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June 14, 2016

Project 130274

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

Subject: Status Report: December 2015 through May 2016 Activities  
Former Gorham Manufacturing Facility  
333 Adelaide Avenue, Providence, RI  
Site Remediation Case No. 97-030

Dear Mr. Martella:

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

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

This status report describes groundwater monitoring activities conducted at the site by CB&I. This report includes results of groundwater sampling and analysis conducted in December 2015 and January, February, March, April and May of 2016.

## FIELD ACTIVITIES

### Limited VOC Sampling Activities December 2015 and January, February, March and April 2016

Limited groundwater gauging and sampling was conducted on December 3, 2015 and January 3, February 23, March 21, and April 20, 2016. Monitoring wells MW-112, MW-116D, and MW-116S were sampled for volatile organic compound (VOC) analysis. Groundwater elevation results for the gauging of these wells are included in **Table 2**.

### **Groundwater Sampling**

Groundwater samples were collected for VOC analysis (EPA Method 8260C) from the three monitoring wells (MW-112, MW-116D, and MW-116S) on December 3, 2015 and January 3, February 23, March 21, and April 20, 2016. Groundwater samples were delivered to Con-Test Analytical Laboratory in East Longmeadow, Massachusetts for analysis.

### **Groundwater Sampling Activities May 2016**

The monitoring wells that comprise the groundwater monitoring program were monitored for field parameters and sampled for analysis on May 4 and May 5, 2016.

### **Monitoring Activities**

Field parameters were measured in treatment area wells and compliance wells on May 4 and 5, 2016. 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. Elevation and field parameter results are presented in **Table 1**.

### **Groundwater Sampling**

On May 4 and 5, 2016 groundwater samples were collected for analysis for VOCs (EPA Method 8260C) from 22 monitoring wells within and around the treatment area, including the compliance wells. One duplicate sample was collected from MW-101S (MW-101S DUP) for VOC analysis. One sample was collected for total petroleum hydrocarbon (TPH) analysis (modified EPA Method 8015 C) from monitoring well CW-6. Samples were also collected for lead analysis (EPA Method 6020A-B) from monitoring wells MW-109D and GZA-3. One duplicate sample was also collected from GZA-3 (GZA-3 DUP) for lead analysis. Groundwater samples were delivered to Con-Test Analytical Laboratory in East Longmeadow, Massachusetts for analysis.

### **SUMMARY OF ANALYTICAL DATA**

A summary of the analytical data associated with the groundwater sampling conducted on December 3, 2015 and January 3, February 23, March 21, April 20, May 4 and May 5, 2016 is contained in **Table 3**. A copy of each laboratory analytical report is also attached to this report. All measured PCE concentrations were below the treatment goal of 7,700 µg/L in all wells sampled during these sampling events except for well MW-112 which had a PCE detection of 10,000 µg/L on December 3, 2015. During this reporting period the reported PCE concentrations in well MW-112 were: 10,000 µg/L on December 3, 2015, 5,900 µg/L on January 3, 2016, 2,500 µg/L on February 23, 2016, 4,400 µg/L on March 21, 2016, 1,800 µg/L on April 20, 2016 and 330 µg/L on May 4, 2016.

A summary of the compliance well results is contained in **Table 4**. The results for the compliance well sampling indicate that exceedances of the compliance standard occurred for the Adelaide Avenue well

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MW-112 for PCE on December 3, 2015 and January 3, February 23, March 21, April 20, May 4, 2016 and MW-209D on May 4, 2016. (Note that due to sample dilution by the laboratory, the analytical reporting limits for vinyl chloride for wells MW-112 and MW-209D were above the compound specific compliance standard for most of the sampling results collected.)

## FUTURE ACTIVITIES

Future limited sampling will be conducted in June, July, August, September and October 2016 and the full sampling event will be conducted in November 2016.

If you have any questions regarding this report, please do not hesitate to call.

Sincerely,



Brian J. Cote, PG, LSP

Senior Project Manager

CB&I Environmental & Infrastructure, Inc.

Please Reply to: Brian J. Cote

Phone: 617-589-6175

E-Mail Address: [brian.cote@cbi.com](mailto:brian.cote@cbi.com)

Enclosures:

Table 1 – Summary Field Parameters

Table 2 – Groundwater Elevation Data

Table 3 – Groundwater Analytical Results Detected Compounds – December 2015 – May 2016

Table 4 – Groundwater Analytical Results in Compliance Wells – December 2015 – May 2016

Figure 1 – Site Plan

Figure 2 – Injection Well Locations

Attachment A - Laboratory Analytical Reports

cc:     Craig Roy, RIDEM OWR - email  
          Greg Simpson, Textron - email  
          Dave Heislein, AMEC - email  
          Robert Azar, Providence Redevelopment Agency - email  
          Jeff Morgan, Stop & Shop - email  
          Ronald Ruth, Sherin and Lodgen - email

### CERTIFICATIONS

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

I, Brian J. Cote, as an authorized representative of CB&I Environmental & Infrastructure, Inc., and the person responsible for the preparation of this Status Report dated June 14, 2016, certify that the information contained in this report is complete and accurate to the best of my knowledge.



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Brian J. Cote  
Senior Project Manager

6/14/16

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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Gregory L. Simpson  
Project Manager

6/14/16

Date:

## **TABLES**

**Table 1**  
**Summary Field Parameters**  
**December 2015 - May 2016**

**Former Gorham Manufacturing Facility**  
**Providence, Rhode Island**

Well ID	DATE	pH	Temperature (deg. C°)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)
MW-101D	5/4/2016	6.03	15.3	0.0405	1.26	53.2
MW-101S	5/4/2016	6.19	15.9	0.19	2.01	33
MW-112	5/4/2016	5.62	14.2	2.033	4.47	186.2
MW-116D	5/5/2016	4.98	15	0.432	2.88	178.1
MW-116S	5/5/2016	5.61	16.2	0.112	6.53	166.7
MW-201D	5/4/2016	6.27	15.9	0.805	1.5	79.1
MW-202D	5/4/2016	5.95	15.9	0.4262	0.26	93.5
MW-202S	5/4/2016	6.02	15.8	0.6351	0.77	102.7
MW-207D	5/4/2016	6.38	15.6	0.327	1.82	-23.4
MW-207S	5/4/2016	6.47	15.1	0.5966	3.19	233.2
MW-209D	5/4/2016	6.6	15	0.6114	1.32	160.2
MW-216D	5/5/2016	6.4	15.5	0.5029	0.88	-15.5
MW-216S	5/5/2016	6.4	15.6	1.577	0.91	-80.4
MW-217D	5/5/2016	6.11	15.2	0.511	0.71	86.5
MW-217S	5/5/2016	6.32	15.5	0.833	0.42	1.4
MW-218D	5/5/2016	5.42	14.9	0.572	0.24	136.7
MW-218S	5/5/2016	5.82	15.3	0.841	1.04	172.4

Notes:

C° = degrees Celsius

mS/cm = millisiemens per centimeter

mg/L = milligrams per liter

mV = milli volts

**TABLE 2**  
**GROUNDWATER ELEVATION DATA**  
(12/03/15 - 05/05/16)

05/16/16

**Former Gorham Manufacturing Facility  
Providence, Rhode Island**

Location	Date	Reference Elevation (Feet)	Depth to Water (Feet)	Depth to LNAPL (Feet)	LNAPL Thickness (Feet)	Groundwater Elevation (Feet)	Notes
CW-01	05/04/16	99.52	26.31	--	--	73.21	DTB = 54.55'
CW-02	05/04/16	98.86	25.45	--	--	73.41	DTB = 54.44'
CW-06	05/04/16	99.52	24.33	--	--	75.19	DTB = 33.27'
GZA-3	05/04/16	NA	17.43	--	--	NA	DTB = 22.10'
MW-101D	05/04/16	98.91	25.86	--	--	73.05	DTB = 46.22'
MW-101S	05/04/16	98.90	25.73	--	--	73.17	DTB = 28.35'
MW-109D	05/04/16	NA	19.48	--	--	NA	DTB = 74.80'
MW-112	12/03/15	100.63	27.59	--	--	73.04	DTB = 34.65'
MW-112	01/03/16	100.63	27.35	--	--	73.28	DTB = 34.12'
MW-112	02/23/16	100.63	26.50	--	--	74.13	DTB = 34.65'
MW-112	03/21/16	100.63	26.53	--	--	74.10	DTB = 34.73'
MW-112	04/20/16	100.63	26.30	--	--	74.33	DTB = 34.72'
MW-112	05/04/16	100.63	27.55	--	--	73.08	DTB = 34.61'
MW-116D	12/03/15	98.92	25.52	--	--	73.40	DTB = 44.26'
MW-116D	01/03/16	98.92	25.57	--	--	73.35	DTB = 44.41'
MW-116D	02/23/16	98.92	24.80	--	--	74.12	DTB = 44.40'
MW-116D	03/21/16	98.92	24.80	--	--	74.12	DTB = 44.35'
MW-116D	04/20/16	98.92	24.69	--	--	74.23	DTB = 44.35'
MW-116D	05/05/16	98.92	25.52	--	--	73.40	DTB = 44.21'
MW-116S	12/03/15	99.40	NM	--	--	NA	Interface Probe would not fit down well.
MW-116S	01/03/16	99.40	NM	--	--	NA	Interface Probe would not fit down well.
MW-116S	02/23/16	99.40	25.50	--	--	73.90	DTB = 28.55'
MW-116S	03/21/16	99.40	25.20	--	--	74.20	DTB = 29.69'
MW-116S	04/20/16	99.40	24.98	--	--	74.42	DTB = 29.69'
MW-116S	05/05/16	99.40	26.25	--	--	73.15	DTB = 27.68'
MW-201D	05/04/16	98.80	25.62	--	--	73.18	DTB = 47.40'
MW-202D	05/04/16	98.17	24.98	--	--	73.19	DTB = 47.45'
MW-202S	05/04/16	98.06	24.89	--	--	73.17	DTB = 38.13'
MW-207D	05/04/16	98.18	25.01	--	--	73.17	DTB = 51.06'
MW-207S	05/04/16	98.28	25.12	--	--	73.16	DTB = 37.77'
MW-209D	05/04/16	99.90	27.29	--	--	72.61	DTB = 62.18'
MW-216D	05/05/16	98.69	26.49	--	--	72.20	DTB = 39.33'
MW-216S	05/05/16	99.58	26.47	--	--	73.11	DTB = 29.65'
MW-217D	05/05/16	98.65	25.61	--	--	73.04	DTB = 49.85'
MW-217S	05/05/16	98.71	25.79	--	--	72.92	DTB = 29.52'
MW-218D	05/05/16	99.67	26.44	--	--	73.23	DTB = 46.71'
MW-218S	05/05/16	99.61	26.47	--	--	73.14	DTB = 29.52'
MW-220S	05/05/16	99.41	26.01	--	--	73.40	DTB = 31.93'
MW-221S	05/05/16	98.92	26.22	26.15	0.07	72.77	

Notes:

feet = feet measured below ground surface

NA = Not Available

NM = Not Measured

**TABLE 3**  
**Groundwater Analytical Results Detected Compounds**  
**December 2015 - May 2016**

Former Gorham Manufacturing Facility  
 Providence, Rhode Island

CONSTITUENT	CW-01 5/4/2016 Primary	CW-02 5/4/2016 Primary	CW-6 5/5/2016 Primary	CW-6 5/5/2016 Duplicate	GZA-3 5/5/2016 Primary	GZA-3 5/5/2016 Duplicate	MW-101D 5/4/2016 Primary	MW-101S 5/4/2016 Primary	MW-101S 5/4/2016 Duplicate	MW-109D 5/5/2016 Primary
<b>(VOC (µg/L)</b>										
1,1,1-Trichloroethane	<50	<1.0	---	---	<1.0	---	<1.0	<25	<25	<1.0
1,1-Dichloroethene	<50	<1.0	---	---	<1.0	---	<1.0	<25	<25	<1.0
1,2,4-Trimethylbenzene	<50	<1.0	---	---	<1.0	---	<1.0	<25	<25	<1.0
1,3,5-Trimethylbenzene	<50	<1.0	---	---	<1.0	---	<1.0	<25	<25	<1.0
Carbondisulfide	<200	<4.0	---	---	<4.0	---	<4.0	<100	<100	<4.0
cis-1,2-Dichloroethene	94	<1.0	---	---	9.1	---	<1.0	<25	<25	<1.0
Ethylbenzene	<50	<1.0	---	---	<1.0	---	<1.0	<25	<25	<1.0
Methyltert-butylether	<50	<1.0	---	---	<1.0	---	<1.0	<25	<25	<1.0
Naphthalene	<100	<2.0	---	---	<2.0	---	<2.0	<50	<50	<2.0
Tetrachloroethene	<50	<1.0	---	---	<1.0	---	<1.0	1400	1300	<1.0
trans-1,2-Dichloroethene	<50	<1.0	---	---	<1.0	---	<1.0	<25	<25	<1.0
Trichloroethene	1800	<1.0	---	---	<1.0	---	<1.0	27	<25D	<1.0
Vinyl chloride	<100	<2.0	---	---	8.5	---	<2.0	<50	<50	<2.0
o-Xylene	<50	<1.0	---	---	<1.0	---	<1.0	<25	<25	<1.0
Xylenes	<50	<1.0	---	---	<1.0	---	<1.0	<25	<25	<1.0
<b>TPH (mg/L)</b>										
TPH (Fuel Oil)	---	---	5.0	5.3	---	---	---	---	---	---
<b>Lead (µg/L)</b>										
Dissolved Lead	---	---	---	---	<1.0	<1.0	---	---	---	<1.0

Notes: < = 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

-- = Not analyzed for  
 D = Result reported from a diluted sample  
 J = Result is an estimated value

**TABLE 3**  
**Groundwater Analytical Results Detected Compounds**  
**December 2015 - May 2016**

Former Gorham Manufacturing Facility  
 Providence, Rhode Island

CONSTITUENT	MW-112 12/3/2015 Primary	MW-112 1/3/2016 Primary	MW-112 2/23/2016 Primary	MW-112 3/21/2016 Primary	MW-112 4/20/2016 Primary	MW-112 5/4/2016 Primary	MW-116D 12/3/2015 Primary	MW-116D 1/3/2016 Primary	MW-116D 2/23/2016 Primary	MW-116D 3/21/2016 Primary
<b>(VOC (µg/L)</b>										
1,1,1-Trichloroethane	<10	<50	<4.0	<4.0	<40	1	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	<10	<50	<4.0	<4.0	<40	4.6	<1.0	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	<10	<50	<4.0	<4.0	<40	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	<10	<50	<4.0	<4.0	<40	<1.0	<1.0	<1.0	<1.0	<1.0
Carbondisulfide	<40	<200	20	<16	<160	<4.0	<4.0	<4.0	<4.0	<4.0
cis-1,2-Dichloroethene	<10	<50	<4.0	<4.0	<40	21	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	<10	<50	<4.0	<4.0	<40	<1.0	<1.0	<1.0	<1.0	<1.0
Methyltert-butylether	<10	<50	<4.0	<4.0	<40	1.4	<1.0	<1.0	<1.0	<1.0
Naphthalene	<20	<100	<8.0	<8.0	<80	<2.0	<2.0	<2.0	<2.0	<2.0
Tetrachloroethene	10000	5900	2500	4400	1800	330D	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	<10	<50	<4.0	<4.0	<40	1.3	<1.0	<1.0	<1.0	<1.0
Trichloroethene	11	<50	12	11	<40	110	<1.0J	<1.0	<1.0J	<1.0
Vinyl chloride	<20	<100	<8.0	<8.0	<80	<2.0	<2.0	<2.0	<2.0	<2.0
o-Xylene	<10	<50	<4.0	<4.0	<40	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes	<10	<50	<4.0	<4.0	<40	<1.0	<1.0	<1.0	<1.0	<1.0
<b>TPH (mg/L)</b>										
TPH (Fuel Oil)	---	---	---	---	---	---	---	---	---	---
<b>Lead (µg/L)</b>										
Dissolved Lead	---	---	---	---	---	---	---	---	---	---

Notes: < = Less than the laboratory reporting limit

-- = Not analyzed for

µg/L = Micrograms per liter, parts per billion

D = Result reported from a diluted sample

mg/L = Milligrams per liter, parts per million

J = Result is an estimated value

TPH = Total Petroleum Hydrocarbons

**TABLE 3**  
**Groundwater Analytical Results Detected Compounds**  
**December 2015 - May 2016**

Former Gorham Manufacturing Facility  
 Providence, Rhode Island

CONSTITUENT	MW-116D 4/20/2016 Primary	MW-116D 5/5/2016 Primary	MW-116S 12/3/2015 Primary	MW-116S 1/3/2016 Primary	MW-116S 2/23/2016 Primary	MW-116S 3/21/2016 Primary	MW-116S 4/20/2016 Primary	MW-116S 5/5/2016 Primary	MW-201D 5/4/2016 Primary	MW-202D 5/4/2016 Primary
<b>(VOC (µg/L)</b>										
1,1,1-Trichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<1.0
1,1-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<1.0
1,2,4-Trimethylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<1.0
1,3,5-Trimethylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<1.0
Carbondisulfide	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<400	<4.0
cis-1,2-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<1.0
Ethylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<1.0
Methyltert-butylether	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<1.0
Naphthalene	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<200	<2.0
Tetrachloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5000	12
trans-1,2-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<1.0
Trichloroethene	<1.0J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<1.0
Vinyl chloride	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<200	<2.0
o-Xylene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<1.0
Xylenes	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<1.0
<b>TPH (mg/L)</b>										
TPH (Fuel Oil)	---	---	---	---	---	---	---	---	---	---
<b>Lead (µg/L)</b>										
Dissolved Lead	---	---	---	---	---	---	---	---	---	---

Notes: < = Less than the laboratory reporting limit

-- = Not analyzed for

µg/L = Micrograms per liter, parts per billion

D = Result reported from a diluted sample

mg/L = Milligrams per liter, parts per million

J = Result is an estimated value

TPH = Total Petroleum Hydrocarbons

**TABLE 3**  
**Groundwater Analytical Results Detected Compounds**  
**December 2015 - May 2016**

Former Gorham Manufacturing Facility  
 Providence, Rhode Island

CONSTITUENT	MW-202S 5/4/2016 Primary	MW-207D 5/4/2016 Primary	MW-207S 5/4/2016 Primary	MW-209D 5/4/2016 Primary	MW-216D 5/5/2016 Primary	MW-216S 5/5/2016 Primary	MW-217D 5/5/2016 Primary	MW-217S 5/5/2016 Primary	MW-218D 5/5/2016 Primary	MW-218S 5/5/2016 Primary
<b>(VOC (µg/L)</b>										
1,1,1-Trichloroethane	<1.0	<1.0	<1.0	<5.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0
1,1-Dichloroethene	<1.0	<1.0	<1.0	<5.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0
1,2,4-Trimethylbenzene	<1.0	<1.0	<1.0	<5.0	<1.0	8.5	<1.0	<2.0	<1.0	<1.0
1,3,5-Trimethylbenzene	<1.0	<1.0	<1.0	<5.0	<1.0	5.3	<1.0	<2.0	<1.0	<1.0
Carbondisulfide	<4.0	<4.0	<4.0	<20	<4.0	<8.0	<4.0	<8.0	<4.0	<4.0
cis-1,2-Dichloroethene	<1.0	<1.0	<1.0	<5.0	<1.0	48	3.8	<2.0	<1.0	<1.0
Ethylbenzene	<1.0	<1.0	<1.0	<5.0	<1.0	2.3	<1.0	<2.0	<1.0	<1.0
Methyltert-butylether	<1.0	<1.0	<1.0	<5.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0
Naphthalene	<2.0	<2.0	<2.0	<10	<2.0	16	<2.0	<4.0	<2.0	<2.0
Tetrachloroethene	42	13	4.9	2700D	<1.0	<2.0	<1.0	2.4	10	20
trans-1,2-Dichloroethene	<1.0	<1.0	<1.0	<5.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0
Trichloroethene	4.5	1.5	1.4	5.1	1.5	<2.0	4.5	<2.0	1.2	<1.0
Vinyl chloride	<2.0	<2.0	<2.0	<10	<2.0	<4.0	<2.0	<4.0	<2.0	<2.0
o-Xylene	<1.0	<1.0	<1.0	<5.0	<1.0	7	<1.0	<2.0	<1.0	<1.0
Xylenes	<1.0	<1.0	<1.0	<5.0	<1.0	7	<1.0	<2.0	<1.0	<1.0
<b>TPH (mg/L)</b>										
TPH (Fuel Oil)	---	---	---	---	---	---	---	---	---	---
<b>Lead (µg/L)</b>										
Dissolved Lead	---	---	---	---	---	---	---	---	---	---

Notes: < = 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

-- = Not analyzed for

D = Result reported from a diluted sample

J = Result is an estimated value

**TABLE 4**  
**Groundwater Analytical Results**  
**December 2015 - May 2016**

Former Gorham Manufacturing Facility  
 Providence, Rhode Island

<b>Mashapaug Pond Compliance Wells</b>			
Sample ID	GZA-3 5/5/2016 Primary	GZA-3 5/5/2016 Duplicate	Compliance Standard <sup>1</sup>
<b>Metals (mg/L)</b>			
Lead	<1.0	<1.0	0.03
<b>VOCs (µg/L)</b>			
1,1-Dichloroethane	<1.0	---	50,000
1,1-Dichloroethene	<1.0	---	50,000
cis-1,2-Dichloroethene	9.1	---	50,000
Methyltert-butylether	<1.0	---	50,000
Tetrachloroethene	<1.0	---	5,000
Trichloroethene	<1.0	---	20,000
Vinyl chloride	8.5	---	1,200

<b>TPH Remediation Area Well</b>			
Sample ID	CW-06 5/5/2016 Primary	CW-06 5/5/2016 Duplicate	Compliance Standard <sup>1</sup>
<b>TPH (mg/L)</b>			
TPH	5.0	5.3	20

<b>Sewer Interceptor Area Wells</b>			
Sample ID	CW-01 5/4/2016 Primary	CW-02 5/4/2016 Primary	Compliance Standard <sup>2</sup>
<b>VOCs (µg/L)</b>			
1,1-Dichloroethane	<50	<1.0	120,000
1,1-Dichloroethene	<50	<1.0	23,000
cis-1,2-Dichloroethene	94	<1.0	69,000
trans-1,2-Dichloroethene	<50	<1.0	79,000
Tetrachloroethene	<50	<1.0	NS
Trichloroethene	1800	<1.0	87,000

<b>Adelaide Avenue Wells</b>									
Sample ID	MW-112 12/3/2015 Primary	MW-112 1/3/2016 Primary	MW-112 2/23/2016 Primary	MW-112 3/21/2016 Primary	MW-112 4/20/2016 Primary	MW-112 5/4/2016 Primary	MW-209D 5/4/2016 Primary	MW-218S 5/5/2016 Primary	Compliance Standard <sup>3</sup>
<b>VOCs (µg/L)</b>									
1,1-Dichloroethane	<10	<50	<4.0	<4.0	<40	<1.0	<5.0	<1.0	2,400
1,1-Dichloroethene	<10	<50	<4.0	<4.0	<40	4.6	<5.0	<1.0	7
cis-1,2-Dichloroethene	<10	<50	<4.0	<4.0	<40	21	<5.0	<1.0	1,900
Methyltert-butylether	<10	<50	<4.0	<4.0	<40	1.4	<5.0	<1.0	5,000
Tetrachloroethene	10000	5900	2500	4400	1800	330D	2700D	20	150
Trichloroethene	11	<50	12	11	<40	110	5.1	<1.0	540
Vinyl chloride	<20	<100	<8.0	<8.0	<80	<2.0	<10	<2.0	2

1. These site specific compliance standards were taken from the approved RAWP dated April 1, 2001 and/or the RIDEM Remediation Regulations.

Note: The standard for Methyl tert-butyl ether is the Massachusetts Department of Environmental Protection (MassDEP) Method 1 GW-3 standard (310 CMR 40.0974 (2), 12/14/07. The use of the MassDEP Method 1 GW-3 standard is consistent with the approach used in the April 1, 2001 RAWP.

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

3. These compliance standards taken from Table 4 - GB Groundwater Objectives of the RIDEM Remediation Regulations or in the case of vinyl chloride the compliance standard was taken from Table 3 of the Remediation Regulations and for chloroform the compliance standard was calculated from the algorithm in Appendix F of the Remediation Regulations (calculations attached as Appendix C of Status Report dated September 18, 2007).

NS = Indicates that no applicable standard exists. Compound does not have a lower explosive limit (LEL).

NA = Indicates that the analysis was not performed.

< = Less than the laboratory reporting limit

µg/L = Micrograms per liter, parts per billion

mg/L = Milligrams per liter, parts per million

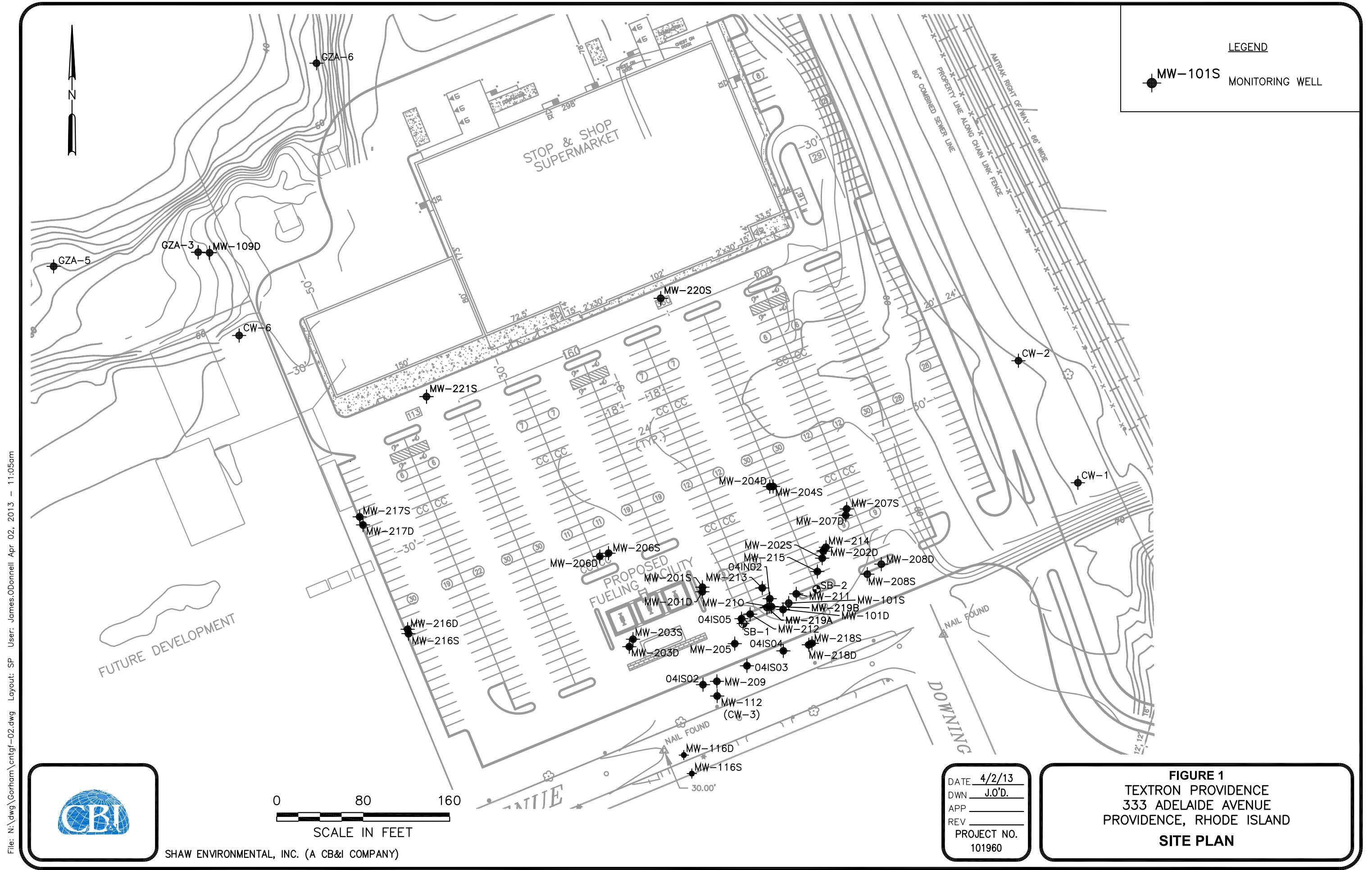
TPH = Total Petroleum Hydrocarbons

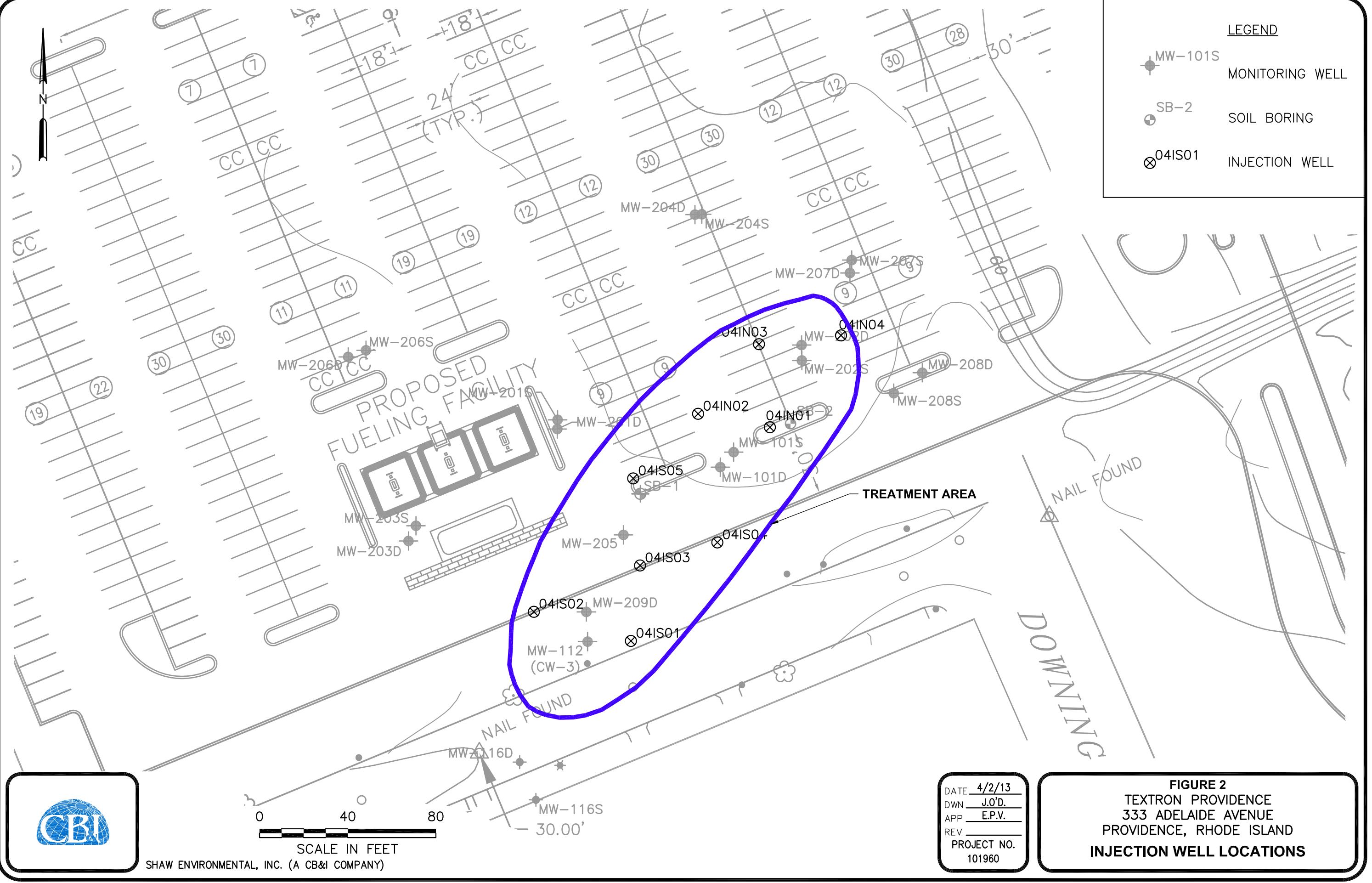
VOCs = Volatile organic compounds

-- = Not analyzed for

D = Result reported from a diluted sample

## **FIGURES**





**ATTACHMENT A**

**LABORATORY REPORTS**



---

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

December 15, 2015

Brian Cote  
CB&I Env. & Infrastructure - MA  
150 Royall Street  
Canton, MA 02021

Project Location: Textron Providence, RI

Client Job Number:

Project Number: 130274

Laboratory Work Order Number: 15L0351

Enclosed are results of analyses for samples received by the laboratory on December 7, 2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

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

James M. Georganas  
Project Manager

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

CB&I Env. & Infrastructure - MA  
150 Royall Street  
Canton, MA 02021  
ATTN: Brian Cote

REPORT DATE: 12/15/2015

PURCHASE ORDER NUMBER: 835493-000 OP

PROJECT NUMBER: 130274

#### **ANALYTICAL SUMMARY**

---

WORK ORDER NUMBER: 15L0351

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

PROJECT LOCATION: Textron Providence, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-112	15L0351-01	Ground Water		SW-846 8260C	
MW-116D	15L0351-02	Ground Water		SW-846 8260C	
MW-116S	15L0351-03	Ground Water		SW-846 8260C	
Trip Blank	15L0351-04	Trip Blank Water		SW-846 8260C	



---

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#### CASE NARRATIVE SUMMARY

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

#### SW-846 8260C

##### **Qualifications:**

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

Elevated reporting limit due to high concentration of target compounds.

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

15L0351-01[MW-112]

---

###### **V-20**

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

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

###### **Bromomethane**

B137342-BS1, B137342-BSD1

###### **Chloromethane**

B137342-BS1, B137342-BSD1

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

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

A handwritten signature in black ink, appearing to read "Johanna K. Harrington".

Johanna K. Harrington

Manager, Laboratory Reporting



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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15L0351

Date Received: 12/7/2015

**Field Sample #:** MW-112

Sampled: 12/3/2015 11:00

**Sample ID:** 15L0351-01Sample Matrix: Ground Water

Sample Flags: RL-11

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	500	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
Acrylonitrile	ND	50	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
tert-Amyl Methyl Ether (TAME)	ND	5.0	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
Benzene	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
Bromobenzene	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
Bromochloromethane	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
Bromodichloromethane	ND	5.0	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
Bromoform	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
Bromomethane	ND	20	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
2-Butanone (MEK)	ND	200	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
tert-Butyl Alcohol (TBA)	ND	200	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
n-Butylbenzene	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
sec-Butylbenzene	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
tert-Butylbenzene	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
tert-Butyl Ethyl Ether (TBEE)	ND	5.0	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
Carbon Disulfide	ND	40	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
Carbon Tetrachloride	ND	50	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
Chlorobenzene	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
Chlorodibromomethane	ND	5.0	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
Chloroethane	ND	20	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
Chloroform	ND	20	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
Chloromethane	ND	20	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
2-Chlorotoluene	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
4-Chlorotoluene	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
1,2-Dibromo-3-chloropropane (DBCP)	ND	50	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
1,2-Dibromoethane (EDB)	ND	5.0	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
Dibromomethane	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
1,2-Dichlorobenzene	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
1,3-Dichlorobenzene	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
1,4-Dichlorobenzene	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
trans-1,4-Dichloro-2-butene	ND	20	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
Dichlorodifluoromethane (Freon 12)	ND	20	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
1,1-Dichloroethane	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
1,2-Dichloroethane	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
1,1-Dichloroethylene	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
cis-1,2-Dichloroethylene	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
trans-1,2-Dichloroethylene	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
1,2-Dichloropropane	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
1,3-Dichloropropane	ND	5.0	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
2,2-Dichloropropane	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
1,1-Dichloropropene	ND	20	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
cis-1,3-Dichloropropene	ND	5.0	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
trans-1,3-Dichloropropene	ND	5.0	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
Diethyl Ether	ND	20	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR



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Project Location: Textron Providence, RI

Sample Description:

Work Order: 15L0351

Date Received: 12/7/2015

**Field Sample #:** MW-112

Sampled: 12/3/2015 11:00

**Sample ID:** 15L0351-01Sample Matrix: Ground Water

Sample Flags: RL-11

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	5.0	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
1,4-Dioxane	ND	500	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
Ethylbenzene	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
Hexachlorobutadiene	ND	5.0	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
2-Hexanone (MBK)	ND	100	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
Isopropylbenzene (Cumene)	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
p-Isopropyltoluene (p-Cymene)	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
Methyl tert-Butyl Ether (MTBE)	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
Methylene Chloride	ND	50	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
4-Methyl-2-pentanone (MIBK)	ND	100	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
Naphthalene	ND	20	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
n-Propylbenzene	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
Styrene	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
1,1,1,2-Tetrachloroethane	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
1,1,2,2-Tetrachloroethane	ND	5.0	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
Tetrachloroethylene	10000	500	µg/L	500		SW-846 8260C	12/14/15	12/14/15 11:54	EEH
Tetrahydrofuran	ND	100	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
Toluene	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
1,2,3-Trichlorobenzene	ND	50	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
1,2,4-Trichlorobenzene	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
1,3,5-Trichlorobenzene	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
1,1,1-Trichloroethane	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
1,1,2-Trichloroethane	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
Trichloroethylene	11	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
Trichlorofluoromethane (Freon 11)	ND	20	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
1,2,3-Trichloropropane	ND	20	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
1,2,4-Trimethylbenzene	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
1,3,5-Trimethylbenzene	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
Vinyl Chloride	ND	20	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
m+p Xylene	ND	20	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR
o-Xylene	ND	10	µg/L	10		SW-846 8260C	12/10/15	12/12/15 3:27	CMR

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	102	70-130		12/14/15 11:54
1,2-Dichloroethane-d4	95.8	70-130		12/12/15 3:27
Toluene-d8	97.6	70-130		12/12/15 3:27
Toluene-d8	101	70-130		12/14/15 11:54
4-Bromofluorobenzene	98.3	70-130		12/12/15 3:27
4-Bromofluorobenzene	96.8	70-130		12/14/15 11:54



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Project Location: Textron Providence, RI

Sample Description:

Work Order: 15L0351

Date Received: 12/7/2015

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

Sampled: 12/3/2015 11:45

**Sample ID:** 15L0351-02Sample Matrix: Ground Water**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
Benzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR



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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15L0351

Date Received: 12/7/2015

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

Sampled: 12/3/2015 11:45

**Sample ID:** 15L0351-02Sample Matrix: Ground Water**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
Styrene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
Toluene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 2:34	CMR

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	98.6	70-130		12/12/15 2:34
Toluene-d8	100	70-130		12/12/15 2:34
4-Bromofluorobenzene	99.5	70-130		12/12/15 2:34



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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15L0351

Date Received: 12/7/2015

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

Sampled: 12/3/2015 12:15

**Sample ID:** 15L0351-03Sample Matrix: Ground Water**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
Benzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR



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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15L0351

Date Received: 12/7/2015

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

Sampled: 12/3/2015 12:15

**Sample ID:** 15L0351-03Sample Matrix: Ground Water**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
Styrene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
Toluene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/12/15 3:00	CMR
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	97.3	70-130					12/12/15 3:00		
Toluene-d8	101	70-130					12/12/15 3:00		
4-Bromofluorobenzene	98.6	70-130					12/12/15 3:00		



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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15L0351

Date Received: 12/7/2015

**Field Sample #:** Trip Blank

Sampled: 12/3/2015 00:00

**Sample ID:** 15L0351-04Sample Matrix: Trip Blank Water**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
Benzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR



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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15L0351

Date Received: 12/7/2015

**Field Sample #:** Trip Blank

Sampled: 12/3/2015 00:00

**Sample ID:** 15L0351-04Sample Matrix: Trip Blank Water**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
Styrene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
Toluene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	12/10/15	12/11/15 18:09	CMR
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	93.4	70-130					12/11/15 18:09		
Toluene-d8	100	70-130					12/11/15 18:09		
4-Bromofluorobenzene	98.3	70-130					12/11/15 18:09		



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

### Sample Extraction Data

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15L0351-01 [MW-112]	B137342	0.5	5.00	12/10/15
15L0351-02 [MW-116D]	B137342	5	5.00	12/10/15
15L0351-03 [MW-116S]	B137342	5	5.00	12/10/15
15L0351-04 [Trip Blank]	B137342	5	5.00	12/10/15

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15L0351-01RE1 [MW-112]	B137536	0.01	5.00	12/14/15



