



APTIM  
150 Royall Street  
Canton, MA 02021  
[www.Aptim.com](http://www.Aptim.com)

July 2, 2018

Project # 130274

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: December 2017 through May 2018 Activities  
Former Gorham Manufacturing Facility  
333 Adelaide Avenue, Providence, RI  
Site Remediation Case No. 97-030*

Dear Mr. Martella:

Aptim Environmental & Infrastructure, Inc. (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 ( $\mu\text{g}/\text{L}$ ). 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 February and May of 2018.

#### ***Field Activities***

##### **Limited VOC Sampling Activities February and May 2018**

Limited groundwater gauging and sampling was conducted on February 21, 2018 and May 29, 2018. 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 February 21 and May 29, 2018. Groundwater samples were delivered to Con-Test Analytical Laboratory in East Longmeadow, Massachusetts for analysis.

#### Semi-Annual Groundwater Sampling Activities May 2018

The monitoring wells that comprise the larger semi-annual groundwater monitoring program were monitored for field parameters and sampled for analysis on May 29 and 30, 2018.

#### Monitoring Activities

Field parameters were measured in treatment area wells and compliance wells on May 29 and 30, 2018. 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 May 29 and 30, 2018 groundwater samples were collected for analysis for VOCs (EPA Method 8260C) 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 6020A-B) 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 February 21, and May 29 and 30, 2018 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-101S (primary/duplicate) at 1300/1800 µg/L, MW-218D at 1000 µg/L and MW-112 at 340 µg/L on May 29, 2018.

A summary of the compliance well results is contained in **Table 4**. The results for the compliance well sampling indicate that exceedance of the compliance standard occurred for PCE at the Adelaide Avenue well MW-112 on May 29, 2018. (Note that due to sample dilution by the laboratory, the analytical reporting

limits for vinyl chloride for wells MW-112 and MW-209D were above the compound specific compliance standard for all of the sampling results collected.)

### ***Future Activities***

Future limited sampling will be conducted in August 2018 and the larger semi-annual sampling event will be conducted in November 2018.

If you have any questions regarding this report, please do not hesitate to contact me directory at 617-794-1767 or via e-mail at [catherine.joe@aptim.com](mailto:catherine.joe@aptim.com).

Respectfully submitted,  
**Aptim Environmental & Infrastructure, Inc.**



Catherine Joe  
Project Manager

#### Attachments

Table 1 – Summary Field Parameters

Table 2 – Groundwater Elevation Data

Table 3 – Groundwater Analytical Results Detected Compounds – December 2017 – May 2018

Table 4 – Groundwater Analytical Results in Compliance Wells –December 2017 – May 2018

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, Inc., and the person responsible for the preparation of this Status Report dated July 2, 2018, certify that the information contained in this report is complete and accurate to the best of my knowledge.



Catherine Joe  
Project Manager

7/2/18

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

7/2/18

Date:

## **TABLES**

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**Table 1**  
**Summary Field Parameters**  
**December 2017 - May 2018**

Former Gorham Manufacturing Facility  
 Providence, Rhode Island

SITE_ID	DATE	pH Field	Temperature Field (C°)	Conductivity Field (mS/cm)	Dissolved Oxygen Field (mg/L)	Oxidation Reduction Potential Field (mV)
MW-101D	5/29/2018	5.87	13.8	0.0362	0.0	37.1
MW-101S	5/29/2018	6.16	14	2.761	0.74	-45.4
MW-112	5/29/2018	5.77	13.6	0.802	1.61	126.4
MW-116D	5/29/2018	5.72	13.8	0.2803	6.43	193.4
MW-116S	5/29/2018	6.39	14.7	0.144	7.52	227.7
MW-201D	5/29/2018	6.93	14.1	0.0762	2.85	114.5
MW-202D	5/29/2018	5.34	14.7	0.0414	0.25	123.4
MW-202S	5/29/2018	5.86	14.8	0.085	0.46	114.6
MW-207D	5/29/2018	6.33	14.6	0.0452	0.34	92.9
MW-207S	5/29/2018	6.57	14.8	0.0798	0.73	76.8
MW-209D	5/29/2018	5.82	13.4	0.3613	1.44	105.4
MW-216D	5/30/2018	6.6	14.2	0.777	2.66	-2.9
MW-216S	5/30/2018	6.3	14.2	1.585	1	-126.6
MW-217D	5/30/2018	6.4	14	0.1551	3.21	52.9
MW-217S	5/30/2018	6.44	13.9	1.938	1.7	14.4
MW-218D	5/29/2018	5.91	12.9	0.1851	2.25	124.5
MW-218S	5/29/2018	5.04	12.8	1.107	3.45	175.4

**Notes:**

Notes:  
 C° = degrees Celsius  
 mS/cm = millisiemens per centimeter  
 mg/L = milligrams per liter  
 mV = milli volts

**TABLE 2**  
**GROUNDWATER ELEVATION DATA**  
**(02/21/18 - 05/30/18)**

06/27/18

**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	05/29/18	99.52	25.11	--	--	74.41	DTB = 54.25'
CW-02	05/29/18	98.86	24.32	--	--	74.54	DTB = 54.38'
CW-06	05/29/18	99.52	24.58	--	--	74.94	DTB = 33.21'
GZA-3	05/30/18	NA	17.24	--	--	NA	DTB = 21.96'
MW-101D	05/29/18	98.91	24.28	--	--	74.63	DTB = 45.85'
MW-101S	05/29/18	98.90	24.40	--	--	74.50	DTB = 28.27'
MW-109D	05/30/18	NA	18.78	--	--	NA	DTB = 74.63'
MW-112	02/21/18	100.63	26.50	--	--	74.13	DTB = 34.40'
MW-112	05/29/18	100.63	26.22	--	--	74.41	DTB = 34.70'
MW-116D	02/21/18	98.92	24.80	--	--	74.12	DTB = 44.20'
MW-116D	05/29/18	98.92	24.35	--	--	74.57	DTB = 44.16'
MW-116S	02/21/18	99.40	25.22	--	--	74.18	DTB = 29.38'
MW-116S	05/29/18	99.40	24.75	--	--	74.65	DTB = 28.70'
MW-201D	05/29/18	98.80	24.28	--	--	74.52	DTB = 47.29'
MW-202D	05/29/18	98.17	23.70	--	--	74.47	DTB = 46.90'
MW-202S	05/29/18	98.06	23.61	--	--	74.45	DTB = 37.82'
MW-207D	05/29/18	98.18	23.62	--	--	74.56	DTB = 50.60'
MW-207S	05/29/18	98.28	23.88	--	--	74.40	DTB = 37.32'
MW-209D	05/29/18	99.90	25.80	--	--	74.10	DTB = 62.13'
MW-216D	05/30/18	98.69	25.10	--	--	73.59	DTB = 39.29'
MW-216S	05/30/18	99.58	25.01	--	--	74.57	DTB = 29.58'
MW-217D	05/30/18	98.65	24.47	--	--	74.18	DTB = 46.64'
MW-217S	05/30/18	98.71	24.50	--	--	74.21	DTB = 26.28'
MW-218D	05/29/18	99.67	25.22	--	--	74.45	DTB = 46.25'
MW-218S	05/29/18	99.61	25.13	--	--	74.48	DTB = 29.30'
MW-220S	05/29/18	99.41	24.92	--	--	74.49	DTB = 31.76'
MW-221S	05/29/18	98.92	25.03	25.01	0.02	73.91	

Notes:

feet = feet measured below ground surface

NA = Not Available

NM = Not Measured

**TABLE 3**  
**Groundwater Analytical Results Detected Compounds**  
**December 2017 - May 2018**

Former Gorham Manufacturing Facility  
 Providence, Rhode Island

CONSTITUENT (µg/L)	CW-01 5/29/2018 Primary	CW-02 5/29/2018 Primary	CW-06 5/29/2018 Primary	CW-06 5/29/2018 Duplicate 1	GZA-3 5/30/2018 Primary	GZA-3 5/30/2018 Duplicate 1	MW-101D 5/29/2018 Primary	MW-101S 5/29/2018 Primary	MW-101S 5/29/2018 Duplicate 1	MW-109D 5/30/2018 Primary	MW-112 2/21/2018 Primary	MW-112 5/29/2018 Primary	MW-116D 2/21/2018 Primary	MW-116D 5/29/2018 Primary
<b>VOCs</b>														
1,2,4-Trimethylbenzene	<10	<1.0	---	---	<1.0	---	<1.0	<50	<50	<1.0	<2.0J	<5.0	<1.0J	<1.0
1,3,5-Trimethylbenzene	<10	<1.0	---	---	<1.0	---	<1.0	<50	<50	<1.0	<2.0	<5.0	<1.0	<1.0
Chloromethane	<20JD	<2.0	---	---	<2.0	---	<2.0	<100	<100	<2.0J	<4.0	10	<2.0	<2.0
cis-1,2-Dichloroethene	390	<1.0	---	---	<1.0J	---	<1.0J	370	420	<1.0	<2.0J	<5.0	<1.0	<1.0
Ethylbenzene	<10	<1.0	---	---	<1.0	---	<1.0	<50	<50	<1.0	<2.0J	<5.0	<1.0J	<1.0
Naphthalene	<20	<2.0	---	---	<2.0	---	<2.0	<100	<100	<2.0	<4.0	<10	<2.0	<2.0
Tetrachloroethene	<10JD	<1.0	---	---	<1.0	---	12	1300	1800	<1.0	95	340	<1.0	<1.0
trans-1,2-Dichloroethene	10	<1.0	---	---	<1.0	---	<1.0	<50	<50	<1.0	<2.0	<5.0	<1.0	<1.0
Trichloroethene	210	<1.0	---	---	<1.0	---	<1.0J	140	160	<1.0J	15	<5.0JD	<1.0	<1.0
Vinyl chloride	<20	<2.0	---	---	5.3	---	<2.0	<100	<100	<2.0	<4.0	<10	<2.0	<2.0
m/p-Xylene	<20	<2.0	---	---	<2.0	---	<2.0	<100	<100	<2.0	<4.0J	<10	<2.0J	<2.0
o-Xylene	<10	<1.0	---	---	<1.0	---	<1.0	<50	<50	<1.0	<2.0J	<5.0	<1.0J	<1.0
Xylene(total)	<20	<2.0	---	---	<2.0	---	<2.0	<100	<100	<2.0	<4.0J	<10	<2.0J	<2.0
<b>TPH (mg/L)</b>														
TPH	---	---	9.4	11	---	---	---	---	---	---	---	---	---	---
<b>Lead</b>														
Dissolved Lead	---	---	---	---	<1.0	<1.0	---	---	---	---	---	---	---	---

Notes: < = Less than the laboratory reporting limit

µg/L = Micrograms per liter, parts per billion

mg/L = Milligrams per liter

EPH = Extractable Petroleum Hydrocarbons

-- = Not analyzed for

D = Result from a diluted sample.

J = Result is an estimated value

**TABLE 3**  
**Groundwater Analytical Results Detected Compounds**  
**December 2017 - May 2018**

Former Gorham Manufacturing Facility  
 Providence, Rhode Island

CONSTITUENT ( $\mu\text{g/L}$ )	MW-116S 2/21/2018 Primary	MW-116S 5/29/2018 Primary	MW-201D 5/29/2018 Primary	MW-202D 5/29/2018 Primary	MW-202S 5/29/2018 Primary	MW-207D 5/29/2018 Primary	MW-207S 5/29/2018 Primary	MW-209D 5/29/2018 Primary	MW-216D 5/30/2018 Primary	MW-216S 5/30/2018 Primary	MW-217D 5/30/2018 Primary	MW-217S 5/30/2018 Primary	MW-218D 5/29/2018 Primary	MW-218S 5/29/2018 Primary
<b>VOCs</b>														
1,2,4-Trimethylbenzene	<1.0J	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	11	<1.0	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	<1.0J	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	4.6	<1.0	<1.0	<1.0	<1.0
Chloromethane	<2.0	<2.0	<20	<2.0	<2.0	<2.0	<2.0	10	<2.0	<4.0	<2.0	<2.0	<2.0J	<2.0
cis-1,2-Dichloroethene	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	22	<1.0J	66	1.2	<1.0	7.2	<1.0
Ethylbenzene	<1.0J	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	2.9	<1.0	<1.0	<1.0	<1.0
Naphthalene	<2.0	<2.0	<20	<2.0	<2.0	<2.0	<2.0	<10	<2.0	22	<2.0	<2.0	<2.0	<2.0
Tetrachloroethene	<1.0	<1.0	270	4.8	5.3	<1.0J	3.6	120	<1.0	<2.0	<1.0	6.7	1000	100
trans-1,2-Dichloroethene	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	<1.0	<1.0	14	<1.0	<1.0J	<1.0	<1.0J	47	1	<2.0	1.4	<1.0J	27	<1.0
Vinyl chloride	<2.0	<2.0	<20	<2.0	<2.0	<2.0	<2.0	<10	<2.0	<4.0	<2.0	<2.0	<2.0	<2.0
m/p-Xylene	<2.0J	<2.0	<20	<2.0	<2.0	<2.0	<2.0	<10	<2.0	<4.0JD	<2.0	<2.0	<2.0	<2.0
o-Xylene	<1.0J	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	9.3	<1.0	<1.0	<1.0	<1.0
Xylene(total)	<2.0J	<2.0	<20	<2.0	<2.0	<2.0	<2.0	<10	<2.0	9JD	<2.0	<2.0	<2.0	<2.0
<b>TPH (mg/L)</b>														
TPH	---	---	---	---	---	---	---	---	---	---	---	---	---	---
<b>Lead</b>														
Dissolved Lead	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Notes: < = Less than the laboratory reporting limit

$\mu\text{g/L}$  = Micrograms per liter, parts per billion

$\text{mg/L}$  = Milligrams per liter

EPH = Extractable Petroleum Hydrocarbons

-- = Not analyzed for

D = Result from a diluted sample.

J = Result is an estimated value

**TABLE 4**  
**Groundwater Analytical Results**  
**December 2017 - May 2018**

Former Gorham Manufacturing Facility  
 Providence, Rhode Island

<b>Mashapaug Pond Compliance Wells</b>				
Sample ID	GZA-3 5/30/2018 Primary	GZA-3 5/30/2018 Duplicate 1	MW-109D 5/30/2018 Primary	Compliance Standard <sup>1</sup>
<b>Metals (mg/L)</b>				
Lead	<0.0010	<0.0010	<0.0010	0.03
<b>VOCs (µg/L)</b>				
1,1-Dichloroethane	<1.0J	---	<1.0	50,000
1,1-Dichloroethene	<1.0	---	<1.0	50,000
cis-1,2-Dichloroethene	<1.0J	---	<1.0	50,000
Methyltert-butylether	<1.0J	---	<1.0	50,000
Tetrachloroethene	<1.0	---	<1.0	5,000
Trichloroethene	<1.0	---	<1.0J	20,000
Vinyl chloride	5.3	---	<2.0	1,200

<b>TPH Remediation Area Well</b>			
Sample ID	CW-06 5/29/2018 Primary	CW-06 5/29/2018 Duplicate	Compliance Standard <sup>1</sup>
<b>TPH (mg/L)</b>			
TPH	9.4	11	20

<b>Sewer Interceptor Area Wells</b>			
Sample ID	CW-01 5/29/2018 Primary	CW-02 5/29/2018 Primary	Compliance Standard <sup>2</sup>
<b>VOCs (µg/L)</b>			
1,1-Dichloroethane	<10	<1.0	120,000
1,1-Dichloroethene	<10JD	<1.0	23,000
cis-1,2-Dichloroethene	390	<1.0	69,000
trans-1,2-Dichloroethene	10	<1.0	79,000
Tetrachloroethene	<10JD	<1.0	NS
Trichloroethene	210	<1.0	87,000

<b>Adelaide Avenue Wells</b>					
Sample ID	MW-112 2/21/2018 Primary	MW-112 5/29/2018 Primary	MW-209D 5/29/2018 Primary	MW-218S 5/29/2018 Primary	Compliance Standard <sup>3</sup>
<b>VOCs (µg/L)</b>					
1,1-Dichloroethane	<2.0	<5.0	<5.0	<1.0	2,400
1,1-Dichloroethene	<2.0	<5.0	<5.0JD	<1.0	7
cis-1,2-Dichloroethene	<2.0J	<5.0	22	<1.0	1,900
Methyltert-butylether	<2.0	<5.0	<5.0	<1.0	5,000
Tetrachloroethene	95	340	120	100	150
Trichloroethene	15	<5.0JD	47	<1.0	540
Vinyl chloride	<4.0	<10	<10	<2.0	2

1. 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.

2. These compliance standards taken from Table 5 - Upper Concentration Limits for GB Groundwater, RIDEM Remediation Regulations.

3. 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).

NA = Indicates that the analysis was not performed.

< = 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

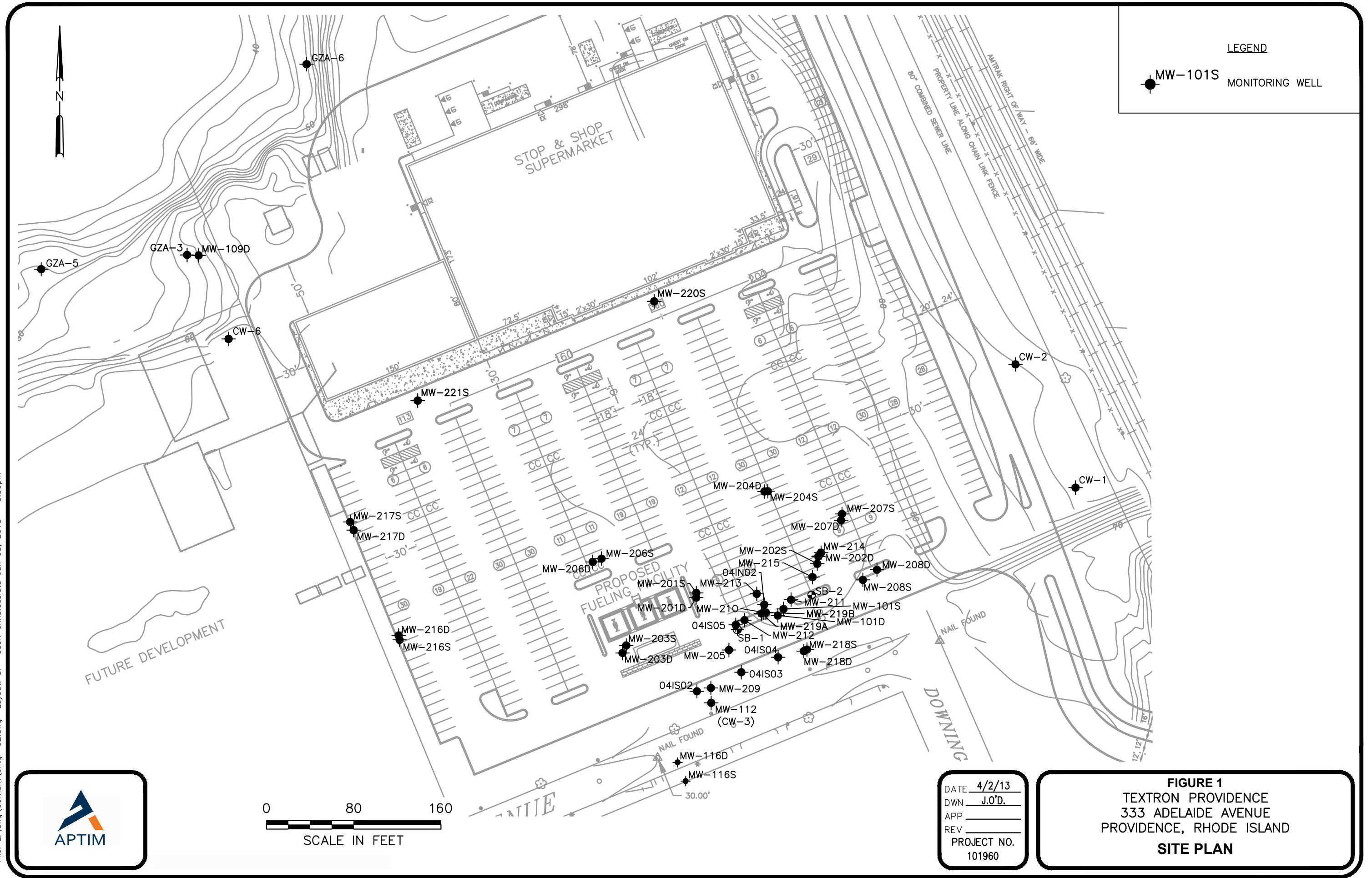
VOCs = Volatile organic compounds

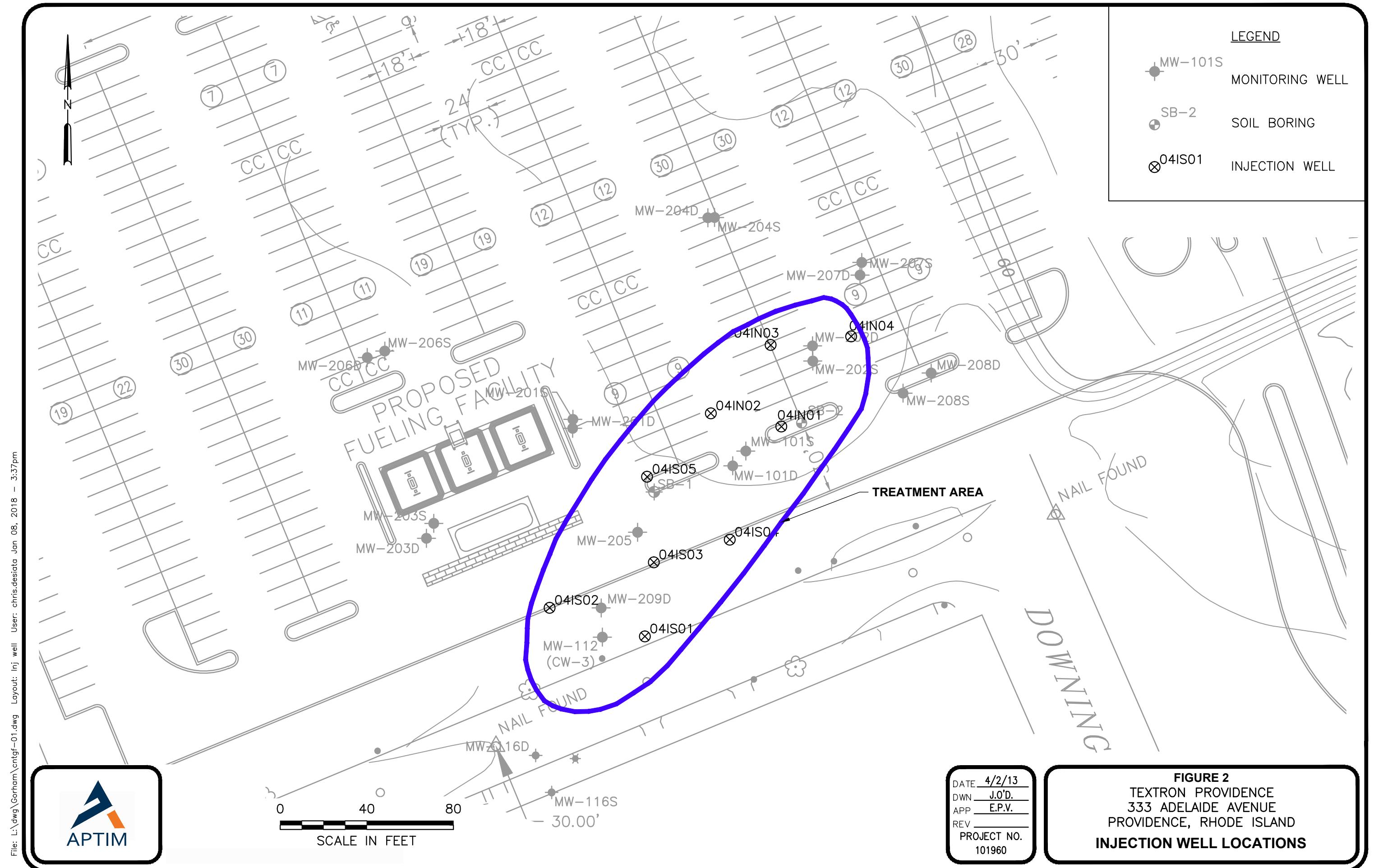
-- = Not analyzed for

J = Estimated result.

