2019	11/13/2019	11/13/2019	11/13/2019	11/13/2019
	Depth	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
	Sample	N	N	N	N	N	N	N	N	N	N	N
Parameter	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
VOLATILES												
1,1,1-Trichloroethane	µg/L	< 2	< 1	< 1	< 1	< 1	< 1	< 50	< 1	< 4	< 1	< 1
1,1-Dichloroethene	µg/L	< 2	< 1	< 1	< 1	< 1	< 1	< 50	< 1	< 4	< 1	< 1
1,2,4-Trimethylbenzene	µg/L	< 2	< 1	< 1	< 1	< 1	< 1	< 50	< 1	< 4	< 1	< 1
1,3,5-Trimethylbenzene	µg/L	< 2	< 1	< 1	< 1	< 1	< 1	< 50	< 1	< 4	< 1	< 1
cis-1,2-Dichloroethene	µg/L	< 2	< 1	< 1	< 1	< 1	< 1	< 50	< 1	< 4	< 1	< 1
Ethylbenzene	µg/L	< 2	< 1	< 1	< 1	< 1	< 1	< 50	< 1	< 4	< 1	< 1
Naphthalene	µg/L	< 10	< 2	< 5	< 2	< 5	< 2	< 100	< 2	< 8	< 2	< 2
o-Xylene	µg/L	< 2	< 1	< 1	< 1	< 1	< 1	< 50	< 1	< 4	< 1	< 1
Tetrachloroethene	µg/L	80	67	< 1	< 1	< 1	< 1	4700	7.9	13	1.4	< 1
Trichloroethene	µg/L	3	7.8	< 1	< 1	< 1	< 1	440	< 1	< 4	< 1	< 1
Vinyl chloride	µg/L	< 4	< 2	< 2	< 2	< 2	< 2	< 100	< 2	< 8	< 2	< 2
Xylene (total)	µg/L	< 2	< 1	< 1	< 1	< 1	< 1	< 50	< 1	< 4	< 1	< 1
TPH												
TPH	mg/L	---	---	---	---	---	---	---	---	---	---	---
METALS, DISSOLVED												
Lead	µg/L	---	---	---	---	---	---	---	---	---	---	---

Notes: < = Less than the laboratory reporting limit
µg/L = Micrograms per liter, parts per billion
mg/L = Milligrams per liter
TPH = Total Petroleum Hydrocarbons
-- = Not analyzed for
N = Primary sample
FD = Field Duplicate

TABLE 3
Groundwater Analytical Results Detected Compounds
June 2019 - November 2019

Former Gorham Manufacturing Facility
Providence, Rhode Island

	Location	MW-209D	MW-216D	MW-216S	MW-217D	MW-217S	MW-218D	MW-218S
	Sample ID	MW-209D-20191114	MW-216D-20191113	MW-216S-20191113	MW-217D-20191114	MW-217S-20191114	MW-218D-20191114	MW-218S-20191114
	Sample Date	11/14/2019	11/13/2019	11/13/2019	11/14/2019	11/14/2019	11/14/2019	11/14/2019
	Depth	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
	Sample	N	N	N	N	N	N	N
Parameter	Units	Result	Result	Result	Result	Result	Result	Result
VOLATILES								
1,1,1-Trichloroethane	µg/L	< 4	< 1	< 2	< 1	< 1	< 40	< 1
1,1-Dichloroethene	µg/L	6.1	< 1	< 2	< 1	< 1	< 40	< 1
1,2,4-Trimethylbenzene	µg/L	< 4	< 1	9.2	< 1	< 1	< 40	< 1
1,3,5-Trimethylbenzene	µg/L	< 4	< 1	3.6	< 1	< 1	< 40	< 1
cis-1,2-Dichloroethene	µg/L	50	< 1	67	1.6	< 1	< 40	< 1
Ethylbenzene	µg/L	< 4	< 1	2.5	< 1	< 1	< 40	< 1
Naphthalene	µg/L	< 8	< 2	20	< 2	< 2	< 80	< 2
o-Xylene	µg/L	< 4	< 1	8.2	< 1	< 1	< 40	< 1
Tetrachloroethene	µg/L	200	5.8	< 2	3.1	5.8	1600	26
Trichloroethene	µg/L	41	< 1	< 2	3.7	1.5	94	< 1
Vinyl chloride	µg/L	< 8	< 2	< 4	< 2	< 2	< 80	< 2
Xylene (total)	µg/L	< 4	< 1	8.2	< 1	< 1	< 40	< 1
TPH								
TPH	mg/L	---	---	---	---	---	---	---
METALS, DISSOLVED								
Lead	µg/L	---	---	---	---	---	---	---

Notes: < = Less than the laboratory reporting limit
µg/L = Micrograms per liter, parts per billion
mg/L = Milligrams per liter
TPH = Total Petroleum Hydrocarbons
-- = Not analyzed for
N = Primary sample
FD = Field Duplicate

TABLE 4
Groundwater Analytical Results
June 2019 - November 2019

Former Gorham Manufacturing Facility
 Providence, Rhode Island

Mashapaug Pond Compliance Wells				
Sample ID	GZA-3	GZA-3	MW-109D	Compliance
Date Collected	11/14/2019	11/14/2019	11/14/2019	Standard ¹
CONSTITUENT	Primary	Duplicate 1	Primary	
Metals (mg/L)				
Lead	<0.0005	<0.0005	<0.0005	0.03
VOCs (µg/L)				
1,1-Dichloroethane	<1.0	---	<1.0	50,000
1,1-Dichloroethene	<1.0	---	<1.0	50,000
cis-1,2-Dichloroethene	<1.0	---	<1.0	50,000
Methyl tert-butyl ether	<1.0	---	<1.0	50,000
Tetrachloroethene	<1.0	---	<1.0	5,000
Trichloroethene	<1.0	---	1	20,000
Vinyl chloride	10	---	<2.0	1,200

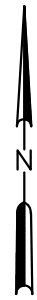
TPH Remediation Area Well			
Sample ID	CW-06	CW-06	Compliance
Date Collected	11/14/2019	11/14/2019	Standard ¹
CONSTITUENT	Primary	Duplicate	
TPH (mg/L)			
TPH	8.6	8.7	20

Sewer Interceptor Area Wells			
Sample ID	CW-01	CW-02	Compliance
Date Collected	11/14/2019	11/14/2019	Standard ²
CONSTITUENT	Primary	Primary	
VOCs (µg/L)			
1,1-Dichloroethane	< 10	< 1	120,000
1,1-Dichloroethene	< 10	< 1	23,000
cis-1,2-Dichloroethene	590	< 1	69,000
trans-1,2-Dichloroethene	< 10	< 1	79,000
Tetrachloroethene	< 10	< 1	NS
Trichloroethene	82	< 1	87,000

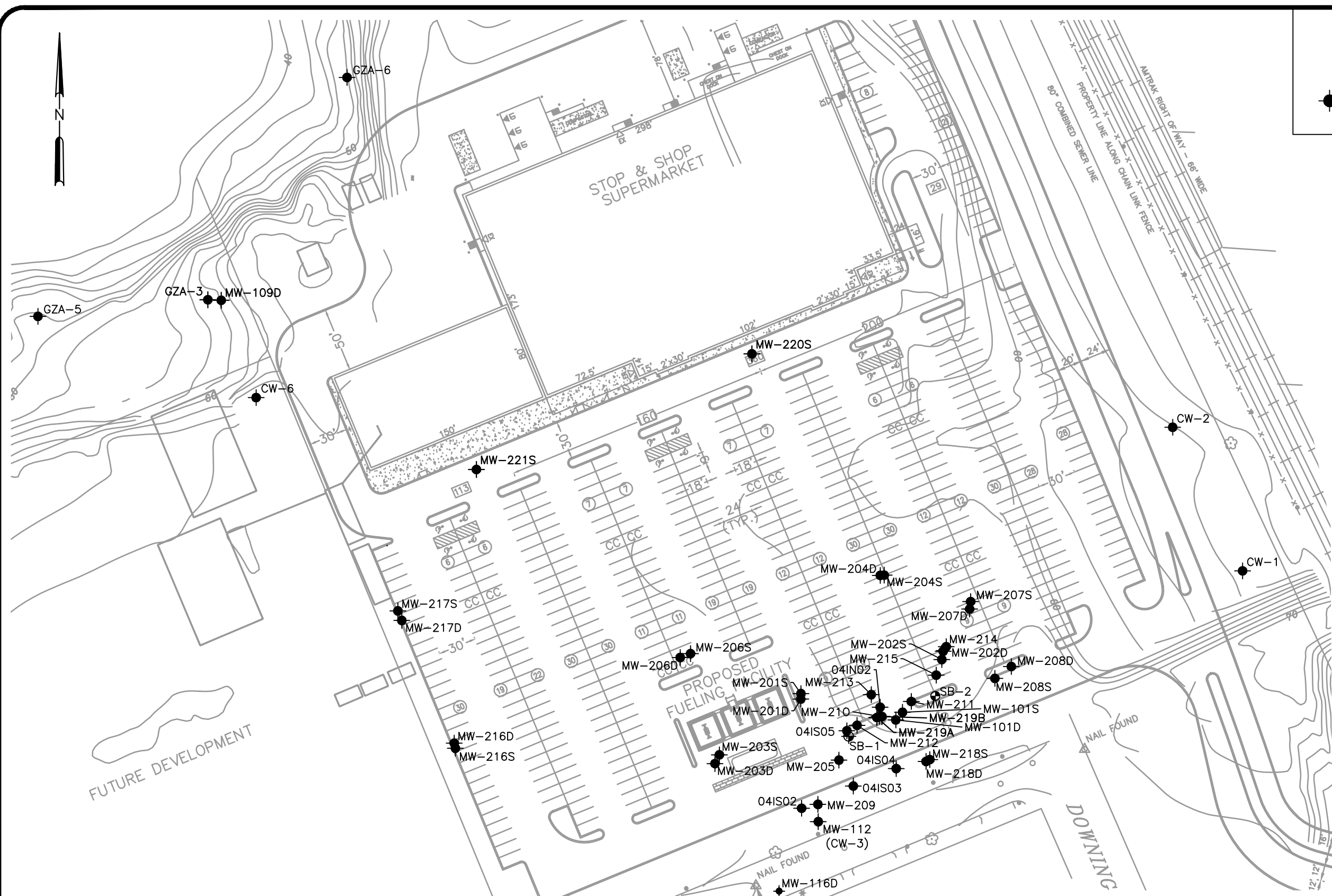
Adelaide Avenue Wells					
Sample ID	MW-112	MW-112	MW-209D	MW-218S	Compliance
Date Collected	8/7/2019	11/14/2019	11/14/2019	11/14/2019	Standard ³
CONSTITUENT	Primary	Primary	Primary	Primary	
VOCs (µg/L)					
1,1-Dichloroethane	< 2	< 1	< 4	< 1	2,400
1,1-Dichloroethene	< 2	< 1	6.1	< 1	7
cis-1,2-Dichloroethene	< 2	< 1	50	< 1	1,900
Methyl tert-butyl ether	< 2	< 1	< 4	< 1	5,000
Tetrachloroethene	80	67	200	26	150
Trichloroethene	3	7.8	41	<1	540
Vinyl chloride	<4	<2	<8	<2	2

- These site specific compliance standards were taken from the approved RAWP dated April 1, 2001 and/or the RIDEM Remediation Regulations.
 Note: The standard for Methyl tert-butyl ether is the Massachusetts Department of Environmental Protection (MassDEP) Method 1 GW-3 standard (310 CMR 40.0974 (2), 12/14/07. The use of the MassDEP Method 1 GW-3 standard is consistent with the approach used in the April 1, 2001 RAWP.
 - These compliance standards taken from Table 5 - Upper Concentration Limits for GB Groundwater, RIDEM Remediation Regulations.
 - These compliance standards taken from Table 4 - GB Groundwater Objectives of the RIDEM Remediation Regulations or in the case of vinyl chloride the compliance standard was taken from Table 3 of the Remediation Regulations and for chloroform the compliance standard was calculated from the algorithm in Appendix F of the Remediation Regulations (calculations attached as Appendix C of Status Report dated September 18, 2007.
- NS = Indicates that no applicable standard exists. Compound does not have a lower explosive limit (LEL).
 < = Less than the laboratory reporting limit
 µg/L = Micrograms per liter, parts per billion
 mg/L = Milligrams per liter, parts per million
 TPH = Total Petroleum Hydrocarbons
 VOCs = Volatile organic compounds
 -- = Not analyzed for

FIGURES

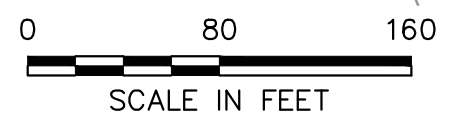


LEGEND
● MW-101S MONITORING WELL



1" 1/2" 0" 1"




File: L:\dwg\Corham\cntgf-02.dwg Layout: SP User: chris.desiata Jan 08, 2018 - 3:30pm

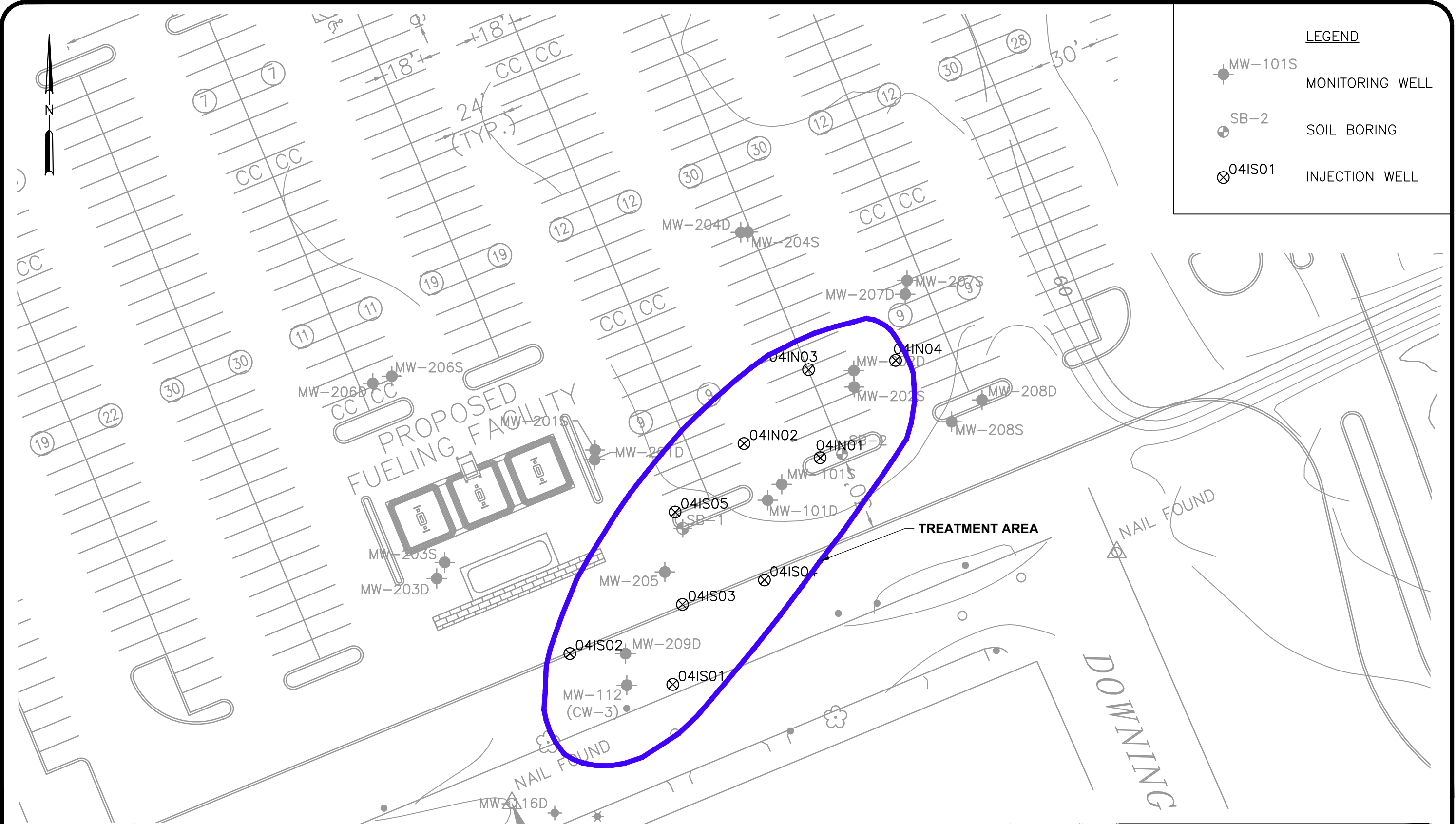


DATE	4/2/13
DWN	J.O'D.
APP	
REV	
PROJECT NO.	101960

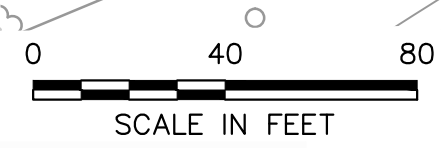
FIGURE 1
TEXTRON PROVIDENCE
333 ADELAIDE AVENUE
PROVIDENCE, RHODE ISLAND
SITE PLAN

LEGEND

-  MW-101S MONITORING WELL
-  SB-2 SOIL BORING
-  04IS01 INJECTION WELL



File: L:\dwg\Gorham\entg-01.dwg Layout: Inj well User: chris.desiata Jan 08, 2018 - 3:37pm
 1" 1/2" 0" 1"



DATE 4/2/13
 DWN J.O'D.
 APP E.P.V.
 REV
 PROJECT NO. 101960

FIGURE 2
 TEXTRON PROVIDENCE
 333 ADELAIDE AVENUE
 PROVIDENCE, RHODE ISLAND
INJECTION WELL LOCATIONS

ATTACHMENT A
LABORATORY REPORTS

January 3, 2020

Catherine Joe
APTIM - MA
150 Royall Street
Canton, MA 02021

Project Location: 333 Adelaide Avenue, Providence, RI
Client Job Number:
Project Number: 130274
Laboratory Work Order Number: 19H0555

Enclosed are results of analyses for samples received by the laboratory on August 9, 2019. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Raymond J. McCarthy
Project Manager

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APTIM - MA
150 Royall Street
Canton, MA 02021
ATTN: Catherine Joe

REPORT DATE: 1/3/2020

PURCHASE ORDER NUMBER: 835493-000 OP

PROJECT NUMBER: 130274

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 19H0555

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

PROJECT LOCATION: 333 Adelaide Avenue, Providence, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-112-20190807	19H0555-01	Ground Water		SW-846 8260C-D	
MW-116D-20190807	19H0555-02	Ground Water		SW-846 8260C-D	
MW-116S-20190807	19H0555-03	Ground Water		SW-846 8260C-D	
Trip Blank-20190807	19H0555-04	Ground Water		SW-846 8260C-D	

CASE NARRATIVE SUMMARY

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

REVISED REPORT 01-03-20: The total xylene RL has been revised.