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 B137342 - SW-846 5030B**

<b>Blank (B137342-BLK1)</b>									Prepared: 12/10/15 Analyzed: 12/11/15
Acetone	ND	50	µg/L						
Acrylonitrile	ND	5.0	µg/L						
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L						
Benzene	ND	1.0	µg/L						
Bromobenzene	ND	1.0	µg/L						
Bromoform	ND	0.50	µg/L						
Bromomethane	ND	1.0	µg/L						
2-Butanone (MEK)	ND	20	µg/L						
tert-Butyl Alcohol (TBA)	ND	20	µg/L						
n-Butylbenzene	ND	1.0	µg/L						
sec-Butylbenzene	ND	1.0	µg/L						
tert-Butylbenzene	ND	1.0	µg/L						
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L						
Carbon Disulfide	ND	4.0	µg/L						
Carbon Tetrachloride	ND	5.0	µg/L						
Chlorobenzene	ND	1.0	µg/L						
Chlorodibromomethane	ND	0.50	µg/L						
Chloroethane	ND	2.0	µg/L						
Chloroform	ND	2.0	µg/L						
Chloromethane	ND	2.0	µg/L						
2-Chlorotoluene	ND	1.0	µg/L						
4-Chlorotoluene	ND	1.0	µg/L						
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L						
1,2-Dibromoethane (EDB)	ND	0.50	µg/L						
Dibromomethane	ND	1.0	µg/L						
1,2-Dichlorobenzene	ND	1.0	µg/L						
1,3-Dichlorobenzene	ND	1.0	µg/L						
1,4-Dichlorobenzene	ND	1.0	µg/L						
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L						
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L						
1,1-Dichloroethane	ND	1.0	µg/L						
1,2-Dichloroethane	ND	1.0	µg/L						
1,1-Dichloroethylene	ND	1.0	µg/L						
cis-1,2-Dichloroethylene	ND	1.0	µg/L						
trans-1,2-Dichloroethylene	ND	1.0	µg/L						
1,2-Dichloropropane	ND	1.0	µg/L						
1,3-Dichloropropane	ND	0.50	µg/L						
2,2-Dichloropropane	ND	1.0	µg/L						
1,1-Dichloropropene	ND	2.0	µg/L						
cis-1,3-Dichloropropene	ND	0.50	µg/L						
trans-1,3-Dichloropropene	ND	0.50	µg/L						
Diethyl Ether	ND	2.0	µg/L						
Diisopropyl Ether (DIPE)	ND	0.50	µg/L						
1,4-Dioxane	ND	50	µg/L						
Ethylbenzene	ND	1.0	µg/L						
Hexachlorobutadiene	ND	0.50	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 tert-Butyl Ether (MTBE)	ND	1.0	µg/L						



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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch B137342 - SW-846 5030B**

<b>Blank (B137342-BLK1)</b>									
Prepared: 12/10/15 Analyzed: 12/11/15									
Methylene Chloride	ND	5.0	µg/L						
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L						
Naphthalene	ND	2.0	µg/L						
n-Propylbenzene	ND	1.0	µg/L						
Styrene	ND	1.0	µg/L						
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L						
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L						
Tetrachloroethylene	ND	1.0	µg/L						
Tetrahydrofuran	ND	10	µg/L						
Toluene	ND	1.0	µg/L						
1,2,3-Trichlorobenzene	ND	5.0	µg/L						
1,2,4-Trichlorobenzene	ND	1.0	µg/L						
1,3,5-Trichlorobenzene	ND	1.0	µg/L						
1,1,1-Trichloroethane	ND	1.0	µg/L						
1,1,2-Trichloroethane	ND	1.0	µg/L						
Trichloroethylene	ND	1.0	µg/L						
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L						
1,2,3-Trichloropropane	ND	2.0	µg/L						
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L						
1,2,4-Trimethylbenzene	ND	1.0	µg/L						
1,3,5-Trimethylbenzene	ND	1.0	µg/L						
Vinyl Chloride	ND	2.0	µg/L						
m+p Xylene	ND	2.0	µg/L						
o-Xylene	ND	1.0	µg/L						
Surrogate: 1,2-Dichloroethane-d4	24.3		µg/L	25.0		97.1	70-130		
Surrogate: Toluene-d8	25.2		µg/L	25.0		101	70-130		
Surrogate: 4-Bromofluorobenzene	25.2		µg/L	25.0		101	70-130		

<b>LCS (B137342-BS1)</b>									
Prepared: 12/10/15 Analyzed: 12/11/15									
Acetone	81.8	50	µg/L	100		81.8	70-160		
Acrylonitrile	10.8	5.0	µg/L	10.0		108	70-130		
tert-Amyl Methyl Ether (TAME)	9.84	0.50	µg/L	10.0		98.4	70-130		
Benzene	10.8	1.0	µg/L	10.0		108	70-130		
Bromobenzene	10.7	1.0	µg/L	10.0		107	70-130		
Bromoform	12.2	1.0	µg/L	10.0		122	70-130		
Bromochloromethane	10.2	0.50	µg/L	10.0		102	70-130		
Bromodichloromethane	9.65	1.0	µg/L	10.0		96.5	70-130		
Bromomethane	8.44	2.0	µg/L	10.0		84.4	40-160	V-20	†
2-Butanone (MEK)	100	20	µg/L	100		100	40-160		†
tert-Butyl Alcohol (TBA)	100	20	µg/L	100		100	40-160		†
n-Butylbenzene	10.3	1.0	µg/L	10.0		103	70-130		
sec-Butylbenzene	10.6	1.0	µg/L	10.0		106	70-130		
tert-Butylbenzene	10.1	1.0	µg/L	10.0		101	70-130		
tert-Butyl Ethyl Ether (TBEE)	10.3	0.50	µg/L	10.0		103	70-130		
Carbon Disulfide	10.9	4.0	µg/L	10.0		109	70-130		
Carbon Tetrachloride	10.2	5.0	µg/L	10.0		102	70-130		
Chlorobenzene	10.2	1.0	µg/L	10.0		102	70-130		
Chlorodibromomethane	9.64	0.50	µg/L	10.0		96.4	70-130		
Chloroethane	12.0	2.0	µg/L	10.0		120	70-130		
Chloroform	10.4	2.0	µg/L	10.0		104	70-130		
Chloromethane	10.5	2.0	µg/L	10.0		105	40-160	V-20	†
2-Chlorotoluene	10.3	1.0	µg/L	10.0		103	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	RPD Limit	Notes
<b>Batch B137342 - SW-846 5030B</b>										
<b>LCS (B137342-BS1)</b>										
Prepared: 12/10/15 Analyzed: 12/11/15										
4-Chlorotoluene	10.2	1.0	µg/L	10.0	102	70-130				
1,2-Dibromo-3-chloropropane (DBCP)	8.53	5.0	µg/L	10.0	85.3	70-130				
1,2-Dibromoethane (EDB)	10.6	0.50	µg/L	10.0	106	70-130				
Dibromomethane	10.3	1.0	µg/L	10.0	103	70-130				
1,2-Dichlorobenzene	9.62	1.0	µg/L	10.0	96.2	70-130				
1,3-Dichlorobenzene	10.1	1.0	µg/L	10.0	101	70-130				
1,4-Dichlorobenzene	9.61	1.0	µg/L	10.0	96.1	70-130				
trans-1,4-Dichloro-2-butene	8.57	2.0	µg/L	10.0	85.7	70-130				
Dichlorodifluoromethane (Freon 12)	5.86	2.0	µg/L	10.0	58.6	40-160				†
1,1-Dichloroethane	11.0	1.0	µg/L	10.0	110	70-130				
1,2-Dichloroethane	9.77	1.0	µg/L	10.0	97.7	70-130				
1,1-Dichloroethylene	10.1	1.0	µg/L	10.0	101	70-130				
cis-1,2-Dichloroethylene	10.6	1.0	µg/L	10.0	106	70-130				
trans-1,2-Dichloroethylene	10.1	1.0	µg/L	10.0	101	70-130				
1,2-Dichloropropane	10.6	1.0	µg/L	10.0	106	70-130				
1,3-Dichloropropane	10.7	0.50	µg/L	10.0	107	70-130				
2,2-Dichloropropane	10.4	1.0	µg/L	10.0	104	40-130				†
1,1-Dichloropropene	10.4	2.0	µg/L	10.0	104	70-130				
cis-1,3-Dichloropropene	9.78	0.50	µg/L	10.0	97.8	70-130				
trans-1,3-Dichloropropene	10.2	0.50	µg/L	10.0	102	70-130				
Diethyl Ether	10.4	2.0	µg/L	10.0	104	70-130				
Diisopropyl Ether (DIPE)	9.76	0.50	µg/L	10.0	97.6	70-130				
1,4-Dioxane	103	50	µg/L	100	103	40-130				†
Ethylbenzene	10.5	1.0	µg/L	10.0	105	70-130				
Hexachlorobutadiene	9.54	0.50	µg/L	10.0	95.4	70-130				
2-Hexanone (MBK)	99.4	10	µg/L	100	99.4	70-160				†
Isopropylbenzene (Cumene)	10.4	1.0	µg/L	10.0	104	70-130				
p-Isopropyltoluene (p-Cymene)	11.1	1.0	µg/L	10.0	111	70-130				
Methyl tert-Butyl Ether (MTBE)	9.70	1.0	µg/L	10.0	97.0	70-130				
Methylene Chloride	10.2	5.0	µg/L	10.0	102	70-130				
4-Methyl-2-pentanone (MIBK)	105	10	µg/L	100	105	70-160				†
Naphthalene	9.40	2.0	µg/L	10.0	94.0	40-130				†
n-Propylbenzene	10.4	1.0	µg/L	10.0	104	70-130				
Styrene	10.7	1.0	µg/L	10.0	107	70-130				
1,1,1,2-Tetrachloroethane	10.0	1.0	µg/L	10.0	100	70-130				
1,1,2,2-Tetrachloroethane	10.9	0.50	µg/L	10.0	109	70-130				
Tetrachloroethylene	10.3	1.0	µg/L	10.0	103	70-130				
Tetrahydrofuran	9.61	10	µg/L	10.0	96.1	70-130				
Toluene	10.8	1.0	µg/L	10.0	108	70-130				
1,2,3-Trichlorobenzene	9.30	5.0	µg/L	10.0	93.0	70-130				
1,2,4-Trichlorobenzene	9.64	1.0	µg/L	10.0	96.4	70-130				
1,3,5-Trichlorobenzene	9.02	1.0	µg/L	10.0	90.2	70-130				
1,1,1-Trichloroethane	10.1	1.0	µg/L	10.0	101	70-130				
1,1,2-Trichloroethane	10.6	1.0	µg/L	10.0	106	70-130				
Trichloroethylene	11.0	1.0	µg/L	10.0	110	70-130				
Trichlorofluoromethane (Freon 11)	9.31	2.0	µg/L	10.0	93.1	70-130				
1,2,3-Trichloropropane	10.7	2.0	µg/L	10.0	107	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.3	1.0	µg/L	10.0	103	70-130				
1,2,4-Trimethylbenzene	10.6	1.0	µg/L	10.0	106	70-130				
1,3,5-Trimethylbenzene	10.9	1.0	µg/L	10.0	109	70-130				
Vinyl Chloride	8.63	2.0	µg/L	10.0	86.3	40-160				†



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 B137342 - SW-846 5030B</b>									
<b>LCS (B137342-BS1)</b>									
Prepared: 12/10/15 Analyzed: 12/11/15									
m+p Xylene	21.0	2.0	µg/L	20.0	105	70-130			
o-Xylene	10.3	1.0	µg/L	10.0	103	70-130			
Surrogate: 1,2-Dichloroethane-d4	24.7		µg/L	25.0	98.7	70-130			
Surrogate: Toluene-d8	24.9		µg/L	25.0	99.6	70-130			
Surrogate: 4-Bromofluorobenzene	24.6		µg/L	25.0	98.4	70-130			
<b>LCS Dup (B137342-BS1D)</b>									
Prepared: 12/10/15 Analyzed: 12/11/15									
Acetone	82.5	50	µg/L	100	82.5	70-160	0.913	25	†
Acrylonitrile	11.2	5.0	µg/L	10.0	112	70-130	3.90	25	
tert-Amyl Methyl Ether (TAME)	9.95	0.50	µg/L	10.0	99.5	70-130	1.11	25	
Benzene	10.5	1.0	µg/L	10.0	105	70-130	2.16	25	
Bromobenzene	10.4	1.0	µg/L	10.0	104	70-130	3.14	25	
Bromoform	12.4	1.0	µg/L	10.0	124	70-130	1.46	25	
Bromochloromethane	10.1	0.50	µg/L	10.0	101	70-130	1.08	25	
Bromodichloromethane	9.77	1.0	µg/L	10.0	97.7	70-130	1.24	25	
Bromomethane	9.34	2.0	µg/L	10.0	93.4	40-160	10.1	25	V-20 †
2-Butanone (MEK)	98.1	20	µg/L	100	98.1	40-160	2.35	25	†
tert-Butyl Alcohol (TBA)	101	20	µg/L	100	101	40-160	0.705	25	†
n-Butylbenzene	10.1	1.0	µg/L	10.0	101	70-130	1.47	25	
sec-Butylbenzene	10.4	1.0	µg/L	10.0	104	70-130	1.91	25	
tert-Butylbenzene	9.89	1.0	µg/L	10.0	98.9	70-130	2.50	25	
tert-Butyl Ethyl Ether (TBEE)	10.2	0.50	µg/L	10.0	102	70-130	0.875	25	
Carbon Disulfide	10.4	4.0	µg/L	10.0	104	70-130	4.80	25	
Carbon Tetrachloride	10.2	5.0	µg/L	10.0	102	70-130	0.196	25	
Chlorobenzene	10.0	1.0	µg/L	10.0	100	70-130	1.38	25	
Chlorodibromomethane	9.61	0.50	µg/L	10.0	96.1	70-130	0.312	25	
Chloroethane	12.2	2.0	µg/L	10.0	122	70-130	1.57	25	
Chloroform	10.3	2.0	µg/L	10.0	103	70-130	1.45	25	
Chloromethane	10.6	2.0	µg/L	10.0	106	40-160	0.568	25	V-20 †
2-Chlorotoluene	10.2	1.0	µg/L	10.0	102	70-130	1.66	25	
4-Chlorotoluene	10.2	1.0	µg/L	10.0	102	70-130	0.00	25	
1,2-Dibromo-3-chloropropane (DBCP)	9.11	5.0	µg/L	10.0	91.1	70-130	6.58	25	
1,2-Dibromoethane (EDB)	10.3	0.50	µg/L	10.0	103	70-130	3.45	25	
Dibromomethane	10.2	1.0	µg/L	10.0	102	70-130	0.195	25	
1,2-Dichlorobenzene	9.56	1.0	µg/L	10.0	95.6	70-130	0.626	25	
1,3-Dichlorobenzene	9.99	1.0	µg/L	10.0	99.9	70-130	1.10	25	
1,4-Dichlorobenzene	9.70	1.0	µg/L	10.0	97.0	70-130	0.932	25	
trans-1,4-Dichloro-2-butene	8.72	2.0	µg/L	10.0	87.2	70-130	1.74	25	
Dichlorodifluoromethane (Freon 12)	5.72	2.0	µg/L	10.0	57.2	40-160	2.42	25	†
1,1-Dichloroethane	10.8	1.0	µg/L	10.0	108	70-130	2.29	25	
1,2-Dichloroethane	9.54	1.0	µg/L	10.0	95.4	70-130	2.38	25	
1,1-Dichloroethylene	9.97	1.0	µg/L	10.0	99.7	70-130	1.59	25	
cis-1,2-Dichloroethylene	10.3	1.0	µg/L	10.0	103	70-130	2.96	25	
trans-1,2-Dichloroethylene	10.2	1.0	µg/L	10.0	102	70-130	1.28	25	
1,2-Dichloropropane	10.9	1.0	µg/L	10.0	109	70-130	2.14	25	
1,3-Dichloropropane	10.4	0.50	µg/L	10.0	104	70-130	2.37	25	
2,2-Dichloropropane	10.1	1.0	µg/L	10.0	101	40-130	2.63	25	†
1,1-Dichloropropene	10.5	2.0	µg/L	10.0	105	70-130	0.574	25	
cis-1,3-Dichloropropene	9.83	0.50	µg/L	10.0	98.3	70-130	0.510	25	
trans-1,3-Dichloropropene	10.4	0.50	µg/L	10.0	104	70-130	2.52	25	
Diethyl Ether	10.9	2.0	µg/L	10.0	109	70-130	4.79	25	
Diisopropyl Ether (DIPE)	9.87	0.50	µg/L	10.0	98.7	70-130	1.12	25	



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B137342 - SW-846 5030B**

LCS Dup (B137342-BSD1)										
Prepared: 12/10/15 Analyzed: 12/11/15										
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,4-Dioxane	103	50	µg/L	100	103	40-130	0.0780	50		† ‡
Ethylbenzene	10.6	1.0	µg/L	10.0	106	70-130	0.570	25		
Hexachlorobutadiene	9.91	0.50	µg/L	10.0	99.1	70-130	3.80	25		
2-Hexanone (MBK)	101	10	µg/L	100	101	70-160	1.09	25		†
Isopropylbenzene (Cumene)	10.2	1.0	µg/L	10.0	102	70-130	1.94	25		
p-Isopropyltoluene (p-Cymene)	10.9	1.0	µg/L	10.0	109	70-130	1.36	25		
Methyl tert-Butyl Ether (MTBE)	9.78	1.0	µg/L	10.0	97.8	70-130	0.821	25		
Methylene Chloride	10.2	5.0	µg/L	10.0	102	70-130	0.393	25		
4-Methyl-2-pentanone (MIBK)	104	10	µg/L	100	104	70-160	0.983	25		†
Naphthalene	9.56	2.0	µg/L	10.0	95.6	40-130	1.69	25		†
n-Propylbenzene	10.2	1.0	µg/L	10.0	102	70-130	1.84	25		
Styrene	10.5	1.0	µg/L	10.0	105	70-130	2.26	25		
1,1,1,2-Tetrachloroethane	10.5	1.0	µg/L	10.0	105	70-130	4.57	25		
1,1,2,2-Tetrachloroethane	10.8	0.50	µg/L	10.0	108	70-130	0.551	25		
Tetrachloroethylene	10.3	1.0	µg/L	10.0	103	70-130	0.291	25		
Tetrahydrofuran	11.6	10	µg/L	10.0	116	70-130	18.6	25		
Toluene	10.6	1.0	µg/L	10.0	106	70-130	2.33	25		
1,2,3-Trichlorobenzene	9.14	5.0	µg/L	10.0	91.4	70-130	1.74	25		
1,2,4-Trichlorobenzene	9.34	1.0	µg/L	10.0	93.4	70-130	3.16	25		
1,3,5-Trichlorobenzene	8.88	1.0	µg/L	10.0	88.8	70-130	1.56	25		
1,1,1-Trichloroethane	9.81	1.0	µg/L	10.0	98.1	70-130	2.81	25		
1,1,2-Trichloroethane	10.6	1.0	µg/L	10.0	106	70-130	0.378	25		
Trichloroethylene	10.6	1.0	µg/L	10.0	106	70-130	3.24	25		
Trichlorofluoromethane (Freon 11)	9.16	2.0	µg/L	10.0	91.6	70-130	1.62	25		
1,2,3-Trichloropropane	10.7	2.0	µg/L	10.0	107	70-130	0.373	25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.2	1.0	µg/L	10.0	102	70-130	0.487	25		
1,2,4-Trimethylbenzene	10.4	1.0	µg/L	10.0	104	70-130	1.43	25		
1,3,5-Trimethylbenzene	10.7	1.0	µg/L	10.0	107	70-130	2.04	25		
Vinyl Chloride	8.51	2.0	µg/L	10.0	85.1	40-160	1.40	25		†
m+p Xylene	20.7	2.0	µg/L	20.0	103	70-130	1.63	25		
o-Xylene	10.3	1.0	µg/L	10.0	103	70-130	0.0969	25		
Surrogate: 1,2-Dichloroethane-d4	24.7		µg/L	25.0	98.7	70-130				
Surrogate: Toluene-d8	24.9		µg/L	25.0	99.8	70-130				
Surrogate: 4-Bromofluorobenzene	24.7		µg/L	25.0	98.9	70-130				

**Batch B137536 - SW-846 5030B**

Blank (B137536-BLK1)										
Prepared & Analyzed: 12/14/15										
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Tetrachloroethylene	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	25.1		µg/L	25.0	100	70-130				
Surrogate: Toluene-d8	25.5		µg/L	25.0	102	70-130				
Surrogate: 4-Bromofluorobenzene	24.9		µg/L	25.0	99.8	70-130				



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#### QUALITY CONTROL

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch B137536 - SW-846 5030B**

<b>LCS (B137536-BS1)</b>									
Prepared & Analyzed: 12/14/15									
Tetrachloroethylene	10.0	1.0	µg/L	10.0	100	70-130			
Surrogate: 1,2-Dichloroethane-d4	25.7		µg/L	25.0	103	70-130			
Surrogate: Toluene-d8	25.0		µg/L	25.0	100	70-130			
Surrogate: 4-Bromofluorobenzene	24.7		µg/L	25.0	98.9	70-130			
<b>LCS Dup (B137536-BS1)</b>									
Prepared & Analyzed: 12/14/15									
Tetrachloroethylene	9.93	1.0	µg/L	10.0	99.3	70-130	1.20	25	
Surrogate: 1,2-Dichloroethane-d4	25.7		µg/L	25.0	103	70-130			
Surrogate: Toluene-d8	25.3		µg/L	25.0	101	70-130			
Surrogate: 4-Bromofluorobenzene	24.5		µg/L	25.0	98.0	70-130			



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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

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.

RL-11 Elevated reporting limit due to high concentration of target compounds.

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



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#### CERTIFICATIONS

##### Certified Analyses included in this Report

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



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

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

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2016
CT	Connecticut Department of Public Health	PH-0567	09/30/2017
NY	New York State Department of Health	10899 NELAP	04/1/2016
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2016
RI	Rhode Island Department of Health	LAO00112	12/30/2015
NC	North Carolina Div. of Water Quality	652	12/31/2015
NJ	New Jersey DEP	MA007 NELAP	06/30/2016
FL	Florida Department of Health	E871027 NELAP	06/30/2016
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2016
WA	State of Washington Department of Ecology	C2065	02/23/2016
ME	State of Maine	2011028	06/9/2017
VA	Commonwealth of Virginia	460217	12/14/2015
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2016



# CHAIN OF CUSTODY RECORD

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

Email: info@contestlabs.com  
www.contestlabs.com

Company Name: CB&I Environmental

Address: 150 Royall Street  
Canton, MA 02021

Attention: Brian Cote

Project Location: Textron Providence, RI

Sampled By:

Project Proposal Provided? (for billing purposes)  
 yes       proposal date

Rev 04/05/12

Telephone: 617-589-6175

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4

ANALYSIS REQUESTED

Dissolved Metals

- Field Filtered
- Lab to Filter

\*\*\*Cont. Code:  
A=Amber glass  
G=glass  
P=plastic  
ST=sterile  
V=vial

Summa can  
T=tedia bag  
O=Other

\*Preservation:  
I=iced  
H = HCl

S=sovereign  
T=treated  
O=Other

Collection

Beginning Date/Time  
Ending Date/Time  
Composite Grab  
Code Conc Code

Enhanced Data Package

\*Cor-Tech  
know if a specific sample  
may be high in concentration in Matrix/Conc. Code Box:

M = Methanol  
N = Nitric Acid  
S = Sulfuric Acid  
B = Sodium bisulfate  
X = Na hydroxide  
T = Na thiosulfate  
O = Other

DW = drinking water  
GW = groundwater  
WW = wastewater

A = air  
S = soil/solid  
SL = sludge  
O = other

\*Matrix Code:  
DW = drinking water  
GW = groundwater  
WW = wastewater

MA State DW Form Required PWSID #

NELAC & AIHA-LAP, LLC

Accredited

WBE/DBE Certified

Comments:

Please use the following codes to let Cor-Tech know if a specific sample  
may be high in concentration in Matrix/Conc. Code Box:  
-----  
H - High; M - Medium; L - Low; C - Clean; U - Unknown

## Is your project MCP or RCP?

- MCP Form Required
- RCP Form Required
- MA State DW Form Required

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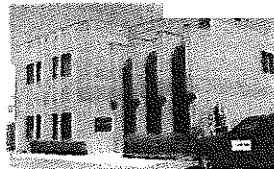
TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR  
INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.  
PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

Requisitioned by: (signature)	Date/Time:	Turnaround	Detection Limit Requirements
<i>Brian Cote</i>	12/7/15 16:40	<input type="checkbox"/> 7-Day <input checked="" type="checkbox"/> 10-Day <input type="checkbox"/> Other	Massachusetts:
<i>Brian Cote</i>	12/7/15 16:15	<input type="checkbox"/> RUSH <sup>†</sup>	Connecticut:
<i>Brian Cote</i>	12/7/15 16:45	<input type="checkbox"/> 24-Hr <input type="checkbox"/> 48-Hr <input type="checkbox"/> 72-Hr <input type="checkbox"/> 4-Day <input checked="" type="checkbox"/> Require lab approval	Other:
<i>Brian Cote</i>	12/7/15 16:45		

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East Longmeadow, MA. 01028  
P: 413-525-2332  
F: 413-525-6405  
www.contestlabs.com



Page 1 of 2

**Sample Receipt Checklist**CLIENT NAME: CB + 1RECEIVED BY: JDIDATE: 12/7/13

1) Was the chain(s) of custody relinquished and signed?

 Yes  No

No CoC Included

2) Does the chain agree with the samples?

 Yes  No

If not, explain:

3) Are all the samples in good condition?

 Yes  No

If not, explain:

4) How were the samples received:

On Ice  Direct from Sampling  Ambient  In Cooler(s) Were the samples received in Temperature Compliance of (2-6°C)?  Yes  No  N/A

Temperature °C by Temp blank \_\_\_\_\_

Temperature °C by Temp gun \_\_\_\_\_

4.6

5) Are there Dissolved samples for the lab to filter?

 Yes  No

Who was notified \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

6) Are there any RUSH or SHORT HOLDING TIME samples?

 Yes  No

Who was notified \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

7) Location where samples are stored:

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Permission to subcontract samples? Yes  No   
 (Walk-in clients only) if not already approved  
 Client Signature: \_\_\_\_\_

8) Do all samples have the proper Acid pH: Yes  No  N/A \_\_\_\_\_9) Do all samples have the proper Base pH: Yes  No  N/A \_\_\_\_\_10) Was the PC notified of any discrepancies with the CoC vs the samples: Yes  No  N/A \_\_\_\_\_**Containers received at Con-Test**

	# of containers		# of containers
1 Liter Amber		8 oz amber/clear jar	
500 mL Amber		4 oz amber/clear jar	
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Plastic Bag / Ziploc	
500 mL Plastic		SOC Kit	
250 mL plastic		Non-ConTest Container	
40 mL Vial - type listed below	//	Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

Laboratory Comments:

40 mL vials: # HCl //	# Methanol _____	Time and Date Frozen:
Doc# 277: # Bisulfate _____	# DI Water _____	
Rev. 4 August 2013: # Thiosulfate _____	Unpreserved _____	

Page 2 of 2

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

<u>Question</u>	<u>Answer (True/False)</u>	<u>Comment</u>
	T/F/NA	
1) The cooler's custody seal, if present, is intact.	N/A	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	N/A	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	T	
18) There is sufficient volume for all requested analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	T	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	T	
21) Samples do not require splitting or compositing.	T	

Who notified of False statements?

Date/Time:

Doc #277 Rev. 4 August 2013

Log-In Technician Initials:

Date/Time:

JDL

12/7/15 1645



---

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

January 11, 2016

Brian Cote  
CB&I Env. & Infrastructure - MA  
150 Royall Street  
Canton, MA 02021

Project Location: 130274 - Providence, RI - CO#501

Client Job Number:

Project Number: 130274

Laboratory Work Order Number: 16A0057

Enclosed are results of analyses for samples received by the laboratory on January 5, 2016. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "James M. Georgantas".

James M. Georgantas  
Project Manager

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

CB&I Env. & Infrastructure - MA  
150 Royall Street  
Canton, MA 02021  
ATTN: Brian Cote

REPORT DATE: 1/11/2016

PURCHASE ORDER NUMBER: 835493-000 OP

PROJECT NUMBER: 130274

#### **ANALYTICAL SUMMARY**

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WORK ORDER NUMBER: 16A0057

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

PROJECT LOCATION: 130274 - Providence, RI - CO#501

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-112	16A0057-01	Ground Water		SW-846 8260C	
MW-116D	16A0057-02	Ground Water		SW-846 8260C	
MW-116S	16A0057-03	Ground Water		SW-846 8260C	



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#### CASE NARRATIVE SUMMARY

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

#### SW-846 8260C

##### **Qualifications:**

###### **L-04**

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

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

###### **Dichlorodifluoromethane (Freon 1)**

16A0057-01[MW-112], 16A0057-02[MW-116D], 16A0057-03[MW-116S], B139338-BLK1, B139338-BS1, B139338-BSD1

###### **L-07**

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

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

###### **1,2-Dibromo-3-chloropropane (DB)**

B139338-BSD1

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

Elevated reporting limit due to high concentration of target compounds.

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

16A0057-01[MW-112]

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

Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.

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

###### **1,2-Dibromo-3-chloropropane (DB)**

16A0057-01[MW-112], 16A0057-02[MW-116D], 16A0057-03[MW-116S], B139338-BLK1, B139338-BS1, B139338-BSD1

###### **Bromoform**

16A0057-01[MW-112], 16A0057-02[MW-116D], 16A0057-03[MW-116S], B139338-BLK1, B139338-BS1, B139338-BSD1

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

16A0057-01[MW-112], 16A0057-02[MW-116D], 16A0057-03[MW-116S], B139338-BLK1, B139338-BS1, B139338-BSD1

###### **V-20**

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

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

###### **Chloromethane**

B139338-BS1, B139338-BSD1



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The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.  
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

A handwritten signature in black ink, appearing to read "Johanna K. Harrington".

Johanna K. Harrington  
Manager, Laboratory Reporting



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

Project Location: 130274 - Providence, RI - CO#50

Sample Description:

Work Order: 16A0057

Date Received: 1/5/2016

**Field Sample #:** MW-112

Sampled: 1/3/2016 11:45

**Sample ID:** 16A0057-01Sample Matrix: Ground Water

Sample Flags: RL-11

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	2500	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
Acrylonitrile	ND	250	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
tert-Amyl Methyl Ether (TAME)	ND	25	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
Benzene	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
Bromobenzene	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
Bromoform	ND	50	µg/L	50	V-05	SW-846 8260C	1/8/16	1/8/16 19:11	EEH
Bromomethane	ND	100	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
2-Butanone (MEK)	ND	1000	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
tert-Butyl Alcohol (TBA)	ND	1000	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
n-Butylbenzene	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
sec-Butylbenzene	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
tert-Butylbenzene	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	25	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
Carbon Disulfide	ND	200	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
Carbon Tetrachloride	ND	250	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
Chlorobenzene	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
Chlorodibromomethane	ND	25	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
Chloroethane	ND	100	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
Chloroform	ND	100	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
Chloromethane	ND	100	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
2-Chlorotoluene	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
4-Chlorotoluene	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	250	µg/L	50	V-05	SW-846 8260C	1/8/16	1/8/16 19:11	EEH
1,2-Dibromoethane (EDB)	ND	25	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
Dibromomethane	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
1,2-Dichlorobenzene	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
1,3-Dichlorobenzene	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
1,4-Dichlorobenzene	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
trans-1,4-Dichloro-2-butene	ND	100	µg/L	50	V-05	SW-846 8260C	1/8/16	1/8/16 19:11	EEH
Dichlorodifluoromethane (Freon 12)	ND	100	µg/L	50	L-04	SW-846 8260C	1/8/16	1/8/16 19:11	EEH
1,1-Dichloroethane	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
1,2-Dichloroethane	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
1,1-Dichloroethylene	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
cis-1,2-Dichloroethylene	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
trans-1,2-Dichloroethylene	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
1,2-Dichloropropane	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
1,3-Dichloropropane	ND	25	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
2,2-Dichloropropane	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
1,1-Dichloropropene	ND	100	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
cis-1,3-Dichloropropene	ND	25	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
trans-1,3-Dichloropropene	ND	25	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
Diethyl Ether	ND	100	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH



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Project Location: 130274 - Providence, RI - CO#50

Sample Description:

Work Order: 16A0057

Date Received: 1/5/2016

**Field Sample #:** MW-112

Sampled: 1/3/2016 11:45

**Sample ID:** 16A0057-01Sample Matrix: Ground Water

Sample Flags: RL-11

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	25	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
1,4-Dioxane	ND	2500	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
Ethylbenzene	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
Hexachlorobutadiene	ND	25	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
2-Hexanone (MBK)	ND	500	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
Isopropylbenzene (Cumene)	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
p-Isopropyltoluene (p-Cymene)	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
Methyl tert-Butyl Ether (MTBE)	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
Methylene Chloride	ND	250	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
4-Methyl-2-pentanone (MIBK)	ND	500	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
Naphthalene	ND	100	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
n-Propylbenzene	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
Styrene	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
1,1,1,2-Tetrachloroethane	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
1,1,2,2-Tetrachloroethane	ND	25	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
Tetrachloroethylene	5900	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
Tetrahydrofuran	ND	500	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
Toluene	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
1,2,3-Trichlorobenzene	ND	250	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
1,2,4-Trichlorobenzene	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
1,3,5-Trichlorobenzene	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
1,1,1-Trichloroethane	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
1,1,2-Trichloroethane	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
Trichloroethylene	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
Trichlorofluoromethane (Freon 11)	ND	100	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
1,2,3-Trichloropropane	ND	100	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
1,2,4-Trimethylbenzene	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
1,3,5-Trimethylbenzene	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
Vinyl Chloride	ND	100	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
m+p Xylene	ND	100	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH
o-Xylene	ND	50	µg/L	50		SW-846 8260C	1/8/16	1/8/16 19:11	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	99.0	70-130	1/8/16 19:11
Toluene-d8	103	70-130	1/8/16 19:11
4-Bromofluorobenzene	101	70-130	1/8/16 19:11



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Project Location: 130274 - Providence, RI - CO#50

Sample Description:

Work Order: 16A0057

Date Received: 1/5/2016

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

Sampled: 1/3/2016 12:45

**Sample ID:** 16A0057-02

Sample Matrix: Ground Water

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
Bromoform	ND	1.0	µg/L	1	V-05	SW-846 8260C	1/8/16	1/8/16 18:18	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	V-05	SW-846 8260C	1/8/16	1/8/16 18:18	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	V-05	SW-846 8260C	1/8/16	1/8/16 18:18	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1	L-04	SW-846 8260C	1/8/16	1/8/16 18:18	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH



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

Project Location: 130274 - Providence, RI - CO#50

Sample Description:

Work Order: 16A0057

Date Received: 1/5/2016

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

Sampled: 1/3/2016 12:45

**Sample ID:** 16A0057-02Sample Matrix: Ground Water**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:18	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	98.1	70-130					1/8/16 18:18		
Toluene-d8	102	70-130					1/8/16 18:18		
4-Bromofluorobenzene	101	70-130					1/8/16 18:18		



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

Project Location: 130274 - Providence, RI - CO#50

Sample Description:

Work Order: 16A0057

Date Received: 1/5/2016

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

Sampled: 1/3/2016 14:00

**Sample ID:** 16A0057-03

Sample Matrix: Ground Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
Bromoform	ND	1.0	µg/L	1	V-05	SW-846 8260C	1/8/16	1/8/16 18:45	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	V-05	SW-846 8260C	1/8/16	1/8/16 18:45	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	V-05	SW-846 8260C	1/8/16	1/8/16 18:45	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1	L-04	SW-846 8260C	1/8/16	1/8/16 18:45	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH



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

Project Location: 130274 - Providence, RI - CO#50

Sample Description:

Work Order: 16A0057

Date Received: 1/5/2016

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

Sampled: 1/3/2016 14:00

**Sample ID:** 16A0057-03Sample Matrix: Ground Water**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	1/8/16	1/8/16 18:45	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	98.9	70-130					1/8/16 18:45		
Toluene-d8	103	70-130					1/8/16 18:45		
4-Bromofluorobenzene	101	70-130					1/8/16 18:45		



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

#### Sample Extraction Data

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
16A0057-01 [MW-112]	B139338	0.1	5.00	01/08/16
16A0057-02 [MW-116D]	B139338	5	5.00	01/08/16
16A0057-03 [MW-116S]	B139338	5	5.00	01/08/16



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 B139338 - SW-846 5030B**

<b>Blank (B139338-BLK1)</b>		Prepared & Analyzed: 01/08/16							
Acetone	ND	50	µg/L						
Acrylonitrile	ND	5.0	µg/L						
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L						
Benzene	ND	1.0	µg/L						
Bromobenzene	ND	1.0	µg/L						
Bromoform	ND	1.0	µg/L						V-05
Bromomethane	ND	2.0	µg/L						
2-Butanone (MEK)	ND	20	µg/L						
tert-Butyl Alcohol (TBA)	ND	20	µg/L						
n-Butylbenzene	ND	1.0	µg/L						
sec-Butylbenzene	ND	1.0	µg/L						
tert-Butylbenzene	ND	1.0	µg/L						
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L						
Carbon Disulfide	ND	4.0	µg/L						
Carbon Tetrachloride	ND	5.0	µg/L						
Chlorobenzene	ND	1.0	µg/L						
Chlorodibromomethane	ND	0.50	µg/L						
Chloroethane	ND	2.0	µg/L						
Chloroform	ND	2.0	µg/L						
Chloromethane	ND	2.0	µg/L						
2-Chlorotoluene	ND	1.0	µg/L						
4-Chlorotoluene	ND	1.0	µg/L						
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L						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						V-05
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L						L-04
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	0.50	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 tert-Butyl Ether (MTBE)	ND	1.0	µg/L						



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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch B139338 - SW-846 5030B**

<b>Blank (B139338-BLK1)</b>	Prepared & Analyzed: 01/08/16					
Methylene Chloride	ND	5.0	µg/L			
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L			
Naphthalene	ND	2.0	µg/L			
n-Propylbenzene	ND	1.0	µg/L			
Styrene	ND	1.0	µg/L			
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L			
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L			
Tetrachloroethylene	ND	1.0	µg/L			
Tetrahydrofuran	ND	10	µg/L			
Toluene	ND	1.0	µg/L			
1,2,3-Trichlorobenzene	ND	5.0	µg/L			
1,2,4-Trichlorobenzene	ND	1.0	µg/L			
1,3,5-Trichlorobenzene	ND	1.0	µg/L			
1,1,1-Trichloroethane	ND	1.0	µg/L			
1,1,2-Trichloroethane	ND	1.0	µg/L			
Trichloroethylene	ND	1.0	µg/L			
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L			
1,2,3-Trichloropropane	ND	2.0	µg/L			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L			
1,2,4-Trimethylbenzene	ND	1.0	µg/L			
1,3,5-Trimethylbenzene	ND	1.0	µg/L			
Vinyl Chloride	ND	2.0	µg/L			
m+p Xylene	ND	2.0	µg/L			
o-Xylene	ND	1.0	µg/L			
Surrogate: 1,2-Dichloroethane-d4	24.1		µg/L	25.0	96.3	70-130
Surrogate: Toluene-d8	25.8		µg/L	25.0	103	70-130
Surrogate: 4-Bromofluorobenzene	24.9		µg/L	25.0	99.6	70-130

<b>LCS (B139338-BS1)</b>	Prepared & Analyzed: 01/08/16					
Acetone	76.6	50	µg/L	100	76.6	70-160
Acrylonitrile	9.70	5.0	µg/L	10.0	97.0	70-130
tert-Amyl Methyl Ether (TAME)	9.12	0.50	µg/L	10.0	91.2	70-130
Benzene	10.1	1.0	µg/L	10.0	101	70-130
Bromobenzene	10.2	1.0	µg/L	10.0	102	70-130
Bromoform	11.7	1.0	µg/L	10.0	117	70-130
Bromochloromethane	9.43	0.50	µg/L	10.0	94.3	70-130
Bromodichloromethane	8.13	1.0	µg/L	10.0	81.3	70-130
Bromomethane	7.45	2.0	µg/L	10.0	74.5	40-160
2-Butanone (MEK)	85.3	20	µg/L	100	85.3	40-160
tert-Butyl Alcohol (TBA)	75.8	20	µg/L	100	75.8	40-160
n-Butylbenzene	9.86	1.0	µg/L	10.0	98.6	70-130
sec-Butylbenzene	10.3	1.0	µg/L	10.0	103	70-130
tert-Butylbenzene	9.88	1.0	µg/L	10.0	98.8	70-130
tert-Butyl Ethyl Ether (TBEE)	9.76	0.50	µg/L	10.0	97.6	70-130
Carbon Disulfide	7.73	4.0	µg/L	10.0	77.3	70-130
Carbon Tetrachloride	9.21	5.0	µg/L	10.0	92.1	70-130
Chlorobenzene	9.84	1.0	µg/L	10.0	98.4	70-130
Chlorodibromomethane	8.76	0.50	µg/L	10.0	87.6	70-130
Chloroethane	10.3	2.0	µg/L	10.0	103	70-130
Chloroform	9.73	2.0	µg/L	10.0	97.3	70-130
Chloromethane	9.35	2.0	µg/L	10.0	93.5	40-160
2-Chlorotoluene	9.96	1.0	µg/L	10.0	99.6	70-130

V-20

†

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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch B139338 - SW-846 5030B**