## **FIGURES**

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**ATTACHMENT A**  
**LABORATORY REPORTS**

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---

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

March 5, 2018

Brian Cote  
APTIM - MA  
150 Royall Street  
Canton, MA 02021

Project Location: 333 Adelaide Ave., Providence, RI

Client Job Number:

Project Number: 130274

Laboratory Work Order Number: 18B0883

Enclosed are results of analyses for samples received by the laboratory on February 22, 2018. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jessica L. Hoffman  
Project Manager

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

APTIM - MA  
150 Royall Street  
Canton, MA 02021  
ATTN: Brian Cote

REPORT DATE: 3/5/2018

PURCHASE ORDER NUMBER: 835493-000 OP

PROJECT NUMBER: 130274

#### **ANALYTICAL SUMMARY**

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WORK ORDER NUMBER: 18B0883

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 Ave., Providence, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-112	18B0883-01	Ground Water		SW-846 8260C	
MW-116S	18B0883-02	Ground Water		SW-846 8260C	
MW-116D	18B0883-03	Ground Water		SW-846 8260C	



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

#### CASE NARRATIVE SUMMARY

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

#### SW-846 8260C

##### **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:**

###### **Methyl Acetate**

18B0883-01[MW-112], 18B0883-02[MW-116S], 18B0883-03[MW-116D], B197923-BLK1, B197923-BS1, B197923-BSD1

###### **RL-11**

Elevated reporting limit due to high concentration of target compounds.

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

18B0883-01[MW-112]

###### **V-05**

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

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

###### **Methyl Acetate**

18B0883-01[MW-112], 18B0883-02[MW-116S], 18B0883-03[MW-116D], B197923-BLK1, B197923-BS1, B197923-BSD1

###### **Naphthalene**

18B0883-01[MW-112], 18B0883-02[MW-116S], 18B0883-03[MW-116D], B197923-BLK1, B197923-BS1, B197923-BSD1

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

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

Lisa A. Worthington  
Project Manager



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

Project Location: 333 Adelaide Ave., Providence, R

Sample Description:

Work Order: 18B0883

Date Received: 2/22/2018

Sampled: 2/21/2018 09:00

**Field Sample #:** MW-112**Sample ID:** 18B0883-01**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	3/1/18	3/1/18 23:25	LBD
Acrylonitrile	ND	10	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
tert-Amyl Methyl Ether (TAME)	ND	1.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
Benzene	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
Bromobenzene	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
Bromochloromethane	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
Bromodichloromethane	ND	1.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
Bromoform	ND	4.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
Bromomethane	ND	4.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
2-Butanone (MEK)	ND	40	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
tert-Butyl Alcohol (TBA)	ND	40	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
n-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
sec-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
tert-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	1.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
Carbon Disulfide	ND	8.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
Carbon Tetrachloride	ND	10	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
Chlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
Chlorodibromomethane	ND	1.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
Chloroethane	ND	4.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
Chloroform	ND	4.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
Chloromethane	ND	4.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
2-Chlorotoluene	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
4-Chlorotoluene	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
Dibromomethane	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
1,2-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
1,3-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
1,4-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
trans-1,4-Dichloro-2-butene	ND	10	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
Dichlorodifluoromethane (Freon 12)	ND	4.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
1,1-Dichloroethane	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
1,2-Dichloroethane	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
1,1-Dichloroethylene	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
cis-1,2-Dichloroethylene	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
trans-1,2-Dichloroethylene	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
1,2-Dichloropropane	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
1,3-Dichloropropane	ND	1.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
2,2-Dichloropropane	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
1,1-Dichloropropene	ND	4.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
cis-1,3-Dichloropropene	ND	1.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
trans-1,3-Dichloropropene	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
Diethyl Ether	ND	4.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD



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

Project Location: 333 Adelaide Ave., Providence, R

Sample Description:

Work Order: 18B0883

Date Received: 2/22/2018

**Field Sample #:** MW-112

Sampled: 2/21/2018 09:00

**Sample ID:** 18B0883-01Sample 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	3/1/18	3/1/18 23:25	LBD
1,4-Dioxane	ND	100	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
Ethylbenzene	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
Hexachlorobutadiene	ND	1.2	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
2-Hexanone (MBK)	ND	20	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
Isopropylbenzene (Cumene)	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
p-Isopropyltoluene (p-Cymene)	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
Methyl Acetate	ND	2.0	µg/L	2	L-04, V-05	SW-846 8260C	3/1/18	3/1/18 23:25	LBD
Methyl tert-Butyl Ether (MTBE)	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
Methyl Cyclohexane	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
Methylene Chloride	ND	10	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
4-Methyl-2-pentanone (MIBK)	ND	20	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
Naphthalene	ND	4.0	µg/L	2	V-05	SW-846 8260C	3/1/18	3/1/18 23:25	LBD
n-Propylbenzene	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
Styrene	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
Tetrachloroethylene	95	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
Tetrahydrofuran	ND	20	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
Toluene	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
1,2,3-Trichlorobenzene	ND	10	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
1,2,4-Trichlorobenzene	ND	4.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
1,3,5-Trichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
1,1,1-Trichloroethane	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
1,1,2-Trichloroethane	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
Trichloroethylene	15	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
Trichlorofluoromethane (Freon 11)	ND	4.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
1,2,3-Trichloropropane	ND	4.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
1,2,4-Trimethylbenzene	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
1,3,5-Trimethylbenzene	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
Vinyl Chloride	ND	4.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
m+p Xylene	ND	4.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
o-Xylene	ND	2.0	µg/L	2		SW-846 8260C	3/1/18	3/1/18 23:25	LBD
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	101	70-130							3/1/18 23:25
Toluene-d8	94.9	70-130							3/1/18 23:25
4-Bromofluorobenzene	93.8	70-130							3/1/18 23:25



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

Project Location: 333 Adelaide Ave., Providence, R

Sample Description:

Work Order: 18B0883

Date Received: 2/22/2018

**Field Sample #:** MW-116S

Sampled: 2/21/2018 11:00

**Sample ID:** 18B0883-02

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	3/1/18	3/1/18 22:23	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
Bromoform	ND	2.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
trans-1,4-Dichloro-2-butene	ND	5.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
trans-1,3-Dichloropropene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD



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

Project Location: 333 Adelaide Ave., Providence, R

Sample Description:

Work Order: 18B0883

Date Received: 2/22/2018

**Field Sample #:** MW-116S

Sampled: 2/21/2018 11:00

**Sample ID:** 18B0883-02Sample 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	3/1/18	3/1/18 22:23	LBD
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
Methyl Acetate	ND	1.0	µg/L	1	L-04, V-05	SW-846 8260C	3/1/18	3/1/18 22:23	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
Naphthalene	ND	2.0	µg/L	1	V-05	SW-846 8260C	3/1/18	3/1/18 22:23	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
1,2,4-Trichlorobenzene	ND	2.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:23	LBD
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	99.9	70-130							3/1/18 22:23
Toluene-d8	95.4	70-130							3/1/18 22:23
4-Bromofluorobenzene	95.8	70-130							3/1/18 22:23



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

Project Location: 333 Adelaide Ave., Providence, R

Sample Description:

Work Order: 18B0883

Date Received: 2/22/2018

Sampled: 2/21/2018 10:00

**Field Sample #:** MW-116D**Sample ID:** 18B0883-03**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	3/1/18	3/1/18 22:54	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
Bromoform	ND	2.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
trans-1,4-Dichloro-2-butene	ND	5.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
trans-1,3-Dichloropropene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD



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

Project Location: 333 Adelaide Ave., Providence, R

Sample Description:

Work Order: 18B0883

Date Received: 2/22/2018

**Field Sample #:** MW-116D

Sampled: 2/21/2018 10:00

**Sample ID:** 18B0883-03

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	3/1/18	3/1/18 22:54	LBD
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
Methyl Acetate	ND	1.0	µg/L	1	L-04, V-05	SW-846 8260C	3/1/18	3/1/18 22:54	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
Naphthalene	ND	2.0	µg/L	1	V-05	SW-846 8260C	3/1/18	3/1/18 22:54	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
1,2,4-Trichlorobenzene	ND	2.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	3/1/18	3/1/18 22:54	LBD
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	102	70-130							3/1/18 22:54
Toluene-d8	96.8	70-130							3/1/18 22:54
4-Bromofluorobenzene	96.0	70-130							3/1/18 22:54



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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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18B0883-01 [MW-112]	B197923	2.5	5.00	03/01/18
18B0883-02 [MW-116S]	B197923	5	5.00	03/01/18
18B0883-03 [MW-116D]	B197923	5	5.00	03/01/18



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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch B197923 - SW-846 5030B****Blank (B197923-BLK1)** Prepared & Analyzed: 03/01/18

Acetone	ND	50	µg/L
Acrylonitrile	ND	5.0	µg/L
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L
Benzene	ND	1.0	µg/L
Bromobenzene	ND	1.0	µg/L
Bromoform	ND	1.0	µg/L
Bromochloromethane	ND	0.50	µg/L
Bromodichloromethane	ND	0.50	µg/L
Bromoform	ND	2.0	µg/L
Bromomethane	ND	2.0	µg/L
2-Butanone (MEK)	ND	20	µg/L
tert-Butyl Alcohol (TBA)	ND	20	µg/L
n-Butylbenzene	ND	1.0	µg/L
sec-Butylbenzene	ND	1.0	µg/L
tert-Butylbenzene	ND	1.0	µg/L
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L
Carbon Disulfide	ND	4.0	µg/L
Carbon Tetrachloride	ND	5.0	µg/L
Chlorobenzene	ND	1.0	µg/L
Chlorodibromomethane	ND	0.50	µg/L
Chloroethane	ND	2.0	µg/L
Chloroform	ND	2.0	µg/L
Chloromethane	ND	2.0	µg/L
2-Chlorotoluene	ND	1.0	µg/L
4-Chlorotoluene	ND	1.0	µg/L
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L
1,2-Dibromoethane (EDB)	ND	0.50	µg/L
Dibromomethane	ND	1.0	µg/L
1,2-Dichlorobenzene	ND	1.0	µg/L
1,3-Dichlorobenzene	ND	1.0	µg/L
1,4-Dichlorobenzene	ND	1.0	µg/L
trans-1,4-Dichloro-2-butene	ND	5.0	µg/L
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L
1,1-Dichloroethane	ND	1.0	µg/L
1,2-Dichloroethane	ND	1.0	µg/L
1,1-Dichloroethylene	ND	1.0	µg/L
cis-1,2-Dichloroethylene	ND	1.0	µg/L
trans-1,2-Dichloroethylene	ND	1.0	µg/L
1,2-Dichloropropane	ND	1.0	µg/L
1,3-Dichloropropane	ND	0.50	µg/L
2,2-Dichloropropane	ND	1.0	µg/L
1,1-Dichloropropene	ND	2.0	µg/L
cis-1,3-Dichloropropene	ND	0.50	µg/L
trans-1,3-Dichloropropene	ND	1.0	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

L-04, V-05



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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch B197923 - SW-846 5030B**

<b>Blank (B197923-BLK1)</b>	Prepared & Analyzed: 03/01/18								
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L						
Methyl Cyclohexane	ND	1.0	µg/L						
Methylene Chloride	ND	5.0	µg/L						
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L						
Naphthalene	ND	2.0	µg/L						
n-Propylbenzene	ND	1.0	µg/L						
Styrene	ND	1.0	µg/L						
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L						
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L						
Tetrachloroethylene	ND	1.0	µg/L						
Tetrahydrofuran	ND	10	µg/L						
Toluene	ND	1.0	µg/L						
1,2,3-Trichlorobenzene	ND	5.0	µg/L						
1,2,4-Trichlorobenzene	ND	2.0	µg/L						
1,3,5-Trichlorobenzene	ND	1.0	µg/L						
1,1,1-Trichloroethane	ND	1.0	µg/L						
1,1,2-Trichloroethane	ND	1.0	µg/L						
Trichloroethylene	ND	1.0	µg/L						
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L						
1,2,3-Trichloropropane	ND	2.0	µg/L						
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L						
1,2,4-Trimethylbenzene	ND	1.0	µg/L						
1,3,5-Trimethylbenzene	ND	1.0	µg/L						
Vinyl Chloride	ND	2.0	µg/L						
m+p Xylene	ND	2.0	µg/L						
o-Xylene	ND	1.0	µg/L						
Surrogate: 1,2-Dichloroethane-d4	25.4		µg/L	25.0	102	70-130			
Surrogate: Toluene-d8	23.6		µg/L	25.0	94.4	70-130			
Surrogate: 4-Bromofluorobenzene	23.5		µg/L	25.0	94.1	70-130			

<b>LCS (B197923-BS1)</b>	Prepared & Analyzed: 03/01/18						
Acetone	88.0	50	µg/L	100	88.0	70-160	†
Acrylonitrile	9.47	5.0	µg/L	10.0	94.7	70-130	
tert-Amyl Methyl Ether (TAME)	8.86	0.50	µg/L	10.0	88.6	70-130	
Benzene	9.18	1.0	µg/L	10.0	91.8	70-130	
Bromobenzene	10.1	1.0	µg/L	10.0	101	70-130	
Bromoform	9.25	2.0	µg/L	10.0	92.5	70-130	
Bromomethane	6.61	2.0	µg/L	10.0	66.1	40-160	†
2-Butanone (MEK)	92.3	20	µg/L	100	92.3	40-160	†
tert-Butyl Alcohol (TBA)	87.0	20	µg/L	100	87.0	40-160	†
n-Butylbenzene	10.8	1.0	µg/L	10.0	108	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)	9.07	0.50	µg/L	10.0	90.7	70-130	
Carbon Disulfide	9.43	4.0	µg/L	10.0	94.3	70-130	
Carbon Tetrachloride	10.6	5.0	µg/L	10.0	106	70-130	
Chlorobenzene	10.1	1.0	µg/L	10.0	101	70-130	
Chlorodibromomethane	10.1	0.50	µg/L	10.0	101	70-130	
Chloroethane	9.10	2.0	µg/L	10.0	91.0	70-130	
Chloroform	9.60	2.0	µg/L	10.0	96.0	70-130	



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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch B197923 - SW-846 5030B**

<b>LCS (B197923-BS1)</b>	Prepared & Analyzed: 03/01/18								
Chloromethane	8.07	2.0	µg/L	10.0	80.7	40-160			†
2-Chlorotoluene	10.4	1.0	µg/L	10.0	104	70-130			
4-Chlorotoluene	10.5	1.0	µg/L	10.0	105	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	9.50	5.0	µg/L	10.0	95.0	70-130			
1,2-Dibromoethane (EDB)	10.4	0.50	µg/L	10.0	104	70-130			
Dibromomethane	10.7	1.0	µg/L	10.0	107	70-130			
1,2-Dichlorobenzene	10.3	1.0	µg/L	10.0	103	70-130			
1,3-Dichlorobenzene	10.7	1.0	µg/L	10.0	107	70-130			
1,4-Dichlorobenzene	10.3	1.0	µg/L	10.0	103	70-130			
trans-1,4-Dichloro-2-butene	9.22	5.0	µg/L	10.0	92.2	70-130			
Dichlorodifluoromethane (Freon 12)	5.87	2.0	µg/L	10.0	58.7	40-160			†
1,1-Dichloroethane	9.76	1.0	µg/L	10.0	97.6	70-130			
1,2-Dichloroethane	11.2	1.0	µg/L	10.0	112	70-130			
1,1-Dichloroethylene	9.93	1.0	µg/L	10.0	99.3	70-130			
cis-1,2-Dichloroethylene	9.85	1.0	µg/L	10.0	98.5	70-130			
trans-1,2-Dichloroethylene	10.1	1.0	µg/L	10.0	101	70-130			
1,2-Dichloropropane	9.98	1.0	µg/L	10.0	99.8	70-130			
1,3-Dichloropropane	9.71	0.50	µg/L	10.0	97.1	70-130			
2,2-Dichloropropane	10.3	1.0	µg/L	10.0	103	40-130			†
1,1-Dichloropropene	9.86	2.0	µg/L	10.0	98.6	70-130			
cis-1,3-Dichloropropene	9.45	0.50	µg/L	10.0	94.5	70-130			
trans-1,3-Dichloropropene	9.80	1.0	µg/L	10.0	98.0	70-130			
Diethyl Ether	9.58	2.0	µg/L	10.0	95.8	70-130			
Diisopropyl Ether (DIPE)	9.83	0.50	µg/L	10.0	98.3	70-130			
1,4-Dioxane	89.8	50	µg/L	100	89.8	40-130			†
Ethylbenzene	10.2	1.0	µg/L	10.0	102	70-130			
Hexachlorobutadiene	11.9	0.60	µg/L	10.0	119	70-130			
2-Hexanone (MBK)	100	10	µg/L	100	100	70-160			†
Isopropylbenzene (Cumene)	10.6	1.0	µg/L	10.0	106	70-130			
p-Isopropyltoluene (p-Cymene)	10.8	1.0	µg/L	10.0	108	70-130			
<b>Methyl Acetate</b>	5.62	1.0	µg/L	10.0	<b>56.2</b> *	70-130			L-04, V-05
Methyl tert-Butyl Ether (MTBE)	9.31	1.0	µg/L	10.0	93.1	70-130			
Methyl Cyclohexane	9.29	1.0	µg/L	10.0	92.9	70-130			
Methylene Chloride	9.98	5.0	µg/L	10.0	99.8	70-130			
4-Methyl-2-pentanone (MIBK)	101	10	µg/L	100	101	70-160			†
Naphthalene	8.35	2.0	µg/L	10.0	83.5	40-130			V-05 †
n-Propylbenzene	10.1	1.0	µg/L	10.0	101	70-130			
Styrene	10.3	1.0	µg/L	10.0	103	70-130			
1,1,1,2-Tetrachloroethane	10.7	1.0	µg/L	10.0	107	70-130			
1,1,2,2-Tetrachloroethane	9.89	0.50	µg/L	10.0	98.9	70-130			
Tetrachloroethylene	11.0	1.0	µg/L	10.0	110	70-130			
Tetrahydrofuran	10.8	10	µg/L	10.0	108	70-130			
Toluene	10.2	1.0	µg/L	10.0	102	70-130			
1,2,3-Trichlorobenzene	10.0	5.0	µg/L	10.0	100	70-130			
1,2,4-Trichlorobenzene	9.95	2.0	µg/L	10.0	99.5	70-130			
1,3,5-Trichlorobenzene	10.6	1.0	µg/L	10.0	106	70-130			
1,1,1-Trichloroethane	10.1	1.0	µg/L	10.0	101	70-130			
1,1,2-Trichloroethane	10.4	1.0	µg/L	10.0	104	70-130			
Trichloroethylene	10.2	1.0	µg/L	10.0	102	70-130			
Trichlorofluoromethane (Freon 11)	9.64	2.0	µg/L	10.0	96.4	70-130			
1,2,3-Trichloropropane	9.94	2.0	µg/L	10.0	99.4	70-130			



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
<b>Batch B197923 - SW-846 5030B</b>										
<b>LCS (B197923-BS1)</b>										
Prepared & Analyzed: 03/01/18										
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.10	1.0	µg/L	10.0	91.0	70-130				
1,2,4-Trimethylbenzene	10.4	1.0	µg/L	10.0	104	70-130				
1,3,5-Trimethylbenzene	10.5	1.0	µg/L	10.0	105	70-130				
Vinyl Chloride	8.37	2.0	µg/L	10.0	83.7	40-160				†
m+p Xylene	20.9	2.0	µg/L	20.0	105	70-130				
o-Xylene	10.3	1.0	µg/L	10.0	103	70-130				
Surrogate: 1,2-Dichloroethane-d4	24.7		µg/L	25.0	98.7	70-130				
Surrogate: Toluene-d8	24.0		µg/L	25.0	96.2	70-130				
Surrogate: 4-Bromofluorobenzene	24.2		µg/L	25.0	96.6	70-130				
<b>LCS Dup (B197923-BS1D)</b>										
Prepared & Analyzed: 03/01/18										
Acetone	88.0	50	µg/L	100	88.0	70-160	0.0341	25		†
Acrylonitrile	8.85	5.0	µg/L	10.0	88.5	70-130	6.77	25		
tert-Amyl Methyl Ether (TAME)	8.71	0.50	µg/L	10.0	87.1	70-130	1.71	25		
Benzene	9.11	1.0	µg/L	10.0	91.1	70-130	0.765	25		
Bromobenzene	9.91	1.0	µg/L	10.0	99.1	70-130	1.50	25		
Bromoform	10.6	1.0	µg/L	10.0	106	70-130	1.42	25		
Bromochloromethane	10.3	0.50	µg/L	10.0	103	70-130	0.00	25		
Bromodichloromethane	9.21	2.0	µg/L	10.0	92.1	70-130	0.433	25		
Bromomethane	7.48	2.0	µg/L	10.0	74.8	40-160	12.3	25		†
2-Butanone (MEK)	92.6	20	µg/L	100	92.6	40-160	0.314	25		†
tert-Butyl Alcohol (TBA)	85.1	20	µg/L	100	85.1	40-160	2.29	25		†
n-Butylbenzene	10.5	1.0	µg/L	10.0	105	70-130	3.38	25		
sec-Butylbenzene	10.2	1.0	µg/L	10.0	102	70-130	1.85	25		
tert-Butylbenzene	9.82	1.0	µg/L	10.0	98.2	70-130	3.21	25		
tert-Butyl Ethyl Ether (TBEE)	9.26	0.50	µg/L	10.0	92.6	70-130	2.07	25		
Carbon Disulfide	9.26	4.0	µg/L	10.0	92.6	70-130	1.82	25		
Carbon Tetrachloride	10.4	5.0	µg/L	10.0	104	70-130	2.29	25		
Chlorobenzene	9.61	1.0	µg/L	10.0	96.1	70-130	4.87	25		
Chlorodibromomethane	10.0	0.50	µg/L	10.0	100	70-130	0.598	25		
Chloroethane	8.96	2.0	µg/L	10.0	89.6	70-130	1.55	25		
Chloroform	9.50	2.0	µg/L	10.0	95.0	70-130	1.05	25		
Chloromethane	7.97	2.0	µg/L	10.0	79.7	40-160	1.25	25		†
2-Chlorotoluene	10.2	1.0	µg/L	10.0	102	70-130	1.65	25		
4-Chlorotoluene	10.2	1.0	µg/L	10.0	102	70-130	3.00	25		
1,2-Dibromo-3-chloropropane (DBCP)	9.54	5.0	µg/L	10.0	95.4	70-130	0.420	25		
1,2-Dibromoethane (EDB)	10.1	0.50	µg/L	10.0	101	70-130	2.83	25		
Dibromomethane	10.5	1.0	µg/L	10.0	105	70-130	1.13	25		
1,2-Dichlorobenzene	10.1	1.0	µg/L	10.0	101	70-130	1.67	25		
1,3-Dichlorobenzene	10.4	1.0	µg/L	10.0	104	70-130	2.85	25		
1,4-Dichlorobenzene	9.94	1.0	µg/L	10.0	99.4	70-130	3.65	25		
trans-1,4-Dichloro-2-butene	9.20	5.0	µg/L	10.0	92.0	70-130	0.217	25		
Dichlorodifluoromethane (Freon 12)	5.60	2.0	µg/L	10.0	56.0	40-160	4.71	25		†
1,1-Dichloroethane	9.65	1.0	µg/L	10.0	96.5	70-130	1.13	25		
1,2-Dichloroethane	11.0	1.0	µg/L	10.0	110	70-130	1.72	25		
1,1-Dichloroethylene	9.98	1.0	µg/L	10.0	99.8	70-130	0.502	25		
cis-1,2-Dichloroethylene	9.85	1.0	µg/L	10.0	98.5	70-130	0.00	25		
trans-1,2-Dichloroethylene	9.92	1.0	µg/L	10.0	99.2	70-130	1.40	25		
1,2-Dichloropropane	9.83	1.0	µg/L	10.0	98.3	70-130	1.51	25		
1,3-Dichloropropane	9.50	0.50	µg/L	10.0	95.0	70-130	2.19	25		
2,2-Dichloropropane	10.0	1.0	µg/L	10.0	100	40-130	2.84	25		†
1,1-Dichloropropene	9.57	2.0	µg/L	10.0	95.7	70-130	2.99	25		