REVISED 8/18/19: Report reissued with correct project manager information and additional sample ID information, per client request

SW-846 8260C-D**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**

B237800-BS1, B237800-BSD1

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:**2,2-Dichloropropane**

B237800-BSD1

RL-11

Elevated reporting limit due to high concentration of target compounds.

Analyte & Samples(s) Qualified:

19H0555-01[MW-112-20190807]

V-05

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

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

19H0555-01[MW-112-20190807], 19H0555-02[MW-116D-20190807], 19H0555-03[MW-116S-20190807], 19H0555-04[Trip Blank-20190807], B237800-BLK1, B237800-BS1, B237800-BSD1, S039131-CCV1

tert-Butyl Ethyl Ether (TBEE)

19H0555-01[MW-112-20190807], 19H0555-02[MW-116D-20190807], 19H0555-03[MW-116S-20190807], 19H0555-04[Trip Blank-20190807], B237800-BLK1, B237800-BS1, B237800-BSD1, S039131-CCV1

trans-1,3-Dichloropropene

19H0555-01[MW-112-20190807], 19H0555-02[MW-116D-20190807], 19H0555-03[MW-116S-20190807], 19H0555-04[Trip Blank-20190807], B237800-BLK1, B237800-BS1, B237800-BSD1, S039131-CCV1

V-20

Continuing calibration verification (CCV) 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:**Methyl Acetate**

B237800-BS1, B237800-BSD1, S039131-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.

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

Raymond J. McCarthy
Air Lab Prep

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

Project Location: 333 Adelaide Avenue, Providence

Sample Description:

Work Order: 19H0555

Date Received: 8/9/2019

Field Sample #: MW-112-20190807

Sampled: 8/7/2019 09:00

Sample ID: 19H0555-01

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	100	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
Acrylonitrile	ND	10	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
tert-Amyl Methyl Ether (TAME)	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
Benzene	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
Bromobenzene	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
Bromochloromethane	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
Bromodichloromethane	ND	1.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
Bromoform	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
Bromomethane	ND	4.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
2-Butanone (MEK)	ND	40	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
tert-Butyl Alcohol (TBA)	ND	40	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
n-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
sec-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
tert-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	1.0	µg/L	2	V-05	SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
Carbon Disulfide	ND	10	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
Carbon Tetrachloride	ND	10	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
Chlorobenzene	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
Chlorodibromomethane	ND	1.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
Chloroethane	ND	4.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
Chloroform	ND	4.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
Chloromethane	ND	4.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
2-Chlorotoluene	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
4-Chlorotoluene	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
Dibromomethane	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
1,2-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
1,3-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
1,4-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
trans-1,4-Dichloro-2-butene	ND	4.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
Dichlorodifluoromethane (Freon 12)	ND	4.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
1,1-Dichloroethane	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
1,2-Dichloroethane	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
1,1-Dichloroethylene	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
cis-1,2-Dichloroethylene	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
trans-1,2-Dichloroethylene	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
1,2-Dichloropropane	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
1,3-Dichloropropane	ND	1.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
2,2-Dichloropropane	ND	2.0	µg/L	2	V-05	SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
1,1-Dichloropropene	ND	4.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
cis-1,3-Dichloropropene	ND	1.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
trans-1,3-Dichloropropene	ND	1.0	µg/L	2	V-05	SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
Diethyl Ether	ND	4.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH

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Project Location: 333 Adelaide Avenue, Providence

Sample Description:

Work Order: 19H0555

Date Received: 8/9/2019

Field Sample #: MW-112-20190807

Sampled: 8/7/2019 09:00

Sample ID: 19H0555-01

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	1.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
1,4-Dioxane	ND	100	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
Ethylbenzene	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
Hexachlorobutadiene	ND	1.2	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
2-Hexanone (MBK)	ND	20	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
Isopropylbenzene (Cumene)	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
p-Isopropyltoluene (p-Cymene)	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
Methyl Acetate	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
Methyl tert-Butyl Ether (MTBE)	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
Methyl Cyclohexane	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
Methylene Chloride	ND	10	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
4-Methyl-2-pentanone (MIBK)	ND	20	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
Naphthalene	ND	10	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
n-Propylbenzene	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
Styrene	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
Tetrachloroethylene	80	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
Tetrahydrofuran	ND	20	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
Toluene	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
1,2,3-Trichlorobenzene	ND	10	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
1,2,4-Trichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
1,3,5-Trichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
1,1,1-Trichloroethane	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
1,1,2-Trichloroethane	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
Trichloroethylene	3.0	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
Trichlorofluoromethane (Freon 11)	ND	4.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
1,2,3-Trichloropropane	ND	4.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
1,2,4-Trimethylbenzene	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
1,3,5-Trimethylbenzene	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
Vinyl Chloride	ND	4.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
m+p Xylene	ND	4.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
o-Xylene	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH
Xylenes (total)	ND	2.0	µg/L	2		SW-846 8260C-D	8/12/19	8/13/19 7:49	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	94.4	70-130	8/13/19 7:49
Toluene-d8	98.5	70-130	8/13/19 7:49
4-Bromofluorobenzene	92.6	70-130	8/13/19 7:49

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Project Location: 333 Adelaide Avenue, Providence

Sample Description:

Work Order: 19H0555

Date Received: 8/9/2019

Field Sample #: MW-116D-20190807

Sampled: 8/7/2019 09:30

Sample ID: 19H0555-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
tert-Amyl Methyl Ether (TAME)	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1	V-05	SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1	V-05	SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH

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

Project Location: 333 Adelaide Avenue, Providence

Sample Description:

Work Order: 19H0555

Date Received: 8/9/2019

Field Sample #: MW-116D-20190807

Sampled: 8/7/2019 09:30

Sample ID: 19H0555-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
Naphthalene	ND	5.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 6:54	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	96.6	70-130	8/13/19 6:54
Toluene-d8	98.8	70-130	8/13/19 6:54
4-Bromofluorobenzene	93.2	70-130	8/13/19 6:54

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

Project Location: 333 Adelaide Avenue, Providence

Sample Description:

Work Order: 19H0555

Date Received: 8/9/2019

Field Sample #: MW-116S-20190807

Sampled: 8/7/2019 10:15

Sample ID: 19H0555-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
tert-Amyl Methyl Ether (TAME)	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1	V-05	SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1	V-05	SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH

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

Project Location: 333 Adelaide Avenue, Providence

Sample Description:

Work Order: 19H0555

Date Received: 8/9/2019

Field Sample #: MW-116S-20190807

Sampled: 8/7/2019 10:15

Sample ID: 19H0555-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
Naphthalene	ND	5.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 7:21	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	93.6	70-130	8/13/19 7:21
Toluene-d8	98.1	70-130	8/13/19 7:21
4-Bromofluorobenzene	94.0	70-130	8/13/19 7:21

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

Project Location: 333 Adelaide Avenue, Providence

Sample Description:

Work Order: 19H0555

Date Received: 8/9/2019

Field Sample #: Trip Blank-20190807

Sampled: 8/7/2019 00:00

Sample ID: 19H0555-04

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
tert-Amyl Methyl Ether (TAME)	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1	V-05	SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1	V-05	SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH

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

Project Location: 333 Adelaide Avenue, Providence

Sample Description:

Work Order: 19H0555

Date Received: 8/9/2019

Field Sample #: Trip Blank-20190807

Sampled: 8/7/2019 00:00

Sample ID: 19H0555-04

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
Naphthalene	ND	5.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260C-D	8/12/19	8/13/19 1:50	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	93.3	70-130	
Toluene-d8	97.2	70-130	
4-Bromofluorobenzene	91.4	70-130	

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

Sample Extraction Data

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
19H0555-01 [MW-112-20190807]	B237800	2.5	5.00	08/12/19
19H0555-02 [MW-116D-20190807]	B237800	5	5.00	08/12/19
19H0555-03 [MW-116S-20190807]	B237800	5	5.00	08/12/19
19H0555-04 [Trip Blank-20190807]	B237800	5	5.00	08/12/19

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 B237800 - SW-846 5030B

Blank (B237800-BLK1)

Prepared: 08/12/19 Analyzed: 08/13/19

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							V-05
Carbon Disulfide	ND	5.0	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							V-05
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							V-05
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							

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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 B237800 - SW-846 5030B

Blank (B237800-BLK1)

Prepared: 08/12/19 Analyzed: 08/13/19

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							
Xylenes (total)	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	23.3		µg/L	25.0		93.1	70-130			
Surrogate: Toluene-d8	24.4		µg/L	25.0		97.7	70-130			
Surrogate: 4-Bromofluorobenzene	23.0		µg/L	25.0		92.2	70-130			

LCS (B237800-BS1)

Prepared & Analyzed: 08/12/19

Acetone	120	50	µg/L	100		120	70-160			†
Acrylonitrile	10.7	5.0	µg/L	10.0		107	70-130			
tert-Amyl Methyl Ether (TAME)	7.22	0.50	µg/L	10.0		72.2	70-130			
Benzene	8.74	1.0	µg/L	10.0		87.4	70-130			
Bromobenzene	10.6	1.0	µg/L	10.0		106	70-130			
Bromochloromethane	9.19	1.0	µg/L	10.0		91.9	70-130			
Bromodichloromethane	9.70	0.50	µg/L	10.0		97.0	70-130			
Bromoform	11.7	1.0	µg/L	10.0		117	70-130			
Bromomethane	5.87	2.0	µg/L	10.0		58.7	40-160			†
2-Butanone (MEK)	100	20	µg/L	100		100	40-160			†
tert-Butyl Alcohol (TBA)	73.2	20	µg/L	100		73.2	40-160			†
n-Butylbenzene	10.8	1.0	µg/L	10.0		108	70-130			
sec-Butylbenzene	11.3	1.0	µg/L	10.0		113	70-130			
tert-Butylbenzene	11.0	1.0	µg/L	10.0		110	70-130			
tert-Butyl Ethyl Ether (TBEE)	7.41	0.50	µg/L	10.0		74.1	70-130			V-05
Carbon Disulfide	9.78	5.0	µg/L	10.0		97.8	70-130			
Carbon Tetrachloride	9.43	5.0	µg/L	10.0		94.3	70-130			
Chlorobenzene	11.0	1.0	µg/L	10.0		110	70-130			
Chlorodibromomethane	9.63	0.50	µg/L	10.0		96.3	70-130			
Chloroethane	9.09	2.0	µg/L	10.0		90.9	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
Batch B237800 - SW-846 5030B										
LCS (B237800-BS1)										
Prepared & Analyzed: 08/12/19										
Chloroform	8.85	2.0	µg/L	10.0		88.5	70-130			
Chloromethane	7.43	2.0	µg/L	10.0		74.3	40-160			†
2-Chlorotoluene	10.4	1.0	µg/L	10.0		104	70-130			
4-Chlorotoluene	11.1	1.0	µg/L	10.0		111	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	11.5	5.0	µg/L	10.0		115	70-130			
1,2-Dibromoethane (EDB)	10.2	0.50	µg/L	10.0		102	70-130			
Dibromomethane	10.2	1.0	µg/L	10.0		102	70-130			
1,2-Dichlorobenzene	10.8	1.0	µg/L	10.0		108	70-130			
1,3-Dichlorobenzene	11.4	1.0	µg/L	10.0		114	70-130			
1,4-Dichlorobenzene	10.9	1.0	µg/L	10.0		109	70-130			
trans-1,4-Dichloro-2-butene	11.3	2.0	µg/L	10.0		113	70-130			
Dichlorodifluoromethane (Freon 12)	6.57	2.0	µg/L	10.0		65.7	40-160			†
1,1-Dichloroethane	9.03	1.0	µg/L	10.0		90.3	70-130			
1,2-Dichloroethane	9.73	1.0	µg/L	10.0		97.3	70-130			
1,1-Dichloroethylene	9.26	1.0	µg/L	10.0		92.6	70-130			
cis-1,2-Dichloroethylene	9.20	1.0	µg/L	10.0		92.0	70-130			
trans-1,2-Dichloroethylene	9.43	1.0	µg/L	10.0		94.3	70-130			
1,2-Dichloropropane	9.42	1.0	µg/L	10.0		94.2	70-130			
1,3-Dichloropropane	9.76	0.50	µg/L	10.0		97.6	70-130			
2,2-Dichloropropane	4.35	1.0	µg/L	10.0		43.5	40-130		V-05	†
1,1-Dichloropropene	8.92	2.0	µg/L	10.0		89.2	70-130			
cis-1,3-Dichloropropene	8.41	0.50	µg/L	10.0		84.1	70-130			
trans-1,3-Dichloropropene	7.14	0.50	µg/L	10.0		71.4	70-130		V-05	
Diethyl Ether	8.88	2.0	µg/L	10.0		88.8	70-130			
Diisopropyl Ether (DIPE)	8.82	0.50	µg/L	10.0		88.2	70-130			
1,4-Dioxane	117	50	µg/L	100		117	40-130			†
Ethylbenzene	10.7	1.0	µg/L	10.0		107	70-130			
Hexachlorobutadiene	11.4	0.60	µg/L	10.0		114	70-130			
2-Hexanone (MBK)	116	10	µg/L	100		116	70-160			†
Isopropylbenzene (Cumene)	11.2	1.0	µg/L	10.0		112	70-130			
p-Isopropyltoluene (p-Cymene)	10.8	1.0	µg/L	10.0		108	70-130			
Methyl Acetate	16.4	1.0	µg/L	10.0		164 *	70-130			L-02, V-20
Methyl tert-Butyl Ether (MTBE)	8.84	1.0	µg/L	10.0		88.4	70-130			
Methyl Cyclohexane	9.82	1.0	µg/L	10.0		98.2	70-130			
Methylene Chloride	8.78	5.0	µg/L	10.0		87.8	70-130			
4-Methyl-2-pentanone (MIBK)	116	10	µg/L	100		116	70-160			†
Naphthalene	11.8	2.0	µg/L	10.0		118	40-130			†
n-Propylbenzene	10.8	1.0	µg/L	10.0		108	70-130			
Styrene	9.63	1.0	µg/L	10.0		96.3	70-130			
1,1,1,2-Tetrachloroethane	11.4	1.0	µg/L	10.0		114	70-130			
1,1,2,2-Tetrachloroethane	12.6	0.50	µg/L	10.0		126	70-130			
Tetrachloroethylene	10.4	1.0	µg/L	10.0		104	70-130			
Tetrahydrofuran	9.96	10	µg/L	10.0		99.6	70-130			
Toluene	9.78	1.0	µg/L	10.0		97.8	70-130			
1,2,3-Trichlorobenzene	11.6	5.0	µg/L	10.0		116	70-130			
1,2,4-Trichlorobenzene	11.2	1.0	µg/L	10.0		112	70-130			
1,3,5-Trichlorobenzene	10.2	1.0	µg/L	10.0		102	70-130			
1,1,1-Trichloroethane	9.31	1.0	µg/L	10.0		93.1	70-130			
1,1,2-Trichloroethane	9.89	1.0	µg/L	10.0		98.9	70-130			
Trichloroethylene	9.82	1.0	µg/L	10.0		98.2	70-130			
Trichlorofluoromethane (Freon 11)	8.47	2.0	µg/L	10.0		84.7	70-130			
1,2,3-Trichloropropane	12.0	2.0	µg/L	10.0		120	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 B237800 - SW-846 5030B

LCS (B237800-BS1)

Prepared & Analyzed: 08/12/19

1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.39	1.0	µg/L	10.0		93.9	70-130			
1,2,4-Trimethylbenzene	10.0	1.0	µg/L	10.0		100	70-130			
1,3,5-Trimethylbenzene	10.9	1.0	µg/L	10.0		109	70-130			
Vinyl Chloride	8.46	2.0	µg/L	10.0		84.6	40-160			†
m+p Xylene	22.1	2.0	µg/L	20.0		110	70-130			
o-Xylene	11.0	1.0	µg/L	10.0		110	70-130			
Xylenes (total)	33.1	1.0	µg/L	30.0		110				
Surrogate: 1,2-Dichloroethane-d4	23.8		µg/L	25.0		95.0	70-130			
Surrogate: Toluene-d8	24.1		µg/L	25.0		96.4	70-130			
Surrogate: 4-Bromofluorobenzene	24.6		µg/L	25.0		98.6	70-130			

LCS Dup (B237800-BSD1)

Prepared & Analyzed: 08/12/19

Acetone	128	50	µg/L	100		128	70-160	6.01	25	†
Acrylonitrile	11.0	5.0	µg/L	10.0		110	70-130	2.85	25	
tert-Amyl Methyl Ether (TAME)	7.16	0.50	µg/L	10.0		71.6	70-130	0.834	25	
Benzene	8.68	1.0	µg/L	10.0		86.8	70-130	0.689	25	
Bromobenzene	10.8	1.0	µg/L	10.0		108	70-130	1.97	25	
Bromochloromethane	9.38	1.0	µg/L	10.0		93.8	70-130	2.05	25	
Bromodichloromethane	9.74	0.50	µg/L	10.0		97.4	70-130	0.412	25	
Bromoform	11.3	1.0	µg/L	10.0		113	70-130	3.58	25	
Bromomethane	6.23	2.0	µg/L	10.0		62.3	40-160	5.95	25	†
2-Butanone (MEK)	103	20	µg/L	100		103	40-160	3.00	25	†
tert-Butyl Alcohol (TBA)	73.8	20	µg/L	100		73.8	40-160	0.775	25	†
n-Butylbenzene	10.6	1.0	µg/L	10.0		106	70-130	1.49	25	
sec-Butylbenzene	11.0	1.0	µg/L	10.0		110	70-130	2.61	25	
tert-Butylbenzene	10.5	1.0	µg/L	10.0		105	70-130	5.11	25	
tert-Butyl Ethyl Ether (TBEE)	7.20	0.50	µg/L	10.0		72.0	70-130	2.87	25	V-05
Carbon Disulfide	8.67	5.0	µg/L	10.0		86.7	70-130	12.0	25	
Carbon Tetrachloride	9.31	5.0	µg/L	10.0		93.1	70-130	1.28	25	
Chlorobenzene	10.9	1.0	µg/L	10.0		109	70-130	0.641	25	
Chlorodibromomethane	9.81	0.50	µg/L	10.0		98.1	70-130	1.85	25	
Chloroethane	8.50	2.0	µg/L	10.0		85.0	70-130	6.71	25	
Chloroform	8.91	2.0	µg/L	10.0		89.1	70-130	0.676	25	
Chloromethane	6.21	2.0	µg/L	10.0		62.1	40-160	17.9	25	†
2-Chlorotoluene	10.0	1.0	µg/L	10.0		100	70-130	3.72	25	
4-Chlorotoluene	11.1	1.0	µg/L	10.0		111	70-130	0.181	25	
1,2-Dibromo-3-chloropropane (DBCP)	11.9	5.0	µg/L	10.0		119	70-130	2.91	25	
1,2-Dibromoethane (EDB)	10.5	0.50	µg/L	10.0		105	70-130	2.12	25	
Dibromomethane	10.3	1.0	µg/L	10.0		103	70-130	1.27	25	
1,2-Dichlorobenzene	10.6	1.0	µg/L	10.0		106	70-130	1.50	25	
1,3-Dichlorobenzene	11.2	1.0	µg/L	10.0		112	70-130	1.60	25	
1,4-Dichlorobenzene	10.7	1.0	µg/L	10.0		107	70-130	1.95	25	
trans-1,4-Dichloro-2-butene	11.3	2.0	µg/L	10.0		113	70-130	0.266	25	
Dichlorodifluoromethane (Freon 12)	6.38	2.0	µg/L	10.0		63.8	40-160	2.93	25	†
1,1-Dichloroethane	8.94	1.0	µg/L	10.0		89.4	70-130	1.00	25	
1,2-Dichloroethane	9.52	1.0	µg/L	10.0		95.2	70-130	2.18	25	
1,1-Dichloroethylene	8.98	1.0	µg/L	10.0		89.8	70-130	3.07	25	
cis-1,2-Dichloroethylene	9.27	1.0	µg/L	10.0		92.7	70-130	0.758	25	
trans-1,2-Dichloroethylene	9.30	1.0	µg/L	10.0		93.0	70-130	1.39	25	
1,2-Dichloropropane	9.22	1.0	µg/L	10.0		92.2	70-130	2.15	25	
1,3-Dichloropropane	9.83	0.50	µg/L	10.0		98.3	70-130	0.715	25	
2,2-Dichloropropane	3.81	1.0	µg/L	10.0		38.1	* 40-130	13.2	25	L-07, V-05 †