<b>LCS (B139338-BS1)</b>					Prepared & Analyzed: 01/08/16					
4-Chlorotoluene	9.83	1.0	µg/L	10.0	98.3	70-130				
1,2-Dibromo-3-chloropropane (DBCP)	7.15	5.0	µg/L	10.0	71.5	70-130				V-05
1,2-Dibromoethane (EDB)	10.1	0.50	µg/L	10.0	101	70-130				
Dibromomethane	9.95	1.0	µg/L	10.0	99.5	70-130				
1,2-Dichlorobenzene	9.45	1.0	µg/L	10.0	94.5	70-130				
1,3-Dichlorobenzene	9.89	1.0	µg/L	10.0	98.9	70-130				
1,4-Dichlorobenzene	9.19	1.0	µg/L	10.0	91.9	70-130				
trans-1,4-Dichloro-2-butene	7.35	2.0	µg/L	10.0	73.5	70-130				V-05
<b>Dichlorodifluoromethane (Freon 12)</b>	3.87	2.0	µg/L	10.0	38.7 *	40-160				L-04 †
1,1-Dichloroethane	10.4	1.0	µg/L	10.0	104	70-130				
1,2-Dichloroethane	9.77	1.0	µg/L	10.0	97.7	70-130				
1,1-Dichloroethylene	9.75	1.0	µg/L	10.0	97.5	70-130				
cis-1,2-Dichloroethylene	10.1	1.0	µg/L	10.0	101	70-130				
trans-1,2-Dichloroethylene	9.73	1.0	µg/L	10.0	97.3	70-130				
1,2-Dichloropropane	10.4	1.0	µg/L	10.0	104	70-130				
1,3-Dichloropropane	10.2	0.50	µg/L	10.0	102	70-130				
2,2-Dichloropropane	9.21	1.0	µg/L	10.0	92.1	40-130				†
1,1-Dichloropropene	9.77	2.0	µg/L	10.0	97.7	70-130				
cis-1,3-Dichloropropene	9.14	0.50	µg/L	10.0	91.4	70-130				
trans-1,3-Dichloropropene	9.76	0.50	µg/L	10.0	97.6	70-130				
Diethyl Ether	9.74	2.0	µg/L	10.0	97.4	70-130				
Diisopropyl Ether (DIPE)	9.60	0.50	µg/L	10.0	96.0	70-130				
1,4-Dioxane	80.0	50	µg/L	100	80.0	40-130				†
Ethylbenzene	10.3	1.0	µg/L	10.0	103	70-130				
Hexachlorobutadiene	9.84	0.50	µg/L	10.0	98.4	70-130				
2-Hexanone (MBK)	91.3	10	µg/L	100	91.3	70-160				†
Isopropylbenzene (Cumene)	10.1	1.0	µg/L	10.0	101	70-130				
p-Isopropyltoluene (p-Cymene)	10.7	1.0	µg/L	10.0	107	70-130				
Methyl tert-Butyl Ether (MTBE)	9.13	1.0	µg/L	10.0	91.3	70-130				
Methylene Chloride	10.6	5.0	µg/L	10.0	106	70-130				
4-Methyl-2-pentanone (MIBK)	96.2	10	µg/L	100	96.2	70-160				†
Naphthalene	8.77	2.0	µg/L	10.0	87.7	40-130				†
n-Propylbenzene	9.98	1.0	µg/L	10.0	99.8	70-130				
Styrene	10.2	1.0	µg/L	10.0	102	70-130				
1,1,1,2-Tetrachloroethane	9.64	1.0	µg/L	10.0	96.4	70-130				
1,1,2,2-Tetrachloroethane	9.88	0.50	µg/L	10.0	98.8	70-130				
Tetrachloroethylene	10.3	1.0	µg/L	10.0	103	70-130				
Tetrahydrofuran	9.85	10	µg/L	10.0	98.5	70-130				
Toluene	10.6	1.0	µg/L	10.0	106	70-130				
1,2,3-Trichlorobenzene	9.43	5.0	µg/L	10.0	94.3	70-130				
1,2,4-Trichlorobenzene	9.70	1.0	µg/L	10.0	97.0	70-130				
1,3,5-Trichlorobenzene	9.10	1.0	µg/L	10.0	91.0	70-130				
1,1,1-Trichloroethane	9.05	1.0	µg/L	10.0	90.5	70-130				
1,1,2-Trichloroethane	10.4	1.0	µg/L	10.0	104	70-130				
Trichloroethylene	10.4	1.0	µg/L	10.0	104	70-130				
Trichlorofluoromethane (Freon 11)	8.04	2.0	µg/L	10.0	80.4	70-130				
1,2,3-Trichloropropane	9.63	2.0	µg/L	10.0	96.3	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.17	1.0	µg/L	10.0	91.7	70-130				
1,2,4-Trimethylbenzene	10.1	1.0	µg/L	10.0	101	70-130				
1,3,5-Trimethylbenzene	10.5	1.0	µg/L	10.0	105	70-130				
Vinyl Chloride	7.08	2.0	µg/L	10.0	70.8	40-160				†



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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 B139338 - SW-846 5030B</b>										
<b>LCS (B139338-BS1)</b>										
Prepared & Analyzed: 01/08/16										
m+p Xylene	20.3	2.0	µg/L	20.0	102	70-130				
o-Xylene	10.0	1.0	µg/L	10.0	100	70-130				
Surrogate: 1,2-Dichloroethane-d4	24.9		µg/L	25.0	99.5	70-130				
Surrogate: Toluene-d8	26.0		µg/L	25.0	104	70-130				
Surrogate: 4-Bromofluorobenzene	25.0		µg/L	25.0	100	70-130				
<b>LCS Dup (B139338-BSD1)</b>										
Prepared & Analyzed: 01/08/16										
Acetone	70.3	50	µg/L	100	70.3	70-160	8.55	25		†
Acrylonitrile	9.15	5.0	µg/L	10.0	91.5	70-130	5.84	25		
tert-Amyl Methyl Ether (TAME)	8.99	0.50	µg/L	10.0	89.9	70-130	1.44	25		
Benzene	9.99	1.0	µg/L	10.0	99.9	70-130	1.10	25		
Bromobenzene	10.3	1.0	µg/L	10.0	103	70-130	0.195	25		
Bromoform	8.85	0.50	µg/L	10.0	88.5	70-130	6.35	25		
Bromomethane	8.02	1.0	µg/L	10.0	80.2	70-130	1.36	25		V-05
2-Butanone (MEK)	8.40	2.0	µg/L	10.0	84.0	40-160	12.0	25		†
tert-Butyl Alcohol (TBA)	76.6	20	µg/L	100	76.6	40-160	10.8	25		†
n-Butylbenzene	71.9	20	µg/L	100	71.9	40-160	5.36	25		†
sec-Butylbenzene	9.25	1.0	µg/L	10.0	92.5	70-130	6.38	25		
tert-Butylbenzene	9.74	1.0	µg/L	10.0	97.4	70-130	5.30	25		
tert-Butyl Ethyl Ether (TBEE)	9.50	1.0	µg/L	10.0	95.0	70-130	3.92	25		
Carbon Disulfide	9.63	0.50	µg/L	10.0	96.3	70-130	1.34	25		
Carbon Tetrachloride	7.36	4.0	µg/L	10.0	73.6	70-130	4.90	25		
Chlorobenzene	9.28	5.0	µg/L	10.0	92.8	70-130	0.757	25		
Chlorodibromomethane	9.80	1.0	µg/L	10.0	98.0	70-130	0.407	25		
Chloroethane	8.60	0.50	µg/L	10.0	86.0	70-130	1.84	25		
Chloroform	10.2	2.0	µg/L	10.0	102	70-130	1.07	25		
Chloromethane	9.63	2.0	µg/L	10.0	96.3	70-130	1.03	25		
2-Chlorotoluene	10.2	2.0	µg/L	10.0	102	40-160	8.60	25		V-20
4-Chlorotoluene	9.94	1.0	µg/L	10.0	99.4	70-130	0.201	25		
<b>1,2-Dibromo-3-chloropropane (DBCP)</b>	9.62	1.0	µg/L	10.0	96.2	70-130	2.16	25		
1,2-Dibromoethane (EDB)	6.51	5.0	µg/L	10.0	65.1	*	70-130	9.37	25	L-07, V-05
Dibromomethane	9.54	0.50	µg/L	10.0	95.4	70-130	5.90	25		
1,2-Dichlorobenzene	10.1	1.0	µg/L	10.0	101	70-130	1.30	25		
1,3-Dichlorobenzene	9.09	1.0	µg/L	10.0	90.9	70-130	3.88	25		
1,4-Dichlorobenzene	9.37	1.0	µg/L	10.0	93.7	70-130	5.40	25		
trans-1,4-Dichloro-2-butene	9.20	1.0	µg/L	10.0	92.0	70-130	0.109	25		
<b>Dichlorodifluoromethane (Freon 12)</b>	7.17	2.0	µg/L	10.0	71.7	70-130	2.48	25		V-05
1,1-Dichloroethane	3.80	2.0	µg/L	10.0	38.0	*	40-160	1.83	25	L-04
1,2-Dichloroethane	10.3	1.0	µg/L	10.0	103	70-130	0.193	25		
cis-1,2-Dichloroethylene	9.69	1.0	µg/L	10.0	96.9	70-130	0.822	25		
trans-1,2-Dichloroethylene	9.68	1.0	µg/L	10.0	96.8	70-130	0.721	25		
cis-1,2-Dichloroethylene	9.73	1.0	µg/L	10.0	97.3	70-130	3.63	25		
1,2-Dichloropropene	9.60	1.0	µg/L	10.0	96.0	70-130	1.35	25		
1,3-Dichloropropene	10.2	1.0	µg/L	10.0	102	70-130	1.65	25		
2,2-Dichloropropene	10.1	0.50	µg/L	10.0	101	70-130	1.48	25		
1,1-Dichloropropene	9.00	1.0	µg/L	10.0	90.0	40-130	2.31	25		†
cis-1,3-Dichloropropene	9.83	2.0	µg/L	10.0	98.3	70-130	0.612	25		
trans-1,3-Dichloropropene	9.02	0.50	µg/L	10.0	90.2	70-130	1.32	25		
Diethyl Ether	9.19	0.50	µg/L	10.0	91.9	70-130	6.02	25		
Diisopropyl Ether (DIPE)	9.86	2.0	µg/L	10.0	98.6	70-130	1.22	25		
	9.41	0.50	µg/L	10.0	94.1	70-130	2.00	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 B139338 - SW-846 5030B</b>										
<b>LCS Dup (B139338-BSD1)</b>										
Prepared & Analyzed: 01/08/16										
1,4-Dioxane	67.0	50	µg/L	100	67.0	40-130	17.7	50		† ‡
Ethylbenzene	10.1	1.0	µg/L	10.0	101	70-130	1.86	25		
Hexachlorobutadiene	9.41	0.50	µg/L	10.0	94.1	70-130	4.47	25		
2-Hexanone (MBK)	83.5	10	µg/L	100	83.5	70-160	8.93	25		†
Isopropylbenzene (Cumene)	10.1	1.0	µg/L	10.0	101	70-130	0.792	25		
p-Isopropyltoluene (p-Cymene)	10.3	1.0	µg/L	10.0	103	70-130	3.24	25		
Methyl tert-Butyl Ether (MTBE)	8.80	1.0	µg/L	10.0	88.0	70-130	3.68	25		
Methylene Chloride	10.8	5.0	µg/L	10.0	108	70-130	1.68	25		
4-Methyl-2-pentanone (MIBK)	90.3	10	µg/L	100	90.3	70-160	6.35	25		†
Naphthalene	7.96	2.0	µg/L	10.0	79.6	40-130	9.68	25		†
n-Propylbenzene	9.84	1.0	µg/L	10.0	98.4	70-130	1.41	25		
Styrene	9.98	1.0	µg/L	10.0	99.8	70-130	2.08	25		
1,1,1,2-Tetrachloroethane	9.51	1.0	µg/L	10.0	95.1	70-130	1.36	25		
1,1,2,2-Tetrachloroethane	9.53	0.50	µg/L	10.0	95.3	70-130	3.61	25		
Tetrachloroethylene	9.95	1.0	µg/L	10.0	99.5	70-130	3.84	25		
Tetrahydrofuran	9.48	10	µg/L	10.0	94.8	70-130	3.83	25		
Toluene	10.3	1.0	µg/L	10.0	103	70-130	2.30	25		
1,2,3-Trichlorobenzene	8.44	5.0	µg/L	10.0	84.4	70-130	11.1	25		
1,2,4-Trichlorobenzene	9.16	1.0	µg/L	10.0	91.6	70-130	5.73	25		
1,3,5-Trichlorobenzene	8.50	1.0	µg/L	10.0	85.0	70-130	6.82	25		
1,1,1-Trichloroethane	9.03	1.0	µg/L	10.0	90.3	70-130	0.221	25		
1,1,2-Trichloroethane	9.85	1.0	µg/L	10.0	98.5	70-130	5.43	25		
Trichloroethylene	10.5	1.0	µg/L	10.0	105	70-130	0.863	25		
Trichlorofluoromethane (Freon 11)	8.04	2.0	µg/L	10.0	80.4	70-130	0.00	25		
1,2,3-Trichloropropane	9.51	2.0	µg/L	10.0	95.1	70-130	1.25	25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.35	1.0	µg/L	10.0	93.5	70-130	1.94	25		
1,2,4-Trimethylbenzene	9.81	1.0	µg/L	10.0	98.1	70-130	2.71	25		
1,3,5-Trimethylbenzene	10.4	1.0	µg/L	10.0	104	70-130	1.34	25		
Vinyl Chloride	7.09	2.0	µg/L	10.0	70.9	40-160	0.141	25		†
m+p Xylene	20.5	2.0	µg/L	20.0	102	70-130	0.980	25		
o-Xylene	10.1	1.0	µg/L	10.0	101	70-130	0.893	25		
Surrogate: 1,2-Dichloroethane-d4	24.8		µg/L	25.0	99.2	70-130				
Surrogate: Toluene-d8	25.7		µg/L	25.0	103	70-130				
Surrogate: 4-Bromofluorobenzene	25.5		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

RL Reporting Limit

DL Method Detection Limit

MCL Maximum Contaminant Level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

L-04 Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits.  
Reported value for this compound is likely to be biased on the low side.

L-07 Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but  
the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

RL-11 Elevated reporting limit due to high concentration of target compounds.

V-05 Continuing calibration did not meet method specifications and was biased on the low side for this compound.  
Increased uncertainty is associated with the reported value which is likely to be biased on the low side.

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



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#### CERTIFICATIONS

##### Certified Analyses included in this Report

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



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

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

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2016
CT	Connecticut Department of Public Health	PH-0567	09/30/2017
NY	New York State Department of Health	10899 NELAP	04/1/2016
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2016
RI	Rhode Island Department of Health	LAO00112	12/30/2016
NC	North Carolina Div. of Water Quality	652	12/31/2016
NJ	New Jersey DEP	MA007 NELAP	06/30/2016
FL	Florida Department of Health	E871027 NELAP	06/30/2016
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2016
WA	State of Washington Department of Ecology	C2065	02/23/2016
ME	State of Maine	2011028	06/9/2017
VA	Commonwealth of Virginia	460217	12/14/2016
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2016

**CHAIN OF CUSTODY RECORD**

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

Email: info@contestlabs.com  
www.contestlabs.com

16A0057  
Rev 04/05/12

39 Spruce Street  
East Longmeadow, MA 01028

Company Name: CB&I Environmental		Telephone: 617-589-6175		Project # 130274		Client PO# 835493		DATA DELIVERY (check all that apply)		ANALYSIS REQUESTED		# of Containers		** Container Code			
Address:	150 Royall Street	Canton, MA	02021	Brian Cote			<input type="checkbox"/> FAX <input type="checkbox"/> EMAIL <input checked="" type="checkbox"/> WEBSITE						<input type="checkbox"/> H		<input type="checkbox"/> Field Filtered		
Attention:	Project Location: 130 & 74 - Providence, RI-CoffS01		Fax #	Sampled By: <i>Brian Cote</i>	Email: brian.cote@cbl.com								<input type="checkbox"/> V		<input type="checkbox"/> Lab to Filter		
Project Proposal Provided? (for billing purposes)		proposal date		Format	<input type="checkbox"/> PDF <input checked="" type="checkbox"/> EXCEL <input type="checkbox"/> GIS		<input type="checkbox"/> OTHER <input checked="" type="checkbox"/> GISKey format		Collection		<input type="checkbox"/> "Enhanced Data Package"						
Con-Test Lab ID	Client Sample ID / Description		Beginning Date/Time	Ending Date/Time	Composite	Grab	Date	Matrix	Code	Comments	Code	Date	Comments	Code	Comments	Code	
01	MW-112		1/3/12	11:15		<input checked="" type="checkbox"/>		GW	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
02	MW-116D		1/3/12	12:15		<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
03	MW-116S		1/3/12	14:00		<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Comments:																	
Reinforced by: (signature) <i>Brian Cote</i>		Date/Time: <i>1/3/12</i>		Turnaround <sup>†</sup>		<input type="checkbox"/> 7-Day		Detection Limit Requirements		Is your project MCP or RCP?							
Received by: (signature) <i>Brian Cote</i>		Date/Time: <i>1/5/12 10:27</i>		<input type="checkbox"/> 10-Day		<input type="checkbox"/> Other		Massachusetts:		<input type="checkbox"/> MCP Form Required							
Elinquished by: (signature) <i>Brian Cote</i>		Date/Time: <i>1/5/12 10:27</i>		<input type="checkbox"/> RUSH <sup>†</sup>		<input type="checkbox"/> 24-Hr		Connecticut:		<input type="checkbox"/> RCP Form Required							
Received by: (signature) <i>Brian Cote</i>		Date/Time: <i>1/5/12 15:55</i>		<input type="checkbox"/> 14-Day		<input type="checkbox"/> 72-Hr		Require lab approval		<input type="checkbox"/> MA State DW Form Required		<input type="checkbox"/> PWSID # _____		<input checked="" type="checkbox"/> NELAC & AIHA-LAP, LLC Accredited		<input checked="" type="checkbox"/> WBE/DBE Certified	
TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.																	

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:

H - High; M - Medium; L - Low; C - Clean; U - Unknown

I = Iced

H = HCl

M = Methanol

N = Nitric Acid

S = Sulfuric Acid

B = Sodium bisulfate

X = Na hydroxide

T = Na thiosulfate

O = Other

SL = sludge

O - other

A = air

S = soil/solid

GW = groundwater

WW = wastewater

DW = drinking water

Other

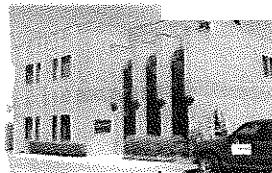


PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

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East Longmeadow, MA. 01028  
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Page 1 of 2



## Sample Receipt Checklist

CLIENT NAME: CB + 1

RECEIVED BY: JDL

DATE: 1/5/16

1) Was the chain(s) of custody relinquished and signed?

Yes No No CoC Included

2) Does the chain agree with the samples?

Yes No

If not, explain:

3) Are all the samples in good condition?

Yes No

If not, explain:

4) How were the samples received:

On Ice  Direct from Sampling  Ambient  In Cooler(s) 

Were the samples received in Temperature Compliance of (2-6°C)?

Yes No N/A

Temperature °C by Temp blank

Temperature °C by Temp gun

3.8

5) Are there Dissolved samples for the lab to filter?

Yes No

Who was notified \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

6) Are there any RUSH or SHORT HOLDING TIME samples?

Yes No

Who was notified \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

Permission to subcontract samples? Yes No

(Walk-in clients only) if not already approved  
Client Signature: \_\_\_\_\_

7) Location where samples are stored:

19

8) Do all samples have the proper Acid pH: Yes No N/A

9) Do all samples have the proper Base pH: Yes No N/A

10) Was the PC notified of any discrepancies with the CoC vs the samples: Yes No N/A

### Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber		8 oz amber/clear jar	
500 mL Amber		4 oz amber/clear jar	
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Plastic Bag / Ziploc	
500 mL Plastic		SOC Kit	
250 mL plastic		Non-ConTest Container	
40 mL Vial - type listed below	9	Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

Laboratory Comments:

40 mL vials: # HCl	9	# Methanol	Time and Date Frozen:
Doc# 277	# Bisulfate	# DI Water	
Rev. 4 August 2013	# Thiosulfate	Unpreserved	

Page 2 of 2

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)  
 Any False statement will be brought to the attention of Client

<u>Question</u>	<u>Answer (True/False)</u>	<u>Comment</u>
	T/F/NA	
1) The cooler's custody seal, if present, is intact.	N/A	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	N/A	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	T	
18) There is sufficient volume for all requested analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	N/A	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	T	
21) Samples do not require splitting or compositing.	T	

Who notified of False statements?

Doc #277 Rev. 4 August 2013

Log-In Technician Initials:

JDL Date/Time: 1/8/16 1555  
 Date/Time: 1/8/16 1555



---

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

March 7, 2016

Brian Cote  
CB&I Env. & Infrastructure - MA  
150 Royall Street  
Canton, MA 02021

Project Location: Textron, Providence, RI

Client Job Number:

Project Number: 130274

Laboratory Work Order Number: 16B1076

Enclosed are results of analyses for samples received by the laboratory on February 26, 2016. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "James M. Georgantas". The signature is fluid and cursive, with a distinct flourish at the end.

James M. Georgantas  
Project Manager

## Table of Contents

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CB&I Env. & Infrastructure - MA  
150 Royall Street  
Canton, MA 02021  
ATTN: Brian Cote

REPORT DATE: 3/7/2016

PURCHASE ORDER NUMBER: 835493-000 OP

PROJECT NUMBER: 130274

#### **ANALYTICAL SUMMARY**

---

WORK ORDER NUMBER: 16B1076

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

PROJECT LOCATION: Textron, Providence, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-112	16B1076-01	Ground Water		SW-846 8260C	
MW-116D	16B1076-02	Ground Water		SW-846 8260C	
MW-116S	16B1076-03	Ground Water		SW-846 8260C	



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#### CASE NARRATIVE SUMMARY

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

#### SW-846 8260C

##### **Qualifications:**

###### **L-02**

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

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

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

B143415-BS1, B143415-BSD1

###### **L-07**

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

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

###### **1,4-Dioxane**

B143415-BSD1

###### **R-05**

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

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

###### **Vinyl Chloride**

B143415-BLK1, B143415-BS1, B143415-BSD1

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

Elevated reporting limit due to high concentration of target compounds.

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

16B1076-01[MW-112]

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

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

Tod E. Kopyscinski  
Laboratory Director



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

Project Location: Textron, Providence, RI

Date Received: 2/26/2016

**Field Sample #:** MW-112**Sample ID:** 16B1076-01Sample Matrix: Ground Water

Sample Description:

Work Order: 16B1076

Sampled: 2/23/2016 10:00

Sample Flags: RL-11

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	200	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
Acrylonitrile	ND	20	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
tert-Amyl Methyl Ether (TAME)	ND	2.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
Benzene	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
Bromobenzene	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
Bromochloromethane	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
Bromodichloromethane	ND	2.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
Bromoform	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
Bromomethane	ND	8.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
2-Butanone (MEK)	ND	80	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
tert-Butyl Alcohol (TBA)	ND	80	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
n-Butylbenzene	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
sec-Butylbenzene	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
tert-Butylbenzene	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	2.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
Carbon Disulfide	20	16	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
Carbon Tetrachloride	ND	20	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
Chlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
Chlorodibromomethane	ND	2.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
Chloroethane	ND	8.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
Chloroform	ND	8.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
Chloromethane	ND	8.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
2-Chlorotoluene	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
4-Chlorotoluene	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	20	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
1,2-Dibromoethane (EDB)	ND	2.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
Dibromomethane	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
1,2-Dichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
1,3-Dichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
1,4-Dichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
trans-1,4-Dichloro-2-butene	ND	8.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
Dichlorodifluoromethane (Freon 12)	ND	8.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
1,1-Dichloroethane	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
1,2-Dichloroethane	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
1,1-Dichloroethylene	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
cis-1,2-Dichloroethylene	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
trans-1,2-Dichloroethylene	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
1,2-Dichloropropane	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
1,3-Dichloropropane	ND	2.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
2,2-Dichloropropane	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
1,1-Dichloropropene	ND	8.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
cis-1,3-Dichloropropene	ND	2.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
trans-1,3-Dichloropropene	ND	2.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
Diethyl Ether	ND	8.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH



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Project Location: Textron, Providence, RI

Sample Description:

Work Order: 16B1076

Date Received: 2/26/2016

**Field Sample #:** MW-112

Sampled: 2/23/2016 10:00

**Sample ID:** 16B1076-01Sample Matrix: Ground Water

Sample Flags: RL-11

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	2.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
1,4-Dioxane	ND	200	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
Ethylbenzene	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
Hexachlorobutadiene	ND	2.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
2-Hexanone (MBK)	ND	40	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
Isopropylbenzene (Cumene)	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
p-Isopropyltoluene (p-Cymene)	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
Methyl tert-Butyl Ether (MTBE)	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
Methylene Chloride	ND	20	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
4-Methyl-2-pentanone (MIBK)	ND	40	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
Naphthalene	ND	8.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
n-Propylbenzene	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
Styrene	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
1,1,1,2-Tetrachloroethane	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
1,1,2,2-Tetrachloroethane	ND	2.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
Tetrachloroethylene	2500	100	µg/L	100		SW-846 8260C	3/4/16	3/5/16 5:33	EEH
Tetrahydrofuran	ND	40	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
Toluene	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
1,2,3-Trichlorobenzene	ND	20	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
1,2,4-Trichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
1,3,5-Trichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
1,1,1-Trichloroethane	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
1,1,2-Trichloroethane	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
Trichloroethylene	12	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
Trichlorofluoromethane (Freon 11)	ND	8.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
1,2,3-Trichloropropane	ND	8.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
1,2,4-Trimethylbenzene	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
1,3,5-Trimethylbenzene	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
Vinyl Chloride	ND	8.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
m+p Xylene	ND	8.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH
o-Xylene	ND	4.0	µg/L	4		SW-846 8260C	3/2/16	3/3/16 8:17	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	101	70-130		3/3/16 8:17
1,2-Dichloroethane-d4	101	70-130		3/5/16 5:33
Toluene-d8	98.7	70-130		3/5/16 5:33
Toluene-d8	98.1	70-130		3/3/16 8:17
4-Bromofluorobenzene	94.6	70-130		3/3/16 8:17
4-Bromofluorobenzene	94.8	70-130		3/5/16 5:33

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

Project Location: Textron, Providence, RI

Sample Description:

Work Order: 16B1076

Date Received: 2/26/2016

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

Sampled: 2/23/2016 11:45

**Sample ID:** 16B1076-02

Sample Matrix: Ground Water

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH



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

Project Location: Textron, Providence, RI

Sample Description:

Work Order: 16B1076

Date Received: 2/26/2016

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

Sampled: 2/23/2016 11:45

**Sample ID:** 16B1076-02Sample Matrix: Ground Water**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:24	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	101	70-130		3/3/16 7:24
Toluene-d8	98.9	70-130		3/3/16 7:24
4-Bromofluorobenzene	95.4	70-130		3/3/16 7:24



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

Project Location: Textron, Providence, RI

Sample Description:

Work Order: 16B1076

Date Received: 2/26/2016

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

Sampled: 2/23/2016 10:45

**Sample ID:** 16B1076-03

Sample Matrix: Ground Water

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH



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

Project Location: Textron, Providence, RI

Sample Description:

Work Order: 16B1076

Date Received: 2/26/2016

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

Sampled: 2/23/2016 10:45

**Sample ID:** 16B1076-03Sample Matrix: Ground Water**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	3/2/16	3/3/16 7:51	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	103	70-130		3/3/16 7:51
Toluene-d8	98.6	70-130		3/3/16 7:51
4-Bromofluorobenzene	95.8	70-130		3/3/16 7:51



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

### Sample Extraction Data

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
16B1076-01RE1 [MW-112]	B143415	0.05	5.00	03/04/16

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
16B1076-01 [MW-112]	B143496	1.25	5.00	03/02/16
16B1076-02 [MW-116D]	B143496	5	5.00	03/02/16
16B1076-03 [MW-116S]	B143496	5	5.00	03/02/16



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 B143415 - SW-846 5030B**

<b>Blank (B143415-BLK1)</b>									Prepared: 03/02/16 Analyzed: 03/04/16
Acetone	ND	50	µg/L						
Acrylonitrile	ND	5.0	µg/L						
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L						
Benzene	ND	1.0	µg/L						
Bromobenzene	ND	1.0	µg/L						
Bromoform	ND	0.50	µg/L						
Bromomethane	ND	1.0	µg/L						
2-Butanone (MEK)	ND	20	µg/L						
tert-Butyl Alcohol (TBA)	ND	20	µg/L						
n-Butylbenzene	ND	1.0	µg/L						
sec-Butylbenzene	ND	1.0	µg/L						
tert-Butylbenzene	ND	1.0	µg/L						
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L						
Carbon Disulfide	ND	4.0	µg/L						
Carbon Tetrachloride	ND	5.0	µg/L						
Chlorobenzene	ND	1.0	µg/L						
Chlorodibromomethane	ND	0.50	µg/L						
Chloroethane	ND	2.0	µg/L						
Chloroform	ND	2.0	µg/L						
Chloromethane	ND	2.0	µg/L						
2-Chlorotoluene	ND	1.0	µg/L						
4-Chlorotoluene	ND	1.0	µg/L						
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L						
1,2-Dibromoethane (EDB)	ND	0.50	µg/L						
Dibromomethane	ND	1.0	µg/L						
1,2-Dichlorobenzene	ND	1.0	µg/L						
1,3-Dichlorobenzene	ND	1.0	µg/L						
1,4-Dichlorobenzene	ND	1.0	µg/L						
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L						
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L						
1,1-Dichloroethane	ND	1.0	µg/L						
1,2-Dichloroethane	ND	1.0	µg/L						
1,1-Dichloroethylene	ND	1.0	µg/L						
cis-1,2-Dichloroethylene	ND	1.0	µg/L						
trans-1,2-Dichloroethylene	ND	1.0	µg/L						
1,2-Dichloropropane	ND	1.0	µg/L						
1,3-Dichloropropane	ND	0.50	µg/L						
2,2-Dichloropropane	ND	1.0	µg/L						
1,1-Dichloropropene	ND	2.0	µg/L						
cis-1,3-Dichloropropene	ND	0.50	µg/L						
trans-1,3-Dichloropropene	ND	0.50	µg/L						
Diethyl Ether	ND	2.0	µg/L						
Diisopropyl Ether (DIPE)	ND	0.50	µg/L						
1,4-Dioxane	ND	50	µg/L						
Ethylbenzene	ND	1.0	µg/L						
Hexachlorobutadiene	ND	0.50	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	5.0	µg/L						



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch B143415 - SW-846 5030B**

<b>Blank (B143415-BLK1)</b>	Prepared: 03/02/16 Analyzed: 03/04/16						
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			R-05	
m+p Xylene	ND	2.0	µg/L				
o-Xylene	ND	1.0	µg/L				
Surrogate: 1,2-Dichloroethane-d4	25.5		µg/L	25.0	102	70-130	
Surrogate: Toluene-d8	24.7		µg/L	25.0	99.0	70-130	
Surrogate: 4-Bromofluorobenzene	24.3		µg/L	25.0	97.2	70-130	

<b>LCS (B143415-BS1)</b>	Prepared: 03/02/16 Analyzed: 03/04/16						
Acetone	100	50	µg/L	100	100	70-160	†
Acrylonitrile	9.72	5.0	µg/L	10.0	97.2	70-130	
tert-Amyl Methyl Ether (TAME)	9.18	0.50	µg/L	10.0	91.8	70-130	
Benzene	10.2	1.0	µg/L	10.0	102	70-130	
Bromobenzene	9.62	1.0	µg/L	10.0	96.2	70-130	
Bromoform	11.3	1.0	µg/L	10.0	113	70-130	
Bromochloromethane	9.96	0.50	µg/L	10.0	99.6	70-130	
Bromodichloromethane	10.7	1.0	µg/L	10.0	107	70-130	
Bromomethane	4.04	2.0	µg/L	10.0	40.4	40-160	†
2-Butanone (MEK)	103	20	µg/L	100	103	40-160	†
tert-Butyl Alcohol (TBA)	91.7	20	µg/L	100	91.7	40-160	†
n-Butylbenzene	9.84	1.0	µg/L	10.0	98.4	70-130	
sec-Butylbenzene	9.10	1.0	µg/L	10.0	91.0	70-130	
tert-Butylbenzene	9.42	1.0	µg/L	10.0	94.2	70-130	
tert-Butyl Ethyl Ether (TBEE)	9.75	0.50	µg/L	10.0	97.5	70-130	
Carbon Disulfide	7.68	4.0	µg/L	10.0	76.8	70-130	
Carbon Tetrachloride	10.3	5.0	µg/L	10.0	103	70-130	
Chlorobenzene	9.40	1.0	µg/L	10.0	94.0	70-130	
Chlorodibromomethane	9.44	0.50	µg/L	10.0	94.4	70-130	
Chloroethane	10.3	2.0	µg/L	10.0	103	70-130	
Chloroform	9.99	2.0	µg/L	10.0	99.9	70-130	



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch B143415 - SW-846 5030B**

<b>LCS (B143415-BS1)</b>					Prepared: 03/02/16 Analyzed: 03/04/16				
Chloromethane	6.13	2.0	µg/L	10.0	61.3	40-160			†
2-Chlorotoluene	8.59	1.0	µg/L	10.0	85.9	70-130			
4-Chlorotoluene	9.16	1.0	µg/L	10.0	91.6	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	10.2	5.0	µg/L	10.0	102	70-130			
1,2-Dibromoethane (EDB)	9.71	0.50	µg/L	10.0	97.1	70-130			
Dibromomethane	10.7	1.0	µg/L	10.0	107	70-130			
1,2-Dichlorobenzene	9.35	1.0	µg/L	10.0	93.5	70-130			
1,3-Dichlorobenzene	9.02	1.0	µg/L	10.0	90.2	70-130			
1,4-Dichlorobenzene	9.22	1.0	µg/L	10.0	92.2	70-130			
trans-1,4-Dichloro-2-butene	11.6	2.0	µg/L	10.0	116	70-130			
Dichlorodifluoromethane (Freon 12)	5.10	2.0	µg/L	10.0	51.0	40-160			†
1,1-Dichloroethane	10.4	1.0	µg/L	10.0	104	70-130			
1,2-Dichloroethane	10.4	1.0	µg/L	10.0	104	70-130			
1,1-Dichloroethylene	8.96	1.0	µg/L	10.0	89.6	70-130			
cis-1,2-Dichloroethylene	9.71	1.0	µg/L	10.0	97.1	70-130			
trans-1,2-Dichloroethylene	9.44	1.0	µg/L	10.0	94.4	70-130			
1,2-Dichloropropane	10.1	1.0	µg/L	10.0	101	70-130			
1,3-Dichloropropane	9.43	0.50	µg/L	10.0	94.3	70-130			
2,2-Dichloropropane	8.40	1.0	µg/L	10.0	84.0	40-130			†
1,1-Dichloropropene	10.1	2.0	µg/L	10.0	101	70-130			
cis-1,3-Dichloropropene	8.71	0.50	µg/L	10.0	87.1	70-130			
trans-1,3-Dichloropropene	9.67	0.50	µg/L	10.0	96.7	70-130			
Diethyl Ether	9.64	2.0	µg/L	10.0	96.4	70-130			
Diisopropyl Ether (DIPE)	9.14	0.50	µg/L	10.0	91.4	70-130			
1,4-Dioxane	123	50	µg/L	100	123	40-130			†
Ethylbenzene	9.58	1.0	µg/L	10.0	95.8	70-130			
Hexachlorobutadiene	9.63	0.50	µg/L	10.0	96.3	70-130			
2-Hexanone (MBK)	101	10	µg/L	100	101	70-160			†
Isopropylbenzene (Cumene)	9.17	1.0	µg/L	10.0	91.7	70-130			
p-Isopropyltoluene (p-Cymene)	9.82	1.0	µg/L	10.0	98.2	70-130			
<b>Methyl Acetate</b>	13.9	5.0	µg/L	10.0	<b>139</b>	*	70-130		L-02
Methyl tert-Butyl Ether (MTBE)	9.61	1.0	µg/L	10.0	96.1	70-130			
Methyl Cyclohexane	9.87	1.0	µg/L	10.0	98.7	70-130			
Methylene Chloride	9.82	5.0	µg/L	10.0	98.2	70-130			
4-Methyl-2-pentanone (MIBK)	99.7	10	µg/L	100	99.7	70-160			†
Naphthalene	10.1	2.0	µg/L	10.0	101	40-130			†
n-Propylbenzene	9.08	1.0	µg/L	10.0	90.8	70-130			
Styrene	9.33	1.0	µg/L	10.0	93.3	70-130			
1,1,1,2-Tetrachloroethane	9.74	1.0	µg/L	10.0	97.4	70-130			
1,1,2,2-Tetrachloroethane	9.79	0.50	µg/L	10.0	97.9	70-130			
Tetrachloroethylene	9.86	1.0	µg/L	10.0	98.6	70-130			
Tetrahydrofuran	10.9	10	µg/L	10.0	109	70-130			
Toluene	9.50	1.0	µg/L	10.0	95.0	70-130			
1,2,3-Trichlorobenzene	10.6	5.0	µg/L	10.0	106	70-130			
1,2,4-Trichlorobenzene	9.48	1.0	µg/L	10.0	94.8	70-130			
1,3,5-Trichlorobenzene	8.85	1.0	µg/L	10.0	88.5	70-130			
1,1,1-Trichloroethane	10.1	1.0	µg/L	10.0	101	70-130			
1,1,2-Trichloroethane	10.1	1.0	µg/L	10.0	101	70-130			
Trichloroethylene	10.2	1.0	µg/L	10.0	102	70-130			
Trichlorofluoromethane (Freon 11)	9.02	2.0	µg/L	10.0	90.2	70-130			
1,2,3-Trichloropropane	9.67	2.0	µg/L	10.0	96.7	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 B143415 - SW-846 5030B</b>									
<b>LCS (B143415-BS1)</b>									
Prepared: 03/02/16 Analyzed: 03/04/16									
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.14	1.0	µg/L	10.0	91.4	70-130			
1,2,4-Trimethylbenzene	9.78	1.0	µg/L	10.0	97.8	70-130			
1,3,5-Trimethylbenzene	9.53	1.0	µg/L	10.0	95.3	70-130			
Vinyl Chloride	8.81	2.0	µg/L	10.0	88.1	40-160			R-05 †
m+p Xylene	18.8	2.0	µg/L	20.0	94.0	70-130			
o-Xylene	9.36	1.0	µg/L	10.0	93.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	26.3		µg/L	25.0	105	70-130			
Surrogate: Toluene-d8	24.8		µg/L	25.0	99.0	70-130			
Surrogate: 4-Bromofluorobenzene	23.9		µg/L	25.0	95.7	70-130			
<b>LCS Dup (B143415-BS1D)</b>									
Prepared: 03/02/16 Analyzed: 03/04/16									
Acetone	110	50	µg/L	100	110	70-160	9.11	25	†
Acrylonitrile	11.0	5.0	µg/L	10.0	110	70-130	12.5	25	
tert-Amyl Methyl Ether (TAME)	9.26	0.50	µg/L	10.0	92.6	70-130	0.868	25	
Benzene	9.96	1.0	µg/L	10.0	99.6	70-130	1.89	25	
Bromobenzene	9.65	1.0	µg/L	10.0	96.5	70-130	0.311	25	
Bromoform	11.2	1.0	µg/L	10.0	112	70-130	0.712	25	
Bromochloromethane	9.77	0.50	µg/L	10.0	97.7	70-130	1.93	25	
Bromodichloromethane	11.2	1.0	µg/L	10.0	112	70-130	4.74	25	
Bromomethane	4.86	2.0	µg/L	10.0	48.6	40-160	18.4	25	†
2-Butanone (MEK)	120	20	µg/L	100	120	40-160	15.8	25	†
tert-Butyl Alcohol (TBA)	111	20	µg/L	100	111	40-160	18.9	25	†
n-Butylbenzene	9.64	1.0	µg/L	10.0	96.4	70-130	2.05	25	
sec-Butylbenzene	8.92	1.0	µg/L	10.0	89.2	70-130	2.00	25	
tert-Butylbenzene	9.38	1.0	µg/L	10.0	93.8	70-130	0.426	25	
tert-Butyl Ethyl Ether (TBEE)	9.79	0.50	µg/L	10.0	97.9	70-130	0.409	25	
Carbon Disulfide	7.85	4.0	µg/L	10.0	78.5	70-130	2.19	25	
Carbon Tetrachloride	10.1	5.0	µg/L	10.0	101	70-130	2.65	25	
Chlorobenzene	9.25	1.0	µg/L	10.0	92.5	70-130	1.61	25	
Chlorodibromomethane	9.48	0.50	µg/L	10.0	94.8	70-130	0.423	25	
Chloroethane	9.99	2.0	µg/L	10.0	99.9	70-130	2.76	25	
Chloroform	9.70	2.0	µg/L	10.0	97.0	70-130	2.95	25	
Chloromethane	6.27	2.0	µg/L	10.0	62.7	40-160	2.26	25	†
2-Chlorotoluene	8.59	1.0	µg/L	10.0	85.9	70-130	0.00	25	
4-Chlorotoluene	9.05	1.0	µg/L	10.0	90.5	70-130	1.21	25	
1,2-Dibromo-3-chloropropane (DBCP)	12.4	5.0	µg/L	10.0	124	70-130	19.7	25	
1,2-Dibromoethane (EDB)	9.75	0.50	µg/L	10.0	97.5	70-130	0.411	25	
Dibromomethane	10.5	1.0	µg/L	10.0	105	70-130	1.89	25	
1,2-Dichlorobenzene	9.51	1.0	µg/L	10.0	95.1	70-130	1.70	25	
1,3-Dichlorobenzene	8.93	1.0	µg/L	10.0	89.3	70-130	1.00	25	
1,4-Dichlorobenzene	9.14	1.0	µg/L	10.0	91.4	70-130	0.871	25	
trans-1,4-Dichloro-2-butene	11.8	2.0	µg/L	10.0	118	70-130	2.56	25	
Dichlorodifluoromethane (Freon 12)	4.86	2.0	µg/L	10.0	48.6	40-160	4.82	25	†
1,1-Dichloroethane	10.1	1.0	µg/L	10.0	101	70-130	2.73	25	
1,2-Dichloroethane	10.0	1.0	µg/L	10.0	100	70-130	3.24	25	
1,1-Dichloroethylene	8.74	1.0	µg/L	10.0	87.4	70-130	2.49	25	
cis-1,2-Dichloroethylene	9.55	1.0	µg/L	10.0	95.5	70-130	1.66	25	
trans-1,2-Dichloroethylene	9.52	1.0	µg/L	10.0	95.2	70-130	0.844	25	
1,2-Dichloropropane	9.68	1.0	µg/L	10.0	96.8	70-130	4.05	25	
1,3-Dichloropropane	9.41	0.50	µg/L	10.0	94.1	70-130	0.212	25	
2,2-Dichloropropane	8.30	1.0	µg/L	10.0	83.0	40-130	1.20	25	†
1,1-Dichloropropene	9.85	2.0	µg/L	10.0	98.5	70-130	2.51	25	