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B197923 - SW-846 5030B</b>										
<b>LCS Dup (B197923-BSD1)</b>										
Prepared & Analyzed: 03/01/18										
cis-1,3-Dichloropropene	9.24	0.50	µg/L	10.0	92.4	70-130	2.25	25		
trans-1,3-Dichloropropene	9.18	1.0	µg/L	10.0	91.8	70-130	6.53	25		
Diethyl Ether	9.74	2.0	µg/L	10.0	97.4	70-130	1.66	25		
Diisopropyl Ether (DIPE)	9.85	0.50	µg/L	10.0	98.5	70-130	0.203	25		
1,4-Dioxane	96.7	50	µg/L	100	96.7	40-130	7.47	50		† ‡
Ethylbenzene	10.2	1.0	µg/L	10.0	102	70-130	0.0984	25		
Hexachlorobutadiene	11.5	0.60	µg/L	10.0	115	70-130	3.07	25		
2-Hexanone (MBK)	98.5	10	µg/L	100	98.5	70-160	1.90	25		†
Isopropylbenzene (Cumene)	10.4	1.0	µg/L	10.0	104	70-130	2.00	25		
p-Isopropyltoluene (p-Cymene)	10.4	1.0	µg/L	10.0	104	70-130	3.11	25		
<b>Methyl Acetate</b>	5.58	1.0	µg/L	10.0	<b>55.8</b> *	70-130	0.714	25	L-04, V-05	
Methyl tert-Butyl Ether (MTBE)	9.48	1.0	µg/L	10.0	94.8	70-130	1.81	25		
Methyl Cyclohexane	9.46	1.0	µg/L	10.0	94.6	70-130	1.81	25		
Methylene Chloride	9.98	5.0	µg/L	10.0	99.8	70-130	0.00	25		
4-Methyl-2-pentanone (MIBK)	98.4	10	µg/L	100	98.4	70-160	2.28	25		†
Naphthalene	8.01	2.0	µg/L	10.0	80.1	40-130	4.16	25	V-05	†
n-Propylbenzene	9.99	1.0	µg/L	10.0	99.9	70-130	1.29	25		
Styrene	10.3	1.0	µg/L	10.0	103	70-130	0.195	25		
1,1,1,2-Tetrachloroethane	10.4	1.0	µg/L	10.0	104	70-130	2.55	25		
1,1,2,2-Tetrachloroethane	9.86	0.50	µg/L	10.0	98.6	70-130	0.304	25		
Tetrachloroethylene	10.6	1.0	µg/L	10.0	106	70-130	3.60	25		
Tetrahydrofuran	9.63	10	µg/L	10.0	96.3	70-130	11.0	25		
Toluene	9.86	1.0	µg/L	10.0	98.6	70-130	2.90	25		
1,2,3-Trichlorobenzene	9.69	5.0	µg/L	10.0	96.9	70-130	3.55	25		
1,2,4-Trichlorobenzene	9.61	2.0	µg/L	10.0	96.1	70-130	3.48	25		
1,3,5-Trichlorobenzene	10.6	1.0	µg/L	10.0	106	70-130	0.0942	25		
1,1,1-Trichloroethane	9.98	1.0	µg/L	10.0	99.8	70-130	0.798	25		
1,1,2-Trichloroethane	10.0	1.0	µg/L	10.0	100	70-130	3.14	25		
Trichloroethylene	10.2	1.0	µg/L	10.0	102	70-130	0.687	25		
Trichlorofluoromethane (Freon 11)	9.40	2.0	µg/L	10.0	94.0	70-130	2.52	25		
1,2,3-Trichloropropane	9.28	2.0	µg/L	10.0	92.8	70-130	6.87	25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.30	1.0	µg/L	10.0	93.0	70-130	2.17	25		
1,2,4-Trimethylbenzene	10.0	1.0	µg/L	10.0	100	70-130	3.73	25		
1,3,5-Trimethylbenzene	10.3	1.0	µg/L	10.0	103	70-130	2.02	25		
Vinyl Chloride	8.08	2.0	µg/L	10.0	80.8	40-160	3.53	25		†
m+p Xylene	20.6	2.0	µg/L	20.0	103	70-130	1.69	25		
o-Xylene	10.3	1.0	µg/L	10.0	103	70-130	0.0971	25		
Surrogate: 1,2-Dichloroethane-d4	24.7		µg/L	25.0	98.9	70-130				
Surrogate: Toluene-d8	24.1		µg/L	25.0	96.5	70-130				
Surrogate: 4-Bromofluorobenzene	24.5		µg/L	25.0	97.9	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-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.
  - RL-11 Elevated reporting limit due to high concentration of target compounds.
  - V-05 Continuing calibration did not meet method specifications and was biased on the low side for this compound.  
Reported result is estimated.



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#### CERTIFICATIONS

##### Certified Analyses included in this Report

Analyte	Certifications
<b><i>SW-846 8260C in Water</i></b>	
Acetone	CT,ME,NH,VA,NY
Acrylonitrile	CT,ME,NH,VA,NY
tert-Amyl Methyl Ether (TAME)	ME,NH,VA,NY
Benzene	CT,ME,NH,VA,NY
Bromobenzene	NY
Bromochloromethane	ME,NH,VA,NY
Bromodichloromethane	CT,ME,NH,VA,NY
Bromoform	CT,ME,NH,VA,NY
Bromomethane	CT,ME,NH,VA,NY
2-Butanone (MEK)	CT,ME,NH,VA,NY
tert-Butyl Alcohol (TBA)	ME,NH,VA,NY
n-Butylbenzene	ME,VA,NY
sec-Butylbenzene	ME,VA,NY
tert-Butylbenzene	ME,VA,NY
tert-Butyl Ethyl Ether (TBEE)	ME,NH,VA,NY
Carbon Disulfide	CT,ME,NH,VA,NY
Carbon Tetrachloride	CT,ME,NH,VA,NY
Chlorobenzene	CT,ME,NH,VA,NY
Chlorodibromomethane	CT,ME,NH,VA,NY
Chloroethane	CT,ME,NH,VA,NY
Chloroform	CT,ME,NH,VA,NY
Chloromethane	CT,ME,NH,VA,NY
2-Chlorotoluene	ME,NH,VA,NY
4-Chlorotoluene	ME,NH,VA,NY
Dibromomethane	ME,NH,VA,NY
1,2-Dichlorobenzene	CT,ME,NH,VA,NY
1,3-Dichlorobenzene	CT,ME,NH,VA,NY
1,4-Dichlorobenzene	CT,ME,NH,VA,NY
trans-1,4-Dichloro-2-butene	ME,NH,VA,NY
Dichlorodifluoromethane (Freon 12)	ME,NH,VA,NY
1,1-Dichloroethane	CT,ME,NH,VA,NY
1,2-Dichloroethane	CT,ME,NH,VA,NY
1,1-Dichloroethylene	CT,ME,NH,VA,NY
cis-1,2-Dichloroethylene	ME,NY
trans-1,2-Dichloroethylene	CT,ME,NH,VA,NY
1,2-Dichloropropane	CT,ME,NH,VA,NY
1,3-Dichloropropane	ME,VA,NY
2,2-Dichloropropane	ME,NH,VA,NY
1,1-Dichloropropene	ME,NH,VA,NY
cis-1,3-Dichloropropene	CT,ME,NH,VA,NY
trans-1,3-Dichloropropene	CT,ME,NH,VA,NY
Diethyl Ether	NY
Diisopropyl Ether (DIPE)	ME,NH,VA,NY
1,4-Dioxane	NY
Ethylbenzene	CT,ME,NH,VA,NY
Hexachlorobutadiene	CT,ME,NH,VA,NY
2-Hexanone (MBK)	CT,ME,NH,VA,NY



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#### CERTIFICATIONS

##### Certified Analyses included in this Report

Analyte	Certifications
<b>SW-846 8260C in Water</b>	
Isopropylbenzene (Cumene)	ME,VA,NY
p-Isopropyltoluene (p-Cymene)	CT,ME,NH,VA,NY
Methyl Acetate	NY
Methyl tert-Butyl Ether (MTBE)	CT,ME,NH,VA,NY
Methyl Cyclohexane	NY
Methylene Chloride	CT,ME,NH,VA,NY
4-Methyl-2-pentanone (MIBK)	CT,ME,NH,VA,NY
Naphthalene	ME,NH,VA,NY
n-Propylbenzene	CT,ME,NH,VA,NY
Styrene	CT,ME,NH,VA,NY
1,1,1,2-Tetrachloroethane	CT,ME,NH,VA,NY
1,1,2,2-Tetrachloroethane	CT,ME,NH,VA,NY
Tetrachloroethylene	CT,ME,NH,VA,NY
Toluene	CT,ME,NH,VA,NY
1,2,3-Trichlorobenzene	ME,NH,VA,NY
1,2,4-Trichlorobenzene	CT,ME,NH,VA,NY
1,3,5-Trichlorobenzene	ME
1,1,1-Trichloroethane	CT,ME,NH,VA,NY
1,1,2-Trichloroethane	CT,ME,NH,VA,NY
Trichloroethylene	CT,ME,NH,VA,NY
Trichlorofluoromethane (Freon 11)	CT,ME,NH,VA,NY
1,2,3-Trichloropropane	ME,NH,VA,NY
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	VA,NY
1,2,4-Trimethylbenzene	ME,VA,NY
1,3,5-Trimethylbenzene	ME,VA,NY
Vinyl Chloride	CT,ME,NH,VA,NY
m+p Xylene	CT,ME,NH,VA,NY
o-Xylene	CT,ME,NH,VA,NY

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2005	100033	03/1/2020
MA	Massachusetts DEP	M-MA100	06/30/2018
CT	Connecticut Department of Public Health	PH-0567	09/30/2019
NY	New York State Department of Health	10899 NELAP	04/1/2018
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2019
RI	Rhode Island Department of Health	LAO00112	12/30/2018
NC	North Carolina Div. of Water Quality	652	12/31/2018
NJ	New Jersey DEP	MA007 NELAP	06/30/2018
FL	Florida Department of Health	E871027 NELAP	06/30/2018
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2018
ME	State of Maine	2011028	06/9/2019
VA	Commonwealth of Virginia	460217	12/14/2018
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2018
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2018
NC-DW	North Carolina Department of Health	25703	07/31/2018





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 AptimReceived By SLDate 2-22-18Time 19:19

How were the samples received?	In Cooler <u>T</u>	No Cooler _____	On Ice <u>T</u>	No Ice _____
	Direct from Sampling		Ambient _____	Melted Ice _____
Were samples within Temperature? 2-6°C	<u>T</u>	By Gun # <u>577</u>	Actual Temp - <u>2.4</u>	
Was Custody Seal Intact?	<u>N/A</u>	By Blank # _____	Actual Temp -	<u>N/A</u>
Was COC Relinquished ?	<u>T</u>		Does Chain Agree With Samples?	<u>T</u>
Are there broken/leaking/loose caps on any samples?	<u>F</u>			
Is COC in ink/ Legible?	<u>T</u>	Were samples received within holding time?	<u>T</u>	
Did COC include all pertinent Information?	Client <u>T</u> Project <u>T</u>	Analysis <u>T</u> ID's <u>T</u>	Sampler Name <u>T</u>	Collection Dates/Times <u>T</u>
Are Sample labels filled out and legible?	<u>T</u>			
Are there Lab to Filters?	<u>F</u>	Who was notified?		
Are there Rushes?	<u>F</u>	Who was notified?		
Are there Short Holds?	<u>F</u>	Who was notified?		
Is there enough Volume?	<u>T</u>			
Is there Headspace where applicable?	<u>F</u>	MS/MSD? <u>F</u>		
Proper Media/Containers Used?	<u>T</u>	Is splitting samples required?	<u>F</u>	
Were trip blanks received?	<u>F</u>	On COC? <u>F</u>		
Do all samples have the proper pH?	<u>N/A</u>	Acid _____	Base _____	

Vials	#	Containers:	#	#	#	#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.
HCL-	<u>9</u>	500 mL Amb.		500 mL Plastic		8oz Amb/Clear
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear
DI-		Other Plastic		Other Glass		Encore
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:
Sulfuric-		Perchlorate		Ziplock		

## Unused Media

Vials	#	Containers:	#	#	#	#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear
DI-		Other Plastic		Other Glass		Encore
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:
Sulfuric-		Perchlorate		Ziplock		

Comments:



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

June 13, 2018

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

Project Location: 333 Adalaide Ave., Providence, RI

Client Job Number:

Project Number: 130274

Laboratory Work Order Number: 18E1698

Enclosed are results of analyses for samples received by the laboratory on May 31, 2018. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Jessica Hoffman". The signature is fluid and cursive, with "Jessica" on the top line and "Hoffman" on the bottom line.

Jessica L. Hoffman  
Project Manager

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

REPORT DATE: 6/13/2018

PURCHASE ORDER NUMBER: 835493-000 OP

PROJECT NUMBER: 130274

#### ANALYTICAL SUMMARY

WORK ORDER NUMBER: 18E1698

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

PROJECT LOCATION: 333 Adalaide Ave., Providence, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-207S	18E1698-01	Ground Water		SW-846 8260C	
MW-207D	18E1698-02	Ground Water		SW-846 8260C	
MW-202S	18E1698-03	Ground Water		SW-846 8260C	
MW-202D	18E1698-04	Ground Water		SW-846 8260C	
MW-101S	18E1698-05	Ground Water		SW-846 8260C	
MW-101S DUP	18E1698-06	Ground Water		SW-846 8260C	
MW-101D	18E1698-07	Ground Water		SW-846 8260C	
MW-209	18E1698-08	Ground Water		SW-846 8260C	
MW-112	18E1698-09	Ground Water		SW-846 8260C	
MW-218S	18E1698-10	Ground Water		SW-846 8260C	
MW-218D	18E1698-11	Ground Water		SW-846 8260C	
MW-201D	18E1698-12	Ground Water		SW-846 8260C	
CW-1	18E1698-13	Ground Water		SW-846 8260C	
CW-2	18E1698-14	Ground Water		SW-846 8260C	
CW-6	18E1698-15	Ground Water		SW-846 8100 Modified	
CW-6 DUP	18E1698-16	Ground Water		SW-846 8100 Modified	
MW-116D	18E1698-17	Ground Water		SW-846 8260C	
MW-116S	18E1698-18	Ground Water		SW-846 8260C	
GZA-3	18E1698-19	Ground Water		SW-846 6020A-B	
GZA-3 DUP	18E1698-20	Ground Water		SW-846 6020A-B	
MW-109D	18E1698-21	Ground Water		SW-846 6020A-B	
				SW-846 8260C	
MW-216D	18E1698-22	Ground Water		SW-846 8260C	
MW-216S	18E1698-23	Ground Water		SW-846 8260C	
MW-217S	18E1698-24	Ground Water		SW-846 8260C	
MW-217D	18E1698-25	Ground Water		SW-846 8260C	
Trip Blank	18E1698-26	Trip Blank Water		SW-846 8260C	



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**CASE NARRATIVE SUMMARY**

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



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**SW-846 8260C**

**Qualifications:**

**DL-01**

Elevated reporting limits for all volatile compounds due to foaming sample matrix.

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

18E1698-23[MW-216S]

**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:**

**Bromochloromethane**

B205474-BS1, B205474-BSD1

**Hexachlorobutadiene**

B205474-BS1, B205474-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:**

**Bromochloromethane**

B205024-BS1

**Carbon Disulfide**

B205204-BS1

**Hexachlorobutadiene**

B205024-BS1, B205204-BS1

**Tetrachloroethylene**

B205204-BS1

**R-05**

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

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

**Bromomethane**

18E1698-01[MW-207S], 18E1698-02[MW-207D], 18E1698-03[MW-202S], 18E1698-04[MW-202D], 18E1698-07[MW-101D], 18E1698-08[MW-209], 18E1698-09[MW-112], 18E1698-10[MW-218S], 18E1698-11[MW-218D], 18E1698-13[CW-1], 18E1698-14[CW-2], 18E1698-17[MW-116D], 18E1698-18[MW-116S], 18E1698-19[GZA-3], 18E1698-21[MW-109D], B205024-BLK1, B205024-BS1, B205024-BSD1

**RL-11**

Elevated reporting limit due to high concentration of target compounds.

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

18E1698-05[MW-101S], 18E1698-06[MW-101S DUP], 18E1698-08[MW-209], 18E1698-09[MW-112], 18E1698-12[MW-201D], 18E1698-13[CW-1]

**V-06**

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

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

**Chloromethane**

18E1698-08[MW-209], 18E1698-09[MW-112], B205024-BS1, B205024-BSD1, S024010-CCV1

**V-20**

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

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

**Bromomethane**

B205024-BS1, B205024-BSD1, B205474-BS1, B205474-BSD1, S024010-CCV1, S024198-CCV1

**Carbon Disulfide**

B205204-BS1, B205204-BSD1, S024154-CCV1

**Chloroethane**

B205204-BS1, B205204-BSD1, S024154-CCV1

**Hexachlorobutadiene**

B205474-BS1, B205474-BSD1, S024198-CCV1



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V-34

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

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

**Dichlorodifluoromethane (Freon 1:**

B205204-BS1, B205204-BSD1, S024154-CCV1

V-36

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

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

**Bromochloromethane**

B205024-BS1, B205024-BSD1, S024010-CCV1

**Hexachlorobutadiene**

B205024-BS1, B205024-BSD1, S024010-CCV1

**SW-846 6010C/D SW-846 6020A/B**

For NC, Metals methods SW-846 6010D and SW-846 6020B are followed, and for all other states methods SW-846 6010C and SW-846 6020A are followed.

**SW-846 8100 Modified**

TPH (C9-C36) is quantitated against a calibration made with a diesel standard.

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

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

A handwritten signature in black ink, appearing to read "Lisa A. Worthington".

Lisa A. Worthington  
Project Manager



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-207S

Sampled: 5/29/2018 09:00

**Sample ID:** 18E1698-01

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	6/6/18	6/7/18 5:10	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
Bromoform	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
Bromomethane	ND	2.0	µg/L	1	R-05	SW-846 8260C	6/6/18	6/7/18 5:10	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-207S

Sampled: 5/29/2018 09:00

**Sample ID:** 18E1698-01Sample 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	6/6/18	6/7/18 5:10	MFF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
Tetrachloroethylene	3.6	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:10	MFF
<b>Surrogates</b>		% Recovery	Recovery Limits	<b>Flag/Qual</b>					
1,2-Dichloroethane-d4		101	70-130						
Toluene-d8		97.8	70-130						
4-Bromofluorobenzene		95.8	70-130						



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-207D

Sampled: 5/29/2018 09:30

**Sample ID:** 18E1698-02

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	6/6/18	6/7/18 5:36	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
Bromoform	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
Bromomethane	ND	2.0	µg/L	1	R-05	SW-846 8260C	6/6/18	6/7/18 5:36	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-207D

Sampled: 5/29/2018 09:30

**Sample ID:** 18E1698-02Sample 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	6/6/18	6/7/18 5:36	MFF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 5:36	MFF
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	104	70-130						6/7/18 5:36	
Toluene-d8	98.4	70-130						6/7/18 5:36	
4-Bromofluorobenzene	96.3	70-130						6/7/18 5:36	



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-202S

Sampled: 5/29/2018 10:00

**Sample ID:** 18E1698-03

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	6/6/18	6/7/18 6:03	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
Bromoform	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
Bromomethane	ND	2.0	µg/L	1	R-05	SW-846 8260C	6/6/18	6/7/18 6:03	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-202S

Sampled: 5/29/2018 10:00

**Sample ID:** 18E1698-03Sample 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	6/6/18	6/7/18 6:03	MFF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
Tetrachloroethylene	5.3	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:03	MFF
<b>Surrogates</b>		% Recovery	Recovery Limits	<b>Flag/Qual</b>					
1,2-Dichloroethane-d4		99.5	70-130						
Toluene-d8		98.8	70-130						
4-Bromofluorobenzene		97.1	70-130						



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-202D

Sampled: 5/29/2018 10:30

**Sample ID:** 18E1698-04

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	6/6/18	6/7/18 6:29	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
Bromoform	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
Bromomethane	ND	2.0	µg/L	1	R-05	SW-846 8260C	6/6/18	6/7/18 6:29	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-202D

Sampled: 5/29/2018 10:30

**Sample ID:** 18E1698-04Sample 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	6/6/18	6/7/18 6:29	MFF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
Tetrachloroethylene	4.8	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:29	MFF
<b>Surrogates</b>		% Recovery	Recovery Limits	<b>Flag/Qual</b>					
1,2-Dichloroethane-d4		102	70-130						
Toluene-d8		98.0	70-130						
4-Bromofluorobenzene		95.3	70-130						



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-101S

Sampled: 5/29/2018 11:00

**Sample ID:** 18E1698-05Sample 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	6/12/18	6/12/18 12:19	MFF
Acrylonitrile	ND	250	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
tert-Amyl Methyl Ether (TAME)	ND	25	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
Benzene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
Bromobenzene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
Bromoform	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
Bromochloromethane	ND	25	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
Bromodichloromethane	ND	100	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
Bromoform	ND	100	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
Bromomethane	ND	25	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
2-Butanone (MEK)	ND	1000	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
tert-Butyl Alcohol (TBA)	ND	1000	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
n-Butylbenzene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
sec-Butylbenzene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
tert-Butylbenzene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	25	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
Carbon Disulfide	ND	200	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
Carbon Tetrachloride	ND	250	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
Chlorobenzene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
Chlorodibromomethane	ND	25	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
Chloroethane	ND	100	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
Chloroform	ND	100	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
Chloromethane	ND	100	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
2-Chlorotoluene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
4-Chlorotoluene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	250	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
1,2-Dibromoethane (EDB)	ND	25	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
Dibromomethane	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
1,2-Dichlorobenzene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
1,3-Dichlorobenzene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
1,4-Dichlorobenzene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
trans-1,4-Dichloro-2-butene	ND	100	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
Dichlorodifluoromethane (Freon 12)	ND	100	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
1,1-Dichloroethane	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
1,2-Dichloroethane	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
1,1-Dichloroethylene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
cis-1,2-Dichloroethylene	370	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
trans-1,2-Dichloroethylene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
1,2-Dichloropropane	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
1,3-Dichloropropane	ND	25	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
2,2-Dichloropropane	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
1,1-Dichloropropene	ND	100	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
cis-1,3-Dichloropropene	ND	25	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
trans-1,3-Dichloropropene	ND	25	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
Diethyl Ether	ND	100	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-101S