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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
Batch B237800 - SW-846 5030B										
LCS Dup (B237800-BSD1)										
Prepared & Analyzed: 08/12/19										
1,1-Dichloropropene	8.67	2.0	µg/L	10.0		86.7	70-130	2.84	25	
cis-1,3-Dichloropropene	8.37	0.50	µg/L	10.0		83.7	70-130	0.477	25	
trans-1,3-Dichloropropene	7.33	0.50	µg/L	10.0		73.3	70-130	2.63	25	V-05
Diethyl Ether	8.99	2.0	µg/L	10.0		89.9	70-130	1.23	25	
Diisopropyl Ether (DIPE)	8.69	0.50	µg/L	10.0		86.9	70-130	1.48	25	
1,4-Dioxane	115	50	µg/L	100		115	40-130	1.64	50	† ‡
Ethylbenzene	10.7	1.0	µg/L	10.0		107	70-130	0.281	25	
Hexachlorobutadiene	11.8	0.60	µg/L	10.0		118	70-130	2.76	25	
2-Hexanone (MBK)	116	10	µg/L	100		116	70-160	0.380	25	†
Isopropylbenzene (Cumene)	11.2	1.0	µg/L	10.0		112	70-130	0.625	25	
p-Isopropyltoluene (p-Cymene)	10.3	1.0	µg/L	10.0		103	70-130	4.47	25	
Methyl Acetate	16.4	1.0	µg/L	10.0		164 *	70-130	0.243	25	L-02, V-20
Methyl tert-Butyl Ether (MTBE)	8.80	1.0	µg/L	10.0		88.0	70-130	0.454	25	
Methyl Cyclohexane	9.59	1.0	µg/L	10.0		95.9	70-130	2.37	25	
Methylene Chloride	8.68	5.0	µg/L	10.0		86.8	70-130	1.15	25	
4-Methyl-2-pentanone (MIBK)	116	10	µg/L	100		116	70-160	0.302	25	†
Naphthalene	12.5	2.0	µg/L	10.0		125	40-130	5.69	25	†
n-Propylbenzene	10.7	1.0	µg/L	10.0		107	70-130	0.835	25	
Styrene	9.45	1.0	µg/L	10.0		94.5	70-130	1.89	25	
1,1,1,2-Tetrachloroethane	11.1	1.0	µg/L	10.0		111	70-130	2.22	25	
1,1,2,2-Tetrachloroethane	12.7	0.50	µg/L	10.0		127	70-130	0.237	25	
Tetrachloroethylene	10.2	1.0	µg/L	10.0		102	70-130	2.14	25	
Tetrahydrofuran	9.96	10	µg/L	10.0		99.6	70-130	0.00	25	
Toluene	9.65	1.0	µg/L	10.0		96.5	70-130	1.34	25	
1,2,3-Trichlorobenzene	12.4	5.0	µg/L	10.0		124	70-130	7.25	25	
1,2,4-Trichlorobenzene	11.3	1.0	µg/L	10.0		113	70-130	0.532	25	
1,3,5-Trichlorobenzene	10.1	1.0	µg/L	10.0		101	70-130	0.494	25	
1,1,1-Trichloroethane	9.16	1.0	µg/L	10.0		91.6	70-130	1.62	25	
1,1,2-Trichloroethane	9.96	1.0	µg/L	10.0		99.6	70-130	0.705	25	
Trichloroethylene	9.42	1.0	µg/L	10.0		94.2	70-130	4.16	25	
Trichlorofluoromethane (Freon 11)	8.37	2.0	µg/L	10.0		83.7	70-130	1.19	25	
1,2,3-Trichloropropane	12.4	2.0	µg/L	10.0		124	70-130	3.37	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.35	1.0	µg/L	10.0		93.5	70-130	0.427	25	
1,2,4-Trimethylbenzene	9.58	1.0	µg/L	10.0		95.8	70-130	4.29	25	
1,3,5-Trimethylbenzene	11.0	1.0	µg/L	10.0		110	70-130	0.731	25	
Vinyl Chloride	8.19	2.0	µg/L	10.0		81.9	40-160	3.24	25	†
m+p Xylene	21.7	2.0	µg/L	20.0		108	70-130	1.88	25	
o-Xylene	11.0	1.0	µg/L	10.0		110	70-130	0.363	25	
Xylenes (total)	32.7	1.0	µg/L	30.0		109		1.37		
Surrogate: 1,2-Dichloroethane-d4	24.1		µg/L	25.0		96.4	70-130			
Surrogate: Toluene-d8	24.2		µg/L	25.0		96.7	70-130			
Surrogate: 4-Bromofluorobenzene	25.1		µg/L	25.0		100	70-130			

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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.
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.
RL-11	Elevated reporting limit due to high concentration of target compounds.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-20	Continuing calibration verification (CCV) 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-D 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	ME,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)	ME,NY
1,2-Dibromoethane (EDB)	ME,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	ME,NY
Diisopropyl Ether (DIPE)	ME,NH,VA,NY
1,4-Dioxane	ME,NY
Ethylbenzene	CT,ME,NH,VA,NY

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260C-D 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	ME,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
Xylenes (total)	ME,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 - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2020
CT	Connecticut Department of Public Health	PH-0567	09/30/2021
NY	New York State Department of Health	10899 NELAP	04/1/2020
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2020
RI	Rhode Island Department of Health	LAO00112	12/30/2020
NC	North Carolina Div. of Water Quality	652	12/31/2020
NJ	New Jersey DEP	MA007 NELAP	06/30/2020
FL	Florida Department of Health	E871027 NELAP	06/30/2020
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2020
ME	State of Maine	2011028	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2020
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2020
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2020
NC-DW	North Carolina Department of Health	25703	07/31/2020
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2020

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East Longmeadow, MA 01028

con-test
ANALYTICAL LABORATORY

Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com

RJM 194055

Company Name: Aptim Environmental & Infrastructure, Inc.
Address: 150 Royall Street, Canton, MA 02021
Phone: 617-794-1767
Project Name: Textron Providence
Project Location: 333 Adelaide Avenue, Providence, RI
Project Number: 130274
Project Manager: Catherine Joe
Con-Test Bid: PO 835493
Invoice Recipient: Catherine Joe
Sampled By: DANIEL C. LEAHY

Requested Turnaround Time
7-Day 10-Day
Other: _____

Rush Approval Required
1-Day 3-Day
2-Day 4-Day

Data Delivery
Format: PDF EXCEL
Other: _____

Enhanced Data Package Required:
Email To: catherine.joe@aptim.com
Fax To #: _____

Con-Test Work Order #	Client Sample ID / Description	Beginning Date	Ending Date	Composite	Grab	Matrix Code	Conc Code
1	MW-112	8/7/19	0900		G	GW	U
2	MW-116D	8/7/19	0930		G	GW	U
3	MW-116S	8/7/19	1015		G	GW	U
4	RIP BANK	1907371	1318		G	LW	U

Comments: GIS Key to Catherine.joe@aptim.com

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

Retinquished by (signature)	Date/Time
<i>[Signature]</i>	8/7/19
<i>[Signature]</i>	8/9/19 10:00
<i>[Signature]</i>	8/9/19 19:40
<i>[Signature]</i>	8/9/19 19:40
<i>[Signature]</i>	8/9/19
<i>[Signature]</i>	

Detection Limit Requirements
MA
CT
Other: _____

Program Information
 MCP Analytical Certification Form Required
 RCP Analysis Certification Form Required
 MA State DW Form Required
PWSID # _____

NELAC and AIHA-LAP, LLC Accredited

TURNAROUND TIME (BUSINESS DAYS) STARTS AT 9:00 AM THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON THIS CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME CANNOT START UNTIL ALL QUESTIONS HAVE BEEN ANSWERED.
PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

# of Containers	Preservation Code	Container Code
3	H	V

ANALYSIS REQUESTED

- 1 Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil/Solid
SL = Sludge
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)
- Dissolved Metals Samples**
 Field Filtered
 Lab to Filter
- Orthophosphate Samples**
 Field Filtered
 Lab to Filter

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples _____



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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 Apim

Received By LR Date 8-9-19 Time 1940

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 # 4 Actual Temp -2.1
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? _____ 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? F

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>11</u>	500 mL Amb.		500 mL Plastic	8oz Amb/Clear
Meoh-		250 mL Amb.		250 mL Plastic	4oz Amb/Clear
Bisulfate-		Flashpoint		Col./Bacteria	2oz Amb/Clear
DI-		Other Glass		Other Plastic	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:

January 3, 2020

Catherine Joe
APTIM - MA
150 Royall Street
Canton, MA 02021

Project Location: Providence, RI
Client Job Number:
Project Number: 631010697
Laboratory Work Order Number: 19K0940

Enclosed are results of analyses for samples received by the laboratory on November 15, 2019. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Raymond J. McCarthy
Project Manager

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

APTIM - MA
 150 Royall Street
 Canton, MA 02021
 ATTN: Catherine Joe

REPORT DATE: 1/3/2020

PURCHASE ORDER NUMBER: 835493

PROJECT NUMBER: 631010697

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 19K0940

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

PROJECT LOCATION: Providence, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-207S-20191113	19K0940-01	Ground Water		SW-846 8260C-D	
MW-207D-20191113	19K0940-02	Ground Water		SW-846 8260C-D	
MW-202S-20191113	19K0940-03	Ground Water		SW-846 8260C-D	
MW-202D-20191113	19K0940-04	Ground Water		SW-846 8260C-D	
MW-101S-20191113	19K0940-05	Ground Water		SW-846 8260C-D	
MW-101S-20191113 FD	19K0940-06	Ground Water		SW-846 8260C-D	
MW-101D-20191113	19K0940-07	Ground Water		SW-846 8260C-D	
MW-201D-20191113	19K0940-08	Ground Water		SW-846 8260C-D	
MW-216S-20191113	19K0940-09	Ground Water		SW-846 8260C-D	
MW-216D-20191113	19K0940-10	Ground Water		SW-846 8260C-D	
MW-217S-20191114	19K0940-11	Ground Water		SW-846 8260C-D	
MW-217D-20191114	19K0940-12	Ground Water		SW-846 8260C-D	
CW-06-20191114	19K0940-13	Ground Water		SW-846 8015C	
CW-06-20191114 FD	19K0940-14	Ground Water		SW-846 8015C	
CW-01-20191114	19K0940-15	Ground Water		SW-846 8260C-D	
CW-02-20191114	19K0940-16	Ground Water		SW-846 8260C-D	
MW-112-20191114	19K0940-17	Ground Water		SW-846 8260C-D	
MW-209D-20191114	19K0940-18	Ground Water		SW-846 8260C-D	
MW-218D-20191114	19K0940-19	Ground Water		SW-846 8260C-D	
MW-218S-20191114	19K0940-20	Ground Water		SW-846 8260C-D	
GZA-3-20191114	19K0940-21	Ground Water		SW-846 6020B	
				SW-846 8260C-D	
GZA-3-20191114 FD	19K0940-22	Ground Water		SW-846 6020B	
MW-109D-20191114	19K0940-23	Ground Water		SW-846 6020B	
				SW-846 8260C-D	
MW-116S-20191114	19K0940-24	Ground Water		SW-846 8260C-D	
MW-116D-20191114	19K0940-25	Ground Water		SW-846 8260C-D	

CASE NARRATIVE SUMMARY

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

REVISED REPORT 01-02-20: The total xylene result for sample 19K0940-09 has been revised with the correct value. The total xylene RL has been revised on all samples.

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
SW-846 8015C

Qualifications:**Z-01a**

Sample chromatogram does not match reference standard exactly.

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

19K0940-13[CW-06-20191114], 19K0940-14[CW-06-20191114 FD]

SW-846 8260C-D

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:**1,2,3-Trichlorobenzene**

19K0940-18[MW-209D-20191114], 19K0940-19[MW-218D-20191114], 19K0940-20[MW-218S-20191114], 19K0940-21[GZA-3-20191114], 19K0940-23[MW-109D-20191114], 19K0940-24[MW-116S-20191114], 19K0940-25[MW-116D-20191114], B246753-BLK1, B246753-BS1, B246753-BSD1

1,2,4-Trichlorobenzene

19K0940-18[MW-209D-20191114], 19K0940-19[MW-218D-20191114], 19K0940-20[MW-218S-20191114], 19K0940-21[GZA-3-20191114], 19K0940-23[MW-109D-20191114], 19K0940-24[MW-116S-20191114], 19K0940-25[MW-116D-20191114], B246753-BLK1, B246753-BS1, B246753-BSD1

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:**1,4-Dioxane**

B246557-BSD1

RL-11

Elevated reporting limit due to high concentration of target compounds.

Analyte & Samples(s) Qualified:

19K0940-05[MW-101S-20191113], 19K0940-06[MW-101S-20191113 FD], 19K0940-08[MW-201D-20191113], 19K0940-15[CW-01-20191114], 19K0940-18[MW-209D-20191114], 19K0940-19[MW-218D-20191114]

RL-13

Elevated reporting limit due to high concentration of non-target compounds.

Analyte & Samples(s) Qualified:

19K0940-09[MW-216S-20191113]

V-05

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

Analyte & Samples(s) Qualified:**1,2,3-Trichlorobenzene**

19K0940-18[MW-209D-20191114], 19K0940-19[MW-218D-20191114], 19K0940-20[MW-218S-20191114], 19K0940-21[GZA-3-20191114], 19K0940-23[MW-109D-20191114], 19K0940-24[MW-116S-20191114], 19K0940-25[MW-116D-20191114], B246753-BLK1, B246753-BS1, B246753-BSD1, S043057-CCV1

1,2,4-Trichlorobenzene

19K0940-18[MW-209D-20191114], 19K0940-19[MW-218D-20191114], 19K0940-20[MW-218S-20191114], 19K0940-21[GZA-3-20191114], 19K0940-23[MW-109D-20191114], 19K0940-24[MW-116S-20191114], 19K0940-25[MW-116D-20191114], B246753-BLK1, B246753-BS1, B246753-BSD1, S043057-CCV1

1,3,5-Trichlorobenzene

19K0940-18[MW-209D-20191114], 19K0940-19[MW-218D-20191114], 19K0940-20[MW-218S-20191114], 19K0940-21[GZA-3-20191114], 19K0940-23[MW-109D-20191114], 19K0940-24[MW-116S-20191114], 19K0940-25[MW-116D-20191114], B246753-BLK1, B246753-BS1, B246753-BSD1, S043057-CCV1

2,2-Dichloropropane

19K0940-01[MW-207S-20191113], 19K0940-02[MW-207D-20191113], 19K0940-03[MW-202S-20191113], 19K0940-04[MW-202D-20191113], 19K0940-05[MW-101S-20191113], 19K0940-06[MW-101S-20191113 FD], 19K0940-07[MW-101D-20191113], 19K0940-08[MW-201D-20191113], 19K0940-09[MW-216S-20191113], 19K0940-10[MW-216D-20191113], 19K0940-11[MW-217S-20191114], 19K0940-12[MW-217D-20191114], 19K0940-15[CW-01-20191114], 19K0940-16[CW-02-20191114], 19K0940-17[MW-112-20191114], 19K0940-18[MW-209D-20191114], 19K0940-19[MW-218D-20191114], 19K0940-20[MW-218S-20191114], 19K0940-21[GZA-3-20191114], 19K0940-23[MW-109D-20191114], 19K0940-24[MW-116S-20191114], 19K0940-25[MW-116D-20191114], B246557-BLK1, B246557-BS1, B246557-BSD1, B246753-BLK1, B246753-BS1, B246753-BSD1, S042940-CCV1, S043057-CCV1

Chloromethane

19K0940-01[MW-207S-20191113], 19K0940-02[MW-207D-20191113], 19K0940-03[MW-202S-20191113], 19K0940-04[MW-202D-20191113], 19K0940-05[MW-101S-20191113], 19K0940-06[MW-101S-20191113 FD], 19K0940-07[MW-101D-20191113], 19K0940-08[MW-201D-20191113], 19K0940-09[MW-216S-20191113], 19K0940-10[MW-216D-20191113], 19K0940-11[MW-217S-20191114], 19K0940-12[MW-217D-20191114], 19K0940-15[CW-01-20191114], 19K0940-16[CW-02-20191114], 19K0940-17[MW-112-20191114], B246557-BLK1, B246557-BS1, B246557-BSD1, S042940-CCV1

Dichlorodifluoromethane (Freon 12)

19K0940-01[MW-207S-20191113], 19K0940-02[MW-207D-20191113], 19K0940-03[MW-202S-20191113], 19K0940-04[MW-202D-20191113], 19K0940-05[MW-101S-20191113], 19K0940-06[MW-101S-20191113 FD], 19K0940-07[MW-101D-20191113], 19K0940-08[MW-201D-20191113], 19K0940-09[MW-216S-20191113], 19K0940-10[MW-216D-20191113], 19K0940-11[MW-217S-20191114], 19K0940-12[MW-217D-20191114], 19K0940-15[CW-01-20191114], 19K0940-16[CW-02-20191114], 19K0940-17[MW-112-20191114], B246557-BLK1, B246557-BS1, B246557-BSD1, S042940-CCV1

Naphthalene

19K0940-18[MW-209D-20191114], 19K0940-19[MW-218D-20191114], 19K0940-20[MW-218S-20191114], 19K0940-21[GZA-3-20191114], 19K0940-23[MW-109D-20191114], 19K0940-24[MW-116S-20191114], 19K0940-25[MW-116D-20191114], B246753-BLK1, B246753-BS1, B246753-BSD1, S043057-CCV1

trans-1,4-Dichloro-2-butene

19K0940-18[MW-209D-20191114], 19K0940-19[MW-218D-20191114], 19K0940-20[MW-218S-20191114], 19K0940-21[GZA-3-20191114], 19K0940-23[MW-109D-20191114], 19K0940-24[MW-116S-20191114], 19K0940-25[MW-116D-20191114], B246753-BLK1, B246753-BS1, B246753-BSD1, S043057-CCV1

V-20

Continuing calibration verification (CCV) 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:**Bromomethane**

B246753-BS1, B246753-BSD1, S043057-CCV1

Chloromethane

B246753-BS1, B246753-BSD1, S043057-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:**Carbon Disulfide**

B246557-BS1, B246557-BSD1

Z-01

Elevated reporting limits due to sample matrix.