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B143415 - SW-846 5030B**

<b>LCS Dup (B143415-BSD1)</b>	Prepared: 03/02/16 Analyzed: 03/04/16								
cis-1,3-Dichloropropene	8.47	0.50	µg/L	10.0	84.7	70-130	2.79	25	
trans-1,3-Dichloropropene	9.70	0.50	µg/L	10.0	97.0	70-130	0.310	25	
Diethyl Ether	9.77	2.0	µg/L	10.0	97.7	70-130	1.34	25	
Diisopropyl Ether (DIPE)	9.07	0.50	µg/L	10.0	90.7	70-130	0.769	25	
<b>1,4-Dioxane</b>	132	50	µg/L	100	132 *	40-130	6.90	50	L-07 † ‡
Ethylbenzene	9.36	1.0	µg/L	10.0	93.6	70-130	2.32	25	
Hexachlorobutadiene	10.2	0.50	µg/L	10.0	102	70-130	5.85	25	
2-Hexanone (MBK)	117	10	µg/L	100	117	70-160	14.9	25	†
Isopropylbenzene (Cumene)	8.99	1.0	µg/L	10.0	89.9	70-130	1.98	25	
p-Isopropyltoluene (p-Cymene)	9.80	1.0	µg/L	10.0	98.0	70-130	0.204	25	
<b>Methyl Acetate</b>	15.9	5.0	µg/L	10.0	159 *	70-130	13.3	25	L-02
Methyl tert-Butyl Ether (MTBE)	9.80	1.0	µg/L	10.0	98.0	70-130	1.96	25	
Methyl Cyclohexane	9.49	1.0	µg/L	10.0	94.9	70-130	3.93	25	
Methylene Chloride	10.0	5.0	µg/L	10.0	100	70-130	2.02	25	
4-Methyl-2-pentanone (MIBK)	114	10	µg/L	100	114	70-160	13.4	25	†
Naphthalene	12.0	2.0	µg/L	10.0	120	40-130	17.2	25	†
n-Propylbenzene	9.16	1.0	µg/L	10.0	91.6	70-130	0.877	25	
Styrene	9.32	1.0	µg/L	10.0	93.2	70-130	0.107	25	
1,1,1,2-Tetrachloroethane	9.36	1.0	µg/L	10.0	93.6	70-130	3.98	25	
1,1,2,2-Tetrachloroethane	10.6	0.50	µg/L	10.0	106	70-130	8.23	25	
Tetrachloroethylene	9.62	1.0	µg/L	10.0	96.2	70-130	2.46	25	
Tetrahydrofuran	12.0	10	µg/L	10.0	120	70-130	9.62	25	
Toluene	9.33	1.0	µg/L	10.0	93.3	70-130	1.81	25	
1,2,3-Trichlorobenzene	10.9	5.0	µg/L	10.0	109	70-130	3.63	25	
1,2,4-Trichlorobenzene	9.88	1.0	µg/L	10.0	98.8	70-130	4.13	25	
1,3,5-Trichlorobenzene	9.09	1.0	µg/L	10.0	90.9	70-130	2.68	25	
1,1,1-Trichloroethane	9.84	1.0	µg/L	10.0	98.4	70-130	2.31	25	
1,1,2-Trichloroethane	10.2	1.0	µg/L	10.0	102	70-130	0.494	25	
Trichloroethylene	9.79	1.0	µg/L	10.0	97.9	70-130	3.91	25	
Trichlorofluoromethane (Freon 11)	8.64	2.0	µg/L	10.0	86.4	70-130	4.30	25	
1,2,3-Trichloropropane	10.5	2.0	µg/L	10.0	105	70-130	8.42	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	8.87	1.0	µg/L	10.0	88.7	70-130	3.00	25	
1,2,4-Trimethylbenzene	9.72	1.0	µg/L	10.0	97.2	70-130	0.615	25	
1,3,5-Trimethylbenzene	9.36	1.0	µg/L	10.0	93.6	70-130	1.80	25	
Vinyl Chloride	6.82	2.0	µg/L	10.0	68.2	40-160	25.5 *	25	R-05 †
m+p Xylene	18.5	2.0	µg/L	20.0	92.6	70-130	1.45	25	
o-Xylene	9.21	1.0	µg/L	10.0	92.1	70-130	1.62	25	
Surrogate: 1,2-Dichloroethane-d4	25.7		µg/L	25.0	103	70-130			
Surrogate: Toluene-d8	24.5		µg/L	25.0	98.0	70-130			
Surrogate: 4-Bromofluorobenzene	23.8		µg/L	25.0	95.1	70-130			

**Batch B143496 - SW-846 5030B**

<b>Blank (B143496-BLK1)</b>	Prepared: 03/02/16 Analyzed: 03/03/16							
Acetone	ND	50	µg/L					
Acrylonitrile	ND	5.0	µg/L					
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L					
Benzene	ND	1.0	µg/L					
Bromobenzene	ND	1.0	µg/L					
Bromochloromethane	ND	1.0	µg/L					
Bromodichloromethane	ND	0.50	µg/L					
Bromoform	ND	1.0	µg/L					

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch B143496 - SW-846 5030B**

<b>Blank (B143496-BLK1)</b>										Prepared: 03/02/16 Analyzed: 03/03/16
Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	20	µg/L							
tert-Butyl Alcohol (TBA)	ND	20	µg/L							
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L							
Carbon Disulfide	ND	4.0	µg/L							
Carbon Tetrachloride	ND	5.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
Dibromomethane	ND	1.0	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							
1,1-Dichloropropene	ND	2.0	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
Diethyl Ether	ND	2.0	µg/L							
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							
Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	0.50	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 tert-Butyl Ether (MTBE)	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							



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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 B143496 - SW-846 5030B**

<b>Blank (B143496-BLK1)</b>									
Prepared: 03/02/16 Analyzed: 03/03/16									
Tetrahydrofuran	ND	10	µg/L						
Toluene	ND	1.0	µg/L						
1,2,3-Trichlorobenzene	ND	5.0	µg/L						
1,2,4-Trichlorobenzene	ND	1.0	µg/L						
1,3,5-Trichlorobenzene	ND	1.0	µg/L						
1,1,1-Trichloroethane	ND	1.0	µg/L						
1,1,2-Trichloroethane	ND	1.0	µg/L						
Trichloroethylene	ND	1.0	µg/L						
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L						
1,2,3-Trichloropropane	ND	2.0	µg/L						
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L						
1,2,4-Trimethylbenzene	ND	1.0	µg/L						
1,3,5-Trimethylbenzene	ND	1.0	µg/L						
Vinyl Chloride	ND	2.0	µg/L						
m+p Xylene	ND	2.0	µg/L						
o-Xylene	ND	1.0	µg/L						
Surrogate: 1,2-Dichloroethane-d4	25.5		µg/L	25.0	102	70-130			
Surrogate: Toluene-d8	25.1		µg/L	25.0	100	70-130			
Surrogate: 4-Bromofluorobenzene	24.1		µg/L	25.0	96.4	70-130			

<b>LCS (B143496-BS1)</b>									
Prepared: 03/02/16 Analyzed: 03/03/16									
Acetone	95.4	50	µg/L	100	95.4	70-160			†
Acrylonitrile	9.76	5.0	µg/L	10.0	97.6	70-130			
tert-Amyl Methyl Ether (TAME)	8.98	0.50	µg/L	10.0	89.8	70-130			
Benzene	9.86	1.0	µg/L	10.0	98.6	70-130			
Bromobenzene	9.75	1.0	µg/L	10.0	97.5	70-130			
Bromoform	10.6	1.0	µg/L	10.0	106	70-130			
Bromochloromethane	9.58	0.50	µg/L	10.0	95.8	70-130			
Bromodichloromethane	10.8	1.0	µg/L	10.0	108	70-130			
Bromomethane	4.45	2.0	µg/L	10.0	44.5	40-160			†
2-Butanone (MEK)	105	20	µg/L	100	105	40-160			†
tert-Butyl Alcohol (TBA)	94.9	20	µg/L	100	94.9	40-160			†
n-Butylbenzene	9.80	1.0	µg/L	10.0	98.0	70-130			
sec-Butylbenzene	9.26	1.0	µg/L	10.0	92.6	70-130			
tert-Butylbenzene	9.75	1.0	µg/L	10.0	97.5	70-130			
tert-Butyl Ethyl Ether (TBEE)	9.50	0.50	µg/L	10.0	95.0	70-130			
Carbon Disulfide	8.65	4.0	µg/L	10.0	86.5	70-130			
Carbon Tetrachloride	10.4	5.0	µg/L	10.0	104	70-130			
Chlorobenzene	9.48	1.0	µg/L	10.0	94.8	70-130			
Chlorodibromomethane	9.24	0.50	µg/L	10.0	92.4	70-130			
Chloroethane	10.5	2.0	µg/L	10.0	105	70-130			
Chloroform	9.77	2.0	µg/L	10.0	97.7	70-130			
Chloromethane	6.64	2.0	µg/L	10.0	66.4	40-160			†
2-Chlorotoluene	8.85	1.0	µg/L	10.0	88.5	70-130			
4-Chlorotoluene	9.19	1.0	µg/L	10.0	91.9	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	10.9	5.0	µg/L	10.0	109	70-130			
1,2-Dibromoethane (EDB)	9.65	0.50	µg/L	10.0	96.5	70-130			
Dibromomethane	10.2	1.0	µg/L	10.0	102	70-130			
1,2-Dichlorobenzene	9.18	1.0	µg/L	10.0	91.8	70-130			
1,3-Dichlorobenzene	8.85	1.0	µg/L	10.0	88.5	70-130			
1,4-Dichlorobenzene	9.05	1.0	µg/L	10.0	90.5	70-130			
trans-1,4-Dichloro-2-butene	11.4	2.0	µg/L	10.0	114	70-130			



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
<b>Batch B143496 - SW-846 5030B</b>									
<b>LCS (B143496-BS1)</b>									
Prepared: 03/02/16 Analyzed: 03/03/16									
Dichlorodifluoromethane (Freon 12)	5.98	2.0	µg/L	10.0	59.8	40-160			†
1,1-Dichloroethane	10.4	1.0	µg/L	10.0	104	70-130			
1,2-Dichloroethane	9.69	1.0	µg/L	10.0	96.9	70-130			
1,1-Dichloroethylene	9.29	1.0	µg/L	10.0	92.9	70-130			
cis-1,2-Dichloroethylene	9.49	1.0	µg/L	10.0	94.9	70-130			
trans-1,2-Dichloroethylene	9.74	1.0	µg/L	10.0	97.4	70-130			
1,2-Dichloropropane	9.68	1.0	µg/L	10.0	96.8	70-130			
1,3-Dichloropropane	9.06	0.50	µg/L	10.0	90.6	70-130			
2,2-Dichloropropane	8.49	1.0	µg/L	10.0	84.9	40-130			†
1,1-Dichloropropene	10.2	2.0	µg/L	10.0	102	70-130			
cis-1,3-Dichloropropene	8.35	0.50	µg/L	10.0	83.5	70-130			
trans-1,3-Dichloropropene	9.35	0.50	µg/L	10.0	93.5	70-130			
Diethyl Ether	9.31	2.0	µg/L	10.0	93.1	70-130			
Diisopropyl Ether (DIPE)	8.66	0.50	µg/L	10.0	86.6	70-130			
1,4-Dioxane	123	50	µg/L	100	123	40-130			†
Ethylbenzene	9.92	1.0	µg/L	10.0	99.2	70-130			
Hexachlorobutadiene	10.5	0.50	µg/L	10.0	105	70-130			
2-Hexanone (MBK)	103	10	µg/L	100	103	70-160			†
Isopropylbenzene (Cumene)	9.44	1.0	µg/L	10.0	94.4	70-130			
p-Isopropyltoluene (p-Cymene)	10.1	1.0	µg/L	10.0	101	70-130			
Methyl tert-Butyl Ether (MTBE)	9.35	1.0	µg/L	10.0	93.5	70-130			
Methylene Chloride	10.2	5.0	µg/L	10.0	102	70-130			
4-Methyl-2-pentanone (MIBK)	102	10	µg/L	100	102	70-160			†
Naphthalene	10.6	2.0	µg/L	10.0	106	40-130			†
n-Propylbenzene	9.62	1.0	µg/L	10.0	96.2	70-130			
Styrene	9.58	1.0	µg/L	10.0	95.8	70-130			
1,1,1,2-Tetrachloroethane	9.59	1.0	µg/L	10.0	95.9	70-130			
1,1,2,2-Tetrachloroethane	9.92	0.50	µg/L	10.0	99.2	70-130			
Tetrachloroethylene	10.1	1.0	µg/L	10.0	101	70-130			
Tetrahydrofuran	11.2	10	µg/L	10.0	112	70-130			
Toluene	9.29	1.0	µg/L	10.0	92.9	70-130			
1,2,3-Trichlorobenzene	10.2	5.0	µg/L	10.0	102	70-130			
1,2,4-Trichlorobenzene	9.62	1.0	µg/L	10.0	96.2	70-130			
1,3,5-Trichlorobenzene	8.90	1.0	µg/L	10.0	89.0	70-130			
1,1,1-Trichloroethane	10.3	1.0	µg/L	10.0	103	70-130			
1,1,2-Trichloroethane	9.75	1.0	µg/L	10.0	97.5	70-130			
Trichloroethylene	10.3	1.0	µg/L	10.0	103	70-130			
Trichlorofluoromethane (Freon 11)	9.44	2.0	µg/L	10.0	94.4	70-130			
1,2,3-Trichloropropane	10.2	2.0	µg/L	10.0	102	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.49	1.0	µg/L	10.0	94.9	70-130			
1,2,4-Trimethylbenzene	9.74	1.0	µg/L	10.0	97.4	70-130			
1,3,5-Trimethylbenzene	9.67	1.0	µg/L	10.0	96.7	70-130			
Vinyl Chloride	9.71	2.0	µg/L	10.0	97.1	40-160			†
m+p Xylene	19.2	2.0	µg/L	20.0	96.0	70-130			
o-Xylene	9.51	1.0	µg/L	10.0	95.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	25.1		µg/L	25.0	100	70-130			
Surrogate: Toluene-d8	24.6		µg/L	25.0	98.5	70-130			
Surrogate: 4-Bromofluorobenzene	24.3		µg/L	25.0	97.0	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 B143496 - SW-846 5030B</b>										
<b>LCS Dup (B143496-BSD1)</b>										
Prepared: 03/02/16 Analyzed: 03/03/16										
Acetone	106	50	µg/L	100	106	70-160	10.3	25		†
Acrylonitrile	10.8	5.0	µg/L	10.0	108	70-130	10.4	25		
tert-Amyl Methyl Ether (TAME)	9.34	0.50	µg/L	10.0	93.4	70-130	3.93	25		
Benzene	9.82	1.0	µg/L	10.0	98.2	70-130	0.407	25		
Bromobenzene	9.62	1.0	µg/L	10.0	96.2	70-130	1.34	25		
Bromoform	10.9	1.0	µg/L	10.0	109	70-130	2.80	25		
Bromochloromethane	9.69	0.50	µg/L	10.0	96.9	70-130	1.14	25		
Bromodichloromethane	11.0	1.0	µg/L	10.0	110	70-130	2.75	25		
Bromomethane	5.34	2.0	µg/L	10.0	53.4	40-160	18.2	25		†
2-Butanone (MEK)	115	20	µg/L	100	115	40-160	8.86	25		†
tert-Butyl Alcohol (TBA)	111	20	µg/L	100	111	40-160	15.4	25		†
n-Butylbenzene	9.75	1.0	µg/L	10.0	97.5	70-130	0.512	25		
sec-Butylbenzene	9.29	1.0	µg/L	10.0	92.9	70-130	0.323	25		
tert-Butylbenzene	9.58	1.0	µg/L	10.0	95.8	70-130	1.76	25		
tert-Butyl Ethyl Ether (TBEE)	9.65	0.50	µg/L	10.0	96.5	70-130	1.57	25		
Carbon Disulfide	7.59	4.0	µg/L	10.0	75.9	70-130	13.1	25		
Carbon Tetrachloride	10.3	5.0	µg/L	10.0	103	70-130	1.45	25		
Chlorobenzene	9.22	1.0	µg/L	10.0	92.2	70-130	2.78	25		
Chlorodibromomethane	9.36	0.50	µg/L	10.0	93.6	70-130	1.29	25		
Chloroethane	11.0	2.0	µg/L	10.0	110	70-130	4.74	25		
Chloroform	9.69	2.0	µg/L	10.0	96.9	70-130	0.822	25		
Chloromethane	7.13	2.0	µg/L	10.0	71.3	40-160	7.12	25		†
2-Chlorotoluene	8.94	1.0	µg/L	10.0	89.4	70-130	1.01	25		
4-Chlorotoluene	9.33	1.0	µg/L	10.0	93.3	70-130	1.51	25		
1,2-Dibromo-3-chloropropane (DBCP)	11.5	5.0	µg/L	10.0	115	70-130	5.10	25		
1,2-Dibromoethane (EDB)	9.81	0.50	µg/L	10.0	98.1	70-130	1.64	25		
Dibromomethane	10.1	1.0	µg/L	10.0	101	70-130	0.786	25		
1,2-Dichlorobenzene	9.59	1.0	µg/L	10.0	95.9	70-130	4.37	25		
1,3-Dichlorobenzene	9.04	1.0	µg/L	10.0	90.4	70-130	2.12	25		
1,4-Dichlorobenzene	9.00	1.0	µg/L	10.0	90.0	70-130	0.554	25		
trans-1,4-Dichloro-2-butene	12.4	2.0	µg/L	10.0	124	70-130	8.58	25		
Dichlorodifluoromethane (Freon 12)	5.99	2.0	µg/L	10.0	59.9	40-160	0.167	25		†
1,1-Dichloroethane	10.3	1.0	µg/L	10.0	103	70-130	0.675	25		
1,2-Dichloroethane	9.89	1.0	µg/L	10.0	98.9	70-130	2.04	25		
1,1-Dichloroethylene	9.33	1.0	µg/L	10.0	93.3	70-130	0.430	25		
cis-1,2-Dichloroethylene	9.74	1.0	µg/L	10.0	97.4	70-130	2.60	25		
trans-1,2-Dichloroethylene	9.68	1.0	µg/L	10.0	96.8	70-130	0.618	25		
1,2-Dichloropropane	9.66	1.0	µg/L	10.0	96.6	70-130	0.207	25		
1,3-Dichloropropane	9.37	0.50	µg/L	10.0	93.7	70-130	3.36	25		
2,2-Dichloropropane	8.38	1.0	µg/L	10.0	83.8	40-130	1.30	25		†
1,1-Dichloropropene	10.0	2.0	µg/L	10.0	100	70-130	2.47	25		
cis-1,3-Dichloropropene	8.57	0.50	µg/L	10.0	85.7	70-130	2.60	25		
trans-1,3-Dichloropropene	9.49	0.50	µg/L	10.0	94.9	70-130	1.49	25		
Diethyl Ether	9.66	2.0	µg/L	10.0	96.6	70-130	3.69	25		
Diisopropyl Ether (DIPE)	8.88	0.50	µg/L	10.0	88.8	70-130	2.51	25		
1,4-Dioxane	128	50	µg/L	100	128	40-130	4.32	50		† ‡
Ethylbenzene	9.72	1.0	µg/L	10.0	97.2	70-130	2.04	25		
Hexachlorobutadiene	10.4	0.50	µg/L	10.0	104	70-130	0.959	25		
2-Hexanone (MBK)	115	10	µg/L	100	115	70-160	11.0	25		†
Isopropylbenzene (Cumene)	9.31	1.0	µg/L	10.0	93.1	70-130	1.39	25		
p-Isopropyltoluene (p-Cymene)	10.0	1.0	µg/L	10.0	100	70-130	0.697	25		
Methyl tert-Butyl Ether (MTBE)	9.74	1.0	µg/L	10.0	97.4	70-130	4.09	25		



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B143496 - SW-846 5030B</b>										
<b>LCS Dup (B143496-BSD1)</b>										
Prepared: 03/02/16 Analyzed: 03/03/16										
Methylene Chloride	10.4	5.0	µg/L	10.0	104	70-130	1.85	25		
4-Methyl-2-pentanone (MIBK)	109	10	µg/L	100	109	70-160	7.10	25		†
Naphthalene	11.7	2.0	µg/L	10.0	117	40-130	10.3	25		†
n-Propylbenzene	9.42	1.0	µg/L	10.0	94.2	70-130	2.10	25		
Styrene	9.36	1.0	µg/L	10.0	93.6	70-130	2.32	25		
1,1,1,2-Tetrachloroethane	9.90	1.0	µg/L	10.0	99.0	70-130	3.18	25		
1,1,2,2-Tetrachloroethane	10.4	0.50	µg/L	10.0	104	70-130	5.01	25		
Tetrachloroethylene	10.2	1.0	µg/L	10.0	102	70-130	0.494	25		
Tetrahydrofuran	10.2	10	µg/L	10.0	102	70-130	8.97	25		
Toluene	9.44	1.0	µg/L	10.0	94.4	70-130	1.60	25		
1,2,3-Trichlorobenzene	11.2	5.0	µg/L	10.0	112	70-130	8.41	25		
1,2,4-Trichlorobenzene	9.98	1.0	µg/L	10.0	99.8	70-130	3.67	25		
1,3,5-Trichlorobenzene	9.31	1.0	µg/L	10.0	93.1	70-130	4.50	25		
1,1,1-Trichloroethane	10.2	1.0	µg/L	10.0	102	70-130	0.488	25		
1,1,2-Trichloroethane	9.74	1.0	µg/L	10.0	97.4	70-130	0.103	25		
Trichloroethylene	10.2	1.0	µg/L	10.0	102	70-130	0.979	25		
Trichlorofluoromethane (Freon 11)	9.22	2.0	µg/L	10.0	92.2	70-130	2.36	25		
1,2,3-Trichloropropane	10.5	2.0	µg/L	10.0	105	70-130	2.51	25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.39	1.0	µg/L	10.0	93.9	70-130	1.06	25		
1,2,4-Trimethylbenzene	9.77	1.0	µg/L	10.0	97.7	70-130	0.308	25		
1,3,5-Trimethylbenzene	9.70	1.0	µg/L	10.0	97.0	70-130	0.310	25		
Vinyl Chloride	8.79	2.0	µg/L	10.0	87.9	40-160	9.95	25		†
m+p Xylene	18.9	2.0	µg/L	20.0	94.7	70-130	1.31	25		
o-Xylene	9.44	1.0	µg/L	10.0	94.4	70-130	0.739	25		
Surrogate: 1,2-Dichloroethane-d4	25.3		µg/L	25.0	101	70-130				
Surrogate: Toluene-d8	24.7		µg/L	25.0	98.6	70-130				
Surrogate: 4-Bromofluorobenzene	23.9		µg/L	25.0	95.5	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
- DL Method Detection Limit
- MCL Maximum Contaminant Level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

- L-02 Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.
- L-07 Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
- R-05 Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
- RL-11 Elevated reporting limit due to high concentration of target compounds.



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#### CERTIFICATIONS

##### Certified Analyses included in this Report

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



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#### CERTIFICATIONS

##### Certified Analyses included in this Report

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

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2018
MA	Massachusetts DEP	M-MA100	06/30/2016
CT	Connecticut Department of Public Health	PH-0567	09/30/2017
NY	New York State Department of Health	10899 NELAP	04/1/2016
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2017
RI	Rhode Island Department of Health	LAO00112	12/30/2016
NC	North Carolina Div. of Water Quality	652	12/31/2016
NJ	New Jersey DEP	MA007 NELAP	06/30/2016
FL	Florida Department of Health	E871027 NELAP	06/30/2016
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2016
WA	State of Washington Department of Ecology	C2065	02/23/2016
ME	State of Maine	2011028	06/9/2017
VA	Commonwealth of Virginia	460217	12/14/2016
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2016

# con-test

## CHAIN OF CUSTODY RECORD

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

Email: info@contestlabs.com  
www.contestlabs.com

**ANALYTICAL LABORATORY**

Company Name: CB&I Environmental

Address: 150 Royal Street

Canton, MA 02021

Attention: Brian Cote

Project Location: Textron Providence, RI

Sampled By: *Austin Magant*

Telephone: 617-589-6175

Project # 130274

Client PO# 835493

**DATA DELIVERY** (check all that apply)

FAX  EMAIL  WEBSITE

Fax # \_\_\_\_\_

Project Proposal Provided? (for billing purposes)

Yes  proposal date

Comments: \_\_\_\_\_

### ANALYSIS REQUESTED

3 H V

3 H

3 H

3 H

3 H

3 H

3 H

3 H

3 H

3 H

3 H

3 H

3 H

3 H

3 H

3 H

3 H

### \*Matrix Code:

GW = Groundwater

WW = Wastewater

DW = Drinking water

A = Air

S = Soil/Solid

SL = Sludge

O = Other

### Is your project MCP or RCP?

MCP

RCP

MA State DW Form Required

PWSID #

NELAC & AIHA-LAP, LLC

Accredited

WBE/DBE Certified

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:  
H - High, M - Medium, L - Low, C - Clean, U - Unknown

Comments: \_\_\_\_\_

7-Day

10-Day

Other

RUSH<sup>†</sup>

24-Hr

48-Hr

72-Hr

4-Day

Require lab approval

Other

TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.  
PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT.

Relinquished by: (signature)

*Austin Magant*

CBI

Date/Time: 2-23-16 11:00

Date/Time: 12-17-16

*nelac*

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39 Spruce St.  
East Longmeadow, MA. 01028  
P: 413-525-2332  
F: 413-525-6405  
www.contestlabs.com



Page 1 of 2

## Sample Receipt Checklist

**CLIENT NAME:** CB&I      **RECEIVED BY:** JDL      **DATE:** 2/26/2016

**1) Was the chain(s) of custody relinquished and signed?** Yes X No \_\_\_\_\_ **No COC Incl.**

**2) Does the chain agree with the samples?** Yes X No \_\_\_\_\_

If not, explain:

**3) Are all the samples in good condition?** Yes X No \_\_\_\_\_

If not, explain:

**4) How were the samples received:**

On Ice X      Direct from Sampling \_\_\_\_\_      Ambient \_\_\_\_\_ In Cooler(s) X

**Were the samples received in Temperature Compliance of (2-6°C)?** Yes X No \_\_\_\_\_ N/A \_\_\_\_\_

Temperature °C by Temp blank \_\_\_\_\_ Temperature °C by Temp gun \_\_\_\_\_ 3.3

**5) Are there Dissolved samples for the lab to filter?** Yes \_\_\_\_\_ No X

Who was notified \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

**6) Are there any RUSH or SHORT HOLDING TIME samples?** Yes \_\_\_\_\_ No X

Who was notified \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

**7) Location where samples are stored:** \_\_\_\_\_

Permission to subcontract samples? Yes X No \_\_\_\_\_  
(Walk-in clients only) if not already approved  
Client Signature: \_\_\_\_\_

**8) Do all samples have the proper Acid pH:** Yes \_\_\_\_\_ No \_\_\_\_\_ N/A X

**9) Do all samples have the proper Base pH:** Yes \_\_\_\_\_ No \_\_\_\_\_ N/A X

**10) Was the PC notified of any discrepancies with the CoC vs the samples:** Yes \_\_\_\_\_ N/A X

### Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber		16 oz amber	
500 mL Amber		8 oz amber/clear jar	
250 mL Amber (8oz amber)		4 oz amber/clear jar	
1 Liter Plastic		2 oz amber/clear jar	
500 mL Plastic		Plastic Bag / Ziploc	
250 mL plastic		SOC Kit	
40 mL Vial - type listed below	9	Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

40 mL vials:	# HCl	9	# Methanol	_____	Time and Date Frozen:
Doc# 277	# Bisulfate	_____	# DI Water	_____	
Rev. 4 August 2013	# Thiosulfate	_____	Unpreserved	_____	

## Page 2 of 2

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

<u>Question</u>	<u>Answer (True/False)</u>	<u>Comment</u>
	T/F/NA	
1) The cooler's custody seal, if present, is intact.	T	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	N/A	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	T	
18) There is sufficient volume for all requested analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	N/A	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	T	
21) Samples do not require splitting or compositing.	T	

Who notified of False statements?

Date/Time:

Doc #277 Rev. 4 August 2013

Log-In Technician Initials: JDL

Date/Time: 2/26/16 15:15



---

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

April 4, 2016

Brian Cote  
CB&I Env. & Infrastructure - MA  
150 Royall Street  
Canton, MA 02021

Project Location: Textron Providence  
Client Job Number:  
Project Number: 130274  
Laboratory Work Order Number: 16C1024

Enclosed are results of analyses for samples received by the laboratory on March 22, 2016. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "James M. Georgantas".

James M. Georgantas  
Project Manager

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CB&I Env. & Infrastructure - MA  
150 Royall Street  
Canton, MA 02021  
ATTN: Brian Cote

REPORT DATE: 4/4/2016

PURCHASE ORDER NUMBER: 835493-000 OP

PROJECT NUMBER: 130274

#### **ANALYTICAL SUMMARY**

---

WORK ORDER NUMBER: 16C1024

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

PROJECT LOCATION: Textron Providence

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-112	16C1024-01	Ground Water		SW-846 8260C	
MW-116D	16C1024-02	Ground Water		SW-846 8260C	
MW-116S	16C1024-03	Ground Water		SW-846 8260C	



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#### CASE NARRATIVE SUMMARY

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

#### SW-846 8260C

##### **Qualifications:**

###### **L-04**

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

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

###### **Acrylonitrile**

16C1024-01[MW-112], 16C1024-02[MW-116D], 16C1024-03[MW-116S], B145348-BLK1, B145348-BS1, B145348-BSD1

###### **L-07**

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

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

###### **1,2-Dibromo-3-chloropropane (DB)**

B145348-BS1

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

Elevated reporting limit due to high concentration of target compounds.

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

16C1024-01[MW-112]

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

Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.

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

###### **1,2-Dibromo-3-chloropropane (DB)**

16C1024-01[MW-112], 16C1024-02[MW-116D], 16C1024-03[MW-116S], B145348-BLK1, B145348-BS1, B145348-BSD1

###### **2,2-Dichloropropane**

16C1024-01[MW-112], 16C1024-02[MW-116D], 16C1024-03[MW-116S], B145348-BLK1, B145348-BS1, B145348-BSD1

###### **Acetone**

16C1024-01[MW-112], 16C1024-02[MW-116D], 16C1024-03[MW-116S], B145348-BLK1, B145348-BS1, B145348-BSD1

###### **Acrylonitrile**

16C1024-01[MW-112], 16C1024-02[MW-116D], 16C1024-03[MW-116S], B145348-BLK1, B145348-BS1, B145348-BSD1

###### **Bromoform**

16C1024-01[MW-112], 16C1024-02[MW-116D], 16C1024-03[MW-116S], B145348-BLK1, B145348-BS1, B145348-BSD1

###### **Chloromethane**

16C1024-01[MW-112], 16C1024-02[MW-116D], 16C1024-03[MW-116S], B145348-BLK1, B145348-BS1, B145348-BSD1

###### **tert-Butyl Alcohol (TBA)**

16C1024-01[MW-112], 16C1024-02[MW-116D], 16C1024-03[MW-116S], B145348-BLK1, B145348-BS1, B145348-BSD1

###### **trans-1,3-Dichloropropene**

16C1024-01[MW-112], 16C1024-02[MW-116D], 16C1024-03[MW-116S], B145348-BLK1, B145348-BS1, B145348-BSD1

###### **V-20**

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

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

###### **Bromomethane**

B145348-BS1, B145348-BSD1



---

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The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.  
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

A handwritten signature in black ink that reads "Lisa A. Worthington". The signature is fluid and cursive, with "Lisa A." on the first line and "Worthington" on the second line.

Lisa A. Worthington  
Project Manager



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

Project Location: Textron Providence

Date Received: 3/22/2016

**Field Sample #:** MW-112**Sample ID:** 16C1024-01**Sample Matrix:** Ground Water

Sample Description:

Work Order: 16C1024

Sampled: 3/21/2016 08:00

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	V-05	SW-846 8260C	3/29/16	3/30/16 2:47	EEH
Acrylonitrile	ND	20	µg/L	4	L-04, V-05	SW-846 8260C	3/29/16	3/30/16 2:47	EEH
tert-Amyl Methyl Ether (TAME)	ND	2.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
Benzene	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
Bromobenzene	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
Bromoform	ND	4.0	µg/L	4	V-05	SW-846 8260C	3/29/16	3/30/16 2:47	EEH
Bromomethane	ND	8.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
2-Butanone (MEK)	ND	80	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
tert-Butyl Alcohol (TBA)	ND	80	µg/L	4	V-05	SW-846 8260C	3/29/16	3/30/16 2:47	EEH
n-Butylbenzene	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
sec-Butylbenzene	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
tert-Butylbenzene	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	2.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
Carbon Disulfide	ND	16	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
Carbon Tetrachloride	ND	20	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
Chlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
Chlorodibromomethane	ND	2.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
Chloroethane	ND	8.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
Chloroform	ND	8.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
Chloromethane	ND	8.0	µg/L	4	V-05	SW-846 8260C	3/29/16	3/30/16 2:47	EEH
2-Chlorotoluene	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
4-Chlorotoluene	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	20	µg/L	4	V-05	SW-846 8260C	3/29/16	3/30/16 2:47	EEH
1,2-Dibromoethane (EDB)	ND	2.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
Dibromomethane	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
1,2-Dichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
1,3-Dichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
1,4-Dichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
trans-1,4-Dichloro-2-butene	ND	8.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
Dichlorodifluoromethane (Freon 12)	ND	8.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
1,1-Dichloroethane	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
1,2-Dichloroethane	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
1,1-Dichloroethylene	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
cis-1,2-Dichloroethylene	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
trans-1,2-Dichloroethylene	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
1,2-Dichloropropane	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
1,3-Dichloropropane	ND	2.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
2,2-Dichloropropane	ND	4.0	µg/L	4	V-05	SW-846 8260C	3/29/16	3/30/16 2:47	EEH
1,1-Dichloropropene	ND	8.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
cis-1,3-Dichloropropene	ND	2.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
trans-1,3-Dichloropropene	ND	2.0	µg/L	4	V-05	SW-846 8260C	3/29/16	3/30/16 2:47	EEH
Diethyl Ether	ND	8.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH



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

Project Location: Textron Providence

Date Received: 3/22/2016

**Field Sample #:** MW-112**Sample ID:** 16C1024-01Sample Matrix: Ground Water

Sample Description:

Work Order: 16C1024

Sampled: 3/21/2016 08:00

Sample Flags: RL-11

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	2.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
1,4-Dioxane	ND	200	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
Ethylbenzene	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
Hexachlorobutadiene	ND	2.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
2-Hexanone (MBK)	ND	40	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
Isopropylbenzene (Cumene)	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
p-Isopropyltoluene (p-Cymene)	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
Methyl Acetate	ND	20	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
Methyl tert-Butyl Ether (MTBE)	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
Methyl Cyclohexane	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
Methylene Chloride	ND	20	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
4-Methyl-2-pentanone (MIBK)	ND	40	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
Naphthalene	ND	8.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
n-Propylbenzene	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
Styrene	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
1,1,1,2-Tetrachloroethane	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
1,1,2,2-Tetrachloroethane	ND	2.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
Tetrachloroethylene	4400	200	µg/L	200		SW-846 8260C	3/29/16	3/30/16 21:40	EEH
Tetrahydrofuran	ND	40	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
Toluene	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
1,2,3-Trichlorobenzene	ND	20	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
1,2,4-Trichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
1,3,5-Trichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
1,1,1-Trichloroethane	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
1,1,2-Trichloroethane	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
Trichloroethylene	11	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
Trichlorofluoromethane (Freon 11)	ND	8.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
1,2,3-Trichloropropane	ND	8.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
1,2,4-Trimethylbenzene	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
1,3,5-Trimethylbenzene	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
Vinyl Chloride	ND	8.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
m+p Xylene	ND	8.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
o-Xylene	ND	4.0	µg/L	4		SW-846 8260C	3/29/16	3/30/16 2:47	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	102	70-130							3/30/16 2:47
1,2-Dichloroethane-d4	96.0	70-130							3/30/16 21:40
Toluene-d8	103	70-130							3/30/16 21:40
Toluene-d8	98.8	70-130							3/30/16 2:47
4-Bromofluorobenzene	95.2	70-130							3/30/16 2:47
4-Bromofluorobenzene	93.6	70-130							3/30/16 21:40



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

Project Location: Textron Providence

Date Received: 3/22/2016

**Field Sample #:** MW-116D**Sample ID:** 16C1024-02

Sample Matrix: Ground Water

Sample Description:

Sampled: 3/21/2016 09:00

Work Order: 16C1024

**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	V-05	SW-846 8260C	3/29/16	3/30/16 1:53	EEH
Acrylonitrile	ND	5.0	µg/L	1	L-04, V-05	SW-846 8260C	3/29/16	3/30/16 1:53	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
Bromoform	ND	1.0	µg/L	1	V-05	SW-846 8260C	3/29/16	3/30/16 1:53	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1	V-05	SW-846 8260C	3/29/16	3/30/16 1:53	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
Chloromethane	ND	2.0	µg/L	1	V-05	SW-846 8260C	3/29/16	3/30/16 1:53	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	V-05	SW-846 8260C	3/29/16	3/30/16 1:53	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C	3/29/16	3/30/16 1:53	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1	V-05	SW-846 8260C	3/29/16	3/30/16 1:53	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH



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

Project Location: Textron Providence

Date Received: 3/22/2016

**Field Sample #:** MW-116D**Sample ID:** 16C1024-02

Sample Matrix: Ground Water

Sample Description:

Work Order: 16C1024

Sampled: 3/21/2016 09:00

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
Methyl Acetate	ND	5.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 1:53	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	99.4	70-130							3/30/16 1:53
Toluene-d8	103	70-130							3/30/16 1:53
4-Bromofluorobenzene	96.4	70-130							3/30/16 1:53



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

Project Location: Textron Providence

Date Received: 3/22/2016

**Field Sample #:** MW-116S**Sample ID:** 16C1024-03

Sample Matrix: Ground Water

Sample Description:

Work Order: 16C1024

Sampled: 3/21/2016 09:30

**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	V-05	SW-846 8260C	3/29/16	3/30/16 2:20	EEH
Acrylonitrile	ND	5.0	µg/L	1	L-04, V-05	SW-846 8260C	3/29/16	3/30/16 2:20	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
Bromoform	ND	1.0	µg/L	1	V-05	SW-846 8260C	3/29/16	3/30/16 2:20	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1	V-05	SW-846 8260C	3/29/16	3/30/16 2:20	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
Chloromethane	ND	2.0	µg/L	1	V-05	SW-846 8260C	3/29/16	3/30/16 2:20	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	V-05	SW-846 8260C	3/29/16	3/30/16 2:20	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C	3/29/16	3/30/16 2:20	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1	V-05	SW-846 8260C	3/29/16	3/30/16 2:20	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH



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

Project Location: Textron Providence

Date Received: 3/22/2016

**Field Sample #:** MW-116S**Sample ID:** 16C1024-03Sample Matrix: Ground Water

Sample Description:

Work Order: 16C1024

Sampled: 3/21/2016 09:30

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
Methyl Acetate	ND	5.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	3/29/16	3/30/16 2:20	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	99.9	70-130							3/30/16 2:20
Toluene-d8	98.6	70-130							3/30/16 2:20
4-Bromofluorobenzene	96.4	70-130							3/30/16 2:20



