



APTIM  
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November 27, 2023

Project # 631010697

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

**Subject: Status Report: June 2023 through November 2023 Activities  
Former Gorham Manufacturing Facility  
333 Adelaide Avenue, Providence, RI  
Site Remediation Case No. 97-030**

Dear Mr. Martella:

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

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

This status report describes groundwater monitoring activities conducted at the site by APTIM. This report includes results of groundwater sampling and analysis conducted in August and November of 2023.

### ***Field Activities***

#### Limited VOC Sampling Activities August and November 2023

Limited groundwater gauging and sampling was conducted on August 28, 2023 and November 5 and 6, 2023. 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 8260D) from the three monitoring wells (MW-112, MW-116D, and MW-116S) on August 28 and November 6, 2023. Groundwater samples were delivered to Pace (formerly Con-Test Analytical) Laboratory in East Longmeadow, Massachusetts for analysis.

### Semi-Annual Groundwater Sampling Activities November 2023

The monitoring wells that comprise the larger semi-annual groundwater monitoring program were monitored for field parameters and sampled for analysis on November 5 and 6, 2023.

### Monitoring Activities

Field parameters were measured in treatment area wells and compliance wells on November 5 and 6, 2023. 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. Wells MW-101S and MW-220S were not gauged during this event as they were paved over during recent resurfacing activities at the property.

### Semi-Annual Groundwater Sampling

On November 5 and 6, 2023 groundwater samples were collected for analysis for VOCs (EPA Method 8260D) from 21 monitoring wells within and around the treatment area, including the compliance wells. Well MW-101S was inaccessible due to recent paving activities, therefore one duplicate sample was collected from MW-101D (MW-101D FD) for VOC analysis. One sample and a duplicate sample were collected for total petroleum hydrocarbon (TPH) analysis (modified EPA Method 8100 modified) from monitoring well CW-6 (CW-6 FD). Samples were also collected for dissolved lead analysis (EPA Method 6020B) from monitoring wells MW-109D and GZA-3. One duplicate sample was also collected from GZA-3 (GZA-3 FD) for lead analysis. Groundwater samples were delivered to Pace Laboratory in East Longmeadow, Massachusetts for analysis.

### ***Summary of Analytical Data***

A summary of the analytical data associated with the groundwater sampling conducted on August 28 and November 5 and 6, 2023 is contained in **Table 3**. A copy of each laboratory analytical report is also attached to this report. During these sampling events, measured PCE concentrations were below the treatment goal of 7,700 µg/L in all wells. During this reporting period the highest PCE concentrations were detected in wells MW-218D at 970 µg/L on November 6, 2023 and MW-112 at 340 µg/L on November 6, 2023.

A summary of the compliance well results is contained in **Table 4**. The results for the compliance well sampling indicate that an exceedance of the compliance standard occurred for PCE at the Adelaide Avenue wells MW-112, MW-209D and MW-218S on November 6, 2023. (Note that due to sample dilution by the laboratory, the analytical reporting limit for vinyl chloride, in wells MW-112, MW-209D and MW-218S, on November 6, 2023, was above the compound specific compliance standard).

### ***Future Activities***

Future limited sampling will be conducted in February 2024 and the larger semi-annual sampling event will be conducted in May 2024.

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

Respectfully submitted,  
**Aptim Environmental & Infrastructure, LLC**



Catherine Joe  
Project Manager

### Attachments

Table 1 – Summary Field Parameters  
Table 2 – Groundwater Elevation Data  
Table 3 – Groundwater Analytical Results Detected Compounds – June 2023 – November 2023  
Table 4 – Groundwater Analytical Results in Compliance Wells – June 2023 – November 2023

Figure 1 – Site Plan  
Figure 2 – Injection Well Locations

### Attachment A - Laboratory Analytical Reports

cc: Amy Fiorellino, Textron - email  
Greg Simpson, Textron - email  
Mykel Mendes, WSP - email  
Robert Azar, Providence Redevelopment Agency - email  
Erin Bradley, Providence Redevelopment Agency - email  
Al Buco, Paolino Properties - 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 November 27, 2023, certify that the information contained in this report is complete and accurate to the best of my knowledge.



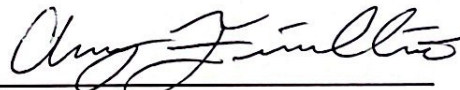
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Catherine Joe  
Project Manager

11/27/2023  
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.



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Amy Fiorellino  
Project Manager

11/28/23  
Date:

## ***TABLES***

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**Table 1  
Summary Field Parameters  
June - November 2023**

Former Gorham Manufacturing Facility  
Providence, Rhode Island

<b>Location</b>	<b>Date</b>	<b>Dissolved Oxygen mg/L</b>	<b>Oxidation Reduction Potential mV</b>	<b>pH unit</b>	<b>Specific Conductivity mS/cm</b>	<b>Temperature C°</b>
MW-101D	11/05/2023	1.19	21.4	6.08	0.018	15.8
MW-112	11/06/2023	4.75	277.9	5.72	2.007	14.09
MW-116D	11/06/2023	6.17	243.7	5.81	0.054	14.82
MW-116S	11/06/2023	6.34	248.5	5.79	0.192	14.67
MW-201D	11/05/2023	2.85	212.1	6.17	0.036	16.64
MW-202D	11/05/2023	3.85	278	5.62	0.015	16.86
MW-202S	11/05/2023	1.6	255.5	5.4	0.041	17.11
MW-207D	11/05/2023	1.68	202.8	5.27	0.03	17.16
MW-207S	11/05/2023	3.6	194	5.73	0.058	16.84
MW-209D	11/06/2023	2.4	226.1	5.75	0.436	14.03
MW-216D	11/05/2023	3.37	102.1	6.41	0.855	16.33
MW-216S	11/05/2023	2.16	-72.6	6.67	1.616	16.09
MW-217D	11/05/2023	2.96	-3.1	6.49	0.729	16.09
MW-217S	11/05/2023	0.58	-89.1	6.75	2.978	16.13
MW-218D	11/06/2023	1.41	-73.8	6.77	0.277	13.95
MW-218S	11/06/2023	3.2	175	4.89	0.556	14.74

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

**TABLE 2**  
**GROUNDWATER ELEVATION DATA**  
**(June - November 2023)**  
Former Gorham Manufacturing Facility  
Providence, Rhode Island

Location	Date	Reference Elevation (Feet)	Depth to Water (Feet)	Depth to LNAPL (Feet)	LNAPL Thickness (Feet)	Groundwater Elevation (Feet)	Notes
CW-01	11/6/2023	99.52	25.37	---	---	74.15	DTB = 54.13 FT
CW-02	11/6/2023	98.86	24.59	---	---	74.27	DTB = 54.83 FT
CW-06	11/5/2023	99.52	24.35	---	---	75.17	DTB = 33.05 FT
GZA-3	11/5/2023	NM	18.35	---	---	NA	DTB = 21.95 FT
MW-101D	11/5/2023	98.91	24.67	---	---	74.24	DTB = 45.55 FT
MW-101S	11/5/2023	98.9	NM	---	---	NA	Paved over with asphalt
MW-109D	11/5/2023	NM	18.81	---	---	NA	DTB = 74.58 FT
MW-112	8/28/2023	100.63	26.4	---	---	74.23	DTB = 34.68 FT
MW-112	11/6/2023	100.63	26.12	---	---	74.51	DTB = 34.62 FT
MW-116D	8/28/2023	98.92	24.88	---	---	74.04	DTB = 44.00 FT
MW-116D	11/6/2023	98.92	24.68	---	---	74.24	DTB = 44.01 FT
MW-116S	8/28/2023	99.4	25.05	---	---	74.35	DTB = 28.55 FT
MW-116S	11/6/2023	99.4	25.08	---	---	74.32	DTB = 28.62 FT
MW-201D	11/5/2023	98.8	24.46	---	---	74.34	DTB = 47.03 FT
MW-202D	11/5/2023	98.17	23.81	---	---	74.36	DTB = 45.96 FT
MW-202S	11/5/2023	98.06	23.58	---	---	74.48	DTB = 37.68 FT
MW-207D	11/5/2023	98.18	23.89	---	---	74.29	DTB = 49.75 FT
MW-207S	11/5/2023	98.28	23.96	---	---	74.32	DTB = 36.60 FT
MW-209D	11/6/2023	99.9	26.22	---	---	73.68	DTB = 62.16 FT
MW-216D	11/5/2023	98.69	25.23	---	---	73.46	DTB = 39.18 FT
MW-216S	11/5/2023	99.58	25.21	---	---	74.37	DTB = 29.57 FT
MW-217D	11/5/2023	98.65	24.6	---	---	74.05	DTB = 46.63 FT
MW-217S	11/5/2023	98.71	24.65	---	---	74.06	DTB = 26.32 FT
MW-218D	11/6/2023	99.67	25.42	---	---	74.25	DTB = 46.51 FT
MW-218S	11/6/2023	99.61	25.38	---	---	74.23	DTB = 29.39 FT
MW-220S	11/5/2023	99.41	NM	---	---	NA	Paved over with asphalt
MW-221S	11/5/2023	98.92	24.22	---	<0.01	74.70	

**Notes:**

Feet = feet measured below ground surface

NA = Not Available

NM = Not Measured

**TABLE 3**  
**Groundwater Analytical Results Detected Compounds**  
**June 2023 - November 2023**

Former Gorham Manufacturing Facility  
 Providence, Rhode Island

Parameter	Location Code	CW-01	CW-02	CW-06		GZA-3		MW-101D		MW-109D	MW-112	
	Sample ID	CW-01-20231106	CW-02-20231106	CW-06-20231105	CW-06-20231105DU P	GZA-3-20231105	GZA-3-20231105DU P	MW-101D-20231105	MW-101D-20231105-DUP	MW-109D-20231105	MW-112-20230828	MW-112-20231106
	Sample Date	11/6/2023	11/6/2023	11/5/2023	11/5/2023	11/5/2023	11/5/2023	11/5/2023	11/5/2023	11/5/2023	8/28/2023	11/6/2023
	Sample Purpose	N	N	N	FD	N	FD	N	FD	N	N	N
Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
<b>VOLATILES</b>												
1,1-Dichloroethene	µg/L	8.7	< 1	---	---	< 1	---	< 1	< 1	< 1	< 1	< 4
1,2,4-Trimethylbenzene	µg/L	< 5	< 1	---	---	< 1	---	< 1	< 1	< 1	< 1	< 4
1,3,5-Trimethylbenzene	µg/L	< 5	< 1	---	---	< 1	---	< 1	< 1	< 1	< 1	< 4
4-Isopropyltoluene	µg/L	< 5	< 1	---	---	< 1	---	< 1	< 1	< 1	< 1	< 4
cis-1,2-Dichloroethene	µg/L	67	< 1	---	---	< 1	---	< 1	< 1	< 1	< 1	< 4
Ethylbenzene	µg/L	< 5	< 1	---	---	< 1	---	< 1	< 1	< 1	< 1	< 4
m,p-xylene	µg/L	< 10	< 2	---	---	< 2	---	< 2	< 2	< 2	< 2	< 8
Methyltert-butylether	µg/L	< 5	1.7	---	---	< 1	---	< 1	< 1	< 1	< 1	< 4
Naphthalene	µg/L	< 10	< 2	---	---	< 2	---	< 2	< 2	< 2	< 2	< 8
o-Xylene	µg/L	< 5	< 1	---	---	< 1	---	< 1	< 1	< 1	< 1	< 4
Tetrachloroethene	µg/L	< 5	< 1	---	---	< 1	---	< 1	< 1	< 1	89	340
trans-1,2-Dichloroethene	µg/L	6.3	< 1	---	---	< 1	---	< 1	< 1	< 1	< 1	< 4
Trichloroethene	µg/L	510	< 1	---	---	< 1	---	< 1	< 1	1.4	2	6.5
Vinyl chloride	µg/L	< 10	< 2	---	---	3.3	---	< 2	< 2	< 2	< 2	< 8
Xylene (total)	µg/L	< 5	< 1	---	---	< 1	---	< 1	< 1	< 1	< 1	< 4
TPH												
TPH	mg/L	---	---	14	16	---	---	---	---	---	---	---
<b>METALS, DISSOLVED</b>												
Lead	µg/L	---	---	---	---	< 0.5	< 0.5	---	---	< 0.5	---	---

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



**TABLE 3**  
**Groundwater Analytical Results Detected Compounds**  
**June 2023 - November 2023**

Former Gorham Manufacturing Facility  
 Providence, Rhode Island

Parameter	Location Code	MW-116D		MW-116S		MW-201D	MW-202D	MW-202S	MW-207D	MW-207S	MW-209D	MW-216D
	Sample ID	MW-116D-20230828	MW-116D-20231106	MW-116S-20230828	MW-116S-20231106	MW-201D-20231105	MW-202D-20231105	MW-202S-20231105	MW-207D-20231105	MW-207S-20231105	MW-209D-20231106	MW-216D-20231105
	Sample Date	8/28/2023	11/6/2023	8/28/2023	11/6/2023	11/5/2023	11/5/2023	11/5/2023	11/5/2023	11/5/2023	11/6/2023	11/5/2023
	Sample Purpose	N	N	N	N	N	N	N	N	N	N	N
Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
<b>VOLATILES</b>												
1,1-Dichloroethene	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
1,2,4-Trimethylbenzene	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
1,3,5-Trimethylbenzene	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
4-Isopropyltoluene	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
cis-1,2-Dichloroethene	µg/L	<1	<1	<1	<1	1.6	<1	<1	<1	<1	17	<1
Ethylbenzene	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
m,p-xylene	µg/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2
Methyltert-butylether	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
Naphthalene	µg/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2
o-Xylene	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
Tetrachloroethene	µg/L	<1	<1	<1	<1	60	3.6	21	4.6	9.7	220	<1
trans-1,2-Dichloroethene	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
Trichloroethene	µg/L	<1	<1	<1	<1	9.6	<1	<1	<1	<1	53	<1
Vinyl chloride	µg/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<4	<2
Xylene (total)	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
TPH												
TPH	mg/L	---	---	---	---	---	---	---	---	---	---	---
<b>METALS, DISSOLVED</b>												
Lead	µg/L	---	---	---	---	---	---	---	---	---	---	---

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

**TABLE 3**  
**Groundwater Analytical Results Detected Compounds**  
**June 2023 - November 2023**

Former Gorham Manufacturing Facility  
 Providence, Rhode Island

	Location Code	MW-216S	MW-217D	MW-217S	MW-218D	MW-218S
	Sample ID	MW-216S-20231105	MW-217D-20231105	MW-217S-20231105	MW-218D-20231106	MW-218S-20231106
	Sample Date	11/5/2023	11/5/2023	11/5/2023	11/6/2023	11/6/2023
	Sample Purpose	N	N	N	N	N
Parameter	Units	Result	Result	Result	Result	Result
<b>VOLATILES</b>						
1,1-Dichloroethene	µg/L	< 1	< 1	< 1	< 10	< 2
1,2,4-Trimethylbenzene	µg/L	9.4	< 1	< 1	< 10	< 2
1,3,5-Trimethylbenzene	µg/L	3.8	< 1	< 1	< 10	< 2
4-Isopropyltoluene	µg/L	1.1	< 1	< 1	< 10	< 2
cis-1,2-Dichloroethene	µg/L	13	1.7	3.2	120	< 2
Ethylbenzene	µg/L	2.7	< 1	< 1	< 10	< 2
m,p-xylene	µg/L	3.3	< 2	< 2	< 20	< 4
Methyltert-butylether	µg/L	< 1	< 1	< 1	< 10	< 2
Naphthalene	µg/L	21	< 2	< 2	< 20	< 4
o-Xylene	µg/L	8.2	< 1	< 1	< 10	< 2
Tetrachloroethene	µg/L	< 1	< 1	< 1	970	170
trans-1,2-Dichloroethene	µg/L	< 1	< 1	< 1	< 10	< 2
Trichloroethene	µg/L	< 1	2.2	2.3	210	< 2
Vinyl chloride	µg/L	4.8	< 2	< 2	< 20	< 4
Xylene (total)	µg/L	11	< 1	< 1	< 10	< 2
<b>TPH</b>						
TPH	mg/L	---	---	---	---	---
<b>METALS, DISSOLVED</b>						
Lead	µg/L	---	---	---	---	---

**Notes:**

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

**TABLE 4**  
**Groundwater Analytical Results**  
**June - November 2023**

Former Gorham Manufacturing Facility  
 Providence, Rhode Island

Mashapaug Pond Compliance Wells				
Sample ID	GZA-3	GZA-3	MW-109D	Compliance
Date Collected	11/5/2023	11/5/2023	11/5/2023	Standard <sup>1</sup>
CONSTITUENT	Primary	Duplicate 1	Primary	
<b>Metals (mg/L)</b>				
Lead	<0.0005	<0.0005	<0.0005	0.03
<b>VOCs (µg/L)</b>				
1,1-Dichloroethane	< 1	--	< 1	50,000
1,1-Dichloroethene	< 1	--	< 1	50,000
cis-1,2-Dichloroethene	< 1	--	< 1	50,000
Methyl tert-butyl ether	< 1	--	< 1	50,000
Tetrachloroethene	< 1	--	< 1	5,000
Trichloroethene	< 1	--	1.4	20,000
Vinyl chloride	3.3	--	< 2	1,200

TPH Remediation Area Well			
Sample ID	CW-06	CW-06	Compliance
Date Collected	11/5/2023	11/5/2023	Standard <sup>1</sup>
CONSTITUENT	Primary	Duplicate	
<b>TPH (mg/L)</b>			
TPH	14	16	20

Sewer Interceptor Area Wells			
Sample ID	CW-01	CW-02	Compliance
Date Collected	11/6/2023	11/6/2023	Standard <sup>2</sup>
CONSTITUENT	Primary	Primary	
<b>VOCs (µg/L)</b>			
1,1-Dichloroethane	<5	< 1	120,000
1,1-Dichloroethene	8.7	< 1	23,000
cis-1,2-Dichloroethene	67	< 1	69,000
trans-1,2-Dichloroethene	6.3	< 1	79,000
Tetrachloroethene	<5	< 1	NS
Trichloroethene	510	< 1	87,000

Adelaide Avenue Wells					
Sample ID	MW-112	MW-112	MW-209D	MW-218S	Compliance
Date Collected	8/28/2023	11/6/2023	11/6/2023	11/6/2023	Standard <sup>3</sup>
CONSTITUENT	Primary	Primary	Primary	Primary	
<b>VOCs (µg/L)</b>					
1,1-Dichloroethane	< 1	< 4	< 2	< 2	2,400
1,1-Dichloroethene	< 1	< 4	< 2	< 2	7
cis-1,2-Dichloroethene	< 1	< 4	17	< 2	1,900
Methyl tert-butyl ether	< 1	< 4	< 2	< 2	5,000
Tetrachloroethene	89	<b>340</b>	<b>220</b>	<b>170</b>	150
Trichloroethene	2	6.5	53	< 2	540
Vinyl chloride	< 2	< 8	< 4	< 4	2