Analyte & Samples(s) Qualified:

19K0940-03[MW-202S-20191113], 19K0940-07[MW-101D-20191113]

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 "Tod Kopycinski". The signature is written in a cursive style with a large, sweeping initial "T".

Tod E. Kopycinski
Laboratory Director

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-207S-20191113

Sampled: 11/13/2019 11:00

Sample ID: 19K0940-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
Bromomethane	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
Chloromethane	ND	2.0	µg/L	1	V-05	SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1	V-05	SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD

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Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-207S-20191113

Sampled: 11/13/2019 11:00

Sample ID: 19K0940-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:05	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	92.5	70-130	11/21/19 21:05
Toluene-d8	98.7	70-130	11/21/19 21:05
4-Bromofluorobenzene	100	70-130	11/21/19 21:05

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-207D-20191113

Sampled: 11/13/2019 11:30

Sample ID: 19K0940-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
Bromomethane	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
Chloromethane	ND	2.0	µg/L	1	V-05	SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1	V-05	SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-207D-20191113

Sampled: 11/13/2019 11:30

Sample ID: 19K0940-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
Tetrachloroethylene	1.4	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 21:36	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	93.0	70-130	11/21/19 21:36
Toluene-d8	99.9	70-130	11/21/19 21:36
4-Bromofluorobenzene	99.5	70-130	11/21/19 21:36

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-202S-20191113

Sampled: 11/13/2019 12:00

Sample ID: 19K0940-03

Sample Matrix: Ground Water

Sample Flags: Z-01

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	200	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
Acrylonitrile	ND	20	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
tert-Amyl Methyl Ether (TAME)	ND	2.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
Benzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
Bromobenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
Bromochloromethane	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
Bromodichloromethane	ND	2.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
Bromoform	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
Bromomethane	ND	20	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
2-Butanone (MEK)	ND	80	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
tert-Butyl Alcohol (TBA)	ND	80	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
n-Butylbenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
sec-Butylbenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
tert-Butylbenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	2.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
Carbon Disulfide	ND	20	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
Carbon Tetrachloride	ND	20	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
Chlorobenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
Chlorodibromomethane	ND	2.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
Chloroethane	ND	8.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
Chloroform	ND	8.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
Chloromethane	ND	8.0	µg/L	4	V-05	SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
2-Chlorotoluene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
4-Chlorotoluene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	20	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
1,2-Dibromoethane (EDB)	ND	2.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
Dibromomethane	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
1,2-Dichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
1,3-Dichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
1,4-Dichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
trans-1,4-Dichloro-2-butene	ND	8.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
Dichlorodifluoromethane (Freon 12)	ND	8.0	µg/L	4	V-05	SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
1,1-Dichloroethane	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
1,2-Dichloroethane	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
1,1-Dichloroethylene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
cis-1,2-Dichloroethylene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
trans-1,2-Dichloroethylene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
1,2-Dichloropropane	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
1,3-Dichloropropane	ND	2.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
2,2-Dichloropropane	ND	4.0	µg/L	4	V-05	SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
1,1-Dichloropropene	ND	8.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
cis-1,3-Dichloropropene	ND	2.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
trans-1,3-Dichloropropene	ND	2.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
Diethyl Ether	ND	8.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-202S-20191113

Sampled: 11/13/2019 12:00

Sample ID: 19K0940-03

Sample Matrix: Ground Water

Sample Flags: Z-01

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	2.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
1,4-Dioxane	ND	200	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
Ethylbenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
Hexachlorobutadiene	ND	2.4	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
2-Hexanone (MBK)	ND	40	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
Isopropylbenzene (Cumene)	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
p-Isopropyltoluene (p-Cymene)	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
Methyl Acetate	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
Methyl tert-Butyl Ether (MTBE)	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
Methyl Cyclohexane	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
Methylene Chloride	ND	20	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
4-Methyl-2-pentanone (MIBK)	ND	40	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
Naphthalene	ND	8.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
n-Propylbenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
Styrene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
1,1,1,2-Tetrachloroethane	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
1,1,2,2-Tetrachloroethane	ND	2.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
Tetrachloroethylene	13	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
Tetrahydrofuran	ND	40	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
Toluene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
1,2,3-Trichlorobenzene	ND	20	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
1,2,4-Trichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
1,3,5-Trichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
1,1,1-Trichloroethane	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
1,1,2-Trichloroethane	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
Trichloroethylene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
Trichlorofluoromethane (Freon 11)	ND	8.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
1,2,3-Trichloropropane	ND	8.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
1,2,4-Trimethylbenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
1,3,5-Trimethylbenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
Vinyl Chloride	ND	8.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
m+p Xylene	ND	8.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
o-Xylene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD
Xylenes (total)	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 22:07	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	93.1	70-130	11/21/19 22:07
Toluene-d8	99.5	70-130	11/21/19 22:07
4-Bromofluorobenzene	100	70-130	11/21/19 22:07

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-202D-20191113

Sampled: 11/13/2019 12:30

Sample ID: 19K0940-04

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
Bromomethane	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
Chloromethane	ND	2.0	µg/L	1	V-05	SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1	V-05	SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-202D-20191113

Sampled: 11/13/2019 12:30

Sample ID: 19K0940-04

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
Tetrachloroethylene	7.9	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 22:37	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	91.1	70-130	11/21/19 22:37
Toluene-d8	100	70-130	11/21/19 22:37
4-Bromofluorobenzene	98.3	70-130	11/21/19 22:37

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-101S-20191113

Sampled: 11/13/2019 13:00

Sample ID: 19K0940-05

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	1200	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
Acrylonitrile	ND	120	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
tert-Amyl Methyl Ether (TAME)	ND	12	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
Benzene	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
Bromobenzene	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
Bromochloromethane	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
Bromodichloromethane	ND	12	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
Bromoform	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
Bromomethane	ND	120	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
2-Butanone (MEK)	ND	500	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
tert-Butyl Alcohol (TBA)	ND	500	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
n-Butylbenzene	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
sec-Butylbenzene	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
tert-Butylbenzene	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	12	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
Carbon Disulfide	ND	120	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
Carbon Tetrachloride	ND	120	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
Chlorobenzene	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
Chlorodibromomethane	ND	12	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
Chloroethane	ND	50	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
Chloroform	ND	50	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
Chloromethane	ND	50	µg/L	25	V-05	SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
2-Chlorotoluene	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
4-Chlorotoluene	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	120	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
1,2-Dibromoethane (EDB)	ND	12	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
Dibromomethane	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
1,2-Dichlorobenzene	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
1,3-Dichlorobenzene	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
1,4-Dichlorobenzene	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
trans-1,4-Dichloro-2-butene	ND	50	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
Dichlorodifluoromethane (Freon 12)	ND	50	µg/L	25	V-05	SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
1,1-Dichloroethane	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
1,2-Dichloroethane	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
1,1-Dichloroethylene	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
cis-1,2-Dichloroethylene	1800	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
trans-1,2-Dichloroethylene	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
1,2-Dichloropropane	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
1,3-Dichloropropane	ND	12	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
2,2-Dichloropropane	ND	25	µg/L	25	V-05	SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
1,1-Dichloropropene	ND	50	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
cis-1,3-Dichloropropene	ND	12	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
trans-1,3-Dichloropropene	ND	12	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
Diethyl Ether	ND	50	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-101S-20191113

Sampled: 11/13/2019 13:00

Sample ID: 19K0940-05

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	12	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
1,4-Dioxane	ND	1200	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
Ethylbenzene	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
Hexachlorobutadiene	ND	15	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
2-Hexanone (MBK)	ND	250	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
Isopropylbenzene (Cumene)	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
p-Isopropyltoluene (p-Cymene)	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
Methyl Acetate	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
Methyl tert-Butyl Ether (MTBE)	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
Methyl Cyclohexane	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
Methylene Chloride	ND	120	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
4-Methyl-2-pentanone (MIBK)	ND	250	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
Naphthalene	ND	50	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
n-Propylbenzene	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
Styrene	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
1,1,1,2-Tetrachloroethane	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
1,1,2,2-Tetrachloroethane	ND	12	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
Tetrachloroethylene	380	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
Tetrahydrofuran	ND	250	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
Toluene	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
1,2,3-Trichlorobenzene	ND	120	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
1,2,4-Trichlorobenzene	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
1,3,5-Trichlorobenzene	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
1,1,1-Trichloroethane	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
1,1,2-Trichloroethane	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
Trichloroethylene	44	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
Trichlorofluoromethane (Freon 11)	ND	50	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
1,2,3-Trichloropropane	ND	50	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
1,2,4-Trimethylbenzene	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
1,3,5-Trimethylbenzene	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
Vinyl Chloride	84	50	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
m+p Xylene	ND	50	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
o-Xylene	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD
Xylenes (total)	ND	25	µg/L	25		SW-846 8260C-D	11/20/19	11/22/19 1:41	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	93.5	70-130	11/22/19 1:41
Toluene-d8	102	70-130	11/22/19 1:41
4-Bromofluorobenzene	99.1	70-130	11/22/19 1:41

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-101S-20191113 FD

Sampled: 11/13/2019 13:00

Sample ID: 19K0940-06

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	1000	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
Acrylonitrile	ND	100	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
tert-Amyl Methyl Ether (TAME)	ND	10	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
Benzene	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
Bromobenzene	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
Bromochloromethane	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
Bromodichloromethane	ND	10	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
Bromoform	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
Bromomethane	ND	100	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
2-Butanone (MEK)	ND	400	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
tert-Butyl Alcohol (TBA)	ND	400	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
n-Butylbenzene	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
sec-Butylbenzene	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
tert-Butylbenzene	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	10	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
Carbon Disulfide	ND	100	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
Carbon Tetrachloride	ND	100	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
Chlorobenzene	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
Chlorodibromomethane	ND	10	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
Chloroethane	ND	40	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
Chloroform	ND	40	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
Chloromethane	ND	40	µg/L	20	V-05	SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
2-Chlorotoluene	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
4-Chlorotoluene	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	100	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
1,2-Dibromoethane (EDB)	ND	10	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
Dibromomethane	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
1,2-Dichlorobenzene	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
1,3-Dichlorobenzene	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
1,4-Dichlorobenzene	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
trans-1,4-Dichloro-2-butene	ND	40	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
Dichlorodifluoromethane (Freon 12)	ND	40	µg/L	20	V-05	SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
1,1-Dichloroethane	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
1,2-Dichloroethane	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
1,1-Dichloroethylene	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
cis-1,2-Dichloroethylene	1700	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
trans-1,2-Dichloroethylene	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
1,2-Dichloropropane	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
1,3-Dichloropropane	ND	10	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
2,2-Dichloropropane	ND	20	µg/L	20	V-05	SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
1,1-Dichloropropene	ND	40	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
cis-1,3-Dichloropropene	ND	10	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
trans-1,3-Dichloropropene	ND	10	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
Diethyl Ether	ND	40	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-101S-20191113 FD

Sampled: 11/13/2019 13:00

Sample ID: 19K0940-06

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	10	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
1,4-Dioxane	ND	1000	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
Ethylbenzene	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
Hexachlorobutadiene	ND	12	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
2-Hexanone (MBK)	ND	200	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
Isopropylbenzene (Cumene)	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
p-Isopropyltoluene (p-Cymene)	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
Methyl Acetate	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
Methyl tert-Butyl Ether (MTBE)	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
Methyl Cyclohexane	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
Methylene Chloride	ND	100	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
4-Methyl-2-pentanone (MIBK)	ND	200	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
Naphthalene	ND	40	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
n-Propylbenzene	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
Styrene	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
1,1,1,2-Tetrachloroethane	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
1,1,2,2-Tetrachloroethane	ND	10	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
Tetrachloroethylene	320	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
Tetrahydrofuran	ND	200	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
Toluene	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
1,2,3-Trichlorobenzene	ND	100	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
1,2,4-Trichlorobenzene	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
1,3,5-Trichlorobenzene	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
1,1,1-Trichloroethane	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
1,1,2-Trichloroethane	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
Trichloroethylene	42	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
Trichlorofluoromethane (Freon 11)	ND	40	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
1,2,3-Trichloropropane	ND	40	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
1,2,4-Trimethylbenzene	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
1,3,5-Trimethylbenzene	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
Vinyl Chloride	75	40	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
m+p Xylene	ND	40	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
o-Xylene	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD
Xylenes (total)	ND	20	µg/L	20		SW-846 8260C-D	11/20/19	11/22/19 2:12	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	94.6	70-130	11/22/19 2:12
Toluene-d8	100	70-130	11/22/19 2:12
4-Bromofluorobenzene	98.2	70-130	11/22/19 2:12

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-101D-20191113

Sampled: 11/13/2019 13:30

Sample ID: 19K0940-07

Sample Matrix: Ground Water

Sample Flags: Z-01

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	200	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
Acrylonitrile	ND	20	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
tert-Amyl Methyl Ether (TAME)	ND	2.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
Benzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
Bromobenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
Bromochloromethane	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
Bromodichloromethane	ND	2.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
Bromoform	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
Bromomethane	ND	20	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
2-Butanone (MEK)	ND	80	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
tert-Butyl Alcohol (TBA)	ND	80	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
n-Butylbenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
sec-Butylbenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
tert-Butylbenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	2.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
Carbon Disulfide	ND	20	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
Carbon Tetrachloride	ND	20	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
Chlorobenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
Chlorodibromomethane	ND	2.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
Chloroethane	ND	8.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
Chloroform	ND	8.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
Chloromethane	ND	8.0	µg/L	4	V-05	SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
2-Chlorotoluene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
4-Chlorotoluene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	20	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
1,2-Dibromoethane (EDB)	ND	2.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
Dibromomethane	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
1,2-Dichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
1,3-Dichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
1,4-Dichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
trans-1,4-Dichloro-2-butene	ND	8.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
Dichlorodifluoromethane (Freon 12)	ND	8.0	µg/L	4	V-05	SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
1,1-Dichloroethane	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
1,2-Dichloroethane	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
1,1-Dichloroethylene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
cis-1,2-Dichloroethylene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
trans-1,2-Dichloroethylene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
1,2-Dichloropropane	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
1,3-Dichloropropane	ND	2.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
2,2-Dichloropropane	ND	4.0	µg/L	4	V-05	SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
1,1-Dichloropropene	ND	8.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
cis-1,3-Dichloropropene	ND	2.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
trans-1,3-Dichloropropene	ND	2.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
Diethyl Ether	ND	8.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-101D-20191113

Sampled: 11/13/2019 13:30

Sample ID: 19K0940-07

Sample Matrix: Ground Water

Sample Flags: Z-01

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	2.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
1,4-Dioxane	ND	200	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
Ethylbenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
Hexachlorobutadiene	ND	2.4	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
2-Hexanone (MBK)	ND	40	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
Isopropylbenzene (Cumene)	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
p-Isopropyltoluene (p-Cymene)	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
Methyl Acetate	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
Methyl tert-Butyl Ether (MTBE)	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
Methyl Cyclohexane	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
Methylene Chloride	ND	20	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
4-Methyl-2-pentanone (MIBK)	ND	40	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
Naphthalene	ND	8.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
n-Propylbenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
Styrene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
1,1,1,2-Tetrachloroethane	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
1,1,2,2-Tetrachloroethane	ND	2.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
Tetrachloroethylene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
Tetrahydrofuran	ND	40	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
Toluene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
1,2,3-Trichlorobenzene	ND	20	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
1,2,4-Trichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
1,3,5-Trichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
1,1,1-Trichloroethane	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
1,1,2-Trichloroethane	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
Trichloroethylene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
Trichlorofluoromethane (Freon 11)	ND	8.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
1,2,3-Trichloropropane	ND	8.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
1,2,4-Trimethylbenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
1,3,5-Trimethylbenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
Vinyl Chloride	ND	8.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
m+p Xylene	ND	8.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
o-Xylene	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD
Xylenes (total)	ND	4.0	µg/L	4		SW-846 8260C-D	11/20/19	11/21/19 23:08	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	90.9	70-130	11/21/19 23:08
Toluene-d8	100	70-130	11/21/19 23:08
4-Bromofluorobenzene	98.2	70-130	11/21/19 23:08

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-201D-20191113

Sampled: 11/13/2019 14:00

Sample ID: 19K0940-08

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	2500	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
Acrylonitrile	ND	250	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
tert-Amyl Methyl Ether (TAME)	ND	25	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
Benzene	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
Bromobenzene	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
Bromochloromethane	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
Bromodichloromethane	ND	25	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
Bromoform	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
Bromomethane	ND	250	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
2-Butanone (MEK)	ND	1000	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
tert-Butyl Alcohol (TBA)	ND	1000	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
n-Butylbenzene	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
sec-Butylbenzene	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
tert-Butylbenzene	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	25	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
Carbon Disulfide	ND	250	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
Carbon Tetrachloride	ND	250	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
Chlorobenzene	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
Chlorodibromomethane	ND	25	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
Chloroethane	ND	100	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
Chloroform	ND	100	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
Chloromethane	ND	100	µg/L	50	V-05	SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
2-Chlorotoluene	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
4-Chlorotoluene	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	250	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
1,2-Dibromoethane (EDB)	ND	25	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
Dibromomethane	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
1,2-Dichlorobenzene	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
1,3-Dichlorobenzene	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
1,4-Dichlorobenzene	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
trans-1,4-Dichloro-2-butene	ND	100	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
Dichlorodifluoromethane (Freon 12)	ND	100	µg/L	50	V-05	SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
1,1-Dichloroethane	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
1,2-Dichloroethane	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
1,1-Dichloroethylene	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
cis-1,2-Dichloroethylene	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
trans-1,2-Dichloroethylene	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
1,2-Dichloropropane	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
1,3-Dichloropropane	ND	25	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
2,2-Dichloropropane	ND	50	µg/L	50	V-05	SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
1,1-Dichloropropene	ND	100	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
cis-1,3-Dichloropropene	ND	25	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
trans-1,3-Dichloropropene	ND	25	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
Diethyl Ether	ND	100	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-201D-20191113