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

### Sample Extraction Data

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
16C1024-01 [MW-112]	B145348	1.25	5.00	03/29/16
16C1024-02 [MW-116D]	B145348	5	5.00	03/29/16
16C1024-03 [MW-116S]	B145348	5	5.00	03/29/16

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
16C1024-01RE1 [MW-112]	B145420	0.025	5.00	03/29/16



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 B145348 - SW-846 5030B**

<b>Blank (B145348-BLK1)</b>					Prepared: 03/29/16 Analyzed: 03/30/16				
Acetone	ND	50	µg/L						V-05
Acrylonitrile	ND	5.0	µg/L						L-04, V-05
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L						
Benzene	ND	1.0	µg/L						
Bromobenzene	ND	1.0	µg/L						
Bromoform	ND	1.0	µg/L						V-05
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	4.0	µg/L						
Carbon Tetrachloride	ND	5.0	µg/L						
Chlorobenzene	ND	1.0	µg/L						
Chlorodibromomethane	ND	0.50	µg/L						
Chloroethane	ND	2.0	µg/L						
Chloroform	ND	2.0	µg/L						
Chloromethane	ND	2.0	µg/L						V-05
2-Chlorotoluene	ND	1.0	µg/L						
4-Chlorotoluene	ND	1.0	µg/L						
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L						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						
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L						
1,1-Dichloroethane	ND	1.0	µg/L						
1,2-Dichloroethane	ND	1.0	µg/L						
1,1-Dichloroethylene	ND	1.0	µg/L						
cis-1,2-Dichloroethylene	ND	1.0	µg/L						
trans-1,2-Dichloroethylene	ND	1.0	µg/L						
1,2-Dichloropropane	ND	1.0	µg/L						
1,3-Dichloropropane	ND	0.50	µg/L						
2,2-Dichloropropane	ND	1.0	µg/L						V-05
1,1-Dichloropropene	ND	2.0	µg/L						
cis-1,3-Dichloropropene	ND	0.50	µg/L						
trans-1,3-Dichloropropene	ND	0.50	µg/L						V-05
Diethyl Ether	ND	2.0	µg/L						
Diisopropyl Ether (DIPE)	ND	0.50	µg/L						
1,4-Dioxane	ND	50	µg/L						
Ethylbenzene	ND	1.0	µg/L						
Hexachlorobutadiene	ND	0.50	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	5.0	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	RPD Limit	Notes
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**Batch B145348 - SW-846 5030B**

<b>Blank (B145348-BLK1)</b>										Prepared: 03/29/16 Analyzed: 03/30/16
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methyl Cyclohexane	ND	1.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Naphthalene	ND	2.0	µg/L							
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Tetrahydrofuran	ND	10	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							
1,2,4-Trichlorobenzene	ND	1.0	µg/L							
1,3,5-Trichlorobenzene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							
1,2,3-Trichloropropane	ND	2.0	µg/L							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
1,3,5-Trimethylbenzene	ND	1.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	25.0		µg/L	25.0		100	70-130			
Surrogate: Toluene-d8	24.9		µg/L	25.0		99.8	70-130			
Surrogate: 4-Bromofluorobenzene	23.7		µg/L	25.0		94.8	70-130			

<b>LCS (B145348-BS1)</b>										Prepared & Analyzed: 03/29/16
Acetone	103	50	µg/L	100		103	70-160			V-05 †
<b>Acrylonitrile</b>	6.43	5.0	µg/L	10.0		<b>64.3</b> *	70-130			L-04, V-05
tert-Amyl Methyl Ether (TAME)	8.20	0.50	µg/L	10.0		82.0	70-130			
Benzene	10.4	1.0	µg/L	10.0		104	70-130			
Bromobenzene	10.0	1.0	µg/L	10.0		100	70-130			
Bromochloromethane	11.0	1.0	µg/L	10.0		110	70-130			
Bromodichloromethane	9.48	0.50	µg/L	10.0		94.8	70-130			
Bromoform	8.48	1.0	µg/L	10.0		84.8	70-130			V-05
Bromomethane	4.06	2.0	µg/L	10.0		40.6	40-160			V-20 †
2-Butanone (MEK)	93.4	20	µg/L	100		93.4	40-160			†
tert-Butyl Alcohol (TBA)	51.5	20	µg/L	100		51.5	40-160			V-05 †
n-Butylbenzene	10.4	1.0	µg/L	10.0		104	70-130			
sec-Butylbenzene	9.71	1.0	µg/L	10.0		97.1	70-130			
tert-Butylbenzene	9.98	1.0	µg/L	10.0		99.8	70-130			
tert-Butyl Ethyl Ether (TBEE)	9.37	0.50	µg/L	10.0		93.7	70-130			
Carbon Disulfide	7.71	4.0	µg/L	10.0		77.1	70-130			
Carbon Tetrachloride	10.4	5.0	µg/L	10.0		104	70-130			
Chlorobenzene	10.0	1.0	µg/L	10.0		100	70-130			
Chlorodibromomethane	8.52	0.50	µg/L	10.0		85.2	70-130			
Chloroethane	10.1	2.0	µg/L	10.0		101	70-130			
Chloroform	10.1	2.0	µg/L	10.0		101	70-130			



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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch B145348 - SW-846 5030B**

<b>LCS (B145348-BS1)</b>	Prepared & Analyzed: 03/29/16							
Chloromethane	6.37	2.0	µg/L	10.0	63.7	40-160	V-05	†
2-Chlorotoluene	9.00	1.0	µg/L	10.0	90.0	70-130		
4-Chlorotoluene	9.50	1.0	µg/L	10.0	95.0	70-130		
<b>1,2-Dibromo-3-chloropropane (DBCP)</b>	6.57	5.0	µg/L	10.0	65.7 *	70-130	L-07, V-05	
1,2-Dibromoethane (EDB)	9.10	0.50	µg/L	10.0	91.0	70-130		
Dibromomethane	10.1	1.0	µg/L	10.0	101	70-130		
1,2-Dichlorobenzene	9.43	1.0	µg/L	10.0	94.3	70-130		
1,3-Dichlorobenzene	9.37	1.0	µg/L	10.0	93.7	70-130		
1,4-Dichlorobenzene	9.42	1.0	µg/L	10.0	94.2	70-130		
trans-1,4-Dichloro-2-butene	9.40	2.0	µg/L	10.0	94.0	70-130		
Dichlorodifluoromethane (Freon 12)	4.42	2.0	µg/L	10.0	44.2	40-160		†
1,1-Dichloroethane	10.5	1.0	µg/L	10.0	105	70-130		
1,2-Dichloroethane	10.0	1.0	µg/L	10.0	100	70-130		
1,1-Dichloroethylene	8.91	1.0	µg/L	10.0	89.1	70-130		
cis-1,2-Dichloroethylene	10.4	1.0	µg/L	10.0	104	70-130		
trans-1,2-Dichloroethylene	9.80	1.0	µg/L	10.0	98.0	70-130		
1,2-Dichloropropane	10.2	1.0	µg/L	10.0	102	70-130		
1,3-Dichloropropane	9.04	0.50	µg/L	10.0	90.4	70-130		
2,2-Dichloropropane	8.25	1.0	µg/L	10.0	82.5	40-130	V-05	†
1,1-Dichloropropene	10.6	2.0	µg/L	10.0	106	70-130		
cis-1,3-Dichloropropene	7.62	0.50	µg/L	10.0	76.2	70-130		
trans-1,3-Dichloropropene	7.67	0.50	µg/L	10.0	76.7	70-130	V-05	
Diethyl Ether	8.47	2.0	µg/L	10.0	84.7	70-130		
Diisopropyl Ether (DIPE)	9.25	0.50	µg/L	10.0	92.5	70-130		
1,4-Dioxane	90.2	50	µg/L	100	90.2	40-130		†
Ethylbenzene	10.3	1.0	µg/L	10.0	103	70-130		
Hexachlorobutadiene	10.6	0.50	µg/L	10.0	106	70-130		
2-Hexanone (MBK)	90.8	10	µg/L	100	90.8	70-160		†
Isopropylbenzene (Cumene)	9.85	1.0	µg/L	10.0	98.5	70-130		
p-Isopropyltoluene (p-Cymene)	10.2	1.0	µg/L	10.0	102	70-130		
Methyl Acetate	9.01	5.0	µg/L	10.0	90.1	70-130		
Methyl tert-Butyl Ether (MTBE)	8.65	1.0	µg/L	10.0	86.5	70-130		
Methyl Cyclohexane	10.3	1.0	µg/L	10.0	103	70-130		
Methylene Chloride	9.25	5.0	µg/L	10.0	92.5	70-130		
4-Methyl-2-pentanone (MIBK)	76.2	10	µg/L	100	76.2	70-160		†
Naphthalene	8.49	2.0	µg/L	10.0	84.9	40-130		†
n-Propylbenzene	9.67	1.0	µg/L	10.0	96.7	70-130		
Styrene	9.90	1.0	µg/L	10.0	99.0	70-130		
1,1,1,2-Tetrachloroethane	9.70	1.0	µg/L	10.0	97.0	70-130		
1,1,2,2-Tetrachloroethane	8.44	0.50	µg/L	10.0	84.4	70-130		
Tetrachloroethylene	10.8	1.0	µg/L	10.0	108	70-130		
Tetrahydrofuran	7.04	10	µg/L	10.0	70.4	70-130		
Toluene	10.0	1.0	µg/L	10.0	100	70-130		
1,2,3-Trichlorobenzene	9.56	5.0	µg/L	10.0	95.6	70-130		
1,2,4-Trichlorobenzene	9.47	1.0	µg/L	10.0	94.7	70-130		
1,3,5-Trichlorobenzene	8.89	1.0	µg/L	10.0	88.9	70-130		
1,1,1-Trichloroethane	10.2	1.0	µg/L	10.0	102	70-130		
1,1,2-Trichloroethane	9.35	1.0	µg/L	10.0	93.5	70-130		
Trichloroethylene	10.8	1.0	µg/L	10.0	108	70-130		
Trichlorodifluoromethane (Freon 11)	9.03	2.0	µg/L	10.0	90.3	70-130		
1,2,3-Trichloropropane	8.29	2.0	µg/L	10.0	82.9	70-130		



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
<b>Batch B145348 - SW-846 5030B</b>									
<b>LCS (B145348-BS1)</b>									
Prepared & Analyzed: 03/29/16									
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.25	1.0	µg/L	10.0	92.5	70-130			
1,2,4-Trimethylbenzene	10.2	1.0	µg/L	10.0	102	70-130			
1,3,5-Trimethylbenzene	9.81	1.0	µg/L	10.0	98.1	70-130			
Vinyl Chloride	12.0	2.0	µg/L	10.0	120	40-160			†
m+p Xylene	20.2	2.0	µg/L	20.0	101	70-130			
o-Xylene	9.87	1.0	µg/L	10.0	98.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	24.8		µg/L	25.0	99.4	70-130			
Surrogate: Toluene-d8	24.7		µg/L	25.0	99.0	70-130			
Surrogate: 4-Bromofluorobenzene	24.8		µg/L	25.0	99.1	70-130			
<b>LCS Dup (B145348-BSD1)</b>									
Prepared: 03/29/16 Analyzed: 03/30/16									
Acetone	89.9	50	µg/L	100	89.9	70-160	13.8	25	V-05
<b>Acrylonitrile</b>	<b>6.69</b>	<b>5.0</b>	<b>µg/L</b>	<b>10.0</b>	<b>66.9</b>	<b>*</b>	<b>70-130</b>	<b>3.96</b>	<b>25</b>
tert-Amyl Methyl Ether (TAME)	8.14	0.50	µg/L	10.0	81.4	70-130	0.734	25	
Benzene	10.2	1.0	µg/L	10.0	102	70-130	1.45	25	
Bromobenzene	10.2	1.0	µg/L	10.0	102	70-130	1.38	25	
Bromoform	11.6	1.0	µg/L	10.0	116	70-130	4.78	25	
Bromochloromethane	9.56	0.50	µg/L	10.0	95.6	70-130	0.840	25	
Bromodichloromethane	8.95	1.0	µg/L	10.0	89.5	70-130	5.39	25	V-05
Bromomethane	4.96	2.0	µg/L	10.0	49.6	40-160	20.0	25	V-20
2-Butanone (MEK)	88.2	20	µg/L	100	88.2	40-160	5.76	25	†
tert-Butyl Alcohol (TBA)	53.5	20	µg/L	100	53.5	40-160	3.73	25	V-05
n-Butylbenzene	10.4	1.0	µg/L	10.0	104	70-130	0.480	25	
sec-Butylbenzene	9.82	1.0	µg/L	10.0	98.2	70-130	1.13	25	
tert-Butylbenzene	10.1	1.0	µg/L	10.0	101	70-130	0.798	25	
tert-Butyl Ethyl Ether (TBEE)	9.45	0.50	µg/L	10.0	94.5	70-130	0.850	25	
Carbon Disulfide	7.34	4.0	µg/L	10.0	73.4	70-130	4.92	25	
Carbon Tetrachloride	10.3	5.0	µg/L	10.0	103	70-130	1.06	25	
Chlorobenzene	10.1	1.0	µg/L	10.0	101	70-130	0.199	25	
Chlorodibromomethane	8.90	0.50	µg/L	10.0	89.0	70-130	4.36	25	
Chloroethane	9.96	2.0	µg/L	10.0	99.6	70-130	1.10	25	
Chloroform	10.4	2.0	µg/L	10.0	104	70-130	3.02	25	
Chloromethane	7.15	2.0	µg/L	10.0	71.5	40-160	11.5	25	V-05
2-Chlorotoluene	9.08	1.0	µg/L	10.0	90.8	70-130	0.885	25	
4-Chlorotoluene	9.71	1.0	µg/L	10.0	97.1	70-130	2.19	25	
1,2-Dibromo-3-chloropropane (DBCP)	7.01	5.0	µg/L	10.0	70.1	70-130	6.48	25	V-05
1,2-Dibromoethane (EDB)	9.34	0.50	µg/L	10.0	93.4	70-130	2.60	25	
Dibromomethane	10.2	1.0	µg/L	10.0	102	70-130	1.38	25	
1,2-Dichlorobenzene	9.75	1.0	µg/L	10.0	97.5	70-130	3.34	25	
1,3-Dichlorobenzene	9.47	1.0	µg/L	10.0	94.7	70-130	1.06	25	
1,4-Dichlorobenzene	9.60	1.0	µg/L	10.0	96.0	70-130	1.89	25	
trans-1,4-Dichloro-2-butene	9.42	2.0	µg/L	10.0	94.2	70-130	0.213	25	
Dichlorodifluoromethane (Freon 12)	4.28	2.0	µg/L	10.0	42.8	40-160	3.22	25	†
1,1-Dichloroethane	10.6	1.0	µg/L	10.0	106	70-130	1.13	25	
1,2-Dichloroethane	10.1	1.0	µg/L	10.0	101	70-130	0.893	25	
1,1-Dichloroethylene	8.85	1.0	µg/L	10.0	88.5	70-130	0.676	25	
cis-1,2-Dichloroethylene	10.4	1.0	µg/L	10.0	104	70-130	0.385	25	
trans-1,2-Dichloroethylene	10.0	1.0	µg/L	10.0	100	70-130	2.32	25	
1,2-Dichloropropane	10.0	1.0	µg/L	10.0	100	70-130	1.29	25	
1,3-Dichloropropane	9.34	0.50	µg/L	10.0	93.4	70-130	3.26	25	
2,2-Dichloropropane	8.15	1.0	µg/L	10.0	81.5	40-130	1.22	25	V-05
1,1-Dichloropropene	10.3	2.0	µg/L	10.0	103	70-130	2.69	25	†



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B145348 - SW-846 5030B**

<b>LCS Dup (B145348-BSD1)</b>	Prepared: 03/29/16 Analyzed: 03/30/16								
cis-1,3-Dichloropropene	7.93	0.50	µg/L	10.0	79.3	70-130	3.99	25	
trans-1,3-Dichloropropene	7.74	0.50	µg/L	10.0	77.4	70-130	0.908	25	V-05
Diethyl Ether	8.62	2.0	µg/L	10.0	86.2	70-130	1.76	25	
Diisopropyl Ether (DIPE)	9.19	0.50	µg/L	10.0	91.9	70-130	0.651	25	
1,4-Dioxane	95.6	50	µg/L	100	95.6	40-130	5.82	50	† ‡
Ethylbenzene	10.4	1.0	µg/L	10.0	104	70-130	0.386	25	
Hexachlorobutadiene	10.7	0.50	µg/L	10.0	107	70-130	0.562	25	
2-Hexanone (MBK)	83.1	10	µg/L	100	83.1	70-160	8.87	25	†
Isopropylbenzene (Cumene)	9.82	1.0	µg/L	10.0	98.2	70-130	0.305	25	
p-Isopropyltoluene (p-Cymene)	10.2	1.0	µg/L	10.0	102	70-130	0.0980	25	
Methyl Acetate	9.45	5.0	µg/L	10.0	94.5	70-130	4.77	25	
Methyl tert-Butyl Ether (MTBE)	8.76	1.0	µg/L	10.0	87.6	70-130	1.26	25	
Methyl Cyclohexane	10.2	1.0	µg/L	10.0	102	70-130	0.488	25	
Methylene Chloride	9.24	5.0	µg/L	10.0	92.4	70-130	0.108	25	
4-Methyl-2-pentanone (MIBK)	79.1	10	µg/L	100	79.1	70-160	3.66	25	†
Naphthalene	8.98	2.0	µg/L	10.0	89.8	40-130	5.61	25	†
n-Propylbenzene	9.66	1.0	µg/L	10.0	96.6	70-130	0.103	25	
Styrene	9.61	1.0	µg/L	10.0	96.1	70-130	2.97	25	
1,1,1,2-Tetrachloroethane	9.63	1.0	µg/L	10.0	96.3	70-130	0.724	25	
1,1,2,2-Tetrachloroethane	8.69	0.50	µg/L	10.0	86.9	70-130	2.92	25	
Tetrachloroethylene	10.5	1.0	µg/L	10.0	105	70-130	2.25	25	
Tetrahydrofuran	7.60	10	µg/L	10.0	76.0	70-130	7.65	25	
Toluene	9.94	1.0	µg/L	10.0	99.4	70-130	0.802	25	
1,2,3-Trichlorobenzene	9.70	5.0	µg/L	10.0	97.0	70-130	1.45	25	
1,2,4-Trichlorobenzene	9.71	1.0	µg/L	10.0	97.1	70-130	2.50	25	
1,3,5-Trichlorobenzene	9.07	1.0	µg/L	10.0	90.7	70-130	2.00	25	
1,1,1-Trichloroethane	10.1	1.0	µg/L	10.0	101	70-130	0.296	25	
1,1,2-Trichloroethane	9.71	1.0	µg/L	10.0	97.1	70-130	3.78	25	
Trichloroethylene	10.6	1.0	µg/L	10.0	106	70-130	1.59	25	
Trichlorofluoromethane (Freon 11)	8.89	2.0	µg/L	10.0	88.9	70-130	1.56	25	
1,2,3-Trichloropropane	8.83	2.0	µg/L	10.0	88.3	70-130	6.31	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.00	1.0	µg/L	10.0	90.0	70-130	2.74	25	
1,2,4-Trimethylbenzene	10.2	1.0	µg/L	10.0	102	70-130	0.491	25	
1,3,5-Trimethylbenzene	9.73	1.0	µg/L	10.0	97.3	70-130	0.819	25	
Vinyl Chloride	12.2	2.0	µg/L	10.0	122	40-160	2.07	25	†
m+p Xylene	20.0	2.0	µg/L	20.0	99.8	70-130	0.997	25	
o-Xylene	9.91	1.0	µg/L	10.0	99.1	70-130	0.404	25	
Surrogate: 1,2-Dichloroethane-d4	24.8		µg/L	25.0	99.0	70-130			
Surrogate: Toluene-d8	24.8		µg/L	25.0	99.0	70-130			
Surrogate: 4-Bromofluorobenzene	24.4		µg/L	25.0	97.6	70-130			

**Batch B145420 - SW-846 5030B**

<b>Blank (B145420-BLK1)</b>	Prepared & Analyzed: 03/30/16							
Tetrachloroethylene	ND	1.0	µg/L					
Surrogate: 1,2-Dichloroethane-d4	24.4		µg/L	25.0	97.4	70-130		
Surrogate: Toluene-d8	25.5		µg/L	25.0	102	70-130		
Surrogate: 4-Bromofluorobenzene	23.4		µg/L	25.0	93.4	70-130		



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#### QUALITY CONTROL

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch B145420 - SW-846 5030B**

<b>LCS (B145420-BS1)</b>									
Prepared & Analyzed: 03/30/16									
Tetrachloroethylene	11.6	1.0	µg/L	10.0	116	70-130			
Surrogate: 1,2-Dichloroethane-d4	24.4		µg/L	25.0	97.8	70-130			
Surrogate: Toluene-d8	25.1		µg/L	25.0	101	70-130			
Surrogate: 4-Bromofluorobenzene	23.7		µg/L	25.0	94.8	70-130			
<b>LCS Dup (B145420-BS1)</b>									
Prepared & Analyzed: 03/30/16									
Tetrachloroethylene	11.5	1.0	µg/L	10.0	115	70-130	0.692	25	
Surrogate: 1,2-Dichloroethane-d4	25.1		µg/L	25.0	100	70-130			
Surrogate: Toluene-d8	25.0		µg/L	25.0	100	70-130			
Surrogate: 4-Bromofluorobenzene	23.8		µg/L	25.0	95.4	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
DL	Method Detection Limit
MCL	Maximum Contaminant Level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

L-04	Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.
L-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
RL-11	Elevated reporting limit due to high concentration of target compounds.
V-05	Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.
V-20	Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.



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#### CERTIFICATIONS

##### Certified Analyses included in this Report

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



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#### CERTIFICATIONS

##### Certified Analyses included in this Report

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

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2018
MA	Massachusetts DEP	M-MA100	06/30/2016
CT	Connecticut Department of Public Health	PH-0567	09/30/2017
NY	New York State Department of Health	10899 NELAP	04/1/2017
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2017
RI	Rhode Island Department of Health	LAO00112	12/30/2016
NC	North Carolina Div. of Water Quality	652	12/31/2016
NJ	New Jersey DEP	MA007 NELAP	06/30/2016
FL	Florida Department of Health	E871027 NELAP	06/30/2016
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2016
ME	State of Maine	2011028	06/9/2017
VA	Commonwealth of Virginia	460217	12/14/2016
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2016

**CHAIN OF CUSTODY RECORD**

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

**ANALYTICAL LABORATORY**  


39 Spruce Street  
East Longmeadow, MA 01028

Rev 04.05.12

Telephone: 617-589-6175

Project #: 130274

Client PO# 8335493

**DATA DELIVERY** (check all that apply)

FAX  EMAIL  WEBSITE

Fax #

Email: Brian.Cote@cbl.com

Format:  PDF  EXCEL  GIS

OTHER GISKey format  
 Enhanced Data Package

Collection:

Beginning Date/ Time	Ending Date/ Time	Composite	Grab Code	Matrix	Conc Code
3.16/16 0900		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> GW	<input checked="" type="checkbox"/> U	<input checked="" type="checkbox"/> 3
3.16/16 0900		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> GW	<input checked="" type="checkbox"/> U	<input checked="" type="checkbox"/> 3
3.16/16 0930		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> GW	<input checked="" type="checkbox"/> U	<input checked="" type="checkbox"/> 3

Comments:

<b>Dissolved Metals</b>	<input type="radio"/> Field Filtered	<input type="radio"/> # of Containers
	<input type="radio"/> Lab to Filter	<input type="radio"/> ** Preservation
	<input type="radio"/> Other	<input type="radio"/> ***Container Code
<b>***Cont. Code:</b>		
A=amber glass		
G=glass		
P=plastic		
ST=sterile		
V=vial		
S=sodium can		
T=tederal bag		
O=Other		

<b>*Preservation:</b>	<input type="radio"/> I=iced	<input type="radio"/> DW=drinking water
	<input type="radio"/> H=HCl	<input type="radio"/> GW=groundwater
	<input type="radio"/> M=Methanol	<input type="radio"/> WW=wastewater
	<input type="radio"/> N=Nitric Acid	
	<input type="radio"/> S=Sulfuric Acid	
	<input type="radio"/> B=Sodium bisulfate	
	<input type="radio"/> X=Na hydroxide	
	<input type="radio"/> T=Na thiosulfate	
	<input type="radio"/> O=Other	



**Is your project MCP or RCP?**

- MCP Form Required  
 RCP Form Required  
 MA State DW Form Required PWSID # \_\_\_\_\_

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:  
-----  
H = High  
M = Medium  
L = Low  
C = Clean  
U = Unknown  
S = soil/solid  
SL = sludge  
O = other

H - High  
M - Medium  
L - Low  
C - Clean  
U - Unknown

S - soil/solid  
SL - sludge  
O - other

H - High  
M - Medium  
L - Low  
C - Clean  
U - Unknown

S - soil/solid  
SL - sludge  
O - other

H - High  
M - Medium  
L - Low  
C - Clean  
U - Unknown

S - soil/solid  
SL - sludge  
O - other

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East Longmeadow, MA. 01028  
P: 413-525-2332  
F: 413-525-6405  
www.contestlabs.com



Page 1 of 2

## Sample Receipt Checklist

**CLIENT NAME:** CB&I Environmental      **RECEIVED BY:** JDL      **DATE:** 3/22/2016

**1) Was the chain(s) of custody relinquished and signed?** Yes  No  No COC Incl.

**2) Does the chain agree with the samples?** Yes  No

If not, explain:

**3) Are all the samples in good condition?** Yes  No

If not, explain:

**4) How were the samples received:**

On Ice  Direct from Sampling  Ambient  In Cooler(s)

**Were the samples received in Temperature Compliance of (2-6°C)?** Yes  No  N/A

Temperature °C by Temp blank \_\_\_\_\_ Temperature °C by Temp gun \_\_\_\_\_ 5.7

**5) Are there Dissolved samples for the lab to filter?** Yes  No

Who was notified \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

**6) Are there any RUSH or SHORT HOLDING TIME samples?** Yes  No

Who was notified \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

Permission to subcontract samples? Yes  No

(Walk-in clients only) if not already approved

Client Signature: \_\_\_\_\_

**8) Do all samples have the proper Acid pH:** Yes  No  N/A

**9) Do all samples have the proper Base pH:** Yes  No  N/A

**10) Was the PC notified of any discrepancies with the CoC vs the samples:** Yes  N/A

### Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber		16 oz amber	
500 mL Amber		8 oz amber/clear jar	
250 mL Amber (8oz amber)		4 oz amber/clear jar	
1 Liter Plastic		2 oz amber/clear jar	
500 mL Plastic		Plastic Bag / Ziploc	
250 mL plastic		SOC Kit	
40 mL Vial - type listed below	9	Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

40 mL vials:	# HCl	9	# Methanol	Time and Date Frozen:
Doc# 277	# Bisulfate		# DI Water	
Rev. 4 August 2013	# Thiosulfate		Unpreserved	

Page 2 of 2

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

<u>Question</u>	<u>Answer (True/False)</u>	<u>Comment</u>
	T/F/NA	
1) The cooler's custody seal, if present, is intact.	NA	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	NA	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	T	
18) There is sufficient volume for all requested analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	NA	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	T	
21) Samples do not require splitting or compositing.	T	

Who notified of False statements?

Date/Time:

Doc #277 Rev. 4 August 2013

Log-In Technician Initials: JDL

3/22/16 1810



---

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

May 3, 2016

Brian Cote  
CB&I Env. & Infrastructure - MA  
150 Royall Street  
Canton, MA 02021

Project Location: Providence, RI

Client Job Number:

Project Number: 130274

Laboratory Work Order Number: 16D0988

Enclosed are results of analyses for samples received by the laboratory on April 21, 2016. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "James M. Georgantas". The signature is fluid and cursive, with a distinct "J" at the beginning.

James M. Georgantas  
Project Manager

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

CB&I Env. & Infrastructure - MA  
150 Royall Street  
Canton, MA 02021  
ATTN: Brian Cote

REPORT DATE: 5/3/2016

PURCHASE ORDER NUMBER: 835493-000 OP

PROJECT NUMBER: 130274

#### **ANALYTICAL SUMMARY**

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WORK ORDER NUMBER: 16D0988

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

PROJECT LOCATION: Providence, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-112	16D0988-01	Ground Water		SW-846 8260C	
MW-116D	16D0988-02	Ground Water		SW-846 8260C	
MW-116S	16D0988-03	Ground Water		SW-846 8260C	



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#### CASE NARRATIVE SUMMARY

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

#### SW-846 8260C

##### **Qualifications:**

###### **L-04**

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

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

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

16D0988-01[MW-112], 16D0988-02[MW-116D], 16D0988-03[MW-116S], B147984-BLK1, B147984-BS1, B147984-BSD1

###### **R-05**

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

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

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

16D0988-01[MW-112], 16D0988-02[MW-116D], 16D0988-03[MW-116S], B147984-BLK1, B147984-BS1, B147984-BSD1

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

Elevated reporting limit due to high concentration of target compounds.

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

16D0988-01[MW-112]

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

Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.

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

###### **Dichlorodifluoromethane (Freon 1)**

16D0988-01[MW-112], 16D0988-02[MW-116D], 16D0988-03[MW-116S], B147984-BLK1, B147984-BS1, B147984-BSD1

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

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

Lisa A. Worthington  
Project Manager



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

Project Location: Providence, RI

Sample Description:

Work Order: 16D0988

Date Received: 4/21/2016

**Field Sample #:** MW-112

Sampled: 4/20/2016 08:00

**Sample ID:** 16D0988-01Sample Matrix: Ground Water

Sample Flags: RL-11

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	2000	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
Acrylonitrile	ND	200	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
tert-Amyl Methyl Ether (TAME)	ND	20	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
Benzene	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
Bromobenzene	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
Bromochloromethane	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
Bromodichloromethane	ND	20	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
Bromoform	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
Bromomethane	ND	80	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
2-Butanone (MEK)	ND	800	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
tert-Butyl Alcohol (TBA)	ND	800	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
n-Butylbenzene	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
sec-Butylbenzene	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
tert-Butylbenzene	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	20	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
Carbon Disulfide	ND	160	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
Carbon Tetrachloride	ND	200	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
Chlorobenzene	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
Chlorodibromomethane	ND	20	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
Chloroethane	ND	80	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
Chloroform	ND	80	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
Chloromethane	ND	80	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
2-Chlorotoluene	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
4-Chlorotoluene	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	200	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
1,2-Dibromoethane (EDB)	ND	20	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
Dibromomethane	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
1,2-Dichlorobenzene	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
1,3-Dichlorobenzene	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
1,4-Dichlorobenzene	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
trans-1,4-Dichloro-2-butene	ND	200	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
Dichlorodifluoromethane (Freon 12)	ND	80	µg/L	40	V-05	SW-846 8260C	4/29/16	5/2/16 21:10	EEH
1,1-Dichloroethane	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
1,2-Dichloroethane	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
1,1-Dichloroethylene	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
cis-1,2-Dichloroethylene	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
trans-1,2-Dichloroethylene	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
1,2-Dichloropropane	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
1,3-Dichloropropane	ND	20	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
2,2-Dichloropropane	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
1,1-Dichloropropene	ND	80	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
cis-1,3-Dichloropropene	ND	20	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
trans-1,3-Dichloropropene	ND	20	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
Diethyl Ether	ND	80	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH



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

Project Location: Providence, RI

Sample Description:

Work Order: 16D0988

Date Received: 4/21/2016

**Field Sample #:** MW-112

Sampled: 4/20/2016 08:00

**Sample ID:** 16D0988-01Sample Matrix: Ground Water

Sample Flags: RL-11

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	20	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
1,4-Dioxane	ND	4000	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
Ethylbenzene	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
Hexachlorobutadiene	ND	20	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
2-Hexanone (MBK)	ND	400	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
Isopropylbenzene (Cumene)	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
p-Isopropyltoluene (p-Cymene)	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
Methyl Acetate	ND	40	µg/L	40	L-04, R-05	SW-846 8260C	4/29/16	5/2/16 21:10	EEH
Methyl tert-Butyl Ether (MTBE)	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
Methyl Cyclohexane	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
Methylene Chloride	ND	200	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
4-Methyl-2-pentanone (MIBK)	ND	400	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
Naphthalene	ND	80	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
n-Propylbenzene	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
Styrene	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
1,1,1,2-Tetrachloroethane	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
1,1,2,2-Tetrachloroethane	ND	20	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
Tetrachloroethylene	1800	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
Tetrahydrofuran	ND	400	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
Toluene	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
1,2,3-Trichlorobenzene	ND	200	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
1,2,4-Trichlorobenzene	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
1,3,5-Trichlorobenzene	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
1,1,1-Trichloroethane	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
1,1,2-Trichloroethane	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
Trichloroethylene	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
Trichlorofluoromethane (Freon 11)	ND	80	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
1,2,3-Trichloropropane	ND	80	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
1,2,4-Trimethylbenzene	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
1,3,5-Trimethylbenzene	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
Vinyl Chloride	ND	80	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
m+p Xylene	ND	80	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
o-Xylene	ND	40	µg/L	40		SW-846 8260C	4/29/16	5/2/16 21:10	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	103	70-130						5/2/16 21:10	
Toluene-d8	98.0	70-130						5/2/16 21:10	
4-Bromofluorobenzene	98.4	70-130						5/2/16 21:10	



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

Project Location: Providence, RI

Sample Description:

Work Order: 16D0988

Date Received: 4/21/2016

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

Sampled: 4/20/2016 08:45

**Sample ID:** 16D0988-02Sample Matrix: Ground Water**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
trans-1,4-Dichloro-2-butene	ND	5.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1	V-05	SW-846 8260C	4/29/16	5/2/16 15:51	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH



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

Project Location: Providence, RI

Sample Description:

Work Order: 16D0988

Date Received: 4/21/2016

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

Sampled: 4/20/2016 08:45

**Sample ID:** 16D0988-02Sample Matrix: Ground Water**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
1,4-Dioxane	ND	100	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
Methyl Acetate	ND	1.0	µg/L	1	L-04, R-05	SW-846 8260C	4/29/16	5/2/16 15:51	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 15:51	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	105	70-130							5/2/16 15:51
Toluene-d8	99.1	70-130							5/2/16 15:51
4-Bromofluorobenzene	100	70-130							5/2/16 15:51



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

Project Location: Providence, RI

Sample Description:

Work Order: 16D0988

Date Received: 4/21/2016

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

Sampled: 4/20/2016 09:30

**Sample ID:** 16D0988-03Sample Matrix: Ground Water**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
trans-1,4-Dichloro-2-butene	ND	5.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1	V-05	SW-846 8260C	4/29/16	5/2/16 16:17	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH



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

Project Location: Providence, RI

Sample Description:

Work Order: 16D0988

Date Received: 4/21/2016

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

Sampled: 4/20/2016 09:30

**Sample ID:** 16D0988-03Sample Matrix: Ground Water**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
1,4-Dioxane	ND	100	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
Methyl Acetate	ND	1.0	µg/L	1	R-05, L-04	SW-846 8260C	4/29/16	5/2/16 16:17	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	4/29/16	5/2/16 16:17	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	105	70-130							5/2/16 16:17
Toluene-d8	99.2	70-130							5/2/16 16:17
4-Bromofluorobenzene	99.5	70-130							5/2/16 16:17



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

**Sample Extraction Data**

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
16D0988-01 [MW-112]	B147984	0.125	5.00	04/29/16
16D0988-02 [MW-116D]	B147984	5	5.00	04/29/16
16D0988-03 [MW-116S]	B147984	5	5.00	04/29/16



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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 B147984 - SW-846 5030B**

<b>Blank (B147984-BLK1)</b>									Prepared: 04/29/16 Analyzed: 05/02/16
Acetone	ND	50	µg/L						
Acrylonitrile	ND	5.0	µg/L						
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L						
Benzene	ND	1.0	µg/L						
Bromobenzene	ND	1.0	µg/L						
Bromoform	ND	0.50	µg/L						
Bromomethane	ND	1.0	µg/L						
2-Butanone (MEK)	ND	20	µg/L						
tert-Butyl Alcohol (TBA)	ND	20	µg/L						
n-Butylbenzene	ND	1.0	µg/L						
sec-Butylbenzene	ND	1.0	µg/L						
tert-Butylbenzene	ND	1.0	µg/L						
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L						
Carbon Disulfide	ND	4.0	µg/L						
Carbon Tetrachloride	ND	5.0	µg/L						
Chlorobenzene	ND	1.0	µg/L						
Chlorodibromomethane	ND	0.50	µg/L						
Chloroethane	ND	2.0	µg/L						
Chloroform	ND	2.0	µg/L						
Chloromethane	ND	2.0	µg/L						
2-Chlorotoluene	ND	1.0	µg/L						
4-Chlorotoluene	ND	1.0	µg/L						
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L						
1,2-Dibromoethane (EDB)	ND	0.50	µg/L						
Dibromomethane	ND	1.0	µg/L						
1,2-Dichlorobenzene	ND	1.0	µg/L						
1,3-Dichlorobenzene	ND	1.0	µg/L						
1,4-Dichlorobenzene	ND	1.0	µg/L						
trans-1,4-Dichloro-2-butene	ND	5.0	µg/L						
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L						V-05
1,1-Dichloroethane	ND	1.0	µg/L						
1,2-Dichloroethane	ND	1.0	µg/L						
1,1-Dichloroethylene	ND	1.0	µg/L						
cis-1,2-Dichloroethylene	ND	1.0	µg/L						
trans-1,2-Dichloroethylene	ND	1.0	µg/L						
1,2-Dichloropropane	ND	1.0	µg/L						
1,3-Dichloropropane	ND	0.50	µg/L						
2,2-Dichloropropane	ND	1.0	µg/L						
1,1-Dichloropropene	ND	2.0	µg/L						
cis-1,3-Dichloropropene	ND	0.50	µg/L						
trans-1,3-Dichloropropene	ND	0.50	µg/L						
Diethyl Ether	ND	2.0	µg/L						
Diisopropyl Ether (DIPE)	ND	0.50	µg/L						
1,4-Dioxane	ND	100	µg/L						
Ethylbenzene	ND	1.0	µg/L						
Hexachlorobutadiene	ND	0.50	µg/L						
2-Hexanone (MBK)	ND	10	µg/L						
Isopropylbenzene (Cumene)	ND	1.0	µg/L						
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L						
Methyl Acetate	ND	1.0	µg/L						L-04, R-05



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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch B147984 - SW-846 5030B**

<b>Blank (B147984-BLK1)</b>									
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L						
Methyl Cyclohexane	ND	1.0	µg/L						
Methylene Chloride	ND	5.0	µg/L						
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L						
Naphthalene	ND	2.0	µg/L						
n-Propylbenzene	ND	1.0	µg/L						
Styrene	ND	1.0	µg/L						
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L						
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L						
Tetrachloroethylene	ND	1.0	µg/L						
Tetrahydrofuran	ND	10	µg/L						
Toluene	ND	1.0	µg/L						
1,2,3-Trichlorobenzene	ND	5.0	µg/L						
1,2,4-Trichlorobenzene	ND	1.0	µg/L						
1,3,5-Trichlorobenzene	ND	1.0	µg/L						
1,1,1-Trichloroethane	ND	1.0	µg/L						
1,1,2-Trichloroethane	ND	1.0	µg/L						
Trichloroethylene	ND	1.0	µg/L						
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L						
1,2,3-Trichloropropane	ND	2.0	µg/L						
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L						
1,2,4-Trimethylbenzene	ND	1.0	µg/L						
1,3,5-Trimethylbenzene	ND	1.0	µg/L						
Vinyl Chloride	ND	2.0	µg/L						
m+p Xylene	ND	2.0	µg/L						
o-Xylene	ND	1.0	µg/L						
Surrogate: 1,2-Dichloroethane-d4	25.2		µg/L	25.0		101	70-130		
Surrogate: Toluene-d8	24.6		µg/L	25.0		98.4	70-130		
Surrogate: 4-Bromofluorobenzene	24.4		µg/L	25.0		97.6	70-130		

<b>LCS (B147984-BS1)</b>									
Acetone	97.1	50	µg/L	100		97.1	70-160		†
Acrylonitrile	9.49	5.0	µg/L	10.0		94.9	70-130		
tert-Amyl Methyl Ether (TAME)	8.57	0.50	µg/L	10.0		85.7	70-130		
Benzene	8.32	1.0	µg/L	10.0		83.2	70-130		
Bromobenzene	8.85	1.0	µg/L	10.0		88.5	70-130		
Bromochloromethane	9.50	1.0	µg/L	10.0		95.0	70-130		
Bromodichloromethane	8.23	0.50	µg/L	10.0		82.3	70-130		
Bromoform	9.35	1.0	µg/L	10.0		93.5	70-130		
Bromomethane	5.30	2.0	µg/L	10.0		53.0	40-160		†
2-Butanone (MEK)	95.8	20	µg/L	100		95.8	40-160		†
tert-Butyl Alcohol (TBA)	91.8	20	µg/L	100		91.8	40-160		†
n-Butylbenzene	9.51	1.0	µg/L	10.0		95.1	70-130		
sec-Butylbenzene	8.85	1.0	µg/L	10.0		88.5	70-130		
tert-Butylbenzene	8.74	1.0	µg/L	10.0		87.4	70-130		
tert-Butyl Ethyl Ether (TBEE)	8.95	0.50	µg/L	10.0		89.5	70-130		
Carbon Disulfide	8.02	4.0	µg/L	10.0		80.2	70-130		
Carbon Tetrachloride	9.03	5.0	µg/L	10.0		90.3	70-130		
Chlorobenzene	8.49	1.0	µg/L	10.0		84.9	70-130		
Chlorodibromomethane	8.62	0.50	µg/L	10.0		86.2	70-130		
Chloroethane	10.1	2.0	µg/L	10.0		101	70-130		
Chloroform	8.57	2.0	µg/L	10.0		85.7	70-130		