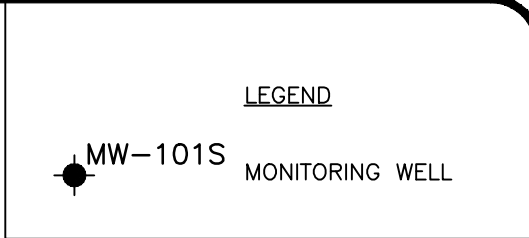
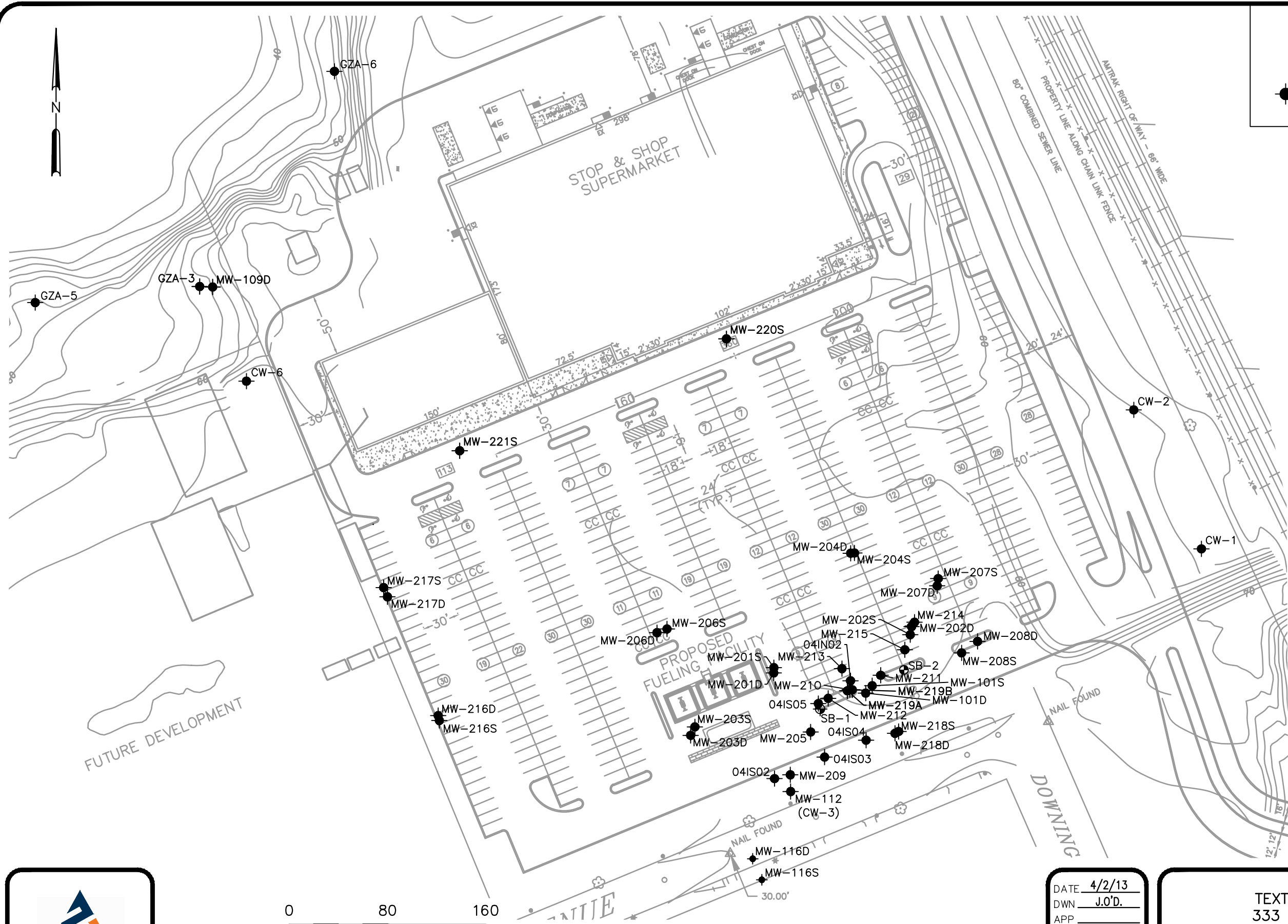
- These site specific compliance standards were taken from the approved RAWP dated April 1, 2001 and/or the RIDEM Remediation Regulations.  
 Note: The standard for Methyl tert-butyl ether is the Massachusetts Department of Environmental Protection (MassDEP) Method 1 GW-3 standard (310 CMR 40.0974 (2),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

## ***FIGURES***

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

1" 1/2" 0" 1"






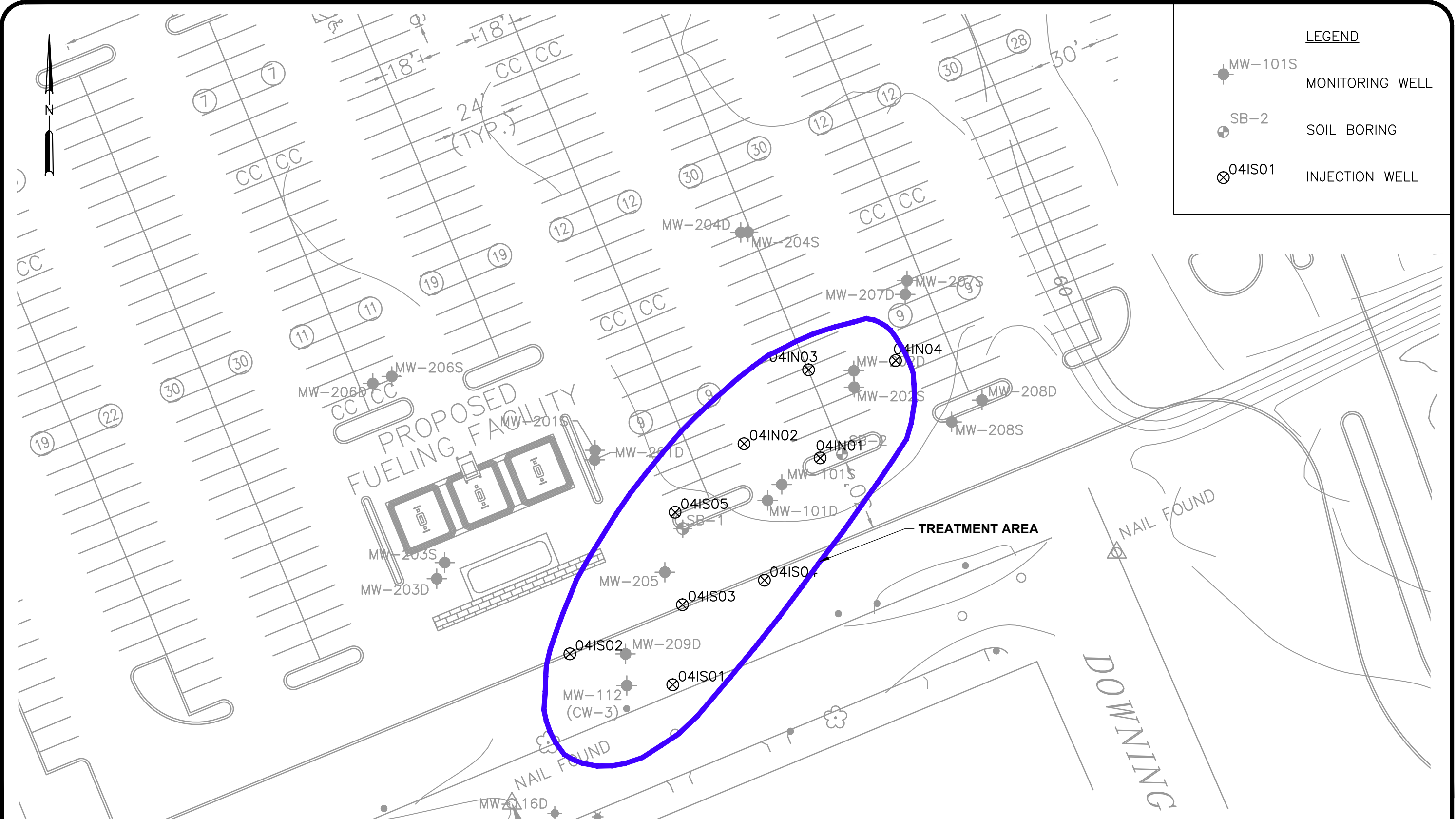
0 80 160  
SCALE IN FEET

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

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

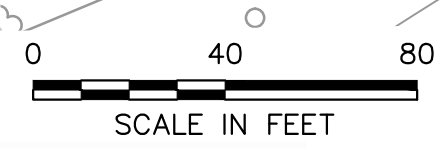
**LEGEND**

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



1" 1/2" 0" 1"

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



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

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

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

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September 8, 2023

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

Project Location: 333 Adelaide Avenue, Providence, RI  
Client Job Number:  
Project Number: 631010697  
Laboratory Work Order Number: 23H4128

Enclosed are results of analyses for samples as received by the laboratory on August 29, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Theresa L. Ferrentino  
Project Manager



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

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

REPORT DATE: 9/8/2023

PURCHASE ORDER NUMBER: 216859 CO 002

PROJECT NUMBER: 631010697

**ANALYTICAL SUMMARY**

WORK ORDER NUMBER: 23H4128

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

PROJECT LOCATION: 333 Adelaide Avenue, Providence, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-112-20230828	23H4128-01	Ground Water		SW-846 8260D	
MW-116S-20230828	23H4128-02	Ground Water		SW-846 8260D	
MW-116D-20230828	23H4128-03	Ground Water		SW-846 8260D	

**CASE NARRATIVE SUMMARY**

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

**SW-846 8260D**

**Qualifications:**

**V-05**

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

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

**trans-1,4-Dichloro-2-butene**

23H4128-01[MW-112-20230828], 23H4128-02[MW-116S-20230828], 23H4128-03[MW-116D-20230828], B350738-BLK1, B350738-BS1, B350738-BSD1, S092974-CCV1

**V-20**

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

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

**Methyl Acetate**

S092974-CCV1

The results of analyses reported only relate to samples submitted to Con-Test, a Pace 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  
Technical Representative

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

Project Location: 333 Adelaide Avenue, Providence

Sample Description:

Work Order: 23H4128

Date Received: 8/29/2023

Field Sample #: MW-112-20230828

Sampled: 8/28/2023 09:30

Sample ID: 23H4128-01

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 8260D	8/31/23	9/2/23 5:12	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	V-05	SW-846 8260D	8/31/23	9/2/23 5:12	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD

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

Project Location: 333 Adelaide Avenue, Providence

Sample Description:

Work Order: 23H4128

Date Received: 8/29/2023

Field Sample #: MW-112-20230828

Sampled: 8/28/2023 09:30

Sample ID: 23H4128-01

Sample Matrix: Ground Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
Naphthalene	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
Tetrachloroethylene	89	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
Trichloroethylene	2.0	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 5:12	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	91.8	70-130	9/2/23 5:12
Toluene-d8	99.9	70-130	9/2/23 5:12
4-Bromofluorobenzene	100	70-130	9/2/23 5:12

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

Project Location: 333 Adelaide Avenue, Providence

Sample Description:

Work Order: 23H4128

Date Received: 8/29/2023

Field Sample #: MW-116S-20230828

Sampled: 8/28/2023 10:30

Sample ID: 23H4128-02

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 8260D	8/31/23	9/2/23 3:27	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	V-05	SW-846 8260D	8/31/23	9/2/23 3:27	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD

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

Project Location: 333 Adelaide Avenue, Providence

Sample Description:

Work Order: 23H4128

Date Received: 8/29/2023

Field Sample #: MW-116S-20230828

Sampled: 8/28/2023 10:30

Sample ID: 23H4128-02

Sample Matrix: Ground Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
Naphthalene	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:27	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	90.8	70-130	9/2/23 3:27
Toluene-d8	97.8	70-130	9/2/23 3:27
4-Bromofluorobenzene	100	70-130	9/2/23 3:27

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

Project Location: 333 Adelaide Avenue, Providence

Sample Description:

Work Order: 23H4128

Date Received: 8/29/2023

Field Sample #: MW-116D-20230828

Sampled: 8/28/2023 11:15

Sample ID: 23H4128-03

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 8260D	8/31/23	9/2/23 3:54	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	V-05	SW-846 8260D	8/31/23	9/2/23 3:54	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD



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

Project Location: 333 Adelaide Avenue, Providence

Sample Description:

Work Order: 23H4128

Date Received: 8/29/2023

Field Sample #: MW-116D-20230828

Sampled: 8/28/2023 11:15

Sample ID: 23H4128-03

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 8260D	8/31/23	9/2/23 3:54	LBD
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
Naphthalene	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260D	8/31/23	9/2/23 3:54	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	91.3	70-130	9/2/23 3:54
Toluene-d8	101	70-130	9/2/23 3:54
4-Bromofluorobenzene	99.8	70-130	9/2/23 3:54

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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 Analytical Method:SW-846 8260D

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23H4128-01 [MW-112-20230828]	B350738	5	5.00	08/31/23
23H4128-02 [MW-116S-20230828]	B350738	5	5.00	08/31/23
23H4128-03 [MW-116D-20230828]	B350738	5	5.00	08/31/23

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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 B350738 - SW-846 5030B**
**Blank (B350738-BLK1)**

Prepared: 08/31/23 Analyzed: 09/01/23

Acetone	ND	50	µg/L							
Acrylonitrile	ND	5.0	µg/L							
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L							
Benzene	ND	1.0	µg/L							
Bromobenzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	0.50	µg/L							
Bromoform	ND	1.0	µg/L							
Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	20	µg/L							
tert-Butyl Alcohol (TBA)	ND	20	µg/L							
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L							
Carbon Disulfide	ND	5.0	µg/L							
Carbon Tetrachloride	ND	5.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
Dibromomethane	ND	1.0	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L							V-05
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							
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							

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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B350738 - SW-846 5030B</b>										
<b>Blank (B350738-BLK1)</b>										
Prepared: 08/31/23 Analyzed: 09/01/23										
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methyl Cyclohexane	ND	1.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Naphthalene	ND	2.0	µg/L							
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Tetrahydrofuran	ND	10	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							
1,2,4-Trichlorobenzene	ND	1.0	µg/L							
1,3,5-Trichlorobenzene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							
1,2,3-Trichloropropane	ND	2.0	µg/L							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
1,3,5-Trimethylbenzene	ND	1.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Xylenes (total)	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	23.0		µg/L	25.0		91.8	70-130			
Surrogate: Toluene-d8	24.7		µg/L	25.0		98.8	70-130			
Surrogate: 4-Bromofluorobenzene	24.8		µg/L	25.0		99.2	70-130			
<b>LCS (B350738-BS1)</b>										
Prepared: 08/31/23 Analyzed: 09/01/23										
Acetone	84.2	50	µg/L	100		84.2	70-160			†
Acrylonitrile	9.13	5.0	µg/L	10.0		91.3	70-130			
tert-Amyl Methyl Ether (TAME)	9.49	0.50	µg/L	10.0		94.9	70-130			
Benzene	9.70	1.0	µg/L	10.0		97.0	70-130			
Bromobenzene	10.0	1.0	µg/L	10.0		100	70-130			
Bromochloromethane	9.96	1.0	µg/L	10.0		99.6	70-130			
Bromodichloromethane	9.84	0.50	µg/L	10.0		98.4	70-130			
Bromoform	9.25	1.0	µg/L	10.0		92.5	70-130			
Bromomethane	8.66	2.0	µg/L	10.0		86.6	40-160			†
2-Butanone (MEK)	91.8	20	µg/L	100		91.8	40-160			†
tert-Butyl Alcohol (TBA)	84.6	20	µg/L	100		84.6	40-160			†
n-Butylbenzene	8.48	1.0	µg/L	10.0		84.8	70-130			
sec-Butylbenzene	8.67	1.0	µg/L	10.0		86.7	70-130			
tert-Butylbenzene	9.06	1.0	µg/L	10.0		90.6	70-130			
tert-Butyl Ethyl Ether (TBEE)	9.58	0.50	µg/L	10.0		95.8	70-130			
Carbon Disulfide	99.6	5.0	µg/L	100		99.6	70-130			
Carbon Tetrachloride	9.55	5.0	µg/L	10.0		95.5	70-130			
Chlorobenzene	9.73	1.0	µg/L	10.0		97.3	70-130			
Chlorodibromomethane	10.1	0.50	µg/L	10.0		101	70-130			
Chloroethane	9.46	2.0	µg/L	10.0		94.6	70-130			