Sampled: 5/29/2018 11:00

**Sample ID:** 18E1698-05Sample 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	6/12/18	6/12/18 12:19	MFF
1,4-Dioxane	ND	2500	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
Ethylbenzene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
Hexachlorobutadiene	ND	30	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
2-Hexanone (MBK)	ND	500	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
Isopropylbenzene (Cumene)	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
p-Isopropyltoluene (p-Cymene)	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
Methyl Acetate	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
Methyl tert-Butyl Ether (MTBE)	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
Methyl Cyclohexane	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
Methylene Chloride	ND	250	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
4-Methyl-2-pentanone (MIBK)	ND	500	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
Naphthalene	ND	100	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
n-Propylbenzene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
Styrene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
1,1,1,2-Tetrachloroethane	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
1,1,2,2-Tetrachloroethane	ND	25	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
Tetrachloroethylene	1300	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
Tetrahydrofuran	ND	500	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
Toluene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
1,2,3-Trichlorobenzene	ND	250	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
1,2,4-Trichlorobenzene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
1,3,5-Trichlorobenzene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
1,1,1-Trichloroethane	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
1,1,2-Trichloroethane	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
Trichloroethylene	140	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
Trichlorofluoromethane (Freon 11)	ND	100	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
1,2,3-Trichloropropane	ND	100	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
1,2,4-Trimethylbenzene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
1,3,5-Trimethylbenzene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
Vinyl Chloride	ND	100	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
m+p Xylene	ND	100	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
o-Xylene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:19	MFF
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	101	70-130							6/12/18 12:19
Toluene-d8	96.6	70-130							6/12/18 12:19
4-Bromofluorobenzene	95.8	70-130							6/12/18 12:19



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-101S DUP

Sampled: 5/29/2018 11:15

**Sample ID:** 18E1698-06Sample 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	6/12/18	6/12/18 12:46	MFF
Acrylonitrile	ND	250	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
tert-Amyl Methyl Ether (TAME)	ND	25	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
Benzene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
Bromobenzene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
Bromochloromethane	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
Bromodichloromethane	ND	25	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
Bromoform	ND	100	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
Bromomethane	ND	100	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
2-Butanone (MEK)	ND	1000	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
tert-Butyl Alcohol (TBA)	ND	1000	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
n-Butylbenzene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
sec-Butylbenzene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
tert-Butylbenzene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	25	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
Carbon Disulfide	ND	200	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
Carbon Tetrachloride	ND	250	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
Chlorobenzene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
Chlorodibromomethane	ND	25	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
Chloroethane	ND	100	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
Chloroform	ND	100	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
Chloromethane	ND	100	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
2-Chlorotoluene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
4-Chlorotoluene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	250	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
1,2-Dibromoethane (EDB)	ND	25	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
Dibromomethane	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
1,2-Dichlorobenzene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
1,3-Dichlorobenzene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
1,4-Dichlorobenzene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
trans-1,4-Dichloro-2-butene	ND	100	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
Dichlorodifluoromethane (Freon 12)	ND	100	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
1,1-Dichloroethane	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
1,2-Dichloroethane	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
1,1-Dichloroethylene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
cis-1,2-Dichloroethylene	420	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
trans-1,2-Dichloroethylene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
1,2-Dichloropropane	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
1,3-Dichloropropane	ND	25	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
2,2-Dichloropropane	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
1,1-Dichloropropene	ND	100	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
cis-1,3-Dichloropropene	ND	25	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
trans-1,3-Dichloropropene	ND	25	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
Diethyl Ether	ND	100	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-101S DUP

Sampled: 5/29/2018 11:15

**Sample ID:** 18E1698-06Sample 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	6/12/18	6/12/18 12:46	MFF
1,4-Dioxane	ND	2500	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
Ethylbenzene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
Hexachlorobutadiene	ND	30	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
2-Hexanone (MBK)	ND	500	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
Isopropylbenzene (Cumene)	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
p-Isopropyltoluene (p-Cymene)	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
Methyl Acetate	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
Methyl tert-Butyl Ether (MTBE)	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
Methyl Cyclohexane	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
Methylene Chloride	ND	250	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
4-Methyl-2-pentanone (MIBK)	ND	500	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
Naphthalene	ND	100	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
n-Propylbenzene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
Styrene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
1,1,1,2-Tetrachloroethane	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
1,1,2,2-Tetrachloroethane	ND	25	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
Tetrachloroethylene	1800	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
Tetrahydrofuran	ND	500	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
Toluene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
1,2,3-Trichlorobenzene	ND	250	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
1,2,4-Trichlorobenzene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
1,3,5-Trichlorobenzene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
1,1,1-Trichloroethane	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
1,1,2-Trichloroethane	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
Trichloroethylene	160	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
Trichlorofluoromethane (Freon 11)	ND	100	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
1,2,3-Trichloropropane	ND	100	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
1,2,4-Trimethylbenzene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
1,3,5-Trimethylbenzene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
Vinyl Chloride	ND	100	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
m+p Xylene	ND	100	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
o-Xylene	ND	50	µg/L	50		SW-846 8260C	6/12/18	6/12/18 12:46	MFF
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	100	70-130							6/12/18 12:46
Toluene-d8	98.1	70-130							6/12/18 12:46
4-Bromofluorobenzene	95.8	70-130							6/12/18 12:46



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-101D

Sampled: 5/29/2018 11:30

**Sample ID:** 18E1698-07

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	6/6/18	6/7/18 6:55	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
Bromoform	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
Bromomethane	ND	2.0	µg/L	1	R-05	SW-846 8260C	6/6/18	6/7/18 6:55	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-101D

Sampled: 5/29/2018 11:30

**Sample ID:** 18E1698-07

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	6/6/18	6/7/18 6:55	MFF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
Tetrachloroethylene	12	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 6:55	MFF
<b>Surrogates</b>		% Recovery	Recovery Limits	<b>Flag/Qual</b>					
1,2-Dichloroethane-d4		103	70-130						
Toluene-d8		97.9	70-130						
4-Bromofluorobenzene		96.1	70-130						



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-209

Sampled: 5/29/2018 12:00

**Sample ID:** 18E1698-08Sample 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	250	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
Acrylonitrile	ND	25	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
tert-Amyl Methyl Ether (TAME)	ND	2.5	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
Benzene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
Bromobenzene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
Bromochloromethane	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
Bromodichloromethane	ND	2.5	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
Bromoform	ND	10	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
Bromomethane	ND	10	µg/L	5	R-05	SW-846 8260C	6/6/18	6/7/18 12:12	MFF
2-Butanone (MEK)	ND	100	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
tert-Butyl Alcohol (TBA)	ND	100	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
n-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
sec-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
tert-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	2.5	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
Carbon Disulfide	ND	20	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
Carbon Tetrachloride	ND	25	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
Chlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
Chlorodibromomethane	ND	2.5	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
Chloroethane	ND	10	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
Chloroform	ND	10	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
Chloromethane	10	10	µg/L	5	V-06	SW-846 8260C	6/6/18	6/7/18 12:12	MFF
2-Chlorotoluene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
4-Chlorotoluene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	25	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
1,2-Dibromoethane (EDB)	ND	2.5	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
Dibromomethane	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
1,2-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
1,3-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
1,4-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
trans-1,4-Dichloro-2-butene	ND	10	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
Dichlorodifluoromethane (Freon 12)	ND	10	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
1,1-Dichloroethane	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
1,2-Dichloroethane	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
1,1-Dichloroethylene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
cis-1,2-Dichloroethylene	22	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
trans-1,2-Dichloroethylene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
1,2-Dichloropropane	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
1,3-Dichloropropane	ND	2.5	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
2,2-Dichloropropane	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
1,1-Dichloropropene	ND	10	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
cis-1,3-Dichloropropene	ND	2.5	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
trans-1,3-Dichloropropene	ND	2.5	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
Diethyl Ether	ND	10	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-209

Sampled: 5/29/2018 12:00

**Sample ID:** 18E1698-08Sample 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	2.5	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
1,4-Dioxane	ND	250	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
Ethylbenzene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
Hexachlorobutadiene	ND	3.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
2-Hexanone (MBK)	ND	50	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
Isopropylbenzene (Cumene)	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
p-Isopropyltoluene (p-Cymene)	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
Methyl Acetate	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
Methyl tert-Butyl Ether (MTBE)	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
Methyl Cyclohexane	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
Methylene Chloride	ND	25	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
4-Methyl-2-pentanone (MIBK)	ND	50	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
Naphthalene	ND	10	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
n-Propylbenzene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
Styrene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
1,1,1,2-Tetrachloroethane	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
1,1,2,2-Tetrachloroethane	ND	2.5	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
Tetrachloroethylene	120	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
Tetrahydrofuran	ND	50	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
Toluene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
1,2,3-Trichlorobenzene	ND	25	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
1,2,4-Trichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
1,3,5-Trichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
1,1,1-Trichloroethane	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
1,1,2-Trichloroethane	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
Trichloroethylene	47	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
Trichlorofluoromethane (Freon 11)	ND	10	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
1,2,3-Trichloropropane	ND	10	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
1,2,4-Trimethylbenzene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
1,3,5-Trimethylbenzene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
Vinyl Chloride	ND	10	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
m+p Xylene	ND	10	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
o-Xylene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:12	MFF
<b>Surrogates</b>		% Recovery	Recovery Limits	<b>Flag/Qual</b>					
1,2-Dichloroethane-d4		104	70-130						
Toluene-d8		97.8	70-130						
4-Bromofluorobenzene		95.2	70-130						



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-112

Sampled: 5/29/2018 12:30

**Sample ID:** 18E1698-09**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	250	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
Acrylonitrile	ND	25	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
tert-Amyl Methyl Ether (TAME)	ND	2.5	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
Benzene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
Bromobenzene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
Bromochloromethane	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
Bromodichloromethane	ND	2.5	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
Bromoform	ND	10	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
Bromomethane	ND	10	µg/L	5	R-05	SW-846 8260C	6/6/18	6/7/18 12:38	MFF
2-Butanone (MEK)	ND	100	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
tert-Butyl Alcohol (TBA)	ND	100	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
n-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
sec-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
tert-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	2.5	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
Carbon Disulfide	ND	20	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
Carbon Tetrachloride	ND	25	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
Chlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
Chlorodibromomethane	ND	2.5	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
Chloroethane	ND	10	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
Chloroform	ND	10	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
Chloromethane	10	10	µg/L	5	V-06	SW-846 8260C	6/6/18	6/7/18 12:38	MFF
2-Chlorotoluene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
4-Chlorotoluene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	25	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
1,2-Dibromoethane (EDB)	ND	2.5	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
Dibromomethane	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
1,2-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
1,3-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
1,4-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
trans-1,4-Dichloro-2-butene	ND	10	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
Dichlorodifluoromethane (Freon 12)	ND	10	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
1,1-Dichloroethane	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
1,2-Dichloroethane	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
1,1-Dichloroethylene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
cis-1,2-Dichloroethylene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
trans-1,2-Dichloroethylene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
1,2-Dichloropropane	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
1,3-Dichloropropane	ND	2.5	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
2,2-Dichloropropane	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
1,1-Dichloropropene	ND	10	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
cis-1,3-Dichloropropene	ND	2.5	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
trans-1,3-Dichloropropene	ND	2.5	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
Diethyl Ether	ND	10	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-112

Sampled: 5/29/2018 12:30

**Sample ID:** 18E1698-09Sample 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	2.5	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
1,4-Dioxane	ND	250	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
Ethylbenzene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
Hexachlorobutadiene	ND	3.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
2-Hexanone (MBK)	ND	50	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
Isopropylbenzene (Cumene)	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
p-Isopropyltoluene (p-Cymene)	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
Methyl Acetate	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
Methyl tert-Butyl Ether (MTBE)	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
Methyl Cyclohexane	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
Methylene Chloride	ND	25	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
4-Methyl-2-pentanone (MIBK)	ND	50	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
Naphthalene	ND	10	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
n-Propylbenzene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
Styrene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
1,1,1,2-Tetrachloroethane	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
1,1,2,2-Tetrachloroethane	ND	2.5	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
Tetrachloroethylene	340	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
Tetrahydrofuran	ND	50	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
Toluene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
1,2,3-Trichlorobenzene	ND	25	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
1,2,4-Trichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
1,3,5-Trichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
1,1,1-Trichloroethane	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
1,1,2-Trichloroethane	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
Trichloroethylene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
Trichlorofluoromethane (Freon 11)	ND	10	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
1,2,3-Trichloropropane	ND	10	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
1,2,4-Trimethylbenzene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
1,3,5-Trimethylbenzene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
Vinyl Chloride	ND	10	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
m+p Xylene	ND	10	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
o-Xylene	ND	5.0	µg/L	5		SW-846 8260C	6/6/18	6/7/18 12:38	MFF
<b>Surrogates</b>		% Recovery	Recovery Limits	<b>Flag/Qual</b>					
1,2-Dichloroethane-d4		105	70-130						
Toluene-d8		97.6	70-130						
4-Bromofluorobenzene		94.7	70-130						



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-218S

Sampled: 5/29/2018 12:45

**Sample ID:** 18E1698-10

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	6/6/18	6/7/18 10:26	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
Bromoform	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
Bromomethane	ND	2.0	µg/L	1	R-05	SW-846 8260C	6/6/18	6/7/18 10:26	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-218S

Sampled: 5/29/2018 12:45

**Sample ID:** 18E1698-10Sample 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	6/6/18	6/7/18 10:26	MFF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
Tetrachloroethylene	100	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:26	MFF
<b>Surrogates</b>		% Recovery	Recovery Limits	<b>Flag/Qual</b>					
1,2-Dichloroethane-d4		104	70-130						
Toluene-d8		97.3	70-130						
4-Bromofluorobenzene		94.4	70-130						



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-218D

Sampled: 5/29/2018 13:00

**Sample ID:** 18E1698-11

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	6/6/18	6/7/18 10:53	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
Bromoform	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
Bromomethane	ND	2.0	µg/L	1	R-05	SW-846 8260C	6/6/18	6/7/18 10:53	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
cis-1,2-Dichloroethylene	7.2	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-218D

Sampled: 5/29/2018 13:00

**Sample ID:** 18E1698-11Sample 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	6/6/18	6/7/18 10:53	MFF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
Tetrachloroethylene	1000	50	µg/L	50		SW-846 8260C	6/6/18	6/11/18 18:09	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
Trichloroethylene	27	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 10:53	MFF
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	105	70-130							6/7/18 10:53
1,2-Dichloroethane-d4	89.2	70-130							6/11/18 18:09
Toluene-d8	97.9	70-130							6/7/18 10:53
Toluene-d8	98.3	70-130							6/11/18 18:09
4-Bromofluorobenzene	91.6	70-130							6/7/18 10:53
4-Bromofluorobenzene	99.3	70-130							6/11/18 18:09



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-201D

Sampled: 5/29/2018 13:30

**Sample ID:** 18E1698-12Sample 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	6/12/18	6/12/18 13:12	MFF
Acrylonitrile	ND	50	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
tert-Amyl Methyl Ether (TAME)	ND	5.0	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
Benzene	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
Bromobenzene	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
Bromochloromethane	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
Bromodichloromethane	ND	5.0	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
Bromoform	ND	20	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
Bromomethane	ND	20	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
2-Butanone (MEK)	ND	200	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
tert-Butyl Alcohol (TBA)	ND	200	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
n-Butylbenzene	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
sec-Butylbenzene	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
tert-Butylbenzene	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	5.0	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
Carbon Disulfide	ND	40	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
Carbon Tetrachloride	ND	50	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
Chlorobenzene	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
Chlorodibromomethane	ND	5.0	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
Chloroethane	ND	20	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
Chloroform	ND	20	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
Chloromethane	ND	20	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
2-Chlorotoluene	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
4-Chlorotoluene	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	50	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
1,2-Dibromoethane (EDB)	ND	5.0	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
Dibromomethane	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
1,2-Dichlorobenzene	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
1,3-Dichlorobenzene	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
1,4-Dichlorobenzene	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
trans-1,4-Dichloro-2-butene	ND	20	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
Dichlorodifluoromethane (Freon 12)	ND	20	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
1,1-Dichloroethane	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
1,2-Dichloroethane	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
1,1-Dichloroethylene	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
cis-1,2-Dichloroethylene	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
trans-1,2-Dichloroethylene	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
1,2-Dichloropropane	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
1,3-Dichloropropane	ND	5.0	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
2,2-Dichloropropane	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
1,1-Dichloropropene	ND	20	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
cis-1,3-Dichloropropene	ND	5.0	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
trans-1,3-Dichloropropene	ND	5.0	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
Diethyl Ether	ND	20	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-201D

Sampled: 5/29/2018 13:30

**Sample ID:** 18E1698-12Sample 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	6/12/18	6/12/18 13:12	MFF
1,4-Dioxane	ND	500	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
Ethylbenzene	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
Hexachlorobutadiene	ND	6.0	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
2-Hexanone (MBK)	ND	100	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
Isopropylbenzene (Cumene)	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
p-Isopropyltoluene (p-Cymene)	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
Methyl Acetate	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
Methyl tert-Butyl Ether (MTBE)	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
Methyl Cyclohexane	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
Methylene Chloride	ND	50	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
4-Methyl-2-pentanone (MIBK)	ND	100	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
Naphthalene	ND	20	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
n-Propylbenzene	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
Styrene	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
1,1,1,2-Tetrachloroethane	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
1,1,2,2-Tetrachloroethane	ND	5.0	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
Tetrachloroethylene	270	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
Tetrahydrofuran	ND	100	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
Toluene	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
1,2,3-Trichlorobenzene	ND	50	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
1,2,4-Trichlorobenzene	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
1,3,5-Trichlorobenzene	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
1,1,1-Trichloroethane	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
1,1,2-Trichloroethane	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
Trichloroethylene	14	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
Trichlorofluoromethane (Freon 11)	ND	20	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
1,2,3-Trichloropropane	ND	20	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
1,2,4-Trimethylbenzene	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
1,3,5-Trimethylbenzene	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
Vinyl Chloride	ND	20	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
m+p Xylene	ND	20	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
o-Xylene	ND	10	µg/L	10		SW-846 8260C	6/12/18	6/12/18 13:12	MFF
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	102	70-130							6/12/18 13:12
Toluene-d8	95.7	70-130							6/12/18 13:12
4-Bromofluorobenzene	94.1	70-130							6/12/18 13:12



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** CW-1

Sampled: 5/29/2018 14:00

**Sample ID:** 18E1698-13**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	6/6/18	6/7/18 13:31	MFF
Acrylonitrile	ND	50	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
tert-Amyl Methyl Ether (TAME)	ND	5.0	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
Benzene	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
Bromobenzene	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
Bromochloromethane	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
Bromodichloromethane	ND	5.0	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
Bromoform	ND	20	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
Bromomethane	ND	20	µg/L	10	R-05	SW-846 8260C	6/6/18	6/7/18 13:31	MFF
2-Butanone (MEK)	ND	200	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
tert-Butyl Alcohol (TBA)	ND	200	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
n-Butylbenzene	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
sec-Butylbenzene	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
tert-Butylbenzene	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	5.0	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
Carbon Disulfide	ND	40	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
Carbon Tetrachloride	ND	50	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
Chlorobenzene	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
Chlorodibromomethane	ND	5.0	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
Chloroethane	ND	20	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
Chloroform	ND	20	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
Chloromethane	ND	20	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
2-Chlorotoluene	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
4-Chlorotoluene	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	50	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
1,2-Dibromoethane (EDB)	ND	5.0	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
Dibromomethane	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
1,2-Dichlorobenzene	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
1,3-Dichlorobenzene	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
1,4-Dichlorobenzene	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
trans-1,4-Dichloro-2-butene	ND	20	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
Dichlorodifluoromethane (Freon 12)	ND	20	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
1,1-Dichloroethane	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
1,2-Dichloroethane	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
1,1-Dichloroethylene	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
cis-1,2-Dichloroethylene	390	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
trans-1,2-Dichloroethylene	10	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
1,2-Dichloropropane	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
1,3-Dichloropropane	ND	5.0	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
2,2-Dichloropropane	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
1,1-Dichloropropene	ND	20	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
cis-1,3-Dichloropropene	ND	5.0	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
trans-1,3-Dichloropropene	ND	5.0	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
Diethyl Ether	ND	20	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** CW-1

Sampled: 5/29/2018 14:00

**Sample ID:** 18E1698-13Sample 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	6/6/18	6/7/18 13:31	MFF
1,4-Dioxane	ND	500	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
Ethylbenzene	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
Hexachlorobutadiene	ND	6.0	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
2-Hexanone (MBK)	ND	100	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
Isopropylbenzene (Cumene)	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
p-Isopropyltoluene (p-Cymene)	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
Methyl Acetate	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
Methyl tert-Butyl Ether (MTBE)	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
Methyl Cyclohexane	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
Methylene Chloride	ND	50	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
4-Methyl-2-pentanone (MIBK)	ND	100	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
Naphthalene	ND	20	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
n-Propylbenzene	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
Styrene	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
1,1,1,2-Tetrachloroethane	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
1,1,2,2-Tetrachloroethane	ND	5.0	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
Tetrachloroethylene	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
Tetrahydrofuran	ND	100	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
Toluene	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
1,2,3-Trichlorobenzene	ND	50	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
1,2,4-Trichlorobenzene	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
1,3,5-Trichlorobenzene	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
1,1,1-Trichloroethane	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
1,1,2-Trichloroethane	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
Trichloroethylene	210	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
Trichlorofluoromethane (Freon 11)	ND	20	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
1,2,3-Trichloropropane	ND	20	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
1,2,4-Trimethylbenzene	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
1,3,5-Trimethylbenzene	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
Vinyl Chloride	ND	20	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
m+p Xylene	ND	20	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
o-Xylene	ND	10	µg/L	10		SW-846 8260C	6/6/18	6/7/18 13:31	MFF
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	103	70-130							6/7/18 13:31
Toluene-d8	98.8	70-130							6/7/18 13:31
4-Bromofluorobenzene	95.8	70-130							6/7/18 13:31



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** CW-2

Sampled: 5/29/2018 14:30

**Sample ID:** 18E1698-14

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	6/6/18	6/7/18 7:22	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
Bromoform	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
Bromomethane	ND	2.0	µg/L	1	R-05	SW-846 8260C	6/6/18	6/7/18 7:22	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** CW-2

Sampled: 5/29/2018 14:30

**Sample ID:** 18E1698-14Sample 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	6/6/18	6/7/18 7:22	MFF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:22	MFF
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	103	70-130						6/7/18 7:22	
Toluene-d8	98.2	70-130						6/7/18 7:22	
4-Bromofluorobenzene	90.8	70-130						6/7/18 7:22	



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

Sampled: 5/29/2018 15:00

**Field Sample #:** CW-6

**Sample ID:** 18E1698-15

Sample Matrix: Ground Water

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	9.4	2.0	mg/L	10		SW-846 8100 Modified	6/2/18	6/6/18 11:27	RMW
<b>Surrogates</b>									
2-Fluorobiphenyl		% Recovery	Recovery Limits		Flag/Qual			6/6/18 11:27	
		103	40-140						



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

Sampled: 5/29/2018 15:00

**Field Sample #:** CW-6 DUP

**Sample ID:** 18E1698-16

Sample Matrix: Ground Water

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	11	2.0	mg/L	10		SW-846 8100 Modified	6/2/18	6/7/18 11:43	RMW
<b>Surrogates</b>									
2-Fluorobiphenyl		120		40-140				6/7/18 11:43	



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-116D

Sampled: 5/29/2018 15:40

**Sample ID:** 18E1698-17

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	6/6/18	6/7/18 7:48	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
Bromoform	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
Bromomethane	ND	2.0	µg/L	1	R-05	SW-846 8260C	6/6/18	6/7/18 7:48	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-116D

Sampled: 5/29/2018 15:40

**Sample ID:** 18E1698-17Sample 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	6/6/18	6/7/18 7:48	MFF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 7:48	MFF
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	103	70-130						6/7/18 7:48	
Toluene-d8	97.2	70-130						6/7/18 7:48	
4-Bromofluorobenzene	93.1	70-130						6/7/18 7:48	



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-116S

Sampled: 5/29/2018 16:30

**Sample ID:** 18E1698-18

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	6/6/18	6/7/18 8:15	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
Bromoform	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
Bromomethane	ND	2.0	µg/L	1	R-05	SW-846 8260C	6/6/18	6/7/18 8:15	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-116S

Sampled: 5/29/2018 16:30

**Sample ID:** 18E1698-18Sample 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	6/6/18	6/7/18 8:15	MFF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:15	MFF
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	103	70-130							6/7/18 8:15
Toluene-d8	96.9	70-130							6/7/18 8:15
4-Bromofluorobenzene	95.4	70-130							6/7/18 8:15