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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch B147984 - SW-846 5030B**

<b>LCS (B147984-BS1)</b>					Prepared: 04/29/16 Analyzed: 05/02/16				
Chloromethane	7.63	2.0	µg/L	10.0	76.3	40-160			†
2-Chlorotoluene	8.71	1.0	µg/L	10.0	87.1	70-130			
4-Chlorotoluene	8.39	1.0	µg/L	10.0	83.9	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	9.41	5.0	µg/L	10.0	94.1	70-130			
1,2-Dibromoethane (EDB)	8.95	0.50	µg/L	10.0	89.5	70-130			
Dibromomethane	8.69	1.0	µg/L	10.0	86.9	70-130			
1,2-Dichlorobenzene	8.54	1.0	µg/L	10.0	85.4	70-130			
1,3-Dichlorobenzene	8.81	1.0	µg/L	10.0	88.1	70-130			
1,4-Dichlorobenzene	8.47	1.0	µg/L	10.0	84.7	70-130			
trans-1,4-Dichloro-2-butene	9.09	5.0	µg/L	10.0	90.9	70-130			
Dichlorodifluoromethane (Freon 12)	5.58	2.0	µg/L	10.0	55.8	40-160		V-05	†
1,1-Dichloroethane	8.54	1.0	µg/L	10.0	85.4	70-130			
1,2-Dichloroethane	8.33	1.0	µg/L	10.0	83.3	70-130			
1,1-Dichloroethylene	8.31	1.0	µg/L	10.0	83.1	70-130			
cis-1,2-Dichloroethylene	8.12	1.0	µg/L	10.0	81.2	70-130			
trans-1,2-Dichloroethylene	8.30	1.0	µg/L	10.0	83.0	70-130			
1,2-Dichloropropane	8.32	1.0	µg/L	10.0	83.2	70-130			
1,3-Dichloropropane	8.40	0.50	µg/L	10.0	84.0	70-130			
2,2-Dichloropropane	8.57	1.0	µg/L	10.0	85.7	40-130			†
1,1-Dichloropropene	8.41	2.0	µg/L	10.0	84.1	70-130			
cis-1,3-Dichloropropene	7.62	0.50	µg/L	10.0	76.2	70-130			
trans-1,3-Dichloropropene	8.42	0.50	µg/L	10.0	84.2	70-130			
Diethyl Ether	8.71	2.0	µg/L	10.0	87.1	70-130			
Diisopropyl Ether (DIPE)	8.54	0.50	µg/L	10.0	85.4	70-130			
1,4-Dioxane	80.2	100	µg/L	100	80.2	40-130			†
Ethylbenzene	8.80	1.0	µg/L	10.0	88.0	70-130			
Hexachlorobutadiene	10.0	0.50	µg/L	10.0	100	70-130			
2-Hexanone (MBK)	95.3	10	µg/L	100	95.3	70-160			†
Isopropylbenzene (Cumene)	8.74	1.0	µg/L	10.0	87.4	70-130			
p-Isopropyltoluene (p-Cymene)	9.17	1.0	µg/L	10.0	91.7	70-130			
<b>Methyl Acetate</b>	5.70	1.0	µg/L	10.0	<b>57.0</b> *	70-130			L-04, R-05
Methyl tert-Butyl Ether (MTBE)	8.15	1.0	µg/L	10.0	81.5	70-130			
Methyl Cyclohexane	8.95	1.0	µg/L	10.0	89.5	70-130			
Methylene Chloride	8.85	5.0	µg/L	10.0	88.5	70-130			
4-Methyl-2-pentanone (MIBK)	99.0	10	µg/L	100	99.0	70-160			†
Naphthalene	9.04	2.0	µg/L	10.0	90.4	40-130			†
n-Propylbenzene	8.65	1.0	µg/L	10.0	86.5	70-130			
Styrene	8.73	1.0	µg/L	10.0	87.3	70-130			
1,1,1,2-Tetrachloroethane	8.95	1.0	µg/L	10.0	89.5	70-130			
1,1,2,2-Tetrachloroethane	9.03	0.50	µg/L	10.0	90.3	70-130			
Tetrachloroethylene	8.86	1.0	µg/L	10.0	88.6	70-130			
Tetrahydrofuran	10.2	10	µg/L	10.0	102	70-130			
Toluene	8.59	1.0	µg/L	10.0	85.9	70-130			
1,2,3-Trichlorobenzene	9.13	5.0	µg/L	10.0	91.3	70-130			
1,2,4-Trichlorobenzene	9.40	1.0	µg/L	10.0	94.0	70-130			
1,3,5-Trichlorobenzene	9.52	1.0	µg/L	10.0	95.2	70-130			
1,1,1-Trichloroethane	8.66	1.0	µg/L	10.0	86.6	70-130			
1,1,2-Trichloroethane	8.76	1.0	µg/L	10.0	87.6	70-130			
Trichloroethylene	8.63	1.0	µg/L	10.0	86.3	70-130			
Trichlorofluoromethane (Freon 11)	8.88	2.0	µg/L	10.0	88.8	70-130			
1,2,3-Trichloropropane	9.11	2.0	µg/L	10.0	91.1	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 B147984 - SW-846 5030B</b>									
<b>LCS (B147984-BS1)</b>									
Prepared: 04/29/16 Analyzed: 05/02/16									
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	8.65	1.0	µg/L	10.0	86.5	70-130			
1,2,4-Trimethylbenzene	8.57	1.0	µg/L	10.0	85.7	70-130			
1,3,5-Trimethylbenzene	8.95	1.0	µg/L	10.0	89.5	70-130			
Vinyl Chloride	7.99	2.0	µg/L	10.0	79.9	40-160			†
m+p Xylene	17.8	2.0	µg/L	20.0	89.1	70-130			
o-Xylene	8.77	1.0	µg/L	10.0	87.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	25.8		µg/L	25.0	103	70-130			
Surrogate: Toluene-d8	24.7		µg/L	25.0	99.0	70-130			
Surrogate: 4-Bromofluorobenzene	24.9		µg/L	25.0	99.8	70-130			
<b>LCS Dup (B147984-BSD1)</b>									
Prepared: 04/29/16 Analyzed: 05/02/16									
Acetone	93.8	50	µg/L	100	93.8	70-160	3.48	25	†
Acrylonitrile	9.68	5.0	µg/L	10.0	96.8	70-130	1.98	25	
tert-Amyl Methyl Ether (TAME)	8.45	0.50	µg/L	10.0	84.5	70-130	1.41	25	
Benzene	8.19	1.0	µg/L	10.0	81.9	70-130	1.57	25	
Bromobenzene	8.61	1.0	µg/L	10.0	86.1	70-130	2.75	25	
Bromoform	9.12	1.0	µg/L	10.0	91.2	70-130	4.08	25	
Bromochloromethane	8.07	0.50	µg/L	10.0	80.7	70-130	1.96	25	
Bromodichloromethane	9.35	1.0	µg/L	10.0	93.5	70-130	0.00	25	
Bromomethane	5.78	2.0	µg/L	10.0	57.8	40-160	8.66	25	†
2-Butanone (MEK)	94.7	20	µg/L	100	94.7	40-160	1.18	25	†
tert-Butyl Alcohol (TBA)	90.5	20	µg/L	100	90.5	40-160	1.40	25	†
n-Butylbenzene	9.53	1.0	µg/L	10.0	95.3	70-130	0.210	25	
sec-Butylbenzene	8.75	1.0	µg/L	10.0	87.5	70-130	1.14	25	
tert-Butylbenzene	8.61	1.0	µg/L	10.0	86.1	70-130	1.50	25	
tert-Butyl Ethyl Ether (TBEE)	8.79	0.50	µg/L	10.0	87.9	70-130	1.80	25	
Carbon Disulfide	7.58	4.0	µg/L	10.0	75.8	70-130	5.64	25	
Carbon Tetrachloride	8.81	5.0	µg/L	10.0	88.1	70-130	2.47	25	
Chlorobenzene	8.36	1.0	µg/L	10.0	83.6	70-130	1.54	25	
Chlorodibromomethane	8.35	0.50	µg/L	10.0	83.5	70-130	3.18	25	
Chloroethane	9.84	2.0	µg/L	10.0	98.4	70-130	2.61	25	
Chloroform	8.40	2.0	µg/L	10.0	84.0	70-130	2.00	25	
Chloromethane	7.55	2.0	µg/L	10.0	75.5	40-160	1.05	25	†
2-Chlorotoluene	8.59	1.0	µg/L	10.0	85.9	70-130	1.39	25	
4-Chlorotoluene	8.30	1.0	µg/L	10.0	83.0	70-130	1.08	25	
1,2-Dibromo-3-chloropropane (DBCP)	10.3	5.0	µg/L	10.0	103	70-130	9.22	25	
1,2-Dibromoethane (EDB)	8.85	0.50	µg/L	10.0	88.5	70-130	1.12	25	
Dibromomethane	8.70	1.0	µg/L	10.0	87.0	70-130	0.115	25	
1,2-Dichlorobenzene	8.53	1.0	µg/L	10.0	85.3	70-130	0.117	25	
1,3-Dichlorobenzene	8.85	1.0	µg/L	10.0	88.5	70-130	0.453	25	
1,4-Dichlorobenzene	8.15	1.0	µg/L	10.0	81.5	70-130	3.85	25	
trans-1,4-Dichloro-2-butene	9.51	5.0	µg/L	10.0	95.1	70-130	4.52	25	
Dichlorodifluoromethane (Freon 12)	5.66	2.0	µg/L	10.0	56.6	40-160	1.42	25	V-05 †
1,1-Dichloroethane	8.52	1.0	µg/L	10.0	85.2	70-130	0.234	25	
1,2-Dichloroethane	8.07	1.0	µg/L	10.0	80.7	70-130	3.17	25	
1,1-Dichloroethylene	8.15	1.0	µg/L	10.0	81.5	70-130	1.94	25	
cis-1,2-Dichloroethylene	7.96	1.0	µg/L	10.0	79.6	70-130	1.99	25	
trans-1,2-Dichloroethylene	8.17	1.0	µg/L	10.0	81.7	70-130	1.58	25	
1,2-Dichloropropane	8.19	1.0	µg/L	10.0	81.9	70-130	1.57	25	
1,3-Dichloropropane	8.02	0.50	µg/L	10.0	80.2	70-130	4.63	25	
2,2-Dichloropropane	8.37	1.0	µg/L	10.0	83.7	40-130	2.36	25	†
1,1-Dichloropropene	8.29	2.0	µg/L	10.0	82.9	70-130	1.44	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 B147984 - SW-846 5030B</b>										
<b>LCS Dup (B147984-BSD1)</b>										
Prepared: 04/29/16 Analyzed: 05/02/16										
cis-1,3-Dichloropropene	7.80	0.50	µg/L	10.0	78.0	70-130	2.33	25		
trans-1,3-Dichloropropene	8.06	0.50	µg/L	10.0	80.6	70-130	4.37	25		
Diethyl Ether	8.62	2.0	µg/L	10.0	86.2	70-130	1.04	25		
Diisopropyl Ether (DIPE)	8.55	0.50	µg/L	10.0	85.5	70-130	0.117	25		
1,4-Dioxane	87.9	100	µg/L	100	87.9	40-130	9.20	50		† ‡
Ethylbenzene	8.64	1.0	µg/L	10.0	86.4	70-130	1.83	25		
Hexachlorobutadiene	9.82	0.50	µg/L	10.0	98.2	70-130	2.02	25		
2-Hexanone (MBK)	95.7	10	µg/L	100	95.7	70-160	0.408	25		†
Isopropylbenzene (Cumene)	8.50	1.0	µg/L	10.0	85.0	70-130	2.78	25		
p-Isopropyltoluene (p-Cymene)	9.12	1.0	µg/L	10.0	91.2	70-130	0.547	25		
<b>Methyl Acetate</b>	16.0	1.0	µg/L	10.0	<b>160</b> *	70-130	<b>95.0</b> *	25	L-04, R-05	
Methyl tert-Butyl Ether (MTBE)	8.20	1.0	µg/L	10.0	82.0	70-130	0.612	25		
Methyl Cyclohexane	9.09	1.0	µg/L	10.0	90.9	70-130	1.55	25		
Methylene Chloride	8.78	5.0	µg/L	10.0	87.8	70-130	0.794	25		
4-Methyl-2-pentanone (MIBK)	99.8	10	µg/L	100	99.8	70-160	0.744	25		†
Naphthalene	9.34	2.0	µg/L	10.0	93.4	40-130	3.26	25		†
n-Propylbenzene	8.35	1.0	µg/L	10.0	83.5	70-130	3.53	25		
Styrene	8.53	1.0	µg/L	10.0	85.3	70-130	2.32	25		
1,1,1,2-Tetrachloroethane	8.78	1.0	µg/L	10.0	87.8	70-130	1.92	25		
1,1,2,2-Tetrachloroethane	9.12	0.50	µg/L	10.0	91.2	70-130	0.992	25		
Tetrachloroethylene	8.75	1.0	µg/L	10.0	87.5	70-130	1.25	25		
Tetrahydrofuran	8.78	10	µg/L	10.0	87.8	70-130	14.7	25		
Toluene	8.26	1.0	µg/L	10.0	82.6	70-130	3.92	25		
1,2,3-Trichlorobenzene	9.22	5.0	µg/L	10.0	92.2	70-130	0.981	25		
1,2,4-Trichlorobenzene	9.38	1.0	µg/L	10.0	93.8	70-130	0.213	25		
1,3,5-Trichlorobenzene	9.32	1.0	µg/L	10.0	93.2	70-130	2.12	25		
1,1,1-Trichloroethane	8.35	1.0	µg/L	10.0	83.5	70-130	3.64	25		
1,1,2-Trichloroethane	8.63	1.0	µg/L	10.0	86.3	70-130	1.50	25		
Trichloroethylene	8.35	1.0	µg/L	10.0	83.5	70-130	3.30	25		
Trichlorofluoromethane (Freon 11)	8.73	2.0	µg/L	10.0	87.3	70-130	1.70	25		
1,2,3-Trichloropropane	8.99	2.0	µg/L	10.0	89.9	70-130	1.33	25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	8.77	1.0	µg/L	10.0	87.7	70-130	1.38	25		
1,2,4-Trimethylbenzene	8.54	1.0	µg/L	10.0	85.4	70-130	0.351	25		
1,3,5-Trimethylbenzene	8.70	1.0	µg/L	10.0	87.0	70-130	2.83	25		
Vinyl Chloride	7.68	2.0	µg/L	10.0	76.8	40-160	3.96	25		†
m+p Xylene	17.3	2.0	µg/L	20.0	86.6	70-130	2.79	25		
o-Xylene	8.50	1.0	µg/L	10.0	85.0	70-130	3.13	25		
Surrogate: 1,2-Dichloroethane-d4	26.0		µg/L	25.0	104	70-130				
Surrogate: Toluene-d8	25.0		µg/L	25.0	99.9	70-130				
Surrogate: 4-Bromofluorobenzene	25.4		µg/L	25.0	101	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
DL	Method Detection Limit
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.
R-05	Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
RL-11	Elevated reporting limit due to high concentration of target compounds.
V-05	Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.



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#### CERTIFICATIONS

##### Certified Analyses included in this Report

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



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

#### CERTIFICATIONS

##### Certified Analyses included in this Report

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

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2018
MA	Massachusetts DEP	M-MA100	06/30/2016
CT	Connecticut Department of Public Health	PH-0567	09/30/2017
NY	New York State Department of Health	10899 NELAP	04/1/2017
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2017
RI	Rhode Island Department of Health	LAO00112	12/30/2016
NC	North Carolina Div. of Water Quality	652	12/31/2016
NJ	New Jersey DEP	MA007 NELAP	06/30/2016
FL	Florida Department of Health	E871027 NELAP	06/30/2016
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2016
ME	State of Maine	2011028	06/9/2017
VA	Commonwealth of Virginia	460217	12/14/2016
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2016

# CHAIN OF CUSTODY RECORD

Phone: 413-525-2332

Fax: 413-525-6405

Email: info@contesttlabs.com  
www.contesttlabs.com

Company Name: CB&amp;I Environmental

Address: 150 Royal Street

Canton, MA 02021

Attention: Brian Cote

Project Location: ProvidenceSampled By: Pail LeedProject Proposal Provided? (for billing purposes)  
 yes  proposal date

Project #	130274
Client PO#	835493
<b>DATA DELIVERY</b> (check all that apply)	
<input type="radio"/> FAX	<input type="radio"/> EMAIL
<input type="radio"/> WEBSITE	
Fax #	
Email: <u>Brian.Cote@CBII.com</u>	
Format:	
<input checked="" type="checkbox"/> PDF <input type="checkbox"/> EXCEL <input type="checkbox"/> GIS	
<input checked="" type="checkbox"/> OTHER/GISKEY format	

Collection		<input type="radio"/> Enhanced Data Package			
Beginning Date/Time	Ending Date/Time	Composite	Grab	Main	Conc Scale
4/20/16 0800		<input checked="" type="checkbox"/>	<input type="checkbox"/> GW	<input type="checkbox"/> U	<input type="checkbox"/> 3
MW-116D	4/20/16 0845	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> 3
MW-116S	4/20/16 0930	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> 3

Comments:	
H = High, M = Medium, L = Low, C = Clean, U = Unknown	
Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:	
<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L <input type="checkbox"/> C <input type="checkbox"/> U	

# of Containers
** Preservation
***Container Code

**Dissolved Metals**

- Field Filtered
- Lab Filter
- Other

**\*\*Cont. Code:**

- A=Amber glass
- G=glass
- P=plastic
- ST=sterile
- V=vial
- S=summary can
- T=tederal bag
- O=Other

**\*\*Preservation**

- I=iced
- H=HCl
- M=Methanol
- N=Nitric Acid
- S=Sulfuric Acid
- B=Sodium bisulfate
- X=Na hydroxide
- T=Na thiosulfate
- O=Other

**\*Matrix Codes:**

- GW=drinking water
- GW=groundwater
- WW=wastewater
- WW=sludge
- SL=other

**Is your project MCP or RCP?**

- MCP Form Required
- RCP Form Required
- MA State DW Form Required PWSID # \_\_\_\_\_

**NELAC & AIHA-LAP, LLC**  
Accredited

WBE/DBE Certified

TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

39 Spruce St.  
East Longmeadow, MA. 01028  
P: 413-525-2332  
F: 413-525-6405  
[www.contestlabs.com](http://www.contestlabs.com)



Page 1 of 2



## Sample Receipt Checklist

CLIENT NAME: CB+JRECEIVED BY: JDLDATE: 4/21/16

1) Was the chain(s) of custody relinquished and signed?

Yes  No  No CoC Included

2) Does the chain agree with the samples?

Yes  No 

If not, explain:

3) Are all the samples in good condition?

Yes  No 

If not, explain:

4) How were the samples received:

On Ice  Direct from Sampling  Ambient  In Cooler(s) Were the samples received in Temperature Compliance of (2-6°C)? Yes  No  N/A

Temperature °C by Temp blank \_\_\_\_\_

Temperature °C by Temp gun 5.1

5) Are there Dissolved samples for the lab to filter?

Yes  No 

Who was notified \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

6) Are there any RUSH or SHORT HOLDING TIME samples?

Yes  No 

Who was notified \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

7) Location where samples are stored:

19Permission to subcontract samples? Yes  No 

(Walk-in clients only) if not already approved

Client Signature:

8) Do all samples have the proper Acid pH: Yes  No  N/A \_\_\_\_\_9) Do all samples have the proper Base pH: Yes  No  N/A \_\_\_\_\_10) Was the PC notified of any discrepancies with the CoC vs the samples: Yes  No  N/A \_\_\_\_\_

Containers received at Con-Test			
	# of containers		# of containers
1 Liter Amber		8 oz amber/clear jar	
500 mL Amber		4 oz amber/clear jar	
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Plastic Bag / Ziploc	
500 mL Plastic		SOC Kit	
250 mL plastic		Non-ConTest Container	
40 mL Vial - type listed below	<u>9</u>	Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

Laboratory Comments:

40 mL vials:	# HCl	<u>9</u>	# Methanol		Time and Date Frozen:
Doc# 277:	# Bisulfate		# DI Water		
Rev. 4 August 2013	# Thiosulfate		Unpreserved		

## Page 2 of 2

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

<u>Question</u>	<u>Answer (True/False)</u>	<u>Comment</u>
	T/F/NA	
1) The cooler's custody seal, if present, is intact.	N/A	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	N/A	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	T	
18) There is sufficient volume for all requested analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	N/A	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	T	
21) Samples do not require splitting or compositing.	T	

Who notified of False statements?

Doc #277 Rev. 4 August 2013

Log-In Technician Initials:

JDL

Date/Time:

Date/Time:

4/21/16 1530



---

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

May 13, 2016

Brian Cote  
CB&I Env. & Infrastructure - MA  
150 Royall Street  
Canton, MA 02021

Project Location: Textron Providence  
Client Job Number:  
Project Number: 130274  
Laboratory Work Order Number: 16E0284

Enclosed are results of analyses for samples received by the laboratory on May 6, 2016. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "James M. Georgantas". The signature is fluid and cursive, with "James" on the first line and "M. Georgantas" on the second line.

James M. Georgantas  
Project Manager

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

CB&I Env. & Infrastructure - MA  
150 Royall Street  
Canton, MA 02021  
ATTN: Brian Cote

REPORT DATE: 5/13/2016

PURCHASE ORDER NUMBER: 835493-000 OP

PROJECT NUMBER: 130274

#### ANALYTICAL SUMMARY

WORK ORDER NUMBER: 16E0284

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

PROJECT LOCATION: Textron Providence

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-207S	16E0284-01	Ground Water		SW-846 8260C	
MW-207D	16E0284-02	Ground Water		SW-846 8260C	
MW-202D	16E0284-03	Ground Water		SW-846 8260C	
MW-202S	16E0284-04	Ground Water		SW-846 8260C	
MW-101S	16E0284-05	Ground Water		SW-846 8260C	
MW-101S DUP	16E0284-06	Ground Water		SW-846 8260C	
MW-101D	16E0284-07	Ground Water		SW-846 8260C	
MW-201D	16E0284-08	Ground Water		SW-846 8260C	
MW-209	16E0284-09	Ground Water		SW-846 8260C	
CW-1	16E0284-10	Ground Water		SW-846 8260C	
CW-2	16E0284-11	Ground Water		SW-846 8260C	
MW-216S	16E0284-12	Ground Water		SW-846 8260C	
MW-216D	16E0284-13	Ground Water		SW-846 8260C	
MW-217S	16E0284-14	Ground Water		SW-846 8260C	
MW-217D	16E0284-15	Ground Water		SW-846 8260C	
CW-6	16E0284-16	Ground Water		SW-846 8015C	
CW-6 DUP	16E0284-17	Ground Water		SW-846 8015C	
MW-109D	16E0284-18	Ground Water		SW-846 6020A-B	
GZA-3	16E0284-19	Ground Water		SW-846 8260C	
GZA-3 DUP	16E0284-20	Ground Water		SW-846 6020A-B	
MW-218S	16E0284-21	Ground Water		SW-846 8260C	
MW-218D	16E0284-22	Ground Water		SW-846 8260C	
MW-116D	16E0284-23	Ground Water		SW-846 8260C	
MW-116S	16E0284-24	Ground Water		SW-846 8260C	
MW-112	16E0284-25	Ground Water		SW-846 8260C	



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**CASE NARRATIVE SUMMARY**

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



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

**SW-846 8015C**

**Qualifications:**

**O-31**

Sample chromatography does not match reference standard exactly, possibly due to weathering.

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

**Fuel Oil #2**

16E0284-16[CW-6], 16E0284-17[CW-6 DUP]

**SW-846 8260C**

**Qualifications:**

**DL-01**

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

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

16E0284-14[MW-217S]

**DL-03**

Elevated reporting limit due to matrix.

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

16E0284-12[MW-216S]

**L-04**

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

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

**Methyl Acetate**

16E0284-01[MW-207S], 16E0284-02[MW-207D], 16E0284-03[MW-202D], 16E0284-04[MW-202S], 16E0284-05[MW-101S], 16E0284-06[MW-101S DUP],  
16E0284-07[MW-101D], 16E0284-08[MW-201D], 16E0284-09[MW-209], 16E0284-10[CW-1], 16E0284-11[CW-2], 16E0284-12[MW-216S], 16E0284-13[MW-216D],  
16E0284-14[MW-217S], 16E0284-15[MW-217D], 16E0284-18[MW-109D], 16E0284-19[GZA-3], 16E0284-21[MW-218S], 16E0284-22[MW-218D],  
16E0284-23[MW-116D], 16E0284-24[MW-116S], 16E0284-25[MW-112], B149041-BLK1, B149041-BS1, B149046-BLK1, B149046-BS1, B149046-BSD1

**RL-11**

Elevated reporting limit due to high concentration of target compounds.

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

16E0284-05[MW-101S], 16E0284-06[MW-101S DUP], 16E0284-08[MW-201D], 16E0284-09[MW-209], 16E0284-10[CW-1]

**V-05**

Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.

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

**1,2,3-Trichlorobenzene**

16E0284-01[MW-207S], 16E0284-04[MW-202S], 16E0284-22[MW-218D], 16E0284-23[MW-116D], 16E0284-24[MW-116S], 16E0284-25[MW-112], B149046-BLK1,  
B149046-BS1, B149046-BSD1

**1,4-Dioxane**

16E0284-01[MW-207S], 16E0284-04[MW-202S], 16E0284-22[MW-218D], 16E0284-23[MW-116D], 16E0284-24[MW-116S], 16E0284-25[MW-112], B149046-BLK1,  
B149046-BS1, B149046-BSD1

**Methyl Acetate**

16E0284-01[MW-207S], 16E0284-04[MW-202S], 16E0284-22[MW-218D], 16E0284-23[MW-116D], 16E0284-24[MW-116S], 16E0284-25[MW-112], B149046-BLK1,  
B149046-BS1, B149046-BSD1

**tert-Butyl Alcohol (TBA)**

16E0284-01[MW-207S], 16E0284-04[MW-202S], 16E0284-22[MW-218D], 16E0284-23[MW-116D], 16E0284-24[MW-116S], 16E0284-25[MW-112], B149046-BLK1,  
B149046-BS1, B149046-BSD1



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

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

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

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.  
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

A handwritten signature in black ink that reads "Lisa A. Worthington". The signature is fluid and cursive, with "Lisa A." on top and "Worthington" below it.

Lisa A. Worthington  
Project Manager



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-207S**Sample ID:** 16E0284-01

Sample Matrix: Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/4/2016 08:15

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1	V-05	SW-846 8260C	5/12/16	5/13/16 3:35	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
trans-1,4-Dichloro-2-butene	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-207S**Sample ID:** 16E0284-01

Sample Matrix: Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/4/2016 08:15

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
1,4-Dioxane	ND	100	µg/L	1	V-05	SW-846 8260C	5/12/16	5/13/16 3:35	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
Methyl Acetate	ND	1.0	µg/L	1	L-04, V-05	SW-846 8260C	5/12/16	5/13/16 3:35	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
Tetrachloroethylene	4.9	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1	V-05	SW-846 8260C	5/12/16	5/13/16 3:35	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
Trichloroethylene	1.4	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 3:35	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	97.6	70-130							5/13/16 3:35
Toluene-d8	99.8	70-130							5/13/16 3:35
4-Bromofluorobenzene	98.9	70-130							5/13/16 3:35



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-207D**Sample ID:** 16E0284-02

Sample Matrix: Ground Water

Sample Description:

Sampled: 5/4/2016 09:00

Work Order: 16E0284

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
trans-1,4-Dichloro-2-butene	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-207D**Sample ID:** 16E0284-02

Sample Matrix: Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/4/2016 09:00

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
1,4-Dioxane	ND	100	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
Methyl Acetate	ND	1.0	µg/L	1	L-04	SW-846 8260C	5/12/16	5/12/16 15:08	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
Tetrachloroethylene	13	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
Trichloroethylene	1.5	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:08	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	99.8	70-130							5/12/16 15:08
Toluene-d8	99.0	70-130							5/12/16 15:08
4-Bromofluorobenzene	100	70-130							5/12/16 15:08



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-202D**Sample ID:** 16E0284-03

Sample Matrix: Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/4/2016 09:35

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
trans-1,4-Dichloro-2-butene	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-202D**Sample ID:** 16E0284-03

Sample Matrix: Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/4/2016 09:35

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
1,4-Dioxane	ND	100	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
Methyl Acetate	ND	1.0	µg/L	1	L-04	SW-846 8260C	5/12/16	5/12/16 15:35	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
Tetrachloroethylene	12	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 15:35	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	100	70-130					5/12/16 15:35		
Toluene-d8	99.6	70-130					5/12/16 15:35		
4-Bromofluorobenzene	102	70-130					5/12/16 15:35		



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-202S**Sample ID:** 16E0284-04

Sample Matrix: Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/4/2016 10:00

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1	V-05	SW-846 8260C	5/13/16	5/13/16 9:49	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
trans-1,4-Dichloro-2-butene	ND	5.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-202S**Sample ID:** 16E0284-04**Sample Matrix:** Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/4/2016 10:00

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
1,4-Dioxane	ND	100	µg/L	1	V-05	SW-846 8260C	5/13/16	5/13/16 9:49	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
Methyl Acetate	ND	1.0	µg/L	1	L-04, V-05	SW-846 8260C	5/13/16	5/13/16 9:49	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
Tetrachloroethylene	42	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1	V-05	SW-846 8260C	5/13/16	5/13/16 9:49	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
Trichloroethylene	4.5	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/13/16	5/13/16 9:49	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	97.9	70-130							5/13/16 9:49
Toluene-d8	101	70-130							5/13/16 9:49
4-Bromofluorobenzene	99.2	70-130							5/13/16 9:49



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-101S**Sample ID:** 16E0284-05Sample Matrix: Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/4/2016 10:30

Sample Flags: RL-11

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	1200	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
Acrylonitrile	ND	120	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
tert-Amyl Methyl Ether (TAME)	ND	12	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
Benzene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
Bromobenzene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
Bromochloromethane	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
Bromodichloromethane	ND	12	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
Bromoform	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
Bromomethane	ND	50	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
2-Butanone (MEK)	ND	500	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
tert-Butyl Alcohol (TBA)	ND	500	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
n-Butylbenzene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
sec-Butylbenzene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
tert-Butylbenzene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	12	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
Carbon Disulfide	ND	100	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
Carbon Tetrachloride	ND	120	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
Chlorobenzene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
Chlorodibromomethane	ND	12	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
Chloroethane	ND	50	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
Chloroform	ND	50	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
Chloromethane	ND	50	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
2-Chlorotoluene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
4-Chlorotoluene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	120	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
1,2-Dibromoethane (EDB)	ND	12	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
Dibromomethane	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
1,2-Dichlorobenzene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
1,3-Dichlorobenzene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
1,4-Dichlorobenzene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
trans-1,4-Dichloro-2-butene	ND	120	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
Dichlorodifluoromethane (Freon 12)	ND	50	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
1,1-Dichloroethane	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
1,2-Dichloroethane	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
1,1-Dichloroethylene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
cis-1,2-Dichloroethylene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
trans-1,2-Dichloroethylene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
1,2-Dichloropropane	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
1,3-Dichloropropane	ND	12	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
2,2-Dichloropropane	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
1,1-Dichloropropene	ND	50	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
cis-1,3-Dichloropropene	ND	12	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
trans-1,3-Dichloropropene	ND	12	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
Diethyl Ether	ND	50	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-101S**Sample ID:** 16E0284-05Sample Matrix: Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/4/2016 10:30

Sample Flags: RL-11

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	12	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
1,4-Dioxane	ND	2500	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
Ethylbenzene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
Hexachlorobutadiene	ND	12	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
2-Hexanone (MBK)	ND	250	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
Isopropylbenzene (Cumene)	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
p-Isopropyltoluene (p-Cymene)	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
Methyl Acetate	ND	25	µg/L	25	L-04	SW-846 8260C	5/12/16	5/12/16 20:28	EEH
Methyl tert-Butyl Ether (MTBE)	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
Methyl Cyclohexane	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
Methylene Chloride	ND	120	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
4-Methyl-2-pentanone (MIBK)	ND	250	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
Naphthalene	ND	50	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
n-Propylbenzene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
Styrene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
1,1,1,2-Tetrachloroethane	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
1,1,2,2-Tetrachloroethane	ND	12	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
Tetrachloroethylene	1400	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
Tetrahydrofuran	ND	250	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
Toluene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
1,2,3-Trichlorobenzene	ND	120	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
1,2,4-Trichlorobenzene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
1,3,5-Trichlorobenzene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
1,1,1-Trichloroethane	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
1,1,2-Trichloroethane	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
Trichloroethylene	27	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
Trichlorofluoromethane (Freon 11)	ND	50	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
1,2,3-Trichloropropane	ND	50	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
1,2,4-Trimethylbenzene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
1,3,5-Trimethylbenzene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
Vinyl Chloride	ND	50	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
m+p Xylene	ND	50	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
o-Xylene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:28	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	99.2	70-130						5/12/16 20:28	
Toluene-d8	98.9	70-130						5/12/16 20:28	
4-Bromofluorobenzene	101	70-130						5/12/16 20:28	



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

Project Location: Textron Providence

Date Received: 5/6/2016

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

Sample Description:

Work Order: 16E0284

Sampled: 5/4/2016 10:30

**Sample ID:** 16E0284-06Sample Matrix: Ground Water

Sample Flags: RL-11

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	1200	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
Acrylonitrile	ND	120	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
tert-Amyl Methyl Ether (TAME)	ND	12	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
Benzene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
Bromobenzene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
Bromochloromethane	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
Bromodichloromethane	ND	12	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
Bromoform	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
Bromomethane	ND	50	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
2-Butanone (MEK)	ND	500	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
tert-Butyl Alcohol (TBA)	ND	500	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
n-Butylbenzene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
sec-Butylbenzene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
tert-Butylbenzene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	12	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
Carbon Disulfide	ND	100	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
Carbon Tetrachloride	ND	120	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
Chlorobenzene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
Chlorodibromomethane	ND	12	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
Chloroethane	ND	50	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
Chloroform	ND	50	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
Chloromethane	ND	50	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
2-Chlorotoluene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
4-Chlorotoluene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	120	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
1,2-Dibromoethane (EDB)	ND	12	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
Dibromomethane	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
1,2-Dichlorobenzene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
1,3-Dichlorobenzene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
1,4-Dichlorobenzene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
trans-1,4-Dichloro-2-butene	ND	120	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
Dichlorodifluoromethane (Freon 12)	ND	50	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
1,1-Dichloroethane	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
1,2-Dichloroethane	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
1,1-Dichloroethylene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
cis-1,2-Dichloroethylene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
trans-1,2-Dichloroethylene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
1,2-Dichloropropane	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
1,3-Dichloropropane	ND	12	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
2,2-Dichloropropane	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
1,1-Dichloropropene	ND	50	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
cis-1,3-Dichloropropene	ND	12	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
trans-1,3-Dichloropropene	ND	12	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
Diethyl Ether	ND	50	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-101S DUP**Sample ID:** 16E0284-06Sample Matrix: Ground Water

Sample Flags: RL-11

Sample Description:

Work Order: 16E0284

Sampled: 5/4/2016 10:30

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	12	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
1,4-Dioxane	ND	2500	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
Ethylbenzene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
Hexachlorobutadiene	ND	12	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
2-Hexanone (MBK)	ND	250	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
Isopropylbenzene (Cumene)	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
p-Isopropyltoluene (p-Cymene)	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
Methyl Acetate	ND	25	µg/L	25	L-04	SW-846 8260C	5/12/16	5/12/16 20:55	EEH
Methyl tert-Butyl Ether (MTBE)	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
Methyl Cyclohexane	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
Methylene Chloride	ND	120	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
4-Methyl-2-pentanone (MIBK)	ND	250	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
Naphthalene	ND	50	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
n-Propylbenzene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
Styrene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
1,1,1,2-Tetrachloroethane	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
1,1,2,2-Tetrachloroethane	ND	12	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
Tetrachloroethylene	1300	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
Tetrahydrofuran	ND	250	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
Toluene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
1,2,3-Trichlorobenzene	ND	120	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
1,2,4-Trichlorobenzene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
1,3,5-Trichlorobenzene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
1,1,1-Trichloroethane	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
1,1,2-Trichloroethane	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
Trichloroethylene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
Trichlorofluoromethane (Freon 11)	ND	50	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
1,2,3-Trichloropropane	ND	50	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
1,2,4-Trimethylbenzene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
1,3,5-Trimethylbenzene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
Vinyl Chloride	ND	50	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
m+p Xylene	ND	50	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
o-Xylene	ND	25	µg/L	25		SW-846 8260C	5/12/16	5/12/16 20:55	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	97.4	70-130						5/12/16 20:55	
Toluene-d8	99.6	70-130						5/12/16 20:55	
4-Bromofluorobenzene	99.5	70-130						5/12/16 20:55	



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-101D**Sample ID:** 16E0284-07

Sample Matrix: Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/4/2016 11:00

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
trans-1,4-Dichloro-2-butene	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH



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

Project Location: Textron Providence

Sample Description:

Work Order: 16E0284

Date Received: 5/6/2016

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

Sampled: 5/4/2016 11:00

**Sample ID:** 16E0284-07Sample Matrix: Ground Water**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
1,4-Dioxane	ND	100	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
Methyl Acetate	ND	1.0	µg/L	1	L-04	SW-846 8260C	5/12/16	5/12/16 16:01	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:01	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	98.3	70-130							5/12/16 16:01
Toluene-d8	100	70-130							5/12/16 16:01
4-Bromofluorobenzene	101	70-130							5/12/16 16:01



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-201D**Sample ID:** 16E0284-08Sample Matrix: Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/4/2016 11:40

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	5000	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
Acrylonitrile	ND	500	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
tert-Amyl Methyl Ether (TAME)	ND	50	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
Benzene	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
Bromobenzene	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
Bromochloromethane	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
Bromodichloromethane	ND	50	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
Bromoform	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
Bromomethane	ND	200	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
2-Butanone (MEK)	ND	2000	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
tert-Butyl Alcohol (TBA)	ND	2000	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
n-Butylbenzene	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
sec-Butylbenzene	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
tert-Butylbenzene	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	50	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
Carbon Disulfide	ND	400	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
Carbon Tetrachloride	ND	500	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
Chlorobenzene	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
Chlorodibromomethane	ND	50	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
Chloroethane	ND	200	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
Chloroform	ND	200	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
Chloromethane	ND	200	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
2-Chlorotoluene	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
4-Chlorotoluene	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	500	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
1,2-Dibromoethane (EDB)	ND	50	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
Dibromomethane	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
1,2-Dichlorobenzene	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
1,3-Dichlorobenzene	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
1,4-Dichlorobenzene	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
trans-1,4-Dichloro-2-butene	ND	500	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
Dichlorodifluoromethane (Freon 12)	ND	200	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
1,1-Dichloroethane	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
1,2-Dichloroethane	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
1,1-Dichloroethylene	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
cis-1,2-Dichloroethylene	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
trans-1,2-Dichloroethylene	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
1,2-Dichloropropane	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
1,3-Dichloropropane	ND	50	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
2,2-Dichloropropane	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
1,1-Dichloropropene	ND	200	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
cis-1,3-Dichloropropene	ND	50	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
trans-1,3-Dichloropropene	ND	50	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
Diethyl Ether	ND	200	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-201D**Sample ID:** 16E0284-08Sample Matrix: Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/4/2016 11:40

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	50	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
1,4-Dioxane	ND	10000	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
Ethylbenzene	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
Hexachlorobutadiene	ND	50	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
2-Hexanone (MBK)	ND	1000	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
Isopropylbenzene (Cumene)	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
p-Isopropyltoluene (p-Cymene)	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
Methyl Acetate	ND	100	µg/L	100	L-04	SW-846 8260C	5/12/16	5/12/16 21:22	EEH
Methyl tert-Butyl Ether (MTBE)	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
Methyl Cyclohexane	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
Methylene Chloride	ND	500	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
4-Methyl-2-pentanone (MIBK)	ND	1000	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
Naphthalene	ND	200	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
n-Propylbenzene	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
Styrene	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
1,1,1,2-Tetrachloroethane	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
1,1,2,2-Tetrachloroethane	ND	50	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
Tetrachloroethylene	5000	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
Tetrahydrofuran	ND	1000	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
Toluene	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
1,2,3-Trichlorobenzene	ND	500	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
1,2,4-Trichlorobenzene	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
1,3,5-Trichlorobenzene	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
1,1,1-Trichloroethane	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
1,1,2-Trichloroethane	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
Trichloroethylene	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
Trichlorofluoromethane (Freon 11)	ND	200	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
1,2,3-Trichloropropane	ND	200	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
1,2,4-Trimethylbenzene	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
1,3,5-Trimethylbenzene	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
Vinyl Chloride	ND	200	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
m+p Xylene	ND	200	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
o-Xylene	ND	100	µg/L	100		SW-846 8260C	5/12/16	5/12/16 21:22	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	98.4	70-130						5/12/16 21:22	
Toluene-d8	99.2	70-130						5/12/16 21:22	
4-Bromofluorobenzene	98.3	70-130						5/12/16 21:22	



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-209**Sample ID:** 16E0284-09**Sample Matrix:** Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/4/2016 12:50

Sample Flags: RL-11

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	250	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
Acrylonitrile	ND	25	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
tert-Amyl Methyl Ether (TAME)	ND	2.5	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
Benzene	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
Bromobenzene	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
Bromochloromethane	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
Bromodichloromethane	ND	2.5	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
Bromoform	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
Bromomethane	ND	10	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
2-Butanone (MEK)	ND	100	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
tert-Butyl Alcohol (TBA)	ND	100	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
n-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
sec-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
tert-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	2.5	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
Carbon Disulfide	ND	20	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
Carbon Tetrachloride	ND	25	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
Chlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
Chlorodibromomethane	ND	2.5	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
Chloroethane	ND	10	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
Chloroform	ND	10	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
Chloromethane	ND	10	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
2-Chlorotoluene	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
4-Chlorotoluene	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	25	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
1,2-Dibromoethane (EDB)	ND	2.5	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
Dibromomethane	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
1,2-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
1,3-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
1,4-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
trans-1,4-Dichloro-2-butene	ND	25	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
Dichlorodifluoromethane (Freon 12)	ND	10	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
1,1-Dichloroethane	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
1,2-Dichloroethane	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
1,1-Dichloroethylene	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
cis-1,2-Dichloroethylene	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
trans-1,2-Dichloroethylene	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
1,2-Dichloropropane	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
1,3-Dichloropropane	ND	2.5	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
2,2-Dichloropropane	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
1,1-Dichloropropene	ND	10	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
cis-1,3-Dichloropropene	ND	2.5	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
trans-1,3-Dichloropropene	ND	2.5	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
Diethyl Ether	ND	10	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-209**Sample ID:** 16E0284-09Sample Matrix: Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/4/2016 12:50

Sample Flags: RL-11

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	2.5	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
1,4-Dioxane	ND	500	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
Ethylbenzene	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
Hexachlorobutadiene	ND	2.5	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
2-Hexanone (MBK)	ND	50	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
Isopropylbenzene (Cumene)	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
p-Isopropyltoluene (p-Cymene)	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
Methyl Acetate	ND	5.0	µg/L	5	L-04	SW-846 8260C	5/12/16	5/12/16 21:48	EEH
Methyl tert-Butyl Ether (MTBE)	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
Methyl Cyclohexane	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
Methylene Chloride	ND	25	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
4-Methyl-2-pentanone (MIBK)	ND	50	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
Naphthalene	ND	10	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
n-Propylbenzene	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
Styrene	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
1,1,1,2-Tetrachloroethane	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
1,1,2,2-Tetrachloroethane	ND	2.5	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
Tetrachloroethylene	2700	200	µg/L	200		SW-846 8260C	5/12/16	5/13/16 8:56	EEH
Tetrahydrofuran	ND	50	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
Toluene	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
1,2,3-Trichlorobenzene	ND	25	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
1,2,4-Trichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
1,3,5-Trichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
1,1,1-Trichloroethane	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
1,1,2-Trichloroethane	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
Trichloroethylene	5.1	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
Trichlorofluoromethane (Freon 11)	ND	10	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
1,2,3-Trichloropropane	ND	10	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
1,2,4-Trimethylbenzene	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
1,3,5-Trimethylbenzene	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
Vinyl Chloride	ND	10	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
m+p Xylene	ND	10	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
o-Xylene	ND	5.0	µg/L	5		SW-846 8260C	5/12/16	5/12/16 21:48	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	97.4	70-130							5/13/16 8:56
1,2-Dichloroethane-d4	99.4	70-130							5/12/16 21:48
Toluene-d8	99.2	70-130							5/12/16 21:48
Toluene-d8	101	70-130							5/13/16 8:56
4-Bromofluorobenzene	99.6	70-130							5/13/16 8:56
4-Bromofluorobenzene	98.8	70-130							5/12/16 21:48



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** CW-1**Sample ID:** 16E0284-10Sample Matrix: Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/4/2016 13:35

Sample Flags: RL-11

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	2500	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
Acrylonitrile	ND	250	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
tert-Amyl Methyl Ether (TAME)	ND	25	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
Benzene	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
Bromobenzene	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
Bromochloromethane	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
Bromodichloromethane	ND	25	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
Bromoform	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
Bromomethane	ND	100	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
2-Butanone (MEK)	ND	1000	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
tert-Butyl Alcohol (TBA)	ND	1000	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
n-Butylbenzene	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
sec-Butylbenzene	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
tert-Butylbenzene	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	25	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
Carbon Disulfide	ND	200	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
Carbon Tetrachloride	ND	250	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
Chlorobenzene	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
Chlorodibromomethane	ND	25	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
Chloroethane	ND	100	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
Chloroform	ND	100	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
Chloromethane	ND	100	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
2-Chlorotoluene	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
4-Chlorotoluene	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	250	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
1,2-Dibromoethane (EDB)	ND	25	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
Dibromomethane	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
1,2-Dichlorobenzene	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
1,3-Dichlorobenzene	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
1,4-Dichlorobenzene	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
trans-1,4-Dichloro-2-butene	ND	250	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
Dichlorodifluoromethane (Freon 12)	ND	100	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
1,1-Dichloroethane	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
1,2-Dichloroethane	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
1,1-Dichloroethylene	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
cis-1,2-Dichloroethylene	94	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
trans-1,2-Dichloroethylene	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
1,2-Dichloropropane	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
1,3-Dichloropropane	ND	25	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
2,2-Dichloropropane	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
1,1-Dichloropropene	ND	100	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
cis-1,3-Dichloropropene	ND	25	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
trans-1,3-Dichloropropene	ND	25	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
Diethyl Ether	ND	100	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** CW-1**Sample ID:** 16E0284-10Sample Matrix: Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/4/2016 13:35

Sample Flags: RL-11

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	25	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
1,4-Dioxane	ND	5000	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
Ethylbenzene	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
Hexachlorobutadiene	ND	25	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
2-Hexanone (MBK)	ND	500	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
Isopropylbenzene (Cumene)	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
p-Isopropyltoluene (p-Cymene)	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
Methyl Acetate	ND	50	µg/L	50	L-04	SW-846 8260C	5/12/16	5/12/16 22:15	EEH
Methyl tert-Butyl Ether (MTBE)	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
Methyl Cyclohexane	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
Methylene Chloride	ND	250	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
4-Methyl-2-pentanone (MIBK)	ND	500	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
Naphthalene	ND	100	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
n-Propylbenzene	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
Styrene	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
1,1,1,2-Tetrachloroethane	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
1,1,2,2-Tetrachloroethane	ND	25	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
Tetrachloroethylene	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
Tetrahydrofuran	ND	500	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
Toluene	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
1,2,3-Trichlorobenzene	ND	250	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
1,2,4-Trichlorobenzene	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
1,3,5-Trichlorobenzene	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
1,1,1-Trichloroethane	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
1,1,2-Trichloroethane	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
Trichloroethylene	1800	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
Trichlorofluoromethane (Freon 11)	ND	100	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
1,2,3-Trichloropropane	ND	100	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
1,2,4-Trimethylbenzene	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
1,3,5-Trimethylbenzene	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
Vinyl Chloride	ND	100	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
m+p Xylene	ND	100	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
o-Xylene	ND	50	µg/L	50		SW-846 8260C	5/12/16	5/12/16 22:15	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	98.4	70-130						5/12/16 22:15	
Toluene-d8	99.6	70-130						5/12/16 22:15	
4-Bromofluorobenzene	99.4	70-130						5/12/16 22:15	



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** CW-2**Sample ID:** 16E0284-11

Sample Matrix: Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/4/2016 14:30

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
trans-1,4-Dichloro-2-butene	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH



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

Project Location: Textron Providence

Sample Description:

Work Order: 16E0284

Date Received: 5/6/2016

**Field Sample #:** CW-2

Sampled: 5/4/2016 14:30

**Sample ID:** 16E0284-11Sample Matrix: Ground Water**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
1,4-Dioxane	ND	100	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
Methyl Acetate	ND	1.0	µg/L	1	L-04	SW-846 8260C	5/12/16	5/12/16 16:28	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:28	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	99.2	70-130							5/12/16 16:28
Toluene-d8	99.5	70-130							5/12/16 16:28
4-Bromofluorobenzene	99.9	70-130							5/12/16 16:28



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-216S**Sample ID:** 16E0284-12Sample Matrix: Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/5/2016 07:30

Sample Flags: DL-03

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	100	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
Acrylonitrile	ND	10	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
tert-Amyl Methyl Ether (TAME)	ND	1.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
Benzene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
Bromobenzene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
Bromochloromethane	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
Bromodichloromethane	ND	1.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
Bromoform	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
Bromomethane	ND	4.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
2-Butanone (MEK)	ND	40	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
tert-Butyl Alcohol (TBA)	ND	40	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
n-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
sec-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
tert-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	1.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
Carbon Disulfide	ND	8.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
Carbon Tetrachloride	ND	10	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
Chlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
Chlorodibromomethane	ND	1.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
Chloroethane	ND	4.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
Chloroform	ND	4.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
Chloromethane	ND	4.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
2-Chlorotoluene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
4-Chlorotoluene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
Dibromomethane	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
1,2-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
1,3-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
1,4-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
trans-1,4-Dichloro-2-butene	ND	10	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
Dichlorodifluoromethane (Freon 12)	ND	4.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
1,1-Dichloroethane	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
1,2-Dichloroethane	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
1,1-Dichloroethylene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
cis-1,2-Dichloroethylene	48	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
trans-1,2-Dichloroethylene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
1,2-Dichloropropane	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
1,3-Dichloropropane	ND	1.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
2,2-Dichloropropane	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
1,1-Dichloropropene	ND	4.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
cis-1,3-Dichloropropene	ND	1.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
trans-1,3-Dichloropropene	ND	1.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
Diethyl Ether	ND	4.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-216S**Sample ID:** 16E0284-12Sample Matrix: Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/5/2016 07:30

Sample Flags: DL-03

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	1.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
1,4-Dioxane	ND	200	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
Ethylbenzene	2.3	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
Hexachlorobutadiene	ND	1.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
2-Hexanone (MBK)	ND	20	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
Isopropylbenzene (Cumene)	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
p-Isopropyltoluene (p-Cymene)	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
Methyl Acetate	ND	2.0	µg/L	2	L-04	SW-846 8260C	5/12/16	5/12/16 22:42	EEH
Methyl tert-Butyl Ether (MTBE)	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
Methyl Cyclohexane	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
Methylene Chloride	ND	10	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
4-Methyl-2-pentanone (MIBK)	ND	20	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
Naphthalene	16	4.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
n-Propylbenzene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
Styrene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
Tetrachloroethylene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
Tetrahydrofuran	ND	20	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
Toluene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
1,2,3-Trichlorobenzene	ND	10	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
1,2,4-Trichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
1,3,5-Trichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
1,1,1-Trichloroethane	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
1,1,2-Trichloroethane	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
Trichloroethylene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
Trichlorofluoromethane (Freon 11)	ND	4.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
1,2,3-Trichloropropane	ND	4.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
1,2,4-Trimethylbenzene	8.5	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
1,3,5-Trimethylbenzene	5.3	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
Vinyl Chloride	ND	4.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
m+p Xylene	ND	4.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
o-Xylene	7.0	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 22:42	EEH
<b>Surrogates</b>		% Recovery	Recovery Limits	<b>Flag/Qual</b>					
1,2-Dichloroethane-d4		99.4	70-130						
Toluene-d8		99.8	70-130						
4-Bromofluorobenzene		100	70-130						



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-216D**Sample ID:** 16E0284-13

Sample Matrix: Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/5/2016 08:10

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
trans-1,4-Dichloro-2-butene	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-216D**Sample ID:** 16E0284-13**Sample Matrix:** Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/5/2016 08:10

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
1,4-Dioxane	ND	100	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
Methyl Acetate	ND	1.0	µg/L	1	L-04	SW-846 8260C	5/12/16	5/12/16 16:55	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
Trichloroethylene	1.5	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 16:55	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	98.9	70-130					5/12/16 16:55		
Toluene-d8	100	70-130					5/12/16 16:55		
4-Bromofluorobenzene	98.9	70-130					5/12/16 16:55		



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-217S**Sample ID:** 16E0284-14Sample Matrix: Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/5/2016 09:00

Sample Flags: DL-01

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	100	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
Acrylonitrile	ND	10	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
tert-Amyl Methyl Ether (TAME)	ND	1.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
Benzene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
Bromobenzene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
Bromochloromethane	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
Bromodichloromethane	ND	1.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
Bromoform	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
Bromomethane	ND	4.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
2-Butanone (MEK)	ND	40	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
tert-Butyl Alcohol (TBA)	ND	40	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
n-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
sec-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
tert-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	1.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
Carbon Disulfide	ND	8.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
Carbon Tetrachloride	ND	10	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
Chlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
Chlorodibromomethane	ND	1.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
Chloroethane	ND	4.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
Chloroform	ND	4.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
Chloromethane	ND	4.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
2-Chlorotoluene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
4-Chlorotoluene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
Dibromomethane	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
1,2-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
1,3-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
1,4-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
trans-1,4-Dichloro-2-butene	ND	10	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
Dichlorodifluoromethane (Freon 12)	ND	4.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
1,1-Dichloroethane	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
1,2-Dichloroethane	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
1,1-Dichloroethylene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
cis-1,2-Dichloroethylene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
trans-1,2-Dichloroethylene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
1,2-Dichloropropane	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
1,3-Dichloropropane	ND	1.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
2,2-Dichloropropane	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
1,1-Dichloropropene	ND	4.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
cis-1,3-Dichloropropene	ND	1.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
trans-1,3-Dichloropropene	ND	1.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
Diethyl Ether	ND	4.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-217S**Sample ID:** 16E0284-14Sample Matrix: Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/5/2016 09:00

Sample Flags: DL-01

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	1.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
1,4-Dioxane	ND	200	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
Ethylbenzene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
Hexachlorobutadiene	ND	1.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
2-Hexanone (MBK)	ND	20	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
Isopropylbenzene (Cumene)	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
p-Isopropyltoluene (p-Cymene)	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
Methyl Acetate	ND	2.0	µg/L	2	L-04	SW-846 8260C	5/12/16	5/12/16 23:08	EEH
Methyl tert-Butyl Ether (MTBE)	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
Methyl Cyclohexane	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
Methylene Chloride	ND	10	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
4-Methyl-2-pentanone (MIBK)	ND	20	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
Naphthalene	ND	4.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
n-Propylbenzene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
Styrene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
Tetrachloroethylene	2.4	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
Tetrahydrofuran	ND	20	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
Toluene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
1,2,3-Trichlorobenzene	ND	10	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
1,2,4-Trichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
1,3,5-Trichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
1,1,1-Trichloroethane	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
1,1,2-Trichloroethane	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
Trichloroethylene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
Trichlorofluoromethane (Freon 11)	ND	4.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
1,2,3-Trichloropropane	ND	4.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
1,2,4-Trimethylbenzene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
1,3,5-Trimethylbenzene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
Vinyl Chloride	ND	4.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
m+p Xylene	ND	4.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
o-Xylene	ND	2.0	µg/L	2		SW-846 8260C	5/12/16	5/12/16 23:08	EEH
<b>Surrogates</b>		% Recovery	Recovery Limits	<b>Flag/Qual</b>					
1,2-Dichloroethane-d4		99.5	70-130						
Toluene-d8		99.2	70-130						
4-Bromofluorobenzene		99.6	70-130						



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-217D**Sample ID:** 16E0284-15

Sample Matrix: Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/5/2016 09:30

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
trans-1,4-Dichloro-2-butene	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
cis-1,2-Dichloroethylene	3.8	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-217D**Sample ID:** 16E0284-15**Sample Matrix:** Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/5/2016 09:30

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
1,4-Dioxane	ND	100	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
Methyl Acetate	ND	1.0	µg/L	1	L-04	SW-846 8260C	5/12/16	5/12/16 17:21	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
Trichloroethylene	4.5	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:21	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	101	70-130					5/12/16 17:21		
Toluene-d8	99.2	70-130					5/12/16 17:21		
4-Bromofluorobenzene	99.9	70-130					5/12/16 17:21		




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

Project Location: Textron Providence

Sample Description:

Work Order: 16E0284

Date Received: 5/6/2016

**Field Sample #:** CW-6

Sampled: 5/5/2016 10:25

**Sample ID:** 16E0284-16Sample Matrix: Ground Water

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**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Fuel Oil #2	5.0	0.20	mg/L	1	O-31	SW-846 8015C	5/9/16	5/10/16 17:02	SCS
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
o-Terphenyl		84.4	40-140					5/10/16 17:02	




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

Project Location: Textron Providence

Sample Description:

Work Order: 16E0284

Date Received: 5/6/2016

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

Sampled: 5/5/2016 10:25

**Sample ID:** 16E0284-17Sample Matrix: Ground Water

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**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Fuel Oil #2	5.3	0.20	mg/L	1	O-31	SW-846 8015C	5/9/16	5/10/16 17:19	SCS
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
o-Terphenyl	86.7	40-140						5/10/16 17:19	



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-109D**Sample ID:** 16E0284-18

Sample Matrix: Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/5/2016 11:30

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
trans-1,4-Dichloro-2-butene	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-109D**Sample ID:** 16E0284-18**Sample Matrix:** Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/5/2016 11:30

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
1,4-Dioxane	ND	100	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
Methyl Acetate	ND	1.0	µg/L	1	L-04	SW-846 8260C	5/12/16	5/12/16 17:48	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 17:48	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	98.2	70-130							5/12/16 17:48
Toluene-d8	98.1	70-130							5/12/16 17:48
4-Bromofluorobenzene	102	70-130							5/12/16 17:48




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

Project Location: Textron Providence

Sample Description:

Work Order: 16E0284

Date Received: 5/6/2016

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

Sampled: 5/5/2016 11:30

**Sample ID:** 16E0284-18Sample Matrix: Ground Water**Metals Analyses (Dissolved)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Lead	ND	1.0	µg/L	1		SW-846 6020A-B	5/9/16	5/10/16 17:07	WSD



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** GZA-3**Sample ID:** 16E0284-19

Sample Matrix: Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/5/2016 12:15

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
trans-1,4-Dichloro-2-butene	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
cis-1,2-Dichloroethylene	9.1	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH



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

Project Location: Textron Providence

Sample Description:

Work Order: 16E0284

Date Received: 5/6/2016

Field Sample #: GZA-3

Sampled: 5/5/2016 12:15

Sample ID: 16E0284-19

Sample Matrix: Ground Water

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
1,4-Dioxane	ND	100	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
Methyl Acetate	ND	1.0	µg/L	1	L-04	SW-846 8260C	5/12/16	5/12/16 18:14	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
Vinyl Chloride	8.5	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:14	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	100	70-130							5/12/16 18:14
Toluene-d8	99.4	70-130							5/12/16 18:14
4-Bromofluorobenzene	100	70-130							5/12/16 18:14




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

Project Location: Textron Providence

Sample Description:

Work Order: 16E0284

Date Received: 5/6/2016

**Field Sample #:** GZA-3

Sampled: 5/5/2016 12:15

**Sample ID:** 16E0284-19Sample Matrix: Ground Water**Metals Analyses (Dissolved)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Lead	ND	1.0	µg/L	1		SW-846 6020A-B	5/9/16	5/10/16 17:10	WSD




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

Project Location: Textron Providence

Sample Description:

Work Order: 16E0284

Date Received: 5/6/2016

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

Sampled: 5/5/2016 12:15

**Sample ID:** 16E0284-20Sample Matrix: Ground Water**Metals Analyses (Dissolved)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Lead	ND	1.0	µg/L	1		SW-846 6020A-B	5/9/16	5/10/16 17:14	WSD



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-218S**Sample ID:** 16E0284-21

Sample Matrix: Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/5/2016 13:00

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
trans-1,4-Dichloro-2-butene	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-218S**Sample ID:** 16E0284-21**Sample Matrix:** Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/5/2016 13:00

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
1,4-Dioxane	ND	100	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
Methyl Acetate	ND	1.0	µg/L	1	L-04	SW-846 8260C	5/12/16	5/12/16 18:41	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
Tetrachloroethylene	20	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/12/16 18:41	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	98.1	70-130							5/12/16 18:41
Toluene-d8	101	70-130							5/12/16 18:41
4-Bromofluorobenzene	99.3	70-130							5/12/16 18:41



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-218D**Sample ID:** 16E0284-22**Sample Matrix:** Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/5/2016 13:30

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1	V-05	SW-846 8260C	5/12/16	5/13/16 4:02	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
trans-1,4-Dichloro-2-butene	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-218D**Sample ID:** 16E0284-22Sample Matrix: Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/5/2016 13:30

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
1,4-Dioxane	ND	100	µg/L	1	V-05	SW-846 8260C	5/12/16	5/13/16 4:02	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
Methyl Acetate	ND	1.0	µg/L	1	L-04, V-05	SW-846 8260C	5/12/16	5/13/16 4:02	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
Tetrachloroethylene	10	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1	V-05	SW-846 8260C	5/12/16	5/13/16 4:02	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
Trichloroethylene	1.2	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:02	EEH
<b>Surrogates</b>		% Recovery	Recovery Limits	<b>Flag/Qual</b>					
1,2-Dichloroethane-d4		98.1	70-130						
Toluene-d8		101	70-130						
4-Bromofluorobenzene		98.7	70-130						



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-116D**Sample ID:** 16E0284-23

Sample Matrix: Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/5/2016 14:00

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1	V-05	SW-846 8260C	5/12/16	5/13/16 4:29	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
trans-1,4-Dichloro-2-butene	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-116D**Sample ID:** 16E0284-23Sample Matrix: Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/5/2016 14:00

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
1,4-Dioxane	ND	100	µg/L	1	V-05	SW-846 8260C	5/12/16	5/13/16 4:29	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
Methyl Acetate	ND	1.0	µg/L	1	L-04, V-05	SW-846 8260C	5/12/16	5/13/16 4:29	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1	V-05	SW-846 8260C	5/12/16	5/13/16 4:29	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:29	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	99.6	70-130							5/13/16 4:29
Toluene-d8	98.4	70-130							5/13/16 4:29
4-Bromofluorobenzene	99.7	70-130							5/13/16 4:29



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-116S**Sample ID:** 16E0284-24

Sample Matrix: Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/5/2016 14:20

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1	V-05	SW-846 8260C	5/12/16	5/13/16 4:55	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
trans-1,4-Dichloro-2-butene	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH



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

Project Location: Textron Providence

Sample Description:

Work Order: 16E0284

Date Received: 5/6/2016

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

Sampled: 5/5/2016 14:20

**Sample ID:** 16E0284-24Sample Matrix: Ground Water**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
1,4-Dioxane	ND	100	µg/L	1	V-05	SW-846 8260C	5/12/16	5/13/16 4:55	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
Methyl Acetate	ND	1.0	µg/L	1	L-04, V-05	SW-846 8260C	5/12/16	5/13/16 4:55	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1	V-05	SW-846 8260C	5/12/16	5/13/16 4:55	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 4:55	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	97.2	70-130							5/13/16 4:55
Toluene-d8	99.6	70-130							5/13/16 4:55
4-Bromofluorobenzene	98.8	70-130							5/13/16 4:55



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

Project Location: Textron Providence

Date Received: 5/6/2016

**Field Sample #:** MW-112**Sample ID:** 16E0284-25

Sample Matrix: Ground Water

Sample Description:

Work Order: 16E0284

Sampled: 5/4/2016 12:30

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1	V-05	SW-846 8260C	5/12/16	5/13/16 5:22	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
trans-1,4-Dichloro-2-butene	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
1,1-Dichloroethylene	4.6	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
cis-1,2-Dichloroethylene	21	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
trans-1,2-Dichloroethylene	1.3	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH



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

Project Location: Textron Providence

Sample Description:

Work Order: 16E0284

Date Received: 5/6/2016

**Field Sample #:** MW-112

Sampled: 5/4/2016 12:30

**Sample ID:** 16E0284-25Sample Matrix: Ground Water**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
1,4-Dioxane	ND	100	µg/L	1	V-05	SW-846 8260C	5/12/16	5/13/16 5:22	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
Methyl Acetate	ND	1.0	µg/L	1	L-04, V-05	SW-846 8260C	5/12/16	5/13/16 5:22	EEH
Methyl tert-Butyl Ether (MTBE)	1.4	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
Tetrachloroethylene	330	20	µg/L	20		SW-846 8260C	5/12/16	5/13/16 9:22	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1	V-05	SW-846 8260C	5/12/16	5/13/16 5:22	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
1,1,1-Trichloroethane	1.0	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
Trichloroethylene	110	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/12/16	5/13/16 5:22	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	96.3	70-130							5/13/16 5:22
1,2-Dichloroethane-d4	98.7	70-130							5/13/16 9:22
Toluene-d8	98.5	70-130							5/13/16 5:22
Toluene-d8	98.0	70-130							5/13/16 9:22
4-Bromofluorobenzene	98.9	70-130							5/13/16 9:22
4-Bromofluorobenzene	99.4	70-130							5/13/16 5:22



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### Sample Extraction Data

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
16E0284-18 [MW-109D]	B148716	50.0	50.0	05/09/16
16E0284-19 [GZA-3]	B148716	50.0	50.0	05/09/16
16E0284-20 [GZA-3 DUP]	B148716	50.0	50.0	05/09/16

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
16E0284-16 [CW-6]	B148748	1000	1.00	05/09/16
16E0284-17 [CW-6 DUP]	B148748	1000	1.00	05/09/16

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
16E0284-02 [MW-207D]	B149041	5	5.00	05/12/16
16E0284-03 [MW-202D]	B149041	5	5.00	05/12/16
16E0284-05 [MW-101S]	B149041	0.2	5.00	05/12/16
16E0284-06 [MW-101S DUP]	B149041	0.2	5.00	05/12/16
16E0284-07 [MW-101D]	B149041	5	5.00	05/12/16
16E0284-08 [MW-201D]	B149041	0.05	5.00	05/12/16
16E0284-09 [MW-209]	B149041	1	5.00	05/12/16
16E0284-10 [CW-1]	B149041	0.1	5.00	05/12/16
16E0284-11 [CW-2]	B149041	5	5.00	05/12/16
16E0284-12 [MW-216S]	B149041	2.5	5.00	05/12/16
16E0284-13 [MW-216D]	B149041	5	5.00	05/12/16
16E0284-14 [MW-217S]	B149041	2.5	5.00	05/12/16
16E0284-15 [MW-217D]	B149041	5	5.00	05/12/16
16E0284-18 [MW-109D]	B149041	5	5.00	05/12/16
16E0284-19 [GZA-3]	B149041	5	5.00	05/12/16
16E0284-21 [MW-218S]	B149041	5	5.00	05/12/16

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
16E0284-01 [MW-207S]	B149046	5	5.00	05/12/16
16E0284-04 [MW-202S]	B149046	5	5.00	05/13/16
16E0284-09RE1 [MW-209]	B149046	0.025	5.00	05/12/16
16E0284-22 [MW-218D]	B149046	5	5.00	05/12/16
16E0284-23 [MW-116D]	B149046	5	5.00	05/12/16
16E0284-24 [MW-116S]	B149046	5	5.00	05/12/16
16E0284-25 [MW-112]	B149046	5	5.00	05/12/16
16E0284-25RE1 [MW-112]	B149046	0.25	5.00	05/12/16



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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 B149041 - SW-846 5030B**

<b>Blank (B149041-BLK1)</b>		Prepared & Analyzed: 05/12/16							
Acetone	ND	50	µg/L						
Acrylonitrile	ND	5.0	µg/L						
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L						
Benzene	ND	1.0	µg/L						
Bromobenzene	ND	1.0	µg/L						
Bromoform	ND	0.50	µg/L						
Bromomethane	ND	1.0	µg/L						
2-Butanone (MEK)	ND	20	µg/L						
tert-Butyl Alcohol (TBA)	ND	20	µg/L						
n-Butylbenzene	ND	1.0	µg/L						
sec-Butylbenzene	ND	1.0	µg/L						
tert-Butylbenzene	ND	1.0	µg/L						
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L						
Carbon Disulfide	ND	4.0	µg/L						
Carbon Tetrachloride	ND	5.0	µg/L						
Chlorobenzene	ND	1.0	µg/L						
Chlorodibromomethane	ND	0.50	µg/L						
Chloroethane	ND	2.0	µg/L						
Chloroform	ND	2.0	µg/L						
Chloromethane	ND	2.0	µg/L						
2-Chlorotoluene	ND	1.0	µg/L						
4-Chlorotoluene	ND	1.0	µg/L						
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L						
1,2-Dibromoethane (EDB)	ND	0.50	µg/L						
Dibromomethane	ND	1.0	µg/L						
1,2-Dichlorobenzene	ND	1.0	µg/L						
1,3-Dichlorobenzene	ND	1.0	µg/L						
1,4-Dichlorobenzene	ND	1.0	µg/L						
trans-1,4-Dichloro-2-butene	ND	5.0	µg/L						
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L						
1,1-Dichloroethane	ND	1.0	µg/L						
1,2-Dichloroethane	ND	1.0	µg/L						
1,1-Dichloroethylene	ND	1.0	µg/L						
cis-1,2-Dichloroethylene	ND	1.0	µg/L						
trans-1,2-Dichloroethylene	ND	1.0	µg/L						
1,2-Dichloropropane	ND	1.0	µg/L						
1,3-Dichloropropane	ND	0.50	µg/L						
2,2-Dichloropropane	ND	1.0	µg/L						
1,1-Dichloropropene	ND	2.0	µg/L						
cis-1,3-Dichloropropene	ND	0.50	µg/L						
trans-1,3-Dichloropropene	ND	0.50	µg/L						
Diethyl Ether	ND	2.0	µg/L						
Diisopropyl Ether (DIPE)	ND	0.50	µg/L						
1,4-Dioxane	ND	100	µg/L						
Ethylbenzene	ND	1.0	µg/L						
Hexachlorobutadiene	ND	0.50	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	RPD Limit	Notes
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**Batch B149041 - SW-846 5030B**

<b>Blank (B149041-BLK1)</b>										Prepared & Analyzed: 05/12/16
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methyl Cyclohexane	ND	1.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Naphthalene	ND	2.0	µg/L							
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Tetrahydrofuran	ND	10	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							
1,2,4-Trichlorobenzene	ND	1.0	µg/L							
1,3,5-Trichlorobenzene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							
1,2,3-Trichloropropane	ND	2.0	µg/L							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
1,3,5-Trimethylbenzene	ND	1.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	24.7		µg/L	25.0		98.7	70-130			
Surrogate: Toluene-d8	25.1		µg/L	25.0		100	70-130			
Surrogate: 4-Bromofluorobenzene	24.9		µg/L	25.0		99.7	70-130			

<b>LCS (B149041-BS1)</b>										Prepared & Analyzed: 05/12/16
Acetone	106	50	µg/L	100		106	70-160			†
Acrylonitrile	10.2	5.0	µg/L	10.0		102	70-130			
tert-Amyl Methyl Ether (TAME)	9.75	0.50	µg/L	10.0		97.5	70-130			
Benzene	8.52	1.0	µg/L	10.0		85.2	70-130			
Bromobenzene	9.54	1.0	µg/L	10.0		95.4	70-130			
Bromochloromethane	9.44	1.0	µg/L	10.0		94.4	70-130			
Bromodichloromethane	8.84	0.50	µg/L	10.0		88.4	70-130			
Bromoform	10.3	1.0	µg/L	10.0		103	70-130			
Bromomethane	7.15	2.0	µg/L	10.0		71.5	40-160			†
2-Butanone (MEK)	95.0	20	µg/L	100		95.0	40-160			†
tert-Butyl Alcohol (TBA)	103	20	µg/L	100		103	40-160			†
n-Butylbenzene	10.0	1.0	µg/L	10.0		100	70-130			
sec-Butylbenzene	9.16	1.0	µg/L	10.0		91.6	70-130			
tert-Butylbenzene	9.17	1.0	µg/L	10.0		91.7	70-130			
tert-Butyl Ethyl Ether (TBEE)	9.80	0.50	µg/L	10.0		98.0	70-130			
Carbon Disulfide	9.85	4.0	µg/L	10.0		98.5	70-130			
Carbon Tetrachloride	9.27	5.0	µg/L	10.0		92.7	70-130			
Chlorobenzene	8.73	1.0	µg/L	10.0		87.3	70-130			
Chlorodibromomethane	9.22	0.50	µg/L	10.0		92.2	70-130			
Chloroethane	11.0	2.0	µg/L	10.0		110	70-130			
Chloroform	8.63	2.0	µg/L	10.0		86.3	70-130			



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch B149041 - SW-846 5030B**

<b>LCS (B149041-BS1)</b>					Prepared & Analyzed: 05/12/16				
Chloromethane	9.60	2.0	µg/L	10.0	96.0	40-160			†
2-Chlorotoluene	9.11	1.0	µg/L	10.0	91.1	70-130			
4-Chlorotoluene	8.88	1.0	µg/L	10.0	88.8	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	9.61	5.0	µg/L	10.0	96.1	70-130			
1,2-Dibromoethane (EDB)	9.27	0.50	µg/L	10.0	92.7	70-130			
Dibromomethane	9.18	1.0	µg/L	10.0	91.8	70-130			
1,2-Dichlorobenzene	8.93	1.0	µg/L	10.0	89.3	70-130			
1,3-Dichlorobenzene	9.07	1.0	µg/L	10.0	90.7	70-130			
1,4-Dichlorobenzene	8.51	1.0	µg/L	10.0	85.1	70-130			
trans-1,4-Dichloro-2-butene	10.7	5.0	µg/L	10.0	107	70-130			
Dichlorodifluoromethane (Freon 12)	6.12	2.0	µg/L	10.0	61.2	40-160			†
1,1-Dichloroethane	9.00	1.0	µg/L	10.0	90.0	70-130			
1,2-Dichloroethane	8.26	1.0	µg/L	10.0	82.6	70-130			
1,1-Dichloroethylene	8.95	1.0	µg/L	10.0	89.5	70-130			
cis-1,2-Dichloroethylene	8.41	1.0	µg/L	10.0	84.1	70-130			
trans-1,2-Dichloroethylene	8.55	1.0	µg/L	10.0	85.5	70-130			
1,2-Dichloropropane	8.66	1.0	µg/L	10.0	86.6	70-130			
1,3-Dichloropropane	8.81	0.50	µg/L	10.0	88.1	70-130			
2,2-Dichloropropane	10.3	1.0	µg/L	10.0	103	40-130			†
1,1-Dichloropropene	8.94	2.0	µg/L	10.0	89.4	70-130			
cis-1,3-Dichloropropene	8.87	0.50	µg/L	10.0	88.7	70-130			
trans-1,3-Dichloropropene	9.30	0.50	µg/L	10.0	93.0	70-130			
Diethyl Ether	9.34	2.0	µg/L	10.0	93.4	70-130			
Diisopropyl Ether (DIPE)	8.76	0.50	µg/L	10.0	87.6	70-130			
1,4-Dioxane	84.8	100	µg/L	100	84.8	40-130			†
Ethylbenzene	9.28	1.0	µg/L	10.0	92.8	70-130			
Hexachlorobutadiene	10.3	0.50	µg/L	10.0	103	70-130			
2-Hexanone (MBK)	101	10	µg/L	100	101	70-160			†
Isopropylbenzene (Cumene)	9.24	1.0	µg/L	10.0	92.4	70-130			
p-Isopropyltoluene (p-Cymene)	9.69	1.0	µg/L	10.0	96.9	70-130			
<b>Methyl Acetate</b>	5.87	1.0	µg/L	10.0	<b>58.7</b> *	70-130			L-04
Methyl tert-Butyl Ether (MTBE)	8.89	1.0	µg/L	10.0	88.9	70-130			
Methyl Cyclohexane	9.92	1.0	µg/L	10.0	99.2	70-130			
Methylene Chloride	9.29	5.0	µg/L	10.0	92.9	70-130			
4-Methyl-2-pentanone (MIBK)	100	10	µg/L	100	100	70-160			†
Naphthalene	9.12	2.0	µg/L	10.0	91.2	40-130			†
n-Propylbenzene	9.21	1.0	µg/L	10.0	92.1	70-130			
Styrene	9.30	1.0	µg/L	10.0	93.0	70-130			
1,1,1,2-Tetrachloroethane	9.63	1.0	µg/L	10.0	96.3	70-130			
1,1,2,2-Tetrachloroethane	9.42	0.50	µg/L	10.0	94.2	70-130			
Tetrachloroethylene	9.41	1.0	µg/L	10.0	94.1	70-130			
Tetrahydrofuran	8.55	10	µg/L	10.0	85.5	70-130			
Toluene	8.90	1.0	µg/L	10.0	89.0	70-130			
1,2,3-Trichlorobenzene	9.13	5.0	µg/L	10.0	91.3	70-130			
1,2,4-Trichlorobenzene	9.73	1.0	µg/L	10.0	97.3	70-130			
1,3,5-Trichlorobenzene	9.85	1.0	µg/L	10.0	98.5	70-130			
1,1,1-Trichloroethane	9.11	1.0	µg/L	10.0	91.1	70-130			
1,1,2-Trichloroethane	9.10	1.0	µg/L	10.0	91.0	70-130			
Trichloroethylene	9.18	1.0	µg/L	10.0	91.8	70-130			
Trichlorofluoromethane (Freon 11)	9.04	2.0	µg/L	10.0	90.4	70-130			
1,2,3-Trichloropropane	9.46	2.0	µg/L	10.0	94.6	70-130			



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
<b>Batch B149041 - SW-846 5030B</b>									
<b>LCS (B149041-BS1)</b>									
Prepared & Analyzed: 05/12/16									
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.71	1.0	µg/L	10.0	97.1	70-130			
1,2,4-Trimethylbenzene	9.06	1.0	µg/L	10.0	90.6	70-130			
1,3,5-Trimethylbenzene	9.58	1.0	µg/L	10.0	95.8	70-130			
Vinyl Chloride	8.77	2.0	µg/L	10.0	87.7	40-160			†
m+p Xylene	18.4	2.0	µg/L	20.0	92.2	70-130			
o-Xylene	9.00	1.0	µg/L	10.0	90.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	24.1		µg/L	25.0	96.4	70-130			
Surrogate: Toluene-d8	24.8		µg/L	25.0	99.1	70-130			
Surrogate: 4-Bromofluorobenzene	25.8		µg/L	25.0	103	70-130			
<b>LCS Dup (B149041-BS1D)</b>									
Prepared & Analyzed: 05/12/16									
Acetone	106	50	µg/L	100	106	70-160	0.132	25	†
Acrylonitrile	10.0	5.0	µg/L	10.0	100	70-130	1.97	25	
tert-Amyl Methyl Ether (TAME)	9.52	0.50	µg/L	10.0	95.2	70-130	2.39	25	
Benzene	8.59	1.0	µg/L	10.0	85.9	70-130	0.818	25	
Bromobenzene	9.36	1.0	µg/L	10.0	93.6	70-130	1.90	25	
Bromoform	9.56	1.0	µg/L	10.0	95.6	70-130	1.26	25	
Bromochloromethane	8.90	0.50	µg/L	10.0	89.0	70-130	0.676	25	
Bromodichloromethane	10.0	1.0	µg/L	10.0	100	70-130	3.34	25	
Bromomethane	8.70	2.0	µg/L	10.0	87.0	40-160	19.6	25	†
2-Butanone (MEK)	94.4	20	µg/L	100	94.4	40-160	0.676	25	†
tert-Butyl Alcohol (TBA)	99.6	20	µg/L	100	99.6	40-160	3.06	25	†
n-Butylbenzene	10.0	1.0	µg/L	10.0	100	70-130	0.199	25	
sec-Butylbenzene	9.26	1.0	µg/L	10.0	92.6	70-130	1.09	25	
tert-Butylbenzene	9.10	1.0	µg/L	10.0	91.0	70-130	0.766	25	
tert-Butyl Ethyl Ether (TBEE)	9.71	0.50	µg/L	10.0	97.1	70-130	0.923	25	
Carbon Disulfide	9.84	4.0	µg/L	10.0	98.4	70-130	0.102	25	
Carbon Tetrachloride	9.38	5.0	µg/L	10.0	93.8	70-130	1.18	25	
Chlorobenzene	8.67	1.0	µg/L	10.0	86.7	70-130	0.690	25	
Chlorodibromomethane	9.09	0.50	µg/L	10.0	90.9	70-130	1.42	25	
Chloroethane	11.9	2.0	µg/L	10.0	119	70-130	7.16	25	
Chloroform	8.90	2.0	µg/L	10.0	89.0	70-130	3.08	25	
Chloromethane	9.99	2.0	µg/L	10.0	99.9	40-160	3.98	25	†
2-Chlorotoluene	8.98	1.0	µg/L	10.0	89.8	70-130	1.44	25	
4-Chlorotoluene	8.98	1.0	µg/L	10.0	89.8	70-130	1.12	25	
1,2-Dibromo-3-chloropropane (DBCP)	9.18	5.0	µg/L	10.0	91.8	70-130	4.58	25	
1,2-Dibromoethane (EDB)	9.07	0.50	µg/L	10.0	90.7	70-130	2.18	25	
Dibromomethane	9.11	1.0	µg/L	10.0	91.1	70-130	0.765	25	
1,2-Dichlorobenzene	8.85	1.0	µg/L	10.0	88.5	70-130	0.900	25	
1,3-Dichlorobenzene	9.13	1.0	µg/L	10.0	91.3	70-130	0.659	25	
1,4-Dichlorobenzene	8.48	1.0	µg/L	10.0	84.8	70-130	0.353	25	
trans-1,4-Dichloro-2-butene	9.84	5.0	µg/L	10.0	98.4	70-130	8.19	25	
Dichlorodifluoromethane (Freon 12)	6.12	2.0	µg/L	10.0	61.2	40-160	0.00	25	†
1,1-Dichloroethane	8.97	1.0	µg/L	10.0	89.7	70-130	0.334	25	
1,2-Dichloroethane	8.34	1.0	µg/L	10.0	83.4	70-130	0.964	25	
1,1-Dichloroethylene	9.13	1.0	µg/L	10.0	91.3	70-130	1.99	25	
cis-1,2-Dichloroethylene	8.32	1.0	µg/L	10.0	83.2	70-130	1.08	25	
trans-1,2-Dichloroethylene	8.60	1.0	µg/L	10.0	86.0	70-130	0.583	25	
1,2-Dichloropropane	8.87	1.0	µg/L	10.0	88.7	70-130	2.40	25	
1,3-Dichloropropane	8.63	0.50	µg/L	10.0	86.3	70-130	2.06	25	
2,2-Dichloropropane	10.4	1.0	µg/L	10.0	104	40-130	0.676	25	†
1,1-Dichloropropene	8.99	2.0	µg/L	10.0	89.9	70-130	0.558	25	