Sampled: 11/13/2019 14:00

Sample ID: 19K0940-08

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	25	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
1,4-Dioxane	ND	2500	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
Ethylbenzene	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
Hexachlorobutadiene	ND	30	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
2-Hexanone (MBK)	ND	500	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
Isopropylbenzene (Cumene)	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
p-Isopropyltoluene (p-Cymene)	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
Methyl Acetate	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
Methyl tert-Butyl Ether (MTBE)	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
Methyl Cyclohexane	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
Methylene Chloride	ND	250	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
4-Methyl-2-pentanone (MIBK)	ND	500	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
Naphthalene	ND	100	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
n-Propylbenzene	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
Styrene	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
1,1,1,2-Tetrachloroethane	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
1,1,2,2-Tetrachloroethane	ND	25	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
Tetrachloroethylene	4700	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
Tetrahydrofuran	ND	500	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
Toluene	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
1,2,3-Trichlorobenzene	ND	250	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
1,2,4-Trichlorobenzene	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
1,3,5-Trichlorobenzene	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
1,1,1-Trichloroethane	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
1,1,2-Trichloroethane	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
Trichloroethylene	440	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
Trichlorofluoromethane (Freon 11)	ND	100	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
1,2,3-Trichloropropane	ND	100	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
1,2,4-Trimethylbenzene	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
1,3,5-Trimethylbenzene	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
Vinyl Chloride	ND	100	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
m+p Xylene	ND	100	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
o-Xylene	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD
Xylenes (total)	ND	50	µg/L	50		SW-846 8260C-D	11/20/19	11/22/19 4:45	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	95.1	70-130	11/22/19 4:45
Toluene-d8	99.3	70-130	11/22/19 4:45
4-Bromofluorobenzene	99.0	70-130	11/22/19 4:45

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-216S-20191113

Sampled: 11/13/2019 14:30

Sample ID: 19K0940-09

Sample Matrix: Ground Water

Sample Flags: RL-13

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	100	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
Acrylonitrile	ND	10	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
tert-Amyl Methyl Ether (TAME)	ND	1.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
Benzene	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
Bromobenzene	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
Bromochloromethane	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
Bromodichloromethane	ND	1.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
Bromoform	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
Bromomethane	ND	10	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
2-Butanone (MEK)	ND	40	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
tert-Butyl Alcohol (TBA)	ND	40	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
n-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
sec-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
tert-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	1.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
Carbon Disulfide	ND	10	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
Carbon Tetrachloride	ND	10	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
Chlorobenzene	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
Chlorodibromomethane	ND	1.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
Chloroethane	ND	4.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
Chloroform	ND	4.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
Chloromethane	ND	4.0	µg/L	2	V-05	SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
2-Chlorotoluene	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
4-Chlorotoluene	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
Dibromomethane	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
1,2-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
1,3-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
1,4-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
trans-1,4-Dichloro-2-butene	ND	4.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
Dichlorodifluoromethane (Freon 12)	ND	4.0	µg/L	2	V-05	SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
1,1-Dichloroethane	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
1,2-Dichloroethane	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
1,1-Dichloroethylene	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
cis-1,2-Dichloroethylene	67	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
trans-1,2-Dichloroethylene	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
1,2-Dichloropropane	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
1,3-Dichloropropane	ND	1.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
2,2-Dichloropropane	ND	2.0	µg/L	2	V-05	SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
1,1-Dichloropropene	ND	4.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
cis-1,3-Dichloropropene	ND	1.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
trans-1,3-Dichloropropene	ND	1.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
Diethyl Ether	ND	4.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-216S-20191113

Sampled: 11/13/2019 14:30

Sample ID: 19K0940-09

Sample Matrix: Ground Water

Sample Flags: RL-13

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	1.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
1,4-Dioxane	ND	100	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
Ethylbenzene	2.5	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
Hexachlorobutadiene	ND	1.2	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
2-Hexanone (MBK)	ND	20	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
Isopropylbenzene (Cumene)	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
p-Isopropyltoluene (p-Cymene)	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
Methyl Acetate	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
Methyl tert-Butyl Ether (MTBE)	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
Methyl Cyclohexane	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
Methylene Chloride	ND	10	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
4-Methyl-2-pentanone (MIBK)	ND	20	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
Naphthalene	20	4.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
n-Propylbenzene	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
Styrene	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
Tetrachloroethylene	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
Tetrahydrofuran	ND	20	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
Toluene	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
1,2,3-Trichlorobenzene	ND	10	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
1,2,4-Trichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
1,3,5-Trichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
1,1,1-Trichloroethane	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
1,1,2-Trichloroethane	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
Trichloroethylene	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
Trichlorofluoromethane (Freon 11)	ND	4.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
1,2,3-Trichloropropane	ND	4.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
1,2,4-Trimethylbenzene	9.2	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
1,3,5-Trimethylbenzene	3.6	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
Vinyl Chloride	ND	4.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
m+p Xylene	ND	4.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
o-Xylene	8.2	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD
Xylenes (total)	8.2	2.0	µg/L	2		SW-846 8260C-D	11/20/19	11/22/19 1:11	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	92.4	70-130	11/22/19 1:11
Toluene-d8	101	70-130	11/22/19 1:11
4-Bromofluorobenzene	98.7	70-130	11/22/19 1:11

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-216D-20191113

Sampled: 11/13/2019 15:00

Sample ID: 19K0940-10

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
Bromomethane	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
Chloromethane	ND	2.0	µg/L	1	V-05	SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1	V-05	SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-216D-20191113

Sampled: 11/13/2019 15:00

Sample ID: 19K0940-10

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
Tetrachloroethylene	5.8	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 3:44	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	93.6	70-130	11/22/19 3:44
Toluene-d8	100	70-130	11/22/19 3:44
4-Bromofluorobenzene	98.0	70-130	11/22/19 3:44

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-217S-20191114

Sampled: 11/14/2019 06:30

Sample ID: 19K0940-11

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
Bromomethane	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
Chloromethane	ND	2.0	µg/L	1	V-05	SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1	V-05	SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-217S-20191114

Sampled: 11/14/2019 06:30

Sample ID: 19K0940-11

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
Tetrachloroethylene	5.8	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
Trichloroethylene	1.5	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/21/19 23:39	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	91.1	70-130	11/21/19 23:39
Toluene-d8	100	70-130	11/21/19 23:39
4-Bromofluorobenzene	98.6	70-130	11/21/19 23:39

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-217D-20191114

Sampled: 11/14/2019 07:00

Sample ID: 19K0940-12

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
Bromomethane	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
Chloromethane	ND	2.0	µg/L	1	V-05	SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1	V-05	SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
cis-1,2-Dichloroethylene	1.6	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-217D-20191114

Sampled: 11/14/2019 07:00

Sample ID: 19K0940-12

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
Tetrachloroethylene	3.1	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
Trichloroethylene	3.7	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:09	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	92.4	70-130	11/22/19 0:09
Toluene-d8	100	70-130	11/22/19 0:09
4-Bromofluorobenzene	98.7	70-130	11/22/19 0:09

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: CW-06-20191114

Sampled: 11/14/2019 08:00

Sample ID: 19K0940-13

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Transformer Oil	8.6	0.19	mg/L	1	Z-01a	SW-846 8015C	11/21/19	11/24/19 15:27	RMW
Surrogates		% Recovery			Recovery Limits				
2-Fluorobiphenyl		71.6			40-140			11/24/19 15:27	

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: CW-06-20191114 FD

Sampled: 11/14/2019 08:00

Sample ID: 19K0940-14

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Transformer Oil	8.7	0.19	mg/L	1	Z-01a	SW-846 8015C	11/21/19	11/24/19 15:48	RMW
Surrogates		% Recovery			Recovery Limits				
2-Fluorobiphenyl		70.5			40-140			11/24/19 15:48	

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: CW-01-20191114

Sampled: 11/14/2019 09:00

Sample ID: 19K0940-15

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	500	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
Acrylonitrile	ND	50	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
tert-Amyl Methyl Ether (TAME)	ND	5.0	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
Benzene	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
Bromobenzene	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
Bromochloromethane	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
Bromodichloromethane	ND	5.0	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
Bromoform	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
Bromomethane	ND	50	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
2-Butanone (MEK)	ND	200	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
tert-Butyl Alcohol (TBA)	ND	200	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
n-Butylbenzene	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
sec-Butylbenzene	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
tert-Butylbenzene	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	5.0	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
Carbon Disulfide	ND	50	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
Carbon Tetrachloride	ND	50	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
Chlorobenzene	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
Chlorodibromomethane	ND	5.0	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
Chloroethane	ND	20	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
Chloroform	ND	20	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
Chloromethane	ND	20	µg/L	10	V-05	SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
2-Chlorotoluene	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
4-Chlorotoluene	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	50	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
1,2-Dibromoethane (EDB)	ND	5.0	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
Dibromomethane	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
1,2-Dichlorobenzene	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
1,3-Dichlorobenzene	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
1,4-Dichlorobenzene	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
trans-1,4-Dichloro-2-butene	ND	20	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
Dichlorodifluoromethane (Freon 12)	ND	20	µg/L	10	V-05	SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
1,1-Dichloroethane	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
1,2-Dichloroethane	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
1,1-Dichloroethylene	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
cis-1,2-Dichloroethylene	590	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
trans-1,2-Dichloroethylene	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
1,2-Dichloropropane	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
1,3-Dichloropropane	ND	5.0	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
2,2-Dichloropropane	ND	10	µg/L	10	V-05	SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
1,1-Dichloropropene	ND	20	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
cis-1,3-Dichloropropene	ND	5.0	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
trans-1,3-Dichloropropene	ND	5.0	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
Diethyl Ether	ND	20	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: CW-01-20191114

Sampled: 11/14/2019 09:00

Sample ID: 19K0940-15

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	5.0	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
1,4-Dioxane	ND	500	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
Ethylbenzene	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
Hexachlorobutadiene	ND	6.0	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
2-Hexanone (MBK)	ND	100	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
Isopropylbenzene (Cumene)	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
p-Isopropyltoluene (p-Cymene)	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
Methyl Acetate	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
Methyl tert-Butyl Ether (MTBE)	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
Methyl Cyclohexane	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
Methylene Chloride	ND	50	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
4-Methyl-2-pentanone (MIBK)	ND	100	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
Naphthalene	ND	20	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
n-Propylbenzene	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
Styrene	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
1,1,1,2-Tetrachloroethane	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
1,1,2,2-Tetrachloroethane	ND	5.0	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
Tetrachloroethylene	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
Tetrahydrofuran	ND	100	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
Toluene	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
1,2,3-Trichlorobenzene	ND	50	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
1,2,4-Trichlorobenzene	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
1,3,5-Trichlorobenzene	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
1,1,1-Trichloroethane	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
1,1,2-Trichloroethane	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
Trichloroethylene	82	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
Trichlorofluoromethane (Freon 11)	ND	20	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
1,2,3-Trichloropropane	ND	20	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
1,2,4-Trimethylbenzene	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
1,3,5-Trimethylbenzene	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
Vinyl Chloride	ND	20	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
m+p Xylene	ND	20	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
o-Xylene	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD
Xylenes (total)	ND	10	µg/L	10		SW-846 8260C-D	11/20/19	11/22/19 2:42	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	93.1	70-130	11/22/19 2:42
Toluene-d8	99.6	70-130	11/22/19 2:42
4-Bromofluorobenzene	100	70-130	11/22/19 2:42

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: CW-02-20191114

Sampled: 11/14/2019 09:30

Sample ID: 19K0940-16

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
Bromomethane	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
Chloromethane	ND	2.0	µg/L	1	V-05	SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1	V-05	SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: CW-02-20191114

Sampled: 11/14/2019 09:30

Sample ID: 19K0940-16

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
1,1,1-Trichloroethane	1.4	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 0:40	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	92.9	70-130	11/22/19 0:40
Toluene-d8	101	70-130	11/22/19 0:40
4-Bromofluorobenzene	100	70-130	11/22/19 0:40

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-112-20191114

Sampled: 11/14/2019 10:00

Sample ID: 19K0940-17

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
Bromomethane	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
Chloromethane	ND	2.0	µg/L	1	V-05	SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1	V-05	SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-112-20191114

Sampled: 11/14/2019 10:00

Sample ID: 19K0940-17

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
Tetrachloroethylene	67	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
Trichloroethylene	7.8	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260C-D	11/20/19	11/22/19 4:15	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	93.1	70-130	11/22/19 4:15
Toluene-d8	101	70-130	11/22/19 4:15
4-Bromofluorobenzene	100	70-130	11/22/19 4:15

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-209D-20191114

Sampled: 11/14/2019 10:30

Sample ID: 19K0940-18

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	200	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
Acrylonitrile	ND	20	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
tert-Amyl Methyl Ether (TAME)	ND	2.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
Benzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
Bromobenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
Bromochloromethane	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
Bromodichloromethane	ND	2.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
Bromoform	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
Bromomethane	ND	8.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
2-Butanone (MEK)	ND	80	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
tert-Butyl Alcohol (TBA)	ND	80	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
n-Butylbenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
sec-Butylbenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
tert-Butylbenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	2.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
Carbon Disulfide	ND	20	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
Carbon Tetrachloride	ND	20	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
Chlorobenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
Chlorodibromomethane	ND	2.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
Chloroethane	ND	8.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
Chloroform	ND	8.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
Chloromethane	ND	8.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
2-Chlorotoluene	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
4-Chlorotoluene	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	20	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
1,2-Dibromoethane (EDB)	ND	2.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
Dibromomethane	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
1,2-Dichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
1,3-Dichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
1,4-Dichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
trans-1,4-Dichloro-2-butene	ND	8.0	µg/L	4	V-05	SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
Dichlorodifluoromethane (Freon 12)	ND	8.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
1,1-Dichloroethane	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
1,2-Dichloroethane	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
1,1-Dichloroethylene	6.1	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
cis-1,2-Dichloroethylene	50	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
trans-1,2-Dichloroethylene	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
1,2-Dichloropropane	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
1,3-Dichloropropane	ND	2.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
2,2-Dichloropropane	ND	4.0	µg/L	4	V-05	SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
1,1-Dichloropropene	ND	8.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
cis-1,3-Dichloropropene	ND	2.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
trans-1,3-Dichloropropene	ND	2.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
Diethyl Ether	ND	8.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-209D-20191114

Sampled: 11/14/2019 10:30

Sample ID: 19K0940-18

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	2.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
1,4-Dioxane	ND	200	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
Ethylbenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
Hexachlorobutadiene	ND	2.4	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
2-Hexanone (MBK)	ND	40	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
Isopropylbenzene (Cumene)	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
p-Isopropyltoluene (p-Cymene)	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
Methyl Acetate	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
Methyl tert-Butyl Ether (MTBE)	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
Methyl Cyclohexane	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
Methylene Chloride	ND	20	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
4-Methyl-2-pentanone (MIBK)	ND	40	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
Naphthalene	ND	8.0	µg/L	4	V-05	SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
n-Propylbenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
Styrene	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
1,1,1,2-Tetrachloroethane	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
1,1,2,2-Tetrachloroethane	ND	2.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
Tetrachloroethylene	200	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
Tetrahydrofuran	ND	40	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
Toluene	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
1,2,3-Trichlorobenzene	ND	20	µg/L	4	L-04, V-05	SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
1,2,4-Trichlorobenzene	ND	4.0	µg/L	4	L-04, V-05	SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
1,3,5-Trichlorobenzene	ND	4.0	µg/L	4	V-05	SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
1,1,1-Trichloroethane	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
1,1,2-Trichloroethane	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
Trichloroethylene	41	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
Trichlorofluoromethane (Freon 11)	ND	8.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
1,2,3-Trichloropropane	ND	8.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
1,2,4-Trimethylbenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
1,3,5-Trimethylbenzene	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
Vinyl Chloride	ND	8.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
m+p Xylene	ND	8.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
o-Xylene	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF
Xylenes (total)	ND	4.0	µg/L	4		SW-846 8260C-D	11/22/19	11/24/19 15:38	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	94.9	70-130	11/24/19 15:38
Toluene-d8	97.6	70-130	11/24/19 15:38
4-Bromofluorobenzene	94.2	70-130	11/24/19 15:38

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-218D-20191114

Sampled: 11/14/2019 11:30

Sample ID: 19K0940-19

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	2000	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
Acrylonitrile	ND	200	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
tert-Amyl Methyl Ether (TAME)	ND	20	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
Benzene	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
Bromobenzene	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
Bromochloromethane	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
Bromodichloromethane	ND	20	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
Bromoform	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
Bromomethane	ND	80	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
2-Butanone (MEK)	ND	800	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
tert-Butyl Alcohol (TBA)	ND	800	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
n-Butylbenzene	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
sec-Butylbenzene	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
tert-Butylbenzene	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	20	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
Carbon Disulfide	ND	200	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
Carbon Tetrachloride	ND	200	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
Chlorobenzene	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
Chlorodibromomethane	ND	20	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
Chloroethane	ND	80	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
Chloroform	ND	80	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
Chloromethane	ND	80	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
2-Chlorotoluene	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
4-Chlorotoluene	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	200	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
1,2-Dibromoethane (EDB)	ND	20	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
Dibromomethane	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
1,2-Dichlorobenzene	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
1,3-Dichlorobenzene	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
1,4-Dichlorobenzene	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
trans-1,4-Dichloro-2-butene	ND	80	µg/L	40	V-05	SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
Dichlorodifluoromethane (Freon 12)	ND	80	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
1,1-Dichloroethane	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
1,2-Dichloroethane	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
1,1-Dichloroethylene	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
cis-1,2-Dichloroethylene	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
trans-1,2-Dichloroethylene	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
1,2-Dichloropropane	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
1,3-Dichloropropane	ND	20	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
2,2-Dichloropropane	ND	40	µg/L	40	V-05	SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
1,1-Dichloropropene	ND	80	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
cis-1,3-Dichloropropene	ND	20	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
trans-1,3-Dichloropropene	ND	20	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
Diethyl Ether	ND	80	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-218D-20191114