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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B350738 - SW-846 5030B</b>										
<b>LCS (B350738-BS1)</b>										
					Prepared: 08/31/23 Analyzed: 09/01/23					
Chloroform	9.48	2.0	µg/L	10.0		94.8	70-130			
Chloromethane	9.88	2.0	µg/L	10.0		98.8	40-160			†
2-Chlorotoluene	9.44	1.0	µg/L	10.0		94.4	70-130			
4-Chlorotoluene	9.41	1.0	µg/L	10.0		94.1	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	8.74	5.0	µg/L	10.0		87.4	70-130			
1,2-Dibromoethane (EDB)	10.8	0.50	µg/L	10.0		108	70-130			
Dibromomethane	10.5	1.0	µg/L	10.0		105	70-130			
1,2-Dichlorobenzene	9.98	1.0	µg/L	10.0		99.8	70-130			
1,3-Dichlorobenzene	9.62	1.0	µg/L	10.0		96.2	70-130			
1,4-Dichlorobenzene	9.64	1.0	µg/L	10.0		96.4	70-130			
trans-1,4-Dichloro-2-butene	7.48	2.0	µg/L	10.0		74.8	70-130			V-05
Dichlorodifluoromethane (Freon 12)	10.3	2.0	µg/L	10.0		103	40-160			†
1,1-Dichloroethane	9.60	1.0	µg/L	10.0		96.0	70-130			
1,2-Dichloroethane	10.4	1.0	µg/L	10.0		104	70-130			
1,1-Dichloroethylene	9.21	1.0	µg/L	10.0		92.1	70-130			
cis-1,2-Dichloroethylene	9.43	1.0	µg/L	10.0		94.3	70-130			
trans-1,2-Dichloroethylene	9.69	1.0	µg/L	10.0		96.9	70-130			
1,2-Dichloropropane	10.4	1.0	µg/L	10.0		104	70-130			
1,3-Dichloropropane	10.4	0.50	µg/L	10.0		104	70-130			
2,2-Dichloropropane	8.46	1.0	µg/L	10.0		84.6	40-130			†
1,1-Dichloropropene	9.75	2.0	µg/L	10.0		97.5	70-130			
cis-1,3-Dichloropropene	9.96	0.50	µg/L	10.0		99.6	70-130			
trans-1,3-Dichloropropene	9.94	0.50	µg/L	10.0		99.4	70-130			
Diethyl Ether	9.24	2.0	µg/L	10.0		92.4	70-130			
Diisopropyl Ether (DIPE)	9.48	0.50	µg/L	10.0		94.8	70-130			
1,4-Dioxane	89.0	50	µg/L	100		89.0	40-130			†
Ethylbenzene	9.69	1.0	µg/L	10.0		96.9	70-130			
Hexachlorobutadiene	8.62	0.60	µg/L	10.0		86.2	70-130			
2-Hexanone (MBK)	101	10	µg/L	100		101	70-160			†
Isopropylbenzene (Cumene)	9.46	1.0	µg/L	10.0		94.6	70-130			
p-Isopropyltoluene (p-Cymene)	8.76	1.0	µg/L	10.0		87.6	70-130			
Methyl Acetate	11.0	1.0	µg/L	10.0		110	70-130			
Methyl tert-Butyl Ether (MTBE)	9.62	1.0	µg/L	10.0		96.2	70-130			
Methyl Cyclohexane	9.40	1.0	µg/L	10.0		94.0	70-130			
Methylene Chloride	9.37	5.0	µg/L	10.0		93.7	70-130			
4-Methyl-2-pentanone (MIBK)	102	10	µg/L	100		102	70-160			†
Naphthalene	9.81	2.0	µg/L	10.0		98.1	40-130			†
n-Propylbenzene	9.32	1.0	µg/L	10.0		93.2	70-130			
Styrene	10.0	1.0	µg/L	10.0		100	70-130			
1,1,1,2-Tetrachloroethane	10.2	1.0	µg/L	10.0		102	70-130			
1,1,2,2-Tetrachloroethane	9.74	0.50	µg/L	10.0		97.4	70-130			
Tetrachloroethylene	10.3	1.0	µg/L	10.0		103	70-130			
Tetrahydrofuran	8.76	10	µg/L	10.0		87.6	70-130			
Toluene	9.97	1.0	µg/L	10.0		99.7	70-130			
1,2,3-Trichlorobenzene	10.3	5.0	µg/L	10.0		103	70-130			
1,2,4-Trichlorobenzene	10.2	1.0	µg/L	10.0		102	70-130			
1,3,5-Trichlorobenzene	9.67	1.0	µg/L	10.0		96.7	70-130			
1,1,1-Trichloroethane	9.83	1.0	µg/L	10.0		98.3	70-130			
1,1,2-Trichloroethane	10.8	1.0	µg/L	10.0		108	70-130			
Trichloroethylene	10.8	1.0	µg/L	10.0		108	70-130			
Trichlorofluoromethane (Freon 11)	9.43	2.0	µg/L	10.0		94.3	70-130			
1,2,3-Trichloropropane	10.2	2.0	µg/L	10.0		102	70-130			

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B350738 - SW-846 5030B**
**LCS (B350738-BS1)**

Prepared: 08/31/23 Analyzed: 09/01/23

1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.66	1.0	µg/L	10.0		96.6	70-130			
1,2,4-Trimethylbenzene	9.19	1.0	µg/L	10.0		91.9	70-130			
1,3,5-Trimethylbenzene	9.57	1.0	µg/L	10.0		95.7	70-130			
Vinyl Chloride	10.0	2.0	µg/L	10.0		100	40-160			†
m+p Xylene	19.0	2.0	µg/L	20.0		95.0	70-130			
o-Xylene	9.64	1.0	µg/L	10.0		96.4	70-130			
Xylenes (total)	28.6	1.0	µg/L	30.0		95.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	22.0		µg/L	25.0		87.8	70-130			
Surrogate: Toluene-d8	25.1		µg/L	25.0		100	70-130			
Surrogate: 4-Bromofluorobenzene	25.6		µg/L	25.0		103	70-130			

**LCS Dup (B350738-BSD1)**

Prepared: 08/31/23 Analyzed: 09/01/23

Acetone	83.6	50	µg/L	100		83.6	70-160	0.644	25	†
Acrylonitrile	9.24	5.0	µg/L	10.0		92.4	70-130	1.20	25	
tert-Amyl Methyl Ether (TAME)	9.48	0.50	µg/L	10.0		94.8	70-130	0.105	25	
Benzene	9.47	1.0	µg/L	10.0		94.7	70-130	2.40	25	
Bromobenzene	9.66	1.0	µg/L	10.0		96.6	70-130	3.56	25	
Bromochloromethane	9.77	1.0	µg/L	10.0		97.7	70-130	1.93	25	
Bromodichloromethane	9.91	0.50	µg/L	10.0		99.1	70-130	0.709	25	
Bromoform	9.38	1.0	µg/L	10.0		93.8	70-130	1.40	25	
Bromomethane	8.84	2.0	µg/L	10.0		88.4	40-160	2.06	25	†
2-Butanone (MEK)	91.8	20	µg/L	100		91.8	40-160	0.0218	25	†
tert-Butyl Alcohol (TBA)	84.3	20	µg/L	100		84.3	40-160	0.414	25	†
n-Butylbenzene	8.32	1.0	µg/L	10.0		83.2	70-130	1.90	25	
sec-Butylbenzene	8.56	1.0	µg/L	10.0		85.6	70-130	1.28	25	
tert-Butylbenzene	8.74	1.0	µg/L	10.0		87.4	70-130	3.60	25	
tert-Butyl Ethyl Ether (TBEE)	9.41	0.50	µg/L	10.0		94.1	70-130	1.79	25	
Carbon Disulfide	96.1	5.0	µg/L	100		96.1	70-130	3.53	25	
Carbon Tetrachloride	9.21	5.0	µg/L	10.0		92.1	70-130	3.62	25	
Chlorobenzene	9.68	1.0	µg/L	10.0		96.8	70-130	0.515	25	
Chlorodibromomethane	9.92	0.50	µg/L	10.0		99.2	70-130	2.09	25	
Chloroethane	9.36	2.0	µg/L	10.0		93.6	70-130	1.06	25	
Chloroform	9.31	2.0	µg/L	10.0		93.1	70-130	1.81	25	
Chloromethane	9.60	2.0	µg/L	10.0		96.0	40-160	2.87	25	†
2-Chlorotoluene	9.26	1.0	µg/L	10.0		92.6	70-130	1.93	25	
4-Chlorotoluene	9.31	1.0	µg/L	10.0		93.1	70-130	1.07	25	
1,2-Dibromo-3-chloropropane (DBCP)	9.28	5.0	µg/L	10.0		92.8	70-130	5.99	25	
1,2-Dibromoethane (EDB)	10.6	0.50	µg/L	10.0		106	70-130	1.69	25	
Dibromomethane	10.5	1.0	µg/L	10.0		105	70-130	0.286	25	
1,2-Dichlorobenzene	9.79	1.0	µg/L	10.0		97.9	70-130	1.92	25	
1,3-Dichlorobenzene	9.52	1.0	µg/L	10.0		95.2	70-130	1.04	25	
1,4-Dichlorobenzene	9.48	1.0	µg/L	10.0		94.8	70-130	1.67	25	
trans-1,4-Dichloro-2-butene	7.60	2.0	µg/L	10.0		76.0	70-130	1.59	25	V-05
Dichlorodifluoromethane (Freon 12)	10.1	2.0	µg/L	10.0		101	40-160	2.65	25	†
1,1-Dichloroethane	9.44	1.0	µg/L	10.0		94.4	70-130	1.68	25	
1,2-Dichloroethane	9.60	1.0	µg/L	10.0		96.0	70-130	8.48	25	
1,1-Dichloroethylene	8.99	1.0	µg/L	10.0		89.9	70-130	2.42	25	
cis-1,2-Dichloroethylene	9.22	1.0	µg/L	10.0		92.2	70-130	2.25	25	
trans-1,2-Dichloroethylene	9.37	1.0	µg/L	10.0		93.7	70-130	3.36	25	
1,2-Dichloropropane	10.3	1.0	µg/L	10.0		103	70-130	1.26	25	
1,3-Dichloropropane	10.7	0.50	µg/L	10.0		107	70-130	2.47	25	
2,2-Dichloropropane	7.93	1.0	µg/L	10.0		79.3	40-130	6.47	25	†

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B350738 - SW-846 5030B</b>										
<b>LCS Dup (B350738-BSD1)</b>										
					Prepared: 08/31/23 Analyzed: 09/01/23					
1,1-Dichloropropene	9.26	2.0	µg/L	10.0		92.6	70-130	5.16	25	
cis-1,3-Dichloropropene	10.0	0.50	µg/L	10.0		100	70-130	0.401	25	
trans-1,3-Dichloropropene	10.2	0.50	µg/L	10.0		102	70-130	2.58	25	
Diethyl Ether	9.13	2.0	µg/L	10.0		91.3	70-130	1.20	25	
Diisopropyl Ether (DIPE)	9.20	0.50	µg/L	10.0		92.0	70-130	3.00	25	
1,4-Dioxane	89.0	50	µg/L	100		89.0	40-130	0.0337	50	† ‡
Ethylbenzene	9.55	1.0	µg/L	10.0		95.5	70-130	1.46	25	
Hexachlorobutadiene	8.70	0.60	µg/L	10.0		87.0	70-130	0.924	25	
2-Hexanone (MBK)	101	10	µg/L	100		101	70-160	0.723	25	†
Isopropylbenzene (Cumene)	9.13	1.0	µg/L	10.0		91.3	70-130	3.55	25	
p-Isopropyltoluene (p-Cymene)	8.72	1.0	µg/L	10.0		87.2	70-130	0.458	25	
Methyl Acetate	10.6	1.0	µg/L	10.0		106	70-130	4.35	25	
Methyl tert-Butyl Ether (MTBE)	9.41	1.0	µg/L	10.0		94.1	70-130	2.21	25	
Methyl Cyclohexane	9.16	1.0	µg/L	10.0		91.6	70-130	2.59	25	
Methylene Chloride	9.26	5.0	µg/L	10.0		92.6	70-130	1.18	25	
4-Methyl-2-pentanone (MIBK)	102	10	µg/L	100		102	70-160	0.481	25	†
Naphthalene	9.65	2.0	µg/L	10.0		96.5	40-130	1.64	25	†
n-Propylbenzene	9.12	1.0	µg/L	10.0		91.2	70-130	2.17	25	
Styrene	9.84	1.0	µg/L	10.0		98.4	70-130	1.91	25	
1,1,1,2-Tetrachloroethane	9.89	1.0	µg/L	10.0		98.9	70-130	2.79	25	
1,1,2,2-Tetrachloroethane	9.62	0.50	µg/L	10.0		96.2	70-130	1.24	25	
Tetrachloroethylene	10.2	1.0	µg/L	10.0		102	70-130	0.779	25	
Tetrahydrofuran	8.66	10	µg/L	10.0		86.6	70-130	1.15	25	
Toluene	9.93	1.0	µg/L	10.0		99.3	70-130	0.402	25	
1,2,3-Trichlorobenzene	9.82	5.0	µg/L	10.0		98.2	70-130	4.77	25	
1,2,4-Trichlorobenzene	10.0	1.0	µg/L	10.0		100	70-130	1.38	25	
1,3,5-Trichlorobenzene	9.33	1.0	µg/L	10.0		93.3	70-130	3.58	25	
1,1,1-Trichloroethane	9.50	1.0	µg/L	10.0		95.0	70-130	3.41	25	
1,1,2-Trichloroethane	10.5	1.0	µg/L	10.0		105	70-130	2.54	25	
Trichloroethylene	10.8	1.0	µg/L	10.0		108	70-130	0.0927	25	
Trichlorofluoromethane (Freon 11)	9.50	2.0	µg/L	10.0		95.0	70-130	0.740	25	
1,2,3-Trichloropropane	9.90	2.0	µg/L	10.0		99.0	70-130	3.08	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.31	1.0	µg/L	10.0		93.1	70-130	3.69	25	
1,2,4-Trimethylbenzene	9.03	1.0	µg/L	10.0		90.3	70-130	1.76	25	
1,3,5-Trimethylbenzene	9.28	1.0	µg/L	10.0		92.8	70-130	3.08	25	
Vinyl Chloride	9.74	2.0	µg/L	10.0		97.4	40-160	2.63	25	†
m+p Xylene	18.6	2.0	µg/L	20.0		93.0	70-130	2.07	25	
o-Xylene	9.49	1.0	µg/L	10.0		94.9	70-130	1.57	25	
Xylenes (total)	28.1	1.0	µg/L	30.0		93.7	70-130	1.90	25	
Surrogate: 1,2-Dichloroethane-d4	22.2		µg/L	25.0		88.9	70-130			
Surrogate: Toluene-d8	25.3		µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	25.4		µg/L	25.0		102	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.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-20	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.



**CERTIFICATIONS**
**Certified Analyses included in this Report**

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

**CERTIFICATIONS**
**Certified Analyses included in this Report**

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

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2024
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2024
ME	State of Maine	MA00100	06/9/2025
VA	Commonwealth of Virginia	460217	12/14/2023

23H 4128

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

<https://www.pacelabs.com/>  
39 Spruce Street  
East Longmeadow, MA 01028

CHAIN OF CUSTODY RECORD  
TLF

Company Name: Pace Analytical  
Address: 150 Royal Street, Canton, MA 02021  
Project Name: Textron Providence  
Project Location: 333 Adelaide Avenue, Providence, RI  
Project Manager: Catherine Joe  
Pace Analytical Quote Name/Number: PO 216859  
Invoice Recipient: Catherine Joe  
Sampled By: Dan Leahy 617-212-8276

Requested Turnaround Time:  7-Day PFAS 10-Day (std)  10-Day  
Due Date:   
Rush-Approval Required:  1-Day  3-Day  2-Day  4-Day  
Data Delivery:  EXCEL  
Format: PDF   
Other: Equis Format   
CLP Like Data Pkg Required:   
Email To: catherine.joe@pacelabs.com  
Fax To #:

ANALYSIS REQUESTED

Pace Analytical Work Order #	Client Sample ID / Description	Beginning Date / Time	Ending Date / Time	COMP / GRAB	Matrix Code	Conc Code	VIALS	GLASS	PLASTIC	BACTERIA	ENCORE	EPA 8260C (VOCs)	Total Petroleum Hydrocarbons	Dissolved Lead	Preservation Code
1	MMW-112-20230828	8/28/23 0930		G	GW	UN	2					2			H
2	MMW-1165-20230828	8/28/23 1030		G	GW	UN	2					2			H
3	MMW-1160-20230828	8/28/23 1115		G	GW	UN	2					2			H

Client Comments:

Relinquished by: (signature) *[Signature]* Date/Time: 8/28/23 1130  
Received by: (signature) *[Signature]* Date/Time: 8/29/23 815  
Relinquished by: (signature) *[Signature]* Date/Time: 8/29/23 815  
Received by: (signature) *[Signature]* Date/Time: 8/29/23 1522  
Relinquished by: (signature) *[Signature]* Date/Time:   
Received by: (signature) *[Signature]* Date/Time:   
Relinquished by: (signature) *[Signature]* Date/Time:   
Received by: (signature) *[Signature]* Date/Time:

**Detection Limit Requirements**

MA	<input type="checkbox"/>
CT	<input type="checkbox"/>
Other:	<input type="checkbox"/>

**Special Requirements**

MA MCP Required	<input type="checkbox"/>
MCP Certification Form Required	<input type="checkbox"/>
CT RCP Required	<input type="checkbox"/>
RCP Certification Form Required	<input type="checkbox"/>
MA State DW Required	<input type="checkbox"/>

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

**Project Entity**

Government	<input type="checkbox"/>
Federal	<input type="checkbox"/>
City	<input type="checkbox"/>
Municipality	21 J
County	Brownfield
MWRA School	<input type="checkbox"/>
MBTA	<input type="checkbox"/>
WRMA	<input type="checkbox"/>
Other	<input type="checkbox"/>
Chromatogram	<input type="checkbox"/>
AIHA-LAP, LLC	<input type="checkbox"/>


1 Matrix Codes:  
GW = Ground Water  
WW = Waste Water  
DW = Drinking Water  
A = Air  
S = Soil  
SL = Sludge  
SOL = Solid  
O = Other (please define)

2 Preservation Codes:  
I = Iced  
H = HCL

M = Methanol  
N = Nitric Acid  
S = Sulfuric Acid  
B = Sodium Bisulfate  
X = Sodium Hydroxide  
T = Sodium Thiiosulfate  
O = Other (please define)

Glassware in the fridge? Y / N  
Glassware in freezer? Y / N  
Prepackaged Cooler? Y / N  
\*Pace Analytical is not responsible for missing samples from prepackaged coolers

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

	DC#_Title: ENV-FRM-ELON-0001 v07_Sample Receiving Checklist
	Effective Date: 07/13/2023

### Log In Back-Sheet

Client Aptim Environmental Infrastructure

Project Textron Providence

MCP/RCP Required NIA

Deliverable Package Requirement NIA

Location 333 Adelaide Avenue, Providence

PWSID# (When Applicable) NIA

Arrival Method:

Courier  Fed Ex  Walk In  Other

Received By / Date / Time EGR / 8-29-23 / 1522

Back-Sheet By / Date / Time AAM / 8-30-23 / 0921

Temperature Method Temp Gun # 5

Temp  < 6° C Actual Temperature 2.7° C

Rush Samples: Yes  No  Notify

Short Hold: Yes  No  Notify

Log In Sample Receipt Checklist – (Rejection Criteria Listing – Using Acceptance Policy) Any False statement will be brought to the attention of the Client – True or False

	True	False
Received on Ice	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Received in Cooler	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Custody Seal: DATE TIME	<input type="checkbox"/>	<input checked="" type="checkbox"/>
COC Relinquished	<input checked="" type="checkbox"/>	<input type="checkbox"/>
COC/Samples Labels Agree	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Samples in Good Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Samples Received within Holding Time	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Is there enough Volume	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Proper Media/Container Used	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Splitting Samples Required	<input type="checkbox"/>	<input checked="" type="checkbox"/>
MS/MSD	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Trip Blanks	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Lab to Filters	<input type="checkbox"/>	<input checked="" type="checkbox"/>
COC Legible	<input checked="" type="checkbox"/>	<input type="checkbox"/>
COC Included: (Check all included)		
Client <input checked="" type="checkbox"/>	Analysis <input checked="" type="checkbox"/>	Sampler Name <input checked="" type="checkbox"/>
Project <input checked="" type="checkbox"/>	IDs <input checked="" type="checkbox"/>	Collection Date/Time <input checked="" type="checkbox"/>
All Samples Proper pH:	<input type="checkbox"/> <u>N/A</u>	<input type="checkbox"/>