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** GZA-3

Sampled: 5/30/2018 07:50

**Sample ID:** 18E1698-19

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	6/6/18	6/7/18 8:41	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
Bromoform	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
Bromomethane	ND	2.0	µg/L	1	R-05	SW-846 8260C	6/6/18	6/7/18 8:41	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** GZA-3

Sampled: 5/30/2018 07:50

**Sample ID:** 18E1698-19**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	6/6/18	6/7/18 8:41	MFF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
Vinyl Chloride	5.3	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 8:41	MFF
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	104	70-130						6/7/18 8:41	
Toluene-d8	95.0	70-130						6/7/18 8:41	
4-Bromofluorobenzene	94.1	70-130						6/7/18 8:41	



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

Project Location: 333 Adalaide Ave., Providence, RI

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

Sampled: 5/30/2018 07:50

**Field Sample #:** GZA-3

**Sample ID:** 18E1698-19

Sample Matrix: Ground Water

**Metals Analyses (Dissolved)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Lead	ND	1.0	µg/L	1		SW-846 6020A-B	6/5/18	6/5/18 14:04	MJH



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

Project Location: 333 Adalaide Ave., Providence, RI

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

Sampled: 5/30/2018 07:50

**Field Sample #:** GZA-3 DUP

**Sample ID:** 18E1698-20

Sample Matrix: Ground Water

**Metals Analyses (Dissolved)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Lead	ND	1.0	µg/L	1		SW-846 6020A-B	6/5/18	6/5/18 14:07	MJH



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-109D

Sampled: 5/30/2018 08:40

**Sample ID:** 18E1698-21

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	6/6/18	6/7/18 9:07	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
Bromoform	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
Bromomethane	ND	2.0	µg/L	1	R-05	SW-846 8260C	6/6/18	6/7/18 9:07	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-109D

Sampled: 5/30/2018 08:40

**Sample ID:** 18E1698-21Sample 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	6/6/18	6/7/18 9:07	MFF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	6/6/18	6/7/18 9:07	MFF
<b>Surrogates</b>		% Recovery	Recovery Limits	<b>Flag/Qual</b>					
1,2-Dichloroethane-d4		104	70-130						
Toluene-d8		96.1	70-130						
4-Bromofluorobenzene		90.0	70-130						



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

Project Location: 333 Adalaide Ave., Providence, RI

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

Sampled: 5/30/2018 08:40

**Field Sample #:** MW-109D

**Sample ID:** 18E1698-21

Sample Matrix: Ground Water

**Metals Analyses (Dissolved)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Lead	ND	1.0	µg/L	1		SW-846 6020A-B	6/5/18	6/5/18 14:11	MJH



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-216D

Sampled: 5/30/2018 09:30

**Sample ID:** 18E1698-22

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	6/11/18	6/11/18 12:31	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-216D

Sampled: 5/30/2018 09:30

**Sample ID:** 18E1698-22Sample 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	6/11/18	6/11/18 12:31	LBD
1,4-Dioxane	ND	100	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
Hexachlorobutadiene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
Trichloroethylene	1.0	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:31	LBD
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	92.6	70-130							6/11/18 12:31
Toluene-d8	97.8	70-130							6/11/18 12:31
4-Bromofluorobenzene	98.1	70-130							6/11/18 12:31



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-216S

Sampled: 5/30/2018 10:00

**Sample ID:** 18E1698-23Sample Matrix: Ground Water

Sample Flags: DL-01

**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	6/11/18	6/11/18 14:04	LBD
Acrylonitrile	ND	10	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
tert-Amyl Methyl Ether (TAME)	ND	1.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
Benzene	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
Bromobenzene	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
Bromochloromethane	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
Bromodichloromethane	ND	1.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
Bromoform	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
Bromomethane	ND	4.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
2-Butanone (MEK)	ND	40	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
tert-Butyl Alcohol (TBA)	ND	40	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
n-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
sec-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
tert-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	1.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
Carbon Disulfide	ND	8.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
Carbon Tetrachloride	ND	10	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
Chlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
Chlorodibromomethane	ND	1.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
Chloroethane	ND	4.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
Chloroform	ND	4.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
Chloromethane	ND	4.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
2-Chlorotoluene	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
4-Chlorotoluene	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
Dibromomethane	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
1,2-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
1,3-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
1,4-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
trans-1,4-Dichloro-2-butene	ND	4.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
Dichlorodifluoromethane (Freon 12)	ND	4.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
1,1-Dichloroethane	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
1,2-Dichloroethane	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
1,1-Dichloroethylene	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
cis-1,2-Dichloroethylene	66	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
trans-1,2-Dichloroethylene	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
1,2-Dichloropropane	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
1,3-Dichloropropane	ND	1.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
2,2-Dichloropropane	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
1,1-Dichloropropene	ND	4.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
cis-1,3-Dichloropropene	ND	1.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
trans-1,3-Dichloropropene	ND	1.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
Diethyl Ether	ND	4.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-216S

Sampled: 5/30/2018 10:00

**Sample ID:** 18E1698-23Sample Matrix: Ground Water

Sample Flags: DL-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	1.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
1,4-Dioxane	ND	200	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
Ethylbenzene	2.9	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
Hexachlorobutadiene	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
2-Hexanone (MBK)	ND	20	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
Isopropylbenzene (Cumene)	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
p-Isopropyltoluene (p-Cymene)	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
Methyl Acetate	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
Methyl tert-Butyl Ether (MTBE)	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
Methyl Cyclohexane	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
Methylene Chloride	ND	10	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
4-Methyl-2-pentanone (MIBK)	ND	20	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
Naphthalene	22	4.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
n-Propylbenzene	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
Styrene	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
Tetrachloroethylene	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
Tetrahydrofuran	ND	20	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
Toluene	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
1,2,3-Trichlorobenzene	ND	10	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
1,2,4-Trichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
1,3,5-Trichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
1,1,1-Trichloroethane	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
1,1,2-Trichloroethane	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
Trichloroethylene	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
Trichlorofluoromethane (Freon 11)	ND	4.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
1,2,3-Trichloropropane	ND	4.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
1,2,4-Trimethylbenzene	11	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
1,3,5-Trimethylbenzene	4.6	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
Vinyl Chloride	ND	4.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
m+p Xylene	ND	4.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
o-Xylene	9.3	2.0	µg/L	2		SW-846 8260C	6/11/18	6/11/18 14:04	LBD
<b>Surrogates</b>		% Recovery	Recovery Limits	<b>Flag/Qual</b>					
1,2-Dichloroethane-d4		90.2	70-130						
Toluene-d8		98.3	70-130						
4-Bromofluorobenzene		99.7	70-130						



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-217S

Sampled: 5/30/2018 10:45

**Sample ID:** 18E1698-24Sample 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	6/11/18	6/11/18 13:02	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-217S

Sampled: 5/30/2018 10:45

**Sample ID:** 18E1698-24Sample 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	6/11/18	6/11/18 13:02	LBD
1,4-Dioxane	ND	100	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
Hexachlorobutadiene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
Tetrachloroethylene	6.7	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:02	LBD
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	90.6	70-130							6/11/18 13:02
Toluene-d8	98.6	70-130							6/11/18 13:02
4-Bromofluorobenzene	100	70-130							6/11/18 13:02



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-217D

Sampled: 5/30/2018 11:30

**Sample ID:** 18E1698-25

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	6/11/18	6/11/18 13:33	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
cis-1,2-Dichloroethylene	1.2	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** MW-217D

Sampled: 5/30/2018 11:30

**Sample ID:** 18E1698-25Sample 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	6/11/18	6/11/18 13:33	LBD
1,4-Dioxane	ND	100	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
Hexachlorobutadiene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
Trichloroethylene	1.4	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 13:33	LBD
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	92.0	70-130							6/11/18 13:33
Toluene-d8	98.8	70-130							6/11/18 13:33
4-Bromofluorobenzene	99.8	70-130							6/11/18 13:33



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** Trip Blank

Sampled: 5/30/2018 09:00

**Sample ID:** 18E1698-26Sample Matrix: Trip Blank 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	6/11/18	6/11/18 12:01	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD



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

Project Location: 333 Adalaide Ave., Providence, R

Sample Description:

Work Order: 18E1698

Date Received: 5/31/2018

**Field Sample #:** Trip Blank

Sampled: 5/30/2018 09:00

**Sample ID:** 18E1698-26Sample Matrix: Trip Blank 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	6/11/18	6/11/18 12:01	LBD
1,4-Dioxane	ND	100	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
Hexachlorobutadiene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	6/11/18	6/11/18 12:01	LBD
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	93.2	70-130							6/11/18 12:01
Toluene-d8	100	70-130							6/11/18 12:01
4-Bromofluorobenzene	98.4	70-130							6/11/18 12:01



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

### Sample Extraction Data

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18E1698-19 [GZA-3]	B204945	10.0	10.0	06/05/18
18E1698-20 [GZA-3 DUP]	B204945	10.0	10.0	06/05/18
18E1698-21 [MW-109D]	B204945	10.0	10.0	06/05/18

**Prep Method: SW-846 3510C-SW-846 8100 Modified**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18E1698-15 [CW-6]	B204786	1000	1.00	06/02/18
18E1698-16 [CW-6 DUP]	B204786	1000	1.00	06/02/18

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18E1698-01 [MW-207S]	B205024	5	5.00	06/06/18
18E1698-02 [MW-207D]	B205024	5	5.00	06/06/18
18E1698-03 [MW-202S]	B205024	5	5.00	06/06/18
18E1698-04 [MW-202D]	B205024	5	5.00	06/06/18
18E1698-07 [MW-101D]	B205024	5	5.00	06/06/18
18E1698-08 [MW-209]	B205024	1	5.00	06/06/18
18E1698-09 [MW-112]	B205024	1	5.00	06/06/18
18E1698-10 [MW-218S]	B205024	5	5.00	06/06/18
18E1698-11 [MW-218D]	B205024	5	5.00	06/06/18
18E1698-13 [CW-1]	B205024	0.5	5.00	06/06/18
18E1698-14 [CW-2]	B205024	5	5.00	06/06/18
18E1698-17 [MW-116D]	B205024	5	5.00	06/06/18
18E1698-18 [MW-116S]	B205024	5	5.00	06/06/18
18E1698-19 [GZA-3]	B205024	5	5.00	06/06/18
18E1698-21 [MW-109D]	B205024	5	5.00	06/06/18

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18E1698-11RE1 [MW-218D]	B205204	0.1	5.00	06/06/18
18E1698-22 [MW-216D]	B205204	5	5.00	06/11/18
18E1698-23 [MW-216S]	B205204	2.5	5.00	06/11/18
18E1698-24 [MW-217S]	B205204	5	5.00	06/11/18
18E1698-25 [MW-217D]	B205204	5	5.00	06/11/18
18E1698-26 [Trip Blank]	B205204	5	5.00	06/11/18

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18E1698-05 [MW-101S]	B205474	0.1	5.00	06/12/18
18E1698-06 [MW-101S DUP]	B205474	0.1	5.00	06/12/18
18E1698-12 [MW-201D]	B205474	0.5	5.00	06/12/18



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch B205024 - SW-846 5030B**

<b>Blank (B205024-BLK1)</b>									Prepared: 06/06/18 Analyzed: 06/07/18
Acetone	ND	50	µg/L						
Acrylonitrile	ND	5.0	µg/L						
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L						
Benzene	ND	1.0	µg/L						
Bromobenzene	ND	1.0	µg/L						
Bromoform	ND	0.50	µg/L						
Bromomethane	ND	2.0	µg/L						
2-Butanone (MEK)	ND	20	µg/L						R-05
tert-Butyl Alcohol (TBA)	ND	20	µg/L						
n-Butylbenzene	ND	1.0	µg/L						
sec-Butylbenzene	ND	1.0	µg/L						
tert-Butylbenzene	ND	1.0	µg/L						
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L						
Carbon Disulfide	ND	4.0	µg/L						
Carbon Tetrachloride	ND	5.0	µg/L						
Chlorobenzene	ND	1.0	µg/L						
Chlorodibromomethane	ND	0.50	µg/L						
Chloroethane	ND	2.0	µg/L						
Chloroform	ND	2.0	µg/L						
Chloromethane	ND	2.0	µg/L						
2-Chlorotoluene	ND	1.0	µg/L						
4-Chlorotoluene	ND	1.0	µg/L						
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L						
1,2-Dibromoethane (EDB)	ND	0.50	µg/L						
Dibromomethane	ND	1.0	µg/L						
1,2-Dichlorobenzene	ND	1.0	µg/L						
1,3-Dichlorobenzene	ND	1.0	µg/L						
1,4-Dichlorobenzene	ND	1.0	µg/L						
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L						
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L						
1,1-Dichloroethane	ND	1.0	µg/L						
1,2-Dichloroethane	ND	1.0	µg/L						
1,1-Dichloroethylene	ND	1.0	µg/L						
cis-1,2-Dichloroethylene	ND	1.0	µg/L						
trans-1,2-Dichloroethylene	ND	1.0	µg/L						
1,2-Dichloropropane	ND	1.0	µg/L						
1,3-Dichloropropane	ND	0.50	µg/L						
2,2-Dichloropropane	ND	1.0	µg/L						
1,1-Dichloropropene	ND	2.0	µg/L						
cis-1,3-Dichloropropene	ND	0.50	µg/L						
trans-1,3-Dichloropropene	ND	0.50	µg/L						
Diethyl Ether	ND	2.0	µg/L						
Diisopropyl Ether (DIPE)	ND	0.50	µg/L						
1,4-Dioxane	ND	50	µg/L						
Ethylbenzene	ND	1.0	µg/L						
Hexachlorobutadiene	ND	0.60	µg/L						
2-Hexanone (MBK)	ND	10	µg/L						
Isopropylbenzene (Cumene)	ND	1.0	µg/L						
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L						
Methyl Acetate	ND	1.0	µg/L						



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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 B205024 - SW-846 5030B**

<b>Blank (B205024-BLK1)</b>									
Prepared: 06/06/18 Analyzed: 06/07/18									
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L						
Methyl Cyclohexane	ND	1.0	µg/L						
Methylene Chloride	ND	5.0	µg/L						
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L						
Naphthalene	ND	2.0	µg/L						
n-Propylbenzene	ND	1.0	µg/L						
Styrene	ND	1.0	µg/L						
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L						
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L						
Tetrachloroethylene	ND	1.0	µg/L						
Tetrahydrofuran	ND	10	µg/L						
Toluene	ND	1.0	µg/L						
1,2,3-Trichlorobenzene	ND	5.0	µg/L						
1,2,4-Trichlorobenzene	ND	1.0	µg/L						
1,3,5-Trichlorobenzene	ND	1.0	µg/L						
1,1,1-Trichloroethane	ND	1.0	µg/L						
1,1,2-Trichloroethane	ND	1.0	µg/L						
Trichloroethylene	ND	1.0	µg/L						
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L						
1,2,3-Trichloropropane	ND	2.0	µg/L						
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L						
1,2,4-Trimethylbenzene	ND	1.0	µg/L						
1,3,5-Trimethylbenzene	ND	1.0	µg/L						
Vinyl Chloride	ND	2.0	µg/L						
m+p Xylene	ND	2.0	µg/L						
o-Xylene	ND	1.0	µg/L						
Surrogate: 1,2-Dichloroethane-d4	25.4		µg/L	25.0		102	70-130		
Surrogate: Toluene-d8	24.2		µg/L	25.0		97.0	70-130		
Surrogate: 4-Bromofluorobenzene	24.1		µg/L	25.0		96.4	70-130		

<b>LCS (B205024-BS1)</b>									
Prepared: 06/06/18 Analyzed: 06/07/18									
Acetone	112	50	µg/L	100		112	70-160		†
Acrylonitrile	11.1	5.0	µg/L	10.0		111	70-130		
tert-Amyl Methyl Ether (TAME)	9.94	0.50	µg/L	10.0		99.4	70-130		
Benzene	10.6	1.0	µg/L	10.0		106	70-130		
Bromobenzene	11.0	1.0	µg/L	10.0		110	70-130		
<b>Bromochloromethane</b>	13.1	1.0	µg/L	10.0	<b>131</b>	*	70-130		L-07, V-36
Bromodichloromethane	10.4	0.50	µg/L	10.0		104	70-130		
Bromoform	10.0	2.0	µg/L	10.0		100	70-130		
Bromomethane	7.11	2.0	µg/L	10.0		71.1	40-160		R-05, V-20 †
2-Butanone (MEK)	108	20	µg/L	100		108	40-160		†
tert-Butyl Alcohol (TBA)	98.7	20	µg/L	100		98.7	40-160		†
n-Butylbenzene	11.6	1.0	µg/L	10.0		116	70-130		
sec-Butylbenzene	11.8	1.0	µg/L	10.0		118	70-130		
tert-Butylbenzene	11.6	1.0	µg/L	10.0		116	70-130		
tert-Butyl Ethyl Ether (TBEE)	9.86	0.50	µg/L	10.0		98.6	70-130		
Carbon Disulfide	10.8	4.0	µg/L	10.0		108	70-130		
Carbon Tetrachloride	10.6	5.0	µg/L	10.0		106	70-130		
Chlorobenzene	11.2	1.0	µg/L	10.0		112	70-130		
Chlorodibromomethane	10.2	0.50	µg/L	10.0		102	70-130		
Chloroethane	9.67	2.0	µg/L	10.0		96.7	70-130		
Chloroform	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 B205024 - SW-846 5030B**

<b>LCS (B205024-BS1)</b>					Prepared: 06/06/18 Analyzed: 06/07/18				
Chloromethane	7.83	2.0	µg/L	10.0	78.3	40-160		V-06	†
2-Chlorotoluene	11.1	1.0	µg/L	10.0	111	70-130			
4-Chlorotoluene	11.2	1.0	µg/L	10.0	112	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	10.1	5.0	µg/L	10.0	101	70-130			
1,2-Dibromoethane (EDB)	10.4	0.50	µg/L	10.0	104	70-130			
Dibromomethane	10.9	1.0	µg/L	10.0	109	70-130			
1,2-Dichlorobenzene	11.0	1.0	µg/L	10.0	110	70-130			
1,3-Dichlorobenzene	11.3	1.0	µg/L	10.0	113	70-130			
1,4-Dichlorobenzene	10.7	1.0	µg/L	10.0	107	70-130			
trans-1,4-Dichloro-2-butene	9.95	2.0	µg/L	10.0	99.5	70-130			
Dichlorodifluoromethane (Freon 12)	6.24	2.0	µg/L	10.0	62.4	40-160			†
1,1-Dichloroethane	11.0	1.0	µg/L	10.0	110	70-130			
1,2-Dichloroethane	10.8	1.0	µg/L	10.0	108	70-130			
1,1-Dichloroethylene	10.3	1.0	µg/L	10.0	103	70-130			
cis-1,2-Dichloroethylene	10.6	1.0	µg/L	10.0	106	70-130			
trans-1,2-Dichloroethylene	10.9	1.0	µg/L	10.0	109	70-130			
1,2-Dichloropropane	10.3	1.0	µg/L	10.0	103	70-130			
1,3-Dichloropropane	10.2	0.50	µg/L	10.0	102	70-130			
2,2-Dichloropropane	9.35	1.0	µg/L	10.0	93.5	40-130			†
1,1-Dichloropropene	10.2	2.0	µg/L	10.0	102	70-130			
cis-1,3-Dichloropropene	9.73	0.50	µg/L	10.0	97.3	70-130			
trans-1,3-Dichloropropene	9.80	0.50	µg/L	10.0	98.0	70-130			
Diethyl Ether	10.7	2.0	µg/L	10.0	107	70-130			
Diisopropyl Ether (DIPE)	9.92	0.50	µg/L	10.0	99.2	70-130			
1,4-Dioxane	98.8	50	µg/L	100	98.8	40-130			†
Ethylbenzene	11.4	1.0	µg/L	10.0	114	70-130			
<b>Hexachlorobutadiene</b>	<b>13.4</b>	<b>0.60</b>	<b>µg/L</b>	<b>10.0</b>	<b>134</b>	<b>*</b>	<b>70-130</b>	<b>L-07, V-36</b>	
2-Hexanone (MBK)	107	10	µg/L	100	107	70-160			†
Isopropylbenzene (Cumene)	11.7	1.0	µg/L	10.0	117	70-130			
p-Isopropyltoluene (p-Cymene)	12.1	1.0	µg/L	10.0	121	70-130			
Methyl Acetate	8.15	1.0	µg/L	10.0	81.5	70-130			
Methyl tert-Butyl Ether (MTBE)	10.7	1.0	µg/L	10.0	107	70-130			
Methyl Cyclohexane	9.90	1.0	µg/L	10.0	99.0	70-130			
Methylene Chloride	10.1	5.0	µg/L	10.0	101	70-130			
4-Methyl-2-pentanone (MIBK)	109	10	µg/L	100	109	70-160			†
Naphthalene	10.9	2.0	µg/L	10.0	109	40-130			†
n-Propylbenzene	11.2	1.0	µg/L	10.0	112	70-130			
Styrene	11.5	1.0	µg/L	10.0	115	70-130			
1,1,1,2-Tetrachloroethane	11.1	1.0	µg/L	10.0	111	70-130			
1,1,2,2-Tetrachloroethane	11.3	0.50	µg/L	10.0	113	70-130			
Tetrachloroethylene	10.8	1.0	µg/L	10.0	108	70-130			
Tetrahydrofuran	11.2	10	µg/L	10.0	112	70-130			
Toluene	10.7	1.0	µg/L	10.0	107	70-130			
1,2,3-Trichlorobenzene	11.0	5.0	µg/L	10.0	110	70-130			
1,2,4-Trichlorobenzene	10.6	1.0	µg/L	10.0	106	70-130			
1,3,5-Trichlorobenzene	10.8	1.0	µg/L	10.0	108	70-130			
1,1,1-Trichloroethane	11.0	1.0	µg/L	10.0	110	70-130			
1,1,2-Trichloroethane	10.9	1.0	µg/L	10.0	109	70-130			
Trichloroethylene	10.9	1.0	µg/L	10.0	109	70-130			
Trichlorofluoromethane (Freon 11)	8.63	2.0	µg/L	10.0	86.3	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
<b>Batch B205024 - SW-846 5030B</b>									
<b>LCS (B205024-BS1)</b>									
Prepared: 06/06/18 Analyzed: 06/07/18									
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.65	1.0	µg/L	10.0	96.5	70-130			
1,2,4-Trimethylbenzene	11.0	1.0	µg/L	10.0	110	70-130			
1,3,5-Trimethylbenzene	11.4	1.0	µg/L	10.0	114	70-130			
Vinyl Chloride	8.33	2.0	µg/L	10.0	83.3	40-160			†
m+p Xylene	21.7	2.0	µg/L	20.0	109	70-130			
o-Xylene	11.1	1.0	µg/L	10.0	111	70-130			
Surrogate: 1,2-Dichloroethane-d4	26.0		µg/L	25.0	104	70-130			
Surrogate: Toluene-d8	24.7		µg/L	25.0	99.0	70-130			
Surrogate: 4-Bromofluorobenzene	25.2		µg/L	25.0	101	70-130			
<b>LCS Dup (B205024-BSD1)</b>									
Prepared: 06/06/18 Analyzed: 06/07/18									
Acetone	107	50	µg/L	100	107	70-160	4.11	25	†
Acrylonitrile	11.0	5.0	µg/L	10.0	110	70-130	1.09	25	
tert-Amyl Methyl Ether (TAME)	9.85	0.50	µg/L	10.0	98.5	70-130	0.910	25	
Benzene	10.4	1.0	µg/L	10.0	104	70-130	1.43	25	
Bromobenzene	10.7	1.0	µg/L	10.0	107	70-130	2.21	25	
Bromoform	12.6	1.0	µg/L	10.0	126	70-130	4.05	25	V-36
Bromochloromethane	10.5	0.50	µg/L	10.0	105	70-130	1.25	25	
Bromodichloromethane	10.2	2.0	µg/L	10.0	102	70-130	1.29	25	
Bromomethane	9.43	2.0	µg/L	10.0	94.3	40-160	28.1	*	25
2-Butanone (MEK)	106	20	µg/L	100	106	40-160	1.99	25	†
tert-Butyl Alcohol (TBA)	98.0	20	µg/L	100	98.0	40-160	0.712	25	†
n-Butylbenzene	11.6	1.0	µg/L	10.0	116	70-130	0.432	25	
sec-Butylbenzene	11.7	1.0	µg/L	10.0	117	70-130	0.937	25	
tert-Butylbenzene	11.4	1.0	µg/L	10.0	114	70-130	2.18	25	
tert-Butyl Ethyl Ether (TBEE)	9.75	0.50	µg/L	10.0	97.5	70-130	1.12	25	
Carbon Disulfide	9.89	4.0	µg/L	10.0	98.9	70-130	8.70	25	
Carbon Tetrachloride	10.2	5.0	µg/L	10.0	102	70-130	3.64	25	
Chlorobenzene	11.2	1.0	µg/L	10.0	112	70-130	0.178	25	
Chlorodibromomethane	9.94	0.50	µg/L	10.0	99.4	70-130	2.58	25	
Chloroethane	8.98	2.0	µg/L	10.0	89.8	70-130	7.40	25	
Chloroform	10.9	2.0	µg/L	10.0	109	70-130	0.0917	25	
Chloromethane	7.76	2.0	µg/L	10.0	77.6	40-160	0.898	25	V-06 †
2-Chlorotoluene	10.8	1.0	µg/L	10.0	108	70-130	2.75	25	
4-Chlorotoluene	11.0	1.0	µg/L	10.0	110	70-130	1.26	25	
1,2-Dibromo-3-chloropropane (DBCP)	10.3	5.0	µg/L	10.0	103	70-130	1.27	25	
1,2-Dibromoethane (EDB)	10.4	0.50	µg/L	10.0	104	70-130	0.0966	25	
Dibromomethane	11.2	1.0	µg/L	10.0	112	70-130	2.62	25	
1,2-Dichlorobenzene	11.0	1.0	µg/L	10.0	110	70-130	0.181	25	
1,3-Dichlorobenzene	11.4	1.0	µg/L	10.0	114	70-130	0.618	25	
1,4-Dichlorobenzene	10.5	1.0	µg/L	10.0	105	70-130	1.51	25	
trans-1,4-Dichloro-2-butene	9.43	2.0	µg/L	10.0	94.3	70-130	5.37	25	
Dichlorodifluoromethane (Freon 12)	6.26	2.0	µg/L	10.0	62.6	40-160	0.320	25	†
1,1-Dichloroethane	11.1	1.0	µg/L	10.0	111	70-130	1.09	25	
1,2-Dichloroethane	10.5	1.0	µg/L	10.0	105	70-130	2.63	25	
1,1-Dichloroethylene	10.0	1.0	µg/L	10.0	100	70-130	2.85	25	
cis-1,2-Dichloroethylene	10.6	1.0	µg/L	10.0	106	70-130	0.473	25	
trans-1,2-Dichloroethylene	10.7	1.0	µg/L	10.0	107	70-130	1.48	25	
1,2-Dichloropropane	10.8	1.0	µg/L	10.0	108	70-130	4.84	25	
1,3-Dichloropropane	9.68	0.50	µg/L	10.0	96.8	70-130	4.74	25	
2,2-Dichloropropane	9.20	1.0	µg/L	10.0	92.0	40-130	1.62	25	†
1,1-Dichloropropene	10.1	2.0	µg/L	10.0	101	70-130	0.197	25	