Sampled: 11/14/2019 11:30

Sample ID: 19K0940-19

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	20	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
1,4-Dioxane	ND	2000	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
Ethylbenzene	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
Hexachlorobutadiene	ND	24	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
2-Hexanone (MBK)	ND	400	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
Isopropylbenzene (Cumene)	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
p-Isopropyltoluene (p-Cymene)	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
Methyl Acetate	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
Methyl tert-Butyl Ether (MTBE)	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
Methyl Cyclohexane	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
Methylene Chloride	ND	200	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
4-Methyl-2-pentanone (MIBK)	ND	400	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
Naphthalene	ND	80	µg/L	40	V-05	SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
n-Propylbenzene	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
Styrene	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
1,1,1,2-Tetrachloroethane	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
1,1,2,2-Tetrachloroethane	ND	20	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
Tetrachloroethylene	1600	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
Tetrahydrofuran	ND	400	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
Toluene	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
1,2,3-Trichlorobenzene	ND	200	µg/L	40	L-04, V-05	SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
1,2,4-Trichlorobenzene	ND	40	µg/L	40	L-04, V-05	SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
1,3,5-Trichlorobenzene	ND	40	µg/L	40	V-05	SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
1,1,1-Trichloroethane	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
1,1,2-Trichloroethane	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
Trichloroethylene	94	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
Trichlorofluoromethane (Freon 11)	ND	80	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
1,2,3-Trichloropropane	ND	80	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
1,2,4-Trimethylbenzene	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
1,3,5-Trimethylbenzene	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
Vinyl Chloride	ND	80	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
m+p Xylene	ND	80	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
o-Xylene	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF
Xylenes (total)	ND	40	µg/L	40		SW-846 8260C-D	11/22/19	11/24/19 16:05	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	96.6	70-130	11/24/19 16:05
Toluene-d8	97.8	70-130	11/24/19 16:05
4-Bromofluorobenzene	92.0	70-130	11/24/19 16:05

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-218S-20191114

Sampled: 11/14/2019 12:00

Sample ID: 19K0940-20

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
Bromoform	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	V-05	SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-218S-20191114

Sampled: 11/14/2019 12:00

Sample ID: 19K0940-20

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
Naphthalene	ND	2.0	µg/L	1	V-05	SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
Tetrachloroethylene	26	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1	L-04, V-05	SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1	L-04, V-05	SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1	V-05	SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 15:12	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	97.8	70-130	11/24/19 15:12
Toluene-d8	96.8	70-130	11/24/19 15:12
4-Bromofluorobenzene	91.0	70-130	11/24/19 15:12

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: GZA-3-20191114

Sampled: 11/14/2019 13:00

Sample ID: 19K0940-21

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
Bromoform	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	V-05	SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: GZA-3-20191114

Sampled: 11/14/2019 13:00

Sample ID: 19K0940-21

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
Naphthalene	ND	2.0	µg/L	1	V-05	SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1	L-04, V-05	SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1	L-04, V-05	SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1	V-05	SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
Vinyl Chloride	10	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:20	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	83.6	70-130	11/24/19 10:20
Toluene-d8	127	70-130	11/24/19 10:20
4-Bromofluorobenzene	93.6	70-130	11/24/19 10:20

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: GZA-3-20191114

Sampled: 11/14/2019 13:00

Sample ID: 19K0940-21

Sample Matrix: Ground Water

Metals Analyses (Dissolved)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Lead	ND	0.50	µg/L	1		SW-846 6020B	11/23/19	11/24/19 16:27	MJH

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: GZA-3-20191114 FD

Sampled: 11/14/2019 13:00

Sample ID: 19K0940-22

Sample Matrix: Ground Water

Metals Analyses (Dissolved)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Lead	ND	0.50	µg/L	1		SW-846 6020B	11/23/19	11/24/19 16:30	MJH

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-109D-20191114

Sampled: 11/14/2019 13:45

Sample ID: 19K0940-23

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
Bromoform	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	V-05	SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-109D-20191114

Sampled: 11/14/2019 13:45

Sample ID: 19K0940-23

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
Naphthalene	ND	2.0	µg/L	1	V-05	SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1	L-04, V-05	SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1	L-04, V-05	SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1	V-05	SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
Trichloroethylene	1.0	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 10:46	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	94.4	70-130	11/24/19 10:46
Toluene-d8	98.5	70-130	11/24/19 10:46
4-Bromofluorobenzene	94.6	70-130	11/24/19 10:46

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-109D-20191114

Sampled: 11/14/2019 13:45

Sample ID: 19K0940-23

Sample Matrix: Ground Water

Metals Analyses (Dissolved)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Lead	ND	0.50	µg/L	1		SW-846 6020B	11/23/19	11/24/19 16:33	MJH

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-116S-20191114

Sampled: 11/14/2019 14:30

Sample ID: 19K0940-24

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
Bromoform	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	V-05	SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-116S-20191114

Sampled: 11/14/2019 14:30

Sample ID: 19K0940-24

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
Naphthalene	ND	2.0	µg/L	1	V-05	SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1	L-04, V-05	SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1	L-04, V-05	SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1	V-05	SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:14	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	95.7	70-130	11/24/19 11:14
Toluene-d8	97.6	70-130	11/24/19 11:14
4-Bromofluorobenzene	92.7	70-130	11/24/19 11:14

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

Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-116D-20191114

Sampled: 11/14/2019 15:00

Sample ID: 19K0940-25

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
Bromoform	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	V-05	SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF

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Project Location: Providence, RI

Sample Description:

Work Order: 19K0940

Date Received: 11/15/2019

Field Sample #: MW-116D-20191114

Sampled: 11/14/2019 15:00

Sample ID: 19K0940-25

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
Naphthalene	ND	2.0	µg/L	1	V-05	SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1	L-04, V-05	SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1	L-04, V-05	SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1	V-05	SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260C-D	11/22/19	11/24/19 11:40	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	97.0	70-130	11/24/19 11:40
Toluene-d8	97.0	70-130	11/24/19 11:40
4-Bromofluorobenzene	92.8	70-130	11/24/19 11:40

Sample Extraction Data

Prep Method: SW-846 3005A Dissolved-SW-846 6020B

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
19K0940-21 [GZA-3-20191114]	B246855	10.0	10.0	11/23/19
19K0940-22 [GZA-3-20191114 FD]	B246855	10.0	10.0	11/23/19
19K0940-23 [MW-109D-20191114]	B246855	10.0	10.0	11/23/19

Prep Method: SW-846 3510C-SW-846 8015C

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
19K0940-13 [CW-06-20191114]	B246654	1040	1.00	11/21/19
19K0940-14 [CW-06-20191114 FD]	B246654	1040	1.00	11/21/19

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
19K0940-01 [MW-207S-20191113]	B246557	5	5.00	11/20/19
19K0940-02 [MW-207D-20191113]	B246557	5	5.00	11/20/19
19K0940-03 [MW-202S-20191113]	B246557	1.25	5.00	11/20/19
19K0940-04 [MW-202D-20191113]	B246557	5	5.00	11/20/19
19K0940-05 [MW-101S-20191113]	B246557	0.2	5.00	11/20/19
19K0940-06 [MW-101S-20191113 FD]	B246557	0.25	5.00	11/20/19
19K0940-07 [MW-101D-20191113]	B246557	1.25	5.00	11/20/19
19K0940-08 [MW-201D-20191113]	B246557	0.1	5.00	11/20/19
19K0940-09 [MW-216S-20191113]	B246557	2.5	5.00	11/20/19
19K0940-10 [MW-216D-20191113]	B246557	5	5.00	11/20/19
19K0940-11 [MW-217S-20191114]	B246557	5	5.00	11/20/19
19K0940-12 [MW-217D-20191114]	B246557	5	5.00	11/20/19
19K0940-15 [CW-01-20191114]	B246557	0.5	5.00	11/20/19
19K0940-16 [CW-02-20191114]	B246557	5	5.00	11/20/19
19K0940-17 [MW-112-20191114]	B246557	5	5.00	11/20/19

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
19K0940-18 [MW-209D-20191114]	B246753	1.25	5.00	11/22/19
19K0940-19 [MW-218D-20191114]	B246753	0.125	5.00	11/22/19
19K0940-20 [MW-218S-20191114]	B246753	5	5.00	11/22/19
19K0940-21 [GZA-3-20191114]	B246753	5	5.00	11/22/19
19K0940-23 [MW-109D-20191114]	B246753	5	5.00	11/22/19
19K0940-24 [MW-116S-20191114]	B246753	5	5.00	11/22/19
19K0940-25 [MW-116D-20191114]	B246753	5	5.00	11/22/19

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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
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Batch B246557 - SW-846 5030B

Blank (B246557-BLK1)

Prepared: 11/20/19 Analyzed: 11/21/19

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	5.0	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							V-05
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							V-05
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							

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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 B246557 - SW-846 5030B

Blank (B246557-BLK1)

Prepared: 11/20/19 Analyzed: 11/21/19

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							
Xylenes (total)	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	23.2		µg/L	25.0		93.0	70-130			
Surrogate: Toluene-d8	24.8		µg/L	25.0		99.0	70-130			
Surrogate: 4-Bromofluorobenzene	24.4		µg/L	25.0		97.8	70-130			

LCS (B246557-BS1)

Prepared: 11/20/19 Analyzed: 11/21/19

Acetone	117	50	µg/L	100		117	70-160			†
Acrylonitrile	10.6	5.0	µg/L	10.0		106	70-130			
tert-Amyl Methyl Ether (TAME)	9.54	0.50	µg/L	10.0		95.4	70-130			
Benzene	9.68	1.0	µg/L	10.0		96.8	70-130			
Bromobenzene	10.2	1.0	µg/L	10.0		102	70-130			
Bromochloromethane	10.0	1.0	µg/L	10.0		100	70-130			
Bromodichloromethane	8.91	0.50	µg/L	10.0		89.1	70-130			
Bromoform	9.71	1.0	µg/L	10.0		97.1	70-130			
Bromomethane	4.56	2.0	µg/L	10.0		45.6	40-160			†
2-Butanone (MEK)	105	20	µg/L	100		105	40-160			†
tert-Butyl Alcohol (TBA)	105	20	µg/L	100		105	40-160			†
n-Butylbenzene	9.77	1.0	µg/L	10.0		97.7	70-130			
sec-Butylbenzene	10.4	1.0	µg/L	10.0		104	70-130			
tert-Butylbenzene	10.1	1.0	µg/L	10.0		101	70-130			
tert-Butyl Ethyl Ether (TBEE)	9.35	0.50	µg/L	10.0		93.5	70-130			
Carbon Disulfide	9.30	5.0	µg/L	10.0		93.0	70-130			V-36
Carbon Tetrachloride	9.23	5.0	µg/L	10.0		92.3	70-130			
Chlorobenzene	10.6	1.0	µg/L	10.0		106	70-130			
Chlorodibromomethane	9.70	0.50	µg/L	10.0		97.0	70-130			
Chloroethane	9.63	2.0	µg/L	10.0		96.3	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
Batch B246557 - SW-846 5030B										
LCS (B246557-BS1)										
					Prepared: 11/20/19 Analyzed: 11/21/19					
Chloroform	8.86	2.0	µg/L	10.0		88.6	70-130			
Chloromethane	5.55	2.0	µg/L	10.0		55.5	40-160			V-05 †
2-Chlorotoluene	10.1	1.0	µg/L	10.0		101	70-130			
4-Chlorotoluene	9.93	1.0	µg/L	10.0		99.3	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	10.2	5.0	µg/L	10.0		102	70-130			
1,2-Dibromoethane (EDB)	10.1	0.50	µg/L	10.0		101	70-130			
Dibromomethane	9.76	1.0	µg/L	10.0		97.6	70-130			
1,2-Dichlorobenzene	10.2	1.0	µg/L	10.0		102	70-130			
1,3-Dichlorobenzene	10.3	1.0	µg/L	10.0		103	70-130			
1,4-Dichlorobenzene	10.1	1.0	µg/L	10.0		101	70-130			
trans-1,4-Dichloro-2-butene	10.7	2.0	µg/L	10.0		107	70-130			
Dichlorodifluoromethane (Freon 12)	6.86	2.0	µg/L	10.0		68.6	40-160			V-05 †
1,1-Dichloroethane	9.56	1.0	µg/L	10.0		95.6	70-130			
1,2-Dichloroethane	9.86	1.0	µg/L	10.0		98.6	70-130			
1,1-Dichloroethylene	10.1	1.0	µg/L	10.0		101	70-130			
cis-1,2-Dichloroethylene	9.55	1.0	µg/L	10.0		95.5	70-130			
trans-1,2-Dichloroethylene	9.59	1.0	µg/L	10.0		95.9	70-130			
1,2-Dichloropropane	10.1	1.0	µg/L	10.0		101	70-130			
1,3-Dichloropropane	9.46	0.50	µg/L	10.0		94.6	70-130			
2,2-Dichloropropane	7.69	1.0	µg/L	10.0		76.9	40-130			V-05 †
1,1-Dichloropropene	9.28	2.0	µg/L	10.0		92.8	70-130			
cis-1,3-Dichloropropene	8.93	0.50	µg/L	10.0		89.3	70-130			
trans-1,3-Dichloropropene	8.40	0.50	µg/L	10.0		84.0	70-130			
Diethyl Ether	10.2	2.0	µg/L	10.0		102	70-130			
Diisopropyl Ether (DIPE)	9.78	0.50	µg/L	10.0		97.8	70-130			
1,4-Dioxane	124	50	µg/L	100		124	40-130			†
Ethylbenzene	9.94	1.0	µg/L	10.0		99.4	70-130			
Hexachlorobutadiene	12.1	0.60	µg/L	10.0		121	70-130			†
2-Hexanone (MBK)	113	10	µg/L	100		113	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	9.45	1.0	µg/L	10.0		94.5	70-130			
Methyl tert-Butyl Ether (MTBE)	9.45	1.0	µg/L	10.0		94.5	70-130			
Methyl Cyclohexane	9.96	1.0	µg/L	10.0		99.6	70-130			
Methylene Chloride	9.47	5.0	µg/L	10.0		94.7	70-130			
4-Methyl-2-pentanone (MIBK)	114	10	µg/L	100		114	70-160			†
Naphthalene	11.8	2.0	µg/L	10.0		118	40-130			†
n-Propylbenzene	10.4	1.0	µg/L	10.0		104	70-130			
Styrene	9.83	1.0	µg/L	10.0		98.3	70-130			
1,1,1,2-Tetrachloroethane	10.6	1.0	µg/L	10.0		106	70-130			
1,1,2,2-Tetrachloroethane	11.8	0.50	µg/L	10.0		118	70-130			
Tetrachloroethylene	10.6	1.0	µg/L	10.0		106	70-130			
Tetrahydrofuran	9.90	10	µg/L	10.0		99.0	70-130			
Toluene	9.49	1.0	µg/L	10.0		94.9	70-130			
1,2,3-Trichlorobenzene	11.8	5.0	µg/L	10.0		118	70-130			
1,2,4-Trichlorobenzene	11.3	1.0	µg/L	10.0		113	70-130			
1,3,5-Trichlorobenzene	11.2	1.0	µg/L	10.0		112	70-130			
1,1,1-Trichloroethane	8.96	1.0	µg/L	10.0		89.6	70-130			
1,1,2-Trichloroethane	10.0	1.0	µg/L	10.0		100	70-130			
Trichloroethylene	9.32	1.0	µg/L	10.0		93.2	70-130			
Trichlorofluoromethane (Freon 11)	8.87	2.0	µg/L	10.0		88.7	70-130			
1,2,3-Trichloropropane	10.9	2.0	µg/L	10.0		109	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 B246557 - SW-846 5030B

LCS (B246557-BS1)

Prepared: 11/20/19 Analyzed: 11/21/19

1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.3	1.0	µg/L	10.0		103	70-130			
1,2,4-Trimethylbenzene	9.99	1.0	µg/L	10.0		99.9	70-130			
1,3,5-Trimethylbenzene	10.6	1.0	µg/L	10.0		106	70-130			
Vinyl Chloride	8.04	2.0	µg/L	10.0		80.4	40-160			†
m+p Xylene	19.8	2.0	µg/L	20.0		99.0	70-130			
o-Xylene	9.96	1.0	µg/L	10.0		99.6	70-130			
Xylenes (total)	29.8	1.0	µg/L	30.0		99.2				
Surrogate: 1,2-Dichloroethane-d4	23.0		µg/L	25.0		92.0	70-130			
Surrogate: Toluene-d8	24.9		µg/L	25.0		99.5	70-130			
Surrogate: 4-Bromofluorobenzene	25.2		µg/L	25.0		101	70-130			

LCS Dup (B246557-BSD1)