**Notes regarding Samples/COC outside of SOP:**

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**Additional Container Notes**

**Note: West Virginia requires all samples to have their temperature taken. Note any outliers.**


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Sample	Soils Jars (Circle Amb/Clear)				Ambers				Plastics						VOA Vials				Other/Fill in			
	16oz Amb/Clear	8oz Amb/Clear	4oz Amb/Clear	2oz Amb/Clear	1 Liter	250mL	100mL	Unpreserved	1 Liter	500mL	250mL				Unpreserved	HCl	MeOH	D.I. Water	Bisulfate	Col/Bact		
1															2							
2															2							
3															2							
4																						
5																						
6																						
7																						
8																						
9																						
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16																						
17																						
18																						
19																						
20																						



DC#\_Title: ENV-FRM-ELON-0001 v07\_Sample Receiving Checklist

Effective Date: 07/13/2023

November 17, 2023

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

Project Location: 333 Adelaide Ave, Providence, RI  
Client Job Number:  
Project Number: 631010697  
Laboratory Work Order Number: 23K0944

Enclosed are results of analyses for samples as received by the laboratory on November 7, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Theresa L. Ferrentino  
Project Manager

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

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

REPORT DATE: 11/17/2023

PURCHASE ORDER NUMBER: 216859 CO 002

PROJECT NUMBER: 631010697

**ANALYTICAL SUMMARY**

WORK ORDER NUMBER: 23K0944

The results of analyses performed on the following samples submitted to CON-TEST, a Pace 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-207S-20231105	23K0944-01	Ground Water		SW-846 8260D	
MW-207D-20231105	23K0944-02	Ground Water		SW-846 8260D	
MW-202S-20231105	23K0944-03	Ground Water		SW-846 8260D	
MW-202D-20231105	23K0944-04	Ground Water		SW-846 8260D	
MW-101D-20231105	23K0944-05	Ground Water		SW-846 8260D	
MW-101D-20231105-Dup	23K0944-06	Ground Water		SW-846 8260D	
MW-201D-20231105	23K0944-07	Ground Water		SW-846 8260D	
MW-216S-20231105	23K0944-08	Ground Water		SW-846 8260D	
MW-216D-20231105	23K0944-09	Ground Water		SW-846 8260D	
MW-217S-20231105	23K0944-10	Ground Water		SW-846 8260D	
MW-217D-20231105	23K0944-11	Ground Water		SW-846 8260D	
CW-6-20231105	23K0944-12	Ground Water		SW-846 8100 Modified	
CW-6-20231105DUP	23K0944-13	Ground Water		SW-846 8100 Modified	
MW-109D-20231105	23K0944-14	Ground Water		SW-846 6020B	
				SW-846 8260D	
GZA-3-20231105	23K0944-15	Ground Water		SW-846 6020B	
				SW-846 8260D	
GZA-3-20231105DUP	23K0944-16	Ground Water		SW-846 6020B	
MW-209D-20231106	23K0944-17	Ground Water		SW-846 8260D	
MW-112-20231106	23K0944-18	Ground Water		SW-846 8260D	
MW-218D-20231106	23K0944-19	Ground Water		SW-846 8260D	
MW-218S-20231106	23K0944-20	Ground Water		SW-846 8260D	
CW-1-20231106	23K0944-21	Ground Water		SW-846 8260D	
CW-2-20231106	23K0944-22	Ground Water		SW-846 8260D	
MW-116D-20231106	23K0944-23	Ground Water		SW-846 8260D	
MW-116S-20231106	23K0944-24	Ground Water		SW-846 8260D	

**CASE NARRATIVE SUMMARY**

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

**SW-846 8260D****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:****Acetone**

23K0944-24[MW-116S-20231106], B357752-BLK1, B357752-BS1, B357752-BSD1, S096216-CCV1

**trans-1,4-Dichloro-2-butene**

23K0944-24[MW-116S-20231106], B357752-BLK1, B357752-BS1, B357752-BSD1, S096216-CCV1

**RL-11**

Elevated reporting limit due to high concentration of target compounds.

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

23K0944-17[MW-209D-20231106], 23K0944-18[MW-112-20231106], 23K0944-19[MW-218D-20231106], 23K0944-20[MW-218S-20231106], 23K0944-21[CW-1-20231106]

**V-05**

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

**Analyte & Samples(s) Qualified:****1,2-Dibromo-3-chloropropane (DBCP)**

23K0944-24[MW-116S-20231106], B357752-BLK1, B357752-BS1, B357752-BSD1, S096216-CCV1

**2,2-Dichloropropane**

23K0944-24[MW-116S-20231106], B357752-BLK1, B357752-BS1, B357752-BSD1, S096216-CCV1

**2-Hexanone (MBK)**

23K0944-24[MW-116S-20231106], B357752-BLK1, B357752-BS1, B357752-BSD1, S096216-CCV1

**4-Methyl-2-pentanone (MIBK)**

23K0944-24[MW-116S-20231106], B357752-BLK1, B357752-BS1, B357752-BSD1, S096216-CCV1

**Acetone**

23K0944-24[MW-116S-20231106], B357752-BLK1, B357752-BS1, B357752-BSD1, S096216-CCV1

**Naphthalene**

23K0944-24[MW-116S-20231106], B357752-BLK1, B357752-BS1, B357752-BSD1, S096216-CCV1

**tert-Butyl Alcohol (TBA)**

23K0944-24[MW-116S-20231106], B357752-BLK1, B357752-BS1, B357752-BSD1, S096216-CCV1

**trans-1,4-Dichloro-2-butene**

23K0944-24[MW-116S-20231106], B357752-BLK1, B357752-BS1, B357752-BSD1, S096216-CCV1

**V-20**

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

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

B357752-BS1, B357752-BSD1, S096216-CCV1

**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 Con-Test, a Pace 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  
Technical Representative

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-207S-20231105

Sampled: 11/5/2023 09:40

Sample ID: 23K0944-01

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 8260D	11/10/23	11/10/23 23:13	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-207S-20231105

Sampled: 11/5/2023 09:40

Sample ID: 23K0944-01

Sample Matrix: Ground Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
Naphthalene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
Tetrachloroethylene	9.7	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:13	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	102	70-130	11/10/23 23:13
Toluene-d8	98.8	70-130	11/10/23 23:13
4-Bromofluorobenzene	95.7	70-130	11/10/23 23:13

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-207D-20231105

Sampled: 11/5/2023 10:00

Sample ID: 23K0944-02

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 8260D	11/10/23	11/10/23 23:39	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-207D-20231105

Sampled: 11/5/2023 10:00

Sample ID: 23K0944-02

Sample Matrix: Ground Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
Naphthalene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
Tetrachloroethylene	4.6	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/10/23 23:39	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	102	70-130	11/10/23 23:39
Toluene-d8	100	70-130	11/10/23 23:39
4-Bromofluorobenzene	97.0	70-130	11/10/23 23:39

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

Project Location: 333 Adelaide Ave, Providence, RI Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

**Field Sample #: MW-202S-20231105**
**Sample ID: 23K0944-03**

Start Date/Time: 11/5/2023 12:00:00AM

Sample Matrix: Ground Water

Stop Date/Time: 11/5/2023 10:30:00AM

**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 8260D	11/10/23	11/11/23 0:05	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD



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

Project Location: 333 Adelaide Ave, Providence, RI Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-202S-20231105

Sample ID: 23K0944-03

Start Date/Time: 11/5/2023 12:00:00AM

Sample Matrix: Ground Water

Stop Date/Time: 11/5/2023 10:30:00AM

## 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 8260D	11/10/23	11/11/23 0:05	LBD
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
Naphthalene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
Tetrachloroethylene	21	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:05	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	103	70-130	11/11/23 0:05
Toluene-d8	99.1	70-130	11/11/23 0:05
4-Bromofluorobenzene	96.2	70-130	11/11/23 0:05

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

Project Location: 333 Adelaide Ave, Providence, RI      Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-202D-20231105

Sampled: 11/5/2023 11:00

Sample ID: 23K0944-04

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 8260D	11/10/23	11/11/23 0:31	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-202D-20231105

Sampled: 11/5/2023 11:00

Sample ID: 23K0944-04

Sample Matrix: Ground Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
Naphthalene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
Tetrachloroethylene	3.6	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:31	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	101	70-130	11/11/23 0:31
Toluene-d8	99.4	70-130	11/11/23 0:31
4-Bromofluorobenzene	96.3	70-130	11/11/23 0:31

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-101D-20231105

Sampled: 11/5/2023 07:45

Sample ID: 23K0944-05

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 8260D	11/10/23	11/11/23 0:58	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-101D-20231105

Sampled: 11/5/2023 07:45

Sample ID: 23K0944-05

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 8260D	11/10/23	11/11/23 0:58	LBD
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
Naphthalene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 0:58	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	101	70-130	11/11/23 0:58
Toluene-d8	99.1	70-130	11/11/23 0:58
4-Bromofluorobenzene	96.0	70-130	11/11/23 0:58

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-101D-20231105-Dup

Sampled: 11/5/2023 07:45

Sample ID: 23K0944-06

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 8260D	11/10/23	11/11/23 1:24	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-101D-20231105-Dup

Sampled: 11/5/2023 07:45

Sample ID: 23K0944-06

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 8260D	11/10/23	11/11/23 1:24	LBD
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
Naphthalene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:24	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	103	70-130	
Toluene-d8	98.8	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 Adelaide Ave, Providence, RI      Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-201D-20231105

Sampled: 11/5/2023 08:15

Sample ID: 23K0944-07

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 8260D	11/10/23	11/11/23 5:18	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
cis-1,2-Dichloroethylene	1.6	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD



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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-201D-20231105

Sampled: 11/5/2023 08:15

Sample ID: 23K0944-07

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 8260D	11/10/23	11/11/23 5:18	LBD
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
Naphthalene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
Tetrachloroethylene	60	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
Trichloroethylene	9.6	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 5:18	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	101	70-130	11/11/23 5:18
Toluene-d8	99.1	70-130	11/11/23 5:18
4-Bromofluorobenzene	96.1	70-130	11/11/23 5:18

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-216S-20231105

Sampled: 11/5/2023 12:00

Sample ID: 23K0944-08

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 8260D	11/10/23	11/11/23 1:50	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
cis-1,2-Dichloroethylene	13	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-216S-20231105

Sampled: 11/5/2023 12:00

Sample ID: 23K0944-08

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 8260D	11/10/23	11/11/23 1:50	LBD
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
Ethylbenzene	2.7	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
p-Isopropyltoluene (p-Cymene)	1.1	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
Naphthalene	21	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
1,2,4-Trimethylbenzene	9.4	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
1,3,5-Trimethylbenzene	3.8	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
Vinyl Chloride	4.8	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
m+p Xylene	3.3	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
o-Xylene	8.2	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD
Xylenes (total)	11	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 1:50	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	100	70-130	11/11/23 1:50
Toluene-d8	98.1	70-130	11/11/23 1:50
4-Bromofluorobenzene	97.6	70-130	11/11/23 1:50

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

Project Location: 333 Adelaide Ave, Providence, RI      Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-216D-20231105

Sampled: 11/5/2023 12:50

Sample ID: 23K0944-09

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 8260D	11/10/23	11/11/23 2:16	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-216D-20231105

Sampled: 11/5/2023 12:50

Sample ID: 23K0944-09

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 8260D	11/10/23	11/11/23 2:16	LBD
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
Naphthalene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:16	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	102	70-130	11/11/23 2:16
Toluene-d8	99.5	70-130	11/11/23 2:16
4-Bromofluorobenzene	97.1	70-130	11/11/23 2:16

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

Project Location: 333 Adelaide Ave, Providence, RI      Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-217S-20231105

Sampled: 11/5/2023 13:20

Sample ID: 23K0944-10

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 8260D	11/10/23	11/11/23 2:42	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
cis-1,2-Dichloroethylene	3.2	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-217S-20231105

Sampled: 11/5/2023 13:20

Sample ID: 23K0944-10

Sample Matrix: Ground Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
Naphthalene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
Trichloroethylene	2.3	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:42	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	102	70-130	11/11/23 2:42
Toluene-d8	99.0	70-130	11/11/23 2:42
4-Bromofluorobenzene	95.9	70-130	11/11/23 2:42

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-217D-20231105

Sampled: 11/5/2023 13:55

Sample ID: 23K0944-11

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 8260D	11/10/23	11/11/23 3:08	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
cis-1,2-Dichloroethylene	1.7	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD



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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-217D-20231105

Sampled: 11/5/2023 13:55

Sample ID: 23K0944-11

Sample Matrix: Ground Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
Naphthalene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
Trichloroethylene	2.2	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:08	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	105	70-130	11/11/23 3:08
Toluene-d8	98.4	70-130	11/11/23 3:08
4-Bromofluorobenzene	98.0	70-130	11/11/23 3:08

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: CW-6-20231105

Sampled: 11/5/2023 14:30

Sample ID: 23K0944-12

Sample Matrix: Ground Water

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	14	1.9	mg/L	10		SW-846 8100 Modified	11/10/23	11/11/23 14:35	GJB
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
2-Fluorobiphenyl	93.1		40-140					11/11/23 14:35	

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: CW-6-20231105DUP

Sampled: 11/5/2023 14:30

Sample ID: 23K0944-13

Sample Matrix: Ground Water

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	16	1.9	mg/L	10		SW-846 8100 Modified	11/10/23	11/17/23 11:28	GJB
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
2-Fluorobiphenyl	115	40-140				11/17/23 11:28			

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-109D-20231105

Sampled: 11/5/2023 15:00

Sample ID: 23K0944-14

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 8260D	11/10/23	11/11/23 3:34	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-109D-20231105

Sampled: 11/5/2023 15:00

Sample ID: 23K0944-14

Sample Matrix: Ground Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
Naphthalene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
Trichloroethylene	1.4	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 3:34	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	101	70-130	11/11/23 3:34
Toluene-d8	97.9	70-130	11/11/23 3:34
4-Bromofluorobenzene	96.7	70-130	11/11/23 3:34

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-109D-20231105

Sampled: 11/5/2023 15:00

Sample ID: 23K0944-14

Sample Matrix: Ground Water

**Metals Analyses (Dissolved)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Lead	ND	0.50	µg/L	1		SW-846 6020B	11/13/23	11/16/23 16:52	MJH

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: GZA-3-20231105

Sampled: 11/5/2023 15:50

Sample ID: 23K0944-15

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 8260D	11/10/23	11/11/23 4:00	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: GZA-3-20231105

Sampled: 11/5/2023 15:50

Sample ID: 23K0944-15

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 8260D	11/10/23	11/11/23 4:00	LBD
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
Naphthalene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
Vinyl Chloride	3.3	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:00	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	102	70-130	11/11/23 4:00
Toluene-d8	98.7	70-130	11/11/23 4:00
4-Bromofluorobenzene	95.6	70-130	11/11/23 4:00



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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: GZA-3-20231105

Sampled: 11/5/2023 15:50

Sample ID: 23K0944-15

Sample Matrix: Ground Water

**Metals Analyses (Dissolved)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Lead	ND	0.50	µg/L	1		SW-846 6020B	11/13/23	11/16/23 16:55	MJH

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: GZA-3-20231105DUP

Sampled: 11/5/2023 15:50

Sample ID: 23K0944-16

Sample Matrix: Ground Water

**Metals Analyses (Dissolved)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Lead	ND	0.50	µg/L	1		SW-846 6020B	11/13/23	11/16/23 16:59	MJH

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-209D-20231106

Sampled: 11/6/2023 06:50

Sample ID: 23K0944-17

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 8260D	11/10/23	11/11/23 5:44	LBD
Acrylonitrile	ND	10	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
tert-Amyl Methyl Ether (TAME)	ND	1.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
Benzene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
Bromobenzene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
Bromochloromethane	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
Bromodichloromethane	ND	1.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
Bromoform	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
Bromomethane	ND	4.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
2-Butanone (MEK)	ND	40	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
tert-Butyl Alcohol (TBA)	ND	40	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
n-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
sec-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
tert-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	1.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
Carbon Disulfide	ND	10	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
Carbon Tetrachloride	ND	10	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
Chlorobenzene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
Chlorodibromomethane	ND	1.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
Chloroethane	ND	4.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
Chloroform	ND	4.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
Chloromethane	ND	4.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
2-Chlorotoluene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
4-Chlorotoluene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
Dibromomethane	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
1,2-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
1,3-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
1,4-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
trans-1,4-Dichloro-2-butene	ND	4.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
Dichlorodifluoromethane (Freon 12)	ND	4.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
1,1-Dichloroethane	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
1,2-Dichloroethane	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
1,1-Dichloroethylene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
cis-1,2-Dichloroethylene	17	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
trans-1,2-Dichloroethylene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
1,2-Dichloropropane	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
1,3-Dichloropropane	ND	1.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
2,2-Dichloropropane	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
1,1-Dichloropropene	ND	4.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
cis-1,3-Dichloropropene	ND	1.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
trans-1,3-Dichloropropene	ND	1.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
Diethyl Ether	ND	4.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-209D-20231106

Sampled: 11/6/2023 06:50

Sample ID: 23K0944-17

Sample Matrix: Ground Water

Sample Flags: RL-11

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	1.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
1,4-Dioxane	ND	100	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
Ethylbenzene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
Hexachlorobutadiene	ND	1.2	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
2-Hexanone (MBK)	ND	20	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
Isopropylbenzene (Cumene)	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
p-Isopropyltoluene (p-Cymene)	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
Methyl Acetate	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
Methyl tert-Butyl Ether (MTBE)	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
Methyl Cyclohexane	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
Methylene Chloride	ND	10	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
4-Methyl-2-pentanone (MIBK)	ND	20	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
Naphthalene	ND	4.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
n-Propylbenzene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
Styrene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
Tetrachloroethylene	220	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
Tetrahydrofuran	ND	20	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
Toluene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
1,2,3-Trichlorobenzene	ND	10	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
1,2,4-Trichlorobenzene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
1,3,5-Trichlorobenzene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
1,1,1-Trichloroethane	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
1,1,2-Trichloroethane	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
Trichloroethylene	53	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
Trichlorofluoromethane (Freon 11)	ND	4.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
1,2,3-Trichloropropane	ND	4.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
1,2,4-Trimethylbenzene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
1,3,5-Trimethylbenzene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
Vinyl Chloride	ND	4.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
m+p Xylene	ND	4.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
o-Xylene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD
Xylenes (total)	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 5:44	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	100	70-130	11/11/23 5:44
Toluene-d8	98.9	70-130	11/11/23 5:44
4-Bromofluorobenzene	96.0	70-130	11/11/23 5:44