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B205024 - SW-846 5030B**

LCS Dup (B205024-BSD1)										
Prepared: 06/06/18 Analyzed: 06/07/18										
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
cis-1,3-Dichloropropene	9.73	0.50	µg/L	10.0	97.3	70-130	0.00	25		
trans-1,3-Dichloropropene	10.1	0.50	µg/L	10.0	101	70-130	3.21	25		
Diethyl Ether	10.2	2.0	µg/L	10.0	102	70-130	5.16	25		
Diisopropyl Ether (DIPE)	9.69	0.50	µg/L	10.0	96.9	70-130	2.35	25		
1,4-Dioxane	95.1	50	µg/L	100	95.1	40-130	3.82	50		† ‡
Ethylbenzene	11.4	1.0	µg/L	10.0	114	70-130	0.264	25		
Hexachlorobutadiene	12.3	0.60	µg/L	10.0	123	70-130	8.56	25		V-36
2-Hexanone (MBK)	104	10	µg/L	100	104	70-160	2.62	25		†
Isopropylbenzene (Cumene)	11.7	1.0	µg/L	10.0	117	70-130	0.171	25		
p-Isopropyltoluene (p-Cymene)	11.8	1.0	µg/L	10.0	118	70-130	2.50	25		
Methyl Acetate	7.82	1.0	µg/L	10.0	78.2	70-130	4.13	25		
Methyl tert-Butyl Ether (MTBE)	10.8	1.0	µg/L	10.0	108	70-130	1.02	25		
Methyl Cyclohexane	10.0	1.0	µg/L	10.0	100	70-130	1.30	25		
Methylene Chloride	9.89	5.0	µg/L	10.0	98.9	70-130	2.10	25		
4-Methyl-2-pentanone (MIBK)	108	10	µg/L	100	108	70-160	0.609	25		†
Naphthalene	10.6	2.0	µg/L	10.0	106	40-130	3.07	25		†
n-Propylbenzene	11.0	1.0	µg/L	10.0	110	70-130	1.80	25		
Styrene	11.2	1.0	µg/L	10.0	112	70-130	2.11	25		
1,1,1,2-Tetrachloroethane	11.2	1.0	µg/L	10.0	112	70-130	0.628	25		
1,1,2,2-Tetrachloroethane	11.0	0.50	µg/L	10.0	110	70-130	2.15	25		
Tetrachloroethylene	10.8	1.0	µg/L	10.0	108	70-130	0.462	25		
Tetrahydrofuran	10.9	10	µg/L	10.0	109	70-130	2.53	25		
Toluene	10.7	1.0	µg/L	10.0	107	70-130	0.468	25		
1,2,3-Trichlorobenzene	10.9	5.0	µg/L	10.0	109	70-130	0.547	25		
1,2,4-Trichlorobenzene	10.6	1.0	µg/L	10.0	106	70-130	0.188	25		
1,3,5-Trichlorobenzene	10.8	1.0	µg/L	10.0	108	70-130	0.185	25		
1,1,1-Trichloroethane	11.1	1.0	µg/L	10.0	111	70-130	0.271	25		
1,1,2-Trichloroethane	10.9	1.0	µg/L	10.0	109	70-130	0.275	25		
Trichloroethylene	10.8	1.0	µg/L	10.0	108	70-130	0.920	25		
Trichlorofluoromethane (Freon 11)	8.59	2.0	µg/L	10.0	85.9	70-130	0.465	25		
1,2,3-Trichloropropane	8.78	2.0	µg/L	10.0	87.8	70-130	21.5	25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.73	1.0	µg/L	10.0	97.3	70-130	0.826	25		
1,2,4-Trimethylbenzene	10.8	1.0	µg/L	10.0	108	70-130	1.83	25		
1,3,5-Trimethylbenzene	10.8	1.0	µg/L	10.0	108	70-130	5.78	25		
Vinyl Chloride	8.30	2.0	µg/L	10.0	83.0	40-160	0.361	25		†
m+p Xylene	21.7	2.0	µg/L	20.0	109	70-130	0.00	25		
o-Xylene	10.9	1.0	µg/L	10.0	109	70-130	2.10	25		
Surrogate: 1,2-Dichloroethane-d4	26.2		µg/L	25.0	105	70-130				
Surrogate: Toluene-d8	25.1		µg/L	25.0	100	70-130				
Surrogate: 4-Bromofluorobenzene	23.9		µg/L	25.0	95.6	70-130				

**Batch B205204 - SW-846 5030B**

Blank (B205204-BLK1)										
Prepared: 06/07/18 Analyzed: 06/11/18										
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acetone	ND	50	µg/L							
Acrylonitrile	ND	5.0	µg/L							
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L							
Benzene	ND	1.0	µg/L							
Bromobenzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	0.50	µg/L							
Bromoform	ND	1.0	µg/L							



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch B205204 - SW-846 5030B**

<b>Blank (B205204-BLK1)</b>									Prepared: 06/07/18 Analyzed: 06/11/18
Bromomethane	ND	2.0	µg/L						
2-Butanone (MEK)	ND	20	µg/L						
tert-Butyl Alcohol (TBA)	ND	20	µg/L						
n-Butylbenzene	ND	1.0	µg/L						
sec-Butylbenzene	ND	1.0	µg/L						
tert-Butylbenzene	ND	1.0	µg/L						
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L						
Carbon Disulfide	ND	4.0	µg/L						
Carbon Tetrachloride	ND	5.0	µg/L						
Chlorobenzene	ND	1.0	µg/L						
Chlorodibromomethane	ND	0.50	µg/L						
Chloroethane	ND	2.0	µg/L						
Chloroform	ND	2.0	µg/L						
Chloromethane	ND	2.0	µg/L						
2-Chlorotoluene	ND	1.0	µg/L						
4-Chlorotoluene	ND	1.0	µg/L						
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L						
1,2-Dibromoethane (EDB)	ND	0.50	µg/L						
Dibromomethane	ND	1.0	µg/L						
1,2-Dichlorobenzene	ND	1.0	µg/L						
1,3-Dichlorobenzene	ND	1.0	µg/L						
1,4-Dichlorobenzene	ND	1.0	µg/L						
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L						
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L						
1,1-Dichloroethane	ND	1.0	µg/L						
1,2-Dichloroethane	ND	1.0	µg/L						
1,1-Dichloroethylene	ND	1.0	µg/L						
cis-1,2-Dichloroethylene	ND	1.0	µg/L						
trans-1,2-Dichloroethylene	ND	1.0	µg/L						
1,2-Dichloropropane	ND	1.0	µg/L						
1,3-Dichloropropane	ND	0.50	µg/L						
2,2-Dichloropropane	ND	1.0	µg/L						
1,1-Dichloropropene	ND	2.0	µg/L						
cis-1,3-Dichloropropene	ND	0.50	µg/L						
trans-1,3-Dichloropropene	ND	0.50	µg/L						
Diethyl Ether	ND	2.0	µg/L						
Diisopropyl Ether (DIPE)	ND	0.50	µg/L						
1,4-Dioxane	ND	100	µg/L						
Ethylbenzene	ND	1.0	µg/L						
Hexachlorobutadiene	ND	1.0	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						
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						



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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 B205204 - SW-846 5030B**

<b>Blank (B205204-BLK1)</b>									
Prepared: 06/07/18 Analyzed: 06/11/18									
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L						
Tetrachloroethylene	ND	1.0	µg/L						
Tetrahydrofuran	ND	10	µg/L						
Toluene	ND	1.0	µg/L						
1,2,3-Trichlorobenzene	ND	5.0	µg/L						
1,2,4-Trichlorobenzene	ND	1.0	µg/L						
1,3,5-Trichlorobenzene	ND	1.0	µg/L						
1,1,1-Trichloroethane	ND	1.0	µg/L						
1,1,2-Trichloroethane	ND	1.0	µg/L						
Trichloroethylene	ND	1.0	µg/L						
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L						
1,2,3-Trichloropropane	ND	2.0	µg/L						
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L						
1,2,4-Trimethylbenzene	ND	1.0	µg/L						
1,3,5-Trimethylbenzene	ND	1.0	µg/L						
Vinyl Chloride	ND	2.0	µg/L						
m+p Xylene	ND	2.0	µg/L						
o-Xylene	ND	1.0	µg/L						
Surrogate: 1,2-Dichloroethane-d4	23.1		µg/L	25.0		92.5	70-130		
Surrogate: Toluene-d8	25.1		µg/L	25.0		100	70-130		
Surrogate: 4-Bromofluorobenzene	24.5		µg/L	25.0		98.0	70-130		

<b>LCS (B205204-BS1)</b>									
Prepared: 06/07/18 Analyzed: 06/11/18									
Acetone	139	50	µg/L	100		139	70-160		†
Acrylonitrile	10.9	5.0	µg/L	10.0		109	70-130		
tert-Amyl Methyl Ether (TAME)	10.3	0.50	µg/L	10.0		103	70-130		
Benzene	11.2	1.0	µg/L	10.0		112	70-130		
Bromobenzene	11.4	1.0	µg/L	10.0		114	70-130		
Bromochloromethane	12.8	1.0	µg/L	10.0		128	70-130		
Bromodichloromethane	10.8	0.50	µg/L	10.0		108	70-130		
Bromoform	11.4	1.0	µg/L	10.0		114	70-130		
Bromomethane	6.24	2.0	µg/L	10.0		62.4	40-160		†
2-Butanone (MEK)	122	20	µg/L	100		122	40-160		†
tert-Butyl Alcohol (TBA)	109	20	µg/L	100		109	40-160		†
n-Butylbenzene	11.4	1.0	µg/L	10.0		114	70-130		
sec-Butylbenzene	10.6	1.0	µg/L	10.0		106	70-130		
tert-Butylbenzene	10.6	1.0	µg/L	10.0		106	70-130		
tert-Butyl Ethyl Ether (TBEE)	9.98	0.50	µg/L	10.0		99.8	70-130		
<b>Carbon Disulfide</b>	13.1	4.0	µg/L	10.0		<b>131</b>	*	70-130	L-07, V-20
Carbon Tetrachloride	11.5	5.0	µg/L	10.0		115	70-130		
Chlorobenzene	11.4	1.0	µg/L	10.0		114	70-130		
Chlorodibromomethane	11.4	0.50	µg/L	10.0		114	70-130		
Chloroethane	11.4	2.0	µg/L	10.0		114	70-130		V-20
Chloroform	11.1	2.0	µg/L	10.0		111	70-130		
Chloromethane	9.86	2.0	µg/L	10.0		98.6	40-160		†
2-Chlorotoluene	11.1	1.0	µg/L	10.0		111	70-130		
4-Chlorotoluene	11.2	1.0	µg/L	10.0		112	70-130		
1,2-Dibromo-3-chloropropane (DBCP)	9.55	5.0	µg/L	10.0		95.5	70-130		
1,2-Dibromoethane (EDB)	12.0	0.50	µg/L	10.0		120	70-130		
Dibromomethane	11.5	1.0	µg/L	10.0		115	70-130		
1,2-Dichlorobenzene	11.0	1.0	µg/L	10.0		110	70-130		
1,3-Dichlorobenzene	11.4	1.0	µg/L	10.0		114	70-130		



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
<b>Batch B205204 - SW-846 5030B</b>									
<b>LCS (B205204-BS1)</b>									
Prepared: 06/07/18 Analyzed: 06/11/18									
1,4-Dichlorobenzene	11.1	1.0	µg/L	10.0	111	70-130			
trans-1,4-Dichloro-2-butene	10.0	2.0	µg/L	10.0	100	70-130			
Dichlorodifluoromethane (Freon 12)	9.25	2.0	µg/L	10.0	92.5	40-160			V-34 †
1,1-Dichloroethane	11.3	1.0	µg/L	10.0	113	70-130			
1,2-Dichloroethane	10.3	1.0	µg/L	10.0	103	70-130			
1,1-Dichloroethylene	11.0	1.0	µg/L	10.0	110	70-130			
cis-1,2-Dichloroethylene	10.4	1.0	µg/L	10.0	104	70-130			
trans-1,2-Dichloroethylene	10.9	1.0	µg/L	10.0	109	70-130			
1,2-Dichloropropane	12.1	1.0	µg/L	10.0	121	70-130			
1,3-Dichloropropane	11.4	0.50	µg/L	10.0	114	70-130			
2,2-Dichloropropane	10.7	1.0	µg/L	10.0	107	40-130			†
1,1-Dichloropropene	11.4	2.0	µg/L	10.0	114	70-130			
cis-1,3-Dichloropropene	10.7	0.50	µg/L	10.0	107	70-130			
trans-1,3-Dichloropropene	11.1	0.50	µg/L	10.0	111	70-130			
Diethyl Ether	11.5	2.0	µg/L	10.0	115	70-130			
Diisopropyl Ether (DIPE)	9.51	0.50	µg/L	10.0	95.1	70-130			
1,4-Dioxane	113	100	µg/L	100	113	40-130			†
Ethylbenzene	11.5	1.0	µg/L	10.0	115	70-130			
<b>Hexachlorobutadiene</b>	13.2	1.0	µg/L	10.0	<b>132</b> *	70-130			L-07
2-Hexanone (MBK)	115	10	µg/L	100	115	70-160			†
Isopropylbenzene (Cumene)	11.7	1.0	µg/L	10.0	117	70-130			
p-Isopropyltoluene (p-Cymene)	11.1	1.0	µg/L	10.0	111	70-130			
Methyl Acetate	10.3	1.0	µg/L	10.0	103	70-130			
Methyl tert-Butyl Ether (MTBE)	10.9	1.0	µg/L	10.0	109	70-130			
Methyl Cyclohexane	11.3	1.0	µg/L	10.0	113	70-130			
Methylene Chloride	10.0	5.0	µg/L	10.0	100	70-130			
4-Methyl-2-pentanone (MIBK)	105	10	µg/L	100	105	70-160			†
Naphthalene	9.15	2.0	µg/L	10.0	91.5	40-130			†
n-Propylbenzene	11.2	1.0	µg/L	10.0	112	70-130			
Styrene	11.6	1.0	µg/L	10.0	116	70-130			
1,1,1,2-Tetrachloroethane	11.8	1.0	µg/L	10.0	118	70-130			
1,1,2,2-Tetrachloroethane	11.4	0.50	µg/L	10.0	114	70-130			
<b>Tetrachloroethylene</b>	13.2	1.0	µg/L	10.0	<b>132</b> *	70-130			L-07
Tetrahydrofuran	11.1	10	µg/L	10.0	111	70-130			
Toluene	11.5	1.0	µg/L	10.0	115	70-130			
1,2,3-Trichlorobenzene	10.5	5.0	µg/L	10.0	105	70-130			
1,2,4-Trichlorobenzene	10.4	1.0	µg/L	10.0	104	70-130			
1,3,5-Trichlorobenzene	12.0	1.0	µg/L	10.0	120	70-130			
1,1,1-Trichloroethane	11.0	1.0	µg/L	10.0	110	70-130			
1,1,2-Trichloroethane	11.6	1.0	µg/L	10.0	116	70-130			
Trichloroethylene	11.8	1.0	µg/L	10.0	118	70-130			
Trichlorofluoromethane (Freon 11)	9.44	2.0	µg/L	10.0	94.4	70-130			
1,2,3-Trichloropropane	11.7	2.0	µg/L	10.0	117	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.5	1.0	µg/L	10.0	115	70-130			
1,2,4-Trimethylbenzene	10.6	1.0	µg/L	10.0	106	70-130			
1,3,5-Trimethylbenzene	11.2	1.0	µg/L	10.0	112	70-130			
Vinyl Chloride	10.9	2.0	µg/L	10.0	109	40-160			†
m+p Xylene	23.0	2.0	µg/L	20.0	115	70-130			
o-Xylene	11.2	1.0	µg/L	10.0	112	70-130			
Surrogate: 1,2-Dichloroethane-d4	22.4		µg/L	25.0	89.4	70-130			
Surrogate: Toluene-d8	25.1		µg/L	25.0	100	70-130			



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch B205204 - SW-846 5030B**

<b>LCS (B205204-BS1)</b> Prepared: 06/07/18 Analyzed: 06/11/18									
Surrogate: 4-Bromofluorobenzene	25.1		µg/L	25.0		100	70-130		
<b>LCS Dup (B205204-BSD1)</b> Prepared: 06/07/18 Analyzed: 06/11/18									
Acetone	135	50	µg/L	100		135	70-160	3.34	25
Acrylonitrile	10.8	5.0	µg/L	10.0		108	70-130	0.924	25
tert-Amyl Methyl Ether (TAME)	10.2	0.50	µg/L	10.0		102	70-130	0.487	25
Benzene	10.9	1.0	µg/L	10.0		109	70-130	2.44	25
Bromobenzene	11.4	1.0	µg/L	10.0		114	70-130	0.351	25
Bromoform	12.5	1.0	µg/L	10.0		125	70-130	2.21	25
Bromochloromethane	10.4	0.50	µg/L	10.0		104	70-130	2.92	25
Bromoform	11.3	1.0	µg/L	10.0		113	70-130	1.05	25
Bromomethane	7.18	2.0	µg/L	10.0		71.8	40-160	14.0	25
2-Butanone (MEK)	119	20	µg/L	100		119	40-160	2.38	25
tert-Butyl Alcohol (TBA)	104	20	µg/L	100		104	40-160	5.16	25
n-Butylbenzene	11.0	1.0	µg/L	10.0		110	70-130	3.31	25
sec-Butylbenzene	10.3	1.0	µg/L	10.0		103	70-130	2.58	25
tert-Butylbenzene	10.2	1.0	µg/L	10.0		102	70-130	3.27	25
tert-Butyl Ethyl Ether (TBEE)	9.69	0.50	µg/L	10.0		96.9	70-130	2.95	25
Carbon Disulfide	12.6	4.0	µg/L	10.0		126	70-130	4.52	25
Carbon Tetrachloride	10.9	5.0	µg/L	10.0		109	70-130	5.01	25
Chlorobenzene	11.1	1.0	µg/L	10.0		111	70-130	2.40	25
Chlorodibromomethane	11.0	0.50	µg/L	10.0		110	70-130	2.68	25
Chloroethane	10.7	2.0	µg/L	10.0		107	70-130	5.89	25
Chloroform	10.8	2.0	µg/L	10.0		108	70-130	2.73	25
Chloromethane	9.62	2.0	µg/L	10.0		96.2	40-160	2.46	25
2-Chlorotoluene	10.9	1.0	µg/L	10.0		109	70-130	1.90	25
4-Chlorotoluene	11.0	1.0	µg/L	10.0		110	70-130	1.44	25
1,2-Dibromo-3-chloropropane (DBCP)	9.14	5.0	µg/L	10.0		91.4	70-130	4.39	25
1,2-Dibromoethane (EDB)	11.8	0.50	µg/L	10.0		118	70-130	1.35	25
Dibromomethane	11.2	1.0	µg/L	10.0		112	70-130	2.82	25
1,2-Dichlorobenzene	10.7	1.0	µg/L	10.0		107	70-130	3.22	25
1,3-Dichlorobenzene	11.1	1.0	µg/L	10.0		111	70-130	2.66	25
1,4-Dichlorobenzene	10.8	1.0	µg/L	10.0		108	70-130	2.38	25
trans-1,4-Dichloro-2-butene	8.82	2.0	µg/L	10.0		88.2	70-130	13.0	25
Dichlorodifluoromethane (Freon 12)	8.99	2.0	µg/L	10.0		89.9	40-160	2.85	25
1,1-Dichloroethane	11.0	1.0	µg/L	10.0		110	70-130	2.97	25
1,2-Dichloroethane	10.5	1.0	µg/L	10.0		105	70-130	2.01	25
1,1-Dichloroethylene	10.7	1.0	µg/L	10.0		107	70-130	2.76	25
cis-1,2-Dichloroethylene	10.3	1.0	µg/L	10.0		103	70-130	0.675	25
trans-1,2-Dichloroethylene	10.4	1.0	µg/L	10.0		104	70-130	3.85	25
1,2-Dichloropropane	11.6	1.0	µg/L	10.0		116	70-130	3.88	25
1,3-Dichloropropane	10.8	0.50	µg/L	10.0		108	70-130	4.68	25
2,2-Dichloropropane	10.1	1.0	µg/L	10.0		101	40-130	5.88	25
1,1-Dichloropropene	10.9	2.0	µg/L	10.0		109	70-130	4.31	25
cis-1,3-Dichloropropene	10.1	0.50	µg/L	10.0		101	70-130	5.28	25
trans-1,3-Dichloropropene	10.7	0.50	µg/L	10.0		107	70-130	3.95	25
Diethyl Ether	11.4	2.0	µg/L	10.0		114	70-130	1.40	25
Diisopropyl Ether (DIPE)	9.26	0.50	µg/L	10.0		92.6	70-130	2.66	25
1,4-Dioxane	100	100	µg/L	100		100	40-130	12.4	50
Ethylbenzene	11.4	1.0	µg/L	10.0		114	70-130	1.22	25
Hexachlorobutadiene	12.6	1.0	µg/L	10.0		126	70-130	4.64	25
2-Hexanone (MBK)	109	10	µg/L	100		109	70-160	5.01	25



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B205204 - SW-846 5030B**

LCS Dup (B205204-BSD1)										
Prepared: 06/07/18 Analyzed: 06/11/18										
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Isopropylbenzene (Cumene)	11.3	1.0	µg/L	10.0	113	70-130	3.21	25		
p-Isopropyltoluene (p-Cymene)	10.5	1.0	µg/L	10.0	105	70-130	5.46	25		
Methyl Acetate	9.65	1.0	µg/L	10.0	96.5	70-130	6.90	25		
Methyl tert-Butyl Ether (MTBE)	10.5	1.0	µg/L	10.0	105	70-130	3.63	25		
Methyl Cyclohexane	11.0	1.0	µg/L	10.0	110	70-130	2.77	25		
Methylene Chloride	9.60	5.0	µg/L	10.0	96.0	70-130	4.38	25		
4-Methyl-2-pentanone (MIBK)	99.8	10	µg/L	100	99.8	70-160	5.11	25	†	
Naphthalene	8.58	2.0	µg/L	10.0	85.8	40-130	6.43	25	†	
n-Propylbenzene	10.9	1.0	µg/L	10.0	109	70-130	2.44	25		
Styrene	11.3	1.0	µg/L	10.0	113	70-130	2.63	25		
1,1,1,2-Tetrachloroethane	11.4	1.0	µg/L	10.0	114	70-130	3.63	25		
1,1,2,2-Tetrachloroethane	11.2	0.50	µg/L	10.0	112	70-130	1.86	25		
Tetrachloroethylene	12.6	1.0	µg/L	10.0	126	70-130	4.50	25		
Tetrahydrofuran	10.5	10	µg/L	10.0	105	70-130	5.67	25		
Toluene	11.1	1.0	µg/L	10.0	111	70-130	3.46	25		
1,2,3-Trichlorobenzene	10.2	5.0	µg/L	10.0	102	70-130	3.57	25		
1,2,4-Trichlorobenzene	10.2	1.0	µg/L	10.0	102	70-130	2.42	25		
1,3,5-Trichlorobenzene	11.5	1.0	µg/L	10.0	115	70-130	3.92	25		
1,1,1-Trichloroethane	10.6	1.0	µg/L	10.0	106	70-130	4.44	25		
1,1,2-Trichloroethane	11.1	1.0	µg/L	10.0	111	70-130	4.48	25		
Trichloroethylene	11.3	1.0	µg/L	10.0	113	70-130	4.06	25		
Trichlorofluoromethane (Freon 11)	9.33	2.0	µg/L	10.0	93.3	70-130	1.17	25		
1,2,3-Trichloropropane	11.5	2.0	µg/L	10.0	115	70-130	1.90	25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.8	1.0	µg/L	10.0	108	70-130	6.11	25		
1,2,4-Trimethylbenzene	10.5	1.0	µg/L	10.0	105	70-130	0.759	25		
1,3,5-Trimethylbenzene	11.0	1.0	µg/L	10.0	110	70-130	1.97	25		
Vinyl Chloride	10.4	2.0	µg/L	10.0	104	40-160	4.90	25	†	
m+p Xylene	22.4	2.0	µg/L	20.0	112	70-130	2.60	25		
o-Xylene	10.9	1.0	µg/L	10.0	109	70-130	2.08	25		
Surrogate: 1,2-Dichloroethane-d4	22.9		µg/L	25.0	91.7	70-130				
Surrogate: Toluene-d8	24.8		µg/L	25.0	99.4	70-130				
Surrogate: 4-Bromofluorobenzene	25.1		µg/L	25.0	101	70-130				

**Batch B205474 - SW-846 5030B**

Blank (B205474-BLK1)										
Prepared & Analyzed: 06/12/18										
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acetone	ND	50	µg/L							
Acrylonitrile	ND	5.0	µg/L							
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L							
Benzene	ND	1.0	µg/L							
Bromobenzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	0.50	µg/L							
Bromoform	ND	1.0	µg/L							
Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	20	µg/L							
tert-Butyl Alcohol (TBA)	ND	20	µg/L							
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L							
Carbon Disulfide	ND	4.0	µg/L							



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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	RPD Limit	Notes
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**Batch B205474 - SW-846 5030B****Blank (B205474-BLK1)** Prepared & Analyzed: 06/12/18

Carbon Tetrachloride	ND	5.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
Dibromomethane	ND	1.0	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							
1,1-Dichloropropene	ND	2.0	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
Diethyl Ether	ND	2.0	µg/L							
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							
Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	0.60	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl Acetate	ND	1.0	µg/L							
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							



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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	RPD Limit	Notes
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**Batch B205474 - SW-846 5030B**

<b>Blank (B205474-BLK1)</b>	Prepared & Analyzed: 06/12/18								
1,1,2-Trichloroethane	ND	1.0	µg/L						
Trichloroethylene	ND	1.0	µg/L						
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L						
1,2,3-Trichloropropane	ND	2.0	µg/L						
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L						
1,2,4-Trimethylbenzene	ND	1.0	µg/L						
1,3,5-Trimethylbenzene	ND	1.0	µg/L						
Vinyl Chloride	ND	2.0	µg/L						
m+p Xylene	ND	2.0	µg/L						
o-Xylene	ND	1.0	µg/L						
Surrogate: 1,2-Dichloroethane-d4	25.4		µg/L	25.0	101	70-130			
Surrogate: Toluene-d8	24.6		µg/L	25.0	98.4	70-130			
Surrogate: 4-Bromofluorobenzene	24.0		µg/L	25.0	96.0	70-130			
<b>LCS (B205474-BS1)</b>	Prepared & Analyzed: 06/12/18								
Acetone	115	50	µg/L	100	115	70-160			†
Acrylonitrile	11.5	5.0	µg/L	10.0	115	70-130			
tert-Amyl Methyl Ether (TAME)	10.3	0.50	µg/L	10.0	103	70-130			
Benzene	11.0	1.0	µg/L	10.0	110	70-130			
Bromobenzene	11.9	1.0	µg/L	10.0	119	70-130			
<b>Bromochloromethane</b>	13.4	1.0	µg/L	10.0	134 *	70-130			L-02
Bromodichloromethane	11.4	0.50	µg/L	10.0	114	70-130			
Bromoform	10.5	1.0	µg/L	10.0	105	70-130			
Bromomethane	8.91	2.0	µg/L	10.0	89.1	40-160			V-20 †
2-Butanone (MEK)	114	20	µg/L	100	114	40-160			†
tert-Butyl Alcohol (TBA)	106	20	µg/L	100	106	40-160			†
n-Butylbenzene	13.0	1.0	µg/L	10.0	130	70-130			
sec-Butylbenzene	12.8	1.0	µg/L	10.0	128	70-130			
tert-Butylbenzene	12.5	1.0	µg/L	10.0	125	70-130			
tert-Butyl Ethyl Ether (TBEE)	10.4	0.50	µg/L	10.0	104	70-130			
Carbon Disulfide	11.5	4.0	µg/L	10.0	115	70-130			
Carbon Tetrachloride	10.7	5.0	µg/L	10.0	107	70-130			
Chlorobenzene	11.7	1.0	µg/L	10.0	117	70-130			
Chlorodibromomethane	11.3	0.50	µg/L	10.0	113	70-130			
Chloroethane	9.84	2.0	µg/L	10.0	98.4	70-130			
Chloroform	11.5	2.0	µg/L	10.0	115	70-130			
Chloromethane	9.08	2.0	µg/L	10.0	90.8	40-160			†
2-Chlorotoluene	11.7	1.0	µg/L	10.0	117	70-130			
4-Chlorotoluene	11.9	1.0	µg/L	10.0	119	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	11.3	5.0	µg/L	10.0	113	70-130			
1,2-Dibromoethane (EDB)	11.5	0.50	µg/L	10.0	115	70-130			
Dibromomethane	11.6	1.0	µg/L	10.0	116	70-130			
1,2-Dichlorobenzene	12.0	1.0	µg/L	10.0	120	70-130			
1,3-Dichlorobenzene	12.3	1.0	µg/L	10.0	123	70-130			
1,4-Dichlorobenzene	11.9	1.0	µg/L	10.0	119	70-130			
trans-1,4-Dichloro-2-butene	11.0	2.0	µg/L	10.0	110	70-130			
Dichlorodifluoromethane (Freon 12)	8.54	2.0	µg/L	10.0	85.4	40-160			†
1,1-Dichloroethane	11.8	1.0	µg/L	10.0	118	70-130			
1,2-Dichloroethane	11.8	1.0	µg/L	10.0	118	70-130			
1,1-Dichloroethylene	11.0	1.0	µg/L	10.0	110	70-130			
cis-1,2-Dichloroethylene	11.5	1.0	µg/L	10.0	115	70-130			
trans-1,2-Dichloroethylene	11.6	1.0	µg/L	10.0	116	70-130			



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
<b>Batch B205474 - SW-846 5030B</b>									
<b>LCS (B205474-BS1)</b>									
Prepared & Analyzed: 06/12/18									
1,2-Dichloropropane	11.4	1.0	µg/L	10.0	114	70-130			
1,3-Dichloropropane	10.8	0.50	µg/L	10.0	108	70-130			
2,2-Dichloropropane	12.4	1.0	µg/L	10.0	124	40-130			†
1,1-Dichloropropene	11.0	2.0	µg/L	10.0	110	70-130			
cis-1,3-Dichloropropene	11.0	0.50	µg/L	10.0	110	70-130			
trans-1,3-Dichloropropene	11.5	0.50	µg/L	10.0	115	70-130			
Diethyl Ether	11.1	2.0	µg/L	10.0	111	70-130			
Diisopropyl Ether (DIPE)	10.4	0.50	µg/L	10.0	104	70-130			
1,4-Dioxane	103	50	µg/L	100	103	40-130			†
Ethylbenzene	12.3	1.0	µg/L	10.0	123	70-130			
<b>Hexachlorobutadiene</b>	<b>14.0</b>	<b>0.60</b>	<b>µg/L</b>	<b>10.0</b>	<b>140</b>	<b>*</b>	<b>70-130</b>		<b>L-02, V-20</b>
2-Hexanone (MBK)	117	10	µg/L	100	117	70-160			†
Isopropylbenzene (Cumene)	12.7	1.0	µg/L	10.0	127	70-130			
p-Isopropyltoluene (p-Cymene)	12.7	1.0	µg/L	10.0	127	70-130			
Methyl Acetate	8.29	1.0	µg/L	10.0	82.9	70-130			
Methyl tert-Butyl Ether (MTBE)	11.6	1.0	µg/L	10.0	116	70-130			
Methyl Cyclohexane	11.7	1.0	µg/L	10.0	117	70-130			
Methylene Chloride	11.2	5.0	µg/L	10.0	112	70-130			
4-Methyl-2-pentanone (MIBK)	118	10	µg/L	100	118	70-160			†
Naphthalene	11.4	2.0	µg/L	10.0	114	40-130			†
n-Propylbenzene	12.0	1.0	µg/L	10.0	120	70-130			
Styrene	12.4	1.0	µg/L	10.0	124	70-130			
1,1,1,2-Tetrachloroethane	11.7	1.0	µg/L	10.0	117	70-130			
1,1,2,2-Tetrachloroethane	11.3	0.50	µg/L	10.0	113	70-130			
Tetrachloroethylene	12.1	1.0	µg/L	10.0	121	70-130			
Tetrahydrofuran	11.7	10	µg/L	10.0	117	70-130			
Toluene	11.9	1.0	µg/L	10.0	119	70-130			
1,2,3-Trichlorobenzene	12.1	5.0	µg/L	10.0	121	70-130			
1,2,4-Trichlorobenzene	11.8	1.0	µg/L	10.0	118	70-130			
1,3,5-Trichlorobenzene	11.8	1.0	µg/L	10.0	118	70-130			
1,1,1-Trichloroethane	11.6	1.0	µg/L	10.0	116	70-130			
1,1,2-Trichloroethane	11.8	1.0	µg/L	10.0	118	70-130			
Trichloroethylene	12.1	1.0	µg/L	10.0	121	70-130			
Trichlorofluoromethane (Freon 11)	9.33	2.0	µg/L	10.0	93.3	70-130			
1,2,3-Trichloropropane	11.8	2.0	µg/L	10.0	118	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.1	1.0	µg/L	10.0	111	70-130			
1,2,4-Trimethylbenzene	11.9	1.0	µg/L	10.0	119	70-130			
1,3,5-Trimethylbenzene	12.0	1.0	µg/L	10.0	120	70-130			
Vinyl Chloride	9.72	2.0	µg/L	10.0	97.2	40-160			†
m+p Xylene	24.3	2.0	µg/L	20.0	122	70-130			
o-Xylene	12.1	1.0	µg/L	10.0	121	70-130			
Surrogate: 1,2-Dichloroethane-d4	25.0		µg/L	25.0	100	70-130			
Surrogate: Toluene-d8	24.8		µg/L	25.0	99.1	70-130			
Surrogate: 4-Bromofluorobenzene	24.8		µg/L	25.0	99.2	70-130			



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B205474 - SW-846 5030B</b>										
<b>LCS Dup (B205474-BSD1)</b>										
Prepared & Analyzed: 06/12/18										
Acetone	116	50	µg/L	100	116	70-160	0.277	25		†
Acrylonitrile	11.3	5.0	µg/L	10.0	113	70-130	1.32	25		
tert-Amyl Methyl Ether (TAME)	10.5	0.50	µg/L	10.0	105	70-130	2.21	25		
Benzene	10.9	1.0	µg/L	10.0	109	70-130	1.09	25		
Bromobenzene	11.7	1.0	µg/L	10.0	117	70-130	2.21	25		
<b>Bromochloromethane</b>	<b>13.1</b>	<b>1.0</b>	<b>µg/L</b>	<b>10.0</b>	<b>131</b>	<b>*</b>	<b>70-130</b>	<b>2.26</b>	<b>25</b>	<b>L-02</b>
Bromodichloromethane	11.1	0.50	µg/L	10.0	111	70-130	2.75	25		
Bromoform	10.4	1.0	µg/L	10.0	104	70-130	0.287	25		
Bromomethane	11.0	2.0	µg/L	10.0	110	40-160	21.2	25	V-20	†
2-Butanone (MEK)	115	20	µg/L	100	115	40-160	0.780	25		†
tert-Butyl Alcohol (TBA)	110	20	µg/L	100	110	40-160	4.14	25		†
n-Butylbenzene	12.5	1.0	µg/L	10.0	125	70-130	3.61	25		
sec-Butylbenzene	12.3	1.0	µg/L	10.0	123	70-130	3.74	25		
tert-Butylbenzene	12.2	1.0	µg/L	10.0	122	70-130	2.03	25		
tert-Butyl Ethyl Ether (TBEE)	10.5	0.50	µg/L	10.0	105	70-130	1.15	25		
Carbon Disulfide	10.8	4.0	µg/L	10.0	108	70-130	6.35	25		
Carbon Tetrachloride	10.5	5.0	µg/L	10.0	105	70-130	2.36	25		
Chlorobenzene	11.4	1.0	µg/L	10.0	114	70-130	2.85	25		
Chlorodibromomethane	11.6	0.50	µg/L	10.0	116	70-130	2.53	25		
Chloroethane	10.5	2.0	µg/L	10.0	105	70-130	6.11	25		
Chloroform	11.5	2.0	µg/L	10.0	115	70-130	0.0868	25		
Chloromethane	9.25	2.0	µg/L	10.0	92.5	40-160	1.85	25		†
2-Chlorotoluene	11.4	1.0	µg/L	10.0	114	70-130	2.43	25		
4-Chlorotoluene	11.4	1.0	µg/L	10.0	114	70-130	4.37	25		
1,2-Dibromo-3-chloropropane (DBCP)	11.2	5.0	µg/L	10.0	112	70-130	1.42	25		
1,2-Dibromoethane (EDB)	11.6	0.50	µg/L	10.0	116	70-130	0.955	25		
Dibromomethane	12.1	1.0	µg/L	10.0	121	70-130	4.98	25		
1,2-Dichlorobenzene	11.7	1.0	µg/L	10.0	117	70-130	3.21	25		
1,3-Dichlorobenzene	12.2	1.0	µg/L	10.0	122	70-130	0.900	25		
1,4-Dichlorobenzene	11.3	1.0	µg/L	10.0	113	70-130	5.01	25		
trans-1,4-Dichloro-2-butene	11.0	2.0	µg/L	10.0	110	70-130	0.0913	25		
Dichlorodifluoromethane (Freon 12)	8.34	2.0	µg/L	10.0	83.4	40-160	2.37	25		†
1,1-Dichloroethane	11.7	1.0	µg/L	10.0	117	70-130	0.426	25		
1,2-Dichloroethane	11.3	1.0	µg/L	10.0	113	70-130	3.72	25		
1,1-Dichloroethylene	10.8	1.0	µg/L	10.0	108	70-130	2.20	25		
cis-1,2-Dichloroethylene	11.3	1.0	µg/L	10.0	113	70-130	1.40	25		
trans-1,2-Dichloroethylene	11.3	1.0	µg/L	10.0	113	70-130	2.80	25		
1,2-Dichloropropane	11.1	1.0	µg/L	10.0	111	70-130	2.66	25		
1,3-Dichloropropane	10.9	0.50	µg/L	10.0	109	70-130	0.645	25		
2,2-Dichloropropane	12.2	1.0	µg/L	10.0	122	40-130	1.46	25		†
1,1-Dichloropropene	10.7	2.0	µg/L	10.0	107	70-130	3.50	25		
cis-1,3-Dichloropropene	10.8	0.50	µg/L	10.0	108	70-130	1.28	25		
trans-1,3-Dichloropropene	11.3	0.50	µg/L	10.0	113	70-130	1.41	25		
Diethyl Ether	10.9	2.0	µg/L	10.0	109	70-130	1.46	25		
Diisopropyl Ether (DIPE)	10.3	0.50	µg/L	10.0	103	70-130	0.966	25		
1,4-Dioxane	111	50	µg/L	100	111	40-130	7.04	50		† ‡
Ethylbenzene	11.9	1.0	µg/L	10.0	119	70-130	3.72	25		
<b>Hexachlorobutadiene</b>	<b>13.4</b>	<b>0.60</b>	<b>µg/L</b>	<b>10.0</b>	<b>134</b>	<b>*</b>	<b>70-130</b>	<b>4.52</b>	<b>25</b>	<b>L-02, V-20</b>
2-Hexanone (MBK)	119	10	µg/L	100	119	70-160	1.49	25		†
Isopropylbenzene (Cumene)	12.1	1.0	µg/L	10.0	121	70-130	4.67	25		
p-Isopropyltoluene (p-Cymene)	12.5	1.0	µg/L	10.0	125	70-130	2.06	25		
Methyl Acetate	8.49	1.0	µg/L	10.0	84.9	70-130	2.38	25		



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B205474 - SW-846 5030B</b>										
<b>LCS Dup (B205474-BSD1)</b>										
Prepared & Analyzed: 06/12/18										
Methyl tert-Butyl Ether (MTBE)	11.5	1.0	µg/L	10.0	115	70-130	0.605	25		
Methyl Cyclohexane	10.9	1.0	µg/L	10.0	109	70-130	6.82	25		
Methylene Chloride	11.0	5.0	µg/L	10.0	110	70-130	1.53	25		
4-Methyl-2-pentanone (MIBK)	11.9	10	µg/L	100	119	70-160	0.211	25		†
Naphthalene	11.2	2.0	µg/L	10.0	112	40-130	1.86	25		†
n-Propylbenzene	11.8	1.0	µg/L	10.0	118	70-130	1.68	25		
Styrene	11.9	1.0	µg/L	10.0	119	70-130	3.79	25		
1,1,1,2-Tetrachloroethane	11.4	1.0	µg/L	10.0	114	70-130	2.34	25		
1,1,2,2-Tetrachloroethane	11.3	0.50	µg/L	10.0	113	70-130	0.00	25		
Tetrachloroethylene	11.6	1.0	µg/L	10.0	116	70-130	4.73	25		
Tetrahydrofuran	12.0	10	µg/L	10.0	120	70-130	1.94	25		
Toluene	11.5	1.0	µg/L	10.0	115	70-130	3.42	25		
1,2,3-Trichlorobenzene	11.7	5.0	µg/L	10.0	117	70-130	3.11	25		
1,2,4-Trichlorobenzene	11.8	1.0	µg/L	10.0	118	70-130	0.594	25		
1,3,5-Trichlorobenzene	11.3	1.0	µg/L	10.0	113	70-130	4.31	25		
1,1,1-Trichloroethane	11.3	1.0	µg/L	10.0	113	70-130	2.45	25		
1,1,2-Trichloroethane	11.9	1.0	µg/L	10.0	119	70-130	1.09	25		
Trichloroethylene	11.5	1.0	µg/L	10.0	115	70-130	4.93	25		
Trichlorofluoromethane (Freon 11)	9.28	2.0	µg/L	10.0	92.8	70-130	0.537	25		
1,2,3-Trichloroproppane	9.37	2.0	µg/L	10.0	93.7	70-130	22.9	25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.6	1.0	µg/L	10.0	106	70-130	4.24	25		
1,2,4-Trimethylbenzene	11.6	1.0	µg/L	10.0	116	70-130	3.07	25		
1,3,5-Trimethylbenzene	11.6	1.0	µg/L	10.0	116	70-130	3.40	25		
Vinyl Chloride	9.32	2.0	µg/L	10.0	93.2	40-160	4.20	25		†
m+p Xylene	23.4	2.0	µg/L	20.0	117	70-130	3.99	25		
o-Xylene	11.6	1.0	µg/L	10.0	116	70-130	4.40	25		
Surrogate: 1,2-Dichloroethane-d4	25.1		µg/L	25.0	100	70-130				
Surrogate: Toluene-d8	24.8		µg/L	25.0	99.4	70-130				
Surrogate: 4-Bromofluorobenzene	24.7		µg/L	25.0	98.9	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
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**Batch B204786 - SW-846 3510C**

<b>Blank (B204786-BLK1)</b>		Prepared: 06/02/18 Analyzed: 06/03/18						
TPH (C9-C36)	ND	0.20	mg/L					
Surrogate: 2-Fluorobiphenyl	0.0766		mg/L	0.100		76.6	40-140	
<b>LCS (B204786-BS1)</b>		Prepared: 06/02/18 Analyzed: 06/03/18						
TPH (C9-C36)	0.636	0.20	mg/L	1.00		63.6	40-140	
Surrogate: 2-Fluorobiphenyl	0.0814		mg/L	0.100		81.4	40-140	
<b>LCS Dup (B204786-BSD1)</b>		Prepared: 06/02/18 Analyzed: 06/03/18						
TPH (C9-C36)	0.643	0.20	mg/L	1.00		64.3	40-140	1.03
Surrogate: 2-Fluorobiphenyl	0.0822		mg/L	0.100		82.2	40-140	30



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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	RPD Limit	Notes
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**Batch B204945 - SW-846 3005A Dissolved**

<b>Blank (B204945-BLK1)</b>	Prepared & Analyzed: 06/05/18						
Lead	ND	1.0	µg/L				
<b>Blank (B204945-BLK2)</b>	Prepared: 06/05/18 Analyzed: 06/06/18						
Lead	ND	1.0	µg/L				
<b>Blank (B204945-BLK3)</b>	Prepared: 06/05/18 Analyzed: 06/07/18						
Lead	ND	1.0	µg/L				
<b>LCS (B204945-BS1)</b>	Prepared & Analyzed: 06/05/18						
Lead	40.3	1.0	µg/L	40.0	101	80-120	
<b>LCS (B204945-BS2)</b>	Prepared: 06/05/18 Analyzed: 06/06/18						
Lead	39.2	1.0	µg/L	40.0	97.9	80-120	
<b>LCS (B204945-BS3)</b>	Prepared: 06/05/18 Analyzed: 06/07/18						
Lead	39.9	1.0	µg/L	40.0	99.7	80-120	



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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.
  
- DL-01 Elevated reporting limits for all volatile compounds due to foaming sample matrix.
- 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.
- R-05 Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
- RL-11 Elevated reporting limit due to high concentration of target compounds.
  
- V-06 Continuing calibration did not meet method specifications and was biased on the high side for this compound. Reported result is estimated.
- V-20 Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.
- V-34 Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.
- V-36 Initial calibration verification (ICV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.



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#### CERTIFICATIONS

##### Certified Analyses included in this Report

Analyte	Certifications
<b><i>SW-846 6020A-B in Water</i></b>	
Lead	CT,NH,NY,NC,ME,VA
<b><i>SW-846 8260C in Water</i></b>	
Acetone	CT,ME,NH,VA,NY
Acrylonitrile	CT,ME,NH,VA,NY
tert-Amyl Methyl Ether (TAME)	ME,NH,VA,NY
Benzene	CT,ME,NH,VA,NY
Bromobenzene	NY
Bromochloromethane	ME,NH,VA,NY
Bromodichloromethane	CT,ME,NH,VA,NY
Bromoform	CT,ME,NH,VA,NY
Bromomethane	CT,ME,NH,VA,NY
2-Butanone (MEK)	CT,ME,NH,VA,NY
tert-Butyl Alcohol (TBA)	ME,NH,VA,NY
n-Butylbenzene	ME,VA,NY
sec-Butylbenzene	ME,VA,NY
tert-Butylbenzene	ME,VA,NY
tert-Butyl Ethyl Ether (TBEE)	ME,NH,VA,NY
Carbon Disulfide	CT,ME,NH,VA,NY
Carbon Tetrachloride	CT,ME,NH,VA,NY
Chlorobenzene	CT,ME,NH,VA,NY
Chlorodibromomethane	CT,ME,NH,VA,NY
Chloroethane	CT,ME,NH,VA,NY
Chloroform	CT,ME,NH,VA,NY
Chloromethane	CT,ME,NH,VA,NY
2-Chlorotoluene	ME,NH,VA,NY
4-Chlorotoluene	ME,NH,VA,NY
1,2-Dibromo-3-chloropropane (DBCP)	NY
1,2-Dibromoethane (EDB)	NY
Dibromomethane	ME,NH,VA,NY
1,2-Dichlorobenzene	CT,ME,NH,VA,NY
1,3-Dichlorobenzene	CT,ME,NH,VA,NY
1,4-Dichlorobenzene	CT,ME,NH,VA,NY
trans-1,4-Dichloro-2-butene	ME,NH,VA,NY
Dichlorodifluoromethane (Freon 12)	ME,NH,VA,NY
1,1-Dichloroethane	CT,ME,NH,VA,NY
1,2-Dichloroethane	CT,ME,NH,VA,NY
1,1-Dichloroethylene	CT,ME,NH,VA,NY
cis-1,2-Dichloroethylene	ME,NY
trans-1,2-Dichloroethylene	CT,ME,NH,VA,NY
1,2-Dichloropropane	CT,ME,NH,VA,NY
1,3-Dichloropropane	ME,VA,NY
2,2-Dichloropropane	ME,NH,VA,NY
1,1-Dichloropropene	ME,NH,VA,NY
cis-1,3-Dichloropropene	CT,ME,NH,VA,NY
trans-1,3-Dichloropropene	CT,ME,NH,VA,NY
Diethyl Ether	NY



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#### CERTIFICATIONS

##### Certified Analyses included in this Report

Analyte	Certifications
<b><i>SW-846 8260C in Water</i></b>	
Diisopropyl Ether (DIPE)	ME,NH,VA,NY
1,4-Dioxane	NY
Ethylbenzene	CT,ME,NH,VA,NY
Hexachlorobutadiene	CT,ME,NH,VA,NY
2-Hexanone (MBK)	CT,ME,NH,VA,NY
Isopropylbenzene (Cumene)	ME,VA,NY
p-Isopropyltoluene (p-Cymene)	CT,ME,NH,VA,NY
Methyl Acetate	NY
Methyl tert-Butyl Ether (MTBE)	CT,ME,NH,VA,NY
Methyl Cyclohexane	NY
Methylene Chloride	CT,ME,NH,VA,NY
4-Methyl-2-pentanone (MIBK)	CT,ME,NH,VA,NY
Naphthalene	ME,NH,VA,NY
n-Propylbenzene	CT,ME,NH,VA,NY
Styrene	CT,ME,NH,VA,NY
1,1,1,2-Tetrachloroethane	CT,ME,NH,VA,NY
1,1,2,2-Tetrachloroethane	CT,ME,NH,VA,NY
Tetrachloroethylene	CT,ME,NH,VA,NY
Toluene	CT,ME,NH,VA,NY
1,2,3-Trichlorobenzene	ME,NH,VA,NY
1,2,4-Trichlorobenzene	CT,ME,NH,VA,NY
1,3,5-Trichlorobenzene	ME
1,1,1-Trichloroethane	CT,ME,NH,VA,NY
1,1,2-Trichloroethane	CT,ME,NH,VA,NY
Trichloroethylene	CT,ME,NH,VA,NY
Trichlorofluoromethane (Freon 11)	CT,ME,NH,VA,NY
1,2,3-Trichloropropane	ME,NH,VA,NY
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	VA,NY
1,2,4-Trimethylbenzene	ME,VA,NY
1,3,5-Trimethylbenzene	ME,VA,NY
Vinyl Chloride	CT,ME,NH,VA,NY
m+p Xylene	CT,ME,NH,VA,NY
o-Xylene	CT,ME,NH,VA,NY




---

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

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2005	100033	03/1/2020
MA	Massachusetts DEP	M-MA100	06/30/2018
CT	Connecticut Department of Public Health	PH-0567	09/30/2019
NY	New York State Department of Health	10899 NELAP	04/1/2019
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2019
RI	Rhode Island Department of Health	LAO00112	12/30/2018
NC	North Carolina Div. of Water Quality	652	12/31/2018
NJ	New Jersey DEP	MA007 NELAP	06/30/2018
FL	Florida Department of Health	E871027 NELAP	06/30/2018
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2018
ME	State of Maine	2011028	06/9/2019
VA	Commonwealth of Virginia	460217	12/14/2018
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2018
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2019
NC-DW	North Carolina Department of Health	25703	07/31/2018



<http://www.contestlabs.com>  
CHAIN OF CUSTODY RECORD

Doc # 381 Rev 0 5 8 2015

18E1698  
Phone: 413-525-2332  
Fax: 413-525-6405

Email: [info@contestlabs.com](mailto:info@contestlabs.com)

Optim Environmental & Infrastructure, Inc.

Address: 150 Royal Street, Canton, MA 02021

Phone: 617-589-6175

Project Name: Textron Providence

Project Location: 333 Adelaide Avenue, Providence, RI

Project Number: 130274

Project Manager: Brian Cote

Con-Test Bid: PO 835493

Invoice Recipient: Brian Cote

Sampled By: *Douglas C. Catt*

		Requested Turnaround Time	
7-Day	<input type="checkbox"/>	10-Day	<input checked="" type="checkbox"/>
Other:			

#### Rush-Approval Required

1-Day

3-Day

4-Day

Data Delivery

Format: PDF

EXCEL

Other: GIS Key format

Enhanced Data Package Required:

Email To: [brian.cote@aptim.com](mailto:brian.cote@aptim.com)

Fax To #: \_\_\_\_\_

Con-Test Work Order #

Client Sample ID / Description

Beginning Date/Time

Ending Date/Time

Composite

Grab

Matrix Code

Conc Code

01	11/12 - 2015	5/29/18 1300		3	GW	U	3
02	11/12 - 2015	5/29/18 1330		3	GW	U	3
03	11/12 - 2015	5/29/18 1000		3	GW	U	3
04	11/12 - 2015	5/29/18 1030		3	GW	U	3
05	11/12 - 1015	5/29/18 1100		3	GW	U	3
06	11/12 - 1015	5/29/18 1115		3	GW	U	3
07	11/12 - 1015	5/29/18 1130		3	GW	U	3
08	11/12 - 2019	5/29/18 1200		3	GW	U	3
09	11/12 - 11/12	5/29/18 1230		3	GW	U	3
10	11/12 - 21/85	5/29/18 1245		3	GW	U	3

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

<sup>1</sup> Container Codes:

A = Amber Glass

G = Glass

P = Plastic

ST = Sterile

V = Vial

S = Summa Canister

T = Tedlar Bag

O = Other (please define)

<sup>2</sup> Preservation Codes:

I = Iced

H = HCl

M = Methanol

N = Nitric Acid

S = Sulfuric Acid

B = Sodium Bisulfate

X = Sodium Hydroxide

Tiosulfate

Thiosulfate

O = Other (please define)

<sup>3</sup> Container Codes:

A = Amber Glass

G = Glass

P = Plastic

ST = Sterile

V = Vial

S = Summa Canister

T = Tedlar Bag

O = Other (please define)

#### ANALYSIS REQUESTED

Total Petroleum Hydrocarbons

Dissolved Lead

EPA 8260B (VOCs)

1 Matrix Codes:

GW = Ground Water

WW = Waste Water

DW = Drinking Water

A = Air

S = Soil / Solid

SL = Sludge

O = Other (please define)

#### Program Information

NELAC and AIHA-LAP, LLC Accredited

MCN Analytical Certification Form Required

RCP Analysis Certification Form Required

MA State DW Form Required

PWSID # \_\_\_\_\_

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

Company Name: Aptim Environmental & Infrastructure, Inc.  
Address: 150 Royal Street, Canton, MA 02021  
Email: info@contestlabs.com

Requested Turnaround Time

7-Day  10-Day

Rush Approval Required  
Other:

1-Day  3-Day   
2-Day  4-Day

Data Delivery

Format: PDF  EXCEL

Other: GIS Key format

Enhanced Data Package Required:

Email To: brian.cote@aptim.com

Fax To #: \_\_\_\_\_

Con-Test Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite Grab	Matrix Code	Conc Code
11	MW - 218 D	5/29/18 1300		G	GW	U
12	MW - 201 D	5/29/18 1330		G	GW	U
13	CW - 1	5/29/18 1400		G	GW	U
14	CW - 2	5/29/18 1430		G	GW	U
15	CW - C	5/29/18 1500		G	GW	U
16	CW - 6 Dup	5/29/18 1500		G	GW	U
17	MW - 116 D	5/29/18 1540		G	GW	U
18	MW - 116 S	5/29/18 1630		G	GW	U
19	C2A - 3	5/30/18 0750		G	GW	U
20	C2A - 3 Dup	5/30/18 0750		G	GW	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

Refurnished by: (signature)	Date/Time:	Detection Limit Requirements	Program Information
John Cote	5/30/18 1300	MA	MCP Analytical Certification Form Required O O RCP Analysis Certification Form Required O O MA State DW Form Required PWSID # _____
Received by: (signature)	Date/Time:		
John Cote	5/31/18 11:00		
Refurnished by: (signature)	Date/Time:		
John Cote	5/31/18 16:00	CT	
Received by: (signature)	Date/Time:		
John Cote	5/31/18 16:00	Other: _____	
Refurnished by: (signature)	Date/Time:		
John Cote	5/31/18 18:40		NELAC and AIHA-LAP, LLC Accredited
Received by: (signature)	Date/Time:		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.
John Cote	5/31/18 18:40		PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT



http://www.contestlabs.com

Doc # 381 Rev 0 5 8 2015

39 Spruce Street  
East Longmeadow, MA 01028

Page 3 of 3

### CHAIN OF CUSTODY RECORD

Requested Turnaround Time

# of Containers

1 Container Code

2 Preservation Code

3 Container Code

Dissolved Metals Samples

O Field Filtered

O Lab to Filter

Dissolved Heavy Metals

O Lab to Filter

Dissolved Phosphate Samples

O Field Filtered

O Lab to Filter

Total Petroleum Hydrocarbons

Dissolved Lead

EPA 8260B (VOCs)

Analysis Requested

H

V

P

N

J

J

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Con-Test

Work Order#

Client Sample ID / Description

Beginning Date/Time

Ending Date/Time

Composite

Grab

Matrix Code

Conc Code

Comments:

GIS Key to catherine.joe@aptim.com

1-950m jar break at put in zip bag. Just

Date/Time:

5/30/18 1300

MA

Date/Time:

5/31/18 1000

MA

Date/Time:

5/31/18 1000

MA

Date/Time:

5/31/18 1045

MA

Date/Time:

5/31/18 1130

MA

Date/Time:

5/31/18 0900

MA

Comments:


**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 AptimReceived By SEDate 5/31/18Time 18:40

How were the samples received? In Cooler T No Cooler \_\_\_\_\_ On Ice T No Ice \_\_\_\_\_  
Direct from Sampling Ambient \_\_\_\_\_ Melted Ice \_\_\_\_\_

Were samples within Temperature? 2-6°C T By Gun # 577 Actual Temp - 2.4  
By Blank # \_\_\_\_\_ Actual Temp - \_\_\_\_\_

Was Custody Seal Intact? N/A Were Samples Tampered with? N/A

Was COC Relinquished? T Does Chain Agree With Samples? T

Are there broken/leaking/loose caps on any samples? F T\* SE 5/31/18

Is COC in ink/ Legible? T Were samples received within holding time? T  
Did COC include all Client T Analysis T F\* Sampler Name T  
pertinent Information? Project T ID's T Collection Dates/Times T

Are Sample labels filled out and legible? T Who was notified? \_\_\_\_\_

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 MS/MSD? F

Is there Headspace where applicable? F Is splitting samples required? F

Proper Media/Containers Used? T On COC? T

Were trip blanks received? T

Do all samples have the proper pH? T Acid pH<2 Base \_\_\_\_\_

Vials	#	Container	#	#	#	#
Unp-		1 Liter Amb.	4	1 Liter Plastic		16 oz Amb.
HCL-	68	500 mL Amb.		500 mL Plastic		8oz Amb/Clear
Meoh-		250 mL Amb.		250 mL Plastic	3	4oz Amb/Clear
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear
DI-		Other Plastic		Other Glass		Encore
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:
Sulfuric-		Perchlorate		Ziplock		

**Unused Media**

Vials	#	Containers:	#	#	#	#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear
DI-		Other Plastic		Other Glass		Encore
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:
Sulfuric-		Perchlorate		Ziplock		

Comments:

\*Not checked off  
\* Sample 16, one of two 1 lit ambers + HCl received broken  
in plastic bag.



<http://www.contestlabs.com>  
CHAIN OF CUSTODY RECORD

Doc # 381 Rev 0 5 8 2015

Phone: 413-525-2332  
Fax: 413-525-6405

Email: [info@contestlabs.com](mailto:info@contestlabs.com)

Company Name: Optim Environmental & Infrastructure, Inc.

Address: 150 Royal Street, Canton, MA 02021

Requested Turnaround Time

7-Day

10-Day

Other:

Rush Approval Required

1-Day

3-Day

4-Day

Data Delivery

2-Day

Format:

PDF

EXCEL

Other:

GIS Key format

Enhanced Data Package Required:

Email To:

[brian.cote@aptim.com](mailto:brian.cote@aptim.com)

Fax To #: \_\_\_\_\_

Sampled By: *Douglas C. Catty*

Con-Test Work Order #

Client Sample ID / Description

Beginning Date/Time

Ending Date/Time

Composite

Grab

Matrix Code

Conc Code

01	1/22 - 2015	5/29/18 1000		3	GW	U	3
02	1/22 - 2015	5/29/18 0930		3	GW	U	3
03	1/22 - 2015	5/29/18 1000		3	GW	U	3
04	1/22 - 2015	5/29/18 1030		3	GW	U	3
05	1/22 - 1015	5/29/18 1100		3	GW	U	3
06	1/22 - 1015	5/29/18 1115		3	GW	U	3
07	1/22 - 1015	5/29/18 1130		3	GW	U	3
08	1/22 - 2015	5/29/18 1200		3	GW	U	3
09	1/22 - 1112	5/29/18 1230		3	GW	U	3
10	1/22 - 2185	5/29/18 1245		3	GW	U	3

Comments: GIS Key to [catherine.joe@aptim.com](mailto: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

<sup>1</sup> Matrix Codes:

GW = Ground Water

WW = Waste Water

DW = Drinking Water

A = Air

S = Soil / Solid

SL = Sludge

O = Other (please define)

<sup>2</sup> 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)

<sup>3</sup> Container Codes:

A = Amber Glass

G = Glass

P = Plastic

ST = Sterile

V = Vial

S = Summa Canister

T = Tedlar Bag

O = Other (please define)

### 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.

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Page 1 of 3

39 Spruce Street  
East Longmeadow, MA 01028

Page 1 of 3

Phone:	617-589-6175	1-Day <input type="checkbox"/>	3-Day <input type="checkbox"/>	4-Day <input type="checkbox"/>	V	ANALYSIS REQUESTED
Project Name:	Textron Providence	2-Day <input type="checkbox"/>	Data Delivery			Dissolved Metals Samples
Project Location:	333 Adelaide Avenue, Providence, RI					Field Filtered
Project Number:	130274					Lab to Filter
Project Manager:	<u>Brian Cote</u> — <u>Cathy</u>					Offshore Samples
Con-Test Bid:	PO 835493					Field Filtered
Invoice Recipient:	<u>Brian Cote</u>					Lab to Filter
Sampled By:	<u>Douglas C. Catty</u>					

Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	Matrix Code	Conc Code
5/29/18 1000	5/29/18 1100		3	GW	U	3
5/29/18 0930	5/29/18 1000		3	GW	U	3
5/29/18 1000	5/29/18 1030		3	GW	U	3
5/29/18 1115	5/29/18 1130		3	GW	U	3
5/29/18 1130	5/29/18 1200		3	GW	U	3
5/29/18 1230	5/29/18 1245		3	GW	U	3

Date/Time: <u>5/31/18 1300</u>	Detection Limit Requirements	Program Information
Date/Time: <u>5/31/18 1000</u>		<input type="checkbox"/> MCP Analytical Certification Form Required
Date/Time: <u>5/31/18 1600</u>		<input type="checkbox"/> RCP Analysis Certification Form Required
Date/Time: <u>5/31/18 1600</u>		<input type="checkbox"/> MA State DW Form Required
Date/Time: <u>5/31/18 1600</u>		PWSID # _____
Comments: GIS Key to <a href="mailto:catherine.joe@aptim.com">catherine.joe@aptim.com</a>		
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		
<sup>1</sup> Matrix Codes:		
GW = Ground Water		
WW = Waste Water		
DW = Drinking Water		
A = Air		
S = Soil / Solid		
SL = Sludge		
O = Other (please define)		
<sup>2</sup> 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)		
<sup>3</sup> Container Codes:		
A = Amber Glass		
G = Glass		
P = Plastic		
ST = Sterile		
V = Vial		
S = Summa Canister		
T = Tedlar Bag		
O = Other (please define)		

18E1698

**CHAIN OF CUSTODY RECORD**

		Requested Turnaround Time			
		7-Day	10-Day	<input checked="" type="checkbox"/>	
Other:				H	
Rush Approval Required		<input type="checkbox"/>	<input type="checkbox"/>	V	
1-Day		<input type="checkbox"/>	<input type="checkbox"/>	G	
2-Day		<input type="checkbox"/>	<input type="checkbox"/>	G	
Data Delivery				G	

Address: 150 Royal Street, Canton, MA 02021

Phone: 617-589-6175

Project Name: Textron Providence

Project Location: 333 Adelaide Avenue, Providence, RI

Project Number: 130274

Project Manager: Brian Cote

Con-Test Bid: PO 835493

Invoice Recipient: Brian Cote

Sampled By: *Dawn C. Lemay*

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

Con-Test Work Order# Client Sample ID / Description Beginning Date/Time Ending Date/Time Composite Grab Matrix Code Conc. Code

11 CW - 218D 5/29/18 1300 G GW U 3

12 CW - 201D 5/29/18 1330 G GW U 3

13 CW - 1 5/29/18 1400 G GW U 3

14 CW - 2 5/29/18 1430 G GW U 3

15 CW - C 5/29/18 1500 G GW U 3

16 CW - 6 Dup 5/29/18 1500 G GW U 3

17 MW - 116D 5/29/18 1540 G GW U 3

18 MW - 116S 5/29/18 1630 G GW U 3

19 G2A - 3 5/30/18 0750 G GW U 3

20 G2A - 3 Dup 5/30/18 0750 G GW U 3

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

**ANALYSIS REQUESTED**

Total Petroleum Hydrocarbons Dissolved Lead

**3 Container Codes:**

G = Amber Glass

G = Glass

P = Plastic

ST = Sterile

V = Vial

S = Summa Canister

T = Tedlar Bag

O = Other (please define)

**4 Container 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)

**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)

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.

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Received by: (signature) *John B. Lemay* Date/Time: 5/30/18 1300 MA

Received by: (signature) *John B. Lemay* Date/Time: 5/31/18 11:00

Refurnished by: (signature) *John B. Lemay* Date/Time: 5/31/18 11:00 CT

Received by: (signature) *John B. Lemay* Date/Time: 5/31/18 16:00

Refurnished by: (signature) *John B. Lemay* Date/Time: 5/31/18 16:00 Other:

Received by: (signature) *John B. Lemay* Date/Time: 5/31/18 18:40

Received by: (signature) *John B. Lemay* Date/Time: 5/31/18 18:40

## Program Information

MCP Analytical Certification Form Required

RCP Analysis Certification Form Required

MA State DW Form Required

PWSID # \_\_\_\_\_




**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 AptimReceived By SEDate 5/31/18Time 18:40

How were the samples received? In Cooler T No Cooler \_\_\_\_\_ On Ice T No Ice \_\_\_\_\_  
Direct from Sampling Ambient \_\_\_\_\_ Melted Ice \_\_\_\_\_

Were samples within Temperature? 2-6°C T By Gun # 577 Actual Temp - 2.4  
By Blank # \_\_\_\_\_ Actual Temp - \_\_\_\_\_

Was Custody Seal Intact? N/A Were Samples Tampered with? N/A

Was COC Relinquished? T Does Chain Agree With Samples? T

Are there broken/leaking/loose caps on any samples? F T\* SE 5/31/18

Is COC in ink/ Legible? T Were samples received within holding time? T  
Did COC include all Client T Analysis T F\* Sampler Name T  
pertinent Information? Project T ID's T Collection Dates/Times T

Are Sample labels filled out and legible? T Who was notified? \_\_\_\_\_

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 MS/MSD? F

Is there Headspace where applicable? F Is splitting samples required? F

Proper Media/Containers Used? T On COC? T

Were trip blanks received? T

Do all samples have the proper pH? T Acid pH<2 Base \_\_\_\_\_

Vials	#	Container	#	#	#	#
Unp-		1 Liter Amb.	4	1 Liter Plastic		16 oz Amb.
HCL-	68	500 mL Amb.		500 mL Plastic		8oz Amb/Clear
Meoh-		250 mL Amb.		250 mL Plastic	3	4oz Amb/Clear
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear
DI-		Other Plastic		Other Glass		Encore
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:
Sulfuric-		Perchlorate		Ziplock		

**Unused Media**

Vials	#	Containers:	#	#	#	#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear
DI-		Other Plastic		Other Glass		Encore
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:
Sulfuric-		Perchlorate		Ziplock		

Comments:

\*Not checked off  
\* Sample 16, one of two 1 lit ambers + HCl received broken  
in plastic bag.