Prepared: 11/20/19 Analyzed: 11/21/19

Acetone	104	50	µg/L	100		104	70-160	12.1	25	†
Acrylonitrile	9.89	5.0	µg/L	10.0		98.9	70-130	7.21	25	
tert-Amyl Methyl Ether (TAME)	9.06	0.50	µg/L	10.0		90.6	70-130	5.16	25	
Benzene	8.86	1.0	µg/L	10.0		88.6	70-130	8.85	25	
Bromobenzene	10.2	1.0	µg/L	10.0		102	70-130	0.785	25	
Bromochloromethane	9.51	1.0	µg/L	10.0		95.1	70-130	5.32	25	
Bromodichloromethane	8.69	0.50	µg/L	10.0		86.9	70-130	2.50	25	
Bromoform	9.31	1.0	µg/L	10.0		93.1	70-130	4.21	25	
Bromomethane	5.33	2.0	µg/L	10.0		53.3	40-160	15.6	25	†
2-Butanone (MEK)	98.8	20	µg/L	100		98.8	40-160	6.41	25	†
tert-Butyl Alcohol (TBA)	107	20	µg/L	100		107	40-160	1.84	25	†
n-Butylbenzene	9.11	1.0	µg/L	10.0		91.1	70-130	6.99	25	
sec-Butylbenzene	9.53	1.0	µg/L	10.0		95.3	70-130	8.92	25	
tert-Butylbenzene	9.21	1.0	µg/L	10.0		92.1	70-130	8.92	25	
tert-Butyl Ethyl Ether (TBEE)	8.89	0.50	µg/L	10.0		88.9	70-130	5.04	25	
Carbon Disulfide	8.49	5.0	µg/L	10.0		84.9	70-130	9.11	25	V-36
Carbon Tetrachloride	8.53	5.0	µg/L	10.0		85.3	70-130	7.88	25	
Chlorobenzene	10.0	1.0	µg/L	10.0		100	70-130	6.00	25	
Chlorodibromomethane	9.32	0.50	µg/L	10.0		93.2	70-130	4.00	25	
Chloroethane	9.18	2.0	µg/L	10.0		91.8	70-130	4.78	25	
Chloroform	8.30	2.0	µg/L	10.0		83.0	70-130	6.53	25	
Chloromethane	5.25	2.0	µg/L	10.0		52.5	40-160	5.56	25	V-05 †
2-Chlorotoluene	9.71	1.0	µg/L	10.0		97.1	70-130	3.64	25	
4-Chlorotoluene	9.63	1.0	µg/L	10.0		96.3	70-130	3.07	25	
1,2-Dibromo-3-chloropropane (DBCP)	10.7	5.0	µg/L	10.0		107	70-130	4.70	25	
1,2-Dibromoethane (EDB)	9.87	0.50	µg/L	10.0		98.7	70-130	2.20	25	
Dibromomethane	9.61	1.0	µg/L	10.0		96.1	70-130	1.55	25	
1,2-Dichlorobenzene	9.75	1.0	µg/L	10.0		97.5	70-130	4.71	25	
1,3-Dichlorobenzene	9.39	1.0	µg/L	10.0		93.9	70-130	8.85	25	
1,4-Dichlorobenzene	9.51	1.0	µg/L	10.0		95.1	70-130	5.92	25	
trans-1,4-Dichloro-2-butene	10.9	2.0	µg/L	10.0		109	70-130	1.57	25	
Dichlorodifluoromethane (Freon 12)	6.38	2.0	µg/L	10.0		63.8	40-160	7.25	25	V-05 †
1,1-Dichloroethane	8.93	1.0	µg/L	10.0		89.3	70-130	6.81	25	
1,2-Dichloroethane	9.40	1.0	µg/L	10.0		94.0	70-130	4.78	25	
1,1-Dichloroethylene	9.42	1.0	µg/L	10.0		94.2	70-130	6.97	25	
cis-1,2-Dichloroethylene	8.88	1.0	µg/L	10.0		88.8	70-130	7.27	25	
trans-1,2-Dichloroethylene	8.93	1.0	µg/L	10.0		89.3	70-130	7.13	25	
1,2-Dichloropropane	9.61	1.0	µg/L	10.0		96.1	70-130	4.67	25	
1,3-Dichloropropane	9.27	0.50	µg/L	10.0		92.7	70-130	2.03	25	
2,2-Dichloropropane	7.22	1.0	µg/L	10.0		72.2	40-130	6.30	25	V-05 †

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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
Batch B246557 - SW-846 5030B										
LCS Dup (B246557-BSD1)										
					Prepared: 11/20/19 Analyzed: 11/21/19					
1,1-Dichloropropene	8.45	2.0	µg/L	10.0		84.5	70-130	9.36	25	
cis-1,3-Dichloropropene	8.72	0.50	µg/L	10.0		87.2	70-130	2.38	25	
trans-1,3-Dichloropropene	8.27	0.50	µg/L	10.0		82.7	70-130	1.56	25	
Diethyl Ether	9.93	2.0	µg/L	10.0		99.3	70-130	3.07	25	
Diisopropyl Ether (DIPE)	9.37	0.50	µg/L	10.0		93.7	70-130	4.28	25	
1,4-Dioxane	153	50	µg/L	100		153 *	40-130	20.6	50	L-07 † ‡
Ethylbenzene	9.57	1.0	µg/L	10.0		95.7	70-130	3.79	25	
Hexachlorobutadiene	11.5	0.60	µg/L	10.0		115	70-130	5.34	25	
2-Hexanone (MBK)	111	10	µg/L	100		111	70-160	1.59	25	†
Isopropylbenzene (Cumene)	10.2	1.0	µg/L	10.0		102	70-130	6.52	25	
p-Isopropyltoluene (p-Cymene)	9.58	1.0	µg/L	10.0		95.8	70-130	8.88	25	
Methyl Acetate	9.33	1.0	µg/L	10.0		93.3	70-130	1.28	25	
Methyl tert-Butyl Ether (MTBE)	9.15	1.0	µg/L	10.0		91.5	70-130	3.23	25	
Methyl Cyclohexane	9.35	1.0	µg/L	10.0		93.5	70-130	6.32	25	
Methylene Chloride	9.10	5.0	µg/L	10.0		91.0	70-130	3.98	25	
4-Methyl-2-pentanone (MIBK)	113	10	µg/L	100		113	70-160	0.528	25	†
Naphthalene	11.3	2.0	µg/L	10.0		113	40-130	3.90	25	†
n-Propylbenzene	9.81	1.0	µg/L	10.0		98.1	70-130	5.93	25	
Styrene	9.51	1.0	µg/L	10.0		95.1	70-130	3.31	25	
1,1,1,2-Tetrachloroethane	10.4	1.0	µg/L	10.0		104	70-130	1.90	25	
1,1,2,2-Tetrachloroethane	11.7	0.50	µg/L	10.0		117	70-130	0.851	25	
Tetrachloroethylene	10.1	1.0	µg/L	10.0		101	70-130	4.45	25	
Tetrahydrofuran	9.17	10	µg/L	10.0		91.7	70-130	7.66	25	
Toluene	9.09	1.0	µg/L	10.0		90.9	70-130	4.31	25	
1,2,3-Trichlorobenzene	11.8	5.0	µg/L	10.0		118	70-130	0.340	25	
1,2,4-Trichlorobenzene	10.8	1.0	µg/L	10.0		108	70-130	4.89	25	
1,3,5-Trichlorobenzene	10.6	1.0	µg/L	10.0		106	70-130	5.43	25	
1,1,1-Trichloroethane	8.17	1.0	µg/L	10.0		81.7	70-130	9.22	25	
1,1,2-Trichloroethane	10.0	1.0	µg/L	10.0		100	70-130	0.200	25	
Trichloroethylene	8.79	1.0	µg/L	10.0		87.9	70-130	5.85	25	
Trichlorofluoromethane (Freon 11)	8.02	2.0	µg/L	10.0		80.2	70-130	10.1	25	
1,2,3-Trichloropropane	10.9	2.0	µg/L	10.0		109	70-130	0.368	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.69	1.0	µg/L	10.0		96.9	70-130	6.20	25	
1,2,4-Trimethylbenzene	9.12	1.0	µg/L	10.0		91.2	70-130	9.11	25	
1,3,5-Trimethylbenzene	10.1	1.0	µg/L	10.0		101	70-130	4.64	25	
Vinyl Chloride	7.42	2.0	µg/L	10.0		74.2	40-160	8.02	25	†
m+p Xylene	19.1	2.0	µg/L	20.0		95.6	70-130	3.49	25	
o-Xylene	9.63	1.0	µg/L	10.0		96.3	70-130	3.37	25	
Xylenes (total)	28.8	1.0	µg/L	30.0		95.9		3.45		
Surrogate: 1,2-Dichloroethane-d4	23.1		µg/L	25.0		92.2	70-130			
Surrogate: Toluene-d8	25.6		µg/L	25.0		102	70-130			
Surrogate: 4-Bromofluorobenzene	25.7		µg/L	25.0		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 B246753 - SW-846 5030B

Blank (B246753-BLK1)

Prepared: 11/22/19 Analyzed: 11/24/19

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	5.0	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							V-05
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							V-05
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							

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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 B246753 - SW-846 5030B

Blank (B246753-BLK1)

Prepared: 11/22/19 Analyzed: 11/24/19

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							V-05
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							V-05, L-04
1,2,4-Trichlorobenzene	ND	1.0	µg/L							L-04, V-05
1,3,5-Trichlorobenzene	ND	1.0	µg/L							V-05
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							
Xylenes (total)	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	23.2		µg/L	25.0		92.7	70-130			
Surrogate: Toluene-d8	24.1		µg/L	25.0		96.5	70-130			
Surrogate: 4-Bromofluorobenzene	23.6		µg/L	25.0		94.2	70-130			

LCS (B246753-BS1)

Prepared: 11/22/19 Analyzed: 11/24/19

Acetone	87.0	50	µg/L	100		87.0	70-160			†
Acrylonitrile	8.63	5.0	µg/L	10.0		86.3	70-130			
tert-Amyl Methyl Ether (TAME)	8.13	0.50	µg/L	10.0		81.3	70-130			
Benzene	9.35	1.0	µg/L	10.0		93.5	70-130			
Bromobenzene	9.59	1.0	µg/L	10.0		95.9	70-130			
Bromochloromethane	9.87	1.0	µg/L	10.0		98.7	70-130			
Bromodichloromethane	9.62	0.50	µg/L	10.0		96.2	70-130			
Bromoform	9.77	1.0	µg/L	10.0		97.7	70-130			
Bromomethane	7.48	2.0	µg/L	10.0		74.8	40-160		V-20	†
2-Butanone (MEK)	87.5	20	µg/L	100		87.5	40-160			†
tert-Butyl Alcohol (TBA)	103	20	µg/L	100		103	40-160			†
n-Butylbenzene	8.31	1.0	µg/L	10.0		83.1	70-130			
sec-Butylbenzene	9.94	1.0	µg/L	10.0		99.4	70-130			
tert-Butylbenzene	9.83	1.0	µg/L	10.0		98.3	70-130			
tert-Butyl Ethyl Ether (TBEE)	7.98	0.50	µg/L	10.0		79.8	70-130			
Carbon Disulfide	9.43	5.0	µg/L	10.0		94.3	70-130			
Carbon Tetrachloride	8.99	5.0	µg/L	10.0		89.9	70-130			
Chlorobenzene	10.6	1.0	µg/L	10.0		106	70-130			
Chlorodibromomethane	9.19	0.50	µg/L	10.0		91.9	70-130			
Chloroethane	8.78	2.0	µg/L	10.0		87.8	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
Batch B246753 - SW-846 5030B										
LCS (B246753-BS1)										
					Prepared: 11/22/19 Analyzed: 11/24/19					
Chloroform	9.29	2.0	µg/L	10.0		92.9	70-130			
Chloromethane	7.69	2.0	µg/L	10.0		76.9	40-160			V-20 †
2-Chlorotoluene	9.38	1.0	µg/L	10.0		93.8	70-130			
4-Chlorotoluene	9.44	1.0	µg/L	10.0		94.4	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	8.26	5.0	µg/L	10.0		82.6	70-130			
1,2-Dibromoethane (EDB)	9.84	0.50	µg/L	10.0		98.4	70-130			
Dibromomethane	9.23	1.0	µg/L	10.0		92.3	70-130			
1,2-Dichlorobenzene	9.96	1.0	µg/L	10.0		99.6	70-130			
1,3-Dichlorobenzene	10.0	1.0	µg/L	10.0		100	70-130			
1,4-Dichlorobenzene	9.82	1.0	µg/L	10.0		98.2	70-130			
trans-1,4-Dichloro-2-butene	7.94	2.0	µg/L	10.0		79.4	70-130			V-05
Dichlorodifluoromethane (Freon 12)	6.13	2.0	µg/L	10.0		61.3	40-160			†
1,1-Dichloroethane	9.55	1.0	µg/L	10.0		95.5	70-130			
1,2-Dichloroethane	9.07	1.0	µg/L	10.0		90.7	70-130			
1,1-Dichloroethylene	9.21	1.0	µg/L	10.0		92.1	70-130			
cis-1,2-Dichloroethylene	9.12	1.0	µg/L	10.0		91.2	70-130			
trans-1,2-Dichloroethylene	9.36	1.0	µg/L	10.0		93.6	70-130			
1,2-Dichloropropane	9.84	1.0	µg/L	10.0		98.4	70-130			
1,3-Dichloropropane	9.43	0.50	µg/L	10.0		94.3	70-130			
2,2-Dichloropropane	5.64	1.0	µg/L	10.0		56.4	40-130			V-05 †
1,1-Dichloropropene	9.09	2.0	µg/L	10.0		90.9	70-130			
cis-1,3-Dichloropropene	8.52	0.50	µg/L	10.0		85.2	70-130			
trans-1,3-Dichloropropene	8.37	0.50	µg/L	10.0		83.7	70-130			
Diethyl Ether	9.33	2.0	µg/L	10.0		93.3	70-130			
Diisopropyl Ether (DIPE)	9.13	0.50	µg/L	10.0		91.3	70-130			
1,4-Dioxane	83.6	50	µg/L	100		83.6	40-130			†
Ethylbenzene	9.97	1.0	µg/L	10.0		99.7	70-130			
Hexachlorobutadiene	8.27	0.60	µg/L	10.0		82.7	70-130			
2-Hexanone (MBK)	84.8	10	µg/L	100		84.8	70-160			†
Isopropylbenzene (Cumene)	10.1	1.0	µg/L	10.0		101	70-130			
p-Isopropyltoluene (p-Cymene)	9.48	1.0	µg/L	10.0		94.8	70-130			
Methyl Acetate	9.93	1.0	µg/L	10.0		99.3	70-130			
Methyl tert-Butyl Ether (MTBE)	9.43	1.0	µg/L	10.0		94.3	70-130			
Methyl Cyclohexane	9.39	1.0	µg/L	10.0		93.9	70-130			
Methylene Chloride	10.4	5.0	µg/L	10.0		104	70-130			
4-Methyl-2-pentanone (MIBK)	86.2	10	µg/L	100		86.2	70-160			†
Naphthalene	6.47	2.0	µg/L	10.0		64.7	40-130			V-05 †
n-Propylbenzene	9.25	1.0	µg/L	10.0		92.5	70-130			
Styrene	9.75	1.0	µg/L	10.0		97.5	70-130			
1,1,1,2-Tetrachloroethane	10.7	1.0	µg/L	10.0		107	70-130			
1,1,2,2-Tetrachloroethane	10.0	0.50	µg/L	10.0		100	70-130			
Tetrachloroethylene	9.58	1.0	µg/L	10.0		95.8	70-130			
Tetrahydrofuran	9.56	10	µg/L	10.0		95.6	70-130			
Toluene	9.61	1.0	µg/L	10.0		96.1	70-130			
1,2,3-Trichlorobenzene	6.48	5.0	µg/L	10.0		64.8	* 70-130			L-04, V-05
1,2,4-Trichlorobenzene	6.49	1.0	µg/L	10.0		64.9	* 70-130			L-04, V-05
1,3,5-Trichlorobenzene	7.68	1.0	µg/L	10.0		76.8	70-130			V-05
1,1,1-Trichloroethane	9.14	1.0	µg/L	10.0		91.4	70-130			
1,1,2-Trichloroethane	10.1	1.0	µg/L	10.0		101	70-130			
Trichloroethylene	10.4	1.0	µg/L	10.0		104	70-130			
Trichlorofluoromethane (Freon 11)	7.90	2.0	µg/L	10.0		79.0	70-130			
1,2,3-Trichloropropane	9.59	2.0	µg/L	10.0		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 B246753 - SW-846 5030B

LCS (B246753-BS1)

Prepared: 11/22/19 Analyzed: 11/24/19

1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.07	1.0	µg/L	10.0		90.7	70-130			
1,2,4-Trimethylbenzene	9.63	1.0	µg/L	10.0		96.3	70-130			
1,3,5-Trimethylbenzene	9.05	1.0	µg/L	10.0		90.5	70-130			
Vinyl Chloride	7.97	2.0	µg/L	10.0		79.7	40-160			†
m+p Xylene	19.7	2.0	µg/L	20.0		98.4	70-130			
o-Xylene	10.1	1.0	µg/L	10.0		101	70-130			
Xylenes (total)	29.8	1.0	µg/L	30.0		99.3				
Surrogate: 1,2-Dichloroethane-d4	22.7		µg/L	25.0		90.8	70-130			
Surrogate: Toluene-d8	24.5		µg/L	25.0		97.9	70-130			
Surrogate: 4-Bromofluorobenzene	24.2		µg/L	25.0		96.7	70-130			

LCS Dup (B246753-BSD1)

Prepared: 11/22/19 Analyzed: 11/24/19

Acetone	92.6	50	µg/L	100		92.6	70-160	6.26	25	†
Acrylonitrile	8.13	5.0	µg/L	10.0		81.3	70-130	5.97	25	
tert-Amyl Methyl Ether (TAME)	8.24	0.50	µg/L	10.0		82.4	70-130	1.34	25	
Benzene	10.0	1.0	µg/L	10.0		100	70-130	6.72	25	
Bromobenzene	10.3	1.0	µg/L	10.0		103	70-130	7.14	25	
Bromochloromethane	10.3	1.0	µg/L	10.0		103	70-130	3.97	25	
Bromodichloromethane	10.1	0.50	µg/L	10.0		101	70-130	4.77	25	
Bromoform	10.1	1.0	µg/L	10.0		101	70-130	3.32	25	
Bromomethane	9.55	2.0	µg/L	10.0		95.5	40-160	24.3	25	V-20 †
2-Butanone (MEK)	88.8	20	µg/L	100		88.8	40-160	1.52	25	†
tert-Butyl Alcohol (TBA)	102	20	µg/L	100		102	40-160	0.886	25	†
n-Butylbenzene	8.65	1.0	µg/L	10.0		86.5	70-130	4.01	25	
sec-Butylbenzene	10.4	1.0	µg/L	10.0		104	70-130	4.72	25	
tert-Butylbenzene	10.8	1.0	µg/L	10.0		108	70-130	9.03	25	
tert-Butyl Ethyl Ether (TBEE)	8.57	0.50	µg/L	10.0		85.7	70-130	7.13	25	
Carbon Disulfide	9.64	5.0	µg/L	10.0		96.4	70-130	2.20	25	
Carbon Tetrachloride	9.72	5.0	µg/L	10.0		97.2	70-130	7.80	25	
Chlorobenzene	11.3	1.0	µg/L	10.0		113	70-130	6.13	25	
Chlorodibromomethane	9.62	0.50	µg/L	10.0		96.2	70-130	4.57	25	
Chloroethane	10.0	2.0	µg/L	10.0		100	70-130	13.4	25	
Chloroform	10.2	2.0	µg/L	10.0		102	70-130	9.83	25	
Chloromethane	8.28	2.0	µg/L	10.0		82.8	40-160	7.39	25	V-20 †
2-Chlorotoluene	10.4	1.0	µg/L	10.0		104	70-130	10.5	25	
4-Chlorotoluene	10.2	1.0	µg/L	10.0		102	70-130	8.23	25	
1,2-Dibromo-3-chloropropane (DBCP)	8.40	5.0	µg/L	10.0		84.0	70-130	1.68	25	
1,2-Dibromoethane (EDB)	10.4	0.50	µg/L	10.0		104	70-130	5.63	25	
Dibromomethane	9.89	1.0	µg/L	10.0		98.9	70-130	6.90	25	
1,2-Dichlorobenzene	10.6	1.0	µg/L	10.0		106	70-130	6.32	25	
1,3-Dichlorobenzene	10.9	1.0	µg/L	10.0		109	70-130	8.23	25	
1,4-Dichlorobenzene	10.7	1.0	µg/L	10.0		107	70-130	8.30	25	
trans-1,4-Dichloro-2-butene	7.72	2.0	µg/L	10.0		77.2	70-130	2.81	25	V-05
Dichlorodifluoromethane (Freon 12)	6.38	2.0	µg/L	10.0		63.8	40-160	4.00	25	†
1,1-Dichloroethane	10.3	1.0	µg/L	10.0		103	70-130	7.65	25	
1,2-Dichloroethane	9.97	1.0	µg/L	10.0		99.7	70-130	9.45	25	
1,1-Dichloroethylene	10.0	1.0	µg/L	10.0		100	70-130	8.22	25	
cis-1,2-Dichloroethylene	9.70	1.0	µg/L	10.0		97.0	70-130	6.16	25	
trans-1,2-Dichloroethylene	9.57	1.0	µg/L	10.0		95.7	70-130	2.22	25	
1,2-Dichloropropane	10.4	1.0	µg/L	10.0		104	70-130	5.44	25	
1,3-Dichloropropane	10.0	0.50	µg/L	10.0		100	70-130	6.17	25	
2,2-Dichloropropane	6.02	1.0	µg/L	10.0		60.2	40-130	6.52	25	V-05 †