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-112-20231106

Sampled: 11/6/2023 07:45

Sample ID: 23K0944-18

Sample Matrix: Ground Water

Sample Flags: RL-11

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	200	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
Acrylonitrile	ND	20	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
tert-Amyl Methyl Ether (TAME)	ND	2.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
Benzene	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
Bromobenzene	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
Bromochloromethane	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
Bromodichloromethane	ND	2.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
Bromoform	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
Bromomethane	ND	8.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
2-Butanone (MEK)	ND	80	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
tert-Butyl Alcohol (TBA)	ND	80	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
n-Butylbenzene	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
sec-Butylbenzene	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
tert-Butylbenzene	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	2.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
Carbon Disulfide	ND	20	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
Carbon Tetrachloride	ND	20	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
Chlorobenzene	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
Chlorodibromomethane	ND	2.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
Chloroethane	ND	8.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
Chloroform	ND	8.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
Chloromethane	ND	8.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
2-Chlorotoluene	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
4-Chlorotoluene	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	20	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
1,2-Dibromoethane (EDB)	ND	2.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
Dibromomethane	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
1,2-Dichlorobenzene	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
1,3-Dichlorobenzene	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
1,4-Dichlorobenzene	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
trans-1,4-Dichloro-2-butene	ND	8.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
Dichlorodifluoromethane (Freon 12)	ND	8.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
1,1-Dichloroethane	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
1,2-Dichloroethane	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
1,1-Dichloroethylene	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
cis-1,2-Dichloroethylene	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
trans-1,2-Dichloroethylene	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
1,2-Dichloropropane	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
1,3-Dichloropropane	ND	2.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
2,2-Dichloropropane	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
1,1-Dichloropropene	ND	8.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
cis-1,3-Dichloropropene	ND	2.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
trans-1,3-Dichloropropene	ND	2.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
Diethyl Ether	ND	8.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-112-20231106

Sampled: 11/6/2023 07:45

Sample ID: 23K0944-18

Sample Matrix: Ground Water

Sample Flags: RL-11

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	2.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
1,4-Dioxane	ND	200	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
Ethylbenzene	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
Hexachlorobutadiene	ND	2.4	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
2-Hexanone (MBK)	ND	40	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
Isopropylbenzene (Cumene)	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
p-Isopropyltoluene (p-Cymene)	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
Methyl Acetate	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
Methyl tert-Butyl Ether (MTBE)	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
Methyl Cyclohexane	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
Methylene Chloride	ND	20	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
4-Methyl-2-pentanone (MIBK)	ND	40	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
Naphthalene	ND	8.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
n-Propylbenzene	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
Styrene	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
1,1,1,2-Tetrachloroethane	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
1,1,2,2-Tetrachloroethane	ND	2.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
Tetrachloroethylene	340	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
Tetrahydrofuran	ND	40	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
Toluene	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
1,2,3-Trichlorobenzene	ND	20	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
1,2,4-Trichlorobenzene	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
1,3,5-Trichlorobenzene	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
1,1,1-Trichloroethane	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
1,1,2-Trichloroethane	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
Trichloroethylene	6.5	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
Trichlorofluoromethane (Freon 11)	ND	8.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
1,2,3-Trichloropropane	ND	8.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
1,2,4-Trimethylbenzene	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
1,3,5-Trimethylbenzene	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
Vinyl Chloride	ND	8.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
m+p Xylene	ND	8.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
o-Xylene	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD
Xylenes (total)	ND	4.0	µg/L	4		SW-846 8260D	11/10/23	11/11/23 6:10	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	104	70-130	11/11/23 6:10
Toluene-d8	100	70-130	11/11/23 6:10
4-Bromofluorobenzene	97.6	70-130	11/11/23 6:10

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

Project Location: 333 Adelaide Ave, Providence, RI Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-218D-20231106

Sampled: 11/6/2023 08:30

Sample ID: 23K0944-19

Sample Matrix: Ground Water

Sample Flags: RL-11

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	500	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
Acrylonitrile	ND	50	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
tert-Amyl Methyl Ether (TAME)	ND	5.0	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
Benzene	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
Bromobenzene	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
Bromochloromethane	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
Bromodichloromethane	ND	5.0	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
Bromoform	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
Bromomethane	ND	20	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
2-Butanone (MEK)	ND	200	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
tert-Butyl Alcohol (TBA)	ND	200	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
n-Butylbenzene	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
sec-Butylbenzene	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
tert-Butylbenzene	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	5.0	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
Carbon Disulfide	ND	50	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
Carbon Tetrachloride	ND	50	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
Chlorobenzene	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
Chlorodibromomethane	ND	5.0	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
Chloroethane	ND	20	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
Chloroform	ND	20	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
Chloromethane	ND	20	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
2-Chlorotoluene	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
4-Chlorotoluene	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	50	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
1,2-Dibromoethane (EDB)	ND	5.0	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
Dibromomethane	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
1,2-Dichlorobenzene	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
1,3-Dichlorobenzene	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
1,4-Dichlorobenzene	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
trans-1,4-Dichloro-2-butene	ND	20	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
Dichlorodifluoromethane (Freon 12)	ND	20	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
1,1-Dichloroethane	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
1,2-Dichloroethane	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
1,1-Dichloroethylene	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
cis-1,2-Dichloroethylene	120	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
trans-1,2-Dichloroethylene	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
1,2-Dichloropropane	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
1,3-Dichloropropane	ND	5.0	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
2,2-Dichloropropane	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
1,1-Dichloropropene	ND	20	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
cis-1,3-Dichloropropene	ND	5.0	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
trans-1,3-Dichloropropene	ND	5.0	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
Diethyl Ether	ND	20	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-218D-20231106

Sampled: 11/6/2023 08:30

Sample ID: 23K0944-19

Sample Matrix: Ground Water

Sample Flags: RL-11

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	5.0	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
1,4-Dioxane	ND	500	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
Ethylbenzene	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
Hexachlorobutadiene	ND	6.0	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
2-Hexanone (MBK)	ND	100	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
Isopropylbenzene (Cumene)	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
p-Isopropyltoluene (p-Cymene)	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
Methyl Acetate	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
Methyl tert-Butyl Ether (MTBE)	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
Methyl Cyclohexane	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
Methylene Chloride	ND	50	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
4-Methyl-2-pentanone (MIBK)	ND	100	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
Naphthalene	ND	20	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
n-Propylbenzene	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
Styrene	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
1,1,1,2-Tetrachloroethane	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
1,1,2,2-Tetrachloroethane	ND	5.0	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
Tetrachloroethylene	970	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
Tetrahydrofuran	ND	100	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
Toluene	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
1,2,3-Trichlorobenzene	ND	50	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
1,2,4-Trichlorobenzene	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
1,3,5-Trichlorobenzene	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
1,1,1-Trichloroethane	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
1,1,2-Trichloroethane	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
Trichloroethylene	210	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
Trichlorofluoromethane (Freon 11)	ND	20	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
1,2,3-Trichloropropane	ND	20	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
1,2,4-Trimethylbenzene	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
1,3,5-Trimethylbenzene	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
Vinyl Chloride	ND	20	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
m+p Xylene	ND	20	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
o-Xylene	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD
Xylenes (total)	ND	10	µg/L	10		SW-846 8260D	11/10/23	11/11/23 6:37	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	102	70-130	11/11/23 6:37
Toluene-d8	98.4	70-130	11/11/23 6:37
4-Bromofluorobenzene	96.6	70-130	11/11/23 6:37



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

Project Location: 333 Adelaide Ave, Providence, RI      Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-218S-20231106

Sampled: 11/6/2023 09:00

Sample ID: 23K0944-20

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 8260D	11/10/23	11/11/23 7:03	LBD
Acrylonitrile	ND	10	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
tert-Amyl Methyl Ether (TAME)	ND	1.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
Benzene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
Bromobenzene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
Bromochloromethane	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
Bromodichloromethane	ND	1.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
Bromoform	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
Bromomethane	ND	4.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
2-Butanone (MEK)	ND	40	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
tert-Butyl Alcohol (TBA)	ND	40	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
n-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
sec-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
tert-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	1.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
Carbon Disulfide	ND	10	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
Carbon Tetrachloride	ND	10	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
Chlorobenzene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
Chlorodibromomethane	ND	1.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
Chloroethane	ND	4.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
Chloroform	ND	4.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
Chloromethane	ND	4.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
2-Chlorotoluene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
4-Chlorotoluene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
Dibromomethane	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
1,2-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
1,3-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
1,4-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
trans-1,4-Dichloro-2-butene	ND	4.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
Dichlorodifluoromethane (Freon 12)	ND	4.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
1,1-Dichloroethane	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
1,2-Dichloroethane	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
1,1-Dichloroethylene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
cis-1,2-Dichloroethylene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
trans-1,2-Dichloroethylene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
1,2-Dichloropropane	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
1,3-Dichloropropane	ND	1.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
2,2-Dichloropropane	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
1,1-Dichloropropene	ND	4.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
cis-1,3-Dichloropropene	ND	1.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
trans-1,3-Dichloropropene	ND	1.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
Diethyl Ether	ND	4.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-218S-20231106

Sampled: 11/6/2023 09:00

Sample ID: 23K0944-20

Sample Matrix: Ground Water

Sample Flags: RL-11

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	1.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
1,4-Dioxane	ND	100	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
Ethylbenzene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
Hexachlorobutadiene	ND	1.2	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
2-Hexanone (MBK)	ND	20	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
Isopropylbenzene (Cumene)	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
p-Isopropyltoluene (p-Cymene)	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
Methyl Acetate	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
Methyl tert-Butyl Ether (MTBE)	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
Methyl Cyclohexane	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
Methylene Chloride	ND	10	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
4-Methyl-2-pentanone (MIBK)	ND	20	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
Naphthalene	ND	4.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
n-Propylbenzene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
Styrene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
Tetrachloroethylene	170	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
Tetrahydrofuran	ND	20	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
Toluene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
1,2,3-Trichlorobenzene	ND	10	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
1,2,4-Trichlorobenzene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
1,3,5-Trichlorobenzene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
1,1,1-Trichloroethane	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
1,1,2-Trichloroethane	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
Trichloroethylene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
Trichlorofluoromethane (Freon 11)	ND	4.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
1,2,3-Trichloropropane	ND	4.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
1,2,4-Trimethylbenzene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
1,3,5-Trimethylbenzene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
Vinyl Chloride	ND	4.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
m+p Xylene	ND	4.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
o-Xylene	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD
Xylenes (total)	ND	2.0	µg/L	2		SW-846 8260D	11/10/23	11/11/23 7:03	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	100	70-130	11/11/23 7:03
Toluene-d8	99.2	70-130	11/11/23 7:03
4-Bromofluorobenzene	96.9	70-130	11/11/23 7:03

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

Project Location: 333 Adelaide Ave, Providence, RI      Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: CW-1-20231106

Sampled: 11/6/2023 09:20

Sample ID: 23K0944-21

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 8260D	11/10/23	11/11/23 7:29	LBD
Acrylonitrile	ND	25	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
tert-Amyl Methyl Ether (TAME)	ND	2.5	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
Benzene	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
Bromobenzene	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
Bromochloromethane	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
Bromodichloromethane	ND	2.5	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
Bromoform	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
Bromomethane	ND	10	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
2-Butanone (MEK)	ND	100	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
tert-Butyl Alcohol (TBA)	ND	100	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
n-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
sec-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
tert-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	2.5	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
Carbon Disulfide	ND	25	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
Carbon Tetrachloride	ND	25	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
Chlorobenzene	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
Chlorodibromomethane	ND	2.5	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
Chloroethane	ND	10	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
Chloroform	ND	10	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
Chloromethane	ND	10	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
2-Chlorotoluene	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
4-Chlorotoluene	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	25	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
1,2-Dibromoethane (EDB)	ND	2.5	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
Dibromomethane	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
1,2-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
1,3-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
1,4-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
trans-1,4-Dichloro-2-butene	ND	10	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
Dichlorodifluoromethane (Freon 12)	ND	10	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
1,1-Dichloroethane	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
1,2-Dichloroethane	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
1,1-Dichloroethylene	8.7	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
cis-1,2-Dichloroethylene	67	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
trans-1,2-Dichloroethylene	6.3	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
1,2-Dichloropropane	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
1,3-Dichloropropane	ND	2.5	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
2,2-Dichloropropane	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
1,1-Dichloropropene	ND	10	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
cis-1,3-Dichloropropene	ND	2.5	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
trans-1,3-Dichloropropene	ND	2.5	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
Diethyl Ether	ND	10	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: CW-1-20231106

Sampled: 11/6/2023 09:20

Sample ID: 23K0944-21

Sample Matrix: Ground Water

Sample Flags: RL-11

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	2.5	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
1,4-Dioxane	ND	250	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
Ethylbenzene	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
Hexachlorobutadiene	ND	3.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
2-Hexanone (MBK)	ND	50	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
Isopropylbenzene (Cumene)	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
p-Isopropyltoluene (p-Cymene)	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
Methyl Acetate	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
Methyl tert-Butyl Ether (MTBE)	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
Methyl Cyclohexane	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
Methylene Chloride	ND	25	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
4-Methyl-2-pentanone (MIBK)	ND	50	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
Naphthalene	ND	10	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
n-Propylbenzene	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
Styrene	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
1,1,1,2-Tetrachloroethane	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
1,1,2,2-Tetrachloroethane	ND	2.5	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
Tetrachloroethylene	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
Tetrahydrofuran	ND	50	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
Toluene	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
1,2,3-Trichlorobenzene	ND	25	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
1,2,4-Trichlorobenzene	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
1,3,5-Trichlorobenzene	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
1,1,1-Trichloroethane	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
1,1,2-Trichloroethane	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
Trichloroethylene	510	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
Trichlorofluoromethane (Freon 11)	ND	10	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
1,2,3-Trichloropropane	ND	10	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
1,2,4-Trimethylbenzene	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
1,3,5-Trimethylbenzene	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
Vinyl Chloride	ND	10	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
m+p Xylene	ND	10	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
o-Xylene	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD
Xylenes (total)	ND	5.0	µg/L	5		SW-846 8260D	11/10/23	11/11/23 7:29	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	103	70-130	11/11/23 7:29
Toluene-d8	98.4	70-130	11/11/23 7:29
4-Bromofluorobenzene	97.0	70-130	11/11/23 7:29

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: CW-2-20231106

Sampled: 11/6/2023 09:40

Sample ID: 23K0944-22

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 8260D	11/10/23	11/11/23 4:26	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: CW-2-20231106

Sampled: 11/6/2023 09:40

Sample ID: 23K0944-22

Sample Matrix: Ground Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
Methyl tert-Butyl Ether (MTBE)	1.7	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
Naphthalene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:26	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	103	70-130	11/11/23 4:26
Toluene-d8	98.9	70-130	11/11/23 4:26
4-Bromofluorobenzene	96.4	70-130	11/11/23 4:26

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-116D-20231106

Sampled: 11/6/2023 10:15

Sample ID: 23K0944-23

Sample Matrix: Ground Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-116D-20231106

Sampled: 11/6/2023 10:15

Sample ID: 23K0944-23

Sample Matrix: Ground Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
Naphthalene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 4:52	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	102	70-130	11/11/23 4:52
Toluene-d8	99.2	70-130	11/11/23 4:52
4-Bromofluorobenzene	96.5	70-130	11/11/23 4:52



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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-116S-20231106

Sampled: 11/6/2023 10:40

Sample ID: 23K0944-24

Sample Matrix: Ground Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1	L-04, V-05	SW-846 8260D	11/10/23	11/11/23 2:34	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1	V-05	SW-846 8260D	11/10/23	11/11/23 2:34	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	V-05	SW-846 8260D	11/10/23	11/11/23 2:34	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	L-04, V-05	SW-846 8260D	11/10/23	11/11/23 2:34	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260D	11/10/23	11/11/23 2:34	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH

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

Project Location: 333 Adelaide Ave, Providence, RI

Sample Description:

Work Order: 23K0944

Date Received: 11/7/2023

Field Sample #: MW-116S-20231106

Sampled: 11/6/2023 10:40

Sample ID: 23K0944-24

Sample Matrix: Ground Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
2-Hexanone (MBK)	ND	10	µg/L	1	V-05	SW-846 8260D	11/10/23	11/11/23 2:34	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1	V-05	SW-846 8260D	11/10/23	11/11/23 2:34	EEH
Naphthalene	ND	2.0	µg/L	1	V-05	SW-846 8260D	11/10/23	11/11/23 2:34	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260D	11/10/23	11/11/23 2:34	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	81.6	70-130	11/11/23 2:34
Toluene-d8	94.8	70-130	11/11/23 2:34
4-Bromofluorobenzene	87.3	70-130	11/11/23 2:34

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

**Sample Extraction Data**
**Prep Method:SW-846 3005A Dissolved Analytical Method:SW-846 6020B**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23K0944-14 [MW-109D-20231105]	B357977	50.0	50.0	11/13/23
23K0944-15 [GZA-3-20231105]	B357977	50.0	50.0	11/13/23
23K0944-16 [GZA-3-20231105DUP]	B357977	50.0	50.0	11/13/23

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23K0944-12 [CW-6-20231105]	B357757	1040	1.00	11/10/23
23K0944-13 [CW-6-20231105DUP]	B357757	1030	1.00	11/10/23

**Prep Method:SW-846 5030B Analytical Method:SW-846 8260D**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23K0944-01 [MW-207S-20231105]	B357751	5	5.00	11/10/23
23K0944-02 [MW-207D-20231105]	B357751	5	5.00	11/10/23
23K0944-03 [MW-202S-20231105]	B357751	5	5.00	11/10/23
23K0944-04 [MW-202D-20231105]	B357751	5	5.00	11/10/23
23K0944-05 [MW-101D-20231105]	B357751	5	5.00	11/10/23
23K0944-06 [MW-101D-20231105-Dup]	B357751	5	5.00	11/10/23
23K0944-07 [MW-201D-20231105]	B357751	5	5.00	11/10/23
23K0944-08 [MW-216S-20231105]	B357751	5	5.00	11/10/23
23K0944-09 [MW-216D-20231105]	B357751	5	5.00	11/10/23
23K0944-10 [MW-217S-20231105]	B357751	5	5.00	11/10/23
23K0944-11 [MW-217D-20231105]	B357751	5	5.00	11/10/23
23K0944-14 [MW-109D-20231105]	B357751	5	5.00	11/10/23
23K0944-15 [GZA-3-20231105]	B357751	5	5.00	11/10/23
23K0944-17 [MW-209D-20231106]	B357751	2.5	5.00	11/10/23
23K0944-18 [MW-112-20231106]	B357751	1.25	5.00	11/10/23
23K0944-19 [MW-218D-20231106]	B357751	0.5	5.00	11/10/23
23K0944-20 [MW-218S-20231106]	B357751	2.5	5.00	11/10/23
23K0944-21 [CW-1-20231106]	B357751	1	5.00	11/10/23
23K0944-22 [CW-2-20231106]	B357751	5	5.00	11/10/23
23K0944-23 [MW-116D-20231106]	B357751	5	5.00	11/10/23

**Prep Method:SW-846 5030B Analytical Method:SW-846 8260D**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23K0944-24 [MW-116S-20231106]	B357752	5	5.00	11/10/23

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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B357751 - SW-846 5030B</b>										
<b>Blank (B357751-BLK1)</b>										
Prepared & Analyzed: 11/10/23										
Acetone	ND	50	µg/L							
Acrylonitrile	ND	5.0	µg/L							
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L							
Benzene	ND	1.0	µg/L							
Bromobenzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	0.50	µg/L							
Bromoform	ND	1.0	µg/L							
Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	20	µg/L							
tert-Butyl Alcohol (TBA)	ND	20	µg/L							
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L							
Carbon Disulfide	ND	5.0	µg/L							
Carbon Tetrachloride	ND	5.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
Dibromomethane	ND	1.0	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L							
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
<b>Batch B357751 - SW-846 5030B</b>										
<b>Blank (B357751-BLK1)</b>										
Prepared & Analyzed: 11/10/23										
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methyl Cyclohexane	ND	1.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Naphthalene	ND	2.0	µg/L							
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Tetrahydrofuran	ND	10	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							
1,2,4-Trichlorobenzene	ND	1.0	µg/L							
1,3,5-Trichlorobenzene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							
1,2,3-Trichloropropane	ND	2.0	µg/L							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
1,3,5-Trimethylbenzene	ND	1.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Xylenes (total)	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	25.7		µg/L	25.0		103	70-130			
Surrogate: Toluene-d8	24.8		µg/L	25.0		99.4	70-130			
Surrogate: 4-Bromofluorobenzene	24.2		µg/L	25.0		96.6	70-130			
<b>LCS (B357751-BS1)</b>										
Prepared & Analyzed: 11/10/23										
Acetone	101	50	µg/L	100		101	70-160			†
Acrylonitrile	9.48	5.0	µg/L	10.0		94.8	70-130			
tert-Amyl Methyl Ether (TAME)	9.54	0.50	µg/L	10.0		95.4	70-130			
Benzene	9.60	1.0	µg/L	10.0		96.0	70-130			
Bromobenzene	10.0	1.0	µg/L	10.0		100	70-130			
Bromochloromethane	10.0	1.0	µg/L	10.0		100	70-130			
Bromodichloromethane	10.6	0.50	µg/L	10.0		106	70-130			
Bromoform	10.3	1.0	µg/L	10.0		103	70-130			
Bromomethane	9.41	2.0	µg/L	10.0		94.1	40-160			†
2-Butanone (MEK)	95.1	20	µg/L	100		95.1	40-160			†
tert-Butyl Alcohol (TBA)	100	20	µg/L	100		100	40-160			†
n-Butylbenzene	8.44	1.0	µg/L	10.0		84.4	70-130			
sec-Butylbenzene	8.84	1.0	µg/L	10.0		88.4	70-130			
tert-Butylbenzene	9.23	1.0	µg/L	10.0		92.3	70-130			
tert-Butyl Ethyl Ether (TBEE)	9.23	0.50	µg/L	10.0		92.3	70-130			
Carbon Disulfide	115	5.0	µg/L	100		115	70-130			
Carbon Tetrachloride	10.1	5.0	µg/L	10.0		101	70-130			
Chlorobenzene	10.1	1.0	µg/L	10.0		101	70-130			
Chlorodibromomethane	10.5	0.50	µg/L	10.0		105	70-130			
Chloroethane	11.0	2.0	µg/L	10.0		110	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 B357751 - SW-846 5030B</b>										
<b>LCS (B357751-BS1)</b>										
Prepared & Analyzed: 11/10/23										
Chloroform	10.4	2.0	µg/L	10.0		104	70-130			
Chloromethane	9.42	2.0	µg/L	10.0		94.2	40-160			†
2-Chlorotoluene	9.55	1.0	µg/L	10.0		95.5	70-130			
4-Chlorotoluene	9.56	1.0	µg/L	10.0		95.6	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	10.9	5.0	µg/L	10.0		109	70-130			
1,2-Dibromoethane (EDB)	11.1	0.50	µg/L	10.0		111	70-130			
Dibromomethane	11.6	1.0	µg/L	10.0		116	70-130			
1,2-Dichlorobenzene	9.83	1.0	µg/L	10.0		98.3	70-130			
1,3-Dichlorobenzene	9.49	1.0	µg/L	10.0		94.9	70-130			
1,4-Dichlorobenzene	9.64	1.0	µg/L	10.0		96.4	70-130			
trans-1,4-Dichloro-2-butene	8.32	2.0	µg/L	10.0		83.2	70-130			
Dichlorodifluoromethane (Freon 12)	11.2	2.0	µg/L	10.0		112	40-160			†
1,1-Dichloroethane	9.83	1.0	µg/L	10.0		98.3	70-130			
1,2-Dichloroethane	11.8	1.0	µg/L	10.0		118	70-130			
1,1-Dichloroethylene	10.8	1.0	µg/L	10.0		108	70-130			
cis-1,2-Dichloroethylene	9.61	1.0	µg/L	10.0		96.1	70-130			
trans-1,2-Dichloroethylene	10.1	1.0	µg/L	10.0		101	70-130			
1,2-Dichloropropane	9.85	1.0	µg/L	10.0		98.5	70-130			
1,3-Dichloropropane	10.7	0.50	µg/L	10.0		107	70-130			
2,2-Dichloropropane	8.65	1.0	µg/L	10.0		86.5	40-130			†
1,1-Dichloropropene	9.77	2.0	µg/L	10.0		97.7	70-130			
cis-1,3-Dichloropropene	9.53	0.50	µg/L	10.0		95.3	70-130			
trans-1,3-Dichloropropene	9.59	0.50	µg/L	10.0		95.9	70-130			
Diethyl Ether	10.2	2.0	µg/L	10.0		102	70-130			
Diisopropyl Ether (DIPE)	8.68	0.50	µg/L	10.0		86.8	70-130			
1,4-Dioxane	100	50	µg/L	100		100	40-130			†
Ethylbenzene	9.93	1.0	µg/L	10.0		99.3	70-130			
Hexachlorobutadiene	8.30	0.60	µg/L	10.0		83.0	70-130			
2-Hexanone (MBK)	102	10	µg/L	100		102	70-160			†
Isopropylbenzene (Cumene)	9.57	1.0	µg/L	10.0		95.7	70-130			
p-Isopropyltoluene (p-Cymene)	8.91	1.0	µg/L	10.0		89.1	70-130			
Methyl Acetate	10.6	1.0	µg/L	10.0		106	70-130			
Methyl tert-Butyl Ether (MTBE)	10.2	1.0	µg/L	10.0		102	70-130			
Methyl Cyclohexane	9.79	1.0	µg/L	10.0		97.9	70-130			
Methylene Chloride	8.73	5.0	µg/L	10.0		87.3	70-130			
4-Methyl-2-pentanone (MIBK)	103	10	µg/L	100		103	70-160			†
Naphthalene	9.22	2.0	µg/L	10.0		92.2	40-130			†
n-Propylbenzene	9.42	1.0	µg/L	10.0		94.2	70-130			
Styrene	9.67	1.0	µg/L	10.0		96.7	70-130			
1,1,1,2-Tetrachloroethane	10.7	1.0	µg/L	10.0		107	70-130			
1,1,2,2-Tetrachloroethane	11.4	0.50	µg/L	10.0		114	70-130			
Tetrachloroethylene	10.4	1.0	µg/L	10.0		104	70-130			
Tetrahydrofuran	9.07	10	µg/L	10.0		90.7	70-130			
Toluene	9.99	1.0	µg/L	10.0		99.9	70-130			
1,2,3-Trichlorobenzene	9.82	5.0	µg/L	10.0		98.2	70-130			
1,2,4-Trichlorobenzene	9.48	1.0	µg/L	10.0		94.8	70-130			
1,3,5-Trichlorobenzene	9.05	1.0	µg/L	10.0		90.5	70-130			
1,1,1-Trichloroethane	10.8	1.0	µg/L	10.0		108	70-130			
1,1,2-Trichloroethane	10.8	1.0	µg/L	10.0		108	70-130			
Trichloroethylene	10.7	1.0	µg/L	10.0		107	70-130			
Trichlorofluoromethane (Freon 11)	11.5	2.0	µg/L	10.0		115	70-130			
1,2,3-Trichloropropane	11.7	2.0	µg/L	10.0		117	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 B357751 - SW-846 5030B</b>										
<b>LCS (B357751-BS1)</b>										
Prepared & Analyzed: 11/10/23										
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.8	1.0	µg/L	10.0		108	70-130			
1,2,4-Trimethylbenzene	9.24	1.0	µg/L	10.0		92.4	70-130			
1,3,5-Trimethylbenzene	9.46	1.0	µg/L	10.0		94.6	70-130			
Vinyl Chloride	11.1	2.0	µg/L	10.0		111	40-160			†
m+p Xylene	19.6	2.0	µg/L	20.0		98.2	70-130			
o-Xylene	9.94	1.0	µg/L	10.0		99.4	70-130			
Xylenes (total)	29.6	1.0	µg/L	30.0		98.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	24.8		µg/L	25.0		99.2	70-130			
Surrogate: Toluene-d8	25.0		µg/L	25.0		100	70-130			
Surrogate: 4-Bromofluorobenzene	24.8		µg/L	25.0		99.0	70-130			
<b>LCS Dup (B357751-BSD1)</b>										
Prepared & Analyzed: 11/10/23										
Acetone	98.8	50	µg/L	100		98.8	70-160	1.75	25	†
Acrylonitrile	9.90	5.0	µg/L	10.0		99.0	70-130	4.33	25	
tert-Amyl Methyl Ether (TAME)	9.59	0.50	µg/L	10.0		95.9	70-130	0.523	25	
Benzene	9.69	1.0	µg/L	10.0		96.9	70-130	0.933	25	
Bromobenzene	9.59	1.0	µg/L	10.0		95.9	70-130	4.58	25	
Bromochloromethane	10.0	1.0	µg/L	10.0		100	70-130	0.199	25	
Bromodichloromethane	10.8	0.50	µg/L	10.0		108	70-130	1.40	25	
Bromoform	9.94	1.0	µg/L	10.0		99.4	70-130	3.17	25	
Bromomethane	9.91	2.0	µg/L	10.0		99.1	40-160	5.18	25	†
2-Butanone (MEK)	93.3	20	µg/L	100		93.3	40-160	1.85	25	†
tert-Butyl Alcohol (TBA)	98.9	20	µg/L	100		98.9	40-160	1.40	25	†
n-Butylbenzene	8.42	1.0	µg/L	10.0		84.2	70-130	0.237	25	
sec-Butylbenzene	8.80	1.0	µg/L	10.0		88.0	70-130	0.454	25	
tert-Butylbenzene	9.21	1.0	µg/L	10.0		92.1	70-130	0.217	25	
tert-Butyl Ethyl Ether (TBEE)	9.23	0.50	µg/L	10.0		92.3	70-130	0.00	25	
Carbon Disulfide	115	5.0	µg/L	100		115	70-130	0.643	25	
Carbon Tetrachloride	9.41	5.0	µg/L	10.0		94.1	70-130	7.07	25	
Chlorobenzene	9.77	1.0	µg/L	10.0		97.7	70-130	3.42	25	
Chlorodibromomethane	10.3	0.50	µg/L	10.0		103	70-130	2.31	25	
Chloroethane	11.0	2.0	µg/L	10.0		110	70-130	0.363	25	
Chloroform	10.5	2.0	µg/L	10.0		105	70-130	1.15	25	
Chloromethane	9.29	2.0	µg/L	10.0		92.9	40-160	1.39	25	†
2-Chlorotoluene	9.24	1.0	µg/L	10.0		92.4	70-130	3.30	25	
4-Chlorotoluene	9.26	1.0	µg/L	10.0		92.6	70-130	3.19	25	
1,2-Dibromo-3-chloropropane (DBCP)	10.5	5.0	µg/L	10.0		105	70-130	3.55	25	
1,2-Dibromoethane (EDB)	11.0	0.50	µg/L	10.0		110	70-130	1.18	25	
Dibromomethane	11.4	1.0	µg/L	10.0		114	70-130	1.39	25	
1,2-Dichlorobenzene	9.73	1.0	µg/L	10.0		97.3	70-130	1.02	25	
1,3-Dichlorobenzene	9.51	1.0	µg/L	10.0		95.1	70-130	0.211	25	
1,4-Dichlorobenzene	9.50	1.0	µg/L	10.0		95.0	70-130	1.46	25	
trans-1,4-Dichloro-2-butene	8.26	2.0	µg/L	10.0		82.6	70-130	0.724	25	
Dichlorodifluoromethane (Freon 12)	10.9	2.0	µg/L	10.0		109	40-160	1.90	25	†
1,1-Dichloroethane	9.52	1.0	µg/L	10.0		95.2	70-130	3.20	25	
1,2-Dichloroethane	11.9	1.0	µg/L	10.0		119	70-130	0.169	25	
1,1-Dichloroethylene	10.6	1.0	µg/L	10.0		106	70-130	1.87	25	
cis-1,2-Dichloroethylene	9.54	1.0	µg/L	10.0		95.4	70-130	0.731	25	
trans-1,2-Dichloroethylene	10.0	1.0	µg/L	10.0		100	70-130	1.19	25	
1,2-Dichloropropane	9.87	1.0	µg/L	10.0		98.7	70-130	0.203	25	
1,3-Dichloropropane	10.6	0.50	µg/L	10.0		106	70-130	1.32	25	
2,2-Dichloropropane	8.63	1.0	µg/L	10.0		86.3	40-130	0.231	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 B357751 - SW-846 5030B</b>										
<b>LCS Dup (B357751-BSD1)</b>										
Prepared & Analyzed: 11/10/23										
1,1-Dichloropropene	9.72	2.0	µg/L	10.0		97.2	70-130	0.513	25	
cis-1,3-Dichloropropene	9.57	0.50	µg/L	10.0		95.7	70-130	0.419	25	
trans-1,3-Dichloropropene	9.74	0.50	µg/L	10.0		97.4	70-130	1.55	25	
Diethyl Ether	10.2	2.0	µg/L	10.0		102	70-130	0.391	25	
Diisopropyl Ether (DIPE)	8.67	0.50	µg/L	10.0		86.7	70-130	0.115	25	
1,4-Dioxane	95.1	50	µg/L	100		95.1	40-130	5.47	50	† ‡
Ethylbenzene	9.73	1.0	µg/L	10.0		97.3	70-130	2.03	25	
Hexachlorobutadiene	8.20	0.60	µg/L	10.0		82.0	70-130	1.21	25	
2-Hexanone (MBK)	99.5	10	µg/L	100		99.5	70-160	2.11	25	†
Isopropylbenzene (Cumene)	9.25	1.0	µg/L	10.0		92.5	70-130	3.40	25	
p-Isopropyltoluene (p-Cymene)	8.88	1.0	µg/L	10.0		88.8	70-130	0.337	25	
Methyl Acetate	10.2	1.0	µg/L	10.0		102	70-130	4.14	25	
Methyl tert-Butyl Ether (MTBE)	10.2	1.0	µg/L	10.0		102	70-130	0.295	25	
Methyl Cyclohexane	9.68	1.0	µg/L	10.0		96.8	70-130	1.13	25	
Methylene Chloride	8.79	5.0	µg/L	10.0		87.9	70-130	0.685	25	
4-Methyl-2-pentanone (MIBK)	101	10	µg/L	100		101	70-160	2.01	25	†
Naphthalene	9.07	2.0	µg/L	10.0		90.7	40-130	1.64	25	†
n-Propylbenzene	9.26	1.0	µg/L	10.0		92.6	70-130	1.71	25	
Styrene	9.56	1.0	µg/L	10.0		95.6	70-130	1.14	25	
1,1,1,2-Tetrachloroethane	9.91	1.0	µg/L	10.0		99.1	70-130	7.76	25	
1,1,2,2-Tetrachloroethane	11.0	0.50	µg/L	10.0		110	70-130	3.84	25	
Tetrachloroethylene	10.3	1.0	µg/L	10.0		103	70-130	0.484	25	
Tetrahydrofuran	8.44	10	µg/L	10.0		84.4	70-130	7.20	25	
Toluene	9.84	1.0	µg/L	10.0		98.4	70-130	1.51	25	
1,2,3-Trichlorobenzene	9.96	5.0	µg/L	10.0		99.6	70-130	1.42	25	
1,2,4-Trichlorobenzene	9.45	1.0	µg/L	10.0		94.5	70-130	0.317	25	
1,3,5-Trichlorobenzene	8.92	1.0	µg/L	10.0		89.2	70-130	1.45	25	
1,1,1-Trichloroethane	10.5	1.0	µg/L	10.0		105	70-130	2.44	25	
1,1,2-Trichloroethane	10.8	1.0	µg/L	10.0		108	70-130	0.557	25	
Trichloroethylene	10.5	1.0	µg/L	10.0		105	70-130	2.16	25	
Trichlorofluoromethane (Freon 11)	11.3	2.0	µg/L	10.0		113	70-130	2.19	25	
1,2,3-Trichloropropane	11.0	2.0	µg/L	10.0		110	70-130	6.26	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.6	1.0	µg/L	10.0		106	70-130	1.86	25	
1,2,4-Trimethylbenzene	9.12	1.0	µg/L	10.0		91.2	70-130	1.31	25	
1,3,5-Trimethylbenzene	9.22	1.0	µg/L	10.0		92.2	70-130	2.57	25	
Vinyl Chloride	10.9	2.0	µg/L	10.0		109	40-160	2.19	25	†
m+p Xylene	19.0	2.0	µg/L	20.0		94.8	70-130	3.52	25	
o-Xylene	9.64	1.0	µg/L	10.0		96.4	70-130	3.06	25	
Xylenes (total)	28.6	1.0	µg/L	30.0		95.4	70-130	3.37	25	
Surrogate: 1,2-Dichloroethane-d4	24.5		µg/L	25.0		98.2	70-130			
Surrogate: Toluene-d8	25.2		µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	24.2		µg/L	25.0		96.8	70-130			



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B357752 - SW-846 5030B</b>										
<b>Blank (B357752-BLK1)</b>										
Prepared: 11/10/23 Analyzed: 11/11/23										
Acetone	ND	50	µg/L							L-04, V-05
Acrylonitrile	ND	5.0	µg/L							
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L							
Benzene	ND	1.0	µg/L							
Bromobenzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	0.50	µg/L							
Bromoform	ND	1.0	µg/L							
Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	20	µg/L							
tert-Butyl Alcohol (TBA)	ND	20	µg/L							V-05
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L							
Carbon Disulfide	ND	5.0	µg/L							
Carbon Tetrachloride	ND	5.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							V-05
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							L-04, V-05
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							V-05
1,1-Dichloropropene	ND	2.0	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
Diethyl Ether	ND	2.0	µg/L							
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							
Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	0.60	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							V-05
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
<b>Batch B357752 - SW-846 5030B</b>										
<b>Blank (B357752-BLK1)</b>										
Prepared: 11/10/23 Analyzed: 11/11/23										
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							V-05
Naphthalene	ND	2.0	µg/L							V-05
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Tetrahydrofuran	ND	10	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							
1,2,4-Trichlorobenzene	ND	1.0	µg/L							
1,3,5-Trichlorobenzene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							
1,2,3-Trichloropropane	ND	2.0	µg/L							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
1,3,5-Trimethylbenzene	ND	1.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Xylenes (total)	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	21.0		µg/L	25.0		84.1	70-130			
Surrogate: Toluene-d8	24.5		µg/L	25.0		98.1	70-130			
Surrogate: 4-Bromofluorobenzene	22.2		µg/L	25.0		88.8	70-130			
<b>LCS (B357752-BS1)</b>										
Prepared & Analyzed: 11/10/23										
Acetone	67.9	50	µg/L	100		67.9 *	70-160			L-04, V-05 †
Acrylonitrile	7.94	5.0	µg/L	10.0		79.4	70-130			
tert-Amyl Methyl Ether (TAME)	9.15	0.50	µg/L	10.0		91.5	70-130			
Benzene	10.1	1.0	µg/L	10.0		101	70-130			
Bromobenzene	9.56	1.0	µg/L	10.0		95.6	70-130			
Bromochloromethane	9.35	1.0	µg/L	10.0		93.5	70-130			
Bromodichloromethane	8.62	0.50	µg/L	10.0		86.2	70-130			
Bromoform	8.10	1.0	µg/L	10.0		81.0	70-130			
Bromomethane	10.5	2.0	µg/L	10.0		105	40-160			V-20 †
2-Butanone (MEK)	78.4	20	µg/L	100		78.4	40-160			†
tert-Butyl Alcohol (TBA)	64.9	20	µg/L	100		64.9	40-160			V-05 †
n-Butylbenzene	8.92	1.0	µg/L	10.0		89.2	70-130			
sec-Butylbenzene	9.06	1.0	µg/L	10.0		90.6	70-130			
tert-Butylbenzene	8.98	1.0	µg/L	10.0		89.8	70-130			
tert-Butyl Ethyl Ether (TBEE)	8.89	0.50	µg/L	10.0		88.9	70-130			
Carbon Disulfide	78.5	5.0	µg/L	100		78.5	70-130			
Carbon Tetrachloride	8.45	5.0	µg/L	10.0		84.5	70-130			
Chlorobenzene	10.6	1.0	µg/L	10.0		106	70-130			
Chlorodibromomethane	8.86	0.50	µg/L	10.0		88.6	70-130			
Chloroethane	8.51	2.0	µg/L	10.0		85.1	70-130			

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## QUALITY CONTROL

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B357752 - SW-846 5030B</b>										
<b>LCS (B357752-BS1)</b>										
Prepared & Analyzed: 11/10/23										
Chloroform	9.16	2.0	µg/L	10.0		91.6	70-130			
Chloromethane	6.83	2.0	µg/L	10.0		68.3	40-160			†
2-Chlorotoluene	9.67	1.0	µg/L	10.0		96.7	70-130			
4-Chlorotoluene	9.56	1.0	µg/L	10.0		95.6	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	7.77	5.0	µg/L	10.0		77.7	70-130			V-05
1,2-Dibromoethane (EDB)	9.59	0.50	µg/L	10.0		95.9	70-130			
Dibromomethane	9.25	1.0	µg/L	10.0		92.5	70-130			
1,2-Dichlorobenzene	10.4	1.0	µg/L	10.0		104	70-130			
1,3-Dichlorobenzene	10.1	1.0	µg/L	10.0		101	70-130			
1,4-Dichlorobenzene	9.67	1.0	µg/L	10.0		96.7	70-130			
<b>trans-1,4-Dichloro-2-butene</b>	6.67	2.0	µg/L	10.0		<b>66.7</b> *	70-130			L-04, V-05
Dichlorodifluoromethane (Freon 12)	6.23	2.0	µg/L	10.0		62.3	40-160			†
1,1-Dichloroethane	8.90	1.0	µg/L	10.0		89.0	70-130			
1,2-Dichloroethane	8.14	1.0	µg/L	10.0		81.4	70-130			
1,1-Dichloroethylene	7.51	1.0	µg/L	10.0		75.1	70-130			
cis-1,2-Dichloroethylene	8.65	1.0	µg/L	10.0		86.5	70-130			
trans-1,2-Dichloroethylene	7.90	1.0	µg/L	10.0		79.0	70-130			
1,2-Dichloropropane	9.62	1.0	µg/L	10.0		96.2	70-130			
1,3-Dichloropropane	9.48	0.50	µg/L	10.0		94.8	70-130			
2,2-Dichloropropane	6.89	1.0	µg/L	10.0		68.9	40-130			V-05 †
1,1-Dichloropropene	8.97	2.0	µg/L	10.0		89.7	70-130			
cis-1,3-Dichloropropene	9.27	0.50	µg/L	10.0		92.7	70-130			
trans-1,3-Dichloropropene	8.71	0.50	µg/L	10.0		87.1	70-130			
Diethyl Ether	8.64	2.0	µg/L	10.0		86.4	70-130			
Diisopropyl Ether (DIPE)	8.55	0.50	µg/L	10.0		85.5	70-130			
1,4-Dioxane	74.5	50	µg/L	100		74.5	40-130			†
Ethylbenzene	9.70	1.0	µg/L	10.0		97.0	70-130			
Hexachlorobutadiene	9.86	0.60	µg/L	10.0		98.6	70-130			
2-Hexanone (MBK)	72.6	10	µg/L	100		72.6	70-160			V-05 †
Isopropylbenzene (Cumene)	9.43	1.0	µg/L	10.0		94.3	70-130			
p-Isopropyltoluene (p-Cymene)	9.21	1.0	µg/L	10.0		92.1	70-130			
Methyl Acetate	8.79	1.0	µg/L	10.0		87.9	70-130			
Methyl tert-Butyl Ether (MTBE)	8.60	1.0	µg/L	10.0		86.0	70-130			
Methyl Cyclohexane	8.33	1.0	µg/L	10.0		83.3	70-130			
Methylene Chloride	7.88	5.0	µg/L	10.0		78.8	70-130			
4-Methyl-2-pentanone (MIBK)	72.4	10	µg/L	100		72.4	70-160			V-05 †
Naphthalene	7.09	2.0	µg/L	10.0		70.9	40-130			V-05 †
n-Propylbenzene	9.62	1.0	µg/L	10.0		96.2	70-130			
Styrene	10.2	1.0	µg/L	10.0		102	70-130			
1,1,1,2-Tetrachloroethane	9.92	1.0	µg/L	10.0		99.2	70-130			
1,1,2,2-Tetrachloroethane	9.34	0.50	µg/L	10.0		93.4	70-130			
Tetrachloroethylene	9.67	1.0	µg/L	10.0		96.7	70-130			
Tetrahydrofuran	7.51	10	µg/L	10.0		75.1	70-130			
Toluene	10.0	1.0	µg/L	10.0		100	70-130			
1,2,3-Trichlorobenzene	9.02	5.0	µg/L	10.0		90.2	70-130			
1,2,4-Trichlorobenzene	8.31	1.0	µg/L	10.0		83.1	70-130			
1,3,5-Trichlorobenzene	9.62	1.0	µg/L	10.0		96.2	70-130			
1,1,1-Trichloroethane	8.59	1.0	µg/L	10.0		85.9	70-130			
1,1,2-Trichloroethane	10.1	1.0	µg/L	10.0		101	70-130			
Trichloroethylene	9.35	1.0	µg/L	10.0		93.5	70-130			
Trichlorofluoromethane (Freon 11)	7.45	2.0	µg/L	10.0		74.5	70-130			
1,2,3-Trichloropropane	11.5	2.0	µg/L	10.0		115	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 B357752 - SW-846 5030B</b>										
<b>LCS (B357752-BS1)</b>										
Prepared & Analyzed: 11/10/23										
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	7.88	1.0	µg/L	10.0		78.8	70-130			
1,2,4-Trimethylbenzene	9.32	1.0	µg/L	10.0		93.2	70-130			
1,3,5-Trimethylbenzene	9.63	1.0	µg/L	10.0		96.3	70-130			
Vinyl Chloride	8.89	2.0	µg/L	10.0		88.9	40-160			†
m+p Xylene	19.2	2.0	µg/L	20.0		96.2	70-130			
o-Xylene	9.49	1.0	µg/L	10.0		94.9	70-130			
Xylenes (total)	28.7	1.0	µg/L	30.0		95.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	20.4		µg/L	25.0		81.4	70-130			
Surrogate: Toluene-d8	25.3		µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	24.1		µg/L	25.0		96.3	70-130			
<b>LCS Dup (B357752-BSD1)</b>										
Prepared & Analyzed: 11/10/23										
Acetone	69.5	50	µg/L	100		69.5 *	70-160	2.43	25	L-04, V-05 †
Acrylonitrile	8.76	5.0	µg/L	10.0		87.6	70-130	9.82	25	
tert-Amyl Methyl Ether (TAME)	9.28	0.50	µg/L	10.0		92.8	70-130	1.41	25	
Benzene	10.3	1.0	µg/L	10.0		103	70-130	1.67	25	
Bromobenzene	9.76	1.0	µg/L	10.0		97.6	70-130	2.07	25	
Bromochloromethane	9.34	1.0	µg/L	10.0		93.4	70-130	0.107	25	
Bromodichloromethane	9.02	0.50	µg/L	10.0		90.2	70-130	4.54	25	
Bromoform	8.38	1.0	µg/L	10.0		83.8	70-130	3.40	25	
Bromomethane	11.0	2.0	µg/L	10.0		110	40-160	5.02	25	V-20 †
2-Butanone (MEK)	80.3	20	µg/L	100		80.3	40-160	2.37	25	†
tert-Butyl Alcohol (TBA)	65.6	20	µg/L	100		65.6	40-160	1.16	25	V-05 †
n-Butylbenzene	9.07	1.0	µg/L	10.0		90.7	70-130	1.67	25	
sec-Butylbenzene	9.20	1.0	µg/L	10.0		92.0	70-130	1.53	25	
tert-Butylbenzene	9.23	1.0	µg/L	10.0		92.3	70-130	2.75	25	
tert-Butyl Ethyl Ether (TBEE)	8.79	0.50	µg/L	10.0		87.9	70-130	1.13	25	
Carbon Disulfide	79.9	5.0	µg/L	100		79.9	70-130	1.84	25	
Carbon Tetrachloride	8.52	5.0	µg/L	10.0		85.2	70-130	0.825	25	
Chlorobenzene	10.9	1.0	µg/L	10.0		109	70-130	2.97	25	
Chlorodibromomethane	9.22	0.50	µg/L	10.0		92.2	70-130	3.98	25	
Chloroethane	8.23	2.0	µg/L	10.0		82.3	70-130	3.35	25	
Chloroform	9.23	2.0	µg/L	10.0		92.3	70-130	0.761	25	
Chloromethane	7.02	2.0	µg/L	10.0		70.2	40-160	2.74	25	†
2-Chlorotoluene	10.1	1.0	µg/L	10.0		101	70-130	4.45	25	
4-Chlorotoluene	9.89	1.0	µg/L	10.0		98.9	70-130	3.39	25	
1,2-Dibromo-3-chloropropane (DBCP)	7.63	5.0	µg/L	10.0		76.3	70-130	1.82	25	V-05
1,2-Dibromoethane (EDB)	9.78	0.50	µg/L	10.0		97.8	70-130	1.96	25	
Dibromomethane	9.48	1.0	µg/L	10.0		94.8	70-130	2.46	25	
1,2-Dichlorobenzene	10.5	1.0	µg/L	10.0		105	70-130	0.768	25	
1,3-Dichlorobenzene	10.4	1.0	µg/L	10.0		104	70-130	3.03	25	
1,4-Dichlorobenzene	10.4	1.0	µg/L	10.0		104	70-130	7.37	25	
<b>trans-1,4-Dichloro-2-butene</b>	6.67	2.0	µg/L	10.0		66.7 *	70-130	0.00	25	L-04, V-05
Dichlorodifluoromethane (Freon 12)	6.16	2.0	µg/L	10.0		61.6	40-160	1.13	25	†
1,1-Dichloroethane	9.02	1.0	µg/L	10.0		90.2	70-130	1.34	25	
1,2-Dichloroethane	8.26	1.0	µg/L	10.0		82.6	70-130	1.46	25	
1,1-Dichloroethylene	7.68	1.0	µg/L	10.0		76.8	70-130	2.24	25	
cis-1,2-Dichloroethylene	8.67	1.0	µg/L	10.0		86.7	70-130	0.231	25	
trans-1,2-Dichloroethylene	8.27	1.0	µg/L	10.0		82.7	70-130	4.58	25	
1,2-Dichloropropane	9.80	1.0	µg/L	10.0		98.0	70-130	1.85	25	
1,3-Dichloropropane	9.66	0.50	µg/L	10.0		96.6	70-130	1.88	25	
2,2-Dichloropropane	6.97	1.0	µg/L	10.0		69.7	40-130	1.15	25	V-05 †

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B357752 - SW-846 5030B</b>										
<b>LCS Dup (B357752-BSD1)</b>										
Prepared & Analyzed: 11/10/23										
1,1-Dichloropropene	9.07	2.0	µg/L	10.0		90.7	70-130	1.11	25	
cis-1,3-Dichloropropene	9.52	0.50	µg/L	10.0		95.2	70-130	2.66	25	
trans-1,3-Dichloropropene	9.13	0.50	µg/L	10.0		91.3	70-130	4.71	25	
Diethyl Ether	8.78	2.0	µg/L	10.0		87.8	70-130	1.61	25	
Diisopropyl Ether (DIPE)	8.45	0.50	µg/L	10.0		84.5	70-130	1.18	25	
1,4-Dioxane	82.7	50	µg/L	100		82.7	40-130	10.4	50	† ‡
Ethylbenzene	10.0	1.0	µg/L	10.0		100	70-130	3.35	25	
Hexachlorobutadiene	10.1	0.60	µg/L	10.0		101	70-130	2.80	25	
2-Hexanone (MBK)	74.5	10	µg/L	100		74.5	70-160	2.62	25	V-05 †
Isopropylbenzene (Cumene)	9.56	1.0	µg/L	10.0		95.6	70-130	1.37	25	
p-Isopropyltoluene (p-Cymene)	9.61	1.0	µg/L	10.0		96.1	70-130	4.25	25	
Methyl Acetate	8.90	1.0	µg/L	10.0		89.0	70-130	1.24	25	
Methyl tert-Butyl Ether (MTBE)	8.69	1.0	µg/L	10.0		86.9	70-130	1.04	25	
Methyl Cyclohexane	8.42	1.0	µg/L	10.0		84.2	70-130	1.07	25	
Methylene Chloride	8.00	5.0	µg/L	10.0		80.0	70-130	1.51	25	
4-Methyl-2-pentanone (MIBK)	74.4	10	µg/L	100		74.4	70-160	2.75	25	V-05 †
Naphthalene	7.23	2.0	µg/L	10.0		72.3	40-130	1.96	25	V-05 †
n-Propylbenzene	9.74	1.0	µg/L	10.0		97.4	70-130	1.24	25	
Styrene	10.2	1.0	µg/L	10.0		102	70-130	0.393	25	
1,1,1,2-Tetrachloroethane	10.2	1.0	µg/L	10.0		102	70-130	3.17	25	
1,1,2,2-Tetrachloroethane	9.46	0.50	µg/L	10.0		94.6	70-130	1.28	25	
Tetrachloroethylene	9.79	1.0	µg/L	10.0		97.9	70-130	1.23	25	
Tetrahydrofuran	8.15	10	µg/L	10.0		81.5	70-130	8.17	25	
Toluene	9.93	1.0	µg/L	10.0		99.3	70-130	0.702	25	
1,2,3-Trichlorobenzene	9.33	5.0	µg/L	10.0		93.3	70-130	3.38	25	
1,2,4-Trichlorobenzene	8.43	1.0	µg/L	10.0		84.3	70-130	1.43	25	
1,3,5-Trichlorobenzene	9.95	1.0	µg/L	10.0		99.5	70-130	3.37	25	
1,1,1-Trichloroethane	8.60	1.0	µg/L	10.0		86.0	70-130	0.116	25	
1,1,2-Trichloroethane	10.3	1.0	µg/L	10.0		103	70-130	1.76	25	
Trichloroethylene	9.47	1.0	µg/L	10.0		94.7	70-130	1.28	25	
Trichlorofluoromethane (Freon 11)	7.56	2.0	µg/L	10.0		75.6	70-130	1.47	25	
1,2,3-Trichloropropane	11.7	2.0	µg/L	10.0		117	70-130	1.72	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	8.01	1.0	µg/L	10.0		80.1	70-130	1.64	25	
1,2,4-Trimethylbenzene	9.36	1.0	µg/L	10.0		93.6	70-130	0.428	25	
1,3,5-Trimethylbenzene	9.87	1.0	µg/L	10.0		98.7	70-130	2.46	25	
Vinyl Chloride	9.07	2.0	µg/L	10.0		90.7	40-160	2.00	25	†
m+p Xylene	19.9	2.0	µg/L	20.0		99.4	70-130	3.27	25	
o-Xylene	9.69	1.0	µg/L	10.0		96.9	70-130	2.09	25	
Xylenes (total)	29.6	1.0	µg/L	30.0		98.6	70-130	2.88	25	
Surrogate: 1,2-Dichloroethane-d4	20.2		µg/L	25.0		81.0	70-130			
Surrogate: Toluene-d8	25.3		µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	24.0		µg/L	25.0		96.0	70-130			

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**QUALITY CONTROL**
**Petroleum Hydrocarbons Analyses - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B357757 - SW-846 3510C</b>									
<b>Blank (B357757-BLK1)</b>					Prepared: 11/10/23 Analyzed: 11/11/23				
TPH (C9-C36)	ND	0.20	mg/L						
Surrogate: 2-Fluorobiphenyl	0.0894		mg/L	0.100		89.4	40-140		
<b>LCS (B357757-BS1)</b>					Prepared: 11/10/23 Analyzed: 11/11/23				
TPH (C9-C36)	0.662	0.20	mg/L	1.00		66.2	40-140		
Surrogate: 2-Fluorobiphenyl	0.0814		mg/L	0.100		81.4	40-140		
<b>LCS Dup (B357757-BSD1)</b>					Prepared: 11/10/23 Analyzed: 11/11/23				
TPH (C9-C36)	0.681	0.20	mg/L	1.00		68.1	40-140	2.85	30
Surrogate: 2-Fluorobiphenyl	0.0915		mg/L	0.100		91.5	40-140		

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**QUALITY CONTROL**
**Metals Analyses (Dissolved) - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B357977 - SW-846 3005A Dissolved</b>										
<b>Blank (B357977-BLK3)</b>				Prepared: 11/13/23 Analyzed: 11/16/23						
Lead	ND	0.50	µg/L							
<b>LCS (B357977-BS3)</b>				Prepared: 11/13/23 Analyzed: 11/16/23						
Lead	544	5.0	µg/L	500		109	80-120			
<b>LCS Dup (B357977-BSD3)</b>				Prepared: 11/13/23 Analyzed: 11/16/23						
Lead	537	5.0	µg/L	500		107	80-120	1.32	20	
<b>Duplicate (B357977-DUP3)</b>				<b>Source: 23K0944-14</b>			Prepared: 11/13/23 Analyzed: 11/16/23			
Lead	ND	0.50	µg/L		ND			NC	20	
<b>Matrix Spike (B357977-MS3)</b>				<b>Source: 23K0944-14</b> Prepared: 11/13/23 Analyzed: 11/16/23						
Lead	551	5.0	µg/L	500	ND	110	75-125			

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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 verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-20	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.



**CERTIFICATIONS**
**Certified Analyses included in this Report**

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

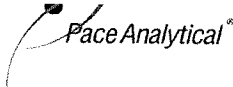
**CERTIFICATIONS**
**Certified Analyses included in this Report**

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

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2024
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2024
NC	North Carolina Div. of Water Quality	652	12/31/2023
ME	State of Maine	MA00100	06/9/2025
VA	Commonwealth of Virginia	460217	12/14/2023

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TF

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39 Spruce Street  
East Longmeadow, MA 01028

Doc # 381 Rev 4\_01/08/2020

CHAIN OF CUSTODY RECORD

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Aptim Environmental & Infrastructure, LLC  
Address: 150 Royal Street, Canton, MA 02021  
Phone: 617-794-1767  
Project Name: Textron Providence  
Project Location: 333 Adelaide Avenue, Providence, RI  
Project Number: 631010697 - 009  
Project Manager: Catherine Joe  
Pace Analytical Quote Name/Number: PO 216859  
Invoice Recipient: Catherine Joe  
Sampled By: Dan Leahy 617-212-8276

Requested Turnaround Time: 7-Day [ ], 10-Day [x]  
PFAS 10-Day (std) [ ] Due Date: [ ]  
Rush Approval Required: 1-Day [ ], 3-Day [ ], 2-Day [ ], 4-Day [ ]  
Data Delivery: Format: PDF [x], EXCEL [ ]  
Other: Equis Format [ ]  
CLP Like Data Pkg Required: [ ]  
Email To: catherine.joe@aptim.com  
Fax To #: [ ]

ANALYSIS REQUESTED  
Field Filtered [x]  
Lab to Filter [ ]  
Orthophosphate Samples: Field Filtered [ ], Lab to Filter [ ]  
PCB ONLY: SOXHLET [ ], NON SOXHLET [ ]  
EPA 8260C (VOCs) [ ]  
Total Petroleum Hydrocarbons [ ]  
Dissolved Lead [ ]

Preservation Code [ ]  
Courier Use Only  
Total Number Of:  
VIALS [ ]  
GLASS [ ]  
PLASTIC [ ]  
BACTERIA [ ]  
ENCORE [ ]  
Glassware in the fridge? Y / N [ ]  
Glassware in freezer? Y / N [ ]  
Prepackaged Cooler? Y / N [ ]

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	COMP/GRAB	Matrix Code	Conc Code	VIALS	GLASS	PLASTIC	BACTERIA	ENCORE	EPA 8260C (VOCs)	Total Petroleum Hydrocarbons	Dissolved Lead
1	MW-2075-20231005	11/5/23	0940	GRAB	GW	U	2					U		
2	MW-207D-20231105	11/5/23	1000	GRAB	GW		2					U		
3	MW-2025-20231105	11/5/23	1030	GRAB	GW		2					U		
4	MW-202D-20231105	11/5/23	1100	GRAB	GW		2					U		
5	MW-101D-20231105	11/5/23	0745	GRAB	GW		2					U		
6	MW-101D-20231105	11/5/23	0745	GRAB	GW		2					U		
7	MW-201D-20231105	11/5/23	0815	GRAB	GW		2					U		
8	MW-216S-20231105	11/5/23	1200	GRAB	GW		2					U		
9	MW-216D-20231105	11/5/23	1230	GRAB	GW		2					U		
10	MW-217S-20231105	11/5/23	1320	GRAB	GW		2					U		

\*Pace Analytical is not responsible for missing samples from prepacked coolers

Matrix Codes:  
GW = Ground Water  
WW = Waste Water  
DW = Drinking Water  
A = Air  
S = Soil  
SL = Sludge  
SOL = Solid  
O = Other (please define)

Relinquished by: (signature) [Signature]  
Date/Time: 11/7/23 0600

Client Comments:

Received by: (signature) [Signature]  
Date/Time: 11/7/23 1400

Relinquished by: (signature) [Signature]  
Date/Time: 11/7/23 1230

Detection Limit Requirements: MA [ ]  
Special Requirements: MA MCP Required [ ], MCP Certification Form Required [ ], CT RCP Required [ ], RCP Certification Form Required [ ], MA State DW Required [ ]

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

Received by: (signature) [Signature]  
Date/Time: 11/7/23 1230

Relinquished by: (signature) [Signature]  
Date/Time: [ ]

Received by: (signature) [Signature]  
Date/Time: [ ]

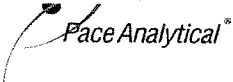
Relinquished by: (signature) [Signature]  
Date/Time: [ ]

Project Entity: Government [ ], Federal [ ], City [ ], Municipality [ ], 21 J [ ], Brownfield [ ], MWRA [ ], School [ ], MBTA [ ], WRTA [ ]

Other: Chromatogram [ ], AIHA-LAP, LLC [ ]

Lab Comments:

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



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39 Spruce Street  
East Longmeadow, MA 01028

Doc # 381 Rev 4\_01/08/2020

CHAIN OF CUSTODY RECORD

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/  
Company Name: Aptim Environmental & Infrastructure, LLC  
Address: 150 Royal Street, Canton, MA 02021  
Phone: 617-794-1767  
Project Name: Textron Providence  
Project Location: 333 Adelaide Avenue, Providence, RI  
Project Number: 631010697 - 009  
Project Manager: Catherine Joe  
Pace Analytical Quote Name/Number: PO 216859  
Invoice Recipient: Catherine Joe  
Sampled By: Dan Leahy 617-212-8276

Requested Turnaround Time		Dissolved Metals Samples	
7-Day <input type="checkbox"/>	10-Day <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Field Filtered	<input type="checkbox"/> Lab to Filter
PFAS 10-Day (std) <input type="checkbox"/>	Due Date:	<input type="checkbox"/> Field Filtered	<input type="checkbox"/> Lab to Filter
Rush-Approval Required		Orthophosphate Samples	
1-Day <input type="checkbox"/>	3-Day <input type="checkbox"/>	<input type="checkbox"/> Field Filtered	<input type="checkbox"/> Lab to Filter
2-Day <input type="checkbox"/>	4-Day <input type="checkbox"/>	<input type="checkbox"/> Field Filtered	<input type="checkbox"/> Lab to Filter
Data Delivery			
Format: PDF <input checked="" type="checkbox"/>	EXCEL <input type="checkbox"/>	<b>PCB ONLY</b>	
Other: Equis Format		SOXHLET <input type="checkbox"/>	
CLP Like Data Pkg Required: <input type="checkbox"/>		NON SOXHLET <input type="checkbox"/>	
Email To: catherine.joe@aptim.com			
Fax To #:			

ANALYSIS REQUESTED										
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EPA 8760C (VOCs)										
Total Petroleum Hydrocarbons										
Dissolved Lead										

<sup>2</sup> Preservation Code  
Courier Use Only  
Total Number Of:  
VIALS \_\_\_\_\_  
GLASS \_\_\_\_\_  
PLASTIC \_\_\_\_\_  
BACTERIA \_\_\_\_\_  
ENCORE \_\_\_\_\_  
Glassware in the fridge? Y / N  
Glassware in freezer? Y / N  
Prepackaged Cooler? Y / N  
\*Pace Analytical is not responsible for missing samples from prepacked coolers

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	COMP/GRAB	<sup>1</sup> Matrix Code	Conc Code	VIALS	GLASS	PLASTIC	BACTERIA	ENCORE	EPA 8760C (VOCs)	Total Petroleum Hydrocarbons	Dissolved Lead
11 ✓	MW-217D-20231105	11/5/23	1355	GRAB	GW	U	3					2		
12 ✓	CW-6-20231105	11/5/23	1430	GRAB	GW			2					2	
13 ✓	CW-6-20231105 DUP	11/5/23	1430	GRAB	GW			2					2	
14 ✓	MW-109D-20231105	11/5/23	1500	GRAB	GW		2		1			2		1
15 ✓	VGA-3-20231105	11/5/23	1550	GRAB	GW		2		1			2		1
16 ✓	VGA-3-20231105 DUP	11/5/23	1550	GRAB	GW				1					1
17 ✓	MW-209D-20231106	11/6/23	0650	GRAB	GW		2					2		
18 ✓	MW-112-20231106	11/6/23	0745	GRAB	GW		2					2		
19 ✓	MW-218D-20231106	11/6/23	0830	GRAB	GW		2							
20 ✓	MW-218S-20231106	11/6/23	0900	GRAB	GW		2							

<sup>1</sup> Matrix Codes:  
GW = Ground Water  
WW = Waste Water  
DW = Drinking Water  
A = Air  
S = Soil  
SL = Sludge  
SOL = Solid  
O = Other (please define)

Relinquished by: (signature) *[Signature]*  
Date/Time: 11/7/23 1400

Client Comments:

Received by: (signature) *[Signature]*  
Date/Time: 11/7/23 1730

Detection Limit Requirements	Special Requirements
MA <input type="checkbox"/>	MA MCP Required <input type="checkbox"/>
	MCP Certification Form Required <input type="checkbox"/>
	CT RCP Required <input type="checkbox"/>
	RCP Certification Form Required <input type="checkbox"/>
	MA State DW Required <input type="checkbox"/>
Other: <input type="checkbox"/>	PWSID # _____

Relinquished by: (signature) *[Signature]*  
Date/Time: 11/7/23 1730

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

Received by: (signature) *[Signature]*  
Date/Time: 11/7/23 1730

Project Entity		Other	
Government <input type="checkbox"/>	Municipality <input type="checkbox"/>	<input type="checkbox"/> Chromatogram	
Federal <input type="checkbox"/>	21 J <input type="checkbox"/>	<input type="checkbox"/> AIHA-LAP, LLC	
City <input type="checkbox"/>	Brownfield <input type="checkbox"/>		
	MWRA <input type="checkbox"/>		
	School <input type="checkbox"/>		
	MBTA <input type="checkbox"/>		
	WRTA <input type="checkbox"/>		

<sup>2</sup> Preservation Codes:  
✓ = Iced  
✓ = HCL  
M = Methanol  
✓ = Nitric Acid  
S = Sulfuric Acid  
B = Sodium Bisulfate  
X = Sodium Hydroxide  
T = Sodium Thiosulfate  
O = Other (please define)

Lab Comments:

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39 Spruce Street  
East Longmeadow, MA 01028

Doc # 381 Rev 4\_01/08/2020

CHAIN OF CUSTODY RECORD

Contact: <https://www.pacelabs.com/contact-us/contact-environmental-sciences/>

Company Name: Aptim Environmental & Infrastructure, LLC  
Address: 150 Royal Street, Canton, MA 02021  
Phone: 617-794-1767  
Project Name: Textron Providence  
Project Location: 333 Adelaide Avenue, Providence, RI  
Project Number: 631010697 - 009  
Project Manager: Catherine Joe  
Pace Analytical Quote Name/Number: PO 216859  
Invoice Recipient: Catherine Joe  
Sampled By: Dan Leahy 617-212-8276

Requested Turnaround Time				Dissolved Lead Samples			
7-Day	<input type="checkbox"/>	10-Day	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Field Filtered	<input type="checkbox"/>	Lab to Filter
PFAS 10-Day (std)	<input type="checkbox"/>	Due Date:		<input type="checkbox"/>			
Rush-Approval Required				Orthophosphate Samples			
1-Day	<input type="checkbox"/>	3-Day	<input type="checkbox"/>	<input type="checkbox"/>	Field Filtered	<input type="checkbox"/>	Lab to Filter
2-Day	<input type="checkbox"/>	4-Day	<input type="checkbox"/>	<input type="checkbox"/>			
Data Delivery				PCB ONLY			
Format:	PDF <input checked="" type="checkbox"/>	EXCEL	<input type="checkbox"/>				
Other:	Equis Format			SOXHLET <input type="checkbox"/>			
CLP Like Data Pkg Required:	<input type="checkbox"/>			NON SOXHLET <input type="checkbox"/>			
Email To:	catherine.joe@aptim.com						
Fax To #:							

ANALYSIS REQUESTED									
EPA 8260C (VOCs)	Total Petroleum Hydrocarbons	Dissolved Lead							
H	I	N							

<sup>2</sup> Preservation Code

Courier Use Only  
Total Number Of:  
VIALS \_\_\_\_\_  
GLASS \_\_\_\_\_  
PLASTIC \_\_\_\_\_  
BACTERIA \_\_\_\_\_  
ENCORE \_\_\_\_\_

Glassware in the fridge? Y / N  
Glassware in freezer? Y / N  
Prepackaged Cooler? Y / N

\*Pace Analytical is not responsible for missing samples from prepacked coolers

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	COMP/GRAB	Matrix Code	Conc Code	VIALS	GLASS	PLASTIC	BACTERIA	ENCORE
21	CW-1-20231106	11/6/23 0920	0920	GRAB	GW	U	2				
22	CW-2-20231106	11/6/23 0940	0940	GRAB	GW		2				
23	MW-116D-20231106	11/6/23 1015	1015	GRAB	GW		2				
24	MW-116S-20231106	11/6/23 1040	1040	GRAB	GW		2				

<sup>1</sup> Matrix Codes:  
GW = Ground Water  
WW = Waste Water  
DW = Drinking Water  
A = Air  
S = Soil  
SL = Sludge  
SOL = Solid  
O = Other (please define)

Relinquished by: (signature) *[Signature]* Date/Time: 11/7/23 0600  
Received by: (signature) *[Signature]* Date/Time: 11/7/23 1400

Client Comments:

<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)

Relinquished by: (signature) *[Signature]* Date/Time: 11/7/23 1330  
Received by: (signature) *[Signature]* Date/Time: 11/7/23 1330

Detection Limit Requirements	Special Requirements
MA <input type="checkbox"/>	MA MCP Required <input type="checkbox"/>
	MCP Certification Form Required <input type="checkbox"/>
	CT RCP Required <input type="checkbox"/>
	RCP Certification Form Required <input type="checkbox"/>
Other: <input type="checkbox"/>	MA State DW Required <input type="checkbox"/>

Please use the following codes to indicate possible sample concentration within the Conc Code column above:  
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature) *[Signature]* Date/Time: 11/7/23 321  
Received by: (signature) *[Signature]* Date/Time: 11/7/23 321

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

Other:  Chromatogram  AIHA-LAP, LLC

Lab Comments:

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

	DC#_ Title: <b>ENV-FRM-ELON-0001 v07_Sample Receiving Checklist</b>
	Effective Date: <b>07/13/2023</b>

### Log In Back-Sheet

Client Apria Environmental and Infrastructure Begin Sample Receipt Checklist - (Rejection Criteria Listing Using Acceptance Policy) Any False statement will be brought to the attention of the Client - True or False

Project Textory Providence

MCP/RCP Required N/A

Deliverable Package Requirement N/A

Location 333 Atlantic Avenue, Providence

PWS/IDH (When Applicable) N/A

Arrival Method:

Courier  Fed Ex  Walk In  Other

Received By / Date / Time MEM 11/7/23 1730

Back-Sheet By / Date / Time LA 11/8/23 756

Temperature Method GA # 5

Temp   $\leq 6^\circ\text{C}$  Actual Temperature 2.4

Rush Samples: Yes /  No / Notify \_\_\_\_\_

Short Hold: Yes /  No / Notify \_\_\_\_\_

**Notes regarding Samples/COC outside of SOP:**

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Received on Ice	<input checked="" type="checkbox"/>	TRUE	<input type="checkbox"/>	FALSE
Received in Cooler	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
Custody Seal: DATE		TIME	<input type="checkbox"/>	<input checked="" type="checkbox"/>
COC Relinquished	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
COC/Samples Labels Agree	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
All Samples in Good Condition	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
Samples Received within Holding Time	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
Is there enough Volume	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
Proper Media/Container Used	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
Splitting Samples Required	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
MS/MSD	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
Trip Blanks	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
Lab to Filters	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
COC Leible	<input checked="" type="checkbox"/>		<input type="checkbox"/>	

COC Included: (Check all included)

Client  Analysis  Sampler Name

Project  IDs  Collection Date/Time

All Samples Proper pH: N/A

**Additional Container Notes**


*Note: West Virginia requires all samples to have their temperature taken. Note any outliers.*

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**DC#\_Title: ENV-FRM-ELON-0001 v07\_Sample Receiving Checklist**  
 Effective Date: 07/13/2023

21-24

		20		
		19		
		18		
		17		
		16		
		15		
		14		
		13		
		12	T	
		11		
		10		
		9		
		8		
		7		
		6		
		5		
		4		
		3		
		2		
		1		
			16oz Amb/Clear	Sample
			8oz Amb/Clear	
			4oz Amb/Clear	
			2oz Amb/Clear	Soils Jars (Grle Amb/Clear)
			Unpreserved	
			HCL	
			Sulfuric	
			Sulfuric	
			Phosphoric	
			HCl	
			Unpreserved	
			100ml	
			1 Liter	
			500ml	Ambers
			250ml	
			Unpreserved	Plastics
			Sulfuric	
			Unpreserved	
			Sulfuric	
			Unpreserved	
			Trizma	
			Sulfuric	
			Nitric	
			NaOH	
			Ammonium Acetate	
			NaOH/Zinc	
			Unpreserved	
			HCl	
			MeOH	
			D.I. Water	
			Bisulfate	
			Col/Bact	
			Other/Fill in	