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B149041 - SW-846 5030B**

<b>LCS Dup (B149041-BSD1)</b>	Prepared & Analyzed: 05/12/16								
cis-1,3-Dichloropropene	8.91	0.50	µg/L	10.0	89.1	70-130	0.450	25	
trans-1,3-Dichloropropene	9.12	0.50	µg/L	10.0	91.2	70-130	1.95	25	
Diethyl Ether	9.51	2.0	µg/L	10.0	95.1	70-130	1.80	25	
Diisopropyl Ether (DIPE)	8.78	0.50	µg/L	10.0	87.8	70-130	0.228	25	
1,4-Dioxane	82.9	100	µg/L	100	82.9	40-130	2.27	50	† ‡
Ethylbenzene	9.25	1.0	µg/L	10.0	92.5	70-130	0.324	25	
Hexachlorobutadiene	10.2	0.50	µg/L	10.0	102	70-130	0.976	25	
2-Hexanone (MBK)	99.6	10	µg/L	100	99.6	70-160	1.06	25	†
Isopropylbenzene (Cumene)	9.29	1.0	µg/L	10.0	92.9	70-130	0.540	25	
p-Isopropyltoluene (p-Cymene)	9.69	1.0	µg/L	10.0	96.9	70-130	0.00	25	
<b>Methyl Acetate</b>	5.72	1.0	µg/L	10.0	57.2 *	70-130	2.59	25	L-04
Methyl tert-Butyl Ether (MTBE)	8.78	1.0	µg/L	10.0	87.8	70-130	1.25	25	
Methyl Cyclohexane	9.96	1.0	µg/L	10.0	99.6	70-130	0.402	25	
Methylene Chloride	9.42	5.0	µg/L	10.0	94.2	70-130	1.39	25	
4-Methyl-2-pentanone (MIBK)	98.5	10	µg/L	100	98.5	70-160	1.84	25	†
Naphthalene	8.55	2.0	µg/L	10.0	85.5	40-130	6.45	25	†
n-Propylbenzene	9.22	1.0	µg/L	10.0	92.2	70-130	0.109	25	
Styrene	9.27	1.0	µg/L	10.0	92.7	70-130	0.323	25	
1,1,1,2-Tetrachloroethane	9.30	1.0	µg/L	10.0	93.0	70-130	3.49	25	
1,1,2,2-Tetrachloroethane	9.21	0.50	µg/L	10.0	92.1	70-130	2.25	25	
Tetrachloroethylene	9.65	1.0	µg/L	10.0	96.5	70-130	2.52	25	
Tetrahydrofuran	8.73	10	µg/L	10.0	87.3	70-130	2.08	25	
Toluene	8.88	1.0	µg/L	10.0	88.8	70-130	0.225	25	
1,2,3-Trichlorobenzene	8.50	5.0	µg/L	10.0	85.0	70-130	7.15	25	
1,2,4-Trichlorobenzene	9.23	1.0	µg/L	10.0	92.3	70-130	5.27	25	
1,3,5-Trichlorobenzene	9.62	1.0	µg/L	10.0	96.2	70-130	2.36	25	
1,1,1-Trichloroethane	9.28	1.0	µg/L	10.0	92.8	70-130	1.85	25	
1,1,2-Trichloroethane	9.15	1.0	µg/L	10.0	91.5	70-130	0.548	25	
Trichloroethylene	9.14	1.0	µg/L	10.0	91.4	70-130	0.437	25	
Trichlorofluoromethane (Freon 11)	9.41	2.0	µg/L	10.0	94.1	70-130	4.01	25	
1,2,3-Trichloropropane	9.14	2.0	µg/L	10.0	91.4	70-130	3.44	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.86	1.0	µg/L	10.0	98.6	70-130	1.53	25	
1,2,4-Trimethylbenzene	9.19	1.0	µg/L	10.0	91.9	70-130	1.42	25	
1,3,5-Trimethylbenzene	9.53	1.0	µg/L	10.0	95.3	70-130	0.523	25	
Vinyl Chloride	9.36	2.0	µg/L	10.0	93.6	40-160	6.51	25	†
m+p Xylene	18.4	2.0	µg/L	20.0	91.8	70-130	0.435	25	
o-Xylene	8.90	1.0	µg/L	10.0	89.0	70-130	1.12	25	
Surrogate: 1,2-Dichloroethane-d4	24.0		µg/L	25.0	96.1	70-130			
Surrogate: Toluene-d8	24.8		µg/L	25.0	99.0	70-130			
Surrogate: 4-Bromofluorobenzene	25.4		µg/L	25.0	101	70-130			

**Batch B149046 - SW-846 5030B**

<b>Blank (B149046-BLK1)</b>	Prepared: 05/12/16 Analyzed: 05/13/16							
Acetone	ND	50	µg/L					
Acrylonitrile	ND	5.0	µg/L					
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L					
Benzene	ND	1.0	µg/L					
Bromobenzene	ND	1.0	µg/L					
Bromochloromethane	ND	1.0	µg/L					
Bromodichloromethane	ND	0.50	µg/L					
Bromoform	ND	1.0	µg/L					



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch B149046 - SW-846 5030B**

<b>Blank (B149046-BLK1)</b>									Prepared: 05/12/16 Analyzed: 05/13/16
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	4.0	µg/L						
Carbon Tetrachloride	ND	5.0	µg/L						
Chlorobenzene	ND	1.0	µg/L						
Chlorodibromomethane	ND	0.50	µg/L						
Chloroethane	ND	2.0	µg/L						
Chloroform	ND	2.0	µg/L						
Chloromethane	ND	2.0	µg/L						
2-Chlorotoluene	ND	1.0	µg/L						
4-Chlorotoluene	ND	1.0	µg/L						
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L						
1,2-Dibromoethane (EDB)	ND	0.50	µg/L						
Dibromomethane	ND	1.0	µg/L						
1,2-Dichlorobenzene	ND	1.0	µg/L						
1,3-Dichlorobenzene	ND	1.0	µg/L						
1,4-Dichlorobenzene	ND	1.0	µg/L						
trans-1,4-Dichloro-2-butene	ND	5.0	µg/L						
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L						
1,1-Dichloroethane	ND	1.0	µg/L						
1,2-Dichloroethane	ND	1.0	µg/L						
1,1-Dichloroethylene	ND	1.0	µg/L						
cis-1,2-Dichloroethylene	ND	1.0	µg/L						
trans-1,2-Dichloroethylene	ND	1.0	µg/L						
1,2-Dichloropropane	ND	1.0	µg/L						
1,3-Dichloropropane	ND	0.50	µg/L						
2,2-Dichloropropane	ND	1.0	µg/L						
1,1-Dichloropropene	ND	2.0	µg/L						
cis-1,3-Dichloropropene	ND	0.50	µg/L						
trans-1,3-Dichloropropene	ND	0.50	µg/L						
Diethyl Ether	ND	2.0	µg/L						
Diisopropyl Ether (DIPE)	ND	0.50	µg/L						
1,4-Dioxane	ND	100	µg/L						V-05
Ethylbenzene	ND	1.0	µg/L						
Hexachlorobutadiene	ND	0.50	µg/L						
2-Hexanone (MBK)	ND	10	µg/L						
Isopropylbenzene (Cumene)	ND	1.0	µg/L						
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L						
Methyl Acetate	ND	1.0	µg/L						L-04, V-05
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L						
Methyl Cyclohexane	ND	1.0	µg/L						
Methylene Chloride	ND	5.0	µg/L						
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L						
Naphthalene	ND	2.0	µg/L						
n-Propylbenzene	ND	1.0	µg/L						
Styrene	ND	1.0	µg/L						
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L						



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch B149046 - SW-846 5030B**

<b>Blank (B149046-BLK1)</b>									
Prepared: 05/12/16 Analyzed: 05/13/16									
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L						
Tetrachloroethylene	ND	1.0	µg/L						
Tetrahydrofuran	ND	10	µg/L						
Toluene	ND	1.0	µg/L						
1,2,3-Trichlorobenzene	ND	5.0	µg/L						V-05
1,2,4-Trichlorobenzene	ND	1.0	µg/L						
1,3,5-Trichlorobenzene	ND	1.0	µg/L						
1,1,1-Trichloroethane	ND	1.0	µg/L						
1,1,2-Trichloroethane	ND	1.0	µg/L						
Trichloroethylene	ND	1.0	µg/L						
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L						
1,2,3-Trichloropropane	ND	2.0	µg/L						
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L						
1,2,4-Trimethylbenzene	ND	1.0	µg/L						
1,3,5-Trimethylbenzene	ND	1.0	µg/L						
Vinyl Chloride	ND	2.0	µg/L						
m+p Xylene	ND	2.0	µg/L						
o-Xylene	ND	1.0	µg/L						
Surrogate: 1,2-Dichloroethane-d4	24.6		µg/L	25.0		98.4	70-130		
Surrogate: Toluene-d8	24.8		µg/L	25.0		99.0	70-130		
Surrogate: 4-Bromofluorobenzene	25.0		µg/L	25.0		99.8	70-130		

<b>LCS (B149046-BS1)</b>									
Prepared: 05/12/16 Analyzed: 05/13/16									
Acetone	86.7	50	µg/L	100		86.7	70-160		†
Acrylonitrile	9.74	5.0	µg/L	10.0		97.4	70-130		
tert-Amyl Methyl Ether (TAME)	9.64	0.50	µg/L	10.0		96.4	70-130		
Benzene	8.37	1.0	µg/L	10.0		83.7	70-130		
Bromobenzene	9.11	1.0	µg/L	10.0		91.1	70-130		
Bromochloromethane	9.37	1.0	µg/L	10.0		93.7	70-130		
Bromodichloromethane	8.53	0.50	µg/L	10.0		85.3	70-130		
Bromoform	9.80	1.0	µg/L	10.0		98.0	70-130		
Bromomethane	5.78	2.0	µg/L	10.0		57.8	40-160		†
2-Butanone (MEK)	85.2	20	µg/L	100		85.2	40-160		†
tert-Butyl Alcohol (TBA)	90.4	20	µg/L	100		90.4	40-160	V-05	†
n-Butylbenzene	9.36	1.0	µg/L	10.0		93.6	70-130		
sec-Butylbenzene	8.90	1.0	µg/L	10.0		89.0	70-130		
tert-Butylbenzene	9.00	1.0	µg/L	10.0		90.0	70-130		
tert-Butyl Ethyl Ether (TBEE)	9.70	0.50	µg/L	10.0		97.0	70-130		
Carbon Disulfide	9.00	4.0	µg/L	10.0		90.0	70-130		
Carbon Tetrachloride	9.33	5.0	µg/L	10.0		93.3	70-130		
Chlorobenzene	8.44	1.0	µg/L	10.0		84.4	70-130		
Chlorodibromomethane	8.78	0.50	µg/L	10.0		87.8	70-130		
Chloroethane	11.6	2.0	µg/L	10.0		116	70-130		
Chloroform	8.47	2.0	µg/L	10.0		84.7	70-130		
Chloromethane	8.84	2.0	µg/L	10.0		88.4	40-160		†
2-Chlorotoluene	8.80	1.0	µg/L	10.0		88.0	70-130		
4-Chlorotoluene	8.58	1.0	µg/L	10.0		85.8	70-130		
1,2-Dibromo-3-chloropropane (DBCP)	10.1	5.0	µg/L	10.0		101	70-130		
1,2-Dibromoethane (EDB)	8.91	0.50	µg/L	10.0		89.1	70-130		
Dibromomethane	9.04	1.0	µg/L	10.0		90.4	70-130		
1,2-Dichlorobenzene	8.70	1.0	µg/L	10.0		87.0	70-130		
1,3-Dichlorobenzene	8.84	1.0	µg/L	10.0		88.4	70-130		



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
<b>Batch B149046 - SW-846 5030B</b>									
<b>LCS (B149046-BS1)</b>									
Prepared: 05/12/16 Analyzed: 05/13/16									
1,4-Dichlorobenzene	8.40	1.0	µg/L	10.0	84.0	70-130			
trans-1,4-Dichloro-2-butene	9.38	5.0	µg/L	10.0	93.8	70-130			
Dichlorodifluoromethane (Freon 12)	6.01	2.0	µg/L	10.0	60.1	40-160			†
1,1-Dichloroethane	8.83	1.0	µg/L	10.0	88.3	70-130			
1,2-Dichloroethane	8.09	1.0	µg/L	10.0	80.9	70-130			
1,1-Dichloroethylene	9.15	1.0	µg/L	10.0	91.5	70-130			
cis-1,2-Dichloroethylene	8.29	1.0	µg/L	10.0	82.9	70-130			
trans-1,2-Dichloroethylene	8.49	1.0	µg/L	10.0	84.9	70-130			
1,2-Dichloropropane	8.55	1.0	µg/L	10.0	85.5	70-130			
1,3-Dichloropropane	8.38	0.50	µg/L	10.0	83.8	70-130			
2,2-Dichloropropane	8.88	1.0	µg/L	10.0	88.8	40-130			†
1,1-Dichloropropene	8.64	2.0	µg/L	10.0	86.4	70-130			
cis-1,3-Dichloropropene	8.39	0.50	µg/L	10.0	83.9	70-130			
trans-1,3-Dichloropropene	8.77	0.50	µg/L	10.0	87.7	70-130			
Diethyl Ether	9.12	2.0	µg/L	10.0	91.2	70-130			
Diisopropyl Ether (DIPE)	8.75	0.50	µg/L	10.0	87.5	70-130			
1,4-Dioxane	63.9	100	µg/L	100	63.9	40-130			V-05 †
Ethylbenzene	8.91	1.0	µg/L	10.0	89.1	70-130			
Hexachlorobutadiene	9.26	0.50	µg/L	10.0	92.6	70-130			
2-Hexanone (MBK)	94.2	10	µg/L	100	94.2	70-160			†
Isopropylbenzene (Cumene)	8.82	1.0	µg/L	10.0	88.2	70-130			
p-Isopropyltoluene (p-Cymene)	9.34	1.0	µg/L	10.0	93.4	70-130			
<b>Methyl Acetate</b>	<b>5.79</b>	<b>1.0</b>	<b>µg/L</b>	<b>10.0</b>	<b>57.9</b>	<b>*</b>	<b>70-130</b>	<b>V-05, L-04</b>	
Methyl tert-Butyl Ether (MTBE)	8.75	1.0	µg/L	10.0	87.5	70-130			
Methyl Cyclohexane	9.32	1.0	µg/L	10.0	93.2	70-130			
Methylene Chloride	9.79	5.0	µg/L	10.0	97.9	70-130			
4-Methyl-2-pentanone (MIBK)	98.2	10	µg/L	100	98.2	70-160			†
Naphthalene	8.87	2.0	µg/L	10.0	88.7	40-130			†
n-Propylbenzene	8.89	1.0	µg/L	10.0	88.9	70-130			
Styrene	8.93	1.0	µg/L	10.0	89.3	70-130			
1,1,1,2-Tetrachloroethane	9.33	1.0	µg/L	10.0	93.3	70-130			
1,1,2,2-Tetrachloroethane	9.00	0.50	µg/L	10.0	90.0	70-130			
Tetrachloroethylene	9.02	1.0	µg/L	10.0	90.2	70-130			
Tetrahydrofuran	8.29	10	µg/L	10.0	82.9	70-130			
Toluene	8.52	1.0	µg/L	10.0	85.2	70-130			
1,2,3-Trichlorobenzene	8.27	5.0	µg/L	10.0	82.7	70-130			V-05
1,2,4-Trichlorobenzene	8.98	1.0	µg/L	10.0	89.8	70-130			
1,3,5-Trichlorobenzene	9.03	1.0	µg/L	10.0	90.3	70-130			
1,1,1-Trichloroethane	9.00	1.0	µg/L	10.0	90.0	70-130			
1,1,2-Trichloroethane	8.98	1.0	µg/L	10.0	89.8	70-130			
Trichloroethylene	8.95	1.0	µg/L	10.0	89.5	70-130			
Trichlorofluoromethane (Freon 11)	9.26	2.0	µg/L	10.0	92.6	70-130			
1,2,3-Trichloropropane	9.09	2.0	µg/L	10.0	90.9	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.80	1.0	µg/L	10.0	98.0	70-130			
1,2,4-Trimethylbenzene	9.08	1.0	µg/L	10.0	90.8	70-130			
1,3,5-Trimethylbenzene	9.11	1.0	µg/L	10.0	91.1	70-130			
Vinyl Chloride	9.05	2.0	µg/L	10.0	90.5	40-160			†
m+p Xylene	17.9	2.0	µg/L	20.0	89.6	70-130			
o-Xylene	8.70	1.0	µg/L	10.0	87.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	24.9		µg/L	25.0	99.6	70-130			
Surrogate: Toluene-d8	24.9		µg/L	25.0	99.8	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 B149046 - SW-846 5030B</b>									
<b>LCS (B149046-BS1)</b>									
Prepared: 05/12/16 Analyzed: 05/13/16									
Surrogate: 4-Bromofluorobenzene	24.7		µg/L		25.0		98.7	70-130	
<b>LCS Dup (B149046-BS1)</b>									
Prepared: 05/12/16 Analyzed: 05/13/16									
Acetone	88.7	50	µg/L	100		88.7	70-160	2.31	25 †
Acrylonitrile	10.4	5.0	µg/L	10.0		104	70-130	6.55	25
tert-Amyl Methyl Ether (TAME)	9.49	0.50	µg/L	10.0		94.9	70-130	1.57	25
Benzene	8.22	1.0	µg/L	10.0		82.2	70-130	1.81	25
Bromobenzene	8.98	1.0	µg/L	10.0		89.8	70-130	1.44	25
Bromoform	9.35	1.0	µg/L	10.0		93.5	70-130	0.214	25
Bromochloromethane	8.47	0.50	µg/L	10.0		84.7	70-130	0.706	25
Bromoform	9.78	1.0	µg/L	10.0		97.8	70-130	0.204	25
Bromomethane	6.49	2.0	µg/L	10.0		64.9	40-160	11.6	25 †
2-Butanone (MEK)	85.1	20	µg/L	100		85.1	40-160	0.141	25 †
tert-Butyl Alcohol (TBA)	95.7	20	µg/L	100		95.7	40-160	5.68	25 V-05 †
n-Butylbenzene	9.34	1.0	µg/L	10.0		93.4	70-130	0.214	25
sec-Butylbenzene	8.81	1.0	µg/L	10.0		88.1	70-130	1.02	25
tert-Butylbenzene	9.18	1.0	µg/L	10.0		91.8	70-130	1.98	25
tert-Butyl Ethyl Ether (TBEE)	9.45	0.50	µg/L	10.0		94.5	70-130	2.61	25
Carbon Disulfide	8.73	4.0	µg/L	10.0		87.3	70-130	3.05	25
Carbon Tetrachloride	9.27	5.0	µg/L	10.0		92.7	70-130	0.645	25
Chlorobenzene	8.52	1.0	µg/L	10.0		85.2	70-130	0.943	25
Chlorodibromomethane	8.81	0.50	µg/L	10.0		88.1	70-130	0.341	25
Chloroethane	11.0	2.0	µg/L	10.0		110	70-130	5.67	25
Chloroform	8.39	2.0	µg/L	10.0		83.9	70-130	0.949	25
Chloromethane	8.95	2.0	µg/L	10.0		89.5	40-160	1.24	25 †
2-Chlorotoluene	8.80	1.0	µg/L	10.0		88.0	70-130	0.00	25
4-Chlorotoluene	8.61	1.0	µg/L	10.0		86.1	70-130	0.349	25
1,2-Dibromo-3-chloropropane (DBCP)	10.0	5.0	µg/L	10.0		100	70-130	1.09	25
1,2-Dibromoethane (EDB)	8.90	0.50	µg/L	10.0		89.0	70-130	0.112	25
Dibromomethane	8.84	1.0	µg/L	10.0		88.4	70-130	2.24	25
1,2-Dichlorobenzene	8.55	1.0	µg/L	10.0		85.5	70-130	1.74	25
1,3-Dichlorobenzene	8.81	1.0	µg/L	10.0		88.1	70-130	0.340	25
1,4-Dichlorobenzene	8.40	1.0	µg/L	10.0		84.0	70-130	0.00	25
trans-1,4-Dichloro-2-butene	10.2	5.0	µg/L	10.0		102	70-130	7.89	25
Dichlorodifluoromethane (Freon 12)	5.87	2.0	µg/L	10.0		58.7	40-160	2.36	25 †
1,1-Dichloroethane	8.87	1.0	µg/L	10.0		88.7	70-130	0.452	25
1,2-Dichloroethane	8.01	1.0	µg/L	10.0		80.1	70-130	0.994	25
1,1-Dichloroethylene	8.95	1.0	µg/L	10.0		89.5	70-130	2.21	25
cis-1,2-Dichloroethylene	8.28	1.0	µg/L	10.0		82.8	70-130	0.121	25
trans-1,2-Dichloroethylene	8.35	1.0	µg/L	10.0		83.5	70-130	1.66	25
1,2-Dichloropropane	8.61	1.0	µg/L	10.0		86.1	70-130	0.699	25
1,3-Dichloropropane	8.30	0.50	µg/L	10.0		83.0	70-130	0.959	25
2,2-Dichloropropane	8.71	1.0	µg/L	10.0		87.1	40-130	1.93	25 †
1,1-Dichloropropene	8.73	2.0	µg/L	10.0		87.3	70-130	1.04	25
cis-1,3-Dichloropropene	8.19	0.50	µg/L	10.0		81.9	70-130	2.41	25
trans-1,3-Dichloropropene	8.68	0.50	µg/L	10.0		86.8	70-130	1.03	25
Diethyl Ether	8.94	2.0	µg/L	10.0		89.4	70-130	1.99	25
Diisopropyl Ether (DIPE)	8.58	0.50	µg/L	10.0		85.8	70-130	1.96	25
1,4-Dioxane	79.2	100	µg/L	100		79.2	40-130	21.4	50 V-05 † ‡
Ethylbenzene	9.04	1.0	µg/L	10.0		90.4	70-130	1.45	25
Hexachlorobutadiene	9.30	0.50	µg/L	10.0		93.0	70-130	0.431	25
2-Hexanone (MBK)	97.7	10	µg/L	100		97.7	70-160	3.56	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 B149046 - SW-846 5030B</b>										
<b>LCS Dup (B149046-BSD1)</b>										
Prepared: 05/12/16 Analyzed: 05/13/16										
Isopropylbenzene (Cumene)	9.00	1.0	µg/L	10.0	90.0	70-130	2.02	25		
p-Isopropyltoluene (p-Cymene)	9.34	1.0	µg/L	10.0	93.4	70-130	0.00	25		
<b>Methyl Acetate</b>	6.33	1.0	µg/L	10.0	<b>63.3</b> *	70-130	8.91	25	L-04, V-05	
Methyl tert-Butyl Ether (MTBE)	8.69	1.0	µg/L	10.0	86.9	70-130	0.688	25		
Methyl Cyclohexane	9.26	1.0	µg/L	10.0	92.6	70-130	0.646	25		
Methylene Chloride	9.73	5.0	µg/L	10.0	97.3	70-130	0.615	25		
4-Methyl-2-pentanone (MIBK)	102	10	µg/L	100	102	70-160	3.81	25		†
Naphthalene	9.16	2.0	µg/L	10.0	91.6	40-130	3.22	25		†
n-Propylbenzene	8.91	1.0	µg/L	10.0	89.1	70-130	0.225	25		
Styrene	9.07	1.0	µg/L	10.0	90.7	70-130	1.56	25		
1,1,1,2-Tetrachloroethane	9.52	1.0	µg/L	10.0	95.2	70-130	2.02	25		
1,1,2,2-Tetrachloroethane	9.22	0.50	µg/L	10.0	92.2	70-130	2.41	25		
Tetrachloroethylene	8.96	1.0	µg/L	10.0	89.6	70-130	0.667	25		
Tetrahydrofuran	8.42	10	µg/L	10.0	84.2	70-130	1.56	25		
Toluene	8.62	1.0	µg/L	10.0	86.2	70-130	1.17	25		
1,2,3-Trichlorobenzene	8.66	5.0	µg/L	10.0	86.6	70-130	4.61	25	V-05	
1,2,4-Trichlorobenzene	8.98	1.0	µg/L	10.0	89.8	70-130	0.00	25		
1,3,5-Trichlorobenzene	9.00	1.0	µg/L	10.0	90.0	70-130	0.333	25		
1,1,1-Trichloroethane	9.11	1.0	µg/L	10.0	91.1	70-130	1.21	25		
1,1,2-Trichloroethane	8.85	1.0	µg/L	10.0	88.5	70-130	1.46	25		
Trichloroethylene	8.81	1.0	µg/L	10.0	88.1	70-130	1.58	25		
Trichlorofluoromethane (Freon 11)	9.18	2.0	µg/L	10.0	91.8	70-130	0.868	25		
1,2,3-Trichloropropane	9.49	2.0	µg/L	10.0	94.9	70-130	4.31	25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.69	1.0	µg/L	10.0	96.9	70-130	1.13	25		
1,2,4-Trimethylbenzene	9.02	1.0	µg/L	10.0	90.2	70-130	0.663	25		
1,3,5-Trimethylbenzene	9.26	1.0	µg/L	10.0	92.6	70-130	1.63	25		
Vinyl Chloride	8.67	2.0	µg/L	10.0	86.7	40-160	4.29	25		†
m+p Xylene	18.0	2.0	µg/L	20.0	90.1	70-130	0.501	25		
o-Xylene	8.79	1.0	µg/L	10.0	87.9	70-130	1.03	25		
Surrogate: 1,2-Dichloroethane-d4	24.4		µg/L	25.0	97.7	70-130				
Surrogate: Toluene-d8	24.8		µg/L	25.0	99.4	70-130				
Surrogate: 4-Bromofluorobenzene	24.8		µg/L	25.0	99.4	70-130				



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#### QUALITY CONTROL

##### Petroleum Hydrocarbons Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch B148748 - SW-846 3510C**

<b>Blank (B148748-BLK1)</b>		Prepared: 05/09/16 Analyzed: 05/10/16						
Fuel Oil #2	ND	0.20	mg/L					
Surrogate: o-Terphenyl	0.0888		mg/L	0.100		88.8	40-140	
<b>LCS (B148748-BS1)</b>		Prepared: 05/09/16 Analyzed: 05/10/16						
Fuel Oil #2	0.569	0.20	mg/L	1.00		56.9	40-140	
Surrogate: o-Terphenyl	0.0819		mg/L	0.100		81.9	40-140	
<b>LCS Dup (B148748-BSD1)</b>		Prepared: 05/09/16 Analyzed: 05/10/16						
Fuel Oil #2	0.633	0.20	mg/L	1.00		63.3	40-140	10.7
Surrogate: o-Terphenyl	0.0840		mg/L	0.100		84.0	40-140	25



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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
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**Batch B148716 - SW-846 3005A Dissolved**

<b>Blank (B148716-BLK1)</b>		Prepared: 05/09/16 Analyzed: 05/10/16									
Lead	ND	1.0	µg/L								
<b>LCS (B148716-BS1)</b>		Prepared: 05/09/16 Analyzed: 05/10/16									
Lead	278	5.0	µg/L	250	111	80-120					
<b>LCS Dup (B148716-BSD1)</b>		Prepared: 05/09/16 Analyzed: 05/10/16									
Lead	276	5.0	µg/L	250	110	80-120	0.648	20			
<b>Duplicate (B148716-DUP1)</b>		<b>Source: 16E0284-18</b>		Prepared: 05/09/16 Analyzed: 05/10/16							
Lead	ND	1.0	µg/L			ND	NC		20		
<b>Matrix Spike (B148716-MS1)</b>		<b>Source: 16E0284-18</b>		Prepared: 05/09/16 Analyzed: 05/10/16							
Lead	280	5.0	µg/L	250	ND	112	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
- DL Method Detection Limit
- MCL Maximum Contaminant Level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

- DL-01 Elevated reporting limits for all volatile compounds due to foaming sample matrix.
- DL-03 Elevated reporting limit due to matrix.
- 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.
- O-31 Sample chromatography does not match reference standard exactly, possibly due to weathering.
- RL-11 Elevated reporting limit due to high concentration of target compounds.
- V-05 Continuing calibration did not meet method specifications and was biased on the low side for this compound.  
Increased uncertainty is associated with the reported value which is likely to be biased on the low side.



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#### CERTIFICATIONS

##### Certified Analyses included in this Report

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



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

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

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2018
MA	Massachusetts DEP	M-MA100	06/30/2016
CT	Connecticut Department of Public Health	PH-0567	09/30/2017
NY	New York State Department of Health	10899 NELAP	04/1/2017
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2017
RI	Rhode Island Department of Health	LAO00112	12/30/2016
NC	North Carolina Div. of Water Quality	652	12/31/2016
NJ	New Jersey DEP	MA007 NELAP	06/30/2016
FL	Florida Department of Health	E871027 NELAP	06/30/2016
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2016
ME	State of Maine	2011028	06/9/2017
VA	Commonwealth of Virginia	460217	12/14/2016
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2016

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East Longmeadow, MA. 01028  
P: 413-525-2332  
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www.contestlabs.com



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## Sample Receipt Checklist

CLIENT NAME: CB&I RECEIVED BY: VP DATE: 5/6/2016

1) Was the chain(s) of custody relinquished and signed? Yes X No \_\_\_\_\_ No COC Incl.

2) Does the chain agree with the samples? Yes \_\_\_\_\_ No X

If not, explain: See lab Comments

3) Are all the samples in good condition? Yes X No \_\_\_\_\_

If not, explain:

4) How were the samples received:

On Ice X Direct from Sampling \_\_\_\_\_ Ambient \_\_\_\_\_ In Cooler(s) X

Were the samples received in Temperature Compliance of (2-6°C)? Yes X No \_\_\_\_\_ N/A \_\_\_\_\_

Temperature °C by Temp blank \_\_\_\_\_ Temperature °C by Temp gun \_\_\_\_\_ 4.5

5) Are there Dissolved samples for the lab to filter? Yes \_\_\_\_\_ No X

Who was notified \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

6) Are there any RUSH or SHORT HOLDING TIME samples? Yes \_\_\_\_\_ No X

Who was notified \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

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Permission to subcontract samples? Yes X No \_\_\_\_\_

(Walk-in clients only) if not already approved

Client Signature: \_\_\_\_\_

7) Location where samples are stored: \_\_\_\_\_

8) Do all samples have the proper Acid pH: Yes X No \_\_\_\_\_ N/A \_\_\_\_\_

9) Do all samples have the proper Base pH: Yes \_\_\_\_\_ No \_\_\_\_\_ N/A X

10) Was the PC notified of any discrepancies with the CoC vs the samples: Yes \_\_\_\_\_ N/A X

### Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber	4	16 oz amber	
500 mL Amber		8 oz amber/clear jar	
250 mL Amber (8oz amber)		4 oz amber/clear jar	
1 Liter Plastic		2 oz amber/clear jar	
500 mL Plastic		Plastic Bag / Ziploc	
250 mL plastic	3	SOC Kit	
40 mL Vial - type listed below	66	Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

3 vials received labeled MW-112, not on chain.

40 mL vials: # HCl	66	# Methanol	Time and Date Frozen:
Dpc# 277: # Bisulfate		# DI Water	
Rev. 4 August 2013: # Thiosulfate		Unpreserved	

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Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

<u>Question</u>	<u>Answer (True/False)</u>	<u>Comment</u>
	T/F/NA	
1) The cooler's custody seal, if present, is intact.	NA	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	NA	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	T	
18) There is sufficient volume for all requested analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	NA	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	T	
21) Samples do not require splitting or compositing.	T	

Who notified of False statements?

Date/Time:

Doc #277 Rev. 4 August 2013

Log-In Technician Initials: VP

Date/Time: 5/6/16 1630

**On-test**® Phone: 413-525-2332  
Fax: 413-525-6405  
Email: info@contestilabs.com  
www.contestilabs.com

# CHAIN OF CUSTODY RECORD

39 Spruce Street  
East Longmeadow, MA 01028

Page 3 of 1

150 Royall Street

Canton, MA 02021

Brian Cote

Project Location: Tyron Providence

Sampled By: Daniel Leahy

Project Proposal Provided? (for billing purposes)  
 Yes  No

Project Proposal Date \_\_\_\_\_

Telephone: 617-589-6175

Project # 130274

Client PO# 835493

**DATA DELIVERY** (check all that apply)

FAX  EMAIL  WEBSITE

Fax #

Email: brian.cote@cbi.com

Format:  PDF  EXCEL  GIS  
 OTHERGISKey format

Collection:  "Enhanced Data Package"

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	Matrix	Code	Spec Code
01	11/16 - 2075	5/4/16 0815			✓	GW	U	3
02	11/16 - 207D	5/4/16 0910						3
03	11/16 - 202D	5/4/16 0935						3
04	11/16 - 2025	5/4/16 1000						3
05	11/16 - 101S	5/4/16 1030						3
06	11/16 - 101S DUR	5/4/16 1030						3
07	11/16 - 101D	5/4/16 1100						3
08	11/16 - 201D	5/4/16 1140						3
09	11/16 - 209	5/4/16 1250						3
10	11/16 - 1	5/4/16 1335						3

Comments: Please email GISKey Formatted EDD & PDF of report to:  
Brian.Cote@cbi.com and Catherine.Joe@cbi.com.  
Dissolved lead samples are field filtered.

Relinquished by: (Signature)	Date/Time:	Turnaround	Detection Limit Requirements
John Cote	5/6/16 0700	□ 7-Day □ 10-Day □ Other	Massachusetts:
John Cote	5/6/16 11:30	□ RUSH †	Connecticut:
John Cote	5/6/16 1630	□ 24-Hr □ 48-Hr □ 72-Hr □ 4- Day □ Require lab approval	Other:
John Cote	5/6/16 1630		

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:

H = High; M = Medium; L = Low; C = Clean; U = Unknown

# of Containers  
\*\* Preservation  
\*\*\* Container Code

Field Filtered  
Lab to Filter  
\*\*\* Cont. Code:  
A=Amber glass  
G=glass  
P=plastic  
ST=sterile  
V=vial  
S=symma can  
T=tederal bag  
O=Other

I=Iced  
H=HCl  
M=Methanol  
N=Nitric Acid  
S=Sulfuric Acid  
B=Sodium bisulfate  
X=Na hydroxide  
T=Na thiosulfate  
O=Other

DW=drinking water  
GW=groundwater  
WW=wastewater  
SL=sludge  
O=other



WBE/DBE Certificate

TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.  
PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT



# CHAIN OF CUSTODY RECORD

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

Email: info@contestlabs.com  
www.contestlabs.com

39 Spruce Street  
East Longmeadow, MA 01028

16/08/1 Rev. 04/05/12  
Address: 150 Royal Street  
Canton, MA 02021  
Attention: Brian Cote  
Project Location: Textron Providence  
Sampled By: Daniel Leahy  
Project Proposal Provided? (for billing purposes)  
 Yes  proposal date

Client PO# 835493  
**DATA DELIVERY** (check all that apply)  
 FAX  EMAIL  WEBSITE  
 Fax # \_\_\_\_\_  
 Email: brian.cote@cbi.com  
 Format:  PDF  EXCEL  GIS  
 OTHER GISKey format

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection						Canc. Date
		Beginning Date/Time	Ending Date/Time	Composite	Grab	Matrix	Unit	
1	CUS-2	5/5/16 14:30				GW	U	3
12	MW-2165	5/5/16 07:30						3
13	MW-216D	5/5/16 08:00						3
14	MW-2175	5/5/16 09:00						3
15	MW-217D	5/5/16 09:30						3
16	OW-6	5/5/16 10:25						3
17	OW-6 DWP	5/5/16 10:25						3
18	MW-109D	5/5/16 11:30						3
19	GZA-3	5/5/16 12:15						3
20	GZA-3 DWP	5/5/16 12:15						3

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Brian.Cote@cbi.com and Catherine.Joe@cbi.com.  
Dissolved lead samples are field filtered.

Comments: Please email GISKey formatted EDD & PDF of report to:  
Brian.Cote@cbi.com and Catherine.Joe@cbi.com.

Dissolved lead samples are field filtered.

# of Containers  
\*\*Preservation  
\*\*\*Container Code

Dissolved Metals  
Field Filtered  
Lab to Filter

\*\*\*Cont. Code:  
A=Amber glass  
G=glass  
P=plastic  
ST=sterile  
V=vial  
S=summa can  
T=tederal bag  
O=Other

Hydrocarbons  
Total Petroleum  
Dissolved Lead

\*Matrix Code:  
GW=Groundwater  
WW=Wastewater  
DW=drinking water  
A=air  
S=soil/solid  
SL=sludge  
O=other

WBE/DBE Certified

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Is your project MCP or RCP?

- MCP Form Required
- RCP Form Required
- MA State DW Form Required PWSID # \_\_\_\_\_





Phone: 413-525-2332

Fax: 413-525-6405

Email: info@contestlabs.com

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N E 0284  
**CHAIN OF CUSTODY RECORD**

Rev 04.05.12

39 Spruce Street  
East Longmeadow, MA 01028

Page 3 of 3

Company Name: CB&amp;I Environmental

Telephone: 617-589-6175

Address: 150 Royall Street

Project #: 130274

Canton, MA 02021

Client PO#: 835493

Attention: Brian Cote

DATA DELIVERY (check all that apply)

 FAX  EMAIL  WEBSITE

Project Location: Textron Providence

Fax #

Sampled By: Daniel Leahy

Email: Brian.Cote@cbi.com

Project Proposal Provided? (for billing purposes)  
 yes \_\_\_\_\_ proposal dateFormat:  
 PDF  EXCEL  GIS  
 OTHER GISKey format  
 "Enhanced Data Package"

## Collection

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	*Matrix Code	Conc Code	EPA 8260B (VOCs)	Total Petroleum Hydrocarbons	Dissolved Lead
21	MW-3185	5/5/16	1300		6	GW	U	3		
22	MW-218D	5/5/16	1330		1			3		
23	MW-116D	5/5/16	1400					3		
24	MW-116S	5/5/16	1420					3		
25	additional sample W-112 received. analyze for VOCs 5.10.16 JMG									

Comments: Please email GISKey formatted EDD & PDF of report to:  
Brian.Cote@cbi.com and Catherine.Joe@cbi.com.  
Dissolved lead samples are field filtered.Please use the following codes to let Con-Test know if a specific sample  
may be high in concentration in Matrix/Conc. Code Box:

H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)

Date/Time:

Turnaround <sup>†</sup>

Detection Limit Requirements

Is your project MCP or RCP?

Received by: (signature)

Date/Time:

 10-Day

Massachusetts:

 MCP Form Required

Relinquished by: (signature)

Date/Time:

 7-Day RCP Form Required

Received by: (signature)

Date/Time:

 Other MA State DW Form Required PWSID #

Received by: (signature)

Date/Time:

 24-Hr  48-Hr

NELAC &amp; AIHA-LAP, LLC

 72-Hr  4-Day

Accredited

† Require lab approval

WBE/DBE Certified

URNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR  
INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

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