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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
Batch B246753 - SW-846 5030B										
LCS Dup (B246753-BSD1)										
					Prepared: 11/22/19 Analyzed: 11/24/19					
1,1-Dichloropropene	10.1	2.0	µg/L	10.0		101	70-130	10.2	25	
cis-1,3-Dichloropropene	9.26	0.50	µg/L	10.0		92.6	70-130	8.32	25	
trans-1,3-Dichloropropene	8.73	0.50	µg/L	10.0		87.3	70-130	4.21	25	
Diethyl Ether	10.0	2.0	µg/L	10.0		100	70-130	7.03	25	
Diisopropyl Ether (DIPE)	9.92	0.50	µg/L	10.0		99.2	70-130	8.29	25	
1,4-Dioxane	79.4	50	µg/L	100		79.4	40-130	5.08	50	† ‡
Ethylbenzene	10.7	1.0	µg/L	10.0		107	70-130	6.88	25	
Hexachlorobutadiene	8.63	0.60	µg/L	10.0		86.3	70-130	4.26	25	
2-Hexanone (MBK)	84.3	10	µg/L	100		84.3	70-160	0.627	25	†
Isopropylbenzene (Cumene)	10.5	1.0	µg/L	10.0		105	70-130	4.08	25	
p-Isopropyltoluene (p-Cymene)	9.98	1.0	µg/L	10.0		99.8	70-130	5.14	25	
Methyl Acetate	9.97	1.0	µg/L	10.0		99.7	70-130	0.402	25	
Methyl tert-Butyl Ether (MTBE)	9.73	1.0	µg/L	10.0		97.3	70-130	3.13	25	
Methyl Cyclohexane	9.69	1.0	µg/L	10.0		96.9	70-130	3.14	25	
Methylene Chloride	10.2	5.0	µg/L	10.0		102	70-130	1.74	25	
4-Methyl-2-pentanone (MIBK)	86.5	10	µg/L	100		86.5	70-160	0.347	25	†
Naphthalene	6.13	2.0	µg/L	10.0		61.3	40-130	5.40	25	V-05 †
n-Propylbenzene	9.91	1.0	µg/L	10.0		99.1	70-130	6.89	25	
Styrene	10.5	1.0	µg/L	10.0		105	70-130	7.03	25	
1,1,1,2-Tetrachloroethane	11.5	1.0	µg/L	10.0		115	70-130	7.57	25	
1,1,2,2-Tetrachloroethane	10.4	0.50	µg/L	10.0		104	70-130	3.43	25	
Tetrachloroethylene	10.5	1.0	µg/L	10.0		105	70-130	8.88	25	
Tetrahydrofuran	9.79	10	µg/L	10.0		97.9	70-130	2.38	25	
Toluene	10.3	1.0	µg/L	10.0		103	70-130	6.83	25	
1,2,3-Trichlorobenzene	6.19	5.0	µg/L	10.0		61.9	* 70-130	4.58	25	L-04, V-05
1,2,4-Trichlorobenzene	6.56	1.0	µg/L	10.0		65.6	* 70-130	1.07	25	L-04, V-05
1,3,5-Trichlorobenzene	7.86	1.0	µg/L	10.0		78.6	70-130	2.32	25	V-05
1,1,1-Trichloroethane	9.86	1.0	µg/L	10.0		98.6	70-130	7.58	25	
1,1,2-Trichloroethane	10.7	1.0	µg/L	10.0		107	70-130	5.86	25	
Trichloroethylene	10.8	1.0	µg/L	10.0		108	70-130	4.25	25	
Trichlorofluoromethane (Freon 11)	8.49	2.0	µg/L	10.0		84.9	70-130	7.20	25	
1,2,3-Trichloropropane	8.98	2.0	µg/L	10.0		89.8	70-130	6.57	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.79	1.0	µg/L	10.0		97.9	70-130	7.64	25	
1,2,4-Trimethylbenzene	10.3	1.0	µg/L	10.0		103	70-130	6.82	25	
1,3,5-Trimethylbenzene	10.1	1.0	µg/L	10.0		101	70-130	10.9	25	
Vinyl Chloride	8.51	2.0	µg/L	10.0		85.1	40-160	6.55	25	†
m+p Xylene	20.8	2.0	µg/L	20.0		104	70-130	5.39	25	
o-Xylene	10.8	1.0	µg/L	10.0		108	70-130	6.80	25	
Xylenes (total)	31.6	1.0	µg/L	30.0		105		5.87		
Surrogate: 1,2-Dichloroethane-d4	23.2		µg/L	25.0		92.9	70-130			
Surrogate: Toluene-d8	24.1		µg/L	25.0		96.4	70-130			
Surrogate: 4-Bromofluorobenzene	24.9		µg/L	25.0		99.5	70-130			

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QUALITY CONTROL

Petroleum Hydrocarbons Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B246654 - SW-846 3510C										
Blank (B246654-BLK1)				Prepared: 11/21/19 Analyzed: 11/24/19						
TPH (C9-C36)	ND	0.20	mg/L							
Surrogate: 2-Fluorobiphenyl	0.0638		mg/L	0.100		63.8	40-140			
LCS (B246654-BS1)				Prepared: 11/21/19 Analyzed: 11/24/19						
TPH (C9-C36)	0.794	0.20	mg/L	1.00		79.4	40-140			
Surrogate: 2-Fluorobiphenyl	0.0709		mg/L	0.100		70.9	40-140			
LCS Dup (B246654-BSD1)				Prepared: 11/21/19 Analyzed: 11/24/19						
TPH (C9-C36)	0.752	0.20	mg/L	1.00		75.2	40-140	5.47	25	
Surrogate: 2-Fluorobiphenyl	0.0679		mg/L	0.100		67.9	40-140			

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QUALITY CONTROL

Metals Analyses (Dissolved) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B246855 - SW-846 3005A Dissolved										
Blank (B246855-BLK1)				Prepared: 11/23/19 Analyzed: 11/24/19						
Lead	ND	0.50	µg/L							
LCS (B246855-BS1)				Prepared: 11/23/19 Analyzed: 11/24/19						
Lead	43.0	0.50	µg/L	40.0		108	80-120			

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.
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.
RL-11	Elevated reporting limit due to high concentration of target compounds.
RL-13	Elevated reporting limit due to high concentration of non-target compounds.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-20	Continuing calibration verification (CCV) 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.
Z-01	Elevated reporting limits due to sample matrix.
Z-01a	Sample chromatogram does not match reference standard exactly.

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 6020B in Water</i>	
Lead	CT,NH,NY,NC,ME,VA
<i>SW-846 8260C-D 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	ME,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)	ME,NY
1,2-Dibromoethane (EDB)	ME,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	ME,NY

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260C-D in Water</i>	
Diisopropyl Ether (DIPE)	ME,NH,VA,NY
1,4-Dioxane	ME,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	ME,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
Xylenes (total)	ME,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 - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2020
CT	Connecticut Department of Public Health	PH-0567	09/30/2021
NY	New York State Department of Health	10899 NELAP	04/1/2020
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2020
RI	Rhode Island Department of Health	LAO00112	12/30/2020
NC	North Carolina Div. of Water Quality	652	12/31/2020
NJ	New Jersey DEP	MA007 NELAP	06/30/2020
FL	Florida Department of Health	E871027 NELAP	06/30/2020
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2020
ME	State of Maine	2011028	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2020
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2020
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2020
NC-DW	North Carolina Department of Health	25703	07/31/2020
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2020



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1910940

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 East Longmeadow, MA 01028

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CHAIN OF CUSTODY RECORD

Requested Turnaround Time: 7-Day 10-Day Field Filtered Lab to Filter

Push Approval Required: 1-Day 3-Day Field Filtered Lab to Filter

Format: PDF EXCEL

Other: EQUUS FORMAT

CLP Like Data Pkg Required:

Email To: CARMELINE JOE @ ARTIM CORP

Fax To #:

Project Location: PROVIDENCE RI

Project Number: 63101069

Project Manager: CARMELINE JOE

Con-Test Quote Name/Number: PO# 835493

Invoice Recipient: CARMELINE JOE

Sampled By: DANIEL LEAHY

Con-Test Work Order #	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	COMP/GRAB	Matrix Code	Conc Code	VIALS	GLASS	PLASTIC	BACTERIA	ENCORE
1	MW-2075-2091113	11/13/19	11:00	6	60		3	3			
2	MW-2070-2091113	11/13/19	11:30								
3	MW-2025-2091113	11/13/19	12:00								
4	MW-2020-2091113	11/13/19	12:30								
5	MW-1015-2091113	11/13/19	13:00								
6	MW-1015-2091113A	11/13/19	13:00								
7	MW-1010-2091113	11/13/19	13:30								
8	MW-2010-2091113	11/13/19	14:00								
9	MW-2165-2091113	11/13/19	14:30								
10	MW-2160-2091113	11/13/19	15:00								

Relinquished by: (signature) *[Signature]* Date/Time: 11/15/19 9:00

Received by: (signature) *[Signature]* Date/Time: 11/15/19 9:00

Relinquished by: (signature) *[Signature]* Date/Time: 11/15 6:45

Received by: (signature) *[Signature]* Date/Time: 11/19 18:45

Relinquished by: (signature)

Received by: (signature)

Relinquished by: (signature)

Received by: (signature)

Special Requirements: MA MCP Required MA MCP Form Required MA State DW Required

MCP Certification Form Required RCP Certification Form Required

Other: WRTA MWRA School MBTA Chromatogram ALPHA-LAP, LLC

Project Entity: Government Federal City Municipality 21 J Brownfield

Comments: *[Blank]*

Disclaimer: Con-Test Labs is not responsible for any omitted information on the Chain of Custody. The Chain of Custody is a legal document that must be complete and accurate and is used to determine what analyses the laboratory will perform. Any missing information is not the laboratory's responsibility. Con-Test values your partnership on each project and will try to assist with missing information, but will not be held accountable.

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 CHAIN OF CUSTODY RECORD
 39 Spruce Street
 East Longmeadow, MA 01028



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 Fax: 413-525-6405
 Email: info@contestlabs.com

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Client Name: ARTIM
 Address: 150 ROYAL ST MAINE, MA 0200
 Phone: 617-294-1767
 Project Location: 333 ADELINDE AVE PROV, RI
 Project Number: 631000697
 Project Manager: CATHERINE JOE @ ARTIM.COM
 Con-Test Quote Name/Number: PO# 835793
 Invoice Recipient: CATHERINE JOE
 Sampled By: DANIEL CANNY

ANALYSIS REQUESTED

Con-Test Work Order #	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	COMP (GSA)	Matrix Code	Conc Code	VIALS	GLASS	PLASTIC	BACTERIA	ENCORE
11	MW-2175-20191114	11/14/19 0630	11/14/19 0630	G	60	U	3	3			
12	MW-2170-20191114	11/14/19 0700	11/14/19 0700				3	3			
13	2W-06-20191114	11/14/19 0800	11/14/19 0800				3	2			
14	2W-06-20191114	11/14/19 0800	11/14/19 0800				3	2			
15	2W-01-20191114	11/14/19 0900	11/14/19 0900				3	3			
16	2W-02-20191114	11/14/19 0930	11/14/19 0930				3	3			
17	2W-12-20191114	11/14/19 1000	11/14/19 1000				3	3			
18	MW-2090-20191114	11/14/19 1030	11/14/19 1030				3	3			
19	MW-2180-20191114	11/14/19 1130	11/14/19 1130				3	3			
20	MW-2185-20191114	11/14/19 1200	11/14/19 1200				3	3			

Relinquished by: (signature) [Signature] Date/Time: 11/15/19 9:30
 Received by: (signature) [Signature] Date/Time: 11/15/19 9:30
 Relinquished by: (signature) [Signature] Date/Time: 11/15/19 9:30
 Received by: (signature) [Signature] Date/Time: 11/15/19 9:30
 Relinquished by: (signature) [Signature] Date/Time: 11/15/19 12:05
 Received by: (signature) [Signature] Date/Time: 11/15/19 12:05
 Relinquished by: (signature) [Signature] Date/Time: 11/15/19 12:05
 Received by: (signature) [Signature] Date/Time: 11/15/19 12:05
 Relinquished by: (signature) [Signature] Date/Time: 11/15/19 12:05
 Received by: (signature) [Signature] Date/Time: 11/15/19 12:05

Special Requirements:
 MA MCP Required
 MCP Certification Form Required
 CT RCP Required
 RCP Certification Form Required
 MA State DW Required
 PWSID # _____

Project Entity:
 Government
 Federal
 City
 Municipality
 21 J
 Brownfield
 MWRA
 School
 MBTA
 WRTA
 Other

NEELAC and ALPHA-LAP, LLC Accredited
 Chromatogram
 ALPHA-LAP, LLC
 PCB ONLY
 Soxhlet
 Non Soxhlet

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

Preservation Code: Counter Use Only
 Total Number Of:
 VIALS _____
 GLASS _____
 PLASTIC _____
 BACTERIA _____
 ENCORE _____
 Glassware in the fridge? Y / N _____
 Glassware in freezer? Y / N _____
 Prepackaged Cooler? Y / N _____
 *Contest is not responsible for missing samples from prepacked coolers
 1 Matrix Codes:
 GW = Ground Water
 WW = Waste Water
 DW = Drinking Water
 A = Air
 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)

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East Longmeadow, MA 01028

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Fax: 413-525-6405
Email: info@contestlabs.com

CHAIN OF CUSTODY RECORD

Requesting Party: ALUM
 7-Day PFAS 10-Day (std) 10-Day Due Date: 11/15/19
 Field Filtered Lab to Filter
 1-Day 2-Day 3-Day 4-Day
 Field Filtered Lab to Filter
 Format: PDF EXCEL
 Other: ESULS FORM
 CLP Like Data Pkg Required:

Address: 150 ROYAL ST LANTIER, MA
 Phone: 617-794-1767
 Project Location: 333 ADELARDS AVE PROV R
 Project Number: 631010697
 Project Manager: CATHERINE MANVILLE
 Con-Test Quote Name/Number: PO# 835493
 Invoiced Recipient:
 Sampled By: DANIEL KELLY

Con-Test Work Order #	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	COMP/GRAB	Matrix Code	Conc Code	VIALS	GLASS	PLASTIC	BACTERIA	ENCORE
21	62A-3-2019114	11/4/19 1300	11/4/19 1300	G	GW	U	3	3	1		
22	62A-3-2019114A	11/4/19 1300	11/4/19 1300	G	GW	U	3	3	1		
23	MW-109D-2019114	11/4/19 1345	11/4/19 1345	G	GW	U	3	3	1		
24	MW-1165-2019114	11/4/19 1430	11/4/19 1430	G	GW	U	3	3	1		
25	MW-1163-2019114	11/4/19 1500	11/4/19 1500	G	W	U	3	3	1		

Relinquished by: (signature) [Signature] Date/Time: 11/15/19 0400
 Received by: (signature) [Signature] Date/Time: 11/15/19 900
 Relinquished by: (signature) [Signature] Date/Time: 11/15/19 0:45
 Received by: (signature) [Signature] Date/Time: 11/15/19 1345
 Relinquished by: (signature) [Signature] Date/Time: 11/15/19 1345
 Received by: (signature) [Signature] Date/Time: 11/15/19 1345
 Relinquished by: (signature) [Signature] Date/Time: 11/15/19 1345
 Received by: (signature) [Signature] Date/Time: 11/15/19 1345

Client Comments: WCS BY 8260C

Special Requirements: MA MCP Required
MA State DW Required
MA State DW Required

Project Entity: Government Municipality WRTA
 Federal City School MBTA
 City Brownfield

Other: Chromatogram AIHA-LAP, LLC

Preservation Code	Matrix Codes	Preservation Codes	PCB ONLY
GW = Ground Water	I = Iced	H = HCL	<input type="checkbox"/> Soxhlet
WM = Waste Water	M = Methanol	N = Nitric Acid	<input type="checkbox"/> Non Soxhlet
DW = Drinking Water	S = Sulfuric Acid	B = Sodium Bisulfate	
A = Air	X = Sodium Hydroxide	T = Sodium Thiosulfate	
SL = Sludge	O = Other (please define)		
SOL = Solid			

Disclaimers: Con-Test Labs is not responsible for any omitted information on the Chain of Custody. The Chain of Custody is a legal document that must be complete and accurate and is used to determine what analyses the laboratory will perform. Any missing information is not the laboratory's responsibility. Con-Test values your partnership on each project and will try to assist with missing information, but will not be held accountable.

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 Aptm
 Received By BLF Date 11/15/19 Time 1845
 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 # 2 Actual Temp - 3.9°C
 By Blank # _____ Actual Temp - _____
 Was Custody Seal Intact? NA Were Samples Tampered with? NA
 Was COC Relinquished? T Does Chain Agree With Samples? _____
 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? F
 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 T pH 6 Base NA

Vials	#	Containers:	#	#	#	#
Unp-		1 Liter Amb.	4	1 Liter Plastic		16 oz Amb.
HCL-	<u>600</u>	500 mL Amb.		500 mL Plastic		8oz Amb/Clear
Meoh-		250 mL Amb.		250 mL Plastic	3	4oz Amb/Clear
Bisulfate-		Flashpoint		Col./Bacteria		2oz Amb/Clear
DI-		Other Glass		Other Plastic		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: