

# Site Investigation Report

719 River Street  
Woonsocket, Rhode Island

## City of Woonsocket

Woonsocket, Rhode Island

November 2021



317 Iron Horse Way  
Suite 204  
Providence, RI 02908





FUSS & O'NEILL

November 9, 2021

Ms. Rachel Simpson  
Senior Environmental Scientist  
Office of Land Revitalization & Sustainable Materials Management  
Rhode Island Department of Environmental Management  
235 Promenade Street  
Providence, RI 02908

RE: Site Investigation Report  
Plat 8 Lots 5, 35, 37 and 58  
719 River Street, Woonsocket, Rhode Island

Dear Ms. Simpson:

The purpose of this letter is to provide you with the attached *Site Investigation Report* for the above-referenced site. Fuss & O'Neill, Inc. (Fuss & O'Neill) prepared this report on behalf of the City of Woonsocket (City) under the City's Brownfields Assessment Program funded by the United States Environmental Protection Agency (USEPA). Please contact the undersigned if you have any questions or require additional information regarding this report, or the project in general.

Sincerely,

317 Iron Horse Way  
Suite 204  
Providence, RI  
02908  
t 401.861.3070  
800.286.2469  
f 401.861.3076

Patrick J. Dowling, CPG  
Associate | Department Manager

/rlz

Attachments: Site Investigation Report Checklist  
Site Investigation Report

[www.fando.com](http://www.fando.com)

California  
Connecticut  
Maine  
Massachusetts  
New Hampshire  
Rhode Island  
Vermont

C: Mr. Kevin Proft, City of Woonsocket





# Section 1.20 of the "Remediation Regulations" Site Investigation Report (SIR) Checklist

(The following information shall be completed and submitted with the SIR)

Contact Name: **City of Woonsocket**  
Contact Address: **169 Main Street, Woonsocket, RI 02895**  
Contact Telephone: **401-762-6400**

Site Name: **719 River Street**  
Site Address: **719 River Street, Woonsocket, Rhode Island 02895**

## OFFICE USE ONLY

SITE INVESTIGATION REPORT (SIR) SITE:  
PROJECT CODE:  
SIR SUBMITTAL DATE:  
CHECKLIST SUBMITTAL DATE:

**DIRECTIONS:** *The box to the left of each item listed below is for the administrative review of the SIR submission and is for **RIDEM USE ONLY**. Under each item listed below, cross-reference the specific sections and pages in the SIR that provide detailed information that addresses each stated requirement. Failure to include cross-references may delay review and approval. If an item is not applicable, simply state that it is not applicable and provide an explanation in the SIR.*

- 1.8.3(A)(1) List specific objectives of the SIR related to characterization of the Release, impacts of the Release and remedy.

**Section 1.1 lists the specific objectives of the SIR.**

- 1.8.3(A)(2) Include information reported in the Notification of Release. A copy of the Release notification form should be included in the SIR. Include information relating to short-term response, if applicable.

**A Release Notification Form is included in Appendix F.**

- 1.8.3(A)(3) Include documentation of any past incidents or Releases.

**This information is provided in Section 2.6.**

- 1.8.3(A)(4) Include list of prior property Owners and Operators, as well as sequencing of property transfers and time periods of occupancy. **Available ownership and historical operations information is provided in Section 2.1 and Appendix A.**

- 1.8.3(A)(5) Include previously existing environmental information which characterizes the Contaminated-Site and all information that led to the discovery of the Contaminated-Site.

**This information is provided in Section 2.6.**

- 1.8.3(A)(6) Include current uses and zoning of the Contaminated-Site, including brief statements of operations, processes employed, waste generated, Hazardous Materials handled, and any residential activities on the site, if applicable. (This section should be linked to the specific objectives section demonstrating how the compounds of concern in the investigation are

those that are used or may have been used on the site or are those that may have impacted the site from an off-site source.)

**Background information is summarized in Section 2.1. The objectives of the Site Investigation are included in Section 1.1** +

- 1.8.3(A)(7) Include a locus map showing the location of the site using US Geological Survey 7.5-min quadrangle map or a copy of a section of that USGS map.

**Refer to Figure 1 for a Site location map**

- 1.8.3(A)(8) Include a site plan, to scale, showing:

- Buildings
- Activities
- Structures
- North Arrow
- Wells
- UIC Systems, septic tanks, UST, piping and other underground structures
- Outdoor Hazardous Materials storage and handling areas
- Extent of paved areas
- Location of environmental samples previously taken with analytical results
- Waste management and disposal areas
- Property Lines

**Refer to Figure 2 for a Site Plan**

- 1.8.3(A)(9) Include a general characterization of the property surrounding the area including, but not limited to:
- Location and distance to any surface water bodies within 500 ft of the site.
  - Location and distance to any Environmentally Sensitive Areas within 500 ft of the site.
  - Actual sources of potable water for all properties immediately abutting the site.
  - Location and distance to all public water supplies, which have been active within the previous 2 years and within one mile of the site.

Determination as to whether the Release impacts any off-site area utilized for residential or industrial/commercial property or both.

Determination of the underlying groundwater classification and if the classification is GB, the distance to the nearest GA area.

**This information is provided in Section 2.**

1.8.3(A)(10) Include classifications of surface and ground water at and surrounding the site that could be impacted by a Release.

**This information is provided in Sections 2.3 and 2.4.**

1.8.3(A)(11) Include a description of the contamination from the Release, including:

Free liquids on the surface

LNAPL and DNAPL

Concentrations of Hazardous Substances which can be shown to present an actual or potential threat to human health and any concentrations in excess of any of the remedial objectives (reference Section 1.13)

Impact to Environmentally Sensitive Areas

Contamination of man-made structures

Odors or stained soil

Stressed vegetation

Presence of excavated or stockpiled material and an estimate of its total volume

Environmental sampling locations, procedures and copies of the results of any analytical testing at the site

List of Hazardous Substances at the site

Discuss if the contamination falls outside of the jurisdiction of the Remediation Regulations, including but not limited to USTs, UICs, and wetlands.

**A description of the contamination of the on-site releases is described in Section 4 and Section 6.**

1.8.3(A)(12) Include the concentration gradients of Hazardous Substances throughout the site for each media impacted by the Release.

**Concentrations of hazardous substances in environmental media sampled during Site Investigation activities are discussed in Section 4 and presented in Tables 4 and 6.**

- 1.8.3(A)(13) Include the methodology and results of any investigation conducted to determine background concentrations of Hazardous Substances identified at the Contaminated-Site (see Section 1.13).

**No investigation was conducted to determine background concentrations of compounds in soil.**

- 1.8.3(A)(14) Include a listing and evaluation of the site specific hydrogeological properties which could influence the migration of Hazardous Substances throughout and away from the site, including but not limited to, where appropriate:

- Depth to GW
- Presence and effects of both the natural and man-made barriers to and conduits for contaminant migration
- Characterization of bedrock
- Groundwater contours, flow rates and gradients throughout the site

**This information is included in Sections 2.2, 2.3, 4.2, 6.2., Tables 3 &5 and Figure 3.**

- 1.8.3(A)(15) Include a characterization of the topography, surface water and run-off flow patterns, including the flooding potential, of the site.

**Topography, surface water, and flooding potential at and near the site are discussed in Sections 2.2 and 2.4 and shown on Figure 2.**

- 1.8.3(A)(16) Include the potential for Hazardous Substances from the site to volatilize and any and all potential impacts of the volatilization to structures within the site.

**Volatilization potential of hazardous substances in environmental media is discussed in Section 6.1 and 6.2.**

- 1.8.3(A)(17) Include the potential for entrainment of Hazardous Substances from the site by wind or erosion actions.

**This information is discussed in Section 6.1.**

- 1.8.3(A)(18) Include detailed protocols for all fate and transport models used in the Site Investigation.

**Fate and transport models were not prepared as part of this investigation.**

- 1.8.3(A)(19) Include a complete list of all samples taken, the location of all samples, parameters tested for and analytical methods used during the Site Investigation. (Be sure to include the samples locations and analytical results on a site figure). **Sample collection is discussed in Section 3 and the locations of all samples collected are depicted on Figure 2. The requested laboratory analyses are included in Tables 1-4 and 6-7.**

- 1.8.3(A)(20) Include construction plans and development procedures for all monitoring wells. Well construction shall be consistent with the requirements of the Groundwater Quality Rules. **Construction, installation, and development of wells by Fuss & O'Neill are discussed in Section 3.2.4. The soil boring logs, and well completion reports are provided in Appendix B.**

- 1.8.3(A)(21) Include procedures for the handling, storage and disposal of wastes derived from and during the investigation.

**No wastes were derived during the investigation. Soil cuttings and purge water generated during sampling were retained on-site.**

- 1.8.3(A)(22) Include a quality assurance and quality control evaluation summary report for sample handling and analytical procedures, including, but not limited to, chain-of-custody procedures and sample preservation techniques. **A discussion of sampling techniques is included in Section 3. A discussion of data validation and usability is included in Section 5. Laboratory quality assurance information is provided in Appendix C, D & E.**
- 1.8.3(A)(23) Include any other site-specific factor, that the Director believes, is necessary to make an accurate decision as to the appropriate Remedial Action to be taken at the site.

**No additional information has been requested at this time.**

- 1.8.4 Include Remedial Alternatives. The Site Investigation Report shall contain a minimum of **TWO (2)** remedial alternatives other than no action/natural attenuation alternative, unless this requirement is waived by the Department. It should be clear which of these alternatives is most preferable. All alternatives shall be supported by relevant data contained in the Site Investigation Report and consistent with the current and reasonably foreseeable land usage, and documentation of the following:

- Compliance with Section 1.9 (RISK MANGEMENT);
- Technical feasibility of the preferred remedial alternative;
- Compliance with federal, state and local laws or other public concerns; and
- The ability of the Performing Party to perform the preferred remedial alternative.

**A discussion of remedial alternatives is included in Section 8.**

- 1.8.5 **Certification Requirements:** The Site Investigation Report and all associated progress reports shall include the following statements signed by an authorized representative of the party specified:

A statement signed by an authorized representative of the Person who prepared the Site Investigation Report certifying the completeness and accuracy of the information contained in that report to the best of their knowledge; and

A statement signed by the Performing Party responsible for the submittal of the Site Investigation Report certifying that the report is a complete and accurate representation of the site and the Release and contains all known facts surrounding the Release to the best of their knowledge.

**The applicable certification requirements are included in Section 9.**

- 1.8.6 **Progress Reports:** If the Site Investigation is not complete, include a schedule for the submission of periodic progress reports on the status of the investigation and interim reports on any milestones achieved in the project.

**The Site Investigation is complete.**

- Public Involvement and Notice:** Be prepared to implement public notice requirements per Sections 1.8.7 and 1.8.9 of the Remediation Regulations when the Department deems the Site Investigation Report to be complete.

Indicate if the site falls within an Environmental Justice (EJ) area and, if applicable, include all EJ public notice documentation issued, and the list of recipients.

**Public notice will be conducted when the Site Investigation is deemed complete by RIDEM.**



# Table of Contents

## Site Investigation Report 719 River Street City of Woonsocket, RI

<b>1</b>	<b>Introduction .....</b>	<b>1</b>
1.1	Objectives .....	1
<b>2</b>	<b>Background .....</b>	<b>1</b>
2.1	Site Description, History, and Foreseeable Future Use .....	1
2.1.1	Foreseeable Future Use.....	2
2.1.2	Environmental Justice Focus Area .....	2
2.2	Geographic and Physiographic Setting.....	2
2.3	Groundwater.....	2
2.4	Surface Water.....	3
2.5	Potential Receptors .....	3
2.6	Previous Environmental Investigations .....	4
2.6.1	October 2019 Phase I ESA .....	4
2.7	Surrounding Land Use .....	4
2.8	Compounds of Concern .....	5
<b>3</b>	<b>Site Investigation .....</b>	<b>5</b>
3.1	Site Investigation Field Activities .....	5
3.1.3	Monitoring Well Installation and Development.....	9
3.1.4	Groundwater Sampling.....	9
3.1.5	Hazardous Building Materials Assessment.....	10
<b>4</b>	<b>Investigation Results.....</b>	<b>10</b>
4.1	Outdoor Soil Sampling Characterization and Analytical Results .....	10
4.2	Groundwater Analytical Results.....	11
4.3	Hazardous Building Materials .....	12
<b>5</b>	<b>Data Verification and Usability .....</b>	<b>12</b>
5.1	Data Verification and Usability.....	12
5.2	Applicable Regulatory Criteria.....	13
<b>6</b>	<b>Data Analysis and Risk Characterization .....</b>	<b>14</b>
6.1	Soil Data Analysis.....	14
6.2	Groundwater Data Analysis.....	17
<b>7</b>	<b>Conceptual Site Model and Conclusions .....</b>	<b>17</b>

# Table of Contents

Site Investigation Report  
 719 River Street  
 City of Woonsocket, RI

---

<b>8</b>	<b>Remedial Alternatives Evaluation .....</b>	<b>18</b>
8.1	Factors Affecting Remedial Alternatives.....	18
8.2	Remedial Alternative #1: Monitored Natural Attenuation.....	19
8.3	Remedial Alternative #2: Soil Excavation and Off-site Disposal .....	19
8.3.1	Risk Management.....	19
8.3.2	Technical Feasibility .....	20
8.3.3	Compliance with Other Laws or Other Public Concerns.....	20
8.3.4	Financial Feasibility.....	20
8.4	Remedial Alternative #3: Targeted Soil Excavation, Site-Wide Capping, UST Abandonment, and Institutional Controls.....	21
8.4.1	Risk Management.....	23
8.4.2	Technical Feasibility .....	23
8.4.3	Compliance with Other Laws or Other Public Concerns.....	23
8.4.4	Financial Feasibility.....	23
8.5	Preferred Remedial Alternative .....	23
<b>9</b>	<b>Certifications.....</b>	<b>25</b>
<b>10</b>	<b>References.....</b>	<b>26</b>
<b>11</b>	<b>Limitations of Work Product.....</b>	<b>27</b>



# Table of Contents

## Site Investigation Report 719 River Street City of Woonsocket, RI

---

<b>Tables</b>	<b>Following Page</b>
1 Summary of Soil Sampling Activities	8
3 Summary of Monitoring Well and Groundwater Sampling Activities	10
4 Summary of Soil Analytical Data and Objectives	End of Report
5 Summary of Groundwater Elevation Data	End of Report
6 Summary of Groundwater Analytical Data and Objectives	End of Report
7 Summary of Soil Samples with Applicable Regulatory Exceedances	15

<b>Figures</b>	<b>End of Report</b>
1 Site Location Map	
2 Site Plan	
3 Groundwater Contour Map	

<b>Appendices</b>	<b>End of Report</b>
A City of Woonsocket Files	
B Hazardous Building Materials Report	
C Soil Boring Logs and Monitoring Well Completion	
D Soil Laboratory Analytical Reports	
E Groundwater Laboratory Analytical Reports	
F Hazardous Material Release Notification Form	



# 1 Introduction

---

## 1.1 Objectives

The City of Woonsocket (City) retained Fuss & O'Neill, Inc. (Fuss & O'Neill) to conduct a Site Investigation at 719 River Street in the City of Woonsocket, Rhode Island, Providence County (the Site). The overall purpose of the Site Investigation Report (SIR) documented herein was to compile environmental information regarding the Site through research, inspections, and field work. More specifically, the goal of the SIR was to evaluate for the absence or presence of contaminants in environmental media at the Site to fulfill requirements of *Section 1.8* of the Rhode Island Department of Environmental Management (RIDEM) *Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (Remediation Regulations; 250-RICR-140-30-1)*.

The Site Investigation documented herein was conducted under the City's Community Wide Brownfields Assessment Program, which is a grant-funded program by the United States Environmental Protection Agency (USEPA).

## 2 Background

---

### 2.1 Site Description, History, and Foreseeable Future Use

The "Site" or "subject site", defined herein as 719 River Street, consists of a 5.021-acre assemblage of parcels located at Assessor's Plat 8, Lots 5, 35, 37 and 58, Woonsocket, Rhode Island. Lot 37 is improved with a two-story, approximately 88,059 square-foot mill building (Building 1) constructed in 1900. Lot 5 is improved with a one-story, approximately 3,025 square-foot industrial building (Building 2) constructed in 1900. Lots 58 and 35 are undeveloped and consist of vegetation and paved areas. Copies of the property description cards available at the City Tax Assessor's office are attached as *Appendix A*. A map consisting of a portion of a United States Geological Survey (USGS) topographic map showing the Site location is provided as *Figure 1*, and a Site plan is provided as *Figure 2*.

The property has been abandoned by the last owner of record, which according to City records, has been Dorado Properties LLC since 1995. However, in 2017, the City of Woonsocket, as the primary creditor of the property, petitioned the RI Superior Court to appoint a Special Master for the site. Since 2017, the Special Master working in conjunction with the City have legally taken control of the property, and have been proceeding with the resolution of outstanding legal and physical issues at the site, with a goal of clean up and beneficial reuse.

Historically, the Site has been occupied by several textile mills, an auto repair facility, and a trucking company. Lot 58 was developed with residential buildings until approximately 1981. Sanborn maps, reviewed as part of an October 2019 *Phase I Environmental Site Assessment (ESA)* prepared by BETA, indicated an auto repair facility with a 150-gallon buried tank was located in the southeast portion of the Site and several additional USTs were formerly on the Site. Based on historical aerial

photographs, several buildings at the Site have been razed, the Blackstone River was re-routed, and Lot 35 was filled in between 1919 and 1943 and between 1954 and 1964.

According to the October 2019 *Phase I ESA*, the buildings are served by municipal water and sewer and are not currently heated. Historically, the Building 2 was heated by coal or wood and Building 1 was heated by natural gas.

### 2.1.1 Foreseeable Future Use

We understand that the City intendeds to raze the existing buildings and initiate remediation activities, pending the acquisition of suitable grant funding, so that the Site can be redeveloped and returned to productive use. The City plans to use the development of the Site as a catalyst to help modernize and increase the aesthetic value of the River Street corridor, which is a linear strip of industrial factories, mills, and auto repairs facilities along the Blackstone River.

### 2.1.2 Environmental Justice Focus Area

According to RIDEM Environmental Resource mapping, the subject site is not located within an *Environmental Justice Focus Area*.

---

## 2.2 Geographic and Physiographic Setting

The topography of the Site is generally flat with a slight slope to the east towards the Blackstone River. The regional topography gradually slopes down to the north and east towards the Blackstone River (USGS, 2018).

Surficial material at the Site was mapped as Udorthents-Urban Land Complex, which is described as human transported material (USDA, 2010).

Bedrock beneath the Site is mapped as Esmond-Dedham sub terrane formation which consists of conglomerate, sandstone, and shale. (Hermes, et al, 1994). Bedrock outcrops were not observed at the Site during soil boring investigations conducted at the Site in June 2021 by Fuss & O'Neill.

---

## 2.3 Groundwater

The groundwater beneath the Site was classified by RIDEM as GB (RIDEM, 2019). GB groundwater is designated to not be suitable for public or private drinking water use. GB groundwater areas are typically located beneath highly urbanized areas, permanent waste disposal areas and the area immediately surrounding the permanent waste disposal areas (RIDEM, 2018). According to RIDEM environmental resource mapping, the nearest GA groundwater is located approximately 0.20 miles west of the Site.

Based on USGS mapping, field observations, and groundwater gauging, the groundwater flow direction was calculated to flow to the east towards the Blackstone River, as further discussed in *Section 4.2*.

Groundwater depths in five monitoring wells gauged by Fuss & O'Neill during the July and September 2021 Site Investigation ranged from approximately 8 to 16 feet below grade (fbg).

The Groundwater Classification & Wellhead Protection Area Map of the Woonsocket, RI quadrangle, available from RIDEM, showed no wellhead protection areas (WHPAs) within a one-half mile radius of the subject site.

---

## 2.4 Surface Water

The nearest surface water body, the Blackstone River, is located adjacent to the western boundary of the Site (USGS, 2018). The Blackstone River was classified by RIDEM as Class B1 (RIDEM, 2010c). Class B1 waters are designated for primary and secondary contact recreational activities and fish and wildlife habitat. They should be suitable for compatible industrial processes and cooling, hydropower, aquacultural uses, navigation, and irrigation and other agricultural uses. These waters should have good aesthetic value. Primary contact recreational activities may be impacted due to pathogens from approved wastewater discharges. However, all Class B criteria must be met.

Additionally, the Blackstone River was identified in the State of Rhode Island 2018-2020 303(d) List of Impaired Waters (RIDEM, 2021) as having been impacted due to cadmium, iron, lead, non-native aquatic plants, dissolved oxygen, total phosphorous, mercury and polychlorinated biphenyls (PCB) in fish tissue, enterococcus and fecal coliform.

Based on the RIDEM Environmental Resource Map, a marsh/wet meadow emergent wetland is located within Lots 5 and 35. Note that Fuss & O'Neill did not independently determine wetland boundaries or the presence of wetlands as part of this assessment.

Based on the Federal Emergency Management Agency (FEMA) Flood Map 44007C0069G, the eastern portion of the Site is located within a Special Flood Hazard Area defined as being within the 100-year flood plain. The western, eastern and southern portions of the Site are located within the 500-year flood plain.

---

## 2.5 Potential Receptors

The activities conducted by individuals working at, visiting, or trespassing at the Site should be evaluated under current and foreseeable Site uses to determine whether compounds present in environmental media at the Site pose a risk to those individuals. Additionally, construction workers associated with redevelopment and future Site users should be considered potential receptors. Furthermore, the adjacent Blackstone River as further described in *Section 2.4*, should also be considered potential receptor.

---

## 2.6 Previous Environmental Investigations

### 2.6.1 October 2019 Phase I ESA

A *Phase I ESA* was conducted for the Site in October 2019 by BETA as part of a Target Brownfield Assessment funded by RIDEM. The *Phase I ESA* identified the following Recognized Environmental Conditions (RECs) associated with the Site:

- **REC #1: Historic Use:** The Site was historically used by textile mills, an auto repair facility, and a trucking operation. The database search listed one of the former textile mills as a generator of hazardous waste.
- **REC #2: Vehicles and Trucks:** BETA observed oil and/or hazardous materials (OHM) staining near and under many of the vehicles and trucks in the northern, western, and central portions of the Site. The vehicles and trucks were located on paved and unpaved areas.
- **REC #3: Underground Storage Tanks (USTs):** Historic records reviewed as part of the Phase I ESA identified at least two USTs and potentially an additional five USTs that exist at the Site.
- **REC #4: Solid Waste/Debris/Fill:** Solid waste and debris was observed at the Site during the Phase I ESA, along with evidence of fill.

In addition to these RECs, BETA identified the potential for the site buildings and solid waste to contain hazardous building materials including potential Asbestos Containing Materials (ACM), lead paint, and mercury/polychlorinated biphenyls (PCB) containing electrical components.

---

## 2.7 Surrounding Land Use

According to the October 2019 *Phase I ESA*, Sanborn maps indicated the area was mostly developed for industrial use prior to 1900. According to the 1892 Sanborn, the property located across River Street was occupied by Woonsocket Worsted Company, a textile company. By 1898, Glenark Knitting Company occupied the property southwest of the Site. By 1911, both properties across River Street were owned by the Woonsocket Worsted Company. By 1955, the property was owned by Royal Robes Inc., a robe manufacturer. The surrounding northern and northeastern areas were established residential neighborhoods by 1939.

Interstate Towing Corporation, located to the north of the Site, uses the northern portion of the Site for storage of vehicles. According to the October 2019 *Phase I ESA*, Global Truck & Auto Repair uses the western and central portion of the Site for the storage of trucks.

---

## 2.8 Compounds of Concern

Based upon the known historical uses of the Site and the results of the previous investigations discussed in *Section 2.6*, the following potential compounds of concern were identified for the *SIR*.

### Soil:

- Volatile Organic Compounds (VOC) via USEPA Method 8260, including preservation by Method 5035
- Polycyclic aromatic hydrocarbons (PAH) by USEPA Method 8270
- Priority Pollutant 13 Metals (PP13) by USEPA Methods 6010/7471
- Toxicity Characteristic Leaching Procedure (TCLP) metals via USEPA Method 1311 for each of the individual metals that may exceed hazardous waste thresholds
- TPH via USEPA Method 8100/8015
- PCBs via USEPA Method 8082

### Groundwater:

- VOC via USEPA Method 8260

---

## 3 Site Investigation

---

### 3.1 Site Investigation Field Activities

Based on the findings of the October 2019 *Phase I ESA*, Fuss & O'Neill was retained by the City to implement a Phase II ESA/Site Investigation scope of work to support completion of a *SIR* in accordance with the RIDEM *Remediation Regulations* and evaluate the general environmental quality of the Site.

This work was performed under the City's USEPA-funded Woonsocket Brownfields Assessment Program. As such, Site Investigation activities were proposed in a *Site-Specific Quality Assurance Project Plan Addendum (Site-Specific QAPP Addendum)* prepared by Fuss & O'Neill in December 2020 and approved by USEPA on December 11, 2020, and RIDEM on December 14, 2020.

Fuss & O'Neill implemented Site Investigation activities in June, July, and September 2021. Data was collected at select locations proximal to RECs identified at the subject site during the October 2019 *Phase I ESA* prepared by BETA Group, Inc. Investigation activities are summarized below in the following sections.

#### 3.1.1 Ground Penetrating Radar (GPR)

On June 23, 2021, Ground Penetration Radar Systems (GPRS) LLC, conducted a ground-penetrating radar (GPR) survey at the Site. The objective of the GPR survey was to determine if a USTs were present on-Site and to further assess utilities. Additionally, the areas surrounding sixteen proposed boring locations were scanned to investigate the potential for unknown subsurface utilities or anomalies.

Based on the survey results, there was evidence of five potential USTs located throughout the Site. For the most part, the actual volume of the USTs is unknown. However, approximate volumes of the USTs were estimated based on the approximate dimensions of the subsurface anomalies identified at each location by the GPR survey. The results of the GPR survey are summarized below:

- **Two potential USTs located north of Building 1:** Evidence of an approximately 20,000- to 30,000-gallon UST and an approximately 10,000- to 12,000-gallon UST was observed north of Building 1. In addition, fill ports, vent pipes, and an access hatch were observed within the boundary of the anomalies.
- **Potential UST located south of Building 1:** Evidence of an approximately 150- to 300-gallon UST was observed south of Building 1 in the vicinity of a former auto repair facility. According to the 1950 to 1970 Sanborn mapping, a 150-gallon tank was identified at this location.
- **Potential UST located north of Building 2:** Evidence of an approximately 1,000- to 1,500-gallon UST was observed north of Building 2. According to the 1950 to 1970 Sanborn mapping, a gasoline tank was identified north of Building 2.
- **Potential UST located on Lot 5:** Evidence of an approximately 4,000- to 5,000-gallon UST was located in the southern portion of Lot 5 within a concrete foundation. Based on historic aerials and Sanborn mapping, the UST was located within a former auto garage.

### 3.1.2 Outdoor Soil Borings and Soil Sampling

On June 28, 29, and 30, 2021, Fuss & O'Neill performed a subsurface soil sampling and characterization program. The investigation consisted of seventeen (17) direct-push (i.e. Geoprobe®) soil borings identified as SB-1, MW-2, SB-3, SB-4, SB-5, MW-6, SB-7, MW-8, MW-9, SB-10, SB-11, SB-12, SB-13, MW-14, MW-15, SB-16, and SB-17 were advanced to a maximum depth of approximately 20 fbg by GeoLogic Earth Exploration, Inc. (GeoLogic). Soil boring locations were selected based on the results of the previous investigations discussed in *Section 2.6* and are depicted on *Figure 2*.

During the June 2021 drilling event, evidence of subsurface petroleum was observed in the soil boring located in the vicinity of the two USTs north of Building 1. Based on the identification of a potential petroleum release, Fuss & O'Neill performed an additional subsurface soil characterization program on September 9, 2021 to further delineate the release. The September 2021 investigation consisted of ten direct-push soil borings, identified as SB-18, SB-19, SB-20, SB-21, SB-22, SB-23, SB-24, SB-25, SB-26, and SB-27. Additional soil boring locations are depicted on *Figure 2*.

Soil was continuously recovered in five-foot dedicated Macro Core MC5 Liners, and logs documenting soil conditions were recorded by Fuss & O'Neill personnel. The recovered soil at each boring was characterized for texture, color, grain type, and moisture and was field screened for VOC using a Phocheck Tiger ® photoionization detector (PID). The PID was calibrated prior to use with 100 parts per million by volume isobutylene calibration gas.



Twenty-six primary soil samples plus two duplicate quality control samples were collected from the soil borings for laboratory analysis during the June 2021 soil boring mobilization. The soil samples were submitted to Con-Test Analytical Laboratory (Con-Test) of East Longmeadow, Massachusetts. A summary of soil sampling activities, including the requested analyses, is included in *Table 1* below. No additional soil samples were collected for laboratory analysis during the soil boring remobilization in September, 2021.

**Table 1**  
**Summary of Outdoor Soil Sampling Activities**

Location	Date	Boring Depth (fbg)	Sample Depth (fbg)	Sample Number	Analyses
SB-1	6/28/2021	20	0.0-2.0	0628-01	VOC, PAH, PP-13 Metals, TPH, PCBs
MW-2		15	0.0-2.0	0628-02	
SB-3		20	0.0-2.0	0628-03	
			5.0-7.0	0628-04	
SB-4		20	0.0-2.0	0628-05	
			8.0-10	0628-06	VOC, PAH, PP-13 Metals, TPH, PCBs, TCLP Lead
SB-5		20	0.0-2.0	0628-07	VOC, PAH, PP-13 Metals, TPH, PCBs
			10-12	0628-08	
MW-6		20	0.0-2.0	0628-09	VOC, PAH, PP-13 Metals, TPH, PCBs, TCLP Lead
SB-7		20	0.0-2.0	0628-10	VOC, PAH, PP-13 Metals, TPH, PCBs
	8.0-10		0628-11		
	8.0-10*		0628-12		
MW-8	6/29/2021	20	0.0-2.0	0629-14	VOC, PAH, PP-13 Metals, TPH, PCBs, TCLP Lead, TCLP Cadmium
MW-9		20	0.0-2.0	0629-15	VOC, PAH, PP-13 Metals, TPH, PCBs
SB-10		20	0.0-2.0	0629-16	
			0.0-2.0	0629-17	
SB-11		20	5.0-7.0	0629-18	
			0.0-2.0	0629-19	
SB-12		20	12-14	0629-20	
SB-13	20	0.0-2.0	0629-21		
MW-14	6/30/2021	20	0.0-2.0	0630-23	VOC, PAH, PP-13 Metals, TPH, PCBs
			10-12	0630-24	
MW-15		20	0.0-2.0	0630-25	
			8.0-10	0630-26	
SB-16		20	0.0-3.0	0630-27	
			0.0-3.0*	0630-28	

**Notes:** Sample ID - Only the last six digits of the sample identification number are listed

\*: Duplicate Sample

### 3.1.3 Monitoring Well Installation and Development

During the June 2021 drilling event, six two-inch diameter polyvinyl chloride (PVC) groundwater monitoring wells were installed by GeoLogic at soil borings MW-2, MW-6, MW-8, MW-9, MW-14, and MW-15.

On July 8, 2021, the monitoring wells were developed by Fuss & O'Neill personnel by vigorously agitating the water in the well to mobilize and remove fine particulate materials (i.e. silt, clay, and organic material) from the well and surrounding sand filter. A peristaltic pump was then used to purge approximately two to three well-volumes of groundwater and sediment from the well. The objective of the development process was to improve the hydraulic connection between the monitoring well and the surrounding aquifer.

Monitoring well MW-2, which had been installed to a depth of 20 feet below grade after observing inferred saturated soil at a depth of approximately 12 feet below grade during soil boring advancement, was observed to be dry on July 8, 2021, and therefore was not developed. On September 9, 2021, groundwater was gauged at monitoring well MW-2 at approximately 8 feet below grade and therefore was developed at that time.

Non-aqueous phase liquid (NAPL) was observed at approximately 15.80 feet below grade in monitoring well MW-8 and therefore, that well was not developed.

### 3.1.4 Groundwater Sampling

On July 15, 2021, Fuss & O'Neill personnel mobilized to the Site and collected groundwater samples from the newly installed monitoring wells using industry-standard low-flow methods. The sampling procedure consisted of slowly purging groundwater from each well using a peristaltic pump, until physical and chemical groundwater parameters (temperature, pH, dissolved oxygen, specific conductivity, and oxidation-reduction potential) stabilized. Four groundwater samples plus one duplicate quality control sample were submitted to Con-Test for analysis of VOC. One trip blank was also analyzed for VOC for quality control purposes.

Monitoring well MW-2, which had been installed to a depth of 20 feet below grade after observing saturated soil at a depth of approximately 8 feet below grade during soil boring advancement, was observed to be dry on July 8, 2021, and therefore not sampled. On September 9, 2021, groundwater was gauged at monitoring well MW-2 at approximately 8 feet below grade and was therefore sampled for VOC, at that time.

During the July 2021 groundwater monitoring event, Fuss & O'Neill personnel measured approximately 4.5 feet of NAPL, consistent in appearance with No. 6 fuel oil, in monitoring well MW-8. Monitoring well MW-8 is located downgradient of the two potential USTs located north of Building 1. Due to the observed NAPL, groundwater from monitoring well MW-8 was not sampled.

A summary of the monitoring well and groundwater sampling activities is included in *Table 3* below:

**Table 3**  
**Summary of Monitoring Well and Groundwater Sampling Activities**

Location	Screened Interval (fbg)	Date Sampled	Sample Number	Analysis	Depth to Groundwater (fbg) <sup>[1]</sup>
MW-2	5-15	9/9/2021	0909-02	VOC	8.25
MW-6	10-20	7/15/2021	0715-02		14.67
			0715-03*		14.95
MW-9	10-20		0715-04		14.60
MW-15	10-20		0715-05		15.68
MW-14	10-20		0715-06		

**Notes:** Sample ID: Only the last six digits of the sample identification number are listed.

[1]: Measured from the top of steel (TPS) well casing

\*: Duplicate Sample

### 3.1.5 Hazardous Building Materials Assessment

On January 13 and 14, 2021, Fuss & O'Neill personnel conducted a hazardous building materials assessment which included an asbestos inspection, a lead-based paint screening and a fluorescent light ballast and mercury-containing equipment inventory. The results of this investigation are outside of the jurisdiction of the RIDEM Remediation Regulations and the Office of Land Revitalization and Sustainable Materials Management. However, a copy of the resulting February 2021 *Hazardous Building Materials Assessment Report* is included as *Appendix B*, for reference.

## 4 Investigation Results

### 4.1 Outdoor Soil Sampling Characterization and Analytical Results

During the July and September 2021 drilling events, soil throughout the subject site was observed to consist of up to 15 feet of fill over fine to coarse sand. The fill material generally consisted of sand and included evidence of brick, coal, and ash. Deeper soil generally consisted of fine- to coarse-sand with silt and gravel. Refusal was encountered at approximately 23.5 fbg in SB-23 and 24.5 fbg in SB-20. Refusal was not encountered at any other soil boring. Soil boring logs and monitoring well completion reports from the July and September 2021 drilling events are included as *Appendix C*.

Black staining, odors, and evidence of petroleum were identified at soil borings SB-5, SB-7, MW-8, SB-17, SB-18, SB-20, SB-23, SB-25, and SB-27 from approximately 10 to 20 fbg. Soil borings identified to contain evidence of petroleum were located north of Building 1, proximal to the location of the two USTs.

Field screening with the PID indicated total VOC concentrations ranging between 0.0 and 145 ppmv. The highest readings were observed at soil borings identified to contain evidence of petroleum.

With the exception of the observed fill material and identified area of subsurface petroleum, no staining, odors, or other evidence of a release of oil and/or hazardous materials was observed in any of the other soil borings.

Laboratory analytical results for the soil samples collected from the Site are summarized in the attached *Table 4*, and copies of the full laboratory analytical reports are included in *Appendix D*. Generally, the laboratory results indicated the following:

- Several VOC were detected at levels above the laboratory reporting limits in three of the twenty-six soil samples.
- Several PAH were detected at levels above the laboratory reporting limits in twenty-one soil samples.
- Metals were detected at levels above the laboratory reporting limits in all the twenty-six soil samples.
- TPH were detected at levels above the laboratory reporting limits in all but one of the twenty-six soil samples.

---

## 4.2 Groundwater Analytical Results

Groundwater elevations were gauged on July 8, 2021, prior to the commencement of groundwater development at the Site. The depth to groundwater was measured throughout the Site at depths of approximately seven to eleven fbg. To determine the relative gradient of groundwater flow beneath the site, groundwater elevations were measured relative to a task-specific benchmark with an assumed elevation of 100 feet above mean sea level. These measurements are included in *Table 4*. Groundwater equipotential contours generated from field data collected on July 8, 2021, are depicted on *Figure 3*, which indicate the direction of groundwater flow at the Site to the east, toward the Blackstone River.

One groundwater sample was collected from monitoring wells MW-2, MW-6, MW-9, MW-14, and MW-15, and one duplicate quality control sample was collected from monitoring well MW-6. The groundwater samples were submitted to Con-Test for analysis of VOC.

Groundwater sampling results are summarized in *Table 5*, and the Con-Test analytical data reports are included in *Appendix E*. No VOC were detected at levels above the laboratory reporting limit in the groundwater samples.

---

## 4.3 Hazardous Building Materials

A summary of the hazardous building materials analytical data is included in the February 2021 *Hazardous Building Materials Assessment Report*, which is provided as *Appendix B*.

---

# 5 Data Verification and Usability

---

## 5.1 Data Verification and Usability

Fuss & O'Neill conducted modified Tier II data verification of the field and analytical data resulting from the assessment documented herein. Modified Tier II verification narratives as well as modified Tier II data validation checklists are attached to each laboratory analytical report in *Appendices D and E*.

Soil and groundwater samples were collected in general conformance with the approved *Generic QAPP, QAPP Addendum (Revision 1.0)*. All soil boring and samples specified in the *QAPP Addendum* were completed.

During the sampling events, 28 primary samples plus quality control samples were collected and submitted for laboratory analysis: 24 primary soil samples plus three trip blank samples and two duplicate sample, and four primary groundwater samples plus one trip blank sample and one duplicate sample. Requested soil and groundwater analytical parameters are included in *Section 2.8* above.

Three trip blanks were submitted for analysis for this investigation during the June 2021 soil sampling investigations, and one trip blank was submitted during the August 2021 groundwater sampling event. All submitted trip blanks were analyzed for VOC. No compounds were detected in the trip blanks at concentrations exceeding the laboratory reporting limits. Dedicated equipment (e.g., VOC core samples, sampling tubing, Geoprobe sleeves, gloved hand, etc.) was used for samples collected at the Site. Therefore, no equipment blanks were collected.

Duplicate analytical results are summarized in the attached data tables and included in *Appendices D and E*. Duplicate samples were collected at a frequency of one duplicate per 20 primary samples per matrix. Two duplicate samples for soil and one duplicate sample for groundwater were collected and submitted for the same analytical parameters as the primary samples.

Calculated relative percent difference (RPDs) of the analytical results for the two primary-duplicate pair of soil samples indicated RPDs generally greater than 30% for the detected analytes, including TPH, PAHs and metals. The primary and duplicate soil samples were collected from within fill material which were documented to contain anthropogenic materials, including coal and brick. Fill materials are typically significant sources of PAH, petroleum, and metals and the elevated RPDs may, therefore, be attributed to the heterogeneity of the fill material.

RPDs were not calculated for groundwater because all reported concentrations were below laboratory reporting limits.

Several non-conformances were documented in the case narrative summaries included in the laboratory analytical reports in *Appendices D* and *E*. In general, the non-conformances reported by Con-Test were not expected to affect the usability of the data because conclusions regarding compliance or non-compliance of the affected samples were with the applicable regulatory criteria were able to be made with no affect from a potential low or high bias.

In summary, the Site Investigation documented herein was conducted in accordance with the *Generic QAPP* and *Site-Specific QAPP Addendum*. The overall analytical data set reported for soil and groundwater samples collected during the assessment activities were usable for the intended purpose of evaluating the environmental condition of the Site and compliance with applicable regulatory criteria.

---

## 5.2 Applicable Regulatory Criteria

Based upon the current and foreseeable use of the Site, the numerical analytical results were compared against the following RIDEM Method 1 criteria as promulgated in the RIDEM *Remediation Regulations*:

### Soil:

- Residential Direct Exposure Criteria (R-DEC)
  - While the Site has historically been utilized for industrial/commercial activities, the R-DEC apply to the Site to evaluate whether a reportable release or regulated concentrations of oil or hazardous materials (OHM), jurisdictional under the RIDEM Remediation Regulations, are present. The R-DEC will apply unless an Environmental Land Usage Restriction limiting the usage of the site to Industrial/Commercial uses is recorded in the land evidence records of Woonsocket.
- Industrial/Commercial Direct Exposure Criteria (I/C-DEC)
  - The Site has historically been utilized for industrial purposes. Therefore, soil concentrations in *Table 4* were also compared to the RIDEM I/C- DEC.
- GB Leachability Criteria (GB-LC)
  - Due to the classification of groundwater at the site as GB, the concentrations of compounds of concern detected in soil samples were compared to the GB-LC.

### Groundwater:

- GB Groundwater Objectives (GB-GO)
  - The groundwater analytical results were compared against the RIDEM Method 1 GB-GO as promulgated in the RIDEM *Remediation Regulations*, which are protective against migration of hazardous substances into indoor air via volatilization.

Laboratory reporting limits of several PAH in the primary and duplicate soil samples collected from soil boring SB-7 and in the soil sample collected from soil boring SB-5 were above the R-DEC and/or the I-C-DEC. The usability of the data was not impacted because petroleum was detected in the soil samples at concentrations above the GB-LC, which constitutes a release. Laboratory reporting limits for the remaining soil and groundwater samples were low enough to allow direct comparison to these criteria.

In general, the non-conformances reported by Con-Test did not affect the usability of the data because conclusions regarding compliance or non-compliance of the affected samples, with respect to applicable regulatory criteria, were able to be made with no discernible impact from a potential low or high bias.

## 6 Data Analysis and Risk Characterization

---

### 6.1 Soil Data Analysis

Laboratory analytical results for the soil samples collected from the Site are summarized in the attached *Table 3*. These results were compared to the applicable regulatory criteria discussed above in *Section 5.2*. Copies of the full laboratory analytical reports are included in *Appendix C*. Exceedances of the applicable RIDEM Method 1 regulatory criteria are summarized in *Table 6* below.



**Table 7**  
**Summary of Soil Samples with Applicable Regulatory Exceedances**

<b>Sample Location</b>	<b>Depth (fbg)</b>	<b>Applicable Regulatory Exceedances</b>
SB-1	0.0-2.0	R-DEC: Various PAH, TPH I/C-DEC: Benzo[a]anthracene, Benzo(a)pyrene, Benzo[b]fluoranthene
SB-4	0.0-2.0	R-DEC: Various PAH I/C-DEC: Benzo[a]pyrene
	8.0-10	R-DEC: Lead
SB-5	0.0-2.0	R-DEC: Benzo[a]pyrene, Chrysene
	10-12	R-DEC: Various PAH, TPH I/C-DEC: Benzo[a]pyrene, TPH GB-LC: TPH
MW-6	0.0-2.0	R-DEC: Lead, Arsenic, Chrysene I/C-DEC: Arsenic
SB-7	0.0-2.0	R-DEC: Various PAH, Arsenic, Lead I/C-DEC: Arsenic, Lead, Benzo[a]pyrene
	8.0-10	R-DEC: Various PAH, TPH I/C-DEC: Benzo[a]pyrene, TPH GB-LC: TPH
	8.0-10	R-DEC: Various PAH, TPH I/C-DEC: Benzo[a]pyrene, TPH GB-LC: TPH
MW-8	0.0-2.0	R-DEC: Lead, Arsenic, Various PAH, TPH I/C-DEC: Arsenic, Benzo[a]pyrene
SB-10	0.0-2.0	R-DEC: Arsenic, TPH I/C-DEC: Arsenic
SB-12	0.0-2.0	R-DEC: Benzo[a]pyrene, Chrysene, Arsenic I/C-DEC: Arsenic
	12-14	I/C-DEC: Arsenic
SB-13	0.0-2.0	R-DEC: Various PAH I/C-DEC: Benzo[a]pyrene
MW-14	0.0-2.0	R-DEC: Various PAH I/C-DEC: Benzo[a]pyrene
	10-12	R-DEC: Benzo[a]pyrene, Chrysene
MW-15	0.0-2.0	R-DEC: Benzo[a]pyrene, Chrysene
	8.0-10	R-DEC: Arsenic I/C-DEC: Arsenic

**Notes:** SB: soil boring; MW: monitoring well; fbg: feet below grade

Based on the exceedances of the regulatory criteria, as indicted in *Table 6*, the following release to soil was identified at the Site:

- **Site-Wide soil containing PAH and metals:** Based on observations during soil boring advancement, urban fill material was observed at locations throughout the Site. Samples of urban fill material containing brick, coal, and ash that were collected throughout the Site contained PAH at concentrations above the R-DEC and I/C-DEC. Arsenic was detected at concentrations above the I/C-DEC in seven soil samples located throughout the Site. Lead was detected above the R-DEC and/or I/C-DEC in the soil samples collected from the fill layers of soil borings SB-4, MW-6 and MW-8 and SB-7, located within the vicinity of the two on-site Buildings. The primary risk posed by these compounds in soil consist of direct exposure via ingestion or inhalation of dust.
- **Soil Containing Petroleum north of Building 1:** Petroleum was detected at concentrations above the GB-LC in the soil samples collected above the groundwater table from soil borings SB-5 and SB-7 located in the vicinity of two potential USTs, north of Building 1. During the June and September 2021 field activities, elevated PID readings and visual/olfactory evidence of a petroleum release were observed in soil borings SB-5, SB-7, MW-8, SB-17, SB-18, SB-20, SB-23, SB-25, and SB-27 from approximately 10 to 20 fbg. The petroleum contaminated soil was identified just above the groundwater table, which was gauged at approximately 12 fbg in each boring. No elevated PID readings or evidence of a petroleum was observed from the ground surface to 10 fbg or in the native soil observed at approximately 18 to 22 fbg. In addition, approximately 4.5 feet of heavy NAPL, consistent in appearance with No. 6 fuel oil, was observed in monitoring well MW-8 during the July 2021 groundwater sampling event. Based on field observations and analytical data, a release of petroleum to soil is believed to have originated from a point source release from a UST(s) located north of Building 1.

**Shallow soil Containing TPH central portion of the Site:** Petroleum was detected above the R-DEC in the soil samples collected from the fill layers of soil borings SB-1, MW-8 and SB-10. During this investigation, several vehicles and trucks were observed to be in poor conditions with staining observed near and under the vehicles. In addition, the northern portion of the Site was historically utilized as parking for a towing and trucking company. The shallow location of the samples and the absence of field evidence of a petroleum release suggests that the TPH in soil may be attributed to the fill material and/or isolated surficial petroleum releases current and historical vehicle storage operations.

The Site is proposed to be redeveloped, potentially including a mix of potential uses. Therefore, the potential for entrainment of hazardous substances from the Site by wind or erosion after redevelopment is not considered to be significant. However, direct exposure to site soil prior to, during, or subsequent to redevelopment activities requires management.

The presence of metals, PAH, and petroleum in soil at concentrations greater than the R-DEC, I/C-DEC and/or GB-LC constitute a reportable condition under the RIDEM *Remediation Regulations*. Therefore, a *Hazardous Material Release Notification Form* was prepared and is included in *Appendix F*. Remedial alternatives were developed for the Site as part of this *SIR* and are included below in *Section 8*.

## 6.2 Groundwater Data Analysis

Laboratory analytical results for the groundwater samples collected from the Site are summarized in the attached *Table 5*, and a copy of the full laboratory analytical report is included in *Appendix E*.

VOC groundwater analytical results were compared against the RIDEM Method 1 GB-GO as promulgated in the RIDEM *Remediation Regulations*, which are protective against migration of hazardous substances into indoor air via volatilization. No VOC were detected in the groundwater samples at concentrations exceeding the laboratory reporting limits during the July and September 2021 sampling events. Based on this data and comparison to the GB-GO, a vapor migration risk of VOC in groundwater to the existing buildings was not identified.

During the July 2021 groundwater sampling event, approximately 4.5 feet of NAPL was observed in monitoring well MW-8, located downgradient of two UST's north of Building 1. The presence of NAPL in the monitoring well constitute a reportable condition under the RIDEM *Remediation Regulations*. Therefore, a *Hazardous Material Release Notification Form* was prepared and is included in *Appendix F*. Remedial alternatives were developed for the Site as part of this *SIR* and are included below in *Section 8*.

## 7 Conceptual Site Model and Conclusions

The primary objectives of the Site Investigation activities described herein were to characterize the overall environmental quality of the Site and to complete an *SIR* in accordance with the requirements of *Section 1.8* of the RIDEM *Remediation Regulations*. These investigation activities consisted of the collection and laboratory analysis of soil and groundwater samples. Results of the Site Investigation activities indicated that environmental media at the subject site were sufficiently characterized to support a complete *SIR* in accordance with the RIDEM *Remediation Regulations*.

Based on the data presented herein, a conceptual site model for the identified releases of oil and/or hazardous materials (OHM) to the environment was developed. The following statements summarize the quality of each environmental media investigated at the subject site and provide recommended response actions to address releases to those media:

- **Site-wide soil containing metals and PAH:** Historically, the Site was used for commercial and industrial purposes. Fill observed throughout the Site during this investigation contained anthropogenic materials, including brick, coal, and ash, and samples of the fill material contained PAH, TPH, lead and/or arsenic at levels exceeding the R-DEC and I/C-DEC. Fill materials were identified across the surface of the Site at a thickness of up to 15 feet. Remedial response actions will be required to bring the Site into compliance with the RIDEM *Remediation Regulations*.
- **Soil Containing Petroleum:** Soil containing TPH above the GB-LC was identified in samples collected from above the groundwater table in the vicinity of two UST's, located north of Building 1. During drilling activities, petroleum contaminated soil and groundwater was observed from approximately 10 to 20 fbg in soil borings SB-5, SB-7, MW-8, SB-17, SB-18, SB-20, SB-23, SB-25, and SB-27. Additionally, 4.5 feet of NAPL was observed in MW-8. A release

of petroleum to the subsurface was observed north of Building 1 in the area surrounding two USTs. Remedial response actions will be required to bring the Site into compliance with the RIDEM *Remediation Regulations* and *UST Regulations*.

- **Groundwater Quality:** No VOC were detected in the groundwater samples collected from the Site at concentrations exceeding the RIDEM Method 1 GB-GO. During the July 2021 groundwater sampling event, 4.5 feet of free-phase petroleum product was observed in monitoring well MW-8, located downgradient of two USTs. Remedial response actions will be required to bring the Site into compliance with the RIDEM *Remediation Regulations*.
- **USTs:** The GPR survey indicted five potential USTs exist at the site. The abandoned USTs should be formally closed in accordance with the RIDEM *Rule and Regulations for Underground Storage Facilities Used for Regulated Substances and Hazardous Materials (UST Regulations, 250-RICR-140-25-1)*.

## 8 Remedial Alternatives Evaluation

Based on the risks identified above in *Sections 6 and 7*, Fuss & O'Neill evaluated remedial alternatives at the Site in order to bring soil at the Site into compliance with the RIDEM *Remediation Regulations* and facilitate Site redevelopment. In accordance with Section 1.8.4 of the *Remediation Regulations*, three alternatives, including a “no-action” alternative, were evaluated for the Site. For the reasons discussed in *Section 7*, no further action is currently recommended regarding groundwater quality at the Site.

---

### 8.1 Factors Affecting Remedial Alternatives

The following factors influenced the evaluation of the remedial alternatives described below:

- The proposed redevelopment at the Site may consist of converting the Site buildings and grounds into a mix of potential uses, potentially including residential, commercial, and/or industrial uses.
- Since the current use of the site is not restricted by an Environmental Land Usage Restriction, both the R-DEC and I/C DEC are applicable.
- The potential risks posed by environmental media at the subject site primarily include direct exposure to soil containing PAH, arsenic, lead, and petroleum above the RIDEM Method 1 R-DEC and/or I/C-DEC, as well as mitigation of separate phase petroleum migration to nearby receptors.
- Petroleum in soil at levels above the GB-LC was identified in the soil north of Building 1. Additionally, approximately 4.5 feet of free-phase petroleum product was identified in groundwater at monitoring well MW-8. The GPR survey indicted evidence of two former USTs located north of Building 1. All USTs will need to be formally closed in accordance with the

RIDEM *Rule and Regulations for Underground Storage Facilities Used for Regulated Substances and Hazardous Materials (UST Regulations, 250-RICR-140-25-1)*.

In consideration of these conditions, Fuss & O'Neill considered the following three remedial alternatives for the subject site:

1. Monitored natural attenuation.
2. Soil excavation and off-Site disposal.
3. Targeted Soil Excavation, Site-Wide Capping, UST Closure, and Institutional Controls

---

## 8.2 Remedial Alternative #1: Monitored Natural Attenuation

In accordance with the RIDEM *Remediation Regulations*, “No Action” has been evaluated as a remedial alternative at the Site. The primary contaminants of concern at the Site include PAH, arsenic, lead, and petroleum, which do not rapidly degrade over time, and therefore these conditions would likely impede any plans for proposed redevelopment or reuse of the site. Therefore, without remedial action, these contaminants will be persistent in environmental media at the Site. Implementation of the “No Action” remedial strategy would not comply with *Section 1.9* of the *Remediation Regulations*, as the concentrations of the contaminants of concern at the subject site exceed applicable RIDEM regulatory criteria.

Unless addressed via remedial activities and/or institutional controls, contaminants in environmental media may pose a risk to future users of the subject site. Therefore, the “No Action” alternative is not an appropriate remedial strategy for soil and separate phase petroleum at the Site, and additional response actions are warranted.

---

## 8.3 Remedial Alternative #2: Soil Excavation and Off-site Disposal

Excavation and off-Site disposal of soil containing PAH, arsenic, lead, and petroleum may be an effective way of reducing concentrations of oil and/or hazardous in soil at the Site by physically removing the contaminated material from the Site. This alternative may be technically feasible to implement and would mitigate long-term risks to human health and the environment

### 8.3.1 Risk Management

By removing all soil from the Site that exceeds applicable regulatory criteria, long-term risks to human health and the environment at the Site would be mitigated. However, during excavation and transportation of soil, compared with other remedial alternatives, there would be a potential short-term, high intensity direct exposure risks to human health. The Site is located within a mixed-use, commercial and residential area, and, if not properly addressed, dust generation and aerial deposition could have the potential to impact nearby receptors. In comparison to other remedial alternatives, Site workers conducting the soil excavation, transport, and disposal activities would also potentially experience high-intensity exposure to the soil. Therefore, best management practices (i.e. use of personal protection

equipment, wetting of soil, covering exposed soil with plastic sheeting, etc.) would need to be implemented during the excavation process to limit risk to on-Site and off-Site receptors.

Due to the ubiquitous nature and distribution of urban fill and petroleum contaminated soil at the site, any proposed excavation of this material would pose a risk for migration of contaminants due to erosion, as the amount of excavation work necessary to implement this remedy would be significant.

Upon completion of the remedial activity, the regulated material would no longer pose a risk to Site users. However, the disposed soil would require management of potential risks to human and environmental receptors at and in the vicinity of the receiving facility.

### 8.3.2 Technical Feasibility

Excavation and disposal of all on-Site soil containing petroleum, PAH, arsenic, and lead as a remedial alternative may be technically feasible. However, available data indicate that the OHM are generally deposited within the on-Site fill material and are randomly distributed throughout the Site. The thickness of the fill material containing brick, coal, and ash was documented to be up to approximately 15 fbg. Furthermore, petroleum was observed during the investigation activities at approximately ten to twenty-three fbg in the soil borings located north of Building 1. Therefore, the petroleum contamination is located within the groundwater table. Consequently, excavation to remove the petroleum contaminated soil and groundwater would require expansive earthwork with significant dewatering, treatment, and discharge. Excavation of this soil would require additional shoring, dewatering, and management and disposal of dewatering fluids. Overall, a project of this nature would involve a significant earthwork disturbance, which could be technically challenging to complete given the physical constraints of the Site.

### 8.3.3 Compliance with Other Laws or Other Public Concerns

Implementation of excavation and off-Site disposal of soil containing petroleum, PAH, arsenic, and lead as a remedial alternative would comply with *Section 1.9* of the *Remediation Regulations* and would be conducted in a manner which would comply with other applicable state and local laws. However, this alternative would require the management of public concerns and public impact due to the significant disturbance and direct exposure to soil at the subject site, increased traffic, and disturbance to neighbors during the completion of remediation work. This alternative would also require coordination with the Rhode Island Department of Transportation (RIDOT). Specifically, coordination to disturb soil adjacent to roadway improvement along River Street including existing sidewalk, utility, and roadway improvements, which will also affect traffic patterns, thereby potentially affecting emergency response vehicles and creating public safety concerns.

### 8.3.4 Financial Feasibility

The costs of excavation, transportation, and disposal of small, targeted volumes of soil typically may be manageable. However, available data indicate that the extent of soil and fill material that would require excavation is widespread and includes soil and fill material that may extend to a depth of 10 to 20 fbg



over the majority of the Site. Based on this data, approximately 100,000 to 120,000 cubic yards of soil and fill material may require excavation and disposal throughout the Site. This would also result in a depression related to surrounding grade, which would require 100,000 to 120,000 cubic yards of backfill. Furthermore, additional costs would also be required for permitting, regulatory coordination, project engineering, and costs related to shoring, utility protection and other requirements, which may be warranted due to the presence of River Street and the Blackstone River in close proximity to the Site's boundary. Therefore, the total project cost could approach \$10M, and may not be successful in acquiring regulatory compliance due to some soil being inaccessible. Consequently, excavation and disposal of all soil containing OHM at the Site is not financially feasible for the performing party to implement.

---

#### **8.4 Remedial Alternative #3: Targeted Soil Excavation, Site- Wide Capping, UST Abandonment, and Institutional Controls**

Targeted soil excavation of petroleum impacted soils combined with Site-wide capping, closure of USTs, and the implementation of an Environmental Land Use Restriction (ELUR), would mitigate the potential for direct exposure to soil containing petroleum, PAH, arsenic, and lead at concentrations greater than the R-DEC, I/C-DEC, and/or GB-LC may be a feasible remedial action for the subject site. The ELUR would be recorded for the entirety of the Site and would prohibit unrestricted residential use, require inspection and maintenance of the soil cap, and document soil management requirements should earthwork be necessary in the future.

The primary risks associated with the majority of the Site is the potential for direct exposure to soil by Site users. However, the potential risk of downgradient migration of petroleum from the Site to nearby receptor(s) also exists due to the presence of petroleum contamination identified within soil near and the groundwater table, and the Site's proximity to the Blackstone River. Targeted excavation of soil containing petroleum in the area of the two UST(s), north of Building 1, would eliminate the presence of petroleum impacted soil at concentrations greater than the GB-LC, and would also mitigate risk of future migration of petroleum compounds. Based on groundwater samples at collected at nearby wells installed during this site investigation, the release of petroleum appears to be limited to the area north of Building 1 and does not appear to have migrated far from the point-source.

On-site treatment and reuse of excavated soil containing petroleum utilizing soil stabilization techniques, such as asphalt emulsion and/or Portland cement stabilization may be an effective strategy to manage the relatively large volumes of soil containing petroleum that will require management. Soil stabilization would bind the petroleum in the soil, and render it immobile, while also generating a usable stable fill resource, which could be reused to backfill resulting excavations.

The construction of a Site-wide engineered cap would mitigate direct exposure to soil documented to contain regulated concentrations of compounds by creating a physical barrier between the soil and human receptors. The cap would also mitigate risks posed by entrainment of dust and soil erosion by

securing regulated soil beneath the cap. Additional limited soil excavation may be required to facilitate the installation of the engineered cap and site redevelopment.

Proper closure of the USTs identified during GPR activities would eliminate the risk of future petroleum releases occurring from these potential future point-sources.

A combination of the following strategies could be implemented at the Site:

- Soil capping would include one or a combination of the following sections placed over existing soil, which would depend on the ultimate reuse plan for the site and the layout of future improvements:
  - For industrial, commercial, or restricted residential uses:
    - A two-foot thickness of clean fill.
    - A one-foot thickness of clean fill underlain by geotextile fabric.
    - A four-inch thickness of asphalt or concrete underlain by six inches of clean fill.
  - For solar array development, or another similar reuse scenario with limited or restricted public access:
    - A six-inch thickness of crushed stone underlain by a geotextile fabric.
- Targeted soil excavation and off-site disposal or on-site soil stabilization and reuse of approximately 6,000 to 12,000 cubic yards of petroleum impacted soil identified proximal to the location of two USTs, north of Building 1. The soil targeted for excavation and management is primarily located above the water table in the area to the north of Building 1, as depicted on Figure 2.
- Limited soil excavation and off-site disposal or on-site soil stabilization and reuse where necessary for grading and the redevelopment of the Site.
- The GPR survey indicated up to five potential USTs existed at the site. The abandoned USTs should be formally closed in accordance with the RIDEM *Rule and Regulations for Underground Storage Facilities Used for Regulated Substances and Hazardous Materials (UST Regulations, 250-RICR-140-25-1)*.
- Capping specifications, including the specific capping layout and material specifications for the cap construction materials, would be presented in a *Remedial Action Work Plan (RAWP)* for submission to and approval by RIDEM, in accordance with *Section 1.10 of the Remediation Regulations*.

Institutional controls in the form of an Environmental Land Usage Restriction (ELUR) and Post-Remediation Soil Management Plan (SMP) would also be implemented. The ELUR would require that future uses of the Site be compatible with the soil cap and would ensure the integrity of the soil cap through inspection, maintenance, and reporting requirements. The ELUR would also require appropriate management of soil in the event of a disturbance of the cap. The Post-Construction SMP would detail the protocols required for disturbances of the cap or regulated soil at the subject site.



### 8.4.1 Risk Management

This remedial alternative would involve capping the Site to reduce the potential for Site users to be exposed to fill material and soil containing petroleum, PAH, arsenic, and lead during use of the Site. The primary risk associated with the majority of the subject site is the potential for direct exposure to soil and fill material. The construction of an engineered cap would mitigate direct exposure to soil and fill material by creating a physical barrier. The cap would also mitigate risks posed by dust generation and soil erosion by securing soil and fill material. Furthermore, this remedial alternative would also include the targeted removal of soil containing TPH at levels above the GB-LC. This would mitigate the potential for direct exposure, leaching of contaminants from the soil, and the migration of petroleum.

An ELUR would mandate that future users of the site maintain the engineered cap and would additionally require that future soil disturbances be conducted in accordance with the Post-Remediation SMP. The ELUR would additionally require annual inspections and certifications that the cap is maintained adequately.

### 8.4.2 Technical Feasibility

Targeted soil excavation and site wide capping of surficial material is a technically feasible remedial alternative and is compatible with the proposed redevelopment of the Site. Capping and targeted soil excavation is a technically feasible remedial alternative and could be incorporated into a development plan for the Site and would be implemented concurrently with Site development, or upon acquisition of suitable grant funding, whichever occurs first.

### 8.4.3 Compliance with Other Laws or Other Public Concerns

Soil management and implementation of capping in conjunction with the filing of an ELUR would comply with *Section 1.9* of the *Remediation Regulations* as well as other state and local laws. This alternative would need to be considered in conjunction with final Site design to ensure that appropriate topographic grades are established to promote effective Site drainage and stormwater management.

### 8.4.4 Financial Feasibility

This remedial alternative is considered to be more cost effective and provides greater cost certainty than Remedial Alternative #2. This remedial alternative is the most compatible with the redevelopment plan and, as a result, would provide cost efficiencies. The final cost of this remedial alternative would be dependent upon the final development plans for the Site. Financing of the costs associated with the filing of the ELUR and associated annual ELUR requirements would also be feasible to implement.

---

## 8.5 Preferred Remedial Alternative

Based on the technical and financial feasibility evaluations, in addition to planned redevelopment objectives for of the Site, the most feasible remediation strategy for the subject site would be Remedial

Alternative #3 – Targeted Soil Excavation, Site-Wide Capping, UST closure, and implementation of institutional controls in the form of an ELUR and Post-Remediation SMP.

An ELUR will be implemented to restrict future property use and to document the Post-Remediation SMP, which would outline procedures for maintaining the cap, as well as protocols for the post construction operational period of the Site.

## 9 Certifications

In accordance with Section 1.8.5 of the *Remediation Regulations*, the certification expressed below shall apply to the *SIR* compiled and submitted to RIDEM by Fuss & O'Neill.

I hereby certify the completeness and accuracy of the information contained in the above-referenced documents to the best of my knowledge




Signature of Fuss & O'Neill, Inc.  
Patrick J. Dowling, CPG

Associate  
Title

11/8/2021  
Date

I hereby certify that the above-referenced documents are a complete and accurate representation of the contaminated site and the release and contain all available facts surrounding the release to the best of my knowledge.



Signature of Performing Party  
City of Woonsocket

City Planner  
Title

11/15/2021  
Date

Kevin Proft

Printed Name

## 10 References

Federal Emergency Management Agency, October 2015, FIRM Panel 44007C0069G. Scale = 1: [25,000].

Fuss & O'Neill, September 2019, Phase I Environmental Site Assessment, City of Woonsocket, Woonsocket, RI.

Garofalo Environmental Services, Inc., 1988. Environmental Site Assessment Report prepared for Mr. Bruce Moger, August 1988.

Hermes, O.D, Gromet, L.P., and Murray, D.P (*compilers*) 1994, Bedrock Geologic Map of Rhode Island: Rhode Island Map Series No.1, University of Rhode Island, Kingston, scale = 1:100,000

Rhode Island Department of Environmental Management, 2019, Rules and Regulations for Groundwater Quality Rules; RIDEM, Office of Water Resources.

Rhode Island Department of Environmental Management, 2018, Water Quality Regulations; RIDEM, Office of Water Resources.

Rhode Island Department of Environmental Management, 2019, Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases; RIDEM, Office of Waste Management

Rhode Island Department of Environmental Management, 2018-2020, State of Rhode Island Final 303(d) List of Impaired Waters, February 2021.

USGS, 1939, Providence, Rhode Island Quadrangle, 7.5-Minute Series Topographic Map; United States Department of the Interior, U.S. Geological Survey, Photo revised 1947.

## 11 Limitations of Work Product

This document was prepared for the sole use of the City of Woonsocket, the only intended beneficiaries of our work. Those who may use or rely upon the report and the services (hereafter “work product”) performed by Fuss & O'Neill, Inc. and/or its subsidiaries or independent professional associates, subconsultants and subcontractors (collectively the “Consultant”) expressly accept the work product upon the following specific conditions.

1. Consultant represents that it prepared the work product in accordance with the professional and industry standards prevailing at the time such services were rendered.
2. The work product may contain information that is time sensitive. The work product was prepared by Consultant subject to the particular scope limitations, budgetary and time constraints and business objectives of the Client which are detailed therein or in the contract between Consultant and Client. Changes in use, tenants, work practices, storage, Federal, state or local laws, rules or regulations may affect the work product.
3. The observations described and upon which the work product was based were made under the conditions stated therein. Any conclusions presented in the work product were based solely upon the services described therein, and not on scientific or engineering tasks or procedures beyond the scope of described services.
4. In preparing its work product, Consultant may have relied on certain information provided by state and local officials and information and representations made by other parties referenced therein, and on information contained in the files of state and/or local agencies made available at the time of the project. To the extent that such files which may affect the conclusions of the work product are missing, incomplete, inaccurate or not provided, Consultant is not responsible. Although there may have been some degree of overlap in the information provided by these various sources, Consultant did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this project. Consultant assumes no responsibility or liability to discover or determine any defects in such information which could result in failure to identify contamination or other defect in, at or near the site. Unless specifically stated in the work product, Consultant assumes no responsibility or liability for the accuracy of drawings and reports obtained, received or reviewed.
5. If the purpose of this project was to assess the physical characteristics of the subject site with respect to the presence in the environment of hazardous substances, waste or petroleum and chemical products and wastes as defined in the work product, unless otherwise noted, no specific attempt was made to check the compliance of present or past owners or operators of the subject site with Federal, state, or local laws and regulations, environmental or otherwise.

6. If water level readings have been made, these observations were made at the times and under the conditions stated in the report. However, it must be noted that fluctuations in water levels may occur due to variations in rainfall, passage of time and other factors and such fluctuations may affect the conclusions and recommendations presented herein.
7. Except as noted in the work product, no quantitative laboratory testing was performed as part of the project. Where such analyses have been conducted by an outside laboratory, Consultant has relied upon the data provided, and unless otherwise described in the work product has not conducted an independent evaluation of the reliability of these tests.
8. If the conclusions and recommendations contained in the work product are based, in part, upon various types of chemical data, then the conclusions and recommendations are contingent upon the validity of such data. These data (if obtained) have been reviewed and interpretations made by Consultant. If indicated in the work product, some of these data may be preliminary or screening-level data and should be confirmed with quantitative analyses if more specific information is necessary. Moreover, it should be noted that variations in the types and concentrations of contaminants and variations in their flow paths may occur due to seasonal water table fluctuations, past disposal practices, the passage of time and other factors.
9. Chemical analyses may have been performed for specific parameters during the course of this project, as described in the work product. However, it should be noted that additional chemical constituents not included in the analyses conducted for the project may be present in soil, groundwater, surface water, sediments or building materials at the subject site.
10. Ownership and property interests of all documents, including reports, electronic media, drawings and specifications, prepared or furnished by Consultant pursuant to this project are subject to the terms and conditions specified in the contract between the Consultant and Client, whether or not the project is completed.
11. Unless otherwise specifically noted in the work product or a requirement of the contract between the Consultant and Client, any reuse, modification or disbursement of documents to third parties will be at the sole risk of the third party and without liability or legal exposure to Consultant.
12. In the event that any questions arise with respect to the scope or meaning of Consultant's work product, immediately contact Consultant for clarification, explanation or to update the work product. In addition, Consultant has the right to verify, at the party's expense, the accuracy of the information contained in the work product, as deemed necessary by Consultant, based upon the passage of time or other material change in conditions since conducting the work.
13. Any use of or reliance on the work product shall constitute acceptance of the terms hereof.

## Tables

---







Table 4  
Summary of Soil Analytical Data and Objectives  
Samples Collected in June 2021

719 River Street  
Woonsocket, RI  
Prepared for City of Woonsocket  
November 2021

Table with columns for Location ID, Sample Number, Sample Date, Depth Interval (ft), Headspace (ppmv), Sample Type, and various analytical data points for VOCs, Metals, PAHs, PCBs, and TPH. Includes Regulatory Criteria (R-DEC, I/C-DEC, GB-1C) and units (mg/kg, mg/L).

NOTES:  
ftg: feet below grade  
ppmv: part per million by volume  
Only the last six digits of the sample numbers are given.  
Only target analytes detected in at least one sample are listed  
MW: soil boring with monitoring well  
SB: soil boring  
PAH: polycyclic aromatic hydrocarbons  
VOC: volatile organic compounds  
PAH: polycyclic aromatic hydrocarbons  
PCBs: polychlorinated biphenyls  
TPH: total petroleum hydrocarbons

TCLP: toxicity characteristic leaching procedure  
RIDEM: Rhode Island Department of Environmental Management  
USEPA: United States Environmental Protection Agency  
mg/kg: milligrams per kilogram  
mg/L: milligrams per liter  
ND<X: compound not detected above laboratory reporting limit  
NA: Not analyzed  
\*: Conservatively assumes that all chromium is in hexavalent form.  
\*\*RIDEM Remediation Regulations 250-RI-CR-140-30-1, last amended April 2020  
---: not established

R-DEC: Residential direct exposure criteria  
I/C-DEC: Industrial/Commercial direct exposure criteria  
GB/LC: GB leachability criteria  
Bold and underlined values exceed one or more regulatory criteria  
= Values exceed the R-DEC  
= Values exceed the R-DEC and I/C-DEC  
= Values exceed the R-DEC, I/C-DEC & GB/LC

Created by: MHS  
Checked by: SMD





**Table 5**  
**Summary of Groundwater Elevations**  
**Measurements Collected July 8, 2021**

719 River Street  
Woonsocket, Rhode Island

Prepared for City of Woonsocket

November 2021

<b>Well Number</b>	<b>Relative Elevation TPS (feet)</b>	<b>DTW - TPS</b>	<b>Relative Groundwater Elevation</b>
MW-2	98.2	8.25	89.95
MW-6	102.40	16.90	85.50
MW-8	101.22	15.80	85.42
MW-9	100.15	19.60	80.55
MW-14	100.05	19.60	80.45
MW-15	100.65	19.35	81.30

**NOTES:**

DTW: depth to water

TPS: top of steel

Created by: MHS

Checked by: SMD

Shallow wells with screens that intersect the water table were used to develop the groundwater contour map. Wells were surveyed on July 8, 2021 using an assumed 100.00-foot benchmark. All groundwater and well elevations are relative to that assumed benchmark.



**Table 6**  
**Summary of Groundwater Analytical Data and Objectives**  
**Samples Collected on July 15, 2021 and September 9, 2021**

719 River Street  
Woonsocket, Rhode Island

Prepared for City of Woonsocket

November 2021

	Sample Location	MW-6		MW-9	MW-15	MW-14	MW-2	RIDEM Regulatory Criteria	RIDEM Regulatory Criteria
	Sample Number	0715-02	0715-03	0715-04	0715-05	0715-06	0909-02		
	Sample Date	7/15/2021		7/15/2021	7/15/2021	7/15/2021	9/9/2021		
	Screened Interval (fbg)	8-18		10-20	10-20	10-20	5/15/2021		
	Sample Type	Primary	Duplicate	Primary	Primary	Primary	Primary	GA-GO	GB-GO
<b>FIELD MEASUREMENTS</b>	Units								
pH	pH units	6.17		6.03	5.96	6.38	6.12	NE	NE
Specific Conductance	µS/cm	444.80		304.20	362.30	398.50	255.90	NE	NE
Temperature	C deg	15.70		15.20	13.19	14.26	19.68	NE	NE
Dissolved Oxygen	mg/L	0.36		1.47	2.76	0.62	5.50	NE	NE
ORP	mV	38.30		-2.90	101.80	-26.90	105.10	NE	NE
Turbidity	ntu	5.83		18.80	10.40	18.70	3.90	NE	NE
<b>USEPA METHOD 8260C-D - VOC</b>									
Various	µg/L	ND	ND	ND	ND	ND	ND	Various	Various

Created by: MHS

Checked by: SMD

**NOTES:**

fbg: feet below grade

MW: monitoring well

Only the last six digits of the sample number are listed

Only target analytes detected in at least one sample are listed

ORP: oxidation-reduction potential

VOC: volatile organic compounds

µS/cm: microsiemens per centimeter

C deg: degrees Celsius

mg/L: milligrams per liter

ng/L: nanograms per liter

mV: millivolts

ntu: nephelometric turbidity units

µg/L: micrograms per liter

NA: not analyzed

RIDEM: Rhode Island Department of Environmental Management

USEPA: United States Environmental Protection Agency

ND<Varies: compound not detected above laboratory reporting limit

GA-GO: GA Groundwater Objectives

GB-GO: GB Groundwater Objectives

NE: Not established

= Values exceed the GA-GO



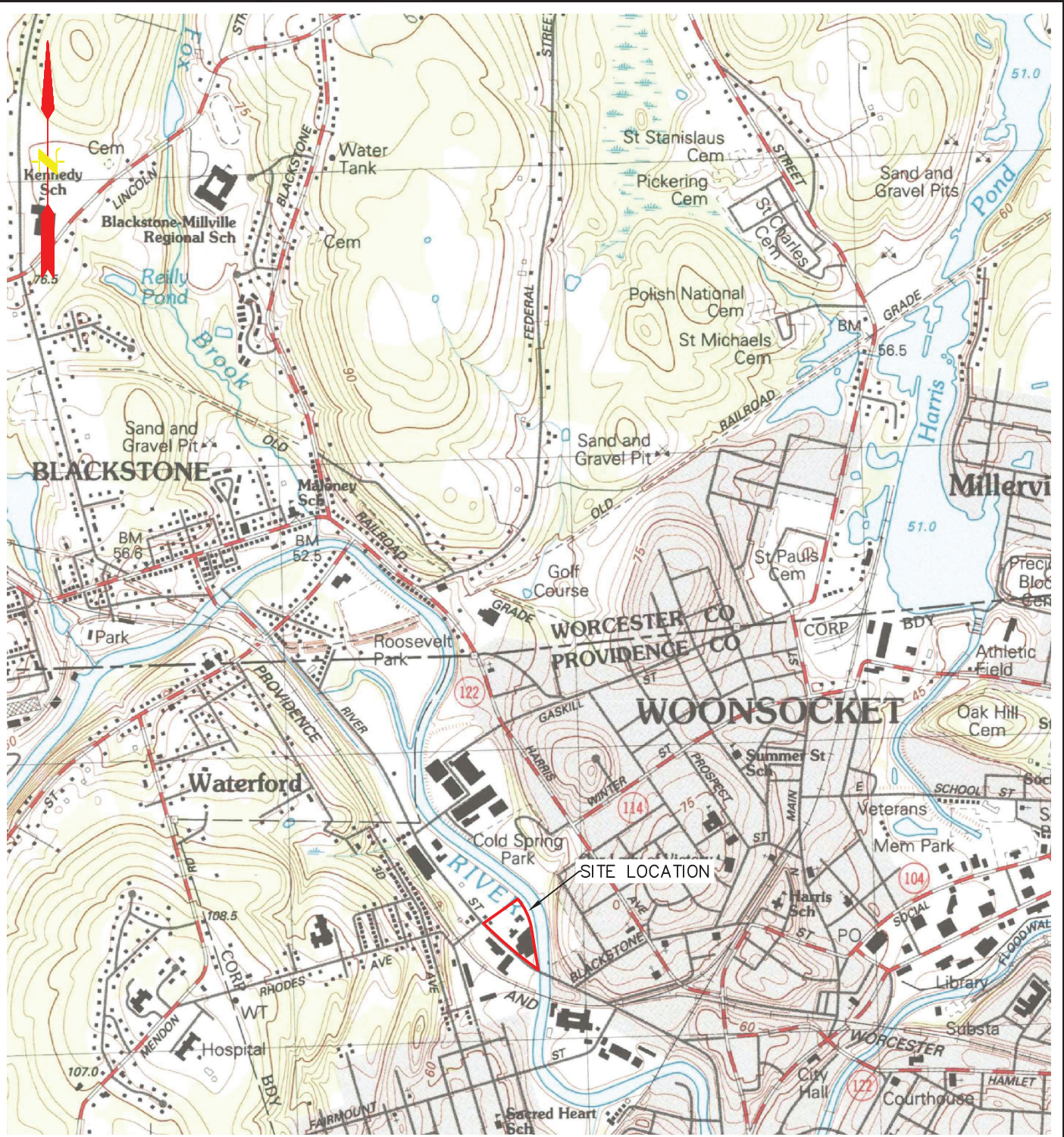
## Figures

---





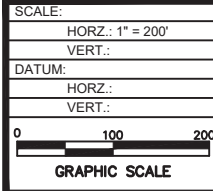
File Path: J:\DWG\2018\1545\B10\_Enviro\mxd\Plan\719 River Street\2018 1545 B10.LOC\_719 RIVER STREET.dwg Layout: 08.SX1-P Plotted: Fri, October 15, 2021 - 8:22 AM User: msampson  
 Plotter: DWG TO PDF-PC3 CTB File: FO.STB  
 LAYER STATE:



**MAP REFERENCES AND NOTES**

THIS MAP WAS PREPARED FROM THE FOLLOWING 7.5 x 15 MINUTE USGS TOPOGRAPHIC QUADRANGLES: UXBRIDGE MASSACHUSETTS

SOURCE: USGS TOPOVEIW

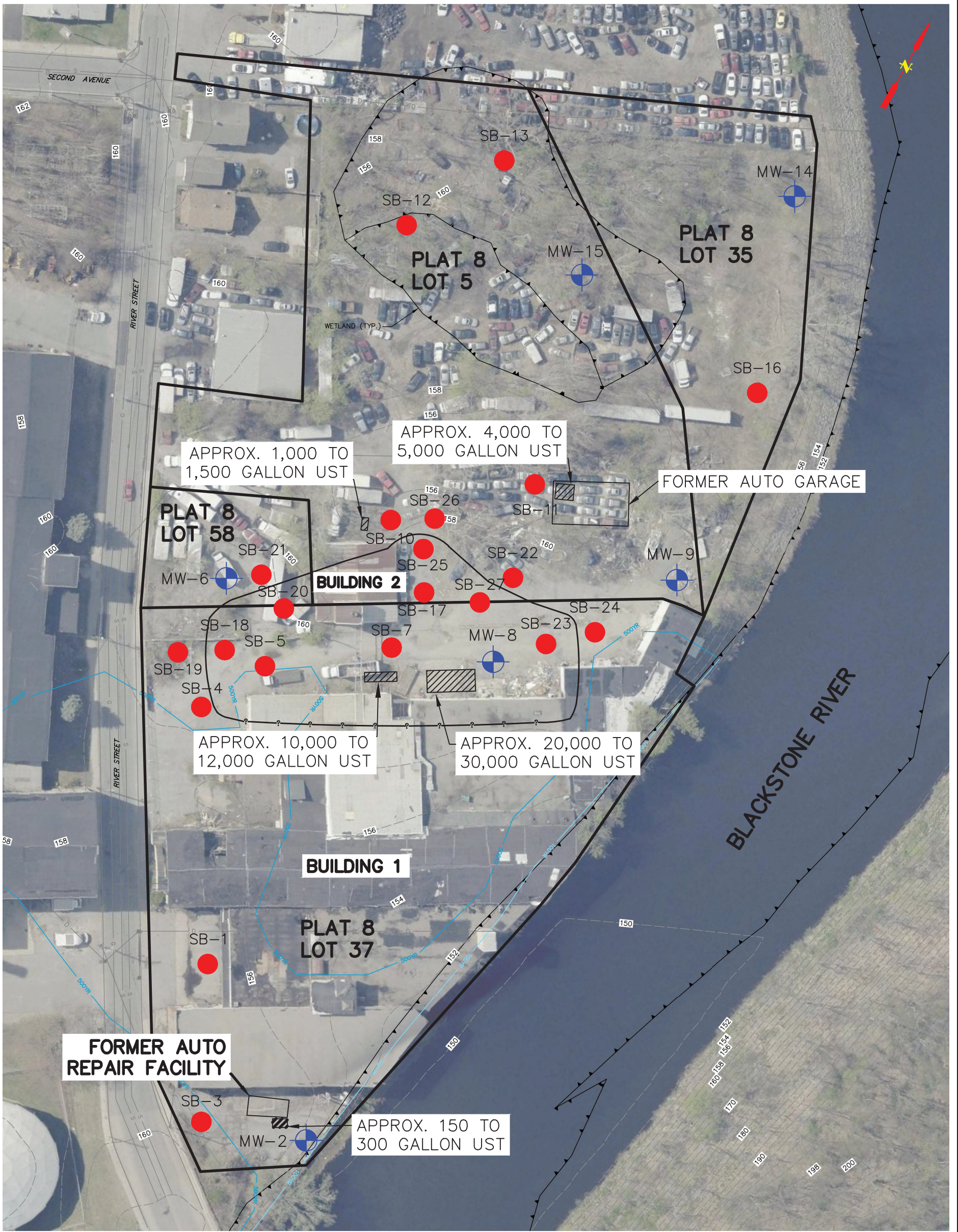


**FUSS & O'NEILL**  
 317 IRON HORSE WAY, SUITE 204  
 PROVIDENCE, RI 02908  
 401.861.3070  
 www.fando.com

CITY OF WOONSOCKET  
 SITE LOCATION MAP  
 719 RIVER STREET  
 WOONSOCKET RHODE ISLAND

PROJ. No.: 20181545.B10  
 DATE: NOVEMBER 2021  
**FIGURE 1**





**LEGEND**

- MW-XX
- SB-XX
- 
- 

— APPROXIMATE AREA OF PETROLEUM CONTAMINATED SOIL DETERMINED BY FIELD OBSERVATIONS (DASHED WHERE INFERRED)

**MAP REFERENCES AND NOTES**

THIS MAP WAS PREPARED FROM RIGIS COLOR ORTHO IMAGERY (2019)  
 SOURCE: THE RHODE ISLAND GEOGRAPHIC INFORMATION SYSTEM (RIGIS)  
 SITE FEATURES AND UST LOCATIONS ARE APPROXIMATE

File: J:\DWG\20181545\B10\Environmental\Plan\719 River Street\20181545.B10\_STP02.dwg Layout: 11X17-P Plotted: 2021-11-08 12:38 PM Saved: 2021-11-08 12:23 PM User: msampson  
 Layer State: PC3: DWG TO PDF PC3 STB/CTB: FO STB

SCALE:  
 HORZ.: 1" = 70'  
 VERT.:  
 DATUM:  
 HORZ.:  
 VERT.:  
 0 35 70  
**GRAPHIC SCALE**

**FUSS & O'NEILL**  
 317 IRON HORSE WAY, SUITE 204  
 PROVIDENCE, RI 02908  
 401.861.3070  
 www.fando.com





CITY OF WOONSOCKET  
 SITE PLAN  
 719 RIVER STREET (PLAT 8, LOTS 5, 35, 37 & 58)  
 WOONSOCKET RHODE ISLAND

PROJ. No.: 20181545.B10  
 DATE: NOVEMBER 2021  
**FIGURE 2**



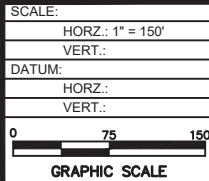


**LEGEND**

- MW-XX  
 MONITORING WELL
- XX.XX'  
 PARCEL BOUNDARY
-  GROUNDWATER FLOW DIRECTION
- X.X'  
 GROUNDWATER ELEVATION EQUIPOTENTIAL CONTOUR

**MAP REFERENCES AND NOTES**

THIS MAP WAS PREPARED FROM RIGIS COLOR ORTHO IMAGERY (2019)  
 SOURCE: THE RHODE ISLAND GEOGRAPHIC INFORMATION SYSTEM (RIGIS)  
 SITE FEATURES ARE APPROXIMATE



**FUSS & O'NEILL**

317 IRON HORSE WAY, SUITE 204  
 PROVIDENCE, RI 02908  
 401.861.3070  
 www.fando.com

CITY OF WOONSOCKET

GROUNDWATER CONTOUR MAP

719 RIVER STREET

WOONSOCKET

RHODE ISLAND

PROJ. No.: 20181545.B10  
 DATE: NOVEMBER 2021

**FIGURE 3**



## **Appendix A**

---

### City of Woonsocket Files





<b>Parcel:</b> 08F-005-005	<b>Location:</b> 787 RIVER STREET	<b>Owner:</b> DORADO PROPERTIES LLC	
<b>Account:</b> 4641	<b>User Acct:</b> 00005703	<b>LUC:</b> 07 - INDUSTRIAL	<b>Zoning:</b> I1

<b>Parcel Values</b>				
<b>Total:</b> \$140,400	<b>Land:</b> \$78,300	<b>Land Area:</b> 1.97 AC	<b>Building:</b> \$62,100	<b>Assessed:</b> \$140,400

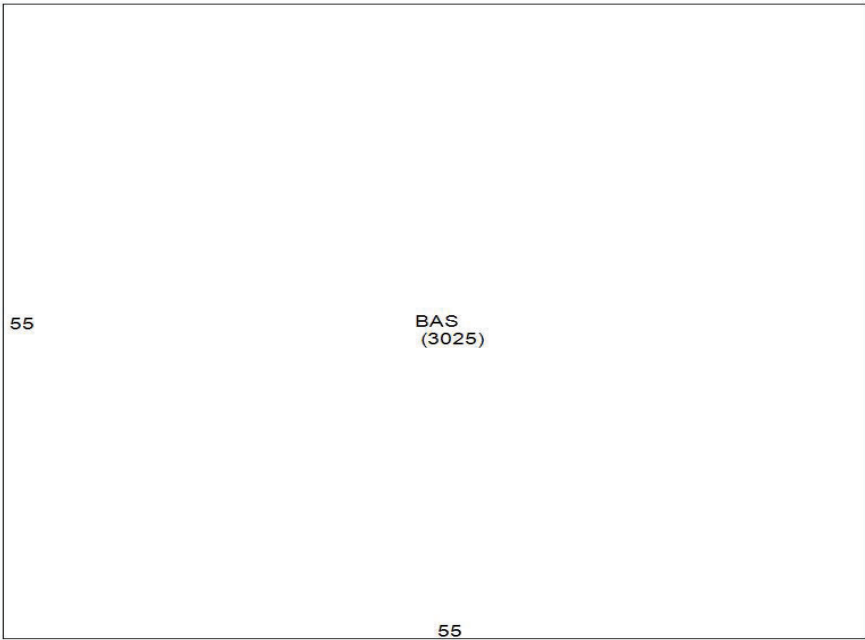
<b>Sales Information</b>				
<b>Book and Page</b>	<b>Instrument Type</b>	<b>Date</b>	<b>Price</b>	<b>Grantor</b>
997-298		06/30/1995	\$175,000	

<b>Building Type:</b> Industrial	<b>Year Built:</b> 1900	<b>Grade:</b> C	<b>Condition:</b> FR		
<b>Heat Fuel:</b> Coal or Wood	<b>Heat Type:</b> None	<b>% Air Conditioned:</b> 0.00	<b>Fireplaces:</b> 0		
<b>Exterior Wall:</b> Stone/Masonr	<b>Bsmnt Garage:</b> 0	<b>Roof Cover:</b> Metal/Tin	<b># of Units:</b> 1		
<b># of Rooms:</b> 0	<b># of Bedrooms:</b> 0	<b>Full Bath:</b> 0	<b>1/2 Baths:</b> 1		

<b>Yard Item(s)</b>						
<b>Description</b>	<b>Quantity</b>	<b>Size</b>	<b>Year</b>	<b>Condition</b>	<b>Quality</b>	<b>Value</b>
Paving - Asphalt	1	5000	2008	AV	Average	\$3,500.00

<b>Building Areas</b>		
<b>Area</b>	<b>Net Area</b>	<b>Finished Area</b>
First Floor	3,025 SF	3,025 SF

Disclaimer: This information is for tax assessing purposes and is not warranted





# Woonsocket

(Summary Data - may not be Complete Representation of Property)



Parcel: 08F-035-011  
Account: 4639

Location: 0 RIVER STREET  
User Acct: 00900028

Owner: DORADO PROPERTIES LLC  
LUC: 14 - COMM AND IND VACANZ  
Zoning: I1

### Parcel Values

Total: \$3,400      Land: \$3,400      Land Area: 0.56 AC      Building: \$0      Assessed: \$3,400

### Sales Information

Book and Page	Instrument Type	Date	Price	Grantor
997-298		06/30/1995	\$175,000	

Building Type:	Year Built:	Grade:	Condition: AV
Heat Fuel:	Heat Type:	% Air Conditioned: 0.00	Fireplaces: 0
Exterior Wall:	Bsmnt Garage: 0	Roof Cover:	# of Units: 0
# of Rooms: 0	# of Bedrooms: 0	Full Bath: 0	1/2 Baths: 0

### Yard Item(s)

Description	Quantity	Size	Year	Condition	Quality	Value

### Building Areas

Area	Net Area	Finished Area

Disclaimer: This information is for tax assessing purposes and is not warranted



Parcel: 08F-037-002  
Account: 4640

Location: 719 RIVER STREET  
User Acct: 00900029

Owner: DORADO PROPERTIES LLC  
LUC: 07 - INDUSTRIAL Zoning: I1

**Parcel Values**

Total: \$245,800      Land: \$128,400      Land Area: 2.207 AC      Building: \$117,400      Assessed: \$245,800

**Sales Information**

Book and Page	Instrument Type	Date	Price	Grantor
997-298		06/30/1995	\$175,000	

**Building Type:** Mill.Bldg.    **Year Built:** 1890    **Grade:**C    **Condition:**PR  
**Heat Fuel:** Gas    **Heat Type:** Steam    **% Air Conditioned:** 3.00    **Fireplaces:**0  
**Exterior Wall:**Brick/Masonr    **Bsmnt Garage:** 0    **Roof Cover:** Tar & Gravel    **# of Units:** 2  
**# of Rooms:** 0    **# of Bedrooms:** 0    **Full Bath:** 0    **1/2 Baths:** 2

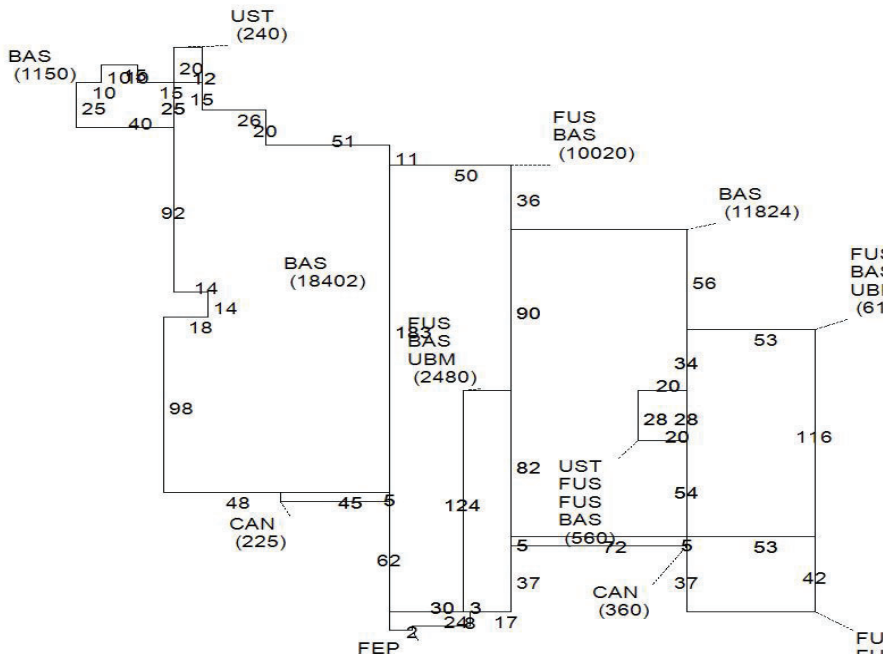
**Yard Item(s)**

Description	Quantity	Size	Year	Condition	Quality	Value
Load Level. w/Man Flip-out		7	1964	AV	Average	\$400.00
Paving - Asphalt	1	7000	1995	PR	Average	\$3,400.00
Elevator - Freight	1	3	1964	AV	Average	\$4,000.00

**Building Areas**

Area	Net Area	Finished Area
Basement, Unfinished	8,628 SF	0 SF
Canopy	585 SF	0 SF
Enclosed porch	282 SF	0 SF
First Floor	52,810 SF	52,810 SF
Upper Story, Finished	24,220 SF	24,220 SF
Utility, Storage, Unfinis	800 SF	0 SF

**Disclaimer: This information is for tax assessing purposes and is not warranted**



Parcel: 08F-058-004      Location: 775 RIVER STREET      Owner: DORADO PROPERTIES LLC  
 Account: 4638      User Acct: 00900030      LUC: 05 - COMMERCIAL I      Zoning: I1

**Parcel Values**  
 Total: \$93,200      Land: \$31,600      Land Area: 0.284 AC      Building: \$61,600      Assessed: \$93,200

**Sales Information**

Book and Page	Instrument Type	Date	Price	Grantor
997-298		06/30/1995	\$175,000	

<b>Building Type:</b> Service Shop	<b>Year Built:</b> 1900	<b>Grade:</b> C	<b>Condition:</b> AV
<b>Heat Fuel:</b> Coal or Wood	<b>Heat Type:</b> None	<b>% Air Conditioned:</b> 0.00	<b>Fireplaces:</b> 0
<b>Exterior Wall:</b> Concr/Cinder	<b>Bsmnt Garage:</b> 0	<b>Roof Cover:</b> Tar & Gravel	<b># of Units:</b> 1
<b># of Rooms:</b> 0	<b># of Bedrooms:</b> 0	<b>Full Bath:</b> 0	<b>1/2 Baths:</b> 1

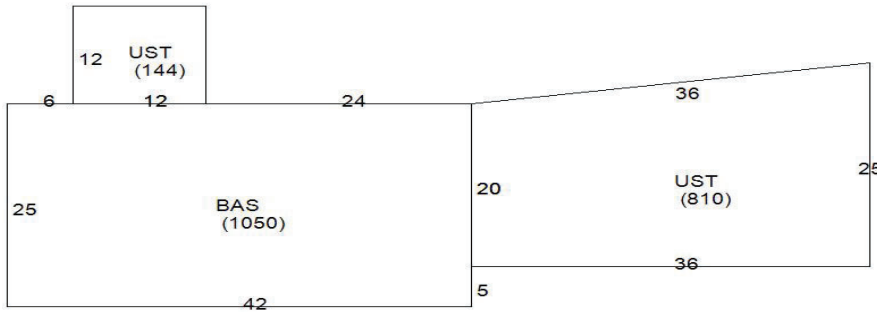
**Yard Item(s)**

Description	Quantity	Size	Year	Condition	Quality	Value
Paving - Asphalt	1	2000	2008	PR	Average	\$1,300.00

**Building Areas**

Area	Net Area	Finished Area
First Floor	1,050 SF	1,050 SF
Utility, Storage, Unfinis	954 SF	0 SF

**Disclaimer: This information is for tax assessing purposes and is not warranted**



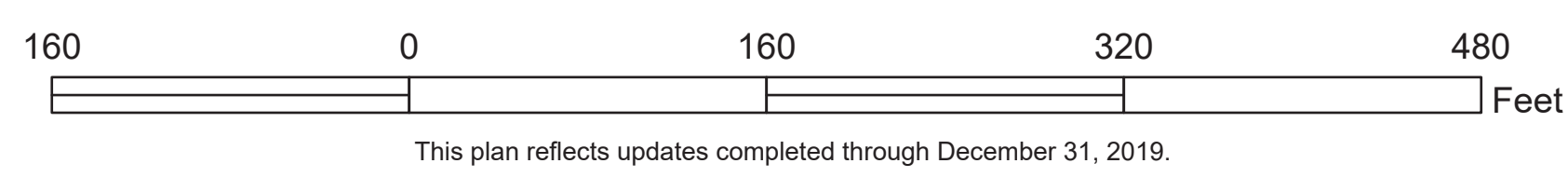




Notes:  
 1. THIS IS NOT A LEGAL DOCUMENT  
 2. Property line information was developed from the City of Woonsocket's Assessor's plat maps.  
 3. All information shown on this map are subject to verification.

Legend	
25-113	Lot Number
12000 sf	Lot Area
---	Parcel Boundary Line w/ Dimension
---	Easement Line
---	Town Line
---	Right-of-Way Line
---	Paper Street
CEM	Cemetery

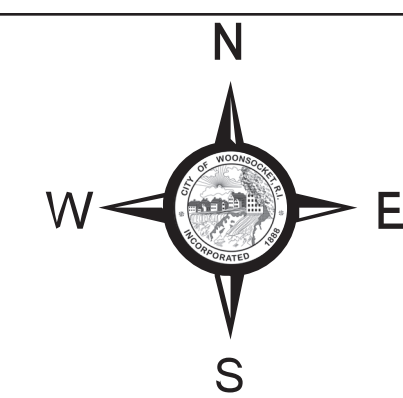
1 inch = 80 feet



This plan reflects updates completed through December 31, 2019.

A3	A4	A5	A6	A7	A8
B3	B4	B5	B6	B7	B8
C3	C4	C5	C6	C7	C8
D3	D4	D5	D6	D7	D8
E3	E4	E5	E6	E7	E8
F3	F4	F5	F6	F7	F8
G3	G4	G5	G6	G7	G8
H3	H4	H5	H6	H7	H8

Sheet Index



Tax Map  
 City of Woonsocket  
 Rhode Island  
 Sheet No. C2





## Appendix B

---

### Hazardous Building Materials Report



# Limited Hazardous Building Materials Inspection Report

719 River Street  
Woonsocket, Rhode Island

**City of Woonsocket**  
Woonsocket, Rhode Island

February 2021



**FUSS & O'NEILL**

Fuss & O'Neill, Inc.  
317 Iron Horse Way, Suite 204  
Providence, RI 02908



FUSS & O'NEILL

February 8, 2021

Mr. Kevin Proft  
City Planner  
City of Woonsocket  
169 Main Street  
Woonsocket, RI 02895

**RE: Limited Hazardous Building Materials Inspection**  
**719 River Street, Woonsocket, RI**  
Fuss & O'Neill Project No. 20181545.B10

Dear Mr. Proft:

Enclosed is the limited hazardous building materials inspection summary report for the inspection conducted at the mill building located at 719 River Street in Woonsocket, Rhode Island.

On January 13 and 14, 2021, a Fuss & O'Neill, Inc. state-certified Asbestos Inspector performed a limited asbestos inspection, a lead-based paint screening, and a fluorescent light ballast and mercury-containing equipment inventory prior to proposed demolition activities.

The information summarized in this report is for the abovementioned materials only. The work was performed in accordance with our written scope of services dated October 7, 2020.

If you should have any questions regarding the contents of the enclosed report, please do not hesitate to contact me at 401.861-3070, extension 4568. Thank you for this opportunity to have served your environmental needs.

Sincerely,

Patrick J. Dowling, CPG  
Associate/Department Manager

PJD/rs

Enclosure

317 Iron Horse Way  
Suite 204  
Providence, RI  
02908  
† 401.861.3070  
800.286.2469  
f 401.861.3076

[www.fando.com](http://www.fando.com)

California  
Connecticut  
Maine  
Massachusetts  
New Hampshire  
Rhode Island  
Vermont

F:\P2018\1545\B10\Sites\719 River Street - Dorado\Deliverables\Hazmat Report\DD\_rm\_mhs\_719 River St\_Hazmat  
pt\_20210205.docx



# Table of Contents

## Limited Hazardous Building Materials Inspection Report 719 River Street City of Woonsocket

---

<b>1</b>	<b>Introduction .....</b>	<b>1</b>
	1.1 Scope of Work.....	1
<b>2</b>	<b>Limited Asbestos Inspection .....</b>	<b>1</b>
	2.1 Methodology .....	2
	2.2 Results .....	3
	2.3 Conclusions & Recommendations.....	3
<b>3</b>	<b>Lead-Based Paint Screening.....</b>	<b>4</b>
	3.1 Methodology .....	4
	3.2 XRF Screening Results.....	4
	3.3 Discussion .....	5
	3.4 Conclusions & Recommendations.....	5
<b>4</b>	<b>Fluorescent Light Ballasts &amp; Mercury-Containing Equipment .....</b>	<b>5</b>
	4.1 Fluorescent Light Ballasts.....	5
	4.2 Mercury-Containing Equipment.....	6
	4.3 Results .....	6
	4.4 Conclusions & Recommendations.....	6

### Tables

**End of Report**

1. Suspect Asbestos-Containing Materials Laboratory Analytical Data Summary
2. Asbestos-Containing Materials Inventory Summary

### Appendices

**End of Report**

APPENDIX A	LIMITATIONS
APPENDIX B	FUSS & O'NEILL ASBESTOS INSPECTOR STATE LICENSE & EPA ACCREDITATION
APPENDIX C	ASBESTOS LABORATORY ANALYTICAL REPORTS & CHAIN-OF-CUSTODY FORM
APPENDIX D	XRF LEAD-BASED PAINT SCREENING FIELD DATA SHEETS

# 1 Introduction

On January 13 and 14, 2021, Fuss & O'Neill, Inc. (Fuss & O'Neill) representative, Mr. Robert Mallett, performed a limited hazardous building materials inspection prior to proposed demolition activities to occur at the former mill building located at 719 River Street in Woonsocket, Rhode Island (the "Site"). Sampling and laboratory analyses were conducted in accordance with the Standard Operating Procedures for field and laboratory activities as detailed in the United States Environmental Protection Agency and Rhode Island Department of Environmental Management approved Site Specific Quality Assurance Project Revision 0.0 for the project, dated December, 2020

---

## 1.1 Scope of Work

The work was performed for the City of Woonsocket (the "Client") in accordance with our written scope of services dated October 7, 2020. This report is subject to the limitations presented in *Appendix A*. The scope of work included the following:

- Limited Asbestos-Containing Materials (ACM) Inspection;
- Lead-Based Paint (LBP) Screening; and
- Fluorescent Light Ballast and Mercury-Containing Equipment Inventory.

The middle section of the complex has a structurally unsound roof, which has led to flooring failures at several areas. The middle section was observed from safe locations, and samples were collected without exposing personnel to questionable structural conditions.

Fuss & O'Neill did not conduct subsurface investigations to identify concealed suspect materials throughout the subject property.

We did not conduct collection and analysis of suspect building materials for polychlorinated biphenyls (PCBs) during this inspection. Sampling for PCBs is presently not mandated by the United States Environmental Protection Agency (EPA); however, liability risk for disposing of PCB-containing wastes exists. Recent knowledge of PCBs within these matrices has become more prevalent, especially with remediation contractors, waste haulers, and disposal facilities. Some property owners have become subject to changes in schedule, scope, and costs as a result of failure to identify PCBs prior to renovation or demolition activities.

## 2 Limited Asbestos Inspection

A property owner or operator must ensure that a thorough asbestos inspection is performed prior to possible disturbance of suspect ACM during renovation or demolition activities. This is a requirement of the United States Environmental Protection Agency (EPA) National Emission Standards for Hazardous Air Pollutants (NESHAP) regulation located at Title 40 CFR, Part 61, Subpart M.

Fuss & O'Neill conducted the limited inspection of visible and accessible areas. Mr. Mallett is a Rhode Island Department of Health (RIDOH)-licensed Asbestos Inspector. Refer to *Appendix B* for copies of the Asbestos Inspector's state license and EPA accreditation.

## 2.1 Methodology

The inspection was conducted by visually inspecting for suspect ACM and touching each of the suspect ACM. The suspect ACM were grouped into three EPA NESHAP categories: Friable; Category I Non-Friable, and Category II Non-Friable.

- Friable is defined as material that contains greater than one percent (> 1%) asbestos that, when dry, **can** be crumbled, pulverized, or reduced to powder by hand pressure.
- Category I Non-Friable refers to material that contains > 1% asbestos (i.e., packings, gaskets, resilient floor coverings, and asphalt roofing products) that when dry **cannot** be crumbled, pulverized, or reduced to powder by hand pressure.
- Category II Non-Friable refers to any non-friable material excluding Category I materials that contain > 1% asbestos that when dry **cannot** be crumbled, pulverized, or reduced to powder by hand pressure.

The suspect ACM were also categorized into their applications including: Thermal System Insulation (TSI), Surfacing ACM, and Miscellaneous ACM. TSI includes those materials used to prevent heat loss/gain or water condensation on mechanical systems. Examples of TSI include, but are not limited to, pipe insulation, boiler insulation, duct insulation, mudded pipe fitting insulation, etc. Surfacing ACM includes those ACM that are sprayed-on, troweled-on, or otherwise applied to an existing surface. Surfacing ACM is commonly used for fireproofing, decorative, and acoustical applications. Miscellaneous ACM include those not listed as TSI or Surfacing ACM, such as sheet flooring, floor tiles, ceiling tiles, caulking, mastics, construction adhesives, etc.

The EPA recommends collecting suspect ACM samples in a manner sufficient to determine asbestos content, and separating suspect ACM into homogenous material types (similar in color, texture, and date of application). The EPA NESHAP regulation does not specifically identify a minimum number of samples to be collected for each homogeneous material, but the NESHAP regulation does recommend the use of sampling protocols included in EPA Title 40 CFR, Part 763, Subpart E: Asbestos Hazard Emergency Response Act (AHERA).

The EPA AHERA regulation requires a specific number of samples be collected based on the material type and quantity present. This regulation includes the following protocol:

1. Surfacing Materials (e.g., plaster, spray-applied fireproofing, etc.) shall be collected in a randomly-distributed manner representing each homogenous area based on the overall quantity as follows:
  - a. At least three (3) bulk samples collected from each homogenous area that is less than or equal to 1,000 square feet.
  - b. At least five (5) bulk samples collected from each homogenous area that is greater than 1,000 square feet but less than or equal to 5,000 square feet.
  - c. At least seven (7) bulk samples collected from each homogenous area that is greater than 5,000 square feet.
2. Thermal System Insulation (e.g., pipe insulation, tank insulation, etc.) shall be collected in a randomly-distributed manner representing each homogenous area. At least three (3) bulk samples shall be collected of each homogenous material type. Also, at least one (1) bulk sample of any patching material applied to TSI, presuming the patched area is less than six linear or square feet, shall be collected.

- Miscellaneous Materials (e.g., floor tile, mastic, cement board, caulking, glazing, etc.) should have at least two (2) bulk samples collected of each homogenous material type. Sample collection shall be conducted in a manner sufficient to determine the asbestos content of the homogenous material type as determined by the inspector.

Suspect ACM samples were collected, and proper chain-of-custody forms were prepared for transmission of collected samples to EMSL Analytical, Inc. (EMSL), for analysis. EMSL is a Rhode Island-licensed and American Industrial Hygiene Association (AIHA)-accredited Asbestos Analytical Laboratory. Initial asbestos sample analysis was conducted using the EPA Interim Method for the Determination of Asbestos in Bulk Building Materials (EPA/600/R-93/116) via Polarized Light Microscopy with Dispersion Staining (PLM/DS).

The EPA recommends that non-friable, organically-bound (NOB) materials (e.g., asphaltic-based materials, adhesives, caulking, etc.) undergo further confirmatory analysis utilizing Transmission Electron Microscopy (TEM). Five (5) of the collected NOB samples were analyzed by TEM.

---

## 2.2 Results

The EPA, the Occupational Safety and Health Administration (OSHA), and RIDOH define a material that contains > 1% asbestos (by PLM/DS analysis) as an ACM.

Refer to **Table 1**, attached, for the complete list of ACM and non-ACM identified by sample identification, material type, sample location, and asbestos content as part of this inspection. Refer to **Table 2**, attached, for the identified ACM inventory.

Refer to *Appendix C* for the asbestos laboratory analytical reports and chain-of-custody form.

---

## 2.3 Conclusions & Recommendations

Based on visual observations, sample collection, and laboratory analysis, ACM were identified at the Site.

Prior to disturbance, ACM that would likely be impacted by the proposed demolition activities must first be abated by a RIDOH-licensed Asbestos Contractor. This is a requirement of RIDOH and EPA NESHAP regulations governing asbestos abatement.

Due to the inability to effectively separate some types of multi-layered ACM from non-ACM, these materials are considered asbestos-contaminated and must be managed as ACM for removal and disposal purposes.

If suspect materials are encountered during demolition activities that are not identified in this report as being non-ACM, they shall be assumed to be ACM until laboratory analysis indicates otherwise.

## 3 Lead-Based Paint Screening

Fuss & O'Neill performed a LBP screening associated with painted building components at the Site that will be disturbed during demolition activities. Fuss & O'Neill used an X-ray fluorescence (XRF) spectrum analyzer to perform the LBP screening. The screening was conducted in accordance with generally-accepted industry standards for non-residential (i.e., not child-occupied) buildings.

---

### 3.1 Methodology

A Radiation Monitoring Device Model LPA-1 (Serial Number 1395) was utilized for the LBP screening. The instrument was calibrated according to the manufacturer's Performance Characteristic Sheet (PCS) prior to each use.

For the purpose of this LBP screening, representative, coated building components were tested for LBP. Individual repainting efforts are not always discernable in such a limited program. LBP issues involving properties that are not residential are only regulated to a limited degree for worker protection relating to LBP-disturbing work activities and waste disposal.

Worker protection is regulated by OSHA regulations, as well as RIDOH regulations. These regulations include air monitoring of workers to determine exposure levels when disturbing lead-containing paint. A LBP screening cannot determine a safe level of lead, but is intended to provide guidance for implementing industry standards for lead in paint at identified locations. Contractors may better determine worker exposure to airborne lead by understanding the different concentrations of LBP on representative components and surfaces. Air monitoring can then be performed during activities that disturb paint on representative surfaces.

The EPA Resource Conservation and Recovery Act (RCRA) and RIDOH regulate lead-containing waste disposal. If lead is determined to be present, representative composite samples of the anticipated waste stream must be collected and analyzed using the Toxicity Characteristic Leaching Procedure (TCLP). The results are compared to a threshold value of 5.0 milligrams per liter (mg/L). If TCLP sample analytical results exceed this value, the waste is characterized as hazardous lead waste. If the result is below the threshold value, the waste material is not considered hazardous and may be disposed as construction and demolition debris.

A level of paint exceeding 1.0 milligram of lead per square centimeter (mg/cm<sup>2</sup>) of surface area is considered toxic or dangerous by EPA and RIDOH. For the purpose of this screening, the level of 1.0 mg/cm<sup>2</sup> has been utilized as a guide to segregate coated building materials from general demolition debris for disposal purposes.

---

### 3.2 XRF Screening Results

The LBP screening indicated consistent painting trends associated with representative building components that will be impacted by demolition activities. Refer to *Appendix D* for the complete list of building components determined to contain levels of lead  $\geq 1.0$  mg/cm<sup>2</sup>.

---

### 3.3 Discussion

OSHA published a Lead in Construction Standard (OSHA Lead Standard) Title 29 CFR, Part 1926.62 in May of 1993. This Standard sets no limit for the content of lead in paint below which the OSHA standards do not apply. The OSHA Lead Standards are task-based and are also based on airborne exposures and blood lead levels.

The results of this LBP screening are intended to provide guidance to contractors for occupational lead exposure controls. Building components coated with lead levels above industry standards may cause exposures to lead above OSHA standards during proposed demolition activities. The results of this screening are also intended to provide insight into waste disposal requirements, in accordance with EPA RCRA regulations. A TCLP sample to characterize the expected waste that will result from demolition activities was not collected as part of this inspection.

---

### 3.4 Conclusions & Recommendations

Based on our LBP screening results, LBP was identified on coated building components located at the Site.

Contractors must be made aware that OSHA has not established a level of lead in a material below which OSHA Title 29 CFR, Part 1926.62 does not apply. Contractors shall comply with exposure assessment criteria, interim worker protection, and other requirements of the regulation as necessary to protect workers during any demolition activities that will impact LBP.

During demolition activities, LBP-coated building components should be segregated from the general demolition waste stream for sample collection and analysis by TCLP to determine proper off-site waste disposal. If disturbed and managed off-site, non-porous LBP-coated building materials (i.e., metals) may be segregated and recycled as scrap metal. Metal LBP-coated building components cannot be subject to grinding, sawing, drilling, sanding, or torch cutting.

## 4 Fluorescent Light Ballasts & Mercury-Containing Equipment

---

### 4.1 Fluorescent Light Ballasts

Fluorescent light ballasts manufactured prior to 1979 may contain capacitors that contain PCBs. Light ballasts installed as late as 1985 may contain PCB capacitors. Fluorescent light ballasts that are not labeled as “No PCBs” must be assumed to contain PCBs unless proven otherwise by quantitative analysis. Capacitors in fluorescent light ballasts labeled as non-PCB-containing may contain diethylhexyl phthalate (DEHP). DEHP was the primary substitute to replace PCBs for small capacitors in fluorescent lighting ballasts in use until 1991. DEHP is a toxic substance, a suspected carcinogen, and is listed under RCRA and the Superfund Law as a hazardous waste. Therefore, Superfund liability exists for landfilling both PCB- and DEHP-containing light ballasts. These listed materials are considered hazardous waste under RCRA and require special handling and disposal considerations.

---

## 4.2 Mercury-Containing Equipment

Fluorescent lamps/tubes are presumed to contain mercury vapor, which is a hazardous substance to both human health and the environment. Thermostatic controls and electrical switch gear may contain a vial or bulb of liquid mercury associated with the control. Mercury-containing equipment is regulated for proper disposal by EPA RCRA regulations.

---

## 4.3 Results

On January 13 and 14, 2021, Mr. Mallett of Fuss & O'Neill performed a visual inspection of representative fluorescent light fixtures to identify possible PCB-containing ballasts in the building. The inspection involved visually inspecting labels on representative light ballasts to identify manufacture dates and labels indicating "No PCBs". Ballasts manufactured after 1991 were not listed as PCB- or DEHP-containing ballasts and were not quantified for disposal. An in-place inventory of the fluorescent lamps/tubes and other mercury-containing equipment was completed concurrently.

During this inspection, 262 DEHP-containing fluorescent light ballasts and 262 eight-foot, mercury-containing light tubes were identified within the Site building.

---

## 4.4 Conclusions & Recommendations

DEHP-containing fluorescent light ballasts and mercury-containing equipment were identified within the Site building during this inspection.

Fluorescent light ballasts marked as "No PCBs" with date labels indicating manufacture prior to 1991 are presumed to contain DEHP. DEHP-containing ballasts must be segregated for proper packaging, transporting, and disposal as non-PCB hazardous waste. Note that disposal requirements for DEHP-containing ballasts are slightly varied, and disposal costs are slightly less, when compared to PCB-containing light ballasts.

According to the EPA, mercury-containing equipment is characterized as a hazardous waste and mercury lamps/tubes are characterized as a Universal Waste. The mercury-containing equipment and fluorescent lamps/tubes identified within the Site building must be recycled, reclaimed, or disposed of as hazardous waste or Universal Waste prior to building demolition.

This report is not intended to be utilized as a bidding or a project specification document. This report is designed to aid the Client in locating hazardous building materials.

Report prepared by Environmental Analyst, Madelyn Sampson.

Reviewed by:



Dustin A. Diedricksen  
Associate | Department Manager

## Tables

---



**Table 1**  
**Suspect Asbestos-Containing Materials Laboratory Analytical Data Summary**

**719 River Street**  
**Woonsocket, Rhode Island**

City of Woonsocket  
 February 2021  
 Fuss & O'Neill Reference No. 20181545.B10

Sample Number	Material Type	NESHAP Category	Sample Location	Result	Comments
01A-RM-0113	9" x 9" Green Floor Tile	Cat 1 NF	1st Floor, D/A-Side Room	5% Chrysotile	
01B-RM-0113	9" x 9" Green Floor Tile	Cat 1 NF	1st Floor, D/A-Side Room	Pos Stop	
02A-RM-0113	Black Mastic Associated with 9" x 9" Green Floor Tile	Non-ACM	1st Floor, D/A-Side Room	ND	TEM
02B-RM-0113	Black Mastic Associated with 9" x 9" Green Floor Tile	Non-ACM	1st Floor, D/A-Side Room	ND	
03A-RM-0113	Black Floor Paper Associated with Raised Flooring	Non-ACM	1st Floor, Southern Warehouse	ND	
03B-RM-0113	Black Floor Paper Associated with Raised Flooring	Non-ACM	1st Floor, Southern Warehouse	ND	
04A-RM-0113	Brown Floor Paper	Non-ACM	1st Floor, Southern Warehouse	ND	
04B-RM-0113	Brown Floor Paper	Non-ACM	1st Floor, Southern Warehouse	ND	
05A-RM-0113	1' x 1' White Nailed Ceiling Tile	Non-ACM	1st Floor, Southern Warehouse	ND	
05B-RM-0113	1' x 1' White Nailed Ceiling Tile	Non-ACM	1st Floor, Southern Warehouse	ND	
06A-RM-0113	9" x 9" Tan Floor Tile	Cat 1 NF	1st Floor, Southern Warehouse	6% Chrysotile	
06B-RM-0113	9" x 9" Tan Floor Tile	Cat 1 NF	1st Floor, Southern Warehouse	Pos Stop	
07A-RM-0113	Brown Mastic Associated with 9" x 9" Tan Floor Tile	Non-ACM	1st Floor, Southern Warehouse	ND	TEM
07B-RM-0113	Brown Mastic Associated with 9" x 9" Tan Floor Tile	Non-ACM	1st Floor, Southern Warehouse	ND	
08A-RM-0113	9" x 9" Brown Floor Tile	Cat 1 NF	1st Floor, Southern Warehouse	10% Chrysotile	
08B-RM-0113	9" x 9" Brown Floor Tile	Cat 1 NF	1st Floor, Southern Warehouse	Pos Stop	
09A-RM-0113	Brown Mastic Associated with 9" x 9" Brown Floor Tile	Non-ACM	1st Floor, Southern Warehouse	ND	
09B-RM-0113	Brown Mastic Associated with 9" x 9" Brown Floor Tile	Non-ACM	1st Floor, Southern Warehouse	ND	
10A-RM-0113	White Wall Tiles	Non-ACM	1st Floor, Southern Warehouse	ND	
10B-RM-0113	White Wall Tiles	Non-ACM	1st Floor, Southern Warehouse	ND	
11A-RM-0113	12" x 12" Tan Floor Tile	Non-ACM	1st Floor, Southern Warehouse, Office Areas	ND	
11B-RM-0113	12" x 12" Tan Floor Tile	Non-ACM	1st Floor, Southern Warehouse, Office Areas	ND	
12A-RM-0113	Black Mastic Associated with 12" x 12" Tan Floor Tile	Non-ACM	1st Floor, Southern Warehouse, Office Areas	ND	TEM
12B-RM-0113	Black Mastic Associated with 12" x 12" Tan Floor Tile	Non-ACM	1st Floor, Southern Warehouse, Office Areas	ND	
13A-RM-0113	White Floor Leveling Compound on Hardwood	Non-ACM	1st Floor, Southern Warehouse, Office Areas	ND	
13B-RM-0113	White Floor Leveling Compound on Hardwood	Non-ACM	1st Floor, Southern Warehouse, Office Areas	ND	
14A-RM-0113	4" Brown Vinyl Baseboard	Non-ACM	1st Floor, Southern Warehouse, Office Areas	ND	
14B-RM-0113	4" Brown Vinyl Baseboard	Non-ACM	1st Floor, Southern Warehouse, Office Areas	ND	
15A-RM-0113	Yellow Adhesive Associated with 4" Brown Vinyl Baseboard	Non-ACM	1st Floor, Southern Warehouse, Office Areas	ND	

**Table 1**  
**Suspect Asbestos-Containing Materials Laboratory Analytical Data Summary**

Sample Number	Material Type	NESHAP Category	Sample Location	Result	Comments
15B-RM-0113	Yellow Adhesive Associated with 4" Brown Vinyl Baseboard	Non-ACM	1st Floor, Southern Warehouse, Office Areas	ND	
16A-RM-0113	White Joint Compound	Non-ACM	1st Floor, Southern Warehouse, Office Areas	ND	
16B-RM-0113	White Joint Compound	Non-ACM	1st Floor, Southern Warehouse, Office Areas	ND	
17A-RM-0113	Gray Gypsum Wallboard	Non-ACM	1st Floor, Southern Warehouse, Office Areas	ND	
17B-RM-0113	Gray Gypsum Wallboard	Non-ACM	1st Floor, Southern Warehouse, Office Areas	ND	
<b>18A-RM-0113</b>	<b>Brown Masonite Wall Panel Adhesive</b>	<b>Cat 2 NF</b>	<b>1st Floor, Southern Warehouse, Office Areas, Bathroom</b>	<b>2% Chrysotile</b>	
<b>18B-RM-0113</b>	<b>Brown Masonite Wall Panel Adhesive</b>	<b>Cat 2 NF</b>	<b>1st Floor, Southern Warehouse, Office Areas, Bathroom</b>	<b>Pos Stop</b>	
19A-RM-0113	4" Black Vinyl Baseboard	Non-ACM	1st Floor, Southern Warehouse, Office Areas	ND	
19B-RM-0113	4" Black Vinyl Baseboard	Non-ACM	1st Floor, Southern Warehouse, Office Areas	ND	
20A-RM-0113	Tan Adhesive Associated with 4" Black Vinyl Baseboard	Non-ACM	1st Floor, Southern Warehouse, Office Areas	ND	
20B-RM-0113	Tan Adhesive Associated with 4" Black Vinyl Baseboard	Non-ACM	1st Floor, Southern Warehouse, Office Areas	ND	
21A-RM-0113	6" Black Vinyl Baseboard	Non-ACM	1st Floor, Southern Warehouse, Office Areas	ND	
21B-RM-0113	6" Black Vinyl Baseboard	Non-ACM	1st Floor, Southern Warehouse, Office Areas	ND	
22A-RM-0113	Tan Adhesive Associated with 6" Black Vinyl Baseboard	Non-ACM	1st Floor, Southern Warehouse, Office Areas	ND	
22B-RM-0113	Tan Adhesive Associated with 6" Black Vinyl Baseboard	Non-ACM	1st Floor, Southern Warehouse, Office Areas	ND	
23A-RM-0113	Tan Linoleum Flooring	Non-ACM	1st Floor, Southern Warehouse, Office Areas, Common Area	ND	
23B-RM-0113	Tan Linoleum Flooring	Non-ACM	1st Floor, Southern Warehouse, Office Areas, Common Area	ND	
<b>24A-RM-0113</b>	<b>Brown Floor Tile</b>	<b>Cat 1 NF</b>	<b>1st Floor, Southern Warehouse, Office Areas, Common Area</b>	<b>4% Chrysotile</b>	
<b>24B-RM-0113</b>	<b>Brown Floor Tile</b>	<b>Cat 1 NF</b>	<b>1st Floor, Southern Warehouse, Office Areas, Common Area</b>	<b>Pos Stop</b>	
25A-RM-0113	Black Mastic Associated with Brown Floor Tile	Non-ACM	1st Floor, Southern Warehouse, Office Areas, Common Area	ND	
25B-RM-0113	Black Mastic Associated with Brown Floor Tile	Non-ACM	1st Floor, Southern Warehouse, Office Areas, Common Area	ND	
<b>26A-RM-0113</b>	<b>Brown Square-Patterned Linoleum Flooring</b>	<b>Cat 1 NF</b>	<b>1st Floor, Southern Warehouse, Office Areas, Common Area, A/B-Side Room</b>	<b>25% Chrysotile</b>	
<b>26B-RM-0113</b>	<b>Brown Square-Patterned Linoleum Flooring</b>	<b>Cat 1 NF</b>	<b>1st Floor, Southern Warehouse, Office Areas, Common Area, A/B-Side Room</b>	<b>Pos Stop</b>	
27A-RM-0113	Brown Adhesive Associated with Brown Square-Patterned Linoleum	Non-ACM	1st Floor, Southern Warehouse, Office Areas, Common Area, A/B-Side Room	ND	
27B-RM-0113	Brown Adhesive Associated with Brown Square-Patterned Linoleum	Non-ACM	1st Floor, Southern Warehouse, Office Areas, Common Area, A/B-Side Room	ND	
28A-RM-0113	Yellow Adhesive Associated with Tan Linoleum Flooring	Non-ACM	1st Floor, Southern Warehouse, Office Areas, Common Area	ND	
28B-RM-0113	Yellow Adhesive Associated with Tan Linoleum Flooring	Non-ACM	1st Floor, Southern Warehouse, Office Areas, Common Area	ND	
29A-RM-0113	Rectangle White Ceiling Panel	Non-ACM	1st Floor, Southern Warehouse, Office Areas, Common Area, A/B-Side Room	ND	
29B-RM-0113	Rectangle White Ceiling Panel	Non-ACM	1st Floor, Southern Warehouse, Office Areas, Common Area, A/B-Side Room	ND	
30A-RM-0113	12" x 12" Dotted Ceiling Panel	Non-ACM	1st Floor, Southern Warehouse, Office Areas	ND	
30B-RM-0113	12" x 12" Dotted Ceiling Panel	Non-ACM	1st Floor, Southern Warehouse, Office Areas	ND	
<b>31A-RM-0113</b>	<b>Green Floor Tile</b>	<b>Cat 1 NF</b>	<b>1st Floor, Southern Warehouse, Office Areas, A-Side Room</b>	<b>5% Chrysotile</b>	
<b>31B-RM-0113</b>	<b>Green Floor Tile</b>	<b>Cat 1 NF</b>	<b>1st Floor, Southern Warehouse, Office Areas, A-Side Room</b>	<b>Pos Stop</b>	

**Table 1**  
**Suspect Asbestos-Containing Materials Laboratory Analytical Data Summary**

Sample Number	Material Type	NESHAP Category	Sample Location	Result	Comments
32A-RM-0113	Black Mastic Associated with Green Floor Tile	Non-ACM	1st Floor, Southern Warehouse, Office Areas, A-Side Room	ND	
32B-RM-0113	Black Mastic Associated with Green Floor Tile	Non-ACM	1st Floor, Southern Warehouse, Office Areas, A-Side Room	ND	
33A-RM-0113	Tan Wall Panel Adhesive Associated with Wood Panels	Non-ACM	1st Floor, Southern Warehouse, Office Areas, A-Side Room, D-Side Room	ND	
33B-RM-0113	Tan Wall Panel Adhesive Associated with Wood Panels	Non-ACM	1st Floor, Southern Warehouse, Office Areas, A-Side Room, D-Side Room	ND	
34A-RM-0113	<b>Black Flooring Strip</b>	<b>Cat 1 NF</b>	<b>1st Floor, Southern Warehouse, Office Areas, A-Side Room, D-Side Closet</b>	<b>2% Chrysotile</b>	
34B-RM-0113	<b>Black Flooring Strip</b>	<b>Cat 1 NF</b>	<b>1st Floor, Southern Warehouse, Office Areas, A-Side Room, D-Side Closet</b>	<b>Pos Stop</b>	
35A-RM-0113	<b>White Pipe Insulation</b>	<b>RACM</b>	<b>Basement, Storage Closet</b>	<b>80% Chrysotile</b>	
35B-RM-0113	<b>White Pipe Insulation</b>	<b>RACM</b>	<b>Basement, Storage Closet</b>	<b>Pos Stop</b>	
35C-RM-0113	<b>White Pipe Insulation</b>	<b>RACM</b>	<b>Basement, Storage Closet</b>	<b>Pos Stop</b>	
36A-RM-0113	<b>Tan Window Caulking</b>	<b>Cat 2 NF</b>	<b>Exterior, Basement Windows</b>	<b>5% Chrysotile</b>	
36B-RM-0113	<b>Tan Window Caulking</b>	<b>Cat 2 NF</b>	<b>Exterior, Basement Windows</b>	<b>Pos Stop</b>	
37A-RM-0113	Brown Floor Paper	Non-ACM	2nd Floor, Southern Warehouse	ND	
37B-RM-0113	Brown Floor Paper	Non-ACM	2nd Floor, Southern Warehouse	ND	
38A-RM-0113	White Interior Window Glazing Compound	Non-ACM	2nd Floor, Southern Warehouse	ND	TEM
38B-RM-0113	White Interior Window Glazing Compound	Non-ACM	2nd Floor, Southern Warehouse	ND	
39A-RM-0113	Black Built-Up Roofing - Tar	Non-ACM	Lower Roof, above Main Entrance	ND	
39B-RM-0113	Black Built-Up Roofing - Tar	Non-ACM	Lower Roof, above Main Entrance	ND	
40A-RM-0113	Black Built-Up Roofing - Felt	Non-ACM	Lower Roof, above Main Entrance	ND	
40B-RM-0113	Black Built-Up Roofing - Felt	Non-ACM	Lower Roof, above Main Entrance	ND	
41A-RM-0113	<b>Black Built-Up Roofing - Tar</b>	<b>Cat 1 NF</b>	<b>Southeast Roof</b>	<b>10% Chrysotile</b>	
41B-RM-0113	<b>Black Built-Up Roofing - Tar</b>	<b>Cat 1 NF</b>	<b>Southeast Roof</b>	<b>Pos Stop</b>	
42A-RM-0113	Black Built-Up Roofing - Felt	Not Analyzed	Southeast Roof	Not Analyzed	
42B-RM-0113	Black Built-Up Roofing - Felt	Not Analyzed	Southeast Roof	Not Analyzed	
43A-RM-0113	Black Built-Up Roofing - Tar	Non-ACM	Collapsed Roof Section (Warehouse)	ND	
43B-RM-0113	Black Built-Up Roofing - Tar	Non-ACM	Collapsed Roof Section (Warehouse)	ND	
44A-RM-0113	Black Built-Up Roofing - Felt	Non-ACM	Collapsed Roof Section (Warehouse)	ND	
44B-RM-0113	Black Built-Up Roofing - Felt	Non-ACM	Collapsed Roof Section (Warehouse)	ND	
45A-RM-0113	Black Floor Paper	Non-ACM	2nd Floor, Collapsed Roof Section	ND	
45B-RM-0113	Black Floor Paper	Non-ACM	2nd Floor, Collapsed Roof Section	ND	
46A-RM-0113	Black Roofing Debris	Non-ACM	Collapsed Roof Section (Middle Section)	ND	
46B-RM-0113	Black Roofing Debris	Non-ACM	Collapsed Roof Section (Middle Section)	ND	
47A-RM-0113	<b>Reinforced Concrete Panel</b>	<b>Cat 2 NF</b>	<b>1st Floor, Collapsed Roof Section, Debris Pile</b>	<b>15% Chrysotile</b>	
47B-RM-0113	<b>Reinforced Concrete Panel</b>	<b>Cat 2 NF</b>	<b>1st Floor, Collapsed Roof Section, Debris Pile</b>	<b>Pos Stop</b>	

**Table 1**  
**Suspect Asbestos-Containing Materials Laboratory Analytical Data Summary**

Sample Number	Material Type	NESHAP Category	Sample Location	Result	Comments
48A-RM-0113	Black Roofing Debris	Cat 1 NF	1st Floor, Northern Warehouse, Debris Pile	5% Chrysotile	
48B-RM-0113	Black Roofing Debris	Cat 1 NF	1st Floor, Northern Warehouse, Debris Pile	Pos Stop	
49A-RM-0113	12" x 12" Brown Floor Tile	Non-ACM	1st Floor, Northern Warehouse	ND	
49B-RM-0113	12" x 12" Brown Floor Tile	Non-ACM	1st Floor, Northern Warehouse	ND	
50A-RM-0113	Yellow Mastic Associated with 12" x 12" Brown Floor Tile	Non-ACM	1st Floor, Northern Warehouse	ND	TEM
50B-RM-0113	Yellow Mastic Associated with 12" x 12" Brown Floor Tile	Non-ACM	1st Floor, Northern Warehouse	ND	
51A-RM-0113	4" Brown Vinyl Baseboard	Non-ACM	1st Floor, Northern Warehouse	ND	
51B-RM-0113	4" Brown Vinyl Baseboard	Non-ACM	1st Floor, Northern Warehouse	ND	
52A-RM-0113	Yellow Adhesive Associated with 4" Brown Vinyl Baseboard	Non-ACM	1st Floor, Northern Warehouse	ND	
52B-RM-0113	Yellow Adhesive Associated with 4" Brown Vinyl Baseboard	Non-ACM	1st Floor, Northern Warehouse	ND	
53A-RM-0113	Tan Wall Panel Adhesive	Non-ACM	1st Floor, Northern Warehouse, Office Area, Hallway	ND	
53B-RM-0113	Tan Wall Panel Adhesive	Non-ACM	1st Floor, Northern Warehouse, Office Area, Hallway	ND	
54A-RM-0113	White Joint Compound	Non-ACM	1st Floor, Northern Warehouse, Office Area, Hallway	ND	
54B-RM-0113	White Joint Compound	Non-ACM	1st Floor, Northern Warehouse, Office Area, Hallway	ND	
54C-RM-0113	White Joint Compound	Non-ACM	1st Floor, Northern Warehouse, Office Area, Hallway	ND	
55A-RM-0113	Gray Gypsum Board	Non-ACM	1st Floor, Northern Warehouse, Office Area, Hallway	ND	
55B-RM-0113	Gray Gypsum Board	Non-ACM	1st Floor, Northern Warehouse, Office Area, Hallway	ND	
56A-RM-0113	Black Siding Paper	Non-ACM	Exterior, A-Side	ND	
56B-RM-0113	Black Siding Paper	Non-ACM	Exterior, A-Side	ND	
57A-RM-0113	Gray Parging Cement	Non-ACM	Exterior, Debris, A-Side	ND	
57B-RM-0113	Gray Parging Cement	Non-ACM	Exterior, Debris, A-Side	ND	
58A-RM-0113	White Skim Coat Plaster	Non-ACM	Exterior, Debris, A-Side	ND	
58B-RM-0113	White Skim Coat Plaster	Non-ACM	Exterior, Debris, A-Side	ND	
58C-RM-0113	White Skim Coat Plaster	Non-ACM	Exterior, Debris, A-Side	ND	
59A-RM-0113	Gray Rough Coat Plaster	Non-ACM	Exterior, Debris, A-Side	ND	
59B-RM-0113	Gray Rough Coat Plaster	Non-ACM	Exterior, Debris, A-Side	ND	
59C-RM-0113	Gray Rough Coat Plaster	Non-ACM	Exterior, Debris, A-Side	ND	
60A-RM-0113	Gray Ceramic Floor Tile Grout	Non-ACM	Exterior, Debris, A-Side	ND	
60B-RM-0113	Gray Ceramic Floor Tile Grout	Non-ACM	Exterior, Debris, A-Side	ND	
61A-RM-0113	Black Roofing Debris	Non-ACM	Exterior, Debris, A-Side	ND	
61B-RM-0113	Black Roofing Debris	Non-ACM	Exterior, Debris, A-Side	ND	
61C-RM-0113	Black Roofing Debris	Non-ACM	Exterior, Debris, A-Side	ND	
61D-RM-0113	Black Roofing Debris	Non-ACM	Exterior, Debris, A-Side	ND	

**Table 1**  
**Suspect Asbestos-Containing Materials Laboratory Analytical Data Summary**

Sample Number	Material Type	NESHAP Category	Sample Location	Result	Comments
62A-RM-0113	Yellow Adhesive Associated with Window Sill Paper	Non-ACM	1st Floor, Southern Warehouse, Office Areas, A-Side Windows	ND	
62B-RM-0113	Yellow Adhesive Associated with Window Sill Paper	Non-ACM	1st Floor, Southern Warehouse, Office Areas, A-Side Windows	ND	
<b>63A-RM-0113</b>	<b>White Interior Window Glazing Compound</b>	<b>Cat 2 NF</b>	<b>1st Floor, Northern Warehouse</b>	<b>2% Chrysotile</b>	
<b>63B-RM-0113</b>	<b>White Interior Window Glazing Compound</b>	<b>Cat 2 NF</b>	<b>1st Floor, Northern Warehouse</b>	<b>Pos Stop</b>	
64A-RM-0113	Gray Ceramic Floor Tile Thin-Set Mortar	Non-ACM	Exterior, Debris Pile, B-Side	ND	
64B-RM-0113	Gray Ceramic Floor Tile Thin-Set Mortar	Non-ACM	Exterior, Debris Pile, B-Side	ND	
65A-RM-0113	Black Roofing Debris	Non-ACM	Exterior, Debris Pile, B-Side	ND	
65B-RM-0113	Black Roofing Debris	Non-ACM	Exterior, Debris Pile, B-Side	ND	
66A-RM-0113	Yellow Wall Panel Adhesive	Non-ACM	1st Floor, Southern Warehouse, Office Areas	ND	
66B-RM-0113	Yellow Wall Panel Adhesive	Non-ACM	1st Floor, Southern Warehouse, Office Areas	ND	

ACM = Asbestos-Containing Material

ND = None Detected

Pos Stop = Positive Stop

RACM = Regulated Asbestos-Containing Material

TEM = Transmission Electron Microscopy

Note: Perimeter wall sides are identified with letter A, B, C, and D. Side A is the street side for the address. Side, B, C, and D are identified clockwise from Side A as one faces the Site building.

**Table 2**  
**Asbestos-Containing Materials Summary**

**719 River Street**  
**Woonsocket, Rhode Island**

City of Woonsocket  
February 2021  
Fuss & O'Neill Reference No. 20181545.B10

Asbestos-Containing Material Type	Locations(s)	Asbestos Content	Estimated Total Quantity
9" x 9" Green Floor Tile	South Building, Office Area	5% Chrysotile	2,000 SF
9" x 9" Tan Floor Tile		6% Chrysotile	
9" x 9" Brown Floor Tile		10% Chrysotile	
Brown Floor Tile		4% Chrysotile	
Brown Square-Patterned Linoleum Flooring		25% Chrysotile	
Green Floor Tile		5% Chrysotile	
Black Flooring Strip		2% Chrysotile	
Brown Masonite Wall Panel Adhesive	South Building, Office Area Bathrooms	2% Chrysotile	300 SF
White Pipe Insulation	Basement, Storage Closet	80% Chrysotile	15 LF
Tan Window Caulking	South Building	5% Chrysotile	40 EA
Black Built-Up Roofing - Tar	Southeast Roof	10% Chrysotile	8,500 SF
Reinforced Concrete Panel	1st Floor, Northern Warehouse, Debris Pile	15% Chrysotile	375 CY
Black Roofing Debris	1st Floor, Northern Warehouse, Debris Pile	5% Chrysotile	
White Interior Window Glazing Compound	1st Floor, Northern Warehouse	2% Chrysotile	10 EA

CY = Cubic Yard; EA = Each, LF = Linear Feet, SF = Square Feet

## **Appendix A**

---

### Limitations

## **APPENDIX A**

### **719 River Street Woonsocket, Rhode Island**

1. This environmental report has been prepared for the exclusive use of the Client, and is subject to, and is issued in connection with, the general terms and conditions of the original Agreement (October 7, 2020) and all of its provisions. Any use or reliance upon information provided in this report, without the specific written authorization of the Client and Fuss & O'Neill, shall be at the User's individual risk. This report should not be used as an abatement specification. All quantities of materials identified during this inspection are approximate.
2. Fuss & O'Neill has obtained and relied upon laboratory analytical results in conducting the inspection. This information was used to form conclusions regarding the types and quantities of ACM that must be managed prior to renovation or demolition activities that may disturb these materials at the subject property. Fuss & O'Neill has not performed an independent review of the reliability of this laboratory data.
3. Unless otherwise noted, only suspect hazardous materials associated within or located on the building (aboveground) were included in this inspection. Suspect hazardous materials may exist below the ground surfaces that were not included in the scope of work of this inspection. Fuss & O'Neill cannot guarantee all asbestos or suspect hazardous materials were identified within the areas included in the scope of work. Only visible and accessible areas were included in the scope of work for this inspection.
4. The findings, observations, and conclusions presented in this report are limited by the scope of services outlined in our original Agreement, which reflects schedule and budgetary constraints imposed by the Client. Furthermore, the assessment has been conducted in accordance with generally accepted environmental practices. No other warranty, expressed or implied, is made.
5. The conclusions presented in this report are based solely upon information gathered by Fuss & O'Neill to date. Should further environmental or other relevant information be discovered at a later date, the Client should immediately bring the information to Fuss & O'Neill's attention. Based upon an evaluation and assessment of relevant information, Fuss & O'Neill may modify the report and its conclusions.



## **Appendix B**

---

### Fuss & O'Neill Asbestos Inspector State Certification & EPA Accreditation

Rhode Island Department of Health

Asbestos Program

Asbestos Inspector

**ROBERT C MALLET**

Exp. Date: 04/30/2021

License #: A100978

Member of C.O.N.E.S.





*State of Rhode Island and Providence Plantations*  
**DEPARTMENT OF HEALTH**  
**CENTER FOR HEALTHY HOMES & ENVIRONMENT – ASBESTOS PROGRAM**

**ASBESTOS CONSULTANT CERTIFICATION**

Pursuant to the Asbestos Abatement Act, Chapter 24.5 of Title 23 of the Rhode Island General Laws, and Regulation 216-RICR-50-15-1 – Asbestos Control, this license is hereby issued as designated below. This license is subject to all applicable rules, regulations, orders and notices of the Department of Health now or hereafter in effect and to any conditions delineated below.

**Certificate Holder: ROBERT C MALLET**

**Address: FUSS AND ONEILL ENVIROSCIENCE LLC**  
**108 MYRTLE ST STE 502**  
**QUINCY MA 02171**

**Certification Number: AI00978**

**Type of Certification: Asbestos Inspector**

**Expiration Date: 04/30/2021**

Except as specifically provided otherwise in this Certificate, Certificate holders shall conduct their program in accordance with statements, procedures and representations contained in their application, including any attachments. Regulation 216-RICR-50-15-1 - Asbestos Control shall govern unless the statements, representations and procedures in the Certificate Holder's application and documentation are more restrictive than the regulations.

*Raquel Barrera*

---

**Raquel Barrera**  
**Sr. Community Program Liaison Worker**  
**Healthy Homes and Environment**

## **Appendix C**

---

### Asbestos Laboratory Analytical Reports & Chain-of-Custody Forms



# EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801

Tel/Fax: (781) 933-8411 / (781) 933-8412

<http://www.EMSL.com> / [bostonlab@emsl.com](mailto:bostonlab@emsl.com)

EMSL Order: 132100449

Customer ID: ENVI54

Customer PO: 20181545.B10

Project ID:

**Attention:** Robert Mallett  
Fuss & O'Neill, Inc.  
146 Hartford Road  
Manchester, CT 06040

**Phone:** (860) 646-2469

**Fax:**

**Received Date:** 01/18/2021 8:40 AM

**Analysis Date:** 01/22/2021 - 01/23/2021

**Collected Date:** 01/13/2021

**Project:** 20181545.B10 - 719 River Street; Woonsocket, RI

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
01A-RM-0113 <small>132100449-0001</small>	1st Floor, D/A-side Room - 9"x9" Green Floor Tile	Green Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
01B-RM-0113 <small>132100449-0002</small>	1st Floor, D/A-side Room - 9"x9" Green Floor Tile				Positive Stop (Not Analyzed)
02A-RM-0113 <small>132100449-0003</small>	1st Floor, D/A-side Room - Black Mastic Assoc. w/ 01	Black Non-Fibrous Homogeneous	10% Cellulose 2% Glass	88% Non-fibrous (Other)	None Detected
02B-RM-0113 <small>132100449-0004</small>	1st Floor, D/A-side Room - Black Mastic Assoc. w/ 01	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
03A-RM-0113 <small>132100449-0005</small>	1st Floor, Southern Warehouse - Black Floor Paper Assoc. w/ Raised Flooring	Black Non-Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
03B-RM-0113 <small>132100449-0006</small>	1st Floor, Southern Warehouse - Black Floor Paper Assoc. w/ Raised Flooring	Black Non-Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
04A-RM-0113 <small>132100449-0007</small>	1st Floor, Southern Warehouse - Brown Floor Paper	Brown Non-Fibrous Homogeneous	95% Cellulose 2% Glass	3% Non-fibrous (Other)	None Detected
04B-RM-0113 <small>132100449-0008</small>	1st Floor, Southern Warehouse - Brown Floor Paper	Brown Non-Fibrous Homogeneous	90% Cellulose 3% Glass	7% Non-fibrous (Other)	None Detected
05A-RM-0113 <small>132100449-0009</small>	1st Floor, Southern Warehouse - 1'x1' White Nailed Ceiling Tile	White Non-Fibrous Homogeneous	98% Cellulose	2% Non-fibrous (Other)	None Detected
05B-RM-0113 <small>132100449-0010</small>	1st Floor, Southern Warehouse - 1'x1' White Nailed Ceiling Tile	White Non-Fibrous Homogeneous	98% Cellulose	2% Non-fibrous (Other)	None Detected
06A-RM-0113 <small>132100449-0011</small>	1st Floor, Southern Warehouse - 9"x9" Tan Floor Tile	Tan Non-Fibrous Homogeneous		94% Non-fibrous (Other)	6% Chrysotile
06B-RM-0113 <small>132100449-0012</small>	1st Floor, Southern Warehouse - 9"x9" Tan Floor Tile				Positive Stop (Not Analyzed)
07A-RM-0113 <small>132100449-0013</small>	1st Floor, Southern Warehouse - Brown Mastic Assoc. w/ 06	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
07B-RM-0113 <small>132100449-0014</small>	1st Floor, Southern Warehouse - Brown Mastic Assoc. w/ 06	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
08A-RM-0113 <small>132100449-0015</small>	1st Floor, Southern Warehouse - 9"x9" Brown Floor Tile	Brown Non-Fibrous Homogeneous		90% Non-fibrous (Other)	10% Chrysotile

Initial report from: 01/23/2021 14:57:30



# EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801

Tel/Fax: (781) 933-8411 / (781) 933-8412

<http://www.EMSL.com> / [bostonlab@emsl.com](mailto:bostonlab@emsl.com)

**EMSL Order:** 132100449  
**Customer ID:** ENVI54  
**Customer PO:** 20181545.B10  
**Project ID:**

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
08B-RM-0113 <i>132100449-0016</i>	1st Floor, Southern Warehouse - 9"x9" Brown Floor Tile				Positive Stop (Not Analyzed)
09A-RM-0113 <i>132100449-0017</i>	1st Floor, Southern Warehouse - Brown Mastic Assoc. w/ 08	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
09B-RM-0113 <i>132100449-0018</i>	1st Floor, Southern Warehouse - Brown Mastic Assoc. w/ 08	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
10A-RM-0113 <i>132100449-0019</i>	1st Floor, Southern Warehouse - White Wall Tiles	White Non-Fibrous Homogeneous	98% Cellulose	2% Non-fibrous (Other)	None Detected
10B-RM-0113 <i>132100449-0020</i>	1st Floor, Southern Warehouse - White Wall Tiles	White Non-Fibrous Homogeneous	98% Cellulose	2% Non-fibrous (Other)	None Detected
11A-RM-0113 <i>132100449-0021</i>	1st Floor, Southern Warehouse, Office Areas - 12"x12" Tan Floor Tile	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
11B-RM-0113 <i>132100449-0022</i>	1st Floor, Southern Warehouse, Office Areas - 12"x12" Tan Floor Tile	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12A-RM-0113 <i>132100449-0023</i>	1st Floor, Southern Warehouse, Office Areas - Black Mastic Assoc. w/ 11	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12B-RM-0113 <i>132100449-0024</i>	1st Floor, Southern Warehouse, Office Areas - Black Mastic Assoc. w/ 11	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
13A-RM-0113 <i>132100449-0025</i>	1st Floor, Southern Warehouse, Office Areas - White Floor Leveling Compound on Hardwood	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
13B-RM-0113 <i>132100449-0026</i>	1st Floor, Southern Warehouse, Office Areas - White Floor Leveling Compound on Hardwood	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
14A-RM-0113 <i>132100449-0027</i>	1st Floor, Southern Warehouse, Office Areas - 4" Brown Vinyl Baseboard	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
14B-RM-0113 <i>132100449-0028</i>	1st Floor, Southern Warehouse, Office Areas - 4" Brown Vinyl Baseboard	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15A-RM-0113 <i>132100449-0029</i>	1st Floor, Southern Warehouse, Office Areas - Yellow Adhesive Assoc. w/ 14	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15B-RM-0113 <i>132100449-0030</i>	1st Floor, Southern Warehouse, Office Areas - Yellow Adhesive Assoc. w/ 14	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 01/23/2021 14:57:30



# EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801

Tel/Fax: (781) 933-8411 / (781) 933-8412

<http://www.EMSL.com> / [bostonlab@emsl.com](mailto:bostonlab@emsl.com)

**EMSL Order:** 132100449  
**Customer ID:** ENVI54  
**Customer PO:** 20181545.B10  
**Project ID:**

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
16A-RM-0113 <small>132100449-0031</small>	1st Floor, Southern Warehouse, Office Areas - White Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
16B-RM-0113 <small>132100449-0032</small>	1st Floor, Southern Warehouse, Office Areas - White Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
17A-RM-0113 <small>132100449-0033</small>	1st Floor, Southern Warehouse, Office Areas - Gray Gypsum Wallboard	Brown/Gray Non-Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
17B-RM-0113 <small>132100449-0034</small>	1st Floor, Southern Warehouse, Office Areas - Gray Gypsum Wallboard	Brown/Gray Non-Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
18A-RM-0113 <small>132100449-0035</small>	1st Floor, Southern Warehouse, Office Areas, Bathroom - Brown Masonite Wall Panel Adhesive	Brown Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
18B-RM-0113 <small>132100449-0036</small>	1st Floor, Southern Warehouse, Office Areas, Bathroom - Brown Masonite Wall Panel Adhesive				Positive Stop (Not Analyzed)
19A-RM-0113 <small>132100449-0037</small>	1st Floor, Southern Warehouse, Office Areas - 4" Black Vinyl Baseboard	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
19B-RM-0113 <small>132100449-0038</small>	1st Floor, Southern Warehouse, Office Areas - 4" Black Vinyl Baseboard	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
20A-RM-0113 <small>132100449-0039</small>	1st Floor, Southern Warehouse, Office Areas - Tan Adhesive Assoc. w/ 19	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
20B-RM-0113 <small>132100449-0040</small>	1st Floor, Southern Warehouse, Office Areas - Tan Adhesive Assoc. w/ 19	Brown/Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
21A-RM-0113 <small>132100449-0041</small>	1st Floor, Southern Warehouse, Office Areas - 6" Black Vinyl Baseboard	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
21B-RM-0113 <small>132100449-0042</small>	1st Floor, Southern Warehouse, Office Areas - 6" Black Vinyl Baseboard	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
22A-RM-0113 <small>132100449-0043</small>	1st Floor, Southern Warehouse, Office Areas - Tan Adhesive Assoc. w/ 21	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
22B-RM-0113 <small>132100449-0044</small>	1st Floor, Southern Warehouse, Office Areas - Tan Adhesive Assoc. w/ 21	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 01/23/2021 14:57:30



# EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801

Tel/Fax: (781) 933-8411 / (781) 933-8412

<http://www.EMSL.com> / [bostonlab@emsl.com](mailto:bostonlab@emsl.com)

**EMSL Order:** 132100449  
**Customer ID:** ENVI54  
**Customer PO:** 20181545.B10  
**Project ID:**

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
23A-RM-0113 132100449-0045	1st Floor, Southern Warehouse, Office Areas, Common Area - Tan Linoleum Flooring	Tan Non-Fibrous Homogeneous	35% Cellulose 5% Glass	60% Non-fibrous (Other)	None Detected
23B-RM-0113 132100449-0046	1st Floor, Southern Warehouse, Office Areas, Common Area - Tan Linoleum Flooring	Tan Non-Fibrous Homogeneous	35% Cellulose 5% Glass	60% Non-fibrous (Other)	None Detected
24A-RM-0113 132100449-0047	1st Floor, Southern Warehouse, Office Areas, Common Area - Brown Floor Tile	Brown Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
24B-RM-0113 132100449-0048	1st Floor, Southern Warehouse, Office Areas, Common Area - Brown Floor Tile				Positive Stop (Not Analyzed)
25A-RM-0113 132100449-0049	1st Floor, Southern Warehouse, Office Areas, Common Area - Black Mastic Assoc. w/ 24	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
25B-RM-0113 132100449-0050	1st Floor, Southern Warehouse, Office Areas, Common Area - Black Mastic Assoc. w/ 24	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
26A-RM-0113 132100449-0051	1st Floor, Southern Warehouse, Office Areas, Common Area, A/B-side Room - Brown Square Patterned Linoleum	Brown Non-Fibrous Homogeneous	40% Cellulose	35% Non-fibrous (Other)	25% Chrysotile
26B-RM-0113 132100449-0052	1st Floor, Southern Warehouse, Office Areas, Common Area, A/B-side Room - Brown Square Patterned Linoleum				Positive Stop (Not Analyzed)
27A-RM-0113 132100449-0053	1st Floor, Southern Warehouse, Office Areas, Common Area, A/B-side Room - Brown Adhesive Assoc. w/ 26	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
27B-RM-0113 132100449-0054	1st Floor, Southern Warehouse, Office Areas, Common Area, A/B-side Room - Brown Adhesive Assoc. w/ 26	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
28A-RM-0113 132100449-0055	1st Floor, Southern Warehouse, Office Areas, Common Area - Yellow Adhesive Assoc. w/ 23	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 01/23/2021 14:57:30





# EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801

Tel/Fax: (781) 933-8411 / (781) 933-8412

<http://www.EMSL.com> / [bostonlab@emsl.com](mailto:bostonlab@emsl.com)

**EMSL Order:** 132100449  
**Customer ID:** ENVI54  
**Customer PO:** 20181545.B10  
**Project ID:**

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
28B-RM-0113 <small>132100449-0056</small>	1st Floor, Southern Warehouse, Office Areas, Common Area - Yellow Adhesive Assoc. w/ 23	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
29A-RM-0113 <small>132100449-0057</small>	1st Floor, Southern Warehouse, Office Areas, Common Area, A/B-side Room - Rectangle White Ceiling Panel	White Non-Fibrous Homogeneous	50% Cellulose 40% Min. Wool	10% Non-fibrous (Other)	None Detected
29B-RM-0113 <small>132100449-0058</small>	1st Floor, Southern Warehouse, Office Areas, Common Area, A/B-side Room - Rectangle White Ceiling Panel	White Fibrous Homogeneous	50% Cellulose 40% Min. Wool	10% Non-fibrous (Other)	None Detected
30A-RM-0113 <small>132100449-0059</small>	1st Floor, Southern Warehouse, Office Areas - 12"x12" Dotted Ceiling Panel	White Non-Fibrous Homogeneous	98% Cellulose	2% Non-fibrous (Other)	None Detected
30B-RM-0113 <small>132100449-0060</small>	1st Floor, Southern Warehouse, Office Areas - 12"x12" Dotted Ceiling Panel	White Fibrous Homogeneous	98% Cellulose	2% Non-fibrous (Other)	None Detected
31A-RM-0113 <small>132100449-0061</small>	1st Floor, Southern Warehouse, Office Areas, A-side Room - Green Floor Tile	Green Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
31B-RM-0113 <small>132100449-0062</small>	1st Floor, Southern Warehouse, Office Areas, A-side Room - Green Floor Tile				Positive Stop (Not Analyzed)
32A-RM-0113 <small>132100449-0063</small>	1st Floor, Southern Warehouse, Office Areas, A-side Room - Black Mastic Assoc. w/ 31	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
32B-RM-0113 <small>132100449-0064</small>	1st Floor, Southern Warehouse, Office Areas, A-side Room - Black Mastic Assoc. w/ 31	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
33A-RM-0113 <small>132100449-0065</small>	1st Floor, Southern Warehouse, Office Areas, A-side Room, D-side Room - Tan Wall Panel Adhesive Assoc. w/ Wood Panels	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
33B-RM-0113 <small>132100449-0066</small>	1st Floor, Southern Warehouse, Office Areas, A-side Room, D-side Room - Tan Wall Panel Adhesive Assoc. w/ Wood Panels	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 01/23/2021 14:57:30



# EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801

Tel/Fax: (781) 933-8411 / (781) 933-8412

<http://www.EMSL.com> / [bostonlab@emsl.com](mailto:bostonlab@emsl.com)

**EMSL Order:** 132100449  
**Customer ID:** ENVI54  
**Customer PO:** 20181545.B10  
**Project ID:**

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
34A-RM-0113 <small>132100449-0067</small>	1st Floor, Southern Warehouse, Office Areas, A-side Room, D-side Closet - Black Flooring Strip	Black Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
34B-RM-0113 <small>132100449-0068</small>	1st Floor, Southern Warehouse, Office Areas, A-side Room, D-side Closet - Black Flooring Strip				Positive Stop (Not Analyzed)
35A-RM-0113 <small>132100449-0069</small>	Basement, Storage Closet - White Pipe Insulation	White Fibrous Homogeneous		20% Non-fibrous (Other)	80% Chrysotile
35B-RM-0113 <small>132100449-0070</small>	Basement, Storage Closet - White Pipe Insulation				Positive Stop (Not Analyzed)
35C-RM-0113 <small>132100449-0071</small>	Basement, Storage Closet - White Pipe Insulation				Positive Stop (Not Analyzed)
36A-RM-0113 <small>132100449-0072</small>	Exterior, Basement Windows - Tan Window Caulking	Tan Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
36B-RM-0113 <small>132100449-0073</small>	Exterior, Basement Windows - Tan Window Caulking				Positive Stop (Not Analyzed)
37A-RM-0113 <small>132100449-0074</small>	2nd Floor, Southern Warehouse - Brown Floor Paper	Tan Fibrous Homogeneous	95% Cellulose	5% Non-fibrous (Other)	None Detected
37B-RM-0113 <small>132100449-0075</small>	2nd Floor, Southern Warehouse - Brown Floor Paper	Tan Fibrous Homogeneous	95% Cellulose	5% Non-fibrous (Other)	None Detected
38A-RM-0113 <small>132100449-0076</small>	2nd Floor, Southern Warehouse - White Interior Window Glazing	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
38B-RM-0113 <small>132100449-0077</small>	2nd Floor, Southern Warehouse - White Interior Window Glazing	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
39A-RM-0113 <small>132100449-0078</small>	Lower Roof, Above Main Entrance - Black Built-up Roofing - Tar	Black Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
39B-RM-0113 <small>132100449-0079</small>	Lower Roof, Above Main Entrance - Black Built-up Roofing - Tar	Black Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
40A-RM-0113 <small>132100449-0080</small>	Lower Roof, Above Main Entrance - Black Built-up Roofing - Felt	Black Fibrous Homogeneous	20% Glass	80% Non-fibrous (Other)	None Detected
40B-RM-0113 <small>132100449-0081</small>	Lower Roof, Above Main Entrance - Black Built-up Roofing - Felt	Black Fibrous Homogeneous	20% Glass	80% Non-fibrous (Other)	None Detected
41A-RM-0113 <small>132100449-0082</small>	Southeast Roof - Black Built-up Roofing - Tar	Black Non-Fibrous Homogeneous		90% Non-fibrous (Other)	10% Chrysotile
41B-RM-0113 <small>132100449-0083</small>	Southeast Roof - Black Built-up Roofing - Tar				Positive Stop (Not Analyzed)

Initial report from: 01/23/2021 14:57:30



# EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801

Tel/Fax: (781) 933-8411 / (781) 933-8412

<http://www.EMSL.com> / [bostonlab@emsl.com](mailto:bostonlab@emsl.com)

**EMSL Order:** 132100449  
**Customer ID:** ENVI54  
**Customer PO:** 20181545.B10  
**Project ID:**

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
42A-RM-0113 <small>132100449-0084</small>	Southeast Roof - Black Built-up Roofing - Felt				Insufficient Material
42B-RM-0113 <small>132100449-0085</small>	Southeast Roof - Black Built-up Roofing - Felt				Insufficient Material
43A-RM-0113 <small>132100449-0086</small>	Collapsed Roof Section - Black Built-up Roofing - Tar	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
43B-RM-0113 <small>132100449-0087</small>	Collapsed Roof Section - Black Built-up Roofing - Tar	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
44A-RM-0113 <small>132100449-0088</small>	Collapsed Roof Section - Black Built-up Roofing - Felt	Black Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
44B-RM-0113 <small>132100449-0089</small>	Collapsed Roof Section - Black Built-up Roofing - Felt	Black Non-Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
45A-RM-0113 <small>132100449-0090</small>	2nd Floor, Collapsed Roof Section - Black Floor Paper	Black Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (Other)	None Detected
45B-RM-0113 <small>132100449-0091</small>	2nd Floor, Collapsed Roof Section - Black Floor Paper	Black Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (Other)	None Detected
46A-RM-0113 <small>132100449-0092</small>	Collapsed Roof Section - Black Roofing Debris	Black Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
46B-RM-0113 <small>132100449-0093</small>	Collapsed Roof Section - Black Roofing Debris	Black Non-Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
47A-RM-0113 <small>132100449-0094</small>	1st Floor, Collapsed Roof Section, Debris Pile - Reinforced Concrete Panel	Gray Fibrous Homogeneous		85% Non-fibrous (Other)	15% Chrysotile
47B-RM-0113 <small>132100449-0095</small>	1st Floor, Collapsed Roof Section, Debris Pile - Reinforced Concrete Panel				Positive Stop (Not Analyzed)
48A-RM-0113 <small>132100449-0096</small>	1st Floor, Nothern Warehouse, Debris Pile - Black Roofing Debris	Black Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
48B-RM-0113 <small>132100449-0097</small>	1st Floor, Nothern Warehouse, Debris Pile - Black Roofing Debris				Positive Stop (Not Analyzed)
49A-RM-0113 <small>132100449-0098</small>	1st Floor, Nothern Warehouse - 12"x12" Brown Floor Tile	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
49B-RM-0113 <small>132100449-0099</small>	1st Floor, Nothern Warehouse - 12"x12" Brown Floor Tile	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
50A-RM-0113 <small>132100449-0100</small>	1st Floor, Nothern Warehouse - Yellow Mastic Assoc. w/ 49	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
50B-RM-0113 <small>132100449-0101</small>	1st Floor, Nothern Warehouse - Yellow Mastic Assoc. w/ 49	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 01/23/2021 14:57:30



# EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801

Tel/Fax: (781) 933-8411 / (781) 933-8412

<http://www.EMSL.com> / [bostonlab@emsl.com](mailto:bostonlab@emsl.com)

EMSL Order: 132100449

Customer ID: ENVI54

Customer PO: 20181545.B10

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
51A-RM-0113 132100449-0102	1st Floor, Nothern Warehouse - 4" Brown Vinyl Baseboard	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
51B-RM-0113 132100449-0103	1st Floor, Nothern Warehouse - 4" Brown Vinyl Baseboard	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
52A-RM-0113 132100449-0104	1st Floor, Nothern Warehouse - Yellow Adhesive Assoc. w/ 51	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
52B-RM-0113 132100449-0105	1st Floor, Nothern Warehouse - Yellow Adhesive Assoc. w/ 51	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
53A-RM-0113 132100449-0106	1st Floor, Nothern Warehouse, Office Area, Hallway - Tan Wall Panel Adhesive	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
53B-RM-0113 132100449-0107	1st Floor, Nothern Warehouse, Office Area, Hallway - Tan Wall Panel Adhesive	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
54A-RM-0113 132100449-0108	1st Floor, Nothern Warehouse, Office Area, Hallway - White Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
54B-RM-0113 132100449-0109	1st Floor, Nothern Warehouse, Office Area, Hallway - White Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
54C-RM-0113 132100449-0110	1st Floor, Nothern Warehouse, Office Area, Hallway - White Joint Compound	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
<i>Sample appears to be gypsum board.</i>					
55A-RM-0113 132100449-0111	1st Floor, Nothern Warehouse, Office Area, Hallway - Gray Gypsum Board	Gray/Tan Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
55B-RM-0113 132100449-0112	1st Floor, Nothern Warehouse, Office Area, Hallway - Gray Gypsum Board	Gray/Tan Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
56A-RM-0113 132100449-0113	Exterior, A-side - Black Siding Paper	Black Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
56B-RM-0113 132100449-0114	Exterior, A-side - Black Siding Paper	Black Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
57A-RM-0113 132100449-0115	Exterior, Debris, A-side - Gray Parging Cement	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
57B-RM-0113 132100449-0116	Exterior, Debris, A-side - Gray Parging Cement	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 01/23/2021 14:57:30



# EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801

Tel/Fax: (781) 933-8411 / (781) 933-8412

<http://www.EMSL.com> / [bostonlab@emsl.com](mailto:bostonlab@emsl.com)

EMSL Order: 132100449

Customer ID: ENVI54

Customer PO: 20181545.B10

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
58A-RM-0113 <small>132100449-0117</small>	Exterior, Debris, A-side - White Skim Coat Plaster	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
58B-RM-0113 <small>132100449-0118</small>	Exterior, Debris, A-side - White Skim Coat Plaster	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
58C-RM-0113 <small>132100449-0119</small>	Exterior, Debris, A-side - White Skim Coat Plaster	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
59A-RM-0113 <small>132100449-0120</small>	Exterior, Debris, A-side - Gray Rough Coat Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
59B-RM-0113 <small>132100449-0121</small>	Exterior, Debris, A-side - Gray Rough Coat Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
59C-RM-0113 <small>132100449-0122</small>	Exterior, Debris, A-side - Gray Rough Coat Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
60A-RM-0113 <small>132100449-0123</small>	Exterior, Debris, A-side - Gray Ceramic Floor Tile Grout	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
60B-RM-0113 <small>132100449-0124</small>	Exterior, Debris, A-side - Gray Ceramic Floor Tile Grout	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
61A-RM-0113 <small>132100449-0125</small>	Exterior, Debris, A-side - Black Roofing Debris	Black Fibrous Homogeneous	10% Synthetic	90% Non-fibrous (Other)	None Detected
61B-RM-0113 <small>132100449-0126</small>	Exterior, Debris, A-side - Black Roofing Debris	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
61C-RM-0113 <small>132100449-0127</small>	Exterior, Debris, A-side - Black Roofing Debris	Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
61D-RM-0113 <small>132100449-0128</small>	Exterior, Debris, A-side - Black Roofing Debris	Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
62A-RM-0113 <small>132100449-0129</small>	1st Floor, Southern Warehouse, Office Areas, A-side Windows - Yellow Adhesive Assoc. w/ Window Sill Paper	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
62B-RM-0113 <small>132100449-0130</small>	1st Floor, Southern Warehouse, Office Areas, A-side Windows - Yellow Adhesive Assoc. w/ Window Sill Paper	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
63A-RM-0113 <small>132100449-0131</small>	1st Floor, Northern Warehouse - White Interior Window Glazing	White Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
63B-RM-0113 <small>132100449-0132</small>	1st Floor, Northern Warehouse - White Interior Window Glazing				Positive Stop (Not Analyzed)

Initial report from: 01/23/2021 14:57:30



# EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801

Tel/Fax: (781) 933-8411 / (781) 933-8412

<http://www.EMSL.com> / [bostonlab@emsl.com](mailto:bostonlab@emsl.com)

**EMSL Order:** 132100449  
**Customer ID:** ENVI54  
**Customer PO:** 20181545.B10  
**Project ID:**

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
64A-RM-0113 <small>132100449-0133</small>	Exterior, Debris Pile, B-side - Gray Ceramic Floor Tile Thinset	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
64B-RM-0113 <small>132100449-0134</small>	Exterior, Debris Pile, B-side - Gray Ceramic Floor Tile Thinset	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
65A-RM-0113 <small>132100449-0135</small>	Exterior, Debris Pile, B-side - Black Roofing Debris	Black Non-Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
65B-RM-0113 <small>132100449-0136</small>	Exterior, Debris Pile, B-side - Black Roofing Debris	Black Non-Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
66A-RM-0113 <small>132100449-0137</small>	1st Floor, Southern Warehouse, Office Areas - Yellow Wall Panel Adhesive	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
66B-RM-0113 <small>132100449-0138</small>	1st Floor, Southern Warehouse, Office Areas - Yellow Wall Panel Adhesive	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Analyst(s) \_\_\_\_\_

Kevin Pine (64)

Valerica Stanca (57)

Steve Grise, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Woburn, MA NVLAP Lab Code 101147-0, CT PH-0315, MA AA000188, RI AAL-139, VT AL998919, ME LB-0039

Initial report from: 01/23/2021 14:57:30



# EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801

Tel/Fax: (781) 933-8411 / (781) 933-8412

<http://www.EMSL.com> / [bostonlab@emsl.com](mailto:bostonlab@emsl.com)

<b>EMSL Order:</b> 132100449
<b>Customer ID:</b> ENVI54
<b>Customer PO:</b> 20181545.B10
<b>Project ID:</b>

**Attention:** Robert Mallett  
 Fuss & O'Neill, Inc.  
 146 Hartford Road  
 Manchester, CT 06040

**Phone:** (860) 646-2469

**Fax:**

**Received Date:** 01/18/2021 8:40 AM

**Analysis Date:** 01/28/2021

**Collected Date:** 01/13/2021

**Project:** 20181545.B10 - 719 River Street; Woonsocket, RI

## Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by TEM via EPA/600/R-93/116 Section 2.5.5.1

Sample ID	Description	Appearance	% Matrix Material	% Non-Asbestos Fibers	Asbestos Types
02A-RM-0113 132100449-0003	1st Floor, D/A-side Room - Black Mastic Assoc. w/ 01	Black Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
07A-RM-0113 132100449-0013	1st Floor, Southern Warehouse - Brown Mastic Assoc. w/ 06	Black Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
12A-RM-0113 132100449-0023	1st Floor, Southern Warehouse, Office Areas - Black Mastic Assoc. w/ 11	Black Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
38A-RM-0113 132100449-0076	2nd Floor, Southern Warehouse - White Interior Window Glazing	White Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
50A-RM-0113 132100449-0100	1st Floor, Northern Warehouse - Yellow Mastic Assoc. w/ 49	Yellow Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected

Analyst(s)

Matthew Conley (5)

Steve Grise, Laboratory Manager  
or other approved signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. EMSL recommends that samples reported as none detected or <1% undergo additional analysis via PLM to avoid the possibility of false negatives.

Samples analyzed by EMSL Analytical, Inc. Woburn, MA

Initial report from: 01/28/2021 14:09:31





108 Myrtle Street, Suite 502, Quincy, MA 02171

Phone (617) 282-4675 Fax (617) 282-8253

**Asbestos Bulk Sample Chain-of-Custody Form**

Sheet 1 of 6

Project Name: 719 River Street Project No.: 20181545.B10 Task: \_\_\_\_\_

Building Name/Number: \_\_\_\_\_ Project Manager: Patrick Dowling

Site Address: 719 River Street, Woonsocket, RI Total # of Samples: 138

Sample ID (#-Initials-Date)	Material Type (Size, Color, Description, Material)	Sample Location	Comments/ Quantities
01A-RM-0113	9" by 9" Green Floor Tile	1st Floor, D/A-side Room	
01B-RM-0113	9" by 9" Green Floor Tile	1st Floor, D/A-side Room	
★ 02A-RM-0113	Black Mastic Associated with Sample 01	1st Floor, D/A-side Room	
02B-RM-0113	Black Mastic Associated with Sample 01	1st Floor, D/A-side Room	
03A-RM-0113	Black Floor Paper Associated with Raised Flooring	1st Floor, Southern Warehouse	
03B-RM-0113	Black Floor Paper Associated with Raised Flooring	1st Floor, Southern Warehouse	
04A-RM-0113	Brown Floor Paper	1st Floor, Southern Warehouse	
04B-RM-0113	Brown Floor Paper	1st Floor, Southern Warehouse	
05A-RM-0113	1' by 1' White Nailed Ceiling Tile	1st Floor, Southern Warehouse	
05B-RM-0113	1' by 1' White Nailed Ceiling Tile	1st Floor, Southern Warehouse	
06A-RM-0113	9" by 9" Tan Floor Tile	1st Floor, Southern Warehouse	
06B-RM-0113	9" by 9" Tan Floor Tile	1st Floor, Southern Warehouse	
★ 07A-RM-0113	Brown Mastic Associated with Sample 08	1st Floor, Southern Warehouse	
07B-RM-0113	Brown Mastic Associated with Sample 08	1st Floor, Southern Warehouse	
08A-RM-0113	9" by 9" Brown Floor Tile	1st Floor, Southern Warehouse	
08B-RM-0113	9" by 9" Brown Floor Tile	1st Floor, Southern Warehouse	
09A-RM-0113	Black Mastic Associated with Sample 08	1st Floor, Southern Warehouse	
09B-RM-0113	Black Mastic Associated with Sample 08	1st Floor, Southern Warehouse	
10A-RM-0113	White Wall Tiles	1st Floor, Southern Warehouse	
10B-RM-0113	White Wall Tiles	1st Floor, Southern Warehouse	
11A-RM-0113	12" by 12" Tan Floor Tile	1st Floor, Southern Warehouse, Office Areas	
11B-RM-0113	12" by 12" Tan Floor Tile	1st Floor, Southern Warehouse, Office Areas	
★ 12A-RM-0113	Black Mastic Associated with Sample 11	1st Floor, Southern Warehouse, Office Areas	
12B-RM-0113	Black Mastic Associated with Sample 11	1st Floor, Southern Warehouse, Office Areas	

REC'D  
EMSL BOSTON  
JAN 7 8 2020  
840  
7959-4155  
4454  
efx





108 Myrtle Street, Suite 502, Quincy, MA 02171

Phone (617) 282-4675 Fax (617) 282-8253

13A-RM-0113	White Floor Leveling Compound on Hardwood	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas	
13B-RM-0113	White Floor Leveling Compound on Hardwood	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas	
14A-RM-0113	4" Brown Vinyl Baseboard	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas	
14B-RM-0113	4" Brown Vinyl Baseboard	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas	
15A-RM-0113	Yellow Adhesive Associated with Sample 14	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas	
15B-RM-0113	Yellow Adhesive Associated with Sample 14	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas	
16A-RM-0113	White Joint Compound	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas	
16B-RM-0113	White Joint Compound	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas	
17A-RM-0113	Gray Gypsum Wallboard	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas	
17B-RM-0113	Gray Gypsum Wallboard	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas	
18A-RM-0113	Brown Masonite Wall Panel Adhesive	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas, Bathroom	
18B-RM-0113	Brown Masonite Wall Panel Adhesive	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas, Bathroom	
19A-RM-0113	4" Black Vinyl Baseboard	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas	
19B-RM-0113	4" Black Vinyl Baseboard	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas	
20A-RM-0113	Tan Adhesive Associated with Sample 19	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas	
20B-RM-0113	Tan Adhesive Associated with Sample 19	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas	
21A-RM-0113	6" Black Vinyl Baseboard	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas	
21B-RM-0113	6" Black Vinyl Baseboard	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas	
22A-RM-0113	Tan Adhesive Associated with Sample 21	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas	
22B-RM-0113	Tan Adhesive Associated with Sample 21	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas	
23A-RM-0113	Tan Linoleum Flooring	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas, Common Area	2 <sup>nd</sup> Layer
23B-RM-0113	Tan Linoleum Flooring	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas, Common Area	
24A-RM-0113	Brown Floor Tile	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas, Common Area	3 <sup>rd</sup> Layer
24B-RM-0113	Brown Floor Tile	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas, Common Area	
25A-RM-0113	Black Mastic Associated with Sample 24	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas, Common Area	
25B-RM-0113	Black Mastic Associated with Sample 24	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas, Common Area	
26A-RM-0113	Brown Square Patterned Linoleum	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas, Common Area, A/B-side Room	
26B-RM-0113	Brown Square Patterned Linoleum	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas, Common Area, A/B-side Room	

REC'D

JAN 18 2020





108 Myrtle Street, Suite 502, Quincy, MA 02171

Phone (617) 282-4675 Fax (617) 282-8253

27A-RM-0113	Brown Adhesive Associated with Sample 26	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas, Common Area, A/B-side Room	
27B-RM-0113	Brown Adhesive Associated with Sample 26	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas, Common Area, A/B-side Room	
28A-RM-0113	Yellow Adhesive Associated with Sample 23	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas, Common Area	
28B-RM-0113	Yellow Adhesive Associated with Sample 23	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas, Common Area	
29A-RM-0113	Rectangle White Ceiling Panel	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas, Common Area, A/B-side Room	
29B-RM-0113	Rectangle White Ceiling Panel	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas, Common Area, A/B-side Room	
30A-RM-0113	12" by 12" Dotted Ceiling Panel	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas	
30B-RM-0113	12" by 12" Dotted Ceiling Panel	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas	
31A-RM-0113	Green Floor Tile	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas, A-side Room	Under Plywood Flooring
31B-RM-0113	Green Floor Tile	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas, A-side Room	
32A-RM-0113	Black Mastic Associated with Sample 31	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas, A-side Room	
32B-RM-0113	Black Mastic Associated with Sample 31	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas, A-side Room	
33A-RM-0113	Tan Wall Panel Adhesive Associated with Wood Panels	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas, A-side Room, D-side Room	
33B-RM-0113	Tan Wall Panel Adhesive Associated with Wood Panels	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas, A-side Room, D-side Room	
34A-RM-0113	Black Flooring Strip	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas, A-side Room, D-side Closet	
34B-RM-0113	Black Flooring Strip	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas, A-side Room, D-side Closet	
35A-RM-0113	White Pipe Insulation	Basement, Storage Closet	
35B-RM-0113	White Pipe Insulation	Basement, Storage Closet	
35C-RM-0113	White Pipe Insulation	Basement, Storage Closet	
★ 36A-RM-0113	Tan Window Caulking	Exterior, Basement Windows	
36B-RM-0113	Tan Window Caulking	Exterior, Basement Windows	
37A-RM-0113	Brown Floor Paper	2 <sup>nd</sup> Floor, Southern Warehouse	
37B-RM-0113	Brown Floor Paper	2 <sup>nd</sup> Floor, Southern Warehouse	
★ 38A-RM-0113	White Interior Window Glazing	2 <sup>nd</sup> Floor, Southern Warehouse	
38B-RM-0113	White Interior Window Glazing	2 <sup>nd</sup> Floor, Southern Warehouse	
39A-RM-0113	Black Built-up Roofing- Tar	Lower Roof, Above Main Entrance	
39B-RM-0113	Black Built-up Roofing- Tar	Lower Roof, Above Main Entrance	
40A-RM-0113	Black Built-up Roofing- Felt	Lower Roof, Above Main Entrance	
40B-RM-0113	Black Built-up Roofing- Felt	Lower Roof, Above Main Entrance	

REC'D  
EMSL-BOSTON  
JAN 18 2020





108 Myrtle Street, Suite 502, Quincy, MA 02171

Phone (617) 282-4675 Fax (617) 282-8253

41A-RM-0113	Black Built-up Roofing- Tar	Southeast Roof	
41B-RM-0113	Black Built-up Roofing- Tar	Southeast Roof	
42A-RM-0113	Black Built-up Roofing- Felt	Southeast Roof	
42B-RM-0113	Black Built-up Roofing- Felt	Southeast Roof	
43A-RM-0113	Black Built-up Roofing- Tar	Collapsed Roof Section	
43B-RM-0113	Black Built-up Roofing- Tar	Collapsed Roof Section	
44A-RM-0113	Black Built-up Roofing- Felt	Collapsed Roof Section	
44B-RM-0113	Black Built-up Roofing- Felt	Collapsed Roof Section	
45A-RM-0113	Black Floor Paper	2 <sup>nd</sup> Floor, Collapsed Roof Section	
45B-RM-0113	Black Floor Paper	2 <sup>nd</sup> Floor, Collapsed Roof Section	
46A-RM-0113	Black Roofing Debris	Collapsed Roof Section	
46B-RM-0113	Black Roofing Debris	Collapsed Roof Section	
47A-RM-0113	Reinforced Concrete Panel	1 <sup>st</sup> Floor, Collapsed Roof Section, Debris Pile	
47B-RM-0113	Reinforced Concrete Panel	1 <sup>st</sup> Floor, Collapsed Roof Section, Debris Pile	
48A-RM-0113	Black Roofing Debris	1 <sup>st</sup> Floor, Northern Warehouse, Debris Pile	
48B-RM-0113	Black Roofing Debris	1 <sup>st</sup> Floor, Northern Warehouse, Debris Pile	
49A-RM-0113	12" by 12" Brown Floor Tile	1 <sup>st</sup> Floor, Northern Warehouse	
49B-RM-0113	12" by 12" Brown Floor Tile	1 <sup>st</sup> Floor, Northern Warehouse	
★ 50A-RM-0113	Yellow Mastic Associated with Sample 49	1 <sup>st</sup> Floor, Northern Warehouse	
50B-RM-0113	Yellow Mastic Associated with Sample 49	1 <sup>st</sup> Floor, Northern Warehouse	
51A-RM-0113	4" Brown Vinyl Baseboard	1 <sup>st</sup> Floor, Northern Warehouse	
51B-RM-0113	4" Brown Vinyl Baseboard	1 <sup>st</sup> Floor, Northern Warehouse	
52A-RM-0113	Yellow Adhesive Associated with Sample 51	1 <sup>st</sup> Floor, Northern Warehouse	
52B-RM-0113	Yellow Adhesive Associated with Sample 51	1 <sup>st</sup> Floor, Northern Warehouse	
53A-RM-0113	Tan Wall Panel Adhesive	1 <sup>st</sup> Floor, Northern Warehouse, Office Area, Hallway	
53B-RM-0113	Tan Wall Panel Adhesive	1 <sup>st</sup> Floor, Northern Warehouse, Office Area, Hallway	
54A-RM-0113	White Joint Compound	1 <sup>st</sup> Floor, Northern Warehouse, Office Area, Hallway	
54B-RM-0113	White Joint Compound	1 <sup>st</sup> Floor, Northern Warehouse, Office Area, Hallway	
54BC.RM-0113	White Joint Compound	1 <sup>st</sup> Floor, Northern Warehouse, Office Area, Hallway	

REC'D  
EMSL-BOSTON  
JAN 10 2020





108 Myrtle Street, Suite 502, Quincy, MA 02171

Phone (617) 282-4675 Fax (617) 282-8253

55A-RM-0113	Gray Gypsum Board	1 <sup>st</sup> Floor, Northern Warehouse, Office Area, Hallway	
55B-RM-0113	Gray Gypsum Board	1 <sup>st</sup> Floor, Northern Warehouse, Office Area, Hallway	
56A-RM-0113	Black Siding Paper	Exterior, A-side	
56B-RM-0113	Black Siding Paper	Exterior, A-side	
57A-RM-0113	Gray Parging Cement	Exterior, Debris Pile, A-side	
57B-RM-0113	Gray Parging Cement	Exterior, Debris Pile, A-side	
58A-RM-0113	White Skim Coat Plaster	Exterior, Debris Pile, A-side	
58B-RM-0113	White Skim Coat Plaster	Exterior, Debris Pile, A-side	
58C-RM-0113	White Skim Coat Plaster	Exterior, Debris Pile, A-side	
59A-RM-0113	Gray Rough Coat Plaster	Exterior, Debris Pile, A-side	
59B-RM-0113	Gray Rough Coat Plaster	Exterior, Debris Pile, A-side	
59C-RM-0113	Gray Rough Coat Plaster	Exterior, Debris Pile, A-side	
60A-RM-0113	Gray Ceramic Floor Tile Grout	Exterior, Debris Pile, A-side	
60B-RM-0113	Gray Ceramic Floor Tile Grout	Exterior, Debris Pile, A-side	
61A-RM-0113	Black Roofing Debris	Exterior, Debris Pile, A-side	
61B-RM-0113	Black Roofing Debris	Exterior, Debris Pile, A-side	
61C-RM-0113	Black Roofing Debris	Exterior, Debris Pile, A-side	
61D-RM-0113	Black Roofing Debris	Exterior, Debris Pile, A-side	
62A-RM-0113	Yellow Adhesive Associated with Window Sill Paper	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas, A-side Windows	
62B-RM-0113	Yellow Adhesive Associated with Window Sill Paper	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas, A-side Windows	
★ 63A-RM-0113	White Interior Window Glazing	1 <sup>st</sup> Floor, Northern Warehouse	
63B-RM-0113	White Interior Window Glazing	1 <sup>st</sup> Floor, Northern Warehouse	
64A-RM-0113	Gray Ceramic Floor Tile Thin Set	Exterior, Debris Pile, B-side	
64B-RM-0113	Gray Ceramic Floor Tile Thin Set	Exterior, Debris Pile, B-side	
65A-RM-0113	Black Roofing Debris	Exterior, Debris Pile, B-side	
65B-RM-0113	Black Roofing Debris	Exterior, Debris Pile, B-side	
66A-RM-0113	Yellow Wall Panel Adhesive	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas	
66B-RM-0113	Yellow Wall Panel Adhesive	1 <sup>st</sup> Floor, Southern Warehouse, Office Areas	

Analysis Method:  PLM  TEM  Other \_\_\_\_\_

REC'D  
 JAN 18 2020  
 Turnaround Time: 1 week



FUSS & O'NEILL

EMSL Customer No. ENVI54

132100449

www.fando.com

108 Myrtle Street, Suite 502, Quincy, MA 02171

Phone (617) 282-4675 Fax (617) 282-8253

Please call Fuss & O'Neill at (617) 282-4675 if analyses will not be completed for requested turnaround time listed above.

Email Results to: rmallett @fando.com Do Not Mail Hard Copy Report FAX Results to: 888-838-1160.

Special Instructions: Stop analysis on first positive sample in each homogeneous set of samples unless otherwise noted. Do not layer samples unless indicated. Do not point count. If NOB group samples are ALL negative by PLM, analyze the sample denoted with a star (★) by TEM NOB on a 1 week turnaround time. Analyze a MAXIMUM of 7 samples by TEM in noted order.

Samples Collected by: Robert Mallett Date: 1/13/2021

Samples Sent by: Made Jan Date: 1/15/21 Time: morning

Shipped To:  EMSL  Other \_\_\_\_\_

Method of Shipment:  Fed Ex  Lab Drop Off  Other \_\_\_\_\_

REC'D  
EMSL REPORT  
JAN 18 2020  
*SM*

## **Appendix D**

---

### XRF Lead-Based Paint Screening Field Data Sheets



XRF Lead-Based Paint Screening Field Data Sheet

Inspector: Robert Mallett XRF Model: RMD-LPA-1 Serial: 1395

Project Name: 719 River Street Date: 1/14/2021

Building Name/Number: Project Number: 20181545.B10

Site Address: 719 River Street, Woonsocket, RI Project Manager: Patrick Dowling

XRF Calibration Check - RMD (0.7 to 1.3 mg/cm² inclusive)

Table with 4 columns: First Reading, Second Reading, Third Reading, Average. Rows for Start Check and Finish Check, all values are 1.0.

Main data table with 7 columns: Room, Side, Surface/Component, Color, Substrate\*, XRF Reading, Positive. Contains 28 rows of screening data.





First Floor, Northern Warehouse		Lower Support Column	Red	M	0.0	
First Floor, Northern Warehouse		Upper Support Column	White	M	0.1	
First Floor, Northern Warehouse		Lower Support Column	Red	M	0.1	
First Floor, Northern Warehouse	C	Upper Wall	White	W	0.1	

\* Substrate Type: M = Metal, W = Wood, P = Plaster, D = Drywall, C = Concrete, B = Brick, CMU = Concrete Masonry Unit, A = Aluminum, CT = Ceramic Tile  
N/A = Not Accessible, N/C = Not Coated, COV = Covered, VR = Vinyl Replacement, POS = Positive

## Appendix C

---

### Soil Boring Logs and Monitoring Well Completion





Fuss & O'Neill, Inc.  
 317 Iron Horse Way, Suite 204  
 Providence, RI  
 Telephone: 401.861.3070

# SOIL BORING SB-1

<b>PROJECT NUMBER</b> <u>20181545.B10</u>	<b>DATE STARTED</b> <u>6/28/21</u>
<b>PROJECT NAME</b> <u>719 River Street</u>	<b>DATE COMPLETED</b> <u>6/28/21</u>
<b>LOCATION</b> <u>Woonsocket, RI</u>	<b>CASING TYPE/DIAMETER</b> <u>----</u>
<b>DRILLING METHOD</b> <u>Geologic/Geoprobe/Mc5 60" Liner</u>	<b>SCREEN TYPE/SLOT/INTERVAL</b> <u>----</u>
<b>HAMMER WEIGHT/FALL</b> <u>--</u>	<b>GRAVEL PACK TYPE</b> <u>----</u>
<b>ELEVATION (FT)</b> <u>N/A</u>	<b>GROUT TYPE/QUANTITY</b> <u>----</u>
<b>TOP OF CASING</b> <u>----</u>	<b>DEPTH TO WATER (FT)</b> <u>10.0</u>
<b>LOGGED BY</b> <u>Madelyn Sampson</u>	<b>GROUND WATER ELEVATION</b> <u>---</u>
<b>REMARKS</b> <u>No refusal encountered.</u>	

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WATER DEPTH
0.0		43	GB 0628-01				X	SAND, fine to medium; some silt; little gravel; trace asphalt; light brown; dry. No odor.	
						FILL	X		
						FILL	X	SAND, fine to medium; and SILT; brown; moist. No odor.	
0.0		42			5	SM	.	SAND, fine to medium; and SILT; brown; moist. No odor.	
0.0		35			10	SP	.	SAND, medium to coarse; some gravel; little silt; light brown; wet at 10 feet. No odor.	▼
0.0		60			15	SP	.	SAND, medium to coarse; some gravel; little silt; light brown; wet. No odor.	

Bottom of borehole at 20.0 feet.



Fuss & O'Neill, Inc.  
 317 Iron Horse Way, Suite 204  
 Providence, RI  
 Telephone: 401.861.3070

# SOIL BORING/MONITORING WELL MW-2

<b>PROJECT NUMBER</b> <u>20181545.B10</u>	<b>DATE STARTED</b> <u>6/28/21</u>
<b>PROJECT NAME</b> <u>719 River Street</u>	<b>DATE COMPLETED</b> <u>6/28/21</u>
<b>LOCATION</b> <u>Woonsocket, RI</u>	<b>CASING TYPE/DIAMETER</b> <u>PVC / 2"</u>
<b>DRILLING METHOD</b> <u>Geologic/Geoprobe/Mc5 60" Liner</u>	<b>SCREEN TYPE/SLOT/INTERVAL</b> <u>Slotted PVC / 0.010" / 5-15'</u>
<b>HAMMER WEIGHT/FALL</b> <u>--</u>	<b>GRAVEL PACK TYPE</b> <u>Silica Sand</u>
<b>ELEVATION (FT)</b> <u>N/A</u>	<b>GROUT TYPE/QUANTITY</b> <u>Bentonite / 1</u>
<b>TOP OF CASING</b> <u>N/A</u>	<b>DEPTH TO WATER (FT)</b> <u>7.0</u>
<b>LOGGED BY</b> <u>Madelyn Sampson</u>	<b>GROUND WATER ELEVATION</b> <u>---</u>
<b>REMARKS</b> <u>No refusal encountered.</u>	

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WATER DEPTH	WELL DIAGRAM
0.0		36	GB 0628-02				FILL	SAND, fine to medium; and SILT; brown; moist. No odor.		
0.0		54			5		SM	SAND, fine to medium; and SILT; light brown; wet at 7 feet. No odor.	▼	
0.0		58			10		SP	SAND, medium to coarse; and GRAVEL; some silt; light brown; wet. No odor.		

Bottom of borehole at 15.0 feet.



Fuss & O'Neill, Inc.  
 317 Iron Horse Way, Suite 204  
 Providence, RI  
 Telephone: 401.861.3070

# SOIL BORING SB-3

<b>PROJECT NUMBER</b> <u>20181545.B10</u>	<b>DATE STARTED</b> <u>6/28/21</u>
<b>PROJECT NAME</b> <u>719 River Street</u>	<b>DATE COMPLETED</b> <u>6/28/21</u>
<b>LOCATION</b> <u>Woonsocket, RI</u>	<b>CASING TYPE/DIAMETER</b> <u>----</u>
<b>DRILLING METHOD</b> <u>Geologic/Geoprobe/Mc5 60" Liner</u>	<b>SCREEN TYPE/SLOT/INTERVAL</b> <u>----</u>
<b>HAMMER WEIGHT/FALL</b> <u>--</u>	<b>GRAVEL PACK TYPE</b> <u>----</u>
<b>ELEVATION (FT)</b> <u>N/A</u>	<b>GROUT TYPE/QUANTITY</b> <u>----</u>
<b>TOP OF CASING</b> <u>----</u>	<b>DEPTH TO WATER (FT)</b> <u>7.0</u>
<b>LOGGED BY</b> <u>Madelyn Sampson</u>	<b>GROUND WATER ELEVATION</b> <u>---</u>
<b>REMARKS</b> <u>No refusal encountered.</u>	

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WATER DEPTH
0.3		55	GB 0628-03			FILL		SAND, fine to medium; and SILT; trace brick; trace ash; brown; dry. No odor.	
0.0		52	GB 0628-04		5	FILL		SAND; fine to medium; and SILT; trace brick; light brown; wet at 7 feet. No odor.	▼
0.0		48			10	SP		SAND; medium to coarse; and GRAVEL; some silt; wet. No odor.	
0.0		60			15	SP		SAND; medium to coarse; and GRAVEL; some silt; wet. No odor.	

Bottom of borehole at 20.0 feet.



Fuss & O'Neill, Inc.  
 317 Iron Horse Way, Suite 204  
 Providence, RI  
 Telephone: 401.861.3070

# SOIL BORING SB-4

<b>PROJECT NUMBER</b> <u>20181545.B10</u>	<b>DATE STARTED</b> <u>6/28/21</u>
<b>PROJECT NAME</b> <u>719 River Street</u>	<b>DATE COMPLETED</b> <u>6/28/21</u>
<b>LOCATION</b> <u>Woonsocket, RI</u>	<b>CASING TYPE/DIAMETER</b> <u>----</u>
<b>DRILLING METHOD</b> <u>Geologic/Geoprobe/Mc5 60" Liner</u>	<b>SCREEN TYPE/SLOT/INTERVAL</b> <u>----</u>
<b>HAMMER WEIGHT/FALL</b> <u>--</u>	<b>GRAVEL PACK TYPE</b> <u>----</u>
<b>ELEVATION (FT)</b> <u>N/A</u>	<b>GROUT TYPE/QUANTITY</b> <u>----</u>
<b>TOP OF CASING</b> <u>----</u>	<b>DEPTH TO WATER (FT)</b> <u>11.0</u>
<b>LOGGED BY</b> <u>Madelyn Sampson</u>	<b>GROUND WATER ELEVATION</b> <u>---</u>
<b>REMARKS</b> <u>No refusal encountered.</u>	

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WATER DEPTH
0.0		28	GB 0628-05			FILL		SAND, fine to medium; some silt; little gravel; trace ash; black; dry. No odor.	
0.3		32			5	FILL		SAND, fine to medium; and SILT; little gravel; trace brick; trace coal; light brown; moist. No odor.	
0.0		60	GB 0628-06		10	SP		SAND, fine to medium; and SILT; little gravel; light brown; wet at 11 feet. No odor.	▼
0.0		60			15	SP		SAND, medium to coarse; some silt; some gravel; light brown; wet. No odor.	

Bottom of borehole at 20.0 feet.





Fuss & O'Neill, Inc.  
 317 Iron Horse Way, Suite 204  
 Providence, RI  
 Telephone: 401.861.3070

# SOIL BORING SB-5

<b>PROJECT NUMBER</b> <u>20181545.B10</u>	<b>DATE STARTED</b> <u>6/28/21</u>
<b>PROJECT NAME</b> <u>719 River Street</u>	<b>DATE COMPLETED</b> <u>6/28/21</u>
<b>LOCATION</b> <u>Woonsocket, RI</u>	<b>CASING TYPE/DIAMETER</b> <u>----</u>
<b>DRILLING METHOD</b> <u>Geologic/Geoprobe/Mc5 60" Liner</u>	<b>SCREEN TYPE/SLOT/INTERVAL</b> <u>----</u>
<b>HAMMER WEIGHT/FALL</b> <u>--</u>	<b>GRAVEL PACK TYPE</b> <u>----</u>
<b>ELEVATION (FT)</b> <u>N/A</u>	<b>GROUT TYPE/QUANTITY</b> <u>----</u>
<b>TOP OF CASING</b> <u>----</u>	<b>DEPTH TO WATER (FT)</b> <u>12.0</u>
<b>LOGGED BY</b> <u>Madelyn Sampson</u>	<b>GROUND WATER ELEVATION</b> <u>---</u>
<b>REMARKS</b> <u>No refusal encountered.</u>	

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WATER DEPTH
0.3		47	GB 0628-07					SAND, fine to medium; and SILT; trace gravel; trace brick; light brown; dry. No odor.	
					5	FILL		SAND, fine to medium; and SILT; dry. No odor.	
62		48	GB 0628-08		10			SAND, medium to coarse; some silt; some gravel; black staining; wet at 12 feet. Petroleum odor.	
					15	SM		SAND, medium to coarse; some silt; some gravel; black staining; wet. Strong petroleum odor.	
88		60				SP			▼

Bottom of borehole at 20.0 feet.



Fuss & O'Neill, Inc.  
 317 Iron Horse Way, Suite 204  
 Providence, RI  
 Telephone: 401.861.3070

# SOIL BORING/MONITORING WELL MW-6

<b>PROJECT NUMBER</b> <u>20181545.B10</u>	<b>DATE STARTED</b> <u>6/28/21</u>
<b>PROJECT NAME</b> <u>719 River Street</u>	<b>DATE COMPLETED</b> <u>6/28/21</u>
<b>LOCATION</b> <u>Woonsocket, RI</u>	<b>CASING TYPE/DIAMETER</b> <u>PVC / 2"</u>
<b>DRILLING METHOD</b> <u>Geologic/Geoprobe/Mc5 60" Liner</u>	<b>SCREEN TYPE/SLOT/INTERVAL</b> <u>Slotted PVC / 0.010" / 8-18'</u>
<b>HAMMER WEIGHT/FALL</b> <u>--</u>	<b>GRAVEL PACK TYPE</b> <u>Silica Sand</u>
<b>ELEVATION (FT)</b> <u>N/A</u>	<b>GROUT TYPE/QUANTITY</b> <u>Bentonite / 1</u>
<b>TOP OF CASING</b> <u>N/A</u>	<b>DEPTH TO WATER (FT)</b> <u>10.0</u>
<b>LOGGED BY</b> <u>Madelyn Sampson</u>	<b>GROUND WATER ELEVATION</b> <u>---</u>
<b>REMARKS</b> <u>No refusal encountered.</u>	

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WATER DEPTH	WELL DIAGRAM
1.0		34	GB 0628-09					SAND, fine to medium; some silt; trace gravel; trace brick; trace glass; trace ash; dry. No odor.		
					5	FILL		SAND, fine to medium; some silt; trace gravel; wet at 10 feet. No odor.		
0.0		26				SP				
0.0		44			10	SP		SAND, medium to coarse; and GRAVEL; some silt; light brown; wet. No odor.	▼	
0.0		60			15	SP				
						SM		SAND, fine to medium; and SILT; wet. No odor.		

Bottom of borehole at 20.0 feet.

LOG A EWNN01 - ESDAT\_LOG1.GDT - 9/28/21 09:35 - F:\P\2018\1545\B10\SITES\719 RIVER STREET - DORADO\DELIVERABLES\IR\APPENDICES\APPENDIX C - SOIL BORING LOGS AND MONITORING WELL COMPLETION\DRFTSMHS\_719 RIVER ST. BORING LO



Fuss & O'Neill, Inc.  
 317 Iron Horse Way, Suite 204  
 Providence, RI  
 Telephone: 401.861.3070

# SOIL BORING SB-7

PAGE 1 OF 1

<b>PROJECT NUMBER</b> <u>20181545.B10</u>	<b>DATE STARTED</b> <u>6/28/21</u>
<b>PROJECT NAME</b> <u>719 River Street</u>	<b>DATE COMPLETED</b> <u>6/28/21</u>
<b>LOCATION</b> <u>Woonsocket, RI</u>	<b>CASING TYPE/DIAMETER</b> <u>----</u>
<b>DRILLING METHOD</b> <u>Geologic/Geoprobe/Mc5 60" Liner</u>	<b>SCREEN TYPE/SLOT/INTERVAL</b> <u>----</u>
<b>HAMMER WEIGHT/FALL</b> <u>--</u>	<b>GRAVEL PACK TYPE</b> <u>----</u>
<b>ELEVATION (FT)</b> <u>N/A</u>	<b>GROUT TYPE/QUANTITY</b> <u>----</u>
<b>TOP OF CASING</b> <u>----</u>	<b>DEPTH TO WATER (FT)</b> <u>10.0</u>
<b>LOGGED BY</b> <u>Madelyn Sampson</u>	<b>GROUND WATER ELEVATION</b> <u>---</u>
<b>REMARKS</b> <u>No refusal encountered.</u>	

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WATER DEPTH
0.4			52 GB 0628-10					SAND, fine to medium; some silt; trace gravel; trace brick; trace wood; trace ash; brown; dry. No odor.	
115			54		5			SAND, fine to medium; and SILT; trace brick; black staining; wet at 10 feet. Petroleum odor.	
40.4			GB 0628-11/0628-12		10			SAND, fine to medium; and SILT; trace gravel; black staining; wet. Petroleum odor.	▼
94			60		15			SAND, medium to coarse; some silt; some gravel; black staining; wet. Petroleum odor.	

Bottom of borehole at 20.0 feet.

# SOIL BORING/MONITORING WELL MW-8



Fuss & O'Neill, Inc.  
 317 Iron Horse Way, Suite 204  
 Providence, RI  
 Telephone: 401.861.3070

**PROJECT NUMBER** 20181545.B10 **DATE STARTED** 6/29/21  
**PROJECT NAME** 719 River Street **DATE COMPLETED** 6/29/21  
**LOCATION** Woonsocket, RI **CASING TYPE/DIAMETER** PVC / 2"  
**DRILLING METHOD** Geologic/Geoprobe/Mc5 60" Liner **SCREEN TYPE/SLOT/INTERVAL** Slotted PVC / 0.010" / 10-20'  
**HAMMER WEIGHT/FALL** -- **GRAVEL PACK TYPE** Silica Sand  
**ELEVATION (FT)** N/A **GROUT TYPE/QUANTITY** Bentonite / 1  
**TOP OF CASING** N/A **DEPTH TO WATER (FT)** 12.0  
**LOGGED BY** Madelyn Sampson **GROUND WATER ELEVATION** ---  
**REMARKS** No refusal encountered.

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WATER DEPTH	WELL DIAGRAM
0.4		28	GB 0629-14					SAND, fine to medium; some silt; little gravel; trace brick; brown; black staining; dry. No odor.		
					5	FILL		SAND, fine to medium; and SILT; light brown; dry. No odor.		
					10	SM		SAND, fine to medium; and SILT; black; wet at 12 feet. Petroleum odor.		
					14.5	SP		SAND, medium to coarse; some silt; some gravel; black staining; wet. Petroleum odor.	12.0	
					15	SP		SAND, medium to coarse; some silt; some gravel; black staining; wet. Petroleum odor.		

Bottom of borehole at 20.0 feet.

LOG A EWMN01 - ESDAT\_LOG1.GDT - 9/28/21 09:34 - F:\P20181545\B10\SITES\719 RIVER STREET - DORADO\DELIVERABLES\APPENDICES\APPENDIX C - SOIL BORING LOGS AND MONITORING WELL COMPLETION\DRAFTS\MH5\_719 RIVER ST. BORING LOG

LOG A EWMN01 - ESDAT\_LOG1.GDT - 9/28/21 09:34 - F:\P2018\1545\B10\SITES\719 RIVER STREET - DORADO\DELIVERABLES\APPENDICES\APPENDIX C - SOIL BORING LOGS AND MONITORING WELL COMPLETION\DRAWINGS\MHS\_719 RIVER ST. BORING LOG



Fuss & O'Neill, Inc.  
 317 Iron Horse Way, Suite 204  
 Providence, RI  
 Telephone: 401.861.3070

# SOIL BORING/MONITORING WELL MW-9

<b>PROJECT NUMBER</b> <u>20181545.B10</u>	<b>DATE STARTED</b> <u>6/29/21</u>
<b>PROJECT NAME</b> <u>719 River Street</u>	<b>DATE COMPLETED</b> <u>6/29/21</u>
<b>LOCATION</b> <u>Woonsocket, RI</u>	<b>CASING TYPE/DIAMETER</b> <u>PVC / 2"</u>
<b>DRILLING METHOD</b> <u>Geologic/Geoprobe/Mc5 60" Liner</u>	<b>SCREEN TYPE/SLOT/INTERVAL</b> <u>Slotted PVC / 0.010" / 10-20'</u>
<b>HAMMER WEIGHT/FALL</b> <u>--</u>	<b>GRAVEL PACK TYPE</b> <u>Silica Sand</u>
<b>ELEVATION (FT)</b> <u>N/A</u>	<b>GROUT TYPE/QUANTITY</b> <u>Bentonite / 1</u>
<b>TOP OF CASING</b> <u>N/A</u>	<b>DEPTH TO WATER (FT)</b> <u>11.0</u>
<b>LOGGED BY</b> <u>Madelyn Sampson</u>	<b>GROUND WATER ELEVATION</b> <u>---</u>
<b>REMARKS</b> <u>No refusal encountered.</u>	

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WATER DEPTH	WELL DIAGRAM
2.4		41	GB 0629-15					SAND, fine to medium; and SILT; some gravel; trace brick; light brown; dry. No odor.		
		52			5	FILL		SAND, fine to medium; and SILT; trace gravel; light brown; dry. No odor.		
		54			10	FILL		SAND, fine to medium; and SILT; trace gravel; light brown; wet at 11 feet. No odor.	▼	
						SP		SAND, medium to coarse; and GRAVEL; some silt; brown; wet. No odor.		
		60			15	SP		SAND, medium to coarse; and GRAVEL; some silt; brown; wet. No odor.		
						SM		SAND, fine to medium; and SILT; light brown; wet. No odor.		

Bottom of borehole at 20.0 feet.



Fuss & O'Neill, Inc.  
 317 Iron Horse Way, Suite 204  
 Providence, RI  
 Telephone: 401.861.3070

# SOIL BORING SB-10

<b>PROJECT NUMBER</b> <u>20181545.B10</u>	<b>DATE STARTED</b> <u>6/29/21</u>
<b>PROJECT NAME</b> <u>719 River Street</u>	<b>DATE COMPLETED</b> <u>6/29/21</u>
<b>LOCATION</b> <u>Woonsocket, RI</u>	<b>CASING TYPE/DIAMETER</b> <u>----</u>
<b>DRILLING METHOD</b> <u>Geologic/Geoprobe/Mc5 60" Liner</u>	<b>SCREEN TYPE/SLOT/INTERVAL</b> <u>----</u>
<b>HAMMER WEIGHT/FALL</b> <u>--</u>	<b>GRAVEL PACK TYPE</b> <u>----</u>
<b>ELEVATION (FT)</b> <u>N/A</u>	<b>GROUT TYPE/QUANTITY</b> <u>----</u>
<b>TOP OF CASING</b> <u>----</u>	<b>DEPTH TO WATER (FT)</b> <u>8.0</u>
<b>LOGGED BY</b> <u>Madelyn Sampson</u>	<b>GROUND WATER ELEVATION</b> <u>---</u>
<b>REMARKS</b> <u>No refusal encountered.</u>	

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WATER DEPTH
0.3		36	GB 0629-16				FILL	SAND, fine to coarse; some silt; trace gravel; trace brick; trace asphalt; trace wood; black; dry. No odor.	
0.0		60			5		SM	SAND, fine to medium, and SILT; brown; wet at 8 feet. No odor.	▼
0.0		60			10		SP	SAND, medium to coarse; some gravel; little silt; light brown; wet. No odor.	
0.0		60			15		SM	SAND, fine to medium, and SILT; light brown; wet. No odor.	

Bottom of borehole at 20.0 feet.



Fuss & O'Neill, Inc.  
 317 Iron Horse Way, Suite 204  
 Providence, RI  
 Telephone: 401.861.3070

# SOIL BORING SB-11

<b>PROJECT NUMBER</b> <u>20181545.B10</u>	<b>DATE STARTED</b> <u>6/29/21</u>
<b>PROJECT NAME</b> <u>719 River Street</u>	<b>DATE COMPLETED</b> <u>6/29/21</u>
<b>LOCATION</b> <u>Woonsocket, RI</u>	<b>CASING TYPE/DIAMETER</b> <u>----</u>
<b>DRILLING METHOD</b> <u>Geologic/Geoprobe/Mc5 60" Liner</u>	<b>SCREEN TYPE/SLOT/INTERVAL</b> <u>----</u>
<b>HAMMER WEIGHT/FALL</b> <u>--</u>	<b>GRAVEL PACK TYPE</b> <u>----</u>
<b>ELEVATION (FT)</b> <u>N/A</u>	<b>GROUT TYPE/QUANTITY</b> <u>----</u>
<b>TOP OF CASING</b> <u>----</u>	<b>DEPTH TO WATER (FT)</b> <u>7.0</u>
<b>LOGGED BY</b> <u>Madelyn Sampson</u>	<b>GROUND WATER ELEVATION</b> <u>---</u>
<b>REMARKS</b> <u>No refusal encountered.</u>	

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WATER DEPTH
0.4		47	GB 0629-17			FILL		SAND, fine to coarse; some silt; some gravel; light brown; dry. No odor.	
					5	FILL		SAND, fine to medium; and SILT; dry. No odor.	
0.0		56	GB 0629-18			FILL		SAND, fine to medium; and SILT; trace brick; trace glass; brown; wet at 7 feet. No odor.	▼
					10	SP		SAND, medium to coarse; and GRAVEL; some silt; wet. No odor.	
0.0		60							
					15			No recovery.	
		0							

Bottom of borehole at 20.0 feet.





Fuss & O'Neill, Inc.  
 317 Iron Horse Way, Suite 204  
 Providence, RI  
 Telephone: 401.861.3070

# SOIL BORING SB-12

<b>PROJECT NUMBER</b> <u>20181545.B10</u>	<b>DATE STARTED</b> <u>6/29/21</u>
<b>PROJECT NAME</b> <u>719 River Street</u>	<b>DATE COMPLETED</b> <u>6/29/21</u>
<b>LOCATION</b> <u>Woonsocket, RI</u>	<b>CASING TYPE/DIAMETER</b> <u>----</u>
<b>DRILLING METHOD</b> <u>Geologic/Geoprobe/Mc5 60" Liner</u>	<b>SCREEN TYPE/SLOT/INTERVAL</b> <u>----</u>
<b>HAMMER WEIGHT/FALL</b> <u>--</u>	<b>GRAVEL PACK TYPE</b> <u>----</u>
<b>ELEVATION (FT)</b> <u>N/A</u>	<b>GROUT TYPE/QUANTITY</b> <u>----</u>
<b>TOP OF CASING</b> <u>----</u>	<b>DEPTH TO WATER (FT)</b> <u>14.0</u>
<b>LOGGED BY</b> <u>Madelyn Sampson</u>	<b>GROUND WATER ELEVATION</b> <u>---</u>
<b>REMARKS</b> <u>No refusal encountered.</u>	

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WATER DEPTH
0.0		25	GB 0629-19				X	SAND, fine to medium; some gravel; some silt; brown; dry. No odor.	
						FILL	X		
0.0		55			5		X	SAND, fine to medium; and SILT; light brown; dry. No odor.	
						FILL	X		
						FILL	X	SAND, medium to coarse; some gravel; little silt; trace brick; trace ash; brown; dry. No odor.	
0.5		48			10		X	SAND, medium to coarse; and GRAVEL; little silt; wet at 14 feet. No odor.	
			GB 0629-20			SP	X		
0.0		52			15		X	SAND, medium to coarse; and GRAVEL; little silt; wet. No odor.	▼
						SP	X		

Bottom of borehole at 20.0 feet.

LOG A EWNN01 - ESDAT\_LOG1.GDT - 9/28/21 09:34 - F:\P2018\1545\B10\SITES\719 RIVER STREET - DORADO\DELIVERABLES\IR\APPENDICES\APPENDIX C - SOIL BORING LOGS AND MONITORING WELL COMPLETION\DRAFTS\MHS\_719 RIVER ST. BORING LO



Fuss & O'Neill, Inc.  
 317 Iron Horse Way, Suite 204  
 Providence, RI  
 Telephone: 401.861.3070

# SOIL BORING SB-13

<b>PROJECT NUMBER</b> <u>20181545.B10</u>	<b>DATE STARTED</b> <u>6/29/21</u>
<b>PROJECT NAME</b> <u>719 River Street</u>	<b>DATE COMPLETED</b> <u>6/29/21</u>
<b>LOCATION</b> <u>Woonsocket, RI</u>	<b>CASING TYPE/DIAMETER</b> <u>----</u>
<b>DRILLING METHOD</b> <u>Geologic/Geoprobe/Mc5 60" Liner</u>	<b>SCREEN TYPE/SLOT/INTERVAL</b> <u>----</u>
<b>HAMMER WEIGHT/FALL</b> <u>--</u>	<b>GRAVEL PACK TYPE</b> <u>----</u>
<b>ELEVATION (FT)</b> <u>N/A</u>	<b>GROUT TYPE/QUANTITY</b> <u>----</u>
<b>TOP OF CASING</b> <u>----</u>	<b>DEPTH TO WATER (FT)</b> <u>12.0</u>
<b>LOGGED BY</b> <u>Madelyn Sampson</u>	<b>GROUND WATER ELEVATION</b> <u>---</u>
<b>REMARKS</b> <u>No refusal encountered.</u>	

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WATER DEPTH
0.5		20	GB 0629-21				X	SAND, fine to medium; some silt; little gravel; trace brick; dry. No odor.	
					5	FILL	X	SAND, fine to medium; and SILT; dry. No odor.	
		52			10	FILL	X	SAND, medium to coarse; and GRAVEL; some silt; brown; wet at 12 feet. No odor.	
					15	SP	X	SAND, medium to coarse and SILT; trace gravel; light brown; wet.	
		53				SP	X	SAND, medium to coarse; and GRAVEL; some silt; light brown; wet. No odor.	
						SP	X		
		58				SP	X		

Bottom of borehole at 20.0 feet.

# SOIL BORING/MONITORING WELL MW-14



Fuss & O'Neill, Inc.  
 317 Iron Horse Way, Suite 204  
 Providence, RI  
 Telephone: 401.861.3070

**PROJECT NUMBER** 20181545.B10 **DATE STARTED** 6/30/21  
**PROJECT NAME** 719 River Street **DATE COMPLETED** 6/30/21  
**LOCATION** Woonsocket, RI **CASING TYPE/DIAMETER** PVC / 2"  
**DRILLING METHOD** Geologic/Geoprobe/Mc5 60" Liner **SCREEN TYPE/SLOT/INTERVAL** Slotted PVC / 0.010" / 10-20'  
**HAMMER WEIGHT/FALL** -- **GRAVEL PACK TYPE** Silica Sand  
**ELEVATION (FT)** N/A **GROUT TYPE/QUANTITY** Bentonite / 1  
**TOP OF CASING** N/A **DEPTH TO WATER (FT)** 12.0  
**LOGGED BY** Madelyn Sampson **GROUND WATER ELEVATION** ---  
**REMARKS** No refusal encountered.

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WATER DEPTH	WELL DIAGRAM
0.0		54	GB 0630-23					SAND, fine to medium; some silt; little gravel; trace brick; trace asphalt; trace wood; light brown; dry. No odor.		
					5	FILL		SAND, fine to medium; some silt; little gravel; trace brick; trace asphalt; trace wood; light brown; dry. No odor.		
0.0		50				FILL		SAND, fine to medium; and SILT; little gravel; brown; wet at 12 feet. No odor.		
0.4		48	GB 0630-24		10	SP		SAND, medium to coarse; some silt; some gravel; light brown; wet. No odor.		
						SP		SAND, medium to coarse; some silt; some gravel; light brown; wet. No odor.		
0.0		45			15	SP		SAND, medium to coarse; some silt; some gravel; light brown; wet. No odor.		

Bottom of borehole at 20.0 feet.

LOG A EWMN01 - ESDAT\_LOG1.GDT - 9/28/21 09:34 - F:\P20181545\B10\SITES\719 RIVER STREET - DORADO\DELIVERABLES\APPENDICES\APPENDIX C - SOIL BORING LOGS AND MONITORING WELL COMPLETION\DRIFTS\MHS\_719 RIVER ST. BORING LO

# SOIL BORING/MONITORING WELL MW-15



Fuss & O'Neill, Inc.  
 317 Iron Horse Way, Suite 204  
 Providence, RI  
 Telephone: 401.861.3070

**PROJECT NUMBER** 20181545.B10      **DATE STARTED** 6/30/21  
**PROJECT NAME** 719 River Street      **DATE COMPLETED** 6/30/21  
**LOCATION** Woonsocket, RI      **CASING TYPE/DIAMETER** PVC / 2"  
**DRILLING METHOD** Geologic/Geoprobe/Mc5 60" Liner      **SCREEN TYPE/SLOT/INTERVAL** Slotted PVC / 0.010" / 10-20'  
**HAMMER WEIGHT/FALL** --      **GRAVEL PACK TYPE** Silica Sand  
**ELEVATION (FT)** N/A      **GROUT TYPE/QUANTITY** Bentonite / 1  
**TOP OF CASING** N/A      **DEPTH TO WATER (FT)** 12.0  
**LOGGED BY** Madelyn Sampson      **GROUND WATER ELEVATION** ---  
**REMARKS** No refusal encountered.

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WATER DEPTH	WELL DIAGRAM
0.5		43	GB 0630-25					SAND, fine to medium; and SILT; little gravel; trace brick; brown; dry. No odor.		
1.5		38			5			SAND, fine to medium; and SILT; little gravel; trace brick; light brown; wet at 10 feet. No odor.		
1.0		48	GB 0630-26		10			SAND, medium to coarse; and GRAVEL; some silt; brown; wet. No odor.		
0.3		24			15			SAND, medium to coarse; and GRAVEL; some silt; brown; wet. No odor.		

Bottom of borehole at 20.0 feet.

LOG A EWMN01 - ESDAT\_LOG1.GDT - 9/28/21 09:34 - F:\P20181545\B10\SITES\719 RIVER STREET - DORADO\DELIVERABLES\IR\APPENDICES\APPENDIX C - SOIL BORING LOGS AND MONITORING WELL COMPLETION\DRAWINGS\MHS\_719 RIVER ST. BORING LOG



Fuss & O'Neill, Inc.  
 317 Iron Horse Way, Suite 204  
 Providence, RI  
 Telephone: 401.861.3070

# SOIL BORING SB-16

<b>PROJECT NUMBER</b> <u>20181545.B10</u>	<b>DATE STARTED</b> <u>6/30/21</u>
<b>PROJECT NAME</b> <u>719 River Street</u>	<b>DATE COMPLETED</b> <u>6/30/21</u>
<b>LOCATION</b> <u>Woonsocket, RI</u>	<b>CASING TYPE/DIAMETER</b> <u>----</u>
<b>DRILLING METHOD</b> <u>Geologic/Geoprobe/Mc5 60" Liner</u>	<b>SCREEN TYPE/SLOT/INTERVAL</b> <u>----</u>
<b>HAMMER WEIGHT/FALL</b> <u>--</u>	<b>GRAVEL PACK TYPE</b> <u>----</u>
<b>ELEVATION (FT)</b> <u>N/A</u>	<b>GROUT TYPE/QUANTITY</b> <u>----</u>
<b>TOP OF CASING</b> <u>----</u>	<b>DEPTH TO WATER (FT)</b> <u>6.0</u>
<b>LOGGED BY</b> <u>Madelyn Sampson</u>	<b>GROUND WATER ELEVATION</b> <u>---</u>
<b>REMARKS</b> <u>No refusal encountered.</u>	

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WATER DEPTH
0.3		48	GB				FILL	SAND, fine to medium; some silt; some gravel; trace brick; brown; dry. No odor.	
		0630-27/0630-28							
0.0		52			5		FILL	SAND, fine to medium; and SILT; trace gravel; light brown; dry. No odor.	▼
							FILL	SAND, fine to medium; and SILT; brown; wet at 6 feet. No odor.	
0.0		60			10		SM	SAND, fine to medium; and SILT; brown; wet. No odor.	
0.0		60			15		SP	SAND, medium to coarse; and GRAVEL; some silt; light brown; wet. No odor.	



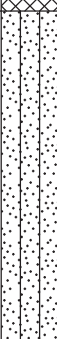
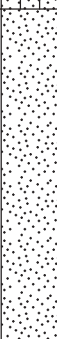
Bottom of borehole at 20.0 feet.



Fuss & O'Neill, Inc.  
 317 Iron Horse Way, Suite 204  
 Providence, RI  
 Telephone: 401.861.3070

# SOIL BORING SB-17

<b>PROJECT NUMBER</b> <u>20181545.B10</u>	<b>DATE STARTED</b> <u>6/30/21</u>
<b>PROJECT NAME</b> <u>719 River Street</u>	<b>DATE COMPLETED</b> <u>6/30/21</u>
<b>LOCATION</b> <u>Woonsocket, RI</u>	<b>CASING TYPE/DIAMETER</b> <u>----</u>
<b>DRILLING METHOD</b> <u>Geologic/Geoprobe/Mc5 60" Liner</u>	<b>SCREEN TYPE/SLOT/INTERVAL</b> <u>----</u>
<b>HAMMER WEIGHT/FALL</b> <u>--</u>	<b>GRAVEL PACK TYPE</b> <u>----</u>
<b>ELEVATION (FT)</b> <u>N/A</u>	<b>GROUT TYPE/QUANTITY</b> <u>----</u>
<b>TOP OF CASING</b> <u>----</u>	<b>DEPTH TO WATER (FT)</b> <u>11.0</u>
<b>LOGGED BY</b> <u>Madelyn Sampson</u>	<b>GROUND WATER ELEVATION</b> <u>---</u>
<b>REMARKS</b> <u>No refusal encountered.</u>	

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WATER DEPTH
0.0		43				FILL		SAND, fine to medium; some silt; little gravel; trace brick; trace glass; trace wood; brown; dry. No odor.	
0.0		12			5	FILL		SAND, fine to medium; little silt; little gravel; trace brick; trace wood; trace ash; black; dry. No odor.	
88		46			10	SM		SAND, fine to medium; and SILT; black; wet at 11 feet. Petroleum odor.	▼
63		60			15	SP		SAND, medium to coarse; some silt; some gravel; brown; black staining; wet. Petroleum odor.	

Bottom of borehole at 20.0 feet.





Fuss & O'Neill, Inc.  
 317 Iron Horse Way, Suite 204  
 Providence, RI  
 Telephone: 401.861.3070

# SOIL BORING SB-18

<b>PROJECT NUMBER</b> <u>20181545.B10</u>	<b>DATE STARTED</b> <u>9/9/21</u>
<b>PROJECT NAME</b> <u>719 River Street</u>	<b>DATE COMPLETED</b> <u>9/9/21</u>
<b>LOCATION</b> <u>Woonsocket, RI</u>	<b>CASING TYPE/DIAMETER</b> <u>----</u>
<b>DRILLING METHOD</b> <u>Geologic/Geoprobe/Mc5 60" Liner</u>	<b>SCREEN TYPE/SLOT/INTERVAL</b> <u>----</u>
<b>HAMMER WEIGHT/FALL</b> <u>--</u>	<b>GRAVEL PACK TYPE</b> <u>----</u>
<b>ELEVATION (FT)</b> <u>N/A</u>	<b>GROUT TYPE/QUANTITY</b> <u>----</u>
<b>TOP OF CASING</b> <u>----</u>	<b>DEPTH TO WATER (FT)</b> <u>12.0</u>
<b>LOGGED BY</b> <u>Madelyn Sampson</u>	<b>GROUND WATER ELEVATION</b> <u>---</u>
<b>REMARKS</b> <u>No refusal encountered.</u>	

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WATER DEPTH
0.0		42					FILL	SAND, fine to medium; trace silt; trace gravel; trace brick; trace ash; light brown; dry. No odor.	
0.0		40			5		FILL	SAND, fine to medium; little silt; trace brick; trace wood; trace ash; black; dry. No odor.	
0.0		60			10	SM	SM	SAND, fine to medium; and SILT; brown; moist. No odor.	
							SM	SAND, medium to coarse; some gravel; trace silt; wet at 12 feet. No odor.	▼
90.4		60			15	SP	SP	SAND, medium to coarse; some gravel; trace silt; light brown; black staining; wet. Petroleum odor.	
							SM	SAND, fine to medium; and SILT; wet. No odor.	

Bottom of borehole at 20.0 feet.



Fuss & O'Neill, Inc.  
 317 Iron Horse Way, Suite 204  
 Providence, RI  
 Telephone: 401.861.3070

# SOIL BORING SB-19

<b>PROJECT NUMBER</b> <u>20181545.B10</u>	<b>DATE STARTED</b> <u>9/9/21</u>
<b>PROJECT NAME</b> <u>719 River Street</u>	<b>DATE COMPLETED</b> <u>9/9/21</u>
<b>LOCATION</b> <u>Woonsocket, RI</u>	<b>CASING TYPE/DIAMETER</b> <u>----</u>
<b>DRILLING METHOD</b> <u>Geologic/Geoprobe/Mc5 60" Liner</u>	<b>SCREEN TYPE/SLOT/INTERVAL</b> <u>----</u>
<b>HAMMER WEIGHT/FALL</b> <u>--</u>	<b>GRAVEL PACK TYPE</b> <u>----</u>
<b>ELEVATION (FT)</b> <u>N/A</u>	<b>GROUT TYPE/QUANTITY</b> <u>----</u>
<b>TOP OF CASING</b> <u>----</u>	<b>DEPTH TO WATER (FT)</b> <u>12.0</u>
<b>LOGGED BY</b> <u>Madelyn Sampson</u>	<b>GROUND WATER ELEVATION</b> <u>---</u>
<b>REMARKS</b> <u>No refusal encountered.</u>	

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WATER DEPTH
0.0		38					FILL	SAND, fine to medium; little silt; light brown; dry. No odor.	
0.0		30			5		FILL	SAND, fine to medium; trace silt; trace gravel; light brown; dry. No odor.	
0.0		56			10	SM	SM	SAND, fine to medium; and SILT, brown; dry. No odor.	
							SP	SAND, medium to coarse; some gravel; trace silt; light brown; wet at 12 feet. No odor.	▼
0.0		60			15		SP	SAND, medium to coarse; some gravel; trace silt; light brown; wet. No odor.	

Bottom of borehole at 20.0 feet.



Fuss & O'Neill, Inc.  
 317 Iron Horse Way, Suite 204  
 Providence, RI  
 Telephone: 401.861.3070

# SOIL BORING SB-20

<b>PROJECT NUMBER</b> <u>20181545.B10</u>	<b>DATE STARTED</b> <u>9/9/21</u>
<b>PROJECT NAME</b> <u>719 River Street</u>	<b>DATE COMPLETED</b> <u>9/9/21</u>
<b>LOCATION</b> <u>Woonsocket, RI</u>	<b>CASING TYPE/DIAMETER</b> <u>----</u>
<b>DRILLING METHOD</b> <u>Geologic/Geoprobe/Mc5 60" Liner</u>	<b>SCREEN TYPE/SLOT/INTERVAL</b> <u>----</u>
<b>HAMMER WEIGHT/FALL</b> <u>--</u>	<b>GRAVEL PACK TYPE</b> <u>----</u>
<b>ELEVATION (FT)</b> <u>N/A</u>	<b>GROUT TYPE/QUANTITY</b> <u>----</u>
<b>TOP OF CASING</b> <u>----</u>	<b>DEPTH TO WATER (FT)</b> <u>15.0</u>
<b>LOGGED BY</b> <u>Madelyn Sampson</u>	<b>GROUND WATER ELEVATION</b> <u>---</u>
<b>REMARKS</b> <u>Refusal encountered at 24.5 feet.</u>	

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WATER DEPTH
0.0		24				FILL		SAND, fine to medium; trace silt; trace gravel; trace brick; trace ash; trace glass; brown; dry. No odor.	
0.0		32			5	FILL		SAND, fine to medium; trace silt; trace gravel; trace ash; trace brick; brown; dry. No odor.	
108		38			10			SAND, medium to coarse; trace silt; black staining; dry. Petroleum odor.	
103		24			15	SP		SAND, medium to coarse; trace silt; black staining; wet at 15 feet. Petroleum odor.	▼
7.4		54			20	SP			
						SM		SAND, fine to medium; and SILT; gray; wet. No odor.	

Bottom of borehole at 24.5 feet.



Fuss & O'Neill, Inc.  
 317 Iron Horse Way, Suite 204  
 Providence, RI  
 Telephone: 401.861.3070

# SOIL BORING SB-21

<b>PROJECT NUMBER</b> <u>20181545.B10</u>	<b>DATE STARTED</b> <u>9/9/21</u>
<b>PROJECT NAME</b> <u>719 River Street</u>	<b>DATE COMPLETED</b> <u>9/9/21</u>
<b>LOCATION</b> <u>Woonsocket, RI</u>	<b>CASING TYPE/DIAMETER</b> <u>----</u>
<b>DRILLING METHOD</b> <u>Geologic/Geoprobe/Mc5 60" Liner</u>	<b>SCREEN TYPE/SLOT/INTERVAL</b> <u>----</u>
<b>HAMMER WEIGHT/FALL</b> <u>--</u>	<b>GRAVEL PACK TYPE</b> <u>----</u>
<b>ELEVATION (FT)</b> <u>N/A</u>	<b>GROUT TYPE/QUANTITY</b> <u>----</u>
<b>TOP OF CASING</b> <u>----</u>	<b>DEPTH TO WATER (FT)</b> <u>13.0</u>
<b>LOGGED BY</b> <u>Madelyn Sampson</u>	<b>GROUND WATER ELEVATION</b> <u>---</u>
<b>REMARKS</b> <u>No refusal encountered.</u>	

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WATER DEPTH
1.7		28					FILL	SAND, fine to medium; trace silt; trace gravel; trace brick; light brown; dry. No odor.	
0.0		22			5		FILL	SAND, fine to medium; trace silt; trace gravel; trace brick; light brown; dry. No odor.	
0.0		55			10	SM	SM	SAND, fine to medium; and SILT; light brown; dry. No odor.	
0.0		60			15	SP	SP	SAND, medium to coarse; little gravel; light brown; wet. No odor.	▼
						SP	SP	SAND, medium to coarse; little gravel; light brown; wet. No odor.	
						SM	SM	SAND, fine to medium; and SILT; wet. No odor.	

Bottom of borehole at 20.0 feet.



Fuss & O'Neill, Inc.  
 317 Iron Horse Way, Suite 204  
 Providence, RI  
 Telephone: 401.861.3070

# SOIL BORING SB-22

<b>PROJECT NUMBER</b> <u>20181545.B10</u>	<b>DATE STARTED</b> <u>9/9/21</u>
<b>PROJECT NAME</b> <u>719 River Street</u>	<b>DATE COMPLETED</b> <u>9/9/21</u>
<b>LOCATION</b> <u>Woonsocket, RI</u>	<b>CASING TYPE/DIAMETER</b> <u>----</u>
<b>DRILLING METHOD</b> <u>Geologic/Geoprobe/Mc5 60" Liner</u>	<b>SCREEN TYPE/SLOT/INTERVAL</b> <u>----</u>
<b>HAMMER WEIGHT/FALL</b> <u>--</u>	<b>GRAVEL PACK TYPE</b> <u>----</u>
<b>ELEVATION (FT)</b> <u>N/A</u>	<b>GROUT TYPE/QUANTITY</b> <u>----</u>
<b>TOP OF CASING</b> <u>----</u>	<b>DEPTH TO WATER (FT)</b> <u>13.0</u>
<b>LOGGED BY</b> <u>Madelyn Sampson</u>	<b>GROUND WATER ELEVATION</b> <u>---</u>
<b>REMARKS</b> <u>No refusal encountered.</u>	

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WATER DEPTH
0.0		22					FILL	SAND, fine to medium; trace silt; trace gravel; trace brick; light brown; dry. No odor.	
0.0		33			5		SM	SAND, fine to medium; and SILT; light brown; dry. No odor.	
0.0		48			10		SM	SAND, fine to medium; and SILT; light brown; dry. No odor.	
							SP	SAND, medium to coarse; trace gravel; light brown; wet at 13 feet. No odor.	▼
0.0		60			15		SP	SAND, medium to coarse; little gravel; light brown; wet. No odor.	
							SM	SAND, fine to medium; and SILT; wet. No odor.	

Bottom of borehole at 20.0 feet.



Fuss & O'Neill, Inc.  
 317 Iron Horse Way, Suite 204  
 Providence, RI  
 Telephone: 401.861.3070

# SOIL BORING SB-23

<b>PROJECT NUMBER</b> <u>20181545.B10</u>	<b>DATE STARTED</b> <u>9/9/21</u>
<b>PROJECT NAME</b> <u>719 River Street</u>	<b>DATE COMPLETED</b> <u>9/9/21</u>
<b>LOCATION</b> <u>Woonsocket, RI</u>	<b>CASING TYPE/DIAMETER</b> <u>----</u>
<b>DRILLING METHOD</b> <u>Geologic/Geoprobe/Mc5 60" Liner</u>	<b>SCREEN TYPE/SLOT/INTERVAL</b> <u>----</u>
<b>HAMMER WEIGHT/FALL</b> <u>--</u>	<b>GRAVEL PACK TYPE</b> <u>----</u>
<b>ELEVATION (FT)</b> <u>N/A</u>	<b>GROUT TYPE/QUANTITY</b> <u>----</u>
<b>TOP OF CASING</b> <u>----</u>	<b>DEPTH TO WATER (FT)</b> <u>15.0</u>
<b>LOGGED BY</b> <u>Madelyn Sampson</u>	<b>GROUND WATER ELEVATION</b> <u>---</u>
<b>REMARKS</b> <u>Refusal encountered at 23.5 feet.</u>	

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WATER DEPTH
0.0		38					FILL	SAND, fine to medium; trace silt; trace gravel; trace ash; light brown; dry. No odor.	
0.0		20			5		FILL	SAND, fine to medium; trace silt; trace gravel; trace brick; trace ash; brown; dry. No odor.	
0.0		32			10		FILL	SAND, fine to medium; trace silt; trace gravel; trace brick; trace ash; brown; dry. No odor.	
82		60			15	SP	SP	SAND, fine to medium; trace silt; trace gravel; black staining; wet at 15 feet. Petroleum odor.	▼
10		42			20	SP	SP	SAND, medium to coarse; trace silt; black staining; wet. Petroleum odor.	
						SM	SM	SAND, fine to medium; and SILT; wet. No odor.	

Bottom of borehole at 23.5 feet.





Fuss & O'Neill, Inc.  
 317 Iron Horse Way, Suite 204  
 Providence, RI  
 Telephone: 401.861.3070

# SOIL BORING SB-24

<b>PROJECT NUMBER</b> <u>20181545.B10</u>	<b>DATE STARTED</b> <u>9/9/21</u>
<b>PROJECT NAME</b> <u>719 River Street</u>	<b>DATE COMPLETED</b> <u>9/9/21</u>
<b>LOCATION</b> <u>Woonsocket, RI</u>	<b>CASING TYPE/DIAMETER</b> <u>----</u>
<b>DRILLING METHOD</b> <u>Geologic/Geoprobe/Mc5 60" Liner</u>	<b>SCREEN TYPE/SLOT/INTERVAL</b> <u>----</u>
<b>HAMMER WEIGHT/FALL</b> <u>--</u>	<b>GRAVEL PACK TYPE</b> <u>----</u>
<b>ELEVATION (FT)</b> <u>N/A</u>	<b>GROUT TYPE/QUANTITY</b> <u>----</u>
<b>TOP OF CASING</b> <u>----</u>	<b>DEPTH TO WATER (FT)</b> <u>14.0</u>
<b>LOGGED BY</b> <u>Madelyn Sampson</u>	<b>GROUND WATER ELEVATION</b> <u>---</u>
<b>REMARKS</b> <u>No refusal encountered.</u>	

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WATER DEPTH
0.0		28					FILL	SAND, fine to medium; little gravel; trace silt; trace brick; trace wood; brown; dry. No odor.	
0.0		32			5		FILL	SAND, fine to medium; little gravel; trace silt; trace brick; trace wood; brown; dry. No odor.	
0.0		38			10		FILL	SAND, fine to medium; little gravel; trace silt; trace brick; trace wood; brown; dry. No odor.	
0.0		60			15	SP	SP	SAND, medium to coarse; trace silt; light brown; wet at 14 feet. No odor.	▼
						SP	SP	SAND, medium to coarse; trace silt; light brown; wet. No odor.	
						SM	SM	SAND, fine to medium; and SILT; light brown; wet. No odor.	

Bottom of borehole at 20.0 feet.



Fuss & O'Neill, Inc.  
 317 Iron Horse Way, Suite 204  
 Providence, RI  
 Telephone: 401.861.3070

# SOIL BORING SB-25

<b>PROJECT NUMBER</b> <u>20181545.B10</u>	<b>DATE STARTED</b> <u>9/9/21</u>
<b>PROJECT NAME</b> <u>719 River Street</u>	<b>DATE COMPLETED</b> <u>9/9/21</u>
<b>LOCATION</b> <u>Woonsocket, RI</u>	<b>CASING TYPE/DIAMETER</b> <u>----</u>
<b>DRILLING METHOD</b> <u>Geologic/Geoprobe/Mc5 60" Liner</u>	<b>SCREEN TYPE/SLOT/INTERVAL</b> <u>----</u>
<b>HAMMER WEIGHT/FALL</b> <u>--</u>	<b>GRAVEL PACK TYPE</b> <u>----</u>
<b>ELEVATION (FT)</b> <u>N/A</u>	<b>GROUT TYPE/QUANTITY</b> <u>----</u>
<b>TOP OF CASING</b> <u>----</u>	<b>DEPTH TO WATER (FT)</b> <u>13.0</u>
<b>LOGGED BY</b> <u>Madelyn Sampson</u>	<b>GROUND WATER ELEVATION</b> <u>---</u>
<b>REMARKS</b> <u>No refusal encountered.</u>	

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WATER DEPTH
0.0		48					FILL	SAND, fine to medium; trace silt; trace gravel; trace brick; trace wood; brown; dry. No odor.	
0.0		18			5		FILL	SAND, fine to medium; trace silt; trace gravel; trace brick; trace wood; trace ash; brown; dry. No odor.	
74		56			10	SM	SM	SAND, fine to medium; and SILT; brown; dry. No odor.	
						SP	SP	SAND, medium to coarse; little gravel; trace silt; black staining; wet at 13 feet. No odor.	▼
96.7		46			15	SP	SP	SAND, medium to coarse; little gravel; trace silt; black staining; wet. No odor.	
						SM	SM	SAND, fine to medium; and SILT; light brown; wet. No odor.	

Bottom of borehole at 20.0 feet.



Fuss & O'Neill, Inc.  
 317 Iron Horse Way, Suite 204  
 Providence, RI  
 Telephone: 401.861.3070

# SOIL BORING SB-26

<b>PROJECT NUMBER</b> <u>20181545.B10</u>	<b>DATE STARTED</b> <u>9/9/21</u>
<b>PROJECT NAME</b> <u>719 River Street</u>	<b>DATE COMPLETED</b> <u>9/9/21</u>
<b>LOCATION</b> <u>Woonsocket, RI</u>	<b>CASING TYPE/DIAMETER</b> <u>----</u>
<b>DRILLING METHOD</b> <u>Geologic/Geoprobe/Mc5 60" Liner</u>	<b>SCREEN TYPE/SLOT/INTERVAL</b> <u>----</u>
<b>HAMMER WEIGHT/FALL</b> <u>--</u>	<b>GRAVEL PACK TYPE</b> <u>----</u>
<b>ELEVATION (FT)</b> <u>N/A</u>	<b>GROUT TYPE/QUANTITY</b> <u>----</u>
<b>TOP OF CASING</b> <u>----</u>	<b>DEPTH TO WATER (FT)</b> <u>9.0</u>
<b>LOGGED BY</b> <u>Madelyn Sampson</u>	<b>GROUND WATER ELEVATION</b> <u>---</u>
<b>REMARKS</b> <u>No refusal encountered.</u>	

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WATER DEPTH
0.0		32					FILL	SAND, fine to medium; trace silt; trace gravel; light brown; dry. No odor.	
0.0		52			5	SM	SM	SAND, fine to medium; and SILT; brown; dry. No odor.	
0.0		48			10	SP	SP	SAND, medium to coarse; trace silt; light brown; wet at 9 feet. No odor.	▼
						SP	SP	SAND, medium to coarse; trace silt; light brown; wet. No odor.	
						SP	SP	SAND, medium to coarse; some silt; light brown; wet. No odor.	
0.0		56			15	SP	SP	SAND, medium to coarse; some silt; light brown; wet. No odor.	
						SM	SM	SAND, fine to medium; and SILT; light brown; wet. No odor.	




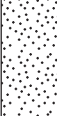


Bottom of borehole at 20.0 feet.



Fuss & O'Neill, Inc.  
 317 Iron Horse Way, Suite 204  
 Providence, RI  
 Telephone: 401.861.3070

# SOIL BORING SB-27

<b>PROJECT NUMBER</b> <u>20181545.B10</u>	<b>DATE STARTED</b> <u>9/9/21</u>
<b>PROJECT NAME</b> <u>719 River Street</u>	<b>DATE COMPLETED</b> <u>9/9/21</u>
<b>LOCATION</b> <u>Woonsocket, RI</u>	<b>CASING TYPE/DIAMETER</b> <u>----</u>
<b>DRILLING METHOD</b> <u>Geologic/Geoprobe/Mc5 60" Liner</u>	<b>SCREEN TYPE/SLOT/INTERVAL</b> <u>----</u>
<b>HAMMER WEIGHT/FALL</b> <u>--</u>	<b>GRAVEL PACK TYPE</b> <u>----</u>
<b>ELEVATION (FT)</b> <u>N/A</u>	<b>GROUT TYPE/QUANTITY</b> <u>----</u>
<b>TOP OF CASING</b> <u>----</u>	<b>DEPTH TO WATER (FT)</b> <u>12.0</u>
<b>LOGGED BY</b> <u>Madelyn Sampson</u>	<b>GROUND WATER ELEVATION</b> <u>---</u>
<b>REMARKS</b> <u>No refusal encountered.</u>	

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WATER DEPTH
0.0		48				FILL		SAND, fine to medium; trace silt; trace gravel; trace brick; trace ash; light brown; dry. No odor.	
0.0		36			5	FILL		SAND, fine to medium; and SILT; trace brick; brown; dry. No odor.	
79.7		44			10	FILL		SAND, fine to medium; and SILT; trace brick; brown; wet at 12 feet. No odor.	▼
						SP		SAND, fine coarse; black staining; wet. Petroleum odor.	
107		60			15	SP		SAND, fine coarse; black staining; wet. Petroleum odor.	
						SM		SAND, fine to medium; and SILT; brown; wet. No odor.	

Bottom of borehole at 20.0 feet.



## **Appendix D**

---

### Soil Laboratory Analytical Reports







Modified Tier II  
Data Validation Narrative

Project: 20181545.B10, 20 Privilege Street, Woonsocket, RI

<b>Con-Test Analytical Laboratory Project Number:</b>	21G0035, 21G0036, 21G1540
<b>Date Samples Received at Laboratory:</b>	July 1, 2021
<b>Date of Review:</b>	July 14, 2021

Twenty-four soil samples plus two duplicate quality control sample were collected from soil borings at the Site. The soil samples were submitted to Con-Test Analytical Laboratory (Con-Test) of East Longmeadow, Massachusetts. The samples were analyzed for the following analytes using the designated methods:

**Soil:**

- Volatile Organic Compounds (VOC) via USEPA Method 8260, including preservation by Method 5035
- Polycyclic aromatic hydrocarbons (PAH) via USEPA Method 8270
- Priority Pollutant 13 Metals via USEPA Methods 6010/7471
- Toxicity Characteristic Leaching Procedure (TCLP) metals via USEPA Method 1311
- Total Petroleum Hydrocarbons (TPH) via USEPA Method 8100/8015
- Polychlorinated biphenyls (PCBs) via USEPA Method 8082

In addition, three laboratory-supplied trip blank, including one methanol-preserved and two sodium bisulfate-preserved vials, were submitted for analysis of VOC by USEPA Method 8260. Dedicated sampling equipment was utilized, so equipment blanks and field blanks were not collected during these sampling activities.

No compounds were detected in the trip blanks at concentrations exceeding laboratory detection limits. Samples were received by the laboratory at 2.0 and 4.4 degrees Celsius. All samples were analyzed within the method-specific holding times.

No case narrative summary was included in the analytical report 21G1540 for the TCLP analysis of samples 1603210628-06, 1603210628-09, 1603210628-10 and 1603210629-14. As documented in the case narrative summary included in the analytical reports 21G0035 and 21G0036, the following non-conformances were identified during analysis of these samples:

**21G0035:**

- Due to a lab reporting error, the thallium results from samples 16 to 20 were revised with the correct values on July 14, 2021.
- Either the laboratory fortified blank/laboratory control sample recovery or duplicate recoveries were outside of control limits but the other is within limits for Beryllium, Chromium and Nickel. RPD between the two LFB/LCS results is within method specified criteria.
- The matrix spike recovery was outside of control limits for Antimony, Selenium and Zinc for samples 1603210628-01 and/or 1603210629-18. Analysis was in control based on laboratory fortified blank recovery. There is a possibility of the sample matrix effects that



lead to low bias for reported result or non-homogenous sample aliquot cannot be eliminated.

- Duplicate relative percent difference (RPD) is a less useful indicator of sample precision for samples results that are less than five times the reporting limits (RL) for Arsenic and Beryllium in sample 1603210628-01.
- Sample contamination consisted of heavy residual hydrocarbons similar to asphalt for TPH. Chromatogram also shows the presence of PAHs. Samples 1603210628-01, 1603210628-03, 1603210628-05, 1603210628-07, 1603210629-14 and 1603210629-19.
- The surrogate recovery was not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences for 2-Fluorobiphenyl for samples 1603210628-08, 1603210628-11, 1603210628-12, 1603210629-14, and 1603210629-16.
- Chromatogram did not match any reference standard for TPH for samples 1603210629-17 and 1603210629-18.
- Chromatogram showed the presence of heavy hydrocarbons similar to motor oil for sample 1603210629-15.
- Chromatogram showed the presence of weathered #2 diesel fuel as well as heavier hydrocarbons in the motor oil range for samples 1603210628-08, 1603210628-09, 1603210628-10, 1603210628-11, 1603210628-11, 1603210628-12 and 1603210629-16.
- The sample chromatographic pattern did not exhibit any fuel pattern for samples 1603210628-02, 1603210628-04 and 1603210628-06.
- The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract for Decachlorobiphenyl for sample 1603210628-01.
- The laboratory fortified blank/laboratory control sample recovery and duplicate recoveries were outside of control limits for Bromomethane and Methyl Acetate. Data validation was not affected since all results are “not detected” for associated samples and the bias was on the high side.
- The laboratory fortified blank/laboratory control sample recovery and duplicate recoveries were outside of control limits for Bromochloromethane and Trichlorogluoromethane. The reported values for these compounds are likely to be biased on the low side for samples 1603210628-08, 1603210628-11, 1603210628-12, 1603210629-16, 1603210629-17, 1603210629-18, 1603210629-19 and 1603210629-20.
- The laboratory fortified blank/laboratory control sample or duplicate recovery was outside of control limits, but the other is within limits for Bromochloromethane and Methyl Acetate. RPD between the two LFB/LCS results is within method specified criteria.
- The laboratory fortified blank/laboratory control sample or duplicate recovery was outside of control limits, but the other is within limits for Chloroethane. RPD was outside of control limits. Reduced precision is anticipated for any reported results for this compound.
- Laboratory fortified blank duplicate RPD was outside of control limits for Chloroethane for samples 1603210628-08, 1603210628-11, and 1603210628-12.
- Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for 1,1-Dichloroethylene, 1,2,3-Trichlorobenzene, Bromochloromethane, Carbon Disulfide, trans-1,4- Dichloro-2-butene and Trichlorofluoromethane for most samples.
- Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side for 1,1-Dichloroethylene, 1,2-Dichloroethane, Acetone, Bromochloromethane, Bromoform, Bromomethane, Methyl Acetate and Methylene Chloride. Data validation was not affected since sample results were “not detected” for these compounds.



- Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated for Bromoethane for most samples.
- The surrogate recovery was not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences for 2-Fluorobiphenyl, Nitrobenzene and p-Terphenyl for sample 1603210628-01.

### **21G0036:**

- The laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits but the other is within limits for Beryllium, Chromium and Nickel.
- Sample contamination consists of heavy residual hydrocarbons similar to asphalt and chromatogram shows the presence of PAHs for samples 1603210629-21, 1603210629-23, 1603210629-24, 1603210630-25, 1603210630-26, 1603210630-27 and 1603210630-28.
- The laboratory fortified blank/laboratory control sample recovery and duplicate recoveries were outside of control limits for Bromomethane and Methyl Acetate. Data validation was not affected since all results are “not detected” for associated samples and the bias was on the high side.
- The laboratory fortified blank/laboratory control sample recovery and duplicate recoveries were outside of control limits for Trichlorofluoromethane for samples 1603210629-21, 1603210629-22, 1603210629-23, 1603210630-24, 1603210630-25, 1603210630-26, 1603210630-27, 1603210630-28, and 1603210630-29. Data validation was not affected since all results are “not detected” for associated samples and the bias was on the low side.
- The laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits but the other is within limits for Bromochloromethane.
- Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for 1,1-Dichloroethylene, 1,2,3-Trichlorobenzene, Carbon Disulfide, and Trichlorofluoromethane for samples 1603210629-21, 1603210629-22, 1603210629-23, 1603210630-24, 1603210630-25, 1603210630-26, 1603210630-27, 1603210630-28, and 1603210630-29.
- Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was “not detected” for Bromochloromethane, Bromomethane and Methyl Acetate.

Based on the full data set for soil at the Site, the compounds of concern warranting response actions for soil were antimony, selenium, zinc, TPH, and PAH. No VOC of concern were identified in site soil. Therefore, the non-conformances during VOC analysis were not anticipated to affect the usability of the data.

The concentration of antimony and selenium in soil samples affected by the non-conformance were all below the laboratory detection limits. The concentration of zinc in soil samples affected by the non-conformance were above laboratory detection limits but significantly below applicable regulatory standards. The non-conformity reported by Con-Test was not expected to affect the usability of the data.



The concentration of TPH in soil samples 1603210629-17 and 1603210629-18 affected by the non-conformance were above laboratory detection limits but significantly below applicable regulatory standards. The non-conformity reported by Con-Test was not expected to affect the usability of the data.

Analytical results for the soil samples were compared to the Method 1 Residential Exposure Criteria, Industrial/Commercial Direct Exposure Criteria, and GB Leachability Criteria promulgated by the Rhode Island Department of Environmental Management.

Laboratory reporting limits of several PAH in soil samples 1603210628-08, 1603210628-11, and 1603210628-12 were above the Method 1 Residential Exposure Criteria and Industrial/Commercial Direct Exposure Criteria. The usability of the data was not impacted because TPH was detected in the soil samples at concentrations above the GB Leachability Criteria. Laboratory reporting limits for the remaining soil samples were low enough to allow direct comparison to the applicable criteria.

July 14, 2021

Madelyn Sampson  
Fuss & O'Neill - Providence  
317 Iron Horse Way, Suite 204  
Providence, RI 02908

Project Location: 719 River St, Woonsocket, RI  
Client Job Number:  
Project Number: 20181545.B10  
Laboratory Work Order Number: 21G0035

Enclosed are results of analyses for samples received by the laboratory on July 1, 2021. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Jessica L. Hoffman  
Project Manager



# Table of Contents

Sample Summary	4
Case Narrative	8
Sample Results	13
21G0035-01	13
21G0035-02	20
21G0035-03	27
21G0035-04	34
21G0035-05	41
21G0035-06	48
21G0035-07	55
21G0035-08	62
21G0035-09	69
21G0035-10	76
21G0035-11	83
21G0035-12	90
21G0035-13	97
21G0035-14	99
21G0035-15	106
21G0035-16	113
21G0035-17	120
21G0035-18	127
21G0035-19	134
21G0035-20	141
Sample Preparation Information	148
QC Data	152

## Table of Contents (continued)

Volatile Organic Compounds by GC/MS	152
B285216	152
B285222	157
B285252	161
Semivolatile Organic Compounds by GC/MS	167
B285209	167
Polychlorinated Biphenyls with 3540 Soxhlet Extraction	170
B285421	170
Petroleum Hydrocarbons Analyses	172
B285208	172
Metals Analyses (Total)	173
B285206	173
B285207	174
B285230	176
B285231	176
Dual Column RPD Report	177
Flag/Qualifier Summary	181
Certifications	182
Chain of Custody/Sample Receipt	187

Fuss & O'Neill - Providence  
 317 Iron Horse Way, Suite 204  
 Providence, RI 02908  
 ATTN: Madelyn Sampson

REPORT DATE: 7/14/2021

PURCHASE ORDER NUMBER: 160320181545.B10

PROJECT NUMBER: 20181545.B10

**ANALYTICAL SUMMARY**

WORK ORDER NUMBER: 21G0035

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

PROJECT LOCATION: 719 River St, Woonsocket, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
1603210628-01	21G0035-01	Soil	SB-1	SM 2540G SW-846 6010D SW-846 7471B SW-846 8015C SW-846 8082A SW-846 8260C-D SW-846 8270D-E	
1603210628-02	21G0035-02	Soil	MW-2	SM 2540G SW-846 6010D SW-846 7471B SW-846 8015C SW-846 8082A SW-846 8260C-D SW-846 8270D-E	
1603210628-03	21G0035-03	Soil	SB-3	SM 2540G SW-846 6010D SW-846 7471B SW-846 8015C SW-846 8082A SW-846 8260C-D SW-846 8270D-E	
1603210628-04	21G0035-04	Soil	SB-3	SM 2540G SW-846 6010D SW-846 7471B SW-846 8015C SW-846 8082A SW-846 8260C-D SW-846 8270D-E	
1603210628-05	21G0035-05	Soil	SB-4	SM 2540G SW-846 6010D SW-846 7471B SW-846 8015C SW-846 8082A SW-846 8260C-D SW-846 8270D-E	

Fuss & O'Neill - Providence  
317 Iron Horse Way, Suite 204  
Providence, RI 02908  
ATTN: Madelyn Sampson

REPORT DATE: 7/14/2021

PURCHASE ORDER NUMBER: 160320181545.B10

PROJECT NUMBER: 20181545.B10

**ANALYTICAL SUMMARY**

WORK ORDER NUMBER: 21G0035

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

PROJECT LOCATION: 719 River St, Woonsocket, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
1603210628-06	21G0035-06	Soil	SB-4	SM 2540G SW-846 6010D SW-846 7471B SW-846 8015C SW-846 8082A SW-846 8260C-D SW-846 8270D-E	
1603210628-07	21G0035-07	Soil	SB-5	SM 2540G SW-846 6010D SW-846 7471B SW-846 8015C SW-846 8082A SW-846 8260C-D SW-846 8270D-E	
1603210628-08	21G0035-08	Soil	SB-5	SM 2540G SW-846 6010D SW-846 7471B SW-846 8015C SW-846 8082A SW-846 8260C-D SW-846 8270D-E	
1603210628-09	21G0035-09	Soil	MW-6	SM 2540G SW-846 6010D SW-846 7471B SW-846 8015C SW-846 8082A SW-846 8260C-D SW-846 8270D-E	
1603210628-10	21G0035-10	Soil	SB-7	SM 2540G SW-846 6010D SW-846 7471B SW-846 8015C SW-846 8082A SW-846 8260C-D SW-846 8270D-E	

Fuss & O'Neill - Providence  
 317 Iron Horse Way, Suite 204  
 Providence, RI 02908  
 ATTN: Madelyn Sampson

REPORT DATE: 7/14/2021

PURCHASE ORDER NUMBER: 160320181545.B10

PROJECT NUMBER: 20181545.B10

**ANALYTICAL SUMMARY**

WORK ORDER NUMBER: 21G0035

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

PROJECT LOCATION: 719 River St, Woonsocket, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
1603210628-11	21G0035-11	Soil	SB-7	SM 2540G SW-846 6010D SW-846 7471B SW-846 8015C SW-846 8082A SW-846 8260C-D SW-846 8270D-E	
1603210628-12	21G0035-12	Soil	SB-7	SM 2540G SW-846 6010D SW-846 7471B SW-846 8015C SW-846 8082A SW-846 8260C-D SW-846 8270D-E	
1603210628-13	21G0035-13	Trip Blank Soil	Trip Blank	SW-846 8260C-D	
1603210629-1	21G0035-14	Soil	ME-8	SM 2540G SW-846 6010D SW-846 7471B SW-846 8015C SW-846 8082A SW-846 8260C-D SW-846 8270D-E	
1603210629-1	21G0035-15	Soil	ME-9	SM 2540G SW-846 6010D SW-846 7471B SW-846 8015C SW-846 8082A SW-846 8260C-D SW-846 8270D-E	
1603210629-1	21G0035-16	Soil	SB-10	SM 2540G SW-846 6010D SW-846 7471B SW-846 8015C SW-846 8082A SW-846 8260C-D SW-846 8270D-E	

Fuss & O'Neill - Providence  
317 Iron Horse Way, Suite 204  
Providence, RI 02908  
ATTN: Madelyn Sampson

REPORT DATE: 7/14/2021

PURCHASE ORDER NUMBER: 160320181545.B10

PROJECT NUMBER: 20181545.B10

**ANALYTICAL SUMMARY**

WORK ORDER NUMBER: 21G0035

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

PROJECT LOCATION: 719 River St, Woonsocket, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
1603210629-1	21G0035-17	Soil	SB-11	SM 2540G SW-846 6010D SW-846 7471B SW-846 8015C SW-846 8082A SW-846 8260C-D SW-846 8270D-E	
1603210629-1	21G0035-18	Soil	SB-11	SM 2540G SW-846 6010D SW-846 7471B SW-846 8015C SW-846 8082A SW-846 8260C-D SW-846 8270D-E	
1603210629-1	21G0035-19	Soil	SB-12	SM 2540G SW-846 6010D SW-846 7471B SW-846 8015C SW-846 8082A SW-846 8260C-D SW-846 8270D-E	
1603210629-1	21G0035-20	Soil	SB-12	SM 2540G SW-846 6010D SW-846 7471B SW-846 8015C SW-846 8082A SW-846 8260C-D SW-846 8270D-E	



**CASE NARRATIVE SUMMARY**

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

REVISED REPORT 07-14-21: Due to a lab reporting error, the thallium results for samples 21G0035-16-20 have been revised with the correct values. For method 8270E, only PAHs were requested and reported.

**SW-846 6010D**

**Qualifications:**

**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:**

**Beryllium**

B285206-BS1

**Chromium**

B285206-BS1

**Nickel**

B285206-BS1

**MS-07**

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

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

**Antimony**

21G0035-01[1603210628-01], 21G0035-18[1603210629-1], B285206-MS1, B285207-MS1

**Selenium**

21G0035-18[1603210629-1], B285206-MS1

**Zinc**

21G0035-01[1603210628-01], B285207-MS1

**R-04**

Duplicate relative percent difference (RPD) is a less useful indicator of sample precision for sample results that are <5 times the reporting limit (RL).

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

**Arsenic**

21G0035-01[1603210628-01], B285207-DUP1

**Beryllium**

21G0035-01[1603210628-01], B285207-DUP1

**SW-846 8015C**

**Qualifications:**

**O-25**

Sample contamination consists of heavy residual hydrocarbons similar to asphalt.

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

**TPH (C9-C36)**

21G0035-20[1603210629-1]

**O-26**

Sample contamination consists of heavy residual hydrocarbons similar to asphalt. Chromatogram also shows the presence of PAHs.

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

**TPH (C9-C36)**

21G0035-01[1603210628-01], 21G0035-03[1603210628-03], 21G0035-05[1603210628-05], 21G0035-07[1603210628-07], 21G0035-14[1603210629-1], 21G0035-19[1603210629-1]

**S-01**

The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

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

**2-Fluorobiphenyl**

21G0035-08[1603210628-08], 21G0035-11[1603210628-11], 21G0035-12[1603210628-12], 21G0035-14[1603210629-1], 21G0035-16[1603210629-1]

**Z-01**

Chromatogram does not match any reference standard.

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

**TPH (C9-C36)**

21G0035-17[1603210629-1], 21G0035-18[1603210629-1]

**Z-01a**

Chromatogram shows the presence heavy hydrocarbons similar to motor oil.

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

**TPH (C9-C36)**

21G0035-15[1603210629-1]

**Z-01b**

Chromatogram shows the presence of weathered #2 diesel fuel as well as heavier hydrocarbons in the motor oil range.

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

**TPH (C9-C36)**

21G0035-08[1603210628-08], 21G0035-09[1603210628-09], 21G0035-10[1603210628-10], 21G0035-11[1603210628-11], 21G0035-12[1603210628-12],  
21G0035-16[1603210629-1]

**Z-01c**

The sample chromatographic pattern does not exhibit any fuel pattern

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

**TPH (C9-C36)**

21G0035-02[1603210628-02], 21G0035-04[1603210628-04], 21G0035-06[1603210628-06]

**SW-846 8082A**

**Qualifications:**

**S-02**

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

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

**Decachlorobiphenyl [2C]**

21G0035-01[1603210628-01]

**SW-846 8260C-D**

**Qualifications:**

**L-02**

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

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

**Bromomethane**

B285252-BS1, B285252-BSD1

**Methyl Acetate**

B285222-BS1, B285222-BSD1, B285252-BS1, B285252-BSD1

**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:**

**Bromochloromethane**

21G0035-08[1603210628-08], 21G0035-11[1603210628-11], 21G0035-12[1603210628-12], B285216-BLK1, B285216-BS1, B285216-BSD1

**Trichlorofluoromethane (Freon 11)**

21G0035-16[1603210629-1], 21G0035-17[1603210629-1], 21G0035-18[1603210629-1], 21G0035-19[1603210629-1], 21G0035-20[1603210629-1], B285252-BLK1, B285252-BS1, B285252-BSD1

**L-07**

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

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

**Bromochloromethane**

B285252-BS1

**Methyl Acetate**

B285216-BSD1

**L-07A**

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

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

**Chloroethane**

B285216-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:****Chloroethane**

21G0035-08[1603210628-08], 21G0035-11[1603210628-11], 21G0035-12[1603210628-12], B285216-BLK1, B285216-BS1, B285216-BSD1

**V-05**

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

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

21G0035-16[1603210629-1], 21G0035-17[1603210629-1], 21G0035-18[1603210629-1], 21G0035-19[1603210629-1], 21G0035-20[1603210629-1], B285252-BLK1, B285252-BS1, B285252-BSD1, S061205-CCV1

**1,2,3-Trichlorobenzene**

21G0035-16[1603210629-1], 21G0035-17[1603210629-1], 21G0035-18[1603210629-1], 21G0035-19[1603210629-1], 21G0035-20[1603210629-1], B285252-BLK1, B285252-BS1, B285252-BSD1, S061205-CCV1

**Bromochloromethane**

21G0035-08[1603210628-08], 21G0035-11[1603210628-11], 21G0035-12[1603210628-12], B285216-BLK1, B285216-BS1, B285216-BSD1, S061207-CCV1

**Carbon Disulfide**

21G0035-16[1603210629-1], 21G0035-17[1603210629-1], 21G0035-18[1603210629-1], 21G0035-19[1603210629-1], 21G0035-20[1603210629-1], B285252-BLK1, B285252-BS1, B285252-BSD1, S061205-CCV1

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

21G0035-01[1603210628-01], 21G0035-02[1603210628-02], 21G0035-03[1603210628-03], 21G0035-04[1603210628-04], 21G0035-05[1603210628-05], 21G0035-06[1603210628-06], 21G0035-07[1603210628-07], 21G0035-09[1603210628-09], 21G0035-10[1603210628-10], 21G0035-13[1603210628-13], 21G0035-14[1603210629-1], 21G0035-15[1603210629-1], B285222-BLK1, B285222-BS1, B285222-BSD1, S061211-CCV1

**Trichlorofluoromethane (Freon 11)**

21G0035-16[1603210629-1], 21G0035-17[1603210629-1], 21G0035-18[1603210629-1], 21G0035-19[1603210629-1], 21G0035-20[1603210629-1], B285252-BLK1, B285252-BS1, B285252-BSD1, S061205-CCV1

**V-20**

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

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

B285222-BS1, B285222-BSD1, S061211-CCV1

**1,2-Dichloroethane**

B285222-BS1, B285222-BSD1, S061211-CCV1

**Acetone**

B285222-BS1, B285222-BSD1, S061211-CCV1

**Bromochloromethane**

B285252-BS1, B285252-BSD1, S061205-CCV1

**Bromoform**

B285216-BS1, B285216-BSD1, S061207-CCV1

**Bromomethane**

B285222-BS1, B285222-BSD1, B285252-BS1, B285252-BSD1, S061205-CCV1, S061211-CCV1

**Methyl Acetate**

B285216-BS1, B285216-BSD1, B285222-BS1, B285222-BSD1, B285252-BS1, B285252-BSD1, S061205-CCV1, S061207-CCV1, S061211-CCV1

**Methylene Chloride**

B285222-BS1, B285222-BSD1, S061211-CCV1

**V-34**

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

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

21G0035-01[1603210628-01], 21G0035-02[1603210628-02], 21G0035-03[1603210628-03], 21G0035-04[1603210628-04], 21G0035-05[1603210628-05], 21G0035-06[1603210628-06], 21G0035-07[1603210628-07], 21G0035-08[1603210628-08], 21G0035-09[1603210628-09], 21G0035-10[1603210628-10], 21G0035-11[1603210628-11], 21G0035-12[1603210628-12], 21G0035-13[1603210628-13], 21G0035-14[1603210629-1], 21G0035-15[1603210629-1], B285216-BLK1, B285216-BS1, B285216-BSD1, B285222-BLK1, B285222-BS1, B285222-BSD1, S061207-CCV1, S061211-CCV1

**SW-846 8270D-E****Qualifications:**

**RL-12**

Elevated reporting limit due to matrix interference.

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

21G0035-08[1603210628-08], 21G0035-11[1603210628-11], 21G0035-14[1603210629-1]

**S-01**

The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

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

**2-Fluorobiphenyl**

21G0035-01RE2[1603210628-01]

**Nitrobenzene-d5**

21G0035-01RE2[1603210628-01]

**p-Terphenyl-d14**

21G0035-01RE2[1603210628-01]

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

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



Lisa A. Worthington  
Technical Representative

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-1

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-01

Sampled: 6/28/2021 07:42

Sample ID: 21G0035-01

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
Acrylonitrile	ND	0.0053	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
Benzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
Bromobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
Bromochloromethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
Bromodichloromethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
Bromoform	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
Bromomethane	ND	0.0089	mg/Kg dry	1	V-34	SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
2-Butanone (MEK)	ND	0.036	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
tert-Butyl Alcohol (TBA)	ND	0.089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
n-Butylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
sec-Butylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
tert-Butylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
Carbon Disulfide	ND	0.0053	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
Carbon Tetrachloride	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
Chlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
Chlorodibromomethane	ND	0.00089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
Chloroethane	ND	0.018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
Chloroform	ND	0.0036	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
Chloromethane	ND	0.0089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
2-Chlorotoluene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
4-Chlorotoluene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
1,2-Dibromoethane (EDB)	ND	0.00089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
Dibromomethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
1,2-Dichlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
1,3-Dichlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
1,4-Dichlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
trans-1,4-Dichloro-2-butene	ND	0.0036	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
1,1-Dichloroethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
1,2-Dichloroethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
1,1-Dichloroethylene	ND	0.0036	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
cis-1,2-Dichloroethylene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
trans-1,2-Dichloroethylene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
1,2-Dichloropropane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
1,3-Dichloropropane	ND	0.00089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
2,2-Dichloropropane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
1,1-Dichloropropene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
cis-1,3-Dichloropropene	ND	0.00089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
trans-1,3-Dichloropropene	ND	0.00089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
Diethyl Ether	ND	0.018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-1

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-01

Sampled: 6/28/2021 07:42

Sample ID: 21G0035-01

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.00089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
1,4-Dioxane	ND	0.089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
Ethylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
Hexachlorobutadiene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
2-Hexanone (MBK)	ND	0.018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
Isopropylbenzene (Cumene)	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
Methyl Acetate	ND	0.0036	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0036	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
Methyl Cyclohexane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
Methylene Chloride	ND	0.018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
Naphthalene	ND	0.0036	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
n-Propylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
Styrene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
1,1,1,2-Tetrachloroethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
1,1,2,2-Tetrachloroethane	ND	0.00089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
Tetrachloroethylene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
Tetrahydrofuran	ND	0.0089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
Toluene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
1,2,3-Trichlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
1,2,4-Trichlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
1,3,5-Trichlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
1,1,1-Trichloroethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
1,1,2-Trichloroethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
Trichloroethylene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
1,2,3-Trichloropropane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
1,2,4-Trimethylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
1,3,5-Trimethylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
Vinyl Chloride	ND	0.0089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
m+p Xylene	ND	0.0036	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
o-Xylene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:14	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		113	70-130					7/2/21 15:14	
Toluene-d8		96.3	70-130					7/2/21 15:14	
4-Bromofluorobenzene		94.6	70-130					7/2/21 15:14	



Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-1

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-01

Sampled: 6/28/2021 07:42

Sample ID: 21G0035-01

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	1.9	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 20:18	BGL
Acenaphthylene	6.3	1.8	mg/Kg dry	10		SW-846 8270D-E	7/2/21	7/9/21 1:27	BGL
Anthracene	12	1.8	mg/Kg dry	10		SW-846 8270D-E	7/2/21	7/9/21 1:27	BGL
Benzo(a)anthracene	18	1.8	mg/Kg dry	10		SW-846 8270D-E	7/2/21	7/9/21 1:27	BGL
Benzo(a)pyrene	16	1.8	mg/Kg dry	10		SW-846 8270D-E	7/2/21	7/9/21 1:27	BGL
Benzo(b)fluoranthene	18	1.8	mg/Kg dry	10		SW-846 8270D-E	7/2/21	7/9/21 1:27	BGL
Benzo(g,h,i)perylene	9.0	1.8	mg/Kg dry	10		SW-846 8270D-E	7/2/21	7/9/21 1:27	BGL
Benzo(k)fluoranthene	7.6	1.8	mg/Kg dry	10		SW-846 8270D-E	7/2/21	7/9/21 1:27	BGL
Chrysene	15	1.8	mg/Kg dry	10		SW-846 8270D-E	7/2/21	7/9/21 1:27	BGL
Dibenz(a,h)anthracene	2.3	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 20:18	BGL
Fluoranthene	41	8.8	mg/Kg dry	50		SW-846 8270D-E	7/2/21	7/9/21 1:55	BGL
Fluorene	8.9	1.8	mg/Kg dry	10		SW-846 8270D-E	7/2/21	7/9/21 1:27	BGL
Indeno(1,2,3-cd)pyrene	9.7	1.8	mg/Kg dry	10		SW-846 8270D-E	7/2/21	7/9/21 1:27	BGL
2-Methylnaphthalene	3.8	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 20:18	BGL
Naphthalene	7.8	1.8	mg/Kg dry	10		SW-846 8270D-E	7/2/21	7/9/21 1:27	BGL
Phenanthrene	50	8.8	mg/Kg dry	50		SW-846 8270D-E	7/2/21	7/9/21 1:55	BGL
Pyrene	40	1.8	mg/Kg dry	10		SW-846 8270D-E	7/2/21	7/9/21 1:27	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	Date/Time Analyzed
Nitrobenzene-d5	52.2	30-130		7/7/21 20:18
Nitrobenzene-d5	56.9	30-130		7/9/21 1:27
<b>Nitrobenzene-d5</b>	*	30-130	S-01	7/9/21 1:55
2-Fluorobiphenyl	50.1	30-130		7/7/21 20:18
2-Fluorobiphenyl	55.7	30-130		7/9/21 1:27
<b>2-Fluorobiphenyl</b>	*	30-130	S-01	7/9/21 1:55
p-Terphenyl-d14	71.6	30-130		7/7/21 20:18
p-Terphenyl-d14	80.8	30-130		7/9/21 1:27
<b>p-Terphenyl-d14</b>	*	30-130	S-01	7/9/21 1:55

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-1

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-01

Sampled: 6/28/2021 07:42

Sample ID: 21G0035-01

Sample Matrix: Soil

**Polychlorinated Biphenyls with 3540 Soxhlet Extraction**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.084	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 17:31	JMB
Aroclor-1221 [1]	ND	0.084	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 17:31	JMB
Aroclor-1232 [1]	ND	0.084	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 17:31	JMB
Aroclor-1242 [1]	ND	0.084	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 17:31	JMB
Aroclor-1248 [1]	ND	0.084	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 17:31	JMB
Aroclor-1254 [1]	ND	0.084	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 17:31	JMB
Aroclor-1260 [1]	ND	0.084	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 17:31	JMB
Aroclor-1262 [1]	ND	0.084	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 17:31	JMB
Aroclor-1268 [1]	ND	0.084	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 17:31	JMB
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]	77.9		30-150			7/10/21 17:31			
<b>Decachlorobiphenyl [2]</b>	<b>159 *</b>		30-150		S-02	7/10/21 17:31			
Tetrachloro-m-xylene [1]	78.3		30-150			7/10/21 17:31			
Tetrachloro-m-xylene [2]	69.3		30-150			7/10/21 17:31			

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-1

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-01

Sampled: 6/28/2021 07:42

Sample ID: 21G0035-01

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	1100	86	mg/Kg dry	10	O-26	SW-846 8015C	7/2/21	7/7/21 19:04	SFM
<b>Surrogates</b>		<b>% Recovery</b>	<b>Recovery Limits</b>		<b>Flag/Qual</b>				
2-Fluorobiphenyl		40.5	40-140					7/7/21 19:04	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-1

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-01

Sampled: 6/28/2021 07:42

Sample ID: 21G0035-01

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.7	mg/Kg dry	1	MS-07	SW-846 6010D	7/2/21	7/6/21 17:17	MJH
Arsenic	3.4	3.4	mg/Kg dry	1	R-04	SW-846 6010D	7/2/21	7/7/21 20:05	AJL
Beryllium	0.27	0.17	mg/Kg dry	1	R-04	SW-846 6010D	7/2/21	7/6/21 17:17	MJH
Cadmium	ND	0.34	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:17	MJH
Chromium	14	0.67	mg/Kg dry	1		SW-846 6010D	7/2/21	7/7/21 20:05	AJL
Copper	22	0.67	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:17	MJH
Lead	67	0.51	mg/Kg dry	1		SW-846 6010D	7/2/21	7/7/21 20:05	AJL
Mercury	0.24	0.031	mg/Kg dry	1		SW-846 7471B	7/2/21	7/7/21 10:36	CJV
Nickel	5.3	0.67	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:17	MJH
Selenium	ND	3.4	mg/Kg dry	1		SW-846 6010D	7/2/21	7/7/21 20:05	AJL
Silver	ND	0.34	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:17	MJH
Thallium	ND	1.7	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:17	MJH
Zinc	52	0.67	mg/Kg dry	1	MS-07	SW-846 6010D	7/2/21	7/7/21 20:05	AJL

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

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-1

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-01

Sampled: 6/28/2021 07:42

Sample ID: 21G0035-01

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	95.8		% Wt	1		SM 2540G	7/2/21	7/3/21 9:39	JML

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-2

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-02

Sampled: 6/28/2021 08:21

Sample ID: 21G0035-02

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.079	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
Acrylonitrile	ND	0.0047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00079	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
Benzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
Bromobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
Bromochloromethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
Bromodichloromethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
Bromoform	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
Bromomethane	ND	0.0079	mg/Kg dry	1	V-34	SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
2-Butanone (MEK)	ND	0.032	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
tert-Butyl Alcohol (TBA)	ND	0.079	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
n-Butylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
sec-Butylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
tert-Butylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00079	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
Carbon Disulfide	ND	0.0047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
Carbon Tetrachloride	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
Chlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
Chlorodibromomethane	ND	0.00079	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
Chloroethane	ND	0.016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
Chloroform	ND	0.0032	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
Chloromethane	ND	0.0079	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
2-Chlorotoluene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
4-Chlorotoluene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
1,2-Dibromoethane (EDB)	ND	0.00079	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
Dibromomethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
1,2-Dichlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
1,3-Dichlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
1,4-Dichlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
trans-1,4-Dichloro-2-butene	ND	0.0032	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
1,1-Dichloroethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
1,2-Dichloroethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
1,1-Dichloroethylene	ND	0.0032	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
cis-1,2-Dichloroethylene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
trans-1,2-Dichloroethylene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
1,2-Dichloropropane	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
1,3-Dichloropropane	ND	0.00079	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
2,2-Dichloropropane	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
1,1-Dichloropropene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
cis-1,3-Dichloropropene	ND	0.00079	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
trans-1,3-Dichloropropene	ND	0.00079	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
Diethyl Ether	ND	0.016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-2

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-02

Sampled: 6/28/2021 08:21

Sample ID: 21G0035-02

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.00079	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
1,4-Dioxane	ND	0.079	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
Ethylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
Hexachlorobutadiene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
2-Hexanone (MBK)	ND	0.016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
Isopropylbenzene (Cumene)	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
Methyl Acetate	ND	0.0032	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0032	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
Methyl Cyclohexane	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
Methylene Chloride	ND	0.016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
Naphthalene	ND	0.0032	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
n-Propylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
Styrene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
1,1,1,2-Tetrachloroethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
1,1,2,2-Tetrachloroethane	ND	0.00079	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
Tetrachloroethylene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
Tetrahydrofuran	ND	0.0079	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
Toluene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
1,2,3-Trichlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
1,2,4-Trichlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
1,3,5-Trichlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
1,1,1-Trichloroethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
1,1,2-Trichloroethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
Trichloroethylene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0079	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
1,2,3-Trichloropropane	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0079	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
1,2,4-Trimethylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
1,3,5-Trimethylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
Vinyl Chloride	ND	0.0079	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
m+p Xylene	ND	0.0032	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
o-Xylene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:39	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		118	70-130					7/2/21 15:39	
Toluene-d8		98.0	70-130					7/2/21 15:39	
4-Bromofluorobenzene		99.5	70-130					7/2/21 15:39	



Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-2

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-02

Sampled: 6/28/2021 08:21

Sample ID: 21G0035-02

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 20:45	BGL
Acenaphthylene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 20:45	BGL
Anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 20:45	BGL
Benzo(a)anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 20:45	BGL
Benzo(a)pyrene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 20:45	BGL
Benzo(b)fluoranthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 20:45	BGL
Benzo(g,h,i)perylene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 20:45	BGL
Benzo(k)fluoranthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 20:45	BGL
Chrysene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 20:45	BGL
Dibenz(a,h)anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 20:45	BGL
Fluoranthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 20:45	BGL
Fluorene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 20:45	BGL
Indeno(1,2,3-cd)pyrene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 20:45	BGL
2-Methylnaphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 20:45	BGL
Naphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 20:45	BGL
Phenanthrene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 20:45	BGL
Pyrene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 20:45	BGL
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		54.8	30-130					7/7/21 20:45	
2-Fluorobiphenyl		54.5	30-130					7/7/21 20:45	
p-Terphenyl-d14		76.1	30-130					7/7/21 20:45	

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-2

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-02

Sampled: 6/28/2021 08:21

Sample ID: 21G0035-02

Sample Matrix: Soil

**Polychlorinated Biphenyls with 3540 Soxhlet Extraction**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 18:58	JMB
Aroclor-1221 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 18:58	JMB
Aroclor-1232 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 18:58	JMB
Aroclor-1242 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 18:58	JMB
Aroclor-1248 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 18:58	JMB
Aroclor-1254 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 18:58	JMB
Aroclor-1260 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 18:58	JMB
Aroclor-1262 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 18:58	JMB
Aroclor-1268 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 18:58	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		78.1	30-150					7/10/21 18:58	
Decachlorobiphenyl [2]		68.2	30-150					7/10/21 18:58	
Tetrachloro-m-xylene [1]		81.1	30-150					7/10/21 18:58	
Tetrachloro-m-xylene [2]		75.6	30-150					7/10/21 18:58	

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-2

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-02

Sampled: 6/28/2021 08:21

Sample ID: 21G0035-02

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	ND	8.8	mg/Kg dry	1	Z-01c	SW-846 8015C	7/2/21	7/7/21 14:43	SFM
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
2-Fluorobiphenyl	42.1	40-140			7/7/21 14:43				

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-2

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-02

Sampled: 6/28/2021 08:21

Sample ID: 21G0035-02

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.7	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:23	MJH
Arsenic	ND	3.4	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:23	MJH
Beryllium	ND	0.17	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:23	MJH
Cadmium	ND	0.34	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:23	MJH
Chromium	4.3	0.68	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:23	MJH
Copper	2.6	0.68	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:23	MJH
Lead	1.5	0.51	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:23	MJH
Mercury	ND	0.030	mg/Kg dry	1		SW-846 7471B	7/2/21	7/7/21 10:34	CJV
Nickel	2.8	0.68	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:23	MJH
Selenium	ND	3.4	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:23	MJH
Silver	ND	0.34	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:23	MJH
Thallium	ND	1.7	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:23	MJH
Zinc	9.8	0.68	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:23	MJH

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

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-2

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-02

Sampled: 6/28/2021 08:21

Sample ID: 21G0035-02

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	94.0		% Wt	1		SM 2540G	7/2/21	7/3/21 9:39	JML

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-3

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-03

Sampled: 6/28/2021 09:05

Sample ID: 21G0035-03

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
Acrylonitrile	ND	0.0067	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
Benzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
Bromobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
Bromochloromethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
Bromodichloromethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
Bromoform	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
Bromomethane	ND	0.011	mg/Kg dry	1	V-34	SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
2-Butanone (MEK)	ND	0.045	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
tert-Butyl Alcohol (TBA)	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
n-Butylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
sec-Butylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
tert-Butylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
Carbon Disulfide	ND	0.0067	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
Carbon Tetrachloride	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
Chlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
Chlorodibromomethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
Chloroethane	ND	0.022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
Chloroform	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
Chloromethane	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
2-Chlorotoluene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
4-Chlorotoluene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
1,2-Dibromoethane (EDB)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
Dibromomethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
1,2-Dichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
1,3-Dichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
1,4-Dichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
trans-1,4-Dichloro-2-butene	ND	0.0045	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
1,1-Dichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
1,2-Dichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
1,1-Dichloroethylene	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
cis-1,2-Dichloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
trans-1,2-Dichloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
1,2-Dichloropropane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
1,3-Dichloropropane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
2,2-Dichloropropane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
1,1-Dichloropropene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
cis-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
trans-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
Diethyl Ether	ND	0.022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-3

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-03

Sampled: 6/28/2021 09:05

Sample ID: 21G0035-03

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
1,4-Dioxane	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
Ethylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
Hexachlorobutadiene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
2-Hexanone (MBK)	ND	0.022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
Isopropylbenzene (Cumene)	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
Methyl Acetate	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
Methyl Cyclohexane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
Methylene Chloride	ND	0.022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
Naphthalene	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
n-Propylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
Styrene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
1,1,1,2-Tetrachloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
1,1,2,2-Tetrachloroethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
Tetrachloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
Tetrahydrofuran	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
Toluene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
1,2,3-Trichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
1,2,4-Trichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
1,3,5-Trichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
1,1,1-Trichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
1,1,2-Trichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
Trichloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
Trichlorofluoromethane (Freon 11)	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
1,2,3-Trichloropropane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
1,2,4-Trimethylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
1,3,5-Trimethylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
Vinyl Chloride	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
m+p Xylene	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
o-Xylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:03	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		113	70-130					7/2/21 16:03	
Toluene-d8		98.1	70-130					7/2/21 16:03	
4-Bromofluorobenzene		95.1	70-130					7/2/21 16:03	



Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-3

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-03

Sampled: 6/28/2021 09:05

Sample ID: 21G0035-03

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:12	BGL
Acenaphthylene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:12	BGL
Anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:12	BGL
Benzo(a)anthracene	0.29	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:12	BGL
Benzo(a)pyrene	0.29	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:12	BGL
Benzo(b)fluoranthene	0.35	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:12	BGL
Benzo(g,h,i)perylene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:12	BGL
Benzo(k)fluoranthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:12	BGL
Chrysene	0.27	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:12	BGL
Dibenz(a,h)anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:12	BGL
Fluoranthene	0.57	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:12	BGL
Fluorene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:12	BGL
Indeno(1,2,3-cd)pyrene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:12	BGL
2-Methylnaphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:12	BGL
Naphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:12	BGL
Phenanthrene	0.37	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:12	BGL
Pyrene	0.56	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:12	BGL
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		53.3	30-130					7/7/21 21:12	
2-Fluorobiphenyl		53.0	30-130					7/7/21 21:12	
p-Terphenyl-d14		72.3	30-130					7/7/21 21:12	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-3

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-03

Sampled: 6/28/2021 09:05

Sample ID: 21G0035-03

Sample Matrix: Soil

**Polychlorinated Biphenyls with 3540 Soxhlet Extraction**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 19:16	JMB
Aroclor-1221 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 19:16	JMB
Aroclor-1232 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 19:16	JMB
Aroclor-1242 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 19:16	JMB
Aroclor-1248 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 19:16	JMB
Aroclor-1254 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 19:16	JMB
Aroclor-1260 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 19:16	JMB
Aroclor-1262 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 19:16	JMB
Aroclor-1268 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 19:16	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		66.3	30-150					7/10/21 19:16	
Decachlorobiphenyl [2]		58.4	30-150					7/10/21 19:16	
Tetrachloro-m-xylene [1]		72.4	30-150					7/10/21 19:16	
Tetrachloro-m-xylene [2]		67.2	30-150					7/10/21 19:16	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-3

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-03

Sampled: 6/28/2021 09:05

Sample ID: 21G0035-03

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	32	9.0	mg/Kg dry	1	O-26	SW-846 8015C	7/2/21	7/8/21 12:38	SFM
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
2-Fluorobiphenyl	42.4	40-140				7/8/21 12:38			

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-3

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-03

Sampled: 6/28/2021 09:05

Sample ID: 21G0035-03

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.8	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:42	MJH
Arsenic	4.6	3.6	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:42	MJH
Beryllium	0.29	0.18	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:42	MJH
Cadmium	ND	0.36	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:42	MJH
Chromium	11	0.73	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:42	MJH
Copper	13	0.73	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:42	MJH
Lead	45	0.55	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:42	MJH
Mercury	0.34	0.029	mg/Kg dry	1		SW-846 7471B	7/2/21	7/7/21 10:38	CJV
Nickel	5.7	0.73	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:42	MJH
Selenium	ND	3.6	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:42	MJH
Silver	ND	0.36	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:42	MJH
Thallium	ND	1.8	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:42	MJH
Zinc	48	0.73	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:42	MJH



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

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-3

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-03

Sampled: 6/28/2021 09:05

Sample ID: 21G0035-03

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	91.1		% Wt	1		SM 2540G	7/2/21	7/3/21 9:39	JML

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-3

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-04

Sampled: 6/28/2021 09:10

Sample ID: 21G0035-04

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
Acrylonitrile	ND	0.0068	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
Benzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
Bromobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
Bromochloromethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
Bromodichloromethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
Bromoform	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
Bromomethane	ND	0.011	mg/Kg dry	1	V-34	SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
2-Butanone (MEK)	ND	0.045	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
tert-Butyl Alcohol (TBA)	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
n-Butylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
sec-Butylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
tert-Butylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
Carbon Disulfide	ND	0.0068	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
Carbon Tetrachloride	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
Chlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
Chlorodibromomethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
Chloroethane	ND	0.023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
Chloroform	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
Chloromethane	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
2-Chlorotoluene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
4-Chlorotoluene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
1,2-Dibromoethane (EDB)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
Dibromomethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
1,2-Dichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
1,3-Dichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
1,4-Dichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
trans-1,4-Dichloro-2-butene	ND	0.0045	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
1,1-Dichloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
1,2-Dichloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
1,1-Dichloroethylene	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
cis-1,2-Dichloroethylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
trans-1,2-Dichloroethylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
1,2-Dichloropropane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
1,3-Dichloropropane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
2,2-Dichloropropane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
1,1-Dichloropropene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
cis-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
trans-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
Diethyl Ether	ND	0.023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-3

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-04

Sampled: 6/28/2021 09:10

Sample ID: 21G0035-04

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
1,4-Dioxane	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
Ethylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
Hexachlorobutadiene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
2-Hexanone (MBK)	ND	0.023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
Isopropylbenzene (Cumene)	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
Methyl Acetate	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
Methyl Cyclohexane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
Methylene Chloride	ND	0.023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
Naphthalene	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
n-Propylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
Styrene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
1,1,1,2-Tetrachloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
1,1,2,2-Tetrachloroethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
Tetrachloroethylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
Tetrahydrofuran	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
Toluene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
1,2,3-Trichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
1,2,4-Trichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
1,3,5-Trichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
1,1,1-Trichloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
1,1,2-Trichloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
Trichloroethylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
Trichlorofluoromethane (Freon 11)	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
1,2,3-Trichloropropane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
1,2,4-Trimethylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
1,3,5-Trimethylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
Vinyl Chloride	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
m+p Xylene	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
o-Xylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:28	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		113	70-130					7/2/21 16:28	
Toluene-d8		97.5	70-130					7/2/21 16:28	
4-Bromofluorobenzene		99.6	70-130					7/2/21 16:28	



Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-3

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-04

Sampled: 6/28/2021 09:10

Sample ID: 21G0035-04

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:38	BGL
Acenaphthylene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:38	BGL
Anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:38	BGL
Benzo(a)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:38	BGL
Benzo(a)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:38	BGL
Benzo(b)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:38	BGL
Benzo(g,h,i)perylene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:38	BGL
Benzo(k)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:38	BGL
Chrysene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:38	BGL
Dibenz(a,h)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:38	BGL
Fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:38	BGL
Fluorene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:38	BGL
Indeno(1,2,3-cd)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:38	BGL
2-Methylnaphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:38	BGL
Naphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:38	BGL
Phenanthrene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:38	BGL
Pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 21:38	BGL
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		59.9	30-130					7/7/21 21:38	
2-Fluorobiphenyl		60.3	30-130					7/7/21 21:38	
p-Terphenyl-d14		82.9	30-130					7/7/21 21:38	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-3

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-04

Sampled: 6/28/2021 09:10

Sample ID: 21G0035-04

Sample Matrix: Soil

**Polychlorinated Biphenyls with 3540 Soxhlet Extraction**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 19:33	JMB
Aroclor-1221 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 19:33	JMB
Aroclor-1232 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 19:33	JMB
Aroclor-1242 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 19:33	JMB
Aroclor-1248 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 19:33	JMB
Aroclor-1254 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 19:33	JMB
Aroclor-1260 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 19:33	JMB
Aroclor-1262 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 19:33	JMB
Aroclor-1268 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 19:33	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		85.3	30-150					7/10/21 19:33	
Decachlorobiphenyl [2]		74.4	30-150					7/10/21 19:33	
Tetrachloro-m-xylene [1]		85.2	30-150					7/10/21 19:33	
Tetrachloro-m-xylene [2]		79.3	30-150					7/10/21 19:33	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-3

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-04

Sampled: 6/28/2021 09:10

Sample ID: 21G0035-04

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	10	9.1	mg/Kg dry	1	Z-01c	SW-846 8015C	7/2/21	7/7/21 15:04	SFM
<b>Surrogates</b>		<b>% Recovery</b>	<b>Recovery Limits</b>		<b>Flag/Qual</b>				
2-Fluorobiphenyl		51.1	40-140					7/7/21 15:04	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-3

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-04

Sampled: 6/28/2021 09:10

Sample ID: 21G0035-04

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.8	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:49	MJH
Arsenic	ND	3.6	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:49	MJH
Beryllium	0.21	0.18	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:49	MJH
Cadmium	ND	0.36	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:49	MJH
Chromium	4.5	0.72	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:49	MJH
Copper	3.2	0.72	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:49	MJH
Lead	1.7	0.54	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:49	MJH
Mercury	ND	0.031	mg/Kg dry	1		SW-846 7471B	7/2/21	7/7/21 10:39	CJV
Nickel	4.2	0.72	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:49	MJH
Selenium	ND	3.6	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:49	MJH
Silver	ND	0.36	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:49	MJH
Thallium	ND	1.8	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:49	MJH
Zinc	11	0.72	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:49	MJH

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

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-3

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-04

Sampled: 6/28/2021 09:10

Sample ID: 21G0035-04

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	91.3		% Wt	1		SM 2540G	7/2/21	7/3/21 9:39	JML

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-4

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-05

Sampled: 6/28/2021 10:04

Sample ID: 21G0035-05

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.10	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
Acrylonitrile	ND	0.0061	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
Benzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
Bromobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
Bromochloromethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
Bromodichloromethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
Bromoform	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
Bromomethane	ND	0.010	mg/Kg dry	1	V-34	SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
2-Butanone (MEK)	ND	0.041	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
tert-Butyl Alcohol (TBA)	ND	0.10	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
n-Butylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
sec-Butylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
tert-Butylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
Carbon Disulfide	ND	0.0061	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
Carbon Tetrachloride	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
Chlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
Chlorodibromomethane	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
Chloroethane	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
Chloroform	ND	0.0041	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
Chloromethane	ND	0.010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
2-Chlorotoluene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
4-Chlorotoluene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
Dibromomethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
1,2-Dichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
1,3-Dichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
1,4-Dichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
trans-1,4-Dichloro-2-butene	ND	0.0041	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
1,1-Dichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
1,2-Dichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
1,1-Dichloroethylene	ND	0.0041	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
1,2-Dichloropropane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
1,3-Dichloropropane	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
2,2-Dichloropropane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
1,1-Dichloropropene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
Diethyl Ether	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-4

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-05

Sampled: 6/28/2021 10:04

Sample ID: 21G0035-05

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
1,4-Dioxane	ND	0.10	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
Ethylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
Hexachlorobutadiene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
2-Hexanone (MBK)	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
Methyl Acetate	ND	0.0041	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0041	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
Methyl Cyclohexane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
Methylene Chloride	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
Naphthalene	ND	0.0041	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
n-Propylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
Styrene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
Tetrachloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
Tetrahydrofuran	ND	0.010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
Toluene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
1,2,3-Trichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
1,3,5-Trichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
1,1,1-Trichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
1,1,2-Trichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
Trichloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
1,2,3-Trichloropropane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
Vinyl Chloride	ND	0.010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
m+p Xylene	ND	0.0041	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
o-Xylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:52	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		102	70-130					7/2/21 16:52	
Toluene-d8		95.0	70-130					7/2/21 16:52	
4-Bromofluorobenzene		88.5	70-130					7/2/21 16:52	



Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-4

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-05

Sampled: 6/28/2021 10:04

Sample ID: 21G0035-05

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:05	BGL
Acenaphthylene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:05	BGL
Anthracene	0.30	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:05	BGL
Benzo(a)anthracene	1.4	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:05	BGL
Benzo(a)pyrene	1.5	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:05	BGL
Benzo(b)fluoranthene	1.9	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:05	BGL
Benzo(g,h,i)perylene	0.97	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:05	BGL
Benzo(k)fluoranthene	0.72	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:05	BGL
Chrysene	1.4	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:05	BGL
Dibenz(a,h)anthracene	0.26	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:05	BGL
Fluoranthene	2.4	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:05	BGL
Fluorene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:05	BGL
Indeno(1,2,3-cd)pyrene	1.0	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:05	BGL
2-Methylnaphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:05	BGL
Naphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:05	BGL
Phenanthrene	1.3	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:05	BGL
Pyrene	2.7	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:05	BGL
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		63.9	30-130					7/7/21 22:05	
2-Fluorobiphenyl		62.5	30-130					7/7/21 22:05	
p-Terphenyl-d14		84.9	30-130					7/7/21 22:05	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-4

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-05

Sampled: 6/28/2021 10:04

Sample ID: 21G0035-05

Sample Matrix: Soil

**Polychlorinated Biphenyls with 3540 Soxhlet Extraction**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 19:51	JMB
Aroclor-1221 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 19:51	JMB
Aroclor-1232 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 19:51	JMB
Aroclor-1242 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 19:51	JMB
Aroclor-1248 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 19:51	JMB
Aroclor-1254 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 19:51	JMB
Aroclor-1260 [2]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 19:51	JMB
Aroclor-1262 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 19:51	JMB
Aroclor-1268 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 19:51	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		80.7	30-150					7/10/21 19:51	
Decachlorobiphenyl [2]		95.1	30-150					7/10/21 19:51	
Tetrachloro-m-xylene [1]		82.5	30-150					7/10/21 19:51	
Tetrachloro-m-xylene [2]		74.1	30-150					7/10/21 19:51	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-4

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-05

Sampled: 6/28/2021 10:04

Sample ID: 21G0035-05

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	390	91	mg/Kg dry	10	O-26	SW-846 8015C	7/2/21	7/7/21 18:43	SFM
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
2-Fluorobiphenyl	43.0	40-140				7/7/21 18:43			

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-4

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-05

Sampled: 6/28/2021 10:04

Sample ID: 21G0035-05

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.8	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:56	MJH
Arsenic	4.3	3.6	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:56	MJH
Beryllium	0.48	0.18	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:56	MJH
Cadmium	ND	0.36	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:56	MJH
Chromium	9.6	0.72	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:56	MJH
Copper	16	0.72	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:56	MJH
Lead	53	0.54	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:56	MJH
Mercury	0.047	0.032	mg/Kg dry	1		SW-846 7471B	7/2/21	7/7/21 10:41	CJV
Nickel	7.7	0.72	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:56	MJH
Selenium	ND	3.6	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:56	MJH
Silver	ND	0.36	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:56	MJH
Thallium	ND	1.8	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:56	MJH
Zinc	49	0.72	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 17:56	MJH

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

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-4

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-05

Sampled: 6/28/2021 10:04

Sample ID: 21G0035-05

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	91.0		% Wt	1		SM 2540G	7/2/21	7/3/21 9:39	JML

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-4

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-06

Sampled: 6/28/2021 10:12

Sample ID: 21G0035-06

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Acrylonitrile	ND	0.0060	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Benzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Bromobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Bromochloromethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Bromodichloromethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Bromoform	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Bromomethane	ND	0.0099	mg/Kg dry	1	V-34	SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
2-Butanone (MEK)	ND	0.040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
tert-Butyl Alcohol (TBA)	ND	0.099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
n-Butylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
sec-Butylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
tert-Butylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Carbon Disulfide	ND	0.0060	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Carbon Tetrachloride	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Chlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Chlorodibromomethane	ND	0.00099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Chloroethane	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Chloroform	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Chloromethane	ND	0.0099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
2-Chlorotoluene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
4-Chlorotoluene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,2-Dibromoethane (EDB)	ND	0.00099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Dibromomethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,2-Dichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,3-Dichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,4-Dichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
trans-1,4-Dichloro-2-butene	ND	0.0040	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,1-Dichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,2-Dichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,1-Dichloroethylene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,2-Dichloropropane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,3-Dichloropropane	ND	0.00099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
2,2-Dichloropropane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,1-Dichloropropene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
cis-1,3-Dichloropropene	ND	0.00099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
trans-1,3-Dichloropropene	ND	0.00099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Diethyl Ether	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-4

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-06

Sampled: 6/28/2021 10:12

Sample ID: 21G0035-06

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.00099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,4-Dioxane	ND	0.099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Ethylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Hexachlorobutadiene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
2-Hexanone (MBK)	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Methyl Acetate	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Methyl Cyclohexane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Methylene Chloride	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Naphthalene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
n-Propylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Styrene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,1,2,2-Tetrachloroethane	ND	0.00099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Tetrachloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Tetrahydrofuran	ND	0.0099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Toluene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,2,3-Trichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,3,5-Trichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,1,1-Trichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,1,2-Trichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Trichloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,2,3-Trichloropropane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Vinyl Chloride	ND	0.0099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
m+p Xylene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
o-Xylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		111	70-130					7/2/21 17:16	
Toluene-d8		98.0	70-130					7/2/21 17:16	
4-Bromofluorobenzene		97.5	70-130					7/2/21 17:16	



Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-4

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-06

Sampled: 6/28/2021 10:12

Sample ID: 21G0035-06

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:33	BGL
Acenaphthylene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:33	BGL
Anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:33	BGL
Benzo(a)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:33	BGL
Benzo(a)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:33	BGL
Benzo(b)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:33	BGL
Benzo(g,h,i)perylene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:33	BGL
Benzo(k)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:33	BGL
Chrysene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:33	BGL
Dibenz(a,h)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:33	BGL
Fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:33	BGL
Fluorene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:33	BGL
Indeno(1,2,3-cd)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:33	BGL
2-Methylnaphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:33	BGL
Naphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:33	BGL
Phenanthrene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:33	BGL
Pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 22:33	BGL
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		60.2	30-130					7/7/21 22:33	
2-Fluorobiphenyl		59.9	30-130					7/7/21 22:33	
p-Terphenyl-d14		83.3	30-130					7/7/21 22:33	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-4

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-06

Sampled: 6/28/2021 10:12

Sample ID: 21G0035-06

Sample Matrix: Soil

**Polychlorinated Biphenyls with 3540 Soxhlet Extraction**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 20:08	JMB
Aroclor-1221 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 20:08	JMB
Aroclor-1232 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 20:08	JMB
Aroclor-1242 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 20:08	JMB
Aroclor-1248 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 20:08	JMB
Aroclor-1254 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 20:08	JMB
Aroclor-1260 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 20:08	JMB
Aroclor-1262 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 20:08	JMB
Aroclor-1268 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 20:08	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		85.1	30-150					7/10/21 20:08	
Decachlorobiphenyl [2]		77.0	30-150					7/10/21 20:08	
Tetrachloro-m-xylene [1]		88.6	30-150					7/10/21 20:08	
Tetrachloro-m-xylene [2]		82.1	30-150					7/10/21 20:08	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-4

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-06

Sampled: 6/28/2021 10:12

Sample ID: 21G0035-06

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	9.5	9.2	mg/Kg dry	1	Z-01c	SW-846 8015C	7/2/21	7/7/21 15:25	SFM
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
2-Fluorobiphenyl	52.9		40-140					7/7/21 15:25	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-4

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-06

Sampled: 6/28/2021 10:12

Sample ID: 21G0035-06

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.8	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:02	MJH
Arsenic	ND	3.6	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:02	MJH
Beryllium	0.25	0.18	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:02	MJH
Cadmium	ND	0.36	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:02	MJH
Chromium	7.0	0.72	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:02	MJH
Copper	16	0.72	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:02	MJH
Lead	260	0.54	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:02	MJH
Mercury	0.73	0.028	mg/Kg dry	1		SW-846 7471B	7/2/21	7/7/21 10:47	CJV
Nickel	4.4	0.72	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:02	MJH
Selenium	ND	3.6	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:02	MJH
Silver	ND	0.36	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:02	MJH
Thallium	ND	1.8	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:02	MJH
Zinc	44	0.72	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:02	MJH

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

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-4

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-06

Sampled: 6/28/2021 10:12

Sample ID: 21G0035-06

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	90.4		% Wt	1		SM 2540G	7/2/21	7/3/21 9:39	JML

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-5

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-07

Sampled: 6/28/2021 10:32

Sample ID: 21G0035-07

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.13	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
Acrylonitrile	ND	0.0080	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0013	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
Benzene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
Bromobenzene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
Bromochloromethane	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
Bromodichloromethane	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
Bromoform	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
Bromomethane	ND	0.013	mg/Kg dry	1	V-34	SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
2-Butanone (MEK)	ND	0.053	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
tert-Butyl Alcohol (TBA)	ND	0.13	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
n-Butylbenzene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
sec-Butylbenzene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
tert-Butylbenzene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0013	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
Carbon Disulfide	ND	0.0080	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
Carbon Tetrachloride	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
Chlorobenzene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
Chlorodibromomethane	ND	0.0013	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
Chloroethane	ND	0.027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
Chloroform	ND	0.0053	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
Chloromethane	ND	0.013	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
2-Chlorotoluene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
4-Chlorotoluene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
1,2-Dibromoethane (EDB)	ND	0.0013	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
Dibromomethane	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
1,2-Dichlorobenzene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
1,3-Dichlorobenzene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
1,4-Dichlorobenzene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
trans-1,4-Dichloro-2-butene	ND	0.0053	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
1,1-Dichloroethane	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
1,2-Dichloroethane	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
1,1-Dichloroethylene	ND	0.0053	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
cis-1,2-Dichloroethylene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
trans-1,2-Dichloroethylene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
1,2-Dichloropropane	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
1,3-Dichloropropane	ND	0.0013	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
2,2-Dichloropropane	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
1,1-Dichloropropene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
cis-1,3-Dichloropropene	ND	0.0013	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
trans-1,3-Dichloropropene	ND	0.0013	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
Diethyl Ether	ND	0.027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-5

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-07

Sampled: 6/28/2021 10:32

Sample ID: 21G0035-07

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0013	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
1,4-Dioxane	ND	0.13	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
Ethylbenzene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
Hexachlorobutadiene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
2-Hexanone (MBK)	ND	0.027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
Isopropylbenzene (Cumene)	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
Methyl Acetate	ND	0.0053	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0053	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
Methyl Cyclohexane	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
Methylene Chloride	ND	0.027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
Naphthalene	ND	0.0053	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
n-Propylbenzene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
Styrene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
1,1,1,2-Tetrachloroethane	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
1,1,2,2-Tetrachloroethane	ND	0.0013	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
Tetrachloroethylene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
Tetrahydrofuran	ND	0.013	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
Toluene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
1,2,3-Trichlorobenzene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
1,2,4-Trichlorobenzene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
1,3,5-Trichlorobenzene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
1,1,1-Trichloroethane	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
1,1,2-Trichloroethane	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
Trichloroethylene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
Trichlorofluoromethane (Freon 11)	ND	0.013	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
1,2,3-Trichloropropane	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.013	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
1,2,4-Trimethylbenzene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
1,3,5-Trimethylbenzene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
Vinyl Chloride	ND	0.013	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
m+p Xylene	ND	0.0053	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
o-Xylene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:41	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		118	70-130					7/2/21 17:41	
Toluene-d8		97.2	70-130					7/2/21 17:41	
4-Bromofluorobenzene		97.3	70-130					7/2/21 17:41	



Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-5

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-07

Sampled: 6/28/2021 10:32

Sample ID: 21G0035-07

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:00	BGL
Acenaphthylene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:00	BGL
Anthracene	0.21	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:00	BGL
Benzo(a)anthracene	0.58	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:00	BGL
Benzo(a)pyrene	0.48	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:00	BGL
Benzo(b)fluoranthene	0.56	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:00	BGL
Benzo(g,h,i)perylene	0.27	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:00	BGL
Benzo(k)fluoranthene	0.23	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:00	BGL
Chrysene	0.52	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:00	BGL
Dibenz(a,h)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:00	BGL
Fluoranthene	1.1	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:00	BGL
Fluorene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:00	BGL
Indeno(1,2,3-cd)pyrene	0.28	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:00	BGL
2-Methylnaphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:00	BGL
Naphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:00	BGL
Phenanthrene	1.0	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:00	BGL
Pyrene	1.1	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:00	BGL
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		50.5	30-130					7/7/21 23:00	
2-Fluorobiphenyl		50.0	30-130					7/7/21 23:00	
p-Terphenyl-d14		72.4	30-130					7/7/21 23:00	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-5

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-07

Sampled: 6/28/2021 10:32

Sample ID: 21G0035-07

Sample Matrix: Soil

**Polychlorinated Biphenyls with 3540 Soxhlet Extraction**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 20:26	JMB
Aroclor-1221 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 20:26	JMB
Aroclor-1232 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 20:26	JMB
Aroclor-1242 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 20:26	JMB
Aroclor-1248 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 20:26	JMB
Aroclor-1254 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 20:26	JMB
Aroclor-1260 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 20:26	JMB
Aroclor-1262 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 20:26	JMB
Aroclor-1268 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 20:26	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		84.8	30-150					7/10/21 20:26	
Decachlorobiphenyl [2]		77.4	30-150					7/10/21 20:26	
Tetrachloro-m-xylene [1]		85.8	30-150					7/10/21 20:26	
Tetrachloro-m-xylene [2]		78.1	30-150					7/10/21 20:26	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-5

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-07

Sampled: 6/28/2021 10:32

Sample ID: 21G0035-07

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	74	9.5	mg/Kg dry	1	O-26	SW-846 8015C	7/2/21	7/7/21 16:48	SFM
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
2-Fluorobiphenyl	40.8	40-140			7/7/21 16:48				

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-5

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-07

Sampled: 6/28/2021 10:32

Sample ID: 21G0035-07

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.8	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:09	MJH
Arsenic	ND	3.6	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:09	MJH
Beryllium	0.36	0.18	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:09	MJH
Cadmium	ND	0.36	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:09	MJH
Chromium	7.5	0.72	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:09	MJH
Copper	21	0.72	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:09	MJH
Lead	2.9	0.54	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:09	MJH
Mercury	0.081	0.030	mg/Kg dry	1		SW-846 7471B	7/2/21	7/7/21 10:49	CJV
Nickel	3.9	0.72	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:09	MJH
Selenium	ND	3.6	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:09	MJH
Silver	ND	0.36	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:09	MJH
Thallium	ND	1.8	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:09	MJH
Zinc	14	0.72	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:09	MJH

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

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-5

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-07

Sampled: 6/28/2021 10:32

Sample ID: 21G0035-07

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	88.1		% Wt	1		SM 2540G	7/2/21	7/3/21 9:39	JML

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-5

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-08

Sampled: 6/28/2021 10:45

Sample ID: 21G0035-08

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	2.2	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
Acrylonitrile	ND	0.22	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
Benzene	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
Bromobenzene	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
Bromochloromethane	ND	0.043	mg/Kg dry	1	L-04, V-05	SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
Bromodichloromethane	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
Bromoform	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
Bromomethane	ND	0.087	mg/Kg dry	1	V-34	SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
2-Butanone (MEK)	ND	0.87	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
tert-Butyl Alcohol (TBA)	ND	0.87	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
n-Butylbenzene	1.2	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
sec-Butylbenzene	0.84	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
tert-Butylbenzene	0.052	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
Carbon Disulfide	ND	0.22	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
Carbon Tetrachloride	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
Chlorobenzene	0.37	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
Chlorodibromomethane	ND	0.022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
Chloroethane	ND	0.087	mg/Kg dry	1	R-05	SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
Chloroform	ND	0.087	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
Chloromethane	ND	0.087	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
2-Chlorotoluene	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
4-Chlorotoluene	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.22	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
1,2-Dibromoethane (EDB)	ND	0.022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
Dibromomethane	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
1,2-Dichlorobenzene	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
1,3-Dichlorobenzene	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
1,4-Dichlorobenzene	0.21	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
trans-1,4-Dichloro-2-butene	ND	0.087	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
Dichlorodifluoromethane (Freon 12)	ND	0.087	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
1,1-Dichloroethane	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
1,2-Dichloroethane	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
1,1-Dichloroethylene	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
cis-1,2-Dichloroethylene	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
trans-1,2-Dichloroethylene	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
1,2-Dichloropropane	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
1,3-Dichloropropane	ND	0.022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
2,2-Dichloropropane	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
1,1-Dichloropropene	ND	0.087	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
cis-1,3-Dichloropropene	ND	0.022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
trans-1,3-Dichloropropene	ND	0.022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
Diethyl Ether	ND	0.087	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-5

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-08

Sampled: 6/28/2021 10:45

Sample ID: 21G0035-08

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
1,4-Dioxane	ND	2.2	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
Ethylbenzene	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
Hexachlorobutadiene	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
2-Hexanone (MBK)	ND	0.43	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
Isopropylbenzene (Cumene)	0.98	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
p-Isopropyltoluene (p-Cymene)	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
Methyl Acetate	ND	0.43	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
Methyl Cyclohexane	1.5	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
Methylene Chloride	ND	0.22	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
4-Methyl-2-pentanone (MIBK)	ND	0.43	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
Naphthalene	ND	0.087	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
n-Propylbenzene	1.8	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
Styrene	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
1,1,1,2-Tetrachloroethane	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
1,1,2,2-Tetrachloroethane	ND	0.022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
Tetrachloroethylene	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
Tetrahydrofuran	ND	0.43	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
Toluene	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
1,2,3-Trichlorobenzene	ND	0.22	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
1,2,4-Trichlorobenzene	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
1,3,5-Trichlorobenzene	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
1,1,1-Trichloroethane	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
1,1,2-Trichloroethane	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
Trichloroethylene	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
Trichlorofluoromethane (Freon 11)	ND	0.087	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
1,2,3-Trichloropropane	ND	0.087	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
1,2,4-Trimethylbenzene	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
1,3,5-Trimethylbenzene	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
Vinyl Chloride	ND	0.087	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
m+p Xylene	ND	0.087	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
o-Xylene	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:10	EEH
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		86.5	70-130					7/2/21 19:10	
Toluene-d8		96.0	70-130					7/2/21 19:10	
4-Bromofluorobenzene		123	70-130					7/2/21 19:10	



Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-5

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-08

Sampled: 6/28/2021 10:45

Sample ID: 21G0035-08

Sample Matrix: Soil

Sample Flags: RL-12

**Semivolatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:31	BGL
Acenaphthylene	ND	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:31	BGL
Anthracene	ND	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:31	BGL
Benzo(a)anthracene	ND	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:31	BGL
Benzo(a)pyrene	ND	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:31	BGL
Benzo(b)fluoranthene	ND	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:31	BGL
Benzo(g,h,i)perylene	ND	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:31	BGL
Benzo(k)fluoranthene	ND	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:31	BGL
Chrysene	ND	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:31	BGL
Dibenz(a,h)anthracene	ND	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:31	BGL
Fluoranthene	ND	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:31	BGL
Fluorene	ND	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:31	BGL
Indeno(1,2,3-cd)pyrene	ND	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:31	BGL
2-Methylnaphthalene	ND	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:31	BGL
Naphthalene	ND	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:31	BGL
Phenanthrene	3.8	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:31	BGL
Pyrene	ND	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:31	BGL
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		80.0	30-130					7/9/21 0:31	
2-Fluorobiphenyl		69.8	30-130					7/9/21 0:31	
p-Terphenyl-d14		112	30-130					7/9/21 0:31	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-5

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-08

Sampled: 6/28/2021 10:45

Sample ID: 21G0035-08

Sample Matrix: Soil

**Polychlorinated Biphenyls with 3540 Soxhlet Extraction**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 20:43	JMB
Aroclor-1221 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 20:43	JMB
Aroclor-1232 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 20:43	JMB
Aroclor-1242 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 20:43	JMB
Aroclor-1248 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 20:43	JMB
Aroclor-1254 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 20:43	JMB
Aroclor-1260 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 20:43	JMB
Aroclor-1262 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 20:43	JMB
Aroclor-1268 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 20:43	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		77.6	30-150					7/10/21 20:43	
Decachlorobiphenyl [2]		67.1	30-150					7/10/21 20:43	
Tetrachloro-m-xylene [1]		73.3	30-150					7/10/21 20:43	
Tetrachloro-m-xylene [2]		66.2	30-150					7/10/21 20:43	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-5

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-08

Sampled: 6/28/2021 10:45

Sample ID: 21G0035-08

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	6800	440	mg/Kg dry	50	Z-01b	SW-846 8015C	7/2/21	7/8/21 20:39	RMW
Surrogates	% Recovery		Recovery Limits	Flag/Qual					
2-Fluorobiphenyl	*		40-140	S-01		7/8/21 20:39			

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-5

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-08

Sampled: 6/28/2021 10:45

Sample ID: 21G0035-08

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.7	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:16	MJH
Arsenic	ND	3.5	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:16	MJH
Beryllium	0.25	0.17	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:16	MJH
Cadmium	ND	0.35	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:16	MJH
Chromium	7.4	0.69	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:16	MJH
Copper	5.9	0.69	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:16	MJH
Lead	1.5	0.52	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:16	MJH
Mercury	ND	0.028	mg/Kg dry	1		SW-846 7471B	7/2/21	7/7/21 10:51	CJV
Nickel	8.0	0.69	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:16	MJH
Selenium	ND	3.5	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:16	MJH
Silver	ND	0.35	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:16	MJH
Thallium	ND	1.7	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:16	MJH
Zinc	16	0.69	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:16	MJH

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

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-5

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-08

Sampled: 6/28/2021 10:45

Sample ID: 21G0035-08

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	93.7		% Wt	1		SM 2540G	7/2/21	7/3/21 9:39	JML

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-6

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-09

Sampled: 6/28/2021 11:34

Sample ID: 21G0035-09

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.095	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
Acrylonitrile	ND	0.0057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00095	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
Benzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
Bromobenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
Bromochloromethane	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
Bromodichloromethane	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
Bromoform	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
Bromomethane	ND	0.0095	mg/Kg dry	1	V-34	SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
2-Butanone (MEK)	ND	0.038	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
tert-Butyl Alcohol (TBA)	ND	0.095	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
n-Butylbenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
sec-Butylbenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
tert-Butylbenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00095	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
Carbon Disulfide	ND	0.0057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
Carbon Tetrachloride	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
Chlorobenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
Chlorodibromomethane	ND	0.00095	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
Chloroethane	ND	0.019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
Chloroform	ND	0.0038	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
Chloromethane	ND	0.0095	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
2-Chlorotoluene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
4-Chlorotoluene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
1,2-Dibromoethane (EDB)	ND	0.00095	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
Dibromomethane	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
1,2-Dichlorobenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
1,3-Dichlorobenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
1,4-Dichlorobenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
trans-1,4-Dichloro-2-butene	ND	0.0038	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
1,1-Dichloroethane	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
1,2-Dichloroethane	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
1,1-Dichloroethylene	ND	0.0038	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
cis-1,2-Dichloroethylene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
trans-1,2-Dichloroethylene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
1,2-Dichloropropane	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
1,3-Dichloropropane	ND	0.00095	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
2,2-Dichloropropane	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
1,1-Dichloropropene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
cis-1,3-Dichloropropene	ND	0.00095	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
trans-1,3-Dichloropropene	ND	0.00095	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
Diethyl Ether	ND	0.019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-6

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-09

Sampled: 6/28/2021 11:34

Sample ID: 21G0035-09

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.00095	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
1,4-Dioxane	ND	0.095	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
Ethylbenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
Hexachlorobutadiene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
2-Hexanone (MBK)	ND	0.019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
Isopropylbenzene (Cumene)	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
Methyl Acetate	ND	0.0038	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0038	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
Methyl Cyclohexane	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
Methylene Chloride	ND	0.019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
Naphthalene	ND	0.0038	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
n-Propylbenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
Styrene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
1,1,1,2-Tetrachloroethane	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
1,1,2,2-Tetrachloroethane	ND	0.00095	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
Tetrachloroethylene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
Tetrahydrofuran	ND	0.0095	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
Toluene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
1,2,3-Trichlorobenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
1,2,4-Trichlorobenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
1,3,5-Trichlorobenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
1,1,1-Trichloroethane	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
1,1,2-Trichloroethane	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
Trichloroethylene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0095	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
1,2,3-Trichloropropane	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0095	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
1,2,4-Trimethylbenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
1,3,5-Trimethylbenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
Vinyl Chloride	ND	0.0095	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
m+p Xylene	ND	0.0038	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
o-Xylene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:05	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		114	70-130					7/2/21 18:05	
Toluene-d8		99.3	70-130					7/2/21 18:05	
4-Bromofluorobenzene		96.8	70-130					7/2/21 18:05	



Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-6

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-09

Sampled: 6/28/2021 11:34

Sample ID: 21G0035-09

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:54	BGL
Acenaphthylene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:54	BGL
Anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:54	BGL
Benzo(a)anthracene	0.46	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:54	BGL
Benzo(a)pyrene	0.39	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:54	BGL
Benzo(b)fluoranthene	0.54	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:54	BGL
Benzo(g,h,i)perylene	0.29	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:54	BGL
Benzo(k)fluoranthene	0.21	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:54	BGL
Chrysene	0.48	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:54	BGL
Dibenz(a,h)anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:54	BGL
Fluoranthene	0.93	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:54	BGL
Fluorene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:54	BGL
Indeno(1,2,3-cd)pyrene	0.28	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:54	BGL
2-Methylnaphthalene	0.20	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:54	BGL
Naphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:54	BGL
Phenanthrene	0.86	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:54	BGL
Pyrene	0.93	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/7/21 23:54	BGL
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		61.9	30-130					7/7/21 23:54	
2-Fluorobiphenyl		56.8	30-130					7/7/21 23:54	
p-Terphenyl-d14		80.1	30-130					7/7/21 23:54	

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-6

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-09

Sampled: 6/28/2021 11:34

Sample ID: 21G0035-09

Sample Matrix: Soil

**Polychlorinated Biphenyls with 3540 Soxhlet Extraction**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 21:01	JMB
Aroclor-1221 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 21:01	JMB
Aroclor-1232 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 21:01	JMB
Aroclor-1242 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 21:01	JMB
Aroclor-1248 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 21:01	JMB
Aroclor-1254 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 21:01	JMB
Aroclor-1260 [2]	ND	0.086	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 21:01	JMB
Aroclor-1262 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 21:01	JMB
Aroclor-1268 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 21:01	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		78.1	30-150					7/10/21 21:01	
Decachlorobiphenyl [2]		72.9	30-150					7/10/21 21:01	
Tetrachloro-m-xylene [1]		87.2	30-150					7/10/21 21:01	
Tetrachloro-m-xylene [2]		79.0	30-150					7/10/21 21:01	

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

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-6

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-09

Sampled: 6/28/2021 11:34

Sample ID: 21G0035-09

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	220	18	mg/Kg dry	2	Z-01b	SW-846 8015C	7/2/21	7/8/21 2:02	RDD
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
2-Fluorobiphenyl	59.9	40-140			7/8/21 2:02				

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-6

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-09

Sampled: 6/28/2021 11:34

Sample ID: 21G0035-09

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.8	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:23	MJH
Arsenic	11	3.5	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:23	MJH
Beryllium	0.39	0.18	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:23	MJH
Cadmium	1.1	0.35	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:23	MJH
Chromium	16	0.71	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:23	MJH
Copper	89	0.71	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:23	MJH
Lead	220	0.53	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:23	MJH
Mercury	0.22	0.028	mg/Kg dry	1		SW-846 7471B	7/2/21	7/7/21 10:53	CJV
Nickel	8.7	0.71	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:23	MJH
Selenium	ND	3.5	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:23	MJH
Silver	ND	0.35	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:23	MJH
Thallium	ND	1.8	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:23	MJH
Zinc	690	3.5	mg/Kg dry	5		SW-846 6010D	7/2/21	7/7/21 20:12	AJL

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

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-6

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-09

Sampled: 6/28/2021 11:34

Sample ID: 21G0035-09

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	93.2		% Wt	1		SM 2540G	7/2/21	7/3/21 9:40	JML

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-7

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-10

Sampled: 6/28/2021 13:56

Sample ID: 21G0035-10

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.20	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
Acrylonitrile	ND	0.012	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
Benzene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
Bromobenzene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
Bromochloromethane	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
Bromodichloromethane	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
Bromoform	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
Bromomethane	ND	0.020	mg/Kg dry	1	V-34	SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
2-Butanone (MEK)	ND	0.081	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
tert-Butyl Alcohol (TBA)	ND	0.20	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
n-Butylbenzene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
sec-Butylbenzene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
tert-Butylbenzene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
Carbon Disulfide	ND	0.012	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
Carbon Tetrachloride	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
Chlorobenzene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
Chlorodibromomethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
Chloroethane	ND	0.040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
Chloroform	ND	0.0081	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
Chloromethane	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
2-Chlorotoluene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
4-Chlorotoluene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
1,2-Dibromoethane (EDB)	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
Dibromomethane	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
1,2-Dichlorobenzene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
1,3-Dichlorobenzene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
1,4-Dichlorobenzene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
trans-1,4-Dichloro-2-butene	ND	0.0081	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
1,1-Dichloroethane	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
1,2-Dichloroethane	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
1,1-Dichloroethylene	ND	0.0081	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
cis-1,2-Dichloroethylene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
trans-1,2-Dichloroethylene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
1,2-Dichloropropane	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
1,3-Dichloropropane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
2,2-Dichloropropane	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
1,1-Dichloropropene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
cis-1,3-Dichloropropene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
trans-1,3-Dichloropropene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
Diethyl Ether	ND	0.040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-7

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-10

Sampled: 6/28/2021 13:56

Sample ID: 21G0035-10

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
1,4-Dioxane	ND	0.20	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
Ethylbenzene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
Hexachlorobutadiene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
2-Hexanone (MBK)	ND	0.040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
Isopropylbenzene (Cumene)	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
Methyl Acetate	ND	0.0081	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0081	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
Methyl Cyclohexane	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
Methylene Chloride	ND	0.040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
Naphthalene	ND	0.0081	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
n-Propylbenzene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
Styrene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
1,1,1,2-Tetrachloroethane	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
1,1,2,2-Tetrachloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
Tetrachloroethylene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
Tetrahydrofuran	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
Toluene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
1,2,3-Trichlorobenzene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
1,2,4-Trichlorobenzene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
1,3,5-Trichlorobenzene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
1,1,1-Trichloroethane	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
1,1,2-Trichloroethane	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
Trichloroethylene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
Trichlorofluoromethane (Freon 11)	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
1,2,3-Trichloropropane	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
1,2,4-Trimethylbenzene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
1,3,5-Trimethylbenzene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
Vinyl Chloride	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
m+p Xylene	ND	0.0081	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
o-Xylene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:30	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		115	70-130					7/2/21 18:30	
Toluene-d8		94.2	70-130					7/2/21 18:30	
4-Bromofluorobenzene		87.9	70-130					7/2/21 18:30	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-7

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-10

Sampled: 6/28/2021 13:56

Sample ID: 21G0035-10

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 0:21	BGL
Acenaphthylene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 0:21	BGL
Anthracene	0.24	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 0:21	BGL
Benzo(a)anthracene	1.3	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 0:21	BGL
Benzo(a)pyrene	1.1	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 0:21	BGL
Benzo(b)fluoranthene	1.5	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 0:21	BGL
Benzo(g,h,i)perylene	0.74	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 0:21	BGL
Benzo(k)fluoranthene	0.44	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 0:21	BGL
Chrysene	1.7	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 0:21	BGL
Dibenz(a,h)anthracene	0.20	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 0:21	BGL
Fluoranthene	2.3	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 0:21	BGL
Fluorene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 0:21	BGL
Indeno(1,2,3-cd)pyrene	0.64	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 0:21	BGL
2-Methylnaphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 0:21	BGL
Naphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 0:21	BGL
Phenanthrene	2.0	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 0:21	BGL
Pyrene	2.9	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 0:21	BGL
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		71.2	30-130					7/8/21 0:21	
2-Fluorobiphenyl		73.4	30-130					7/8/21 0:21	
p-Terphenyl-d14		93.5	30-130					7/8/21 0:21	



Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-7

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-10

Sampled: 6/28/2021 13:56

Sample ID: 21G0035-10

Sample Matrix: Soil

**Polychlorinated Biphenyls with 3540 Soxhlet Extraction**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 21:18	JMB
Aroclor-1221 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 21:18	JMB
Aroclor-1232 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 21:18	JMB
Aroclor-1242 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 21:18	JMB
Aroclor-1248 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 21:18	JMB
Aroclor-1254 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 21:18	JMB
Aroclor-1260 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 21:18	JMB
Aroclor-1262 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 21:18	JMB
Aroclor-1268 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 21:18	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		73.5	30-150					7/10/21 21:18	
Decachlorobiphenyl [2]		67.9	30-150					7/10/21 21:18	
Tetrachloro-m-xylene [1]		90.0	30-150					7/10/21 21:18	
Tetrachloro-m-xylene [2]		81.9	30-150					7/10/21 21:18	

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

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-7

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-10

Sampled: 6/28/2021 13:56

Sample ID: 21G0035-10

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	260	19	mg/Kg dry	2	Z-01b	SW-846 8015C	7/2/21	7/8/21 2:23	RDD
<b>Surrogates</b>		<b>% Recovery</b>	<b>Recovery Limits</b>		<b>Flag/Qual</b>				
2-Fluorobiphenyl		63.8	40-140					7/8/21 2:23	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-7

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-10

Sampled: 6/28/2021 13:56

Sample ID: 21G0035-10

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.9	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:30	MJH
Arsenic	8.8	3.7	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:30	MJH
Beryllium	1.3	0.19	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:30	MJH
Cadmium	ND	0.37	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:30	MJH
Chromium	9.9	0.75	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:30	MJH
Copper	29	0.75	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:30	MJH
Lead	860	0.56	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:30	MJH
Mercury	0.034	0.033	mg/Kg dry	1		SW-846 7471B	7/2/21	7/7/21 10:55	CJV
Nickel	9.7	0.75	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:30	MJH
Selenium	ND	3.7	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:30	MJH
Silver	ND	0.37	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:30	MJH
Thallium	ND	1.9	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:30	MJH
Zinc	42	0.75	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:30	MJH



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

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-7

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-10

Sampled: 6/28/2021 13:56

Sample ID: 21G0035-10

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	88.3		% Wt	1		SM 2540G	7/2/21	7/3/21 9:40	JML

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-7

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-11

Sampled: 6/28/2021 14:05

Sample ID: 21G0035-11

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	2.3	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
Acrylonitrile	ND	0.23	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
Benzene	ND	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
Bromobenzene	ND	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
Bromochloromethane	ND	0.047	mg/Kg dry	1	L-04, V-05	SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
Bromodichloromethane	ND	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
Bromoform	ND	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
Bromomethane	ND	0.094	mg/Kg dry	1	V-34	SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
2-Butanone (MEK)	ND	0.94	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
tert-Butyl Alcohol (TBA)	ND	0.94	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
n-Butylbenzene	0.11	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
sec-Butylbenzene	0.17	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
tert-Butylbenzene	ND	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
Carbon Disulfide	ND	0.23	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
Carbon Tetrachloride	ND	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
Chlorobenzene	0.12	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
Chlorodibromomethane	ND	0.023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
Chloroethane	ND	0.094	mg/Kg dry	1	R-05	SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
Chloroform	ND	0.094	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
Chloromethane	ND	0.094	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
2-Chlorotoluene	ND	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
4-Chlorotoluene	ND	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.23	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
1,2-Dibromoethane (EDB)	ND	0.023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
Dibromomethane	ND	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
1,2-Dichlorobenzene	0.16	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
1,3-Dichlorobenzene	ND	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
1,4-Dichlorobenzene	0.13	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
trans-1,4-Dichloro-2-butene	ND	0.094	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
Dichlorodifluoromethane (Freon 12)	ND	0.094	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
1,1-Dichloroethane	ND	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
1,2-Dichloroethane	ND	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
1,1-Dichloroethylene	ND	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
cis-1,2-Dichloroethylene	ND	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
trans-1,2-Dichloroethylene	ND	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
1,2-Dichloropropane	ND	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
1,3-Dichloropropane	ND	0.023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
2,2-Dichloropropane	ND	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
1,1-Dichloropropene	ND	0.094	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
cis-1,3-Dichloropropene	ND	0.023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
trans-1,3-Dichloropropene	ND	0.023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
Diethyl Ether	ND	0.094	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-7

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-11

Sampled: 6/28/2021 14:05

Sample ID: 21G0035-11

Sample Matrix: Soil

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
1,4-Dioxane	ND	2.3	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
Ethylbenzene	0.25	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
Hexachlorobutadiene	ND	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
2-Hexanone (MBK)	ND	0.47	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
Isopropylbenzene (Cumene)	0.24	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
p-Isopropyltoluene (p-Cymene)	ND	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
Methyl Acetate	ND	0.47	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
Methyl Cyclohexane	1.3	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
Methylene Chloride	ND	0.23	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
4-Methyl-2-pentanone (MIBK)	ND	0.47	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
Naphthalene	0.15	0.094	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
n-Propylbenzene	0.39	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
Styrene	ND	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
1,1,1,2-Tetrachloroethane	ND	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
1,1,2,2-Tetrachloroethane	ND	0.023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
Tetrachloroethylene	ND	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
Tetrahydrofuran	ND	0.47	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
Toluene	0.072	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
1,2,3-Trichlorobenzene	ND	0.23	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
1,2,4-Trichlorobenzene	ND	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
1,3,5-Trichlorobenzene	ND	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
1,1,1-Trichloroethane	ND	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
1,1,2-Trichloroethane	ND	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
Trichloroethylene	ND	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
Trichlorofluoromethane (Freon 11)	ND	0.094	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
1,2,3-Trichloropropane	ND	0.094	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
1,2,4-Trimethylbenzene	0.062	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
1,3,5-Trimethylbenzene	0.049	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
Vinyl Chloride	ND	0.094	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
m+p Xylene	0.13	0.094	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
o-Xylene	0.064	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:43	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	89.7	70-130	7/2/21 18:43						
Toluene-d8	96.1	70-130	7/2/21 18:43						
4-Bromofluorobenzene	103	70-130	7/2/21 18:43						

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-7

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-11

Sampled: 6/28/2021 14:05

Sample ID: 21G0035-11

Sample Matrix: Soil

Sample Flags: RL-12

**Semivolatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:59	BGL
Acenaphthylene	ND	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:59	BGL
Anthracene	ND	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:59	BGL
Benzo(a)anthracene	ND	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:59	BGL
Benzo(a)pyrene	ND	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:59	BGL
Benzo(b)fluoranthene	ND	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:59	BGL
Benzo(g,h,i)perylene	ND	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:59	BGL
Benzo(k)fluoranthene	ND	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:59	BGL
Chrysene	ND	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:59	BGL
Dibenz(a,h)anthracene	ND	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:59	BGL
Fluoranthene	ND	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:59	BGL
Fluorene	ND	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:59	BGL
Indeno(1,2,3-cd)pyrene	ND	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:59	BGL
2-Methylnaphthalene	13	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:59	BGL
Naphthalene	ND	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:59	BGL
Phenanthrene	4.9	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:59	BGL
Pyrene	ND	3.6	mg/Kg dry	20		SW-846 8270D-E	7/2/21	7/9/21 0:59	BGL
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		65.2	30-130					7/9/21 0:59	
2-Fluorobiphenyl		55.2	30-130					7/9/21 0:59	
p-Terphenyl-d14		85.6	30-130					7/9/21 0:59	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-7

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-11

Sampled: 6/28/2021 14:05

Sample ID: 21G0035-11

Sample Matrix: Soil

**Polychlorinated Biphenyls with 3540 Soxhlet Extraction**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 15:33	JMB
Aroclor-1221 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 15:33	JMB
Aroclor-1232 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 15:33	JMB
Aroclor-1242 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 15:33	JMB
Aroclor-1248 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 15:33	JMB
Aroclor-1254 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 15:33	JMB
Aroclor-1260 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 15:33	JMB
Aroclor-1262 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 15:33	JMB
Aroclor-1268 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 15:33	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		64.4	30-150					7/10/21 15:33	
Decachlorobiphenyl [2]		56.1	30-150					7/10/21 15:33	
Tetrachloro-m-xylene [1]		65.5	30-150					7/10/21 15:33	
Tetrachloro-m-xylene [2]		60.0	30-150					7/10/21 15:33	



Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-7

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-11

Sampled: 6/28/2021 14:05

Sample ID: 21G0035-11

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	12000	880	mg/Kg dry	100	Z-01b	SW-846 8015C	7/2/21	7/8/21 19:58	RMW
Surrogates	% Recovery		Recovery Limits	Flag/Qual					
2-Fluorobiphenyl	*		40-140	S-01		7/8/21 19:58			

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-7

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-11

Sampled: 6/28/2021 14:05

Sample ID: 21G0035-11

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.8	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:37	MJH
Arsenic	ND	3.5	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:37	MJH
Beryllium	0.23	0.18	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:37	MJH
Cadmium	ND	0.35	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:37	MJH
Chromium	13	0.70	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:37	MJH
Copper	8.3	0.70	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:37	MJH
Lead	34	0.53	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:37	MJH
Mercury	ND	0.027	mg/Kg dry	1		SW-846 7471B	7/2/21	7/7/21 10:56	CJV
Nickel	6.7	0.70	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:37	MJH
Selenium	ND	3.5	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:37	MJH
Silver	ND	0.35	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:37	MJH
Thallium	ND	1.8	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:37	MJH
Zinc	16	0.70	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:37	MJH

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

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-7

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-11

Sampled: 6/28/2021 14:05

Sample ID: 21G0035-11

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	93.9		% Wt	1		SM 2540G	7/2/21	7/3/21 9:40	JML

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-7

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-12

Sampled: 6/28/2021 14:10

Sample ID: 21G0035-12

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	2.9	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
Acrylonitrile	ND	0.29	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.029	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
Benzene	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
Bromobenzene	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
Bromochloromethane	ND	0.057	mg/Kg dry	1	L-04, V-05	SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
Bromodichloromethane	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
Bromoform	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
Bromomethane	ND	0.11	mg/Kg dry	1	V-34	SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
2-Butanone (MEK)	ND	1.1	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
tert-Butyl Alcohol (TBA)	ND	1.1	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
n-Butylbenzene	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
sec-Butylbenzene	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
tert-Butylbenzene	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.029	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
Carbon Disulfide	ND	0.29	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
Carbon Tetrachloride	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
Chlorobenzene	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
Chlorodibromomethane	ND	0.029	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
Chloroethane	ND	0.11	mg/Kg dry	1	R-05	SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
Chloroform	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
Chloromethane	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
2-Chlorotoluene	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
4-Chlorotoluene	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.29	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
1,2-Dibromoethane (EDB)	ND	0.029	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
Dibromomethane	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
1,2-Dichlorobenzene	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
1,3-Dichlorobenzene	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
1,4-Dichlorobenzene	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
trans-1,4-Dichloro-2-butene	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
Dichlorodifluoromethane (Freon 12)	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
1,1-Dichloroethane	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
1,2-Dichloroethane	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
1,1-Dichloroethylene	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
cis-1,2-Dichloroethylene	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
trans-1,2-Dichloroethylene	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
1,2-Dichloropropane	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
1,3-Dichloropropane	ND	0.029	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
2,2-Dichloropropane	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
1,1-Dichloropropene	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
cis-1,3-Dichloropropene	ND	0.029	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
trans-1,3-Dichloropropene	ND	0.029	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
Diethyl Ether	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-7

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-12

Sampled: 6/28/2021 14:10

Sample ID: 21G0035-12

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.029	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
1,4-Dioxane	ND	2.9	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
Ethylbenzene	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
Hexachlorobutadiene	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
2-Hexanone (MBK)	ND	0.57	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
Isopropylbenzene (Cumene)	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
p-Isopropyltoluene (p-Cymene)	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
Methyl Acetate	ND	0.57	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
Methyl Cyclohexane	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
Methylene Chloride	ND	0.29	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
4-Methyl-2-pentanone (MIBK)	ND	0.57	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
Naphthalene	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
n-Propylbenzene	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
Styrene	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
1,1,1,2-Tetrachloroethane	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
1,1,2,2-Tetrachloroethane	ND	0.029	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
Tetrachloroethylene	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
Tetrahydrofuran	ND	0.57	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
Toluene	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
1,2,3-Trichlorobenzene	ND	0.29	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
1,2,4-Trichlorobenzene	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
1,3,5-Trichlorobenzene	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
1,1,1-Trichloroethane	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
1,1,2-Trichloroethane	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
Trichloroethylene	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
Trichlorofluoromethane (Freon 11)	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
1,2,3-Trichloropropane	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
1,2,4-Trimethylbenzene	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
1,3,5-Trimethylbenzene	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
Vinyl Chloride	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
m+p Xylene	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
o-Xylene	ND	0.057	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:15	EEH
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		90.2	70-130					7/2/21 18:15	
Toluene-d8		94.6	70-130					7/2/21 18:15	
4-Bromofluorobenzene		98.0	70-130					7/2/21 18:15	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-7

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-12

Sampled: 6/28/2021 14:10

Sample ID: 21G0035-12

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	1.9	mg/Kg dry	10		SW-846 8270D-E	7/2/21	7/8/21 1:14	BGL
Acenaphthylene	ND	1.9	mg/Kg dry	10		SW-846 8270D-E	7/2/21	7/8/21 1:14	BGL
Anthracene	ND	1.9	mg/Kg dry	10		SW-846 8270D-E	7/2/21	7/8/21 1:14	BGL
Benzo(a)anthracene	ND	1.9	mg/Kg dry	10		SW-846 8270D-E	7/2/21	7/8/21 1:14	BGL
Benzo(a)pyrene	ND	1.9	mg/Kg dry	10		SW-846 8270D-E	7/2/21	7/8/21 1:14	BGL
Benzo(b)fluoranthene	ND	1.9	mg/Kg dry	10		SW-846 8270D-E	7/2/21	7/8/21 1:14	BGL
Benzo(g,h,i)perylene	ND	1.9	mg/Kg dry	10		SW-846 8270D-E	7/2/21	7/8/21 1:14	BGL
Benzo(k)fluoranthene	ND	1.9	mg/Kg dry	10		SW-846 8270D-E	7/2/21	7/8/21 1:14	BGL
Chrysene	ND	1.9	mg/Kg dry	10		SW-846 8270D-E	7/2/21	7/8/21 1:14	BGL
Dibenz(a,h)anthracene	ND	1.9	mg/Kg dry	10		SW-846 8270D-E	7/2/21	7/8/21 1:14	BGL
Fluoranthene	ND	1.9	mg/Kg dry	10		SW-846 8270D-E	7/2/21	7/8/21 1:14	BGL
Fluorene	ND	1.9	mg/Kg dry	10		SW-846 8270D-E	7/2/21	7/8/21 1:14	BGL
Indeno(1,2,3-cd)pyrene	ND	1.9	mg/Kg dry	10		SW-846 8270D-E	7/2/21	7/8/21 1:14	BGL
2-Methylnaphthalene	16	1.9	mg/Kg dry	10		SW-846 8270D-E	7/2/21	7/8/21 1:14	BGL
Naphthalene	ND	1.9	mg/Kg dry	10		SW-846 8270D-E	7/2/21	7/8/21 1:14	BGL
Phenanthrene	5.6	1.9	mg/Kg dry	10		SW-846 8270D-E	7/2/21	7/8/21 1:14	BGL
Pyrene	2.1	1.9	mg/Kg dry	10		SW-846 8270D-E	7/2/21	7/8/21 1:14	BGL
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		55.6	30-130					7/8/21 1:14	
2-Fluorobiphenyl		42.5	30-130					7/8/21 1:14	
p-Terphenyl-d14		73.6	30-130					7/8/21 1:14	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-7

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-12

Sampled: 6/28/2021 14:10

Sample ID: 21G0035-12

Sample Matrix: Soil

**Polychlorinated Biphenyls with 3540 Soxhlet Extraction**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 22:41	JMB
Aroclor-1221 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 22:41	JMB
Aroclor-1232 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 22:41	JMB
Aroclor-1242 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 22:41	JMB
Aroclor-1248 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 22:41	JMB
Aroclor-1254 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 22:41	JMB
Aroclor-1260 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 22:41	JMB
Aroclor-1262 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 22:41	JMB
Aroclor-1268 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 22:41	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		75.7	30-150					7/10/21 22:41	
Decachlorobiphenyl [2]		65.5	30-150					7/10/21 22:41	
Tetrachloro-m-xylene [1]		73.9	30-150					7/10/21 22:41	
Tetrachloro-m-xylene [2]		66.8	30-150					7/10/21 22:41	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-7

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-12

Sampled: 6/28/2021 14:10

Sample ID: 21G0035-12

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	15000	910	mg/Kg dry	100	Z-01b	SW-846 8015C	7/2/21	7/8/21 20:18	RMW
Surrogates	% Recovery		Recovery Limits	Flag/Qual					
2-Fluorobiphenyl	*		40-140	S-01		7/8/21 20:18			



Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-7

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-12

Sampled: 6/28/2021 14:10

Sample ID: 21G0035-12

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.8	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:43	MJH
Arsenic	ND	3.5	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:43	MJH
Beryllium	0.23	0.18	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:43	MJH
Cadmium	ND	0.35	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:43	MJH
Chromium	7.2	0.70	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:43	MJH
Copper	6.1	0.70	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:43	MJH
Lead	2.6	0.53	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:43	MJH
Mercury	ND	0.032	mg/Kg dry	1		SW-846 7471B	7/2/21	7/7/21 10:58	CJV
Nickel	4.9	0.70	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:43	MJH
Selenium	ND	3.5	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:43	MJH
Silver	ND	0.35	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:43	MJH
Thallium	ND	1.8	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:43	MJH
Zinc	12	0.70	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 18:43	MJH

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

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-7

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-12

Sampled: 6/28/2021 14:10

Sample ID: 21G0035-12

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	91.0		% Wt	1		SM 2540G	7/2/21	7/3/21 9:40	JML

Project Location: 719 River St, Woonsocket, RI

Sample Description: Trip Blank

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-13

Sampled: 6/28/2021 14:30

Sample ID: 21G0035-13

Sample Matrix: Trip Blank Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.10	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
Acrylonitrile	ND	0.0060	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
Benzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
Bromobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
Bromochloromethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
Bromodichloromethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
Bromoform	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
Bromomethane	ND	0.010	mg/Kg wet	1	V-34	SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
2-Butanone (MEK)	ND	0.040	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
tert-Butyl Alcohol (TBA)	ND	0.10	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
n-Butylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
sec-Butylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
tert-Butylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
Carbon Disulfide	ND	0.0060	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
Carbon Tetrachloride	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
Chlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
Chlorodibromomethane	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
Chloroethane	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
Chloroform	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
Chloromethane	ND	0.010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
2-Chlorotoluene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
4-Chlorotoluene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
Dibromomethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
1,2-Dichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
1,3-Dichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
1,4-Dichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
trans-1,4-Dichloro-2-butene	ND	0.0040	mg/Kg wet	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
1,1-Dichloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
1,2-Dichloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
1,1-Dichloroethylene	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
1,2-Dichloropropane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
1,3-Dichloropropane	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
2,2-Dichloropropane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
1,1-Dichloropropene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
Diethyl Ether	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF

Project Location: 719 River St, Woonsocket, RI

Sample Description: Trip Blank

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210628-13

Sampled: 6/28/2021 14:30

Sample ID: 21G0035-13

Sample Matrix: Trip Blank Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
1,4-Dioxane	ND	0.10	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
Ethylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
Hexachlorobutadiene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
2-Hexanone (MBK)	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
Methyl Acetate	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
Methyl Cyclohexane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
Methylene Chloride	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
Naphthalene	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
n-Propylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
Styrene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
Tetrachloroethylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
Tetrahydrofuran	ND	0.010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
Toluene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
1,2,3-Trichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
1,3,5-Trichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
1,1,1-Trichloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
1,1,2-Trichloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
Trichloroethylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
1,2,3-Trichloropropane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
Vinyl Chloride	ND	0.010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
m+p Xylene	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
o-Xylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 11:57	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		114	70-130					7/2/21 11:57	
Toluene-d8		99.0	70-130					7/2/21 11:57	
4-Bromofluorobenzene		100	70-130					7/2/21 11:57	

Project Location: 719 River St, Woonsocket, RI

Sample Description: ME-8

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 07:19

Sample ID: 21G0035-14

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.13	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
Acrylonitrile	ND	0.0078	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0013	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
Benzene	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
Bromobenzene	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
Bromochloromethane	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
Bromodichloromethane	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
Bromoform	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
Bromomethane	ND	0.013	mg/Kg dry	1	V-34	SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
2-Butanone (MEK)	ND	0.052	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
tert-Butyl Alcohol (TBA)	ND	0.13	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
n-Butylbenzene	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
sec-Butylbenzene	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
tert-Butylbenzene	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0013	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
Carbon Disulfide	ND	0.0078	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
Carbon Tetrachloride	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
Chlorobenzene	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
Chlorodibromomethane	ND	0.0013	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
Chloroethane	ND	0.026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
Chloroform	ND	0.0052	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
Chloromethane	ND	0.013	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
2-Chlorotoluene	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
4-Chlorotoluene	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
1,2-Dibromoethane (EDB)	ND	0.0013	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
Dibromomethane	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
1,2-Dichlorobenzene	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
1,3-Dichlorobenzene	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
1,4-Dichlorobenzene	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
trans-1,4-Dichloro-2-butene	ND	0.0052	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
1,1-Dichloroethane	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
1,2-Dichloroethane	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
1,1-Dichloroethylene	ND	0.0052	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
cis-1,2-Dichloroethylene	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
trans-1,2-Dichloroethylene	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
1,2-Dichloropropane	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
1,3-Dichloropropane	ND	0.0013	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
2,2-Dichloropropane	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
1,1-Dichloropropene	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
cis-1,3-Dichloropropene	ND	0.0013	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
trans-1,3-Dichloropropene	ND	0.0013	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
Diethyl Ether	ND	0.026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF

Project Location: 719 River St, Woonsocket, RI

Sample Description: ME-8

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 07:19

Sample ID: 21G0035-14

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0013	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
1,4-Dioxane	ND	0.13	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
Ethylbenzene	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
Hexachlorobutadiene	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
2-Hexanone (MBK)	ND	0.026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
Isopropylbenzene (Cumene)	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
Methyl Acetate	ND	0.0052	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0052	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
Methyl Cyclohexane	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
Methylene Chloride	ND	0.026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
Naphthalene	ND	0.0052	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
n-Propylbenzene	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
Styrene	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
1,1,1,2-Tetrachloroethane	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
1,1,2,2-Tetrachloroethane	ND	0.0013	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
Tetrachloroethylene	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
Tetrahydrofuran	ND	0.013	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
Toluene	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
1,2,3-Trichlorobenzene	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
1,2,4-Trichlorobenzene	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
1,3,5-Trichlorobenzene	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
1,1,1-Trichloroethane	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
1,1,2-Trichloroethane	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
Trichloroethylene	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
Trichlorofluoromethane (Freon 11)	ND	0.013	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
1,2,3-Trichloropropane	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.013	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
1,2,4-Trimethylbenzene	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
1,3,5-Trimethylbenzene	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
Vinyl Chloride	ND	0.013	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
m+p Xylene	ND	0.0052	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
o-Xylene	ND	0.0026	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:54	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		113	70-130					7/2/21 18:54	
Toluene-d8		98.5	70-130					7/2/21 18:54	
4-Bromofluorobenzene		93.4	70-130					7/2/21 18:54	

Project Location: 719 River St, Woonsocket, RI

Sample Description: ME-8

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 07:19

Sample ID: 21G0035-14

Sample Matrix: Soil

Sample Flags: RL-12

**Semivolatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.38	mg/Kg dry	2		SW-846 8270D-E	7/2/21	7/8/21 1:42	BGL
Acenaphthylene	ND	0.38	mg/Kg dry	2		SW-846 8270D-E	7/2/21	7/8/21 1:42	BGL
Anthracene	0.78	0.38	mg/Kg dry	2		SW-846 8270D-E	7/2/21	7/8/21 1:42	BGL
Benzo(a)anthracene	4.8	0.38	mg/Kg dry	2		SW-846 8270D-E	7/2/21	7/8/21 1:42	BGL
Benzo(a)pyrene	4.1	0.38	mg/Kg dry	2		SW-846 8270D-E	7/2/21	7/8/21 1:42	BGL
Benzo(b)fluoranthene	5.0	0.38	mg/Kg dry	2		SW-846 8270D-E	7/2/21	7/8/21 1:42	BGL
Benzo(g,h,i)perylene	2.9	0.38	mg/Kg dry	2		SW-846 8270D-E	7/2/21	7/8/21 1:42	BGL
Benzo(k)fluoranthene	1.7	0.38	mg/Kg dry	2		SW-846 8270D-E	7/2/21	7/8/21 1:42	BGL
Chrysene	6.3	0.38	mg/Kg dry	2		SW-846 8270D-E	7/2/21	7/8/21 1:42	BGL
Dibenz(a,h)anthracene	0.82	0.38	mg/Kg dry	2		SW-846 8270D-E	7/2/21	7/8/21 1:42	BGL
Fluoranthene	7.7	0.38	mg/Kg dry	2		SW-846 8270D-E	7/2/21	7/8/21 1:42	BGL
Fluorene	ND	0.38	mg/Kg dry	2		SW-846 8270D-E	7/2/21	7/8/21 1:42	BGL
Indeno(1,2,3-cd)pyrene	2.8	0.38	mg/Kg dry	2		SW-846 8270D-E	7/2/21	7/8/21 1:42	BGL
2-Methylnaphthalene	ND	0.38	mg/Kg dry	2		SW-846 8270D-E	7/2/21	7/8/21 1:42	BGL
Naphthalene	ND	0.38	mg/Kg dry	2		SW-846 8270D-E	7/2/21	7/8/21 1:42	BGL
Phenanthrene	6.4	0.38	mg/Kg dry	2		SW-846 8270D-E	7/2/21	7/8/21 1:42	BGL
Pyrene	9.1	1.9	mg/Kg dry	10		SW-846 8270D-E	7/2/21	7/9/21 2:22	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual
Nitrobenzene-d5	44.0	30-130	7/9/21 2:22
Nitrobenzene-d5	57.1	30-130	7/8/21 1:42
2-Fluorobiphenyl	42.7	30-130	7/9/21 2:22
2-Fluorobiphenyl	52.8	30-130	7/8/21 1:42
p-Terphenyl-d14	65.6	30-130	7/9/21 2:22
p-Terphenyl-d14	82.0	30-130	7/8/21 1:42

Project Location: 719 River St, Woonsocket, RI

Sample Description: ME-8

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 07:19

Sample ID: 21G0035-14

Sample Matrix: Soil

**Polychlorinated Biphenyls with 3540 Soxhlet Extraction**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 22:58	JMB
Aroclor-1221 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 22:58	JMB
Aroclor-1232 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 22:58	JMB
Aroclor-1242 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 22:58	JMB
Aroclor-1248 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 22:58	JMB
Aroclor-1254 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 22:58	JMB
Aroclor-1260 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 22:58	JMB
Aroclor-1262 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 22:58	JMB
Aroclor-1268 [1]	ND	0.091	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 22:58	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		67.0	30-150					7/10/21 22:58	
Decachlorobiphenyl [2]		75.8	30-150					7/10/21 22:58	
Tetrachloro-m-xylene [1]		79.4	30-150					7/10/21 22:58	
Tetrachloro-m-xylene [2]		71.9	30-150					7/10/21 22:58	



Project Location: 719 River St, Woonsocket, RI

Sample Description: ME-8

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 07:19

Sample ID: 21G0035-14

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	1200	460	mg/Kg dry	50	O-26	SW-846 8015C	7/2/21	7/8/21 19:16	RMW
Surrogates	% Recovery		Recovery Limits	Flag/Qual					
2-Fluorobiphenyl	*		40-140	S-01		7/8/21 19:16			

Project Location: 719 River St, Woonsocket, RI

Sample Description: ME-8

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 07:19

Sample ID: 21G0035-14

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.8	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 19:02	MJH
Arsenic	22	3.7	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 19:02	MJH
Beryllium	0.44	0.18	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 19:02	MJH
Cadmium	ND	0.37	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 19:02	MJH
Chromium	200	0.74	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 19:02	MJH
Copper	90	0.74	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 19:02	MJH
Lead	240	0.55	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 19:02	MJH
Mercury	0.28	0.032	mg/Kg dry	1		SW-846 7471B	7/2/21	7/7/21 11:00	CJV
Nickel	7.6	0.74	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 19:02	MJH
Selenium	ND	3.7	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 19:02	MJH
Silver	ND	0.37	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 19:02	MJH
Thallium	ND	1.8	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 19:02	MJH
Zinc	68	0.74	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 19:02	MJH

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

Project Location: 719 River St, Woonsocket, RI

Sample Description: ME-8

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 07:19

Sample ID: 21G0035-14

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	88.2		% Wt	1		SM 2540G	7/2/21	7/3/21 9:40	JML

Project Location: 719 River St, Woonsocket, RI

Sample Description: ME-9

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 08:25

Sample ID: 21G0035-15

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
Acrylonitrile	ND	0.0064	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
Benzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
Bromobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
Bromochloromethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
Bromodichloromethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
Bromoform	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
Bromomethane	ND	0.011	mg/Kg dry	1	V-34	SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
2-Butanone (MEK)	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
tert-Butyl Alcohol (TBA)	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
n-Butylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
sec-Butylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
tert-Butylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
Carbon Disulfide	ND	0.0064	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
Carbon Tetrachloride	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
Chlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
Chlorodibromomethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
Chloroethane	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
Chloroform	ND	0.0043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
Chloromethane	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
2-Chlorotoluene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
4-Chlorotoluene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
1,2-Dibromoethane (EDB)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
Dibromomethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
1,2-Dichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
1,3-Dichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
1,4-Dichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
trans-1,4-Dichloro-2-butene	ND	0.0043	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
1,1-Dichloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
1,2-Dichloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
1,1-Dichloroethylene	ND	0.0043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
cis-1,2-Dichloroethylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
trans-1,2-Dichloroethylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
1,2-Dichloropropane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
1,3-Dichloropropane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
2,2-Dichloropropane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
1,1-Dichloropropene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
cis-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
trans-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
Diethyl Ether	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF

Project Location: 719 River St, Woonsocket, RI

Sample Description: ME-9

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 08:25

Sample ID: 21G0035-15

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
1,4-Dioxane	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
Ethylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
Hexachlorobutadiene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
2-Hexanone (MBK)	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
Isopropylbenzene (Cumene)	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
Methyl Acetate	ND	0.0043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
Methyl Cyclohexane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
Methylene Chloride	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
Naphthalene	ND	0.0043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
n-Propylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
Styrene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
1,1,1,2-Tetrachloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
1,1,2,2-Tetrachloroethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
Tetrachloroethylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
Tetrahydrofuran	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
Toluene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
1,2,3-Trichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
1,2,4-Trichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
1,3,5-Trichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
1,1,1-Trichloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
1,1,2-Trichloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
Trichloroethylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
Trichlorofluoromethane (Freon 11)	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
1,2,3-Trichloropropane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
1,2,4-Trimethylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
1,3,5-Trimethylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
Vinyl Chloride	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
m+p Xylene	ND	0.0043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
o-Xylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 19:18	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		113	70-130					7/2/21 19:18	
Toluene-d8		101	70-130					7/2/21 19:18	
4-Bromofluorobenzene		95.3	70-130					7/2/21 19:18	

Project Location: 719 River St, Woonsocket, RI

Sample Description: ME-9

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 08:25

Sample ID: 21G0035-15

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/9/21 0:04	BGL
Acenaphthylene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/9/21 0:04	BGL
Anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/9/21 0:04	BGL
Benzo(a)anthracene	0.23	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/9/21 0:04	BGL
Benzo(a)pyrene	0.21	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/9/21 0:04	BGL
Benzo(b)fluoranthene	0.28	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/9/21 0:04	BGL
Benzo(g,h,i)perylene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/9/21 0:04	BGL
Benzo(k)fluoranthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/9/21 0:04	BGL
Chrysene	0.22	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/9/21 0:04	BGL
Dibenz(a,h)anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/9/21 0:04	BGL
Fluoranthene	0.47	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/9/21 0:04	BGL
Fluorene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/9/21 0:04	BGL
Indeno(1,2,3-cd)pyrene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/9/21 0:04	BGL
2-Methylnaphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/9/21 0:04	BGL
Naphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/9/21 0:04	BGL
Phenanthrene	0.32	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/9/21 0:04	BGL
Pyrene	0.44	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/9/21 0:04	BGL
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		72.1	30-130					7/9/21 0:04	
2-Fluorobiphenyl		71.3	30-130					7/9/21 0:04	
p-Terphenyl-d14		104	30-130					7/9/21 0:04	

Project Location: 719 River St, Woonsocket, RI

Sample Description: ME-9

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 08:25

Sample ID: 21G0035-15

Sample Matrix: Soil

**Polychlorinated Biphenyls with 3540 Soxhlet Extraction**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 23:16	JMB
Aroclor-1221 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 23:16	JMB
Aroclor-1232 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 23:16	JMB
Aroclor-1242 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 23:16	JMB
Aroclor-1248 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 23:16	JMB
Aroclor-1254 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 23:16	JMB
Aroclor-1260 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 23:16	JMB
Aroclor-1262 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 23:16	JMB
Aroclor-1268 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 23:16	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		64.2	30-150					7/10/21 23:16	
Decachlorobiphenyl [2]		56.1	30-150					7/10/21 23:16	
Tetrachloro-m-xylene [1]		81.2	30-150					7/10/21 23:16	
Tetrachloro-m-xylene [2]		75.6	30-150					7/10/21 23:16	

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

Project Location: 719 River St, Woonsocket, RI

Sample Description: ME-9

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 08:25

Sample ID: 21G0035-15

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	59	8.8	mg/Kg dry	1	Z-01a	SW-846 8015C	7/2/21	7/8/21 1:41	RDD
<b>Surrogates</b>		<b>% Recovery</b>	<b>Recovery Limits</b>		<b>Flag/Qual</b>				
2-Fluorobiphenyl		61.2	40-140					7/8/21 1:41	



Project Location: 719 River St, Woonsocket, RI

Sample Description: ME-9

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 08:25

Sample ID: 21G0035-15

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.7	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 19:09	MJH
Arsenic	ND	3.4	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 19:09	MJH
Beryllium	0.18	0.17	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 19:09	MJH
Cadmium	ND	0.34	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 19:09	MJH
Chromium	16	0.67	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 19:09	MJH
Copper	15	0.67	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 19:09	MJH
Lead	25	0.50	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 19:09	MJH
Mercury	0.044	0.029	mg/Kg dry	1		SW-846 7471B	7/2/21	7/7/21 11:02	CJV
Nickel	4.7	0.67	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 19:09	MJH
Selenium	ND	3.4	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 19:09	MJH
Silver	ND	0.34	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 19:09	MJH
Thallium	ND	1.7	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 19:09	MJH
Zinc	89	0.67	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 19:09	MJH



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

Project Location: 719 River St, Woonsocket, RI

Sample Description: ME-9

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 08:25

Sample ID: 21G0035-15

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	94.3		% Wt	1		SM 2540G	7/2/21	7/3/21 9:40	JML

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-10

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 10:22

Sample ID: 21G0035-16

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.23	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
Acrylonitrile	ND	0.014	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
Benzene	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
Bromobenzene	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
Bromochloromethane	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
Bromodichloromethane	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
Bromoform	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
Bromomethane	ND	0.023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
2-Butanone (MEK)	ND	0.093	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
tert-Butyl Alcohol (TBA)	ND	0.23	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
n-Butylbenzene	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
sec-Butylbenzene	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
tert-Butylbenzene	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
Carbon Disulfide	ND	0.014	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
Carbon Tetrachloride	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
Chlorobenzene	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
Chlorodibromomethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
Chloroethane	ND	0.046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
Chloroform	ND	0.0093	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
Chloromethane	ND	0.023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
2-Chlorotoluene	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
4-Chlorotoluene	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
1,2-Dibromoethane (EDB)	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
Dibromomethane	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
1,2-Dichlorobenzene	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
1,3-Dichlorobenzene	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
1,4-Dichlorobenzene	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
trans-1,4-Dichloro-2-butene	ND	0.0093	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
1,1-Dichloroethane	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
1,2-Dichloroethane	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
1,1-Dichloroethylene	ND	0.0093	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
cis-1,2-Dichloroethylene	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
trans-1,2-Dichloroethylene	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
1,2-Dichloropropane	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
1,3-Dichloropropane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
2,2-Dichloropropane	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
1,1-Dichloropropene	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
cis-1,3-Dichloropropene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
trans-1,3-Dichloropropene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
Diethyl Ether	ND	0.046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-10

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 10:22

Sample ID: 21G0035-16

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
1,4-Dioxane	ND	0.23	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
Ethylbenzene	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
Hexachlorobutadiene	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
2-Hexanone (MBK)	ND	0.046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
Isopropylbenzene (Cumene)	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
Methyl Acetate	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0093	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
Methyl Cyclohexane	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
Methylene Chloride	ND	0.046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
Naphthalene	ND	0.0093	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
n-Propylbenzene	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
Styrene	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
1,1,1,2-Tetrachloroethane	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
1,1,2,2-Tetrachloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
Tetrachloroethylene	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
Tetrahydrofuran	ND	0.023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
Toluene	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
1,2,3-Trichlorobenzene	ND	0.0046	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
1,2,4-Trichlorobenzene	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
1,3,5-Trichlorobenzene	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
1,1,1-Trichloroethane	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
1,1,2-Trichloroethane	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
Trichloroethylene	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
Trichlorofluoromethane (Freon 11)	ND	0.023	mg/Kg dry	1	L-04, V-05	SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
1,2,3-Trichloropropane	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
1,2,4-Trimethylbenzene	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
1,3,5-Trimethylbenzene	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
Vinyl Chloride	ND	0.023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
m+p Xylene	ND	0.0093	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
o-Xylene	ND	0.0046	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 13:34	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		105	70-130					7/2/21 13:34	
Toluene-d8		108	70-130					7/2/21 13:34	
4-Bromofluorobenzene		102	70-130					7/2/21 13:34	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-10

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 10:22

Sample ID: 21G0035-16

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 2:36	BGL
Acenaphthylene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 2:36	BGL
Anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 2:36	BGL
Benzo(a)anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 2:36	BGL
Benzo(a)pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 2:36	BGL
Benzo(b)fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 2:36	BGL
Benzo(g,h,i)perylene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 2:36	BGL
Benzo(k)fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 2:36	BGL
Chrysene	0.38	0.20	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 2:36	BGL
Dibenz(a,h)anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 2:36	BGL
Fluoranthene	0.21	0.20	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 2:36	BGL
Fluorene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 2:36	BGL
Indeno(1,2,3-cd)pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 2:36	BGL
2-Methylnaphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 2:36	BGL
Naphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 2:36	BGL
Phenanthrene	0.68	0.20	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 2:36	BGL
Pyrene	0.27	0.20	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 2:36	BGL
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		70.7	30-130					7/8/21 2:36	
2-Fluorobiphenyl		74.8	30-130					7/8/21 2:36	
p-Terphenyl-d14		117	30-130					7/8/21 2:36	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-10

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 10:22

Sample ID: 21G0035-16

Sample Matrix: Soil

**Polychlorinated Biphenyls with 3540 Soxhlet Extraction**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.096	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 23:33	JMB
Aroclor-1221 [1]	ND	0.096	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 23:33	JMB
Aroclor-1232 [1]	ND	0.096	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 23:33	JMB
Aroclor-1242 [1]	ND	0.096	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 23:33	JMB
Aroclor-1248 [1]	ND	0.096	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 23:33	JMB
Aroclor-1254 [1]	ND	0.096	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 23:33	JMB
Aroclor-1260 [1]	ND	0.096	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 23:33	JMB
Aroclor-1262 [1]	ND	0.096	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 23:33	JMB
Aroclor-1268 [1]	ND	0.096	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 23:33	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		76.0	30-150					7/10/21 23:33	
Decachlorobiphenyl [2]		67.3	30-150					7/10/21 23:33	
Tetrachloro-m-xylene [1]		73.4	30-150					7/10/21 23:33	
Tetrachloro-m-xylene [2]		67.4	30-150					7/10/21 23:33	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-10

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 10:22

Sample ID: 21G0035-16

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	580	200	mg/Kg dry	20	Z-01b	SW-846 8015C	7/2/21	7/8/21 19:37	RMW
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
2-Fluorobiphenyl	72.8	40-140			S-01	7/8/21 19:37			

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-10

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 10:22

Sample ID: 21G0035-16

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.9	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:00	MJH
Arsenic	8.1	3.9	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:00	MJH
Beryllium	0.40	0.19	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:00	MJH
Cadmium	ND	0.39	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:00	MJH
Chromium	10	0.78	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:00	MJH
Copper	14	0.78	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:00	MJH
Lead	30	0.58	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:00	MJH
Mercury	0.10	0.034	mg/Kg dry	1		SW-846 7471B	7/2/21	7/7/21 11:03	CJV
Nickel	5.8	0.78	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:00	MJH
Selenium	ND	3.9	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:00	MJH
Silver	ND	0.39	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:00	MJH
Thallium	ND	1.9	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:00	MJH
Zinc	19	0.78	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:00	MJH



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

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-10

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 10:22

Sample ID: 21G0035-16

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	83.6		% Wt	1		SM 2540G	7/2/21	7/3/21 9:40	JML

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-11

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 10:53

Sample ID: 21G0035-17

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
Acrylonitrile	ND	0.0053	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
Benzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
Bromobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
Bromochloromethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
Bromodichloromethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
Bromoform	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
Bromomethane	ND	0.0089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
2-Butanone (MEK)	ND	0.036	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
tert-Butyl Alcohol (TBA)	ND	0.089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
n-Butylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
sec-Butylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
tert-Butylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
Carbon Disulfide	ND	0.0053	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
Carbon Tetrachloride	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
Chlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
Chlorodibromomethane	ND	0.00089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
Chloroethane	ND	0.018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
Chloroform	ND	0.0036	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
Chloromethane	ND	0.0089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
2-Chlorotoluene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
4-Chlorotoluene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
1,2-Dibromoethane (EDB)	ND	0.00089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
Dibromomethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
1,2-Dichlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
1,3-Dichlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
1,4-Dichlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
trans-1,4-Dichloro-2-butene	ND	0.0036	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
1,1-Dichloroethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
1,2-Dichloroethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
1,1-Dichloroethylene	ND	0.0036	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
cis-1,2-Dichloroethylene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
trans-1,2-Dichloroethylene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
1,2-Dichloropropane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
1,3-Dichloropropane	ND	0.00089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
2,2-Dichloropropane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
1,1-Dichloropropene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
cis-1,3-Dichloropropene	ND	0.00089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
trans-1,3-Dichloropropene	ND	0.00089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
Diethyl Ether	ND	0.018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-11

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 10:53

Sample ID: 21G0035-17

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.00089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
1,4-Dioxane	ND	0.089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
Ethylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
Hexachlorobutadiene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
2-Hexanone (MBK)	ND	0.018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
Isopropylbenzene (Cumene)	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
Methyl Acetate	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0036	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
Methyl Cyclohexane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
Methylene Chloride	ND	0.018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
Naphthalene	ND	0.0036	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
n-Propylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
Styrene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
1,1,1,2-Tetrachloroethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
1,1,2,2-Tetrachloroethane	ND	0.00089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
Tetrachloroethylene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
Tetrahydrofuran	ND	0.0089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
Toluene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
1,2,3-Trichlorobenzene	ND	0.0018	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
1,2,4-Trichlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
1,3,5-Trichlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
1,1,1-Trichloroethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
1,1,2-Trichloroethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
Trichloroethylene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0089	mg/Kg dry	1	L-04, V-05	SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
1,2,3-Trichloropropane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
1,2,4-Trimethylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
1,3,5-Trimethylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
Vinyl Chloride	ND	0.0089	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
m+p Xylene	ND	0.0036	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
o-Xylene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:01	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		106	70-130					7/2/21 14:01	
Toluene-d8		107	70-130					7/2/21 14:01	
4-Bromofluorobenzene		112	70-130					7/2/21 14:01	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-11

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 10:53

Sample ID: 21G0035-17

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:17	BGL
Acenaphthylene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:17	BGL
Anthracene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:17	BGL
Benzo(a)anthracene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:17	BGL
Benzo(a)pyrene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:17	BGL
Benzo(b)fluoranthene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:17	BGL
Benzo(g,h,i)perylene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:17	BGL
Benzo(k)fluoranthene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:17	BGL
Chrysene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:17	BGL
Dibenz(a,h)anthracene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:17	BGL
Fluoranthene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:17	BGL
Fluorene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:17	BGL
Indeno(1,2,3-cd)pyrene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:17	BGL
2-Methylnaphthalene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:17	BGL
Naphthalene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:17	BGL
Phenanthrene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:17	BGL
Pyrene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:17	BGL
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		72.6	30-130					7/8/21 16:17	
2-Fluorobiphenyl		72.8	30-130					7/8/21 16:17	
p-Terphenyl-d14		97.3	30-130					7/8/21 16:17	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-11

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 10:53

Sample ID: 21G0035-17

Sample Matrix: Soil

**Polychlorinated Biphenyls with 3540 Soxhlet Extraction**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 23:51	JMB
Aroclor-1221 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 23:51	JMB
Aroclor-1232 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 23:51	JMB
Aroclor-1242 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 23:51	JMB
Aroclor-1248 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 23:51	JMB
Aroclor-1254 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 23:51	JMB
Aroclor-1260 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 23:51	JMB
Aroclor-1262 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 23:51	JMB
Aroclor-1268 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	7/7/21	7/10/21 23:51	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		77.8	30-150					7/10/21 23:51	
Decachlorobiphenyl [2]		68.3	30-150					7/10/21 23:51	
Tetrachloro-m-xylene [1]		88.6	30-150					7/10/21 23:51	
Tetrachloro-m-xylene [2]		81.7	30-150					7/10/21 23:51	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-11

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 10:53

Sample ID: 21G0035-17

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	11	8.5	mg/Kg dry	1	Z-01	SW-846 8015C	7/2/21	7/8/21 0:59	RDD
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
2-Fluorobiphenyl	68.6	40-140						7/8/21 0:59	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-11

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 10:53

Sample ID: 21G0035-17

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.6	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:06	MJH
Arsenic	ND	3.3	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:06	MJH
Beryllium	0.17	0.16	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:06	MJH
Cadmium	ND	0.33	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:06	MJH
Chromium	3.4	0.65	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:06	MJH
Copper	4.6	0.65	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:06	MJH
Lead	4.5	0.49	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:06	MJH
Mercury	ND	0.028	mg/Kg dry	1		SW-846 7471B	7/2/21	7/7/21 11:10	CJV
Nickel	3.1	0.65	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:06	MJH
Selenium	ND	3.3	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:06	MJH
Silver	ND	0.33	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:06	MJH
Thallium	ND	1.6	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:06	MJH
Zinc	21	0.65	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:06	MJH

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

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-11

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 10:53

Sample ID: 21G0035-17

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	97.3		% Wt	1		SM 2540G	7/2/21	7/3/21 9:40	JML



Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-11

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 11:01

Sample ID: 21G0035-18

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
Acrylonitrile	ND	0.0059	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
Benzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
Bromobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
Bromochloromethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
Bromodichloromethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
Bromoform	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
Bromomethane	ND	0.0099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
2-Butanone (MEK)	ND	0.040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
tert-Butyl Alcohol (TBA)	ND	0.099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
n-Butylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
sec-Butylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
tert-Butylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
Carbon Disulfide	ND	0.0059	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
Carbon Tetrachloride	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
Chlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
Chlorodibromomethane	ND	0.00099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
Chloroethane	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
Chloroform	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
Chloromethane	ND	0.0099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
2-Chlorotoluene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
4-Chlorotoluene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
1,2-Dibromoethane (EDB)	ND	0.00099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
Dibromomethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
1,2-Dichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
1,3-Dichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
1,4-Dichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
trans-1,4-Dichloro-2-butene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
1,1-Dichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
1,2-Dichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
1,1-Dichloroethylene	ND	0.0040	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
1,2-Dichloropropane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
1,3-Dichloropropane	ND	0.00099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
2,2-Dichloropropane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
1,1-Dichloropropene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
cis-1,3-Dichloropropene	ND	0.00099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
trans-1,3-Dichloropropene	ND	0.00099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
Diethyl Ether	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-11

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 11:01

Sample ID: 21G0035-18

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.00099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
1,4-Dioxane	ND	0.099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
Ethylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
Hexachlorobutadiene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
2-Hexanone (MBK)	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
Methyl Acetate	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
Methyl Cyclohexane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
Methylene Chloride	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
Naphthalene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
n-Propylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
Styrene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
1,1,2,2-Tetrachloroethane	ND	0.00099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
Tetrachloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
Tetrahydrofuran	ND	0.0099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
Toluene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
1,2,3-Trichlorobenzene	ND	0.0020	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
1,3,5-Trichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
1,1,1-Trichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
1,1,2-Trichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
Trichloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0099	mg/Kg dry	1	L-04, V-05	SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
1,2,3-Trichloropropane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
Vinyl Chloride	ND	0.0099	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
m+p Xylene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
o-Xylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:28	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		106	70-130					7/2/21 14:28	
Toluene-d8		106	70-130					7/2/21 14:28	
4-Bromofluorobenzene		113	70-130					7/2/21 14:28	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-11

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 11:01

Sample ID: 21G0035-18

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:45	BGL
Acenaphthylene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:45	BGL
Anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:45	BGL
Benzo(a)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:45	BGL
Benzo(a)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:45	BGL
Benzo(b)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:45	BGL
Benzo(g,h,i)perylene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:45	BGL
Benzo(k)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:45	BGL
Chrysene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:45	BGL
Dibenz(a,h)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:45	BGL
Fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:45	BGL
Fluorene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:45	BGL
Indeno(1,2,3-cd)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:45	BGL
2-Methylnaphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:45	BGL
Naphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:45	BGL
Phenanthrene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:45	BGL
Pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 16:45	BGL
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		44.2	30-130					7/8/21 16:45	
2-Fluorobiphenyl		44.6	30-130					7/8/21 16:45	
p-Terphenyl-d14		65.8	30-130					7/8/21 16:45	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-11

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 11:01

Sample ID: 21G0035-18

Sample Matrix: Soil

**Polychlorinated Biphenyls with 3540 Soxhlet Extraction**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/11/21 0:08	JMB
Aroclor-1221 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/11/21 0:08	JMB
Aroclor-1232 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/11/21 0:08	JMB
Aroclor-1242 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/11/21 0:08	JMB
Aroclor-1248 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/11/21 0:08	JMB
Aroclor-1254 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/11/21 0:08	JMB
Aroclor-1260 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/11/21 0:08	JMB
Aroclor-1262 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/11/21 0:08	JMB
Aroclor-1268 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	7/7/21	7/11/21 0:08	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		72.9	30-150					7/11/21 0:08	
Decachlorobiphenyl [2]		64.5	30-150					7/11/21 0:08	
Tetrachloro-m-xylene [1]		79.3	30-150					7/11/21 0:08	
Tetrachloro-m-xylene [2]		73.3	30-150					7/11/21 0:08	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-11

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 11:01

Sample ID: 21G0035-18

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	21	9.2	mg/Kg dry	1	Z-01	SW-846 8015C	7/2/21	7/8/21 1:20	RDD
<b>Surrogates</b>		<b>% Recovery</b>	<b>Recovery Limits</b>		<b>Flag/Qual</b>				
2-Fluorobiphenyl		56.7	40-140					7/8/21 1:20	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-11

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 11:01

Sample ID: 21G0035-18

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.8	mg/Kg dry	1	MS-07	SW-846 6010D	7/2/21	7/6/21 20:39	MJH
Arsenic	ND	3.6	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 20:39	MJH
Beryllium	0.24	0.18	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 20:39	MJH
Cadmium	ND	0.36	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 20:39	MJH
Chromium	4.7	0.72	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 20:39	MJH
Copper	3.7	0.72	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 20:39	MJH
Lead	1.8	0.54	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 20:39	MJH
Mercury	ND	0.031	mg/Kg dry	1		SW-846 7471B	7/2/21	7/7/21 11:11	CJV
Nickel	3.1	0.72	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 20:39	MJH
Selenium	ND	3.6	mg/Kg dry	1	MS-07	SW-846 6010D	7/2/21	7/6/21 20:39	MJH
Silver	ND	0.36	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 20:39	MJH
Thallium	ND	1.8	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 20:39	MJH
Zinc	19	0.72	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 20:39	MJH

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

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-11

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 11:01

Sample ID: 21G0035-18

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	90.6		% Wt	1		SM 2540G	7/2/21	7/3/21 9:40	JML

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-12

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 12:20

Sample ID: 21G0035-19

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
Acrylonitrile	ND	0.0068	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
Benzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
Bromobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
Bromochloromethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
Bromodichloromethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
Bromoform	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
Bromomethane	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
2-Butanone (MEK)	ND	0.045	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
tert-Butyl Alcohol (TBA)	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
n-Butylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
sec-Butylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
tert-Butylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
Carbon Disulfide	ND	0.0068	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
Carbon Tetrachloride	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
Chlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
Chlorodibromomethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
Chloroethane	ND	0.023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
Chloroform	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
Chloromethane	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
2-Chlorotoluene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
4-Chlorotoluene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
1,2-Dibromoethane (EDB)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
Dibromomethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
1,2-Dichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
1,3-Dichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
1,4-Dichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
trans-1,4-Dichloro-2-butene	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
1,1-Dichloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
1,2-Dichloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
1,1-Dichloroethylene	ND	0.0045	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
cis-1,2-Dichloroethylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
trans-1,2-Dichloroethylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
1,2-Dichloropropane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
1,3-Dichloropropane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
2,2-Dichloropropane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
1,1-Dichloropropene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
cis-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
trans-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
Diethyl Ether	ND	0.023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF



Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-12

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 12:20

Sample ID: 21G0035-19

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
1,4-Dioxane	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
Ethylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
Hexachlorobutadiene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
2-Hexanone (MBK)	ND	0.023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
Isopropylbenzene (Cumene)	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
Methyl Acetate	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
Methyl Cyclohexane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
Methylene Chloride	ND	0.023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
Naphthalene	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
n-Propylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
Styrene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
1,1,1,2-Tetrachloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
1,1,2,2-Tetrachloroethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
Tetrachloroethylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
Tetrahydrofuran	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
Toluene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
1,2,3-Trichlorobenzene	ND	0.0023	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
1,2,4-Trichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
1,3,5-Trichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
1,1,1-Trichloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
1,1,2-Trichloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
Trichloroethylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
Trichlorofluoromethane (Freon 11)	ND	0.011	mg/Kg dry	1	L-04, V-05	SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
1,2,3-Trichloropropane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
1,2,4-Trimethylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
1,3,5-Trimethylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
Vinyl Chloride	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
m+p Xylene	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
o-Xylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 14:56	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		99.8	70-130					7/2/21 14:56	
Toluene-d8		105	70-130					7/2/21 14:56	
4-Bromofluorobenzene		107	70-130					7/2/21 14:56	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-12

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 12:20

Sample ID: 21G0035-19

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:21	BGL
Acenaphthylene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:21	BGL
Anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:21	BGL
Benzo(a)anthracene	0.52	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:21	BGL
Benzo(a)pyrene	0.45	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:21	BGL
Benzo(b)fluoranthene	0.60	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:21	BGL
Benzo(g,h,i)perylene	0.27	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:21	BGL
Benzo(k)fluoranthene	0.25	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:21	BGL
Chrysene	0.50	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:21	BGL
Dibenz(a,h)anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:21	BGL
Fluoranthene	1.1	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:21	BGL
Fluorene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:21	BGL
Indeno(1,2,3-cd)pyrene	0.27	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:21	BGL
2-Methylnaphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:21	BGL
Naphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:21	BGL
Phenanthrene	0.62	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:21	BGL
Pyrene	0.92	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:21	BGL
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		62.7	30-130					7/8/21 15:21	
2-Fluorobiphenyl		67.5	30-130					7/8/21 15:21	
p-Terphenyl-d14		90.2	30-130					7/8/21 15:21	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-12

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 12:20

Sample ID: 21G0035-19

Sample Matrix: Soil

**Polychlorinated Biphenyls with 3540 Soxhlet Extraction**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/11/21 0:26	JMB
Aroclor-1221 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/11/21 0:26	JMB
Aroclor-1232 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/11/21 0:26	JMB
Aroclor-1242 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/11/21 0:26	JMB
Aroclor-1248 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/11/21 0:26	JMB
Aroclor-1254 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/11/21 0:26	JMB
Aroclor-1260 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/11/21 0:26	JMB
Aroclor-1262 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/11/21 0:26	JMB
Aroclor-1268 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/11/21 0:26	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		83.7	30-150					7/11/21 0:26	
Decachlorobiphenyl [2]		73.8	30-150					7/11/21 0:26	
Tetrachloro-m-xylene [1]		91.5	30-150					7/11/21 0:26	
Tetrachloro-m-xylene [2]		83.6	30-150					7/11/21 0:26	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-12

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 12:20

Sample ID: 21G0035-19

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	210	18	mg/Kg dry	2	O-26	SW-846 8015C	7/2/21	7/8/21 3:05	RDD
<b>Surrogates</b>		<b>% Recovery</b>	<b>Recovery Limits</b>		<b>Flag/Qual</b>				
2-Fluorobiphenyl		70.8	40-140					7/8/21 3:05	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-12

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 12:20

Sample ID: 21G0035-19

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.7	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:13	MJH
Arsenic	14	3.5	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:13	MJH
Beryllium	0.44	0.17	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:13	MJH
Cadmium	ND	0.35	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:13	MJH
Chromium	22	0.70	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:13	MJH
Copper	16	0.70	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:13	MJH
Lead	57	0.52	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:13	MJH
Mercury	0.052	0.030	mg/Kg dry	1		SW-846 7471B	7/2/21	7/6/21 13:11	CJV
Nickel	7.4	0.70	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:13	MJH
Selenium	ND	3.5	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:13	MJH
Silver	ND	0.35	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:13	MJH
Thallium	ND	1.7	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:13	MJH
Zinc	37	0.70	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:13	MJH



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

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-12

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 12:20

Sample ID: 21G0035-19

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	94.6		% Wt	1		SM 2540G	7/2/21	7/3/21 9:40	JML

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-12

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 12:30

Sample ID: 21G0035-20

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.084	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
Acrylonitrile	ND	0.0051	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00084	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
Benzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
Bromobenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
Bromochloromethane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
Bromodichloromethane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
Bromoform	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
Bromomethane	ND	0.0084	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
2-Butanone (MEK)	ND	0.034	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
tert-Butyl Alcohol (TBA)	ND	0.084	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
n-Butylbenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
sec-Butylbenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
tert-Butylbenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00084	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
Carbon Disulfide	ND	0.0051	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
Carbon Tetrachloride	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
Chlorobenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
Chlorodibromomethane	ND	0.00084	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
Chloroethane	ND	0.017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
Chloroform	ND	0.0034	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
Chloromethane	ND	0.0084	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
2-Chlorotoluene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
4-Chlorotoluene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
1,2-Dibromoethane (EDB)	ND	0.00084	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
Dibromomethane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
1,2-Dichlorobenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
1,3-Dichlorobenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
1,4-Dichlorobenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
trans-1,4-Dichloro-2-butene	ND	0.0034	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
1,1-Dichloroethane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
1,2-Dichloroethane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
1,1-Dichloroethylene	ND	0.0034	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
cis-1,2-Dichloroethylene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
trans-1,2-Dichloroethylene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
1,2-Dichloropropane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
1,3-Dichloropropane	ND	0.00084	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
2,2-Dichloropropane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
1,1-Dichloropropene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
cis-1,3-Dichloropropene	ND	0.00084	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
trans-1,3-Dichloropropene	ND	0.00084	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
Diethyl Ether	ND	0.017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-12

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 12:30

Sample ID: 21G0035-20

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.00084	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
1,4-Dioxane	ND	0.084	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
Ethylbenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
Hexachlorobutadiene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
2-Hexanone (MBK)	ND	0.017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
Isopropylbenzene (Cumene)	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
Methyl Acetate	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0034	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
Methyl Cyclohexane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
Methylene Chloride	ND	0.017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
Naphthalene	ND	0.0034	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
n-Propylbenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
Styrene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
1,1,1,2-Tetrachloroethane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
1,1,2,2-Tetrachloroethane	ND	0.00084	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
Tetrachloroethylene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
Tetrahydrofuran	ND	0.0084	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
Toluene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
1,2,3-Trichlorobenzene	ND	0.0017	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
1,2,4-Trichlorobenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
1,3,5-Trichlorobenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
1,1,1-Trichloroethane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
1,1,2-Trichloroethane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
Trichloroethylene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0084	mg/Kg dry	1	L-04, V-05	SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
1,2,3-Trichloropropane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0084	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
1,2,4-Trimethylbenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
1,3,5-Trimethylbenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
Vinyl Chloride	ND	0.0084	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
m+p Xylene	ND	0.0034	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
o-Xylene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:23	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		107	70-130					7/2/21 15:23	
Toluene-d8		110	70-130					7/2/21 15:23	
4-Bromofluorobenzene		109	70-130					7/2/21 15:23	



Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-12

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 12:30

Sample ID: 21G0035-20

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:49	BGL
Acenaphthylene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:49	BGL
Anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:49	BGL
Benzo(a)anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:49	BGL
Benzo(a)pyrene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:49	BGL
Benzo(b)fluoranthene	0.21	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:49	BGL
Benzo(g,h,i)perylene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:49	BGL
Benzo(k)fluoranthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:49	BGL
Chrysene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:49	BGL
Dibenz(a,h)anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:49	BGL
Fluoranthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:49	BGL
Fluorene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:49	BGL
Indeno(1,2,3-cd)pyrene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:49	BGL
2-Methylnaphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:49	BGL
Naphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:49	BGL
Phenanthrene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:49	BGL
Pyrene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 15:49	BGL
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		72.5	30-130					7/8/21 15:49	
2-Fluorobiphenyl		71.7	30-130					7/8/21 15:49	
p-Terphenyl-d14		88.6	30-130					7/8/21 15:49	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-12

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 12:30

Sample ID: 21G0035-20

Sample Matrix: Soil

**Polychlorinated Biphenyls with 3540 Soxhlet Extraction**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/11/21 0:43	JMB
Aroclor-1221 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/11/21 0:43	JMB
Aroclor-1232 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/11/21 0:43	JMB
Aroclor-1242 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/11/21 0:43	JMB
Aroclor-1248 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/11/21 0:43	JMB
Aroclor-1254 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/11/21 0:43	JMB
Aroclor-1260 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/11/21 0:43	JMB
Aroclor-1262 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/11/21 0:43	JMB
Aroclor-1268 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	7/7/21	7/11/21 0:43	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		79.5	30-150					7/11/21 0:43	
Decachlorobiphenyl [2]		71.2	30-150					7/11/21 0:43	
Tetrachloro-m-xylene [1]		85.4	30-150					7/11/21 0:43	
Tetrachloro-m-xylene [2]		78.3	30-150					7/11/21 0:43	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-12

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 12:30

Sample ID: 21G0035-20

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	160	18	mg/Kg dry	2	O-25	SW-846 8015C	7/2/21	7/8/21 2:44	RDD
<b>Surrogates</b>		<b>% Recovery</b>	<b>Recovery Limits</b>		<b>Flag/Qual</b>				
2-Fluorobiphenyl		69.6	40-140					7/8/21 2:44	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-12

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 12:30

Sample ID: 21G0035-20

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.7	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:20	MJH
Arsenic	7.4	3.5	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:20	MJH
Beryllium	0.39	0.17	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:20	MJH
Cadmium	ND	0.35	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:20	MJH
Chromium	15	0.70	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:20	MJH
Copper	12	0.70	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:20	MJH
Lead	20	0.52	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:20	MJH
Mercury	ND	0.029	mg/Kg dry	1		SW-846 7471B	7/2/21	7/6/21 10:56	CJV
Nickel	6.9	0.70	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:20	MJH
Selenium	ND	3.5	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:20	MJH
Silver	ND	0.35	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:20	MJH
Thallium	ND	1.7	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:20	MJH
Zinc	28	0.70	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:20	MJH

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

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-12

Work Order: 21G0035

Date Received: 7/1/2021

Field Sample #: 1603210629-1

Sampled: 6/29/2021 12:30

Sample ID: 21G0035-20

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	94.2		% Wt	1		SM 2540G	7/2/21	7/3/21 9:40	JML

**Sample Extraction Data**
**Prep Method: % Solids    Analytical Method: SM 2540G**

Lab Number [Field ID]	Batch	Date
21G0035-01 [1603210628-01]	B285260	07/02/21
21G0035-02 [1603210628-02]	B285260	07/02/21
21G0035-03 [1603210628-03]	B285260	07/02/21
21G0035-04 [1603210628-04]	B285260	07/02/21
21G0035-05 [1603210628-05]	B285260	07/02/21
21G0035-06 [1603210628-06]	B285260	07/02/21
21G0035-07 [1603210628-07]	B285260	07/02/21
21G0035-08 [1603210628-08]	B285260	07/02/21
21G0035-09 [1603210628-09]	B285260	07/02/21
21G0035-10 [1603210628-10]	B285260	07/02/21
21G0035-11 [1603210628-11]	B285260	07/02/21
21G0035-12 [1603210628-12]	B285260	07/02/21
21G0035-14 [1603210629-1]	B285260	07/02/21
21G0035-15 [1603210629-1]	B285260	07/02/21
21G0035-16 [1603210629-1]	B285260	07/02/21
21G0035-17 [1603210629-1]	B285260	07/02/21
21G0035-18 [1603210629-1]	B285260	07/02/21
21G0035-19 [1603210629-1]	B285260	07/02/21
21G0035-20 [1603210629-1]	B285260	07/02/21

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

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
21G0035-16 [1603210629-1]	B285206	1.54	50.0	07/02/21
21G0035-17 [1603210629-1]	B285206	1.57	50.0	07/02/21
21G0035-18 [1603210629-1]	B285206	1.54	50.0	07/02/21
21G0035-19 [1603210629-1]	B285206	1.51	50.0	07/02/21
21G0035-20 [1603210629-1]	B285206	1.52	50.0	07/02/21

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

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
21G0035-01 [1603210628-01]	B285207	1.55	50.0	07/02/21
21G0035-02 [1603210628-02]	B285207	1.56	50.0	07/02/21
21G0035-03 [1603210628-03]	B285207	1.51	50.0	07/02/21
21G0035-04 [1603210628-04]	B285207	1.51	50.0	07/02/21
21G0035-05 [1603210628-05]	B285207	1.53	50.0	07/02/21
21G0035-06 [1603210628-06]	B285207	1.54	50.0	07/02/21
21G0035-07 [1603210628-07]	B285207	1.57	50.0	07/02/21
21G0035-08 [1603210628-08]	B285207	1.54	50.0	07/02/21
21G0035-09 [1603210628-09]	B285207	1.52	50.0	07/02/21
21G0035-10 [1603210628-10]	B285207	1.52	50.0	07/02/21
21G0035-11 [1603210628-11]	B285207	1.52	50.0	07/02/21
21G0035-12 [1603210628-12]	B285207	1.57	50.0	07/02/21
21G0035-14 [1603210629-1]	B285207	1.53	50.0	07/02/21
21G0035-15 [1603210629-1]	B285207	1.58	50.0	07/02/21

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

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
21G0035-19 [1603210629-1]	B285230	0.532	50.0	07/02/21

**Sample Extraction Data**
**Prep Method: SW-846 7471 Analytical Method: SW-846 7471B**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
21G0035-20 [1603210629-1]	B285230	0.557	50.0	07/02/21

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

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
21G0035-01 [1603210628-01]	B285231	0.505	50.0	07/02/21
21G0035-02 [1603210628-02]	B285231	0.523	50.0	07/02/21
21G0035-03 [1603210628-03]	B285231	0.560	50.0	07/02/21
21G0035-04 [1603210628-04]	B285231	0.530	50.0	07/02/21
21G0035-05 [1603210628-05]	B285231	0.507	50.0	07/02/21
21G0035-06 [1603210628-06]	B285231	0.594	50.0	07/02/21
21G0035-07 [1603210628-07]	B285231	0.569	50.0	07/02/21
21G0035-08 [1603210628-08]	B285231	0.566	50.0	07/02/21
21G0035-09 [1603210628-09]	B285231	0.576	50.0	07/02/21
21G0035-10 [1603210628-10]	B285231	0.513	50.0	07/02/21
21G0035-11 [1603210628-11]	B285231	0.588	50.0	07/02/21
21G0035-12 [1603210628-12]	B285231	0.515	50.0	07/02/21
21G0035-14 [1603210629-1]	B285231	0.538	50.0	07/02/21
21G0035-15 [1603210629-1]	B285231	0.556	50.0	07/02/21
21G0035-16 [1603210629-1]	B285231	0.536	50.0	07/02/21
21G0035-17 [1603210629-1]	B285231	0.542	50.0	07/02/21
21G0035-18 [1603210629-1]	B285231	0.542	50.0	07/02/21

**Prep Method: SW-846 3546 Analytical Method: SW-846 8015C**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
21G0035-01 [1603210628-01]	B285208	30.3	1.00	07/02/21
21G0035-02 [1603210628-02]	B285208	30.2	1.00	07/02/21
21G0035-03 [1603210628-03]	B285208	30.3	1.00	07/02/21
21G0035-04 [1603210628-04]	B285208	30.1	1.00	07/02/21
21G0035-05 [1603210628-05]	B285208	30.2	1.00	07/02/21
21G0035-06 [1603210628-06]	B285208	30.2	1.00	07/02/21
21G0035-07 [1603210628-07]	B285208	30.0	1.00	07/02/21
21G0035-08 [1603210628-08]	B285208	30.2	1.00	07/02/21
21G0035-09 [1603210628-09]	B285208	30.2	1.00	07/02/21
21G0035-10 [1603210628-10]	B285208	30.1	1.00	07/02/21
21G0035-11 [1603210628-11]	B285208	30.1	1.00	07/02/21
21G0035-12 [1603210628-12]	B285208	30.3	1.00	07/02/21
21G0035-14 [1603210629-1]	B285208	30.5	1.00	07/02/21
21G0035-15 [1603210629-1]	B285208	30.2	1.00	07/02/21
21G0035-16 [1603210629-1]	B285208	30.2	1.00	07/02/21
21G0035-17 [1603210629-1]	B285208	30.4	1.00	07/02/21
21G0035-18 [1603210629-1]	B285208	30.1	1.00	07/02/21
21G0035-19 [1603210629-1]	B285208	30.0	1.00	07/02/21
21G0035-20 [1603210629-1]	B285208	30.3	1.00	07/02/21

**Prep Method: SW-846 3540C Analytical Method: SW-846 8082A**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
21G0035-01 [1603210628-01]	B285421	10.0	10.0	07/07/21
21G0035-02 [1603210628-02]	B285421	10.0	10.0	07/07/21

**Sample Extraction Data**
**Prep Method: SW-846 3540C    Analytical Method: SW-846 8082A**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
21G0035-03 [1603210628-03]	B285421	10.0	10.0	07/07/21
21G0035-04 [1603210628-04]	B285421	10.0	10.0	07/07/21
21G0035-05 [1603210628-05]	B285421	10.0	10.0	07/07/21
21G0035-06 [1603210628-06]	B285421	10.0	10.0	07/07/21
21G0035-07 [1603210628-07]	B285421	10.0	10.0	07/07/21
21G0035-08 [1603210628-08]	B285421	10.0	10.0	07/07/21
21G0035-09 [1603210628-09]	B285421	10.0	10.0	07/07/21
21G0035-10 [1603210628-10]	B285421	10.0	10.0	07/07/21
21G0035-11 [1603210628-11]	B285421	10.0	10.0	07/07/21
21G0035-12 [1603210628-12]	B285421	10.0	10.0	07/07/21
21G0035-14 [1603210629-1]	B285421	10.0	10.0	07/07/21
21G0035-15 [1603210629-1]	B285421	10.0	10.0	07/07/21
21G0035-16 [1603210629-1]	B285421	10.0	10.0	07/07/21
21G0035-17 [1603210629-1]	B285421	10.0	10.0	07/07/21
21G0035-18 [1603210629-1]	B285421	10.0	10.0	07/07/21
21G0035-19 [1603210629-1]	B285421	10.0	10.0	07/07/21
21G0035-20 [1603210629-1]	B285421	10.0	10.0	07/07/21

**Prep Method: SW-846 5035/5030B    Analytical Method: SW-846 8260C-D**

Lab Number [Field ID]	Batch	Sample Amount(g)	Methanol Volume(mL)	Methanol Aliquot(mL)	Final Volume(mL)	Date
21G0035-08 [1603210628-08]	B285216	13.4	10.8	1	50	07/02/21
21G0035-11 [1603210628-11]	B285216	12.2	10.7	1	50	07/02/21
21G0035-12 [1603210628-12]	B285216	10.6	11.0	1	50	07/02/21

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

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
21G0035-01 [1603210628-01]	B285222	5.88	10.0	07/02/21
21G0035-02 [1603210628-02]	B285222	6.75	10.0	07/02/21
21G0035-03 [1603210628-03]	B285222	4.90	10.0	07/02/21
21G0035-04 [1603210628-04]	B285222	4.82	10.0	07/02/21
21G0035-05 [1603210628-05]	B285222	5.41	10.0	07/02/21
21G0035-06 [1603210628-06]	B285222	5.57	10.0	07/02/21
21G0035-07 [1603210628-07]	B285222	4.25	10.0	07/02/21
21G0035-09 [1603210628-09]	B285222	5.67	10.0	07/02/21
21G0035-10 [1603210628-10]	B285222	2.80	10.0	07/02/21
21G0035-13 [1603210628-13]	B285222	5.00	10.0	07/02/21
21G0035-14 [1603210629-1]	B285222	4.36	10.0	07/02/21
21G0035-15 [1603210629-1]	B285222	4.95	10.0	07/02/21

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

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
21G0035-16 [1603210629-1]	B285252	2.58	10.0	07/02/21
21G0035-17 [1603210629-1]	B285252	5.79	10.0	07/02/21
21G0035-18 [1603210629-1]	B285252	5.58	10.0	07/02/21
21G0035-19 [1603210629-1]	B285252	4.67	10.0	07/02/21
21G0035-20 [1603210629-1]	B285252	6.29	10.0	07/02/21



**Sample Extraction Data**

Prep Method: SW-846 3546 Analytical Method: SW-846 8270D-E

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
21G0035-01 [1603210628-01]	B285209	30.3	1.00	07/02/21
21G0035-01RE1 [1603210628-01]	B285209	30.3	1.00	07/02/21
21G0035-01RE2 [1603210628-01]	B285209	30.3	1.00	07/02/21
21G0035-02 [1603210628-02]	B285209	30.2	1.00	07/02/21
21G0035-03 [1603210628-03]	B285209	30.3	1.00	07/02/21
21G0035-04 [1603210628-04]	B285209	30.1	1.00	07/02/21
21G0035-05 [1603210628-05]	B285209	30.2	1.00	07/02/21
21G0035-06 [1603210628-06]	B285209	30.2	1.00	07/02/21
21G0035-07 [1603210628-07]	B285209	30.0	1.00	07/02/21
21G0035-08 [1603210628-08]	B285209	30.2	1.00	07/02/21
21G0035-09 [1603210628-09]	B285209	30.2	1.00	07/02/21
21G0035-10 [1603210628-10]	B285209	30.1	1.00	07/02/21
21G0035-11 [1603210628-11]	B285209	30.1	1.00	07/02/21
21G0035-12 [1603210628-12]	B285209	30.3	1.00	07/02/21
21G0035-14 [1603210629-1]	B285209	30.5	1.00	07/02/21
21G0035-14RE1 [1603210629-1]	B285209	30.5	1.00	07/02/21
21G0035-15 [1603210629-1]	B285209	30.2	1.00	07/02/21
21G0035-16 [1603210629-1]	B285209	30.2	1.00	07/02/21
21G0035-17 [1603210629-1]	B285209	30.4	1.00	07/02/21
21G0035-18 [1603210629-1]	B285209	30.1	1.00	07/02/21
21G0035-19 [1603210629-1]	B285209	30.0	1.00	07/02/21
21G0035-20 [1603210629-1]	B285209	30.3	1.00	07/02/21

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch B285216 - SW-846 5035/5030B**
**Blank (B285216-BLK1)**

Prepared &amp; Analyzed: 07/02/21

Acetone	ND	2.5	mg/Kg wet							
Acrylonitrile	ND	0.25	mg/Kg wet							
tert-Amyl Methyl Ether (TAME)	ND	0.025	mg/Kg wet							
Benzene	ND	0.050	mg/Kg wet							
Bromobenzene	ND	0.050	mg/Kg wet							
Bromochloromethane	ND	0.050	mg/Kg wet							L-04, V-05
Bromodichloromethane	ND	0.050	mg/Kg wet							
Bromoform	ND	0.050	mg/Kg wet							
Bromomethane	ND	0.10	mg/Kg wet							V-34
2-Butanone (MEK)	ND	1.0	mg/Kg wet							
tert-Butyl Alcohol (TBA)	ND	1.0	mg/Kg wet							
n-Butylbenzene	ND	0.050	mg/Kg wet							
sec-Butylbenzene	ND	0.050	mg/Kg wet							
tert-Butylbenzene	ND	0.050	mg/Kg wet							
tert-Butyl Ethyl Ether (TBEE)	ND	0.025	mg/Kg wet							
Carbon Disulfide	ND	0.25	mg/Kg wet							
Carbon Tetrachloride	ND	0.050	mg/Kg wet							
Chlorobenzene	ND	0.050	mg/Kg wet							
Chlorodibromomethane	ND	0.025	mg/Kg wet							
Chloroethane	ND	0.10	mg/Kg wet							R-05
Chloroform	ND	0.10	mg/Kg wet							
Chloromethane	ND	0.10	mg/Kg wet							
2-Chlorotoluene	ND	0.050	mg/Kg wet							
4-Chlorotoluene	ND	0.050	mg/Kg wet							
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.25	mg/Kg wet							
1,2-Dibromoethane (EDB)	ND	0.025	mg/Kg wet							
Dibromomethane	ND	0.050	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.050	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.050	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.050	mg/Kg wet							
trans-1,4-Dichloro-2-butene	ND	0.10	mg/Kg wet							
Dichlorodifluoromethane (Freon 12)	ND	0.10	mg/Kg wet							
1,1-Dichloroethane	ND	0.050	mg/Kg wet							
1,2-Dichloroethane	ND	0.050	mg/Kg wet							
1,1-Dichloroethylene	ND	0.050	mg/Kg wet							
cis-1,2-Dichloroethylene	ND	0.050	mg/Kg wet							
trans-1,2-Dichloroethylene	ND	0.050	mg/Kg wet							
Dichlorofluoromethane (Freon 21)	ND	0.050	mg/Kg wet							
1,2-Dichloropropane	ND	0.050	mg/Kg wet							
1,3-Dichloropropane	ND	0.025	mg/Kg wet							
2,2-Dichloropropane	ND	0.050	mg/Kg wet							
1,1-Dichloropropene	ND	0.10	mg/Kg wet							
cis-1,3-Dichloropropene	ND	0.025	mg/Kg wet							
trans-1,3-Dichloropropene	ND	0.025	mg/Kg wet							
Diethyl Ether	ND	0.10	mg/Kg wet							
Difluorochloromethane (Freon 22)	ND	0.050	mg/Kg wet							
Diisopropyl Ether (DIPE)	ND	0.025	mg/Kg wet							
1,4-Dioxane	ND	2.5	mg/Kg wet							
Ethylbenzene	ND	0.050	mg/Kg wet							
Hexachlorobutadiene	ND	0.050	mg/Kg wet							
2-Hexanone (MBK)	ND	0.50	mg/Kg wet							
Isopropylbenzene (Cumene)	ND	0.050	mg/Kg wet							

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch B285216 - SW-846 5035/5030B**
**Blank (B285216-BLK1)**

Prepared &amp; Analyzed: 07/02/21

p-Isopropyltoluene (p-Cymene)	ND	0.050	mg/Kg wet							
Methyl Acetate	ND	0.50	mg/Kg wet							
Methyl tert-Butyl Ether (MTBE)	ND	0.050	mg/Kg wet							
Methyl Cyclohexane	ND	0.050	mg/Kg wet							
Methylene Chloride	ND	0.25	mg/Kg wet							
4-Methyl-2-pentanone (MIBK)	ND	0.50	mg/Kg wet							
Naphthalene	ND	0.10	mg/Kg wet							
n-Propylbenzene	ND	0.050	mg/Kg wet							
Styrene	ND	0.050	mg/Kg wet							
1,1,1,2-Tetrachloroethane	ND	0.050	mg/Kg wet							
1,1,2,2-Tetrachloroethane	ND	0.025	mg/Kg wet							
Tetrachloroethylene	ND	0.050	mg/Kg wet							
Tetrahydrofuran	ND	0.50	mg/Kg wet							
Toluene	ND	0.050	mg/Kg wet							
1,2,3-Trichlorobenzene	ND	0.25	mg/Kg wet							
1,2,4-Trichlorobenzene	ND	0.050	mg/Kg wet							
1,3,5-Trichlorobenzene	ND	0.050	mg/Kg wet							
1,1,1-Trichloroethane	ND	0.050	mg/Kg wet							
1,1,2-Trichloroethane	ND	0.050	mg/Kg wet							
Trichloroethylene	ND	0.050	mg/Kg wet							
Trichlorofluoromethane (Freon 11)	ND	0.10	mg/Kg wet							
1,2,3-Trichloropropane	ND	0.10	mg/Kg wet							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.050	mg/Kg wet							
1,2,4-Trimethylbenzene	ND	0.050	mg/Kg wet							
1,3,5-Trimethylbenzene	ND	0.050	mg/Kg wet							
Vinyl Chloride	ND	0.10	mg/Kg wet							
m+p Xylene	ND	0.10	mg/Kg wet							
o-Xylene	ND	0.050	mg/Kg wet							
Surrogate: 1,2-Dichloroethane-d4	0.0222		mg/Kg wet	0.0250		88.6	70-130			
Surrogate: Toluene-d8	0.0241		mg/Kg wet	0.0250		96.3	70-130			
Surrogate: 4-Bromofluorobenzene	0.0242		mg/Kg wet	0.0250		96.8	70-130			

**LCS (B285216-BS1)**

Prepared &amp; Analyzed: 07/02/21

Acetone	0.237	0.057	mg/Kg wet	0.227		105	70-160			†
Acrylonitrile	0.0133	0.0057	mg/Kg wet	0.0113		117	70-130			
tert-Amyl Methyl Ether (TAME)	0.00845	0.00057	mg/Kg wet	0.0113		74.6	70-130			
Benzene	0.0103	0.0011	mg/Kg wet	0.0113		91.2	70-130			
Bromobenzene	0.0123	0.0011	mg/Kg wet	0.0113		109	70-130			
<b>Bromochloromethane</b>	0.00790	0.0011	mg/Kg wet	0.0113		<b>69.7</b> *	70-130			V-05, L-04
Bromodichloromethane	0.0112	0.0011	mg/Kg wet	0.0113		99.1	70-130			
Bromoform	0.0144	0.0011	mg/Kg wet	0.0113		127	70-130			V-20
Bromomethane	0.0140	0.0023	mg/Kg wet	0.0113		124	40-130			V-34 †
2-Butanone (MEK)	0.236	0.023	mg/Kg wet	0.227		104	70-160			†
tert-Butyl Alcohol (TBA)	0.124	0.023	mg/Kg wet	0.113		109	40-130			†
n-Butylbenzene	0.0114	0.0011	mg/Kg wet	0.0113		100	70-130			
sec-Butylbenzene	0.0115	0.0011	mg/Kg wet	0.0113		102	70-130			
tert-Butylbenzene	0.0117	0.0011	mg/Kg wet	0.0113		103	70-160			†
tert-Butyl Ethyl Ether (TBEE)	0.00899	0.00057	mg/Kg wet	0.0113		79.3	70-130			
Carbon Disulfide	0.230	0.0057	mg/Kg wet	0.227		102	70-130			
Carbon Tetrachloride	0.0113	0.0011	mg/Kg wet	0.0113		99.3	70-130			
Chlorobenzene	0.0125	0.0011	mg/Kg wet	0.0113		111	70-130			
Chlorodibromomethane	0.0123	0.00057	mg/Kg wet	0.0113		108	70-130			

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B285216 - SW-846 5035/5030B</b>										
<b>LCS (B285216-BS1)</b>										
Prepared & Analyzed: 07/02/21										
Chloroethane	0.00900	0.0023	mg/Kg wet	0.0113		79.4	70-130			R-05
Chloroform	0.0105	0.0023	mg/Kg wet	0.0113		92.5	70-130			
Chloromethane	0.0134	0.0023	mg/Kg wet	0.0113		118	70-130			
2-Chlorotoluene	0.0114	0.0011	mg/Kg wet	0.0113		101	70-130			
4-Chlorotoluene	0.0123	0.0011	mg/Kg wet	0.0113		108	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	0.0106	0.0057	mg/Kg wet	0.0113		93.8	70-130			
1,2-Dibromoethane (EDB)	0.0117	0.00057	mg/Kg wet	0.0113		103	70-130			
Dibromomethane	0.0120	0.0011	mg/Kg wet	0.0113		106	70-130			
1,2-Dichlorobenzene	0.0124	0.0011	mg/Kg wet	0.0113		109	70-130			
1,3-Dichlorobenzene	0.0121	0.0011	mg/Kg wet	0.0113		107	70-130			
1,4-Dichlorobenzene	0.0119	0.0011	mg/Kg wet	0.0113		105	70-130			
trans-1,4-Dichloro-2-butene	0.0105	0.0023	mg/Kg wet	0.0113		92.5	70-130			
Dichlorodifluoromethane (Freon 12)	0.0112	0.0023	mg/Kg wet	0.0113		98.9	40-160			†
1,1-Dichloroethane	0.0107	0.0011	mg/Kg wet	0.0113		94.4	70-130			
1,2-Dichloroethane	0.0110	0.0011	mg/Kg wet	0.0113		97.4	70-130			
1,1-Dichloroethylene	0.0118	0.0011	mg/Kg wet	0.0113		104	70-130			
cis-1,2-Dichloroethylene	0.0107	0.0011	mg/Kg wet	0.0113		94.0	70-130			
trans-1,2-Dichloroethylene	0.00938	0.0011	mg/Kg wet	0.0113		82.8	70-130			
Dichlorofluoromethane (Freon 21)	0.0116	0.0011	mg/Kg wet	0.0113		102	70-130			
1,2-Dichloropropane	0.0116	0.0011	mg/Kg wet	0.0113		102	70-130			
1,3-Dichloropropane	0.0116	0.00057	mg/Kg wet	0.0113		103	70-130			
2,2-Dichloropropane	0.00968	0.0011	mg/Kg wet	0.0113		85.4	70-130			
1,1-Dichloropropene	0.0108	0.0023	mg/Kg wet	0.0113		94.9	70-130			
cis-1,3-Dichloropropene	0.0113	0.00057	mg/Kg wet	0.0113		100	70-130			
trans-1,3-Dichloropropene	0.0108	0.00057	mg/Kg wet	0.0113		95.7	70-130			
Diethyl Ether	0.0121	0.0023	mg/Kg wet	0.0113		106	70-130			
Difluorochloromethane (Freon 22)	0.0107	0.0011	mg/Kg wet	0.0113		94.1	70-130			
Diisopropyl Ether (DIPE)	0.0106	0.00057	mg/Kg wet	0.0113		93.1	70-130			
1,4-Dioxane	0.133	0.057	mg/Kg wet	0.113		117	40-160			†
Ethylbenzene	0.0121	0.0011	mg/Kg wet	0.0113		107	70-130			
Hexachlorobutadiene	0.0117	0.0011	mg/Kg wet	0.0113		103	70-160			
2-Hexanone (MBK)	0.260	0.011	mg/Kg wet	0.227		115	70-160			†
Isopropylbenzene (Cumene)	0.0123	0.0011	mg/Kg wet	0.0113		109	70-130			
p-Isopropyltoluene (p-Cymene)	0.0116	0.0011	mg/Kg wet	0.0113		102	70-130			
Methyl Acetate	0.0140	0.011	mg/Kg wet	0.0113		123	70-130			V-20
Methyl tert-Butyl Ether (MTBE)	0.0104	0.0011	mg/Kg wet	0.0113		91.5	70-130			
Methyl Cyclohexane	0.0112	0.0011	mg/Kg wet	0.0113		98.9	70-130			
Methylene Chloride	0.0114	0.0057	mg/Kg wet	0.0113		100	40-160			†
4-Methyl-2-pentanone (MIBK)	0.254	0.011	mg/Kg wet	0.227		112	70-160			†
Naphthalene	0.0105	0.0023	mg/Kg wet	0.0113		93.0	40-130			†
n-Propylbenzene	0.0122	0.0011	mg/Kg wet	0.0113		108	70-130			
Styrene	0.0122	0.0011	mg/Kg wet	0.0113		108	70-130			
1,1,1,2-Tetrachloroethane	0.0129	0.0011	mg/Kg wet	0.0113		114	70-130			
1,1,2,2-Tetrachloroethane	0.0136	0.00057	mg/Kg wet	0.0113		120	70-130			
Tetrachloroethylene	0.0120	0.0011	mg/Kg wet	0.0113		106	70-130			
Tetrahydrofuran	0.0115	0.011	mg/Kg wet	0.0113		102	70-130			
Toluene	0.0113	0.0011	mg/Kg wet	0.0113		99.9	70-130			
1,2,3-Trichlorobenzene	0.0111	0.0057	mg/Kg wet	0.0113		97.8	70-130			
1,2,4-Trichlorobenzene	0.0117	0.0011	mg/Kg wet	0.0113		103	70-130			
1,3,5-Trichlorobenzene	0.0120	0.0011	mg/Kg wet	0.0113		106	70-130			
1,1,1-Trichloroethane	0.0110	0.0011	mg/Kg wet	0.0113		96.9	70-130			
1,1,2-Trichloroethane	0.0125	0.0011	mg/Kg wet	0.0113		110	70-130			

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B285216 - SW-846 5035/5030B</b>										
<b>LCS (B285216-BS1)</b>										
Prepared & Analyzed: 07/02/21										
Trichloroethylene	0.0118	0.0011	mg/Kg wet	0.0113		104	70-130			
Trichlorofluoromethane (Freon 11)	0.0120	0.0023	mg/Kg wet	0.0113		106	70-130			
1,2,3-Trichloropropane	0.0132	0.0023	mg/Kg wet	0.0113		117	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0118	0.0011	mg/Kg wet	0.0113		104	70-130			
1,2,4-Trimethylbenzene	0.0115	0.0011	mg/Kg wet	0.0113		102	70-130			
1,3,5-Trimethylbenzene	0.0123	0.0011	mg/Kg wet	0.0113		108	70-130			
Vinyl Chloride	0.0105	0.0023	mg/Kg wet	0.0113		92.8	40-130			†
m+p Xylene	0.0244	0.0023	mg/Kg wet	0.0227		108	70-130			
o-Xylene	0.0123	0.0011	mg/Kg wet	0.0113		108	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0253		mg/Kg wet	0.0283		89.4	70-130			
Surrogate: Toluene-d8	0.0272		mg/Kg wet	0.0283		95.9	70-130			
Surrogate: 4-Bromofluorobenzene	0.0288		mg/Kg wet	0.0283		102	70-130			
<b>LCS Dup (B285216-BSD1)</b>										
Prepared & Analyzed: 07/02/21										
Acetone	0.226	0.057	mg/Kg wet	0.227		99.6	70-160	4.92	25	†
Acrylonitrile	0.0128	0.0057	mg/Kg wet	0.0113		113	70-130	4.09	25	
tert-Amyl Methyl Ether (TAME)	0.00904	0.00057	mg/Kg wet	0.0113		79.8	70-130	6.74	25	
Benzene	0.0102	0.0011	mg/Kg wet	0.0113		90.0	70-130	1.32	25	
Bromobenzene	0.0119	0.0011	mg/Kg wet	0.0113		105	70-130	2.99	25	
<b>Bromochloromethane</b>	0.00775	0.0011	mg/Kg wet	0.0113		<b>68.4</b> *	70-130	1.88	25	L-04, V-05
Bromodichloromethane	0.0112	0.0011	mg/Kg wet	0.0113		98.6	70-130	0.506	25	
Bromoform	0.0137	0.0011	mg/Kg wet	0.0113		121	70-130	4.52	25	V-20
Bromomethane	0.0140	0.0023	mg/Kg wet	0.0113		124	40-130	0.162	25	V-34
2-Butanone (MEK)	0.238	0.023	mg/Kg wet	0.227		105	70-160	0.703	25	†
tert-Butyl Alcohol (TBA)	0.132	0.023	mg/Kg wet	0.113		116	40-130	6.20	25	†
n-Butylbenzene	0.0110	0.0011	mg/Kg wet	0.0113		97.3	70-130	3.14	25	
sec-Butylbenzene	0.0113	0.0011	mg/Kg wet	0.0113		99.7	70-130	2.18	25	
tert-Butylbenzene	0.0115	0.0011	mg/Kg wet	0.0113		101	70-160	1.57	25	†
tert-Butyl Ethyl Ether (TBEE)	0.00963	0.00057	mg/Kg wet	0.0113		85.0	70-130	6.94	25	
Carbon Disulfide	0.220	0.0057	mg/Kg wet	0.227		97.1	70-130	4.61	25	
Carbon Tetrachloride	0.0109	0.0011	mg/Kg wet	0.0113		96.3	70-130	3.07	25	
Chlorobenzene	0.0121	0.0011	mg/Kg wet	0.0113		107	70-130	3.50	25	
Chlorodibromomethane	0.0120	0.00057	mg/Kg wet	0.0113		106	70-130	2.05	25	
<b>Chloroethane</b>	0.00687	0.0023	mg/Kg wet	0.0113		<b>60.6</b> *	70-130	<b>26.9</b> *	25	L-07A, R-05
Chloroform	0.0106	0.0023	mg/Kg wet	0.0113		93.8	70-130	1.40	25	
Chloromethane	0.0136	0.0023	mg/Kg wet	0.0113		120	70-130	1.26	25	
2-Chlorotoluene	0.0114	0.0011	mg/Kg wet	0.0113		101	70-130	0.298	25	
4-Chlorotoluene	0.0118	0.0011	mg/Kg wet	0.0113		104	70-130	4.34	25	
1,2-Dibromo-3-chloropropane (DBCP)	0.0103	0.0057	mg/Kg wet	0.0113		90.7	70-130	3.36	25	
1,2-Dibromoethane (EDB)	0.0113	0.00057	mg/Kg wet	0.0113		99.9	70-130	3.25	25	
Dibromomethane	0.0117	0.0011	mg/Kg wet	0.0113		103	70-130	2.30	25	
1,2-Dichlorobenzene	0.0123	0.0011	mg/Kg wet	0.0113		108	70-130	0.827	25	
1,3-Dichlorobenzene	0.0119	0.0011	mg/Kg wet	0.0113		105	70-130	2.36	25	
1,4-Dichlorobenzene	0.0118	0.0011	mg/Kg wet	0.0113		104	70-130	1.34	25	
trans-1,4-Dichloro-2-butene	0.0104	0.0023	mg/Kg wet	0.0113		92.0	70-130	0.542	25	
Dichlorodifluoromethane (Freon 12)	0.0110	0.0023	mg/Kg wet	0.0113		97.0	40-160	1.94	25	†
1,1-Dichloroethane	0.0105	0.0011	mg/Kg wet	0.0113		92.4	70-130	2.14	25	
1,2-Dichloroethane	0.0107	0.0011	mg/Kg wet	0.0113		94.2	70-130	3.34	25	
1,1-Dichloroethylene	0.0118	0.0011	mg/Kg wet	0.0113		104	70-130	0.768	25	
cis-1,2-Dichloroethylene	0.0106	0.0011	mg/Kg wet	0.0113		93.5	70-130	0.533	25	
trans-1,2-Dichloroethylene	0.00964	0.0011	mg/Kg wet	0.0113		85.1	70-130	2.74	25	
Dichlorofluoromethane (Freon 21)	0.0113	0.0011	mg/Kg wet	0.0113		100	70-130	2.08	25	

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B285216 - SW-846 5035/5030B</b>										
<b>LCS Dup (B285216-BS01)</b>										
Prepared & Analyzed: 07/02/21										
1,2-Dichloropropane	0.0112	0.0011	mg/Kg wet	0.0113		99.1	70-130	3.18	25	
1,3-Dichloropropane	0.0116	0.00057	mg/Kg wet	0.0113		102	70-130	0.390	25	
2,2-Dichloropropane	0.00940	0.0011	mg/Kg wet	0.0113		82.9	70-130	2.97	25	
1,1-Dichloropropene	0.0103	0.0023	mg/Kg wet	0.0113		90.6	70-130	4.64	25	
cis-1,3-Dichloropropene	0.0108	0.00057	mg/Kg wet	0.0113		95.7	70-130	4.49	25	
trans-1,3-Dichloropropene	0.0109	0.00057	mg/Kg wet	0.0113		95.9	70-130	0.209	25	
Diethyl Ether	0.0118	0.0023	mg/Kg wet	0.0113		104	70-130	2.19	25	
Difluorochloromethane (Freon 22)	0.0101	0.0011	mg/Kg wet	0.0113		89.3	70-130	5.23	25	
Diisopropyl Ether (DIPE)	0.0104	0.00057	mg/Kg wet	0.0113		91.8	70-130	1.41	25	
1,4-Dioxane	0.131	0.057	mg/Kg wet	0.113		115	40-160	1.79	50	† ‡
Ethylbenzene	0.0117	0.0011	mg/Kg wet	0.0113		103	70-130	3.52	25	
Hexachlorobutadiene	0.0117	0.0011	mg/Kg wet	0.0113		103	70-160	0.582	25	
2-Hexanone (MBK)	0.257	0.011	mg/Kg wet	0.227		113	70-160	1.17	25	†
Isopropylbenzene (Cumene)	0.0118	0.0011	mg/Kg wet	0.0113		104	70-130	4.33	25	
p-Isopropyltoluene (p-Cymene)	0.0112	0.0011	mg/Kg wet	0.0113		99.0	70-130	3.18	25	
<b>Methyl Acetate</b>	0.0156	0.011	mg/Kg wet	0.0113		<b>138</b> *	70-130	11.3	25	L-07, V-20
Methyl tert-Butyl Ether (MTBE)	0.0103	0.0011	mg/Kg wet	0.0113		90.6	70-130	0.988	25	
Methyl Cyclohexane	0.0108	0.0011	mg/Kg wet	0.0113		95.3	70-130	3.71	25	
Methylene Chloride	0.0102	0.0057	mg/Kg wet	0.0113		89.6	40-160	11.2	25	†
4-Methyl-2-pentanone (MIBK)	0.254	0.011	mg/Kg wet	0.227		112	70-160	0.236	25	†
Naphthalene	0.0100	0.0023	mg/Kg wet	0.0113		88.6	40-130	4.85	25	†
n-Propylbenzene	0.0117	0.0011	mg/Kg wet	0.0113		103	70-130	4.36	25	
Styrene	0.0118	0.0011	mg/Kg wet	0.0113		104	70-130	3.11	25	
1,1,1,2-Tetrachloroethane	0.0129	0.0011	mg/Kg wet	0.0113		114	70-130	0.439	25	
1,1,2,2-Tetrachloroethane	0.0131	0.00057	mg/Kg wet	0.0113		115	70-130	3.75	25	
Tetrachloroethylene	0.0114	0.0011	mg/Kg wet	0.0113		101	70-130	4.84	25	
Tetrahydrofuran	0.0112	0.011	mg/Kg wet	0.0113		99.2	70-130	2.69	25	
Toluene	0.0110	0.0011	mg/Kg wet	0.0113		96.8	70-130	3.15	25	
1,2,3-Trichlorobenzene	0.0109	0.0057	mg/Kg wet	0.0113		96.4	70-130	1.44	25	
1,2,4-Trichlorobenzene	0.0113	0.0011	mg/Kg wet	0.0113		100	70-130	3.34	25	
1,3,5-Trichlorobenzene	0.0117	0.0011	mg/Kg wet	0.0113		103	70-130	2.59	25	
1,1,1-Trichloroethane	0.0106	0.0011	mg/Kg wet	0.0113		93.1	70-130	4.00	25	
1,1,2-Trichloroethane	0.0120	0.0011	mg/Kg wet	0.0113		106	70-130	3.61	25	
Trichloroethylene	0.0113	0.0011	mg/Kg wet	0.0113		99.9	70-130	4.21	25	
Trichlorofluoromethane (Freon 11)	0.0115	0.0023	mg/Kg wet	0.0113		102	70-130	3.85	25	
1,2,3-Trichloropropane	0.0130	0.0023	mg/Kg wet	0.0113		115	70-130	1.90	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0116	0.0011	mg/Kg wet	0.0113		103	70-130	1.36	25	
1,2,4-Trimethylbenzene	0.0113	0.0011	mg/Kg wet	0.0113		99.7	70-130	2.08	25	
1,3,5-Trimethylbenzene	0.0119	0.0011	mg/Kg wet	0.0113		105	70-130	3.00	25	
Vinyl Chloride	0.0100	0.0023	mg/Kg wet	0.0113		88.6	40-130	4.63	25	†
m+p Xylene	0.0234	0.0023	mg/Kg wet	0.0227		103	70-130	4.17	25	
o-Xylene	0.0119	0.0011	mg/Kg wet	0.0113		105	70-130	2.62	25	
Surrogate: 1,2-Dichloroethane-d4	0.0254		mg/Kg wet	0.0283		89.5	70-130			
Surrogate: Toluene-d8	0.0268		mg/Kg wet	0.0283		94.5	70-130			
Surrogate: 4-Bromofluorobenzene	0.0281		mg/Kg wet	0.0283		99.2	70-130			

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch B285222 - SW-846 5035**
**Blank (B285222-BLK1)**

Prepared &amp; Analyzed: 07/02/21

Acetone	ND	0.10	mg/Kg wet							
Acrylonitrile	ND	0.0060	mg/Kg wet							
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg wet							
Benzene	ND	0.0020	mg/Kg wet							
Bromobenzene	ND	0.0020	mg/Kg wet							
Bromochloromethane	ND	0.0020	mg/Kg wet							
Bromodichloromethane	ND	0.0020	mg/Kg wet							
Bromoform	ND	0.0020	mg/Kg wet							
Bromomethane	ND	0.010	mg/Kg wet							V-34
2-Butanone (MEK)	ND	0.040	mg/Kg wet							
tert-Butyl Alcohol (TBA)	ND	0.10	mg/Kg wet							
n-Butylbenzene	ND	0.0020	mg/Kg wet							
sec-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg wet							
Carbon Disulfide	ND	0.0060	mg/Kg wet							
Carbon Tetrachloride	ND	0.0020	mg/Kg wet							
Chlorobenzene	ND	0.0020	mg/Kg wet							
Chlorodibromomethane	ND	0.0010	mg/Kg wet							
Chloroethane	ND	0.020	mg/Kg wet							
Chloroform	ND	0.0040	mg/Kg wet							
Chloromethane	ND	0.010	mg/Kg wet							
2-Chlorotoluene	ND	0.0020	mg/Kg wet							
4-Chlorotoluene	ND	0.0020	mg/Kg wet							
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg wet							
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg wet							
Dibromomethane	ND	0.0020	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.0020	mg/Kg wet							
trans-1,4-Dichloro-2-butene	ND	0.0040	mg/Kg wet							V-05
Dichlorodifluoromethane (Freon 12)	ND	0.020	mg/Kg wet							
1,1-Dichloroethane	ND	0.0020	mg/Kg wet							
1,2-Dichloroethane	ND	0.0020	mg/Kg wet							
1,1-Dichloroethylene	ND	0.0040	mg/Kg wet							
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
1,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,3-Dichloropropane	ND	0.0010	mg/Kg wet							
2,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,1-Dichloropropene	ND	0.0020	mg/Kg wet							
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
Diethyl Ether	ND	0.020	mg/Kg wet							
Diisopropyl Ether (DIPE)	ND	0.0010	mg/Kg wet							
1,4-Dioxane	ND	0.10	mg/Kg wet							
Ethylbenzene	ND	0.0020	mg/Kg wet							
Hexachlorobutadiene	ND	0.0020	mg/Kg wet							
2-Hexanone (MBK)	ND	0.020	mg/Kg wet							
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg wet							
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg wet							
Methyl Acetate	ND	0.0020	mg/Kg wet							

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch B285222 - SW-846 5035**
**Blank (B285222-BLK1)**

Prepared &amp; Analyzed: 07/02/21

Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg wet							
Methyl Cyclohexane	ND	0.0020	mg/Kg wet							
Methylene Chloride	ND	0.020	mg/Kg wet							
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg wet							
Naphthalene	ND	0.0040	mg/Kg wet							
n-Propylbenzene	ND	0.0020	mg/Kg wet							
Styrene	ND	0.0020	mg/Kg wet							
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg wet							
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg wet							
Tetrachloroethylene	ND	0.0020	mg/Kg wet							
Tetrahydrofuran	ND	0.010	mg/Kg wet							
Toluene	ND	0.0020	mg/Kg wet							
1,2,3-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,3,5-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,1,1-Trichloroethane	ND	0.0020	mg/Kg wet							
1,1,2-Trichloroethane	ND	0.0020	mg/Kg wet							
Trichloroethylene	ND	0.0020	mg/Kg wet							
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg wet							
1,2,3-Trichloropropane	ND	0.0020	mg/Kg wet							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.010	mg/Kg wet							
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg wet							
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg wet							
Vinyl Chloride	ND	0.010	mg/Kg wet							
m+p Xylene	ND	0.0040	mg/Kg wet							
o-Xylene	ND	0.0020	mg/Kg wet							
Surrogate: 1,2-Dichloroethane-d4	0.0589		mg/Kg wet	0.0500		118	70-130			
Surrogate: Toluene-d8	0.0491		mg/Kg wet	0.0500		98.1	70-130			
Surrogate: 4-Bromofluorobenzene	0.0497		mg/Kg wet	0.0500		99.5	70-130			

**LCS (B285222-BS1)**

Prepared &amp; Analyzed: 07/02/21

Acetone	0.235	0.10	mg/Kg wet	0.200		117	70-160			V-20 †
Acrylonitrile	0.0219	0.0060	mg/Kg wet	0.0200		109	70-130			
tert-Amyl Methyl Ether (TAME)	0.0204	0.0010	mg/Kg wet	0.0200		102	70-130			
Benzene	0.0196	0.0020	mg/Kg wet	0.0200		98.1	70-130			
Bromobenzene	0.0196	0.0020	mg/Kg wet	0.0200		97.9	70-130			
Bromochloromethane	0.0208	0.0020	mg/Kg wet	0.0200		104	70-130			
Bromodichloromethane	0.0232	0.0020	mg/Kg wet	0.0200		116	70-130			
Bromoform	0.0222	0.0020	mg/Kg wet	0.0200		111	70-130			
Bromomethane	0.0245	0.010	mg/Kg wet	0.0200		123	40-130			V-20, V-34 †
2-Butanone (MEK)	0.236	0.040	mg/Kg wet	0.200		118	70-160			†
tert-Butyl Alcohol (TBA)	0.217	0.10	mg/Kg wet	0.200		109	40-130			†
n-Butylbenzene	0.0162	0.0020	mg/Kg wet	0.0200		81.0	70-130			
sec-Butylbenzene	0.0162	0.0020	mg/Kg wet	0.0200		80.8	70-130			
tert-Butylbenzene	0.0167	0.0020	mg/Kg wet	0.0200		83.7	70-160			†
tert-Butyl Ethyl Ether (TBEE)	0.0209	0.0010	mg/Kg wet	0.0200		104	70-130			
Carbon Disulfide	0.207	0.0060	mg/Kg wet	0.200		103	70-130			
Carbon Tetrachloride	0.0220	0.0020	mg/Kg wet	0.0200		110	70-130			
Chlorobenzene	0.0195	0.0020	mg/Kg wet	0.0200		97.6	70-130			
Chlorodibromomethane	0.0239	0.0010	mg/Kg wet	0.0200		119	70-130			
Chloroethane	0.0221	0.020	mg/Kg wet	0.0200		110	70-130			
Chloroform	0.0225	0.0040	mg/Kg wet	0.0200		112	70-130			



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B285222 - SW-846 5035</b>										
<b>LCS (B285222-BS1)</b>										
Prepared & Analyzed: 07/02/21										
Chloromethane	0.0238	0.010	mg/Kg wet	0.0200		119	70-130			
2-Chlorotoluene	0.0195	0.0020	mg/Kg wet	0.0200		97.6	70-130			
4-Chlorotoluene	0.0191	0.0020	mg/Kg wet	0.0200		95.7	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	0.0207	0.0020	mg/Kg wet	0.0200		103	70-130			
1,2-Dibromoethane (EDB)	0.0221	0.0010	mg/Kg wet	0.0200		110	70-130			
Dibromomethane	0.0215	0.0020	mg/Kg wet	0.0200		107	70-130			
1,2-Dichlorobenzene	0.0182	0.0020	mg/Kg wet	0.0200		90.8	70-130			
1,3-Dichlorobenzene	0.0174	0.0020	mg/Kg wet	0.0200		86.8	70-130			
1,4-Dichlorobenzene	0.0174	0.0020	mg/Kg wet	0.0200		87.0	70-130			
trans-1,4-Dichloro-2-butene	0.0158	0.0040	mg/Kg wet	0.0200		78.8	70-130			V-05
Dichlorodifluoromethane (Freon 12)	0.0216	0.020	mg/Kg wet	0.0200		108	40-160			†
1,1-Dichloroethane	0.0235	0.0020	mg/Kg wet	0.0200		117	70-130			
1,2-Dichloroethane	0.0254	0.0020	mg/Kg wet	0.0200		127	70-130			V-20
1,1-Dichloroethylene	0.0243	0.0040	mg/Kg wet	0.0200		122	70-130			V-20
cis-1,2-Dichloroethylene	0.0225	0.0020	mg/Kg wet	0.0200		112	70-130			
trans-1,2-Dichloroethylene	0.0228	0.0020	mg/Kg wet	0.0200		114	70-130			
1,2-Dichloropropane	0.0223	0.0020	mg/Kg wet	0.0200		111	70-130			
1,3-Dichloropropane	0.0226	0.0010	mg/Kg wet	0.0200		113	70-130			
2,2-Dichloropropane	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130			
1,1-Dichloropropene	0.0211	0.0020	mg/Kg wet	0.0200		106	70-130			
cis-1,3-Dichloropropene	0.0209	0.0010	mg/Kg wet	0.0200		104	70-130			
trans-1,3-Dichloropropene	0.0212	0.0010	mg/Kg wet	0.0200		106	70-130			
Diethyl Ether	0.0226	0.020	mg/Kg wet	0.0200		113	70-130			
Diisopropyl Ether (DIPE)	0.0223	0.0010	mg/Kg wet	0.0200		111	70-130			
1,4-Dioxane	0.209	0.10	mg/Kg wet	0.200		104	40-160			†
Ethylbenzene	0.0186	0.0020	mg/Kg wet	0.0200		93.3	70-130			
Hexachlorobutadiene	0.0172	0.0020	mg/Kg wet	0.0200		86.1	70-160			†
2-Hexanone (MBK)	0.217	0.020	mg/Kg wet	0.200		109	70-160			†
Isopropylbenzene (Cumene)	0.0178	0.0020	mg/Kg wet	0.0200		89.2	70-130			
p-Isopropyltoluene (p-Cymene)	0.0168	0.0020	mg/Kg wet	0.0200		84.1	70-130			
<b>Methyl Acetate</b>	0.0311	0.0020	mg/Kg wet	0.0200		<b>156</b> *	70-130			L-02, V-20
Methyl tert-Butyl Ether (MTBE)	0.0223	0.0040	mg/Kg wet	0.0200		112	70-130			
Methyl Cyclohexane	0.0185	0.0020	mg/Kg wet	0.0200		92.4	70-130			
Methylene Chloride	0.0239	0.020	mg/Kg wet	0.0200		119	40-160			V-20 †
4-Methyl-2-pentanone (MIBK)	0.229	0.020	mg/Kg wet	0.200		114	70-160			†
Naphthalene	0.0171	0.0040	mg/Kg wet	0.0200		85.4	40-130			†
n-Propylbenzene	0.0181	0.0020	mg/Kg wet	0.0200		90.4	70-130			
Styrene	0.0184	0.0020	mg/Kg wet	0.0200		91.8	70-130			
1,1,1,2-Tetrachloroethane	0.0208	0.0020	mg/Kg wet	0.0200		104	70-130			
1,1,2,2-Tetrachloroethane	0.0203	0.0010	mg/Kg wet	0.0200		102	70-130			
Tetrachloroethylene	0.0207	0.0020	mg/Kg wet	0.0200		104	70-130			
Tetrahydrofuran	0.0211	0.010	mg/Kg wet	0.0200		105	70-130			
Toluene	0.0210	0.0020	mg/Kg wet	0.0200		105	70-130			
1,2,3-Trichlorobenzene	0.0184	0.0020	mg/Kg wet	0.0200		92.1	70-130			
1,2,4-Trichlorobenzene	0.0174	0.0020	mg/Kg wet	0.0200		87.1	70-130			
1,3,5-Trichlorobenzene	0.0170	0.0020	mg/Kg wet	0.0200		84.9	70-130			
1,1,1-Trichloroethane	0.0222	0.0020	mg/Kg wet	0.0200		111	70-130			
1,1,2-Trichloroethane	0.0219	0.0020	mg/Kg wet	0.0200		109	70-130			
Trichloroethylene	0.0203	0.0020	mg/Kg wet	0.0200		101	70-130			
Trichlorofluoromethane (Freon 11)	0.0227	0.010	mg/Kg wet	0.0200		113	70-130			
1,2,3-Trichloropropane	0.0212	0.0020	mg/Kg wet	0.0200		106	70-130			

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B285222 - SW-846 5035</b>										
<b>LCS (B285222-BS1)</b>										
Prepared & Analyzed: 07/02/21										
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0215	0.010	mg/Kg wet	0.0200		108	70-130			
1,2,4-Trimethylbenzene	0.0165	0.0020	mg/Kg wet	0.0200		82.5	70-130			
1,3,5-Trimethylbenzene	0.0187	0.0020	mg/Kg wet	0.0200		93.7	70-130			
Vinyl Chloride	0.0225	0.010	mg/Kg wet	0.0200		112	40-130			†
m+p Xylene	0.0379	0.0040	mg/Kg wet	0.0400		94.8	70-130			
o-Xylene	0.0188	0.0020	mg/Kg wet	0.0200		94.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0567		mg/Kg wet	0.0500		113	70-130			
Surrogate: Toluene-d8	0.0497		mg/Kg wet	0.0500		99.4	70-130			
Surrogate: 4-Bromofluorobenzene	0.0518		mg/Kg wet	0.0500		104	70-130			
<b>LCS Dup (B285222-BSD1)</b>										
Prepared & Analyzed: 07/02/21										
Acetone	0.225	0.10	mg/Kg wet	0.200		113	70-160	4.09	25	V-20 †
Acrylonitrile	0.0204	0.0060	mg/Kg wet	0.0200		102	70-130	7.20	25	
tert-Amyl Methyl Ether (TAME)	0.0193	0.0010	mg/Kg wet	0.0200		96.7	70-130	5.34	25	
Benzene	0.0191	0.0020	mg/Kg wet	0.0200		95.4	70-130	2.81	25	
Bromobenzene	0.0188	0.0020	mg/Kg wet	0.0200		93.8	70-130	4.35	25	
Bromochloromethane	0.0203	0.0020	mg/Kg wet	0.0200		101	70-130	2.82	25	
Bromodichloromethane	0.0217	0.0020	mg/Kg wet	0.0200		109	70-130	6.36	25	
Bromoform	0.0219	0.0020	mg/Kg wet	0.0200		110	70-130	1.33	25	
Bromomethane	0.0233	0.010	mg/Kg wet	0.0200		116	40-130	5.26	25	V-20, V-34 †
2-Butanone (MEK)	0.223	0.040	mg/Kg wet	0.200		112	70-160	5.37	25	†
tert-Butyl Alcohol (TBA)	0.213	0.10	mg/Kg wet	0.200		106	40-130	2.06	25	†
n-Butylbenzene	0.0157	0.0020	mg/Kg wet	0.0200		78.4	70-130	3.35	25	
sec-Butylbenzene	0.0151	0.0020	mg/Kg wet	0.0200		75.6	70-130	6.59	25	
tert-Butylbenzene	0.0157	0.0020	mg/Kg wet	0.0200		78.5	70-160	6.39	25	†
tert-Butyl Ethyl Ether (TBEE)	0.0202	0.0010	mg/Kg wet	0.0200		101	70-130	3.12	25	
Carbon Disulfide	0.193	0.0060	mg/Kg wet	0.200		96.3	70-130	7.03	25	
Carbon Tetrachloride	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130	7.53	25	
Chlorobenzene	0.0184	0.0020	mg/Kg wet	0.0200		92.2	70-130	5.62	25	
Chlorodibromomethane	0.0222	0.0010	mg/Kg wet	0.0200		111	70-130	7.12	25	
Chloroethane	0.0212	0.020	mg/Kg wet	0.0200		106	70-130	3.89	25	
Chloroform	0.0208	0.0040	mg/Kg wet	0.0200		104	70-130	7.63	25	
Chloromethane	0.0232	0.010	mg/Kg wet	0.0200		116	70-130	2.34	25	
2-Chlorotoluene	0.0184	0.0020	mg/Kg wet	0.0200		91.9	70-130	5.95	25	
4-Chlorotoluene	0.0180	0.0020	mg/Kg wet	0.0200		90.1	70-130	5.98	25	
1,2-Dibromo-3-chloropropane (DBCP)	0.0197	0.0020	mg/Kg wet	0.0200		98.6	70-130	4.66	25	
1,2-Dibromoethane (EDB)	0.0214	0.0010	mg/Kg wet	0.0200		107	70-130	3.31	25	
Dibromomethane	0.0211	0.0020	mg/Kg wet	0.0200		106	70-130	1.66	25	
1,2-Dichlorobenzene	0.0171	0.0020	mg/Kg wet	0.0200		85.4	70-130	6.13	25	
1,3-Dichlorobenzene	0.0167	0.0020	mg/Kg wet	0.0200		83.7	70-130	3.59	25	
1,4-Dichlorobenzene	0.0169	0.0020	mg/Kg wet	0.0200		84.7	70-130	2.67	25	
trans-1,4-Dichloro-2-butene	0.0145	0.0040	mg/Kg wet	0.0200		72.6	70-130	8.24	25	V-05
Dichlorodifluoromethane (Freon 12)	0.0199	0.020	mg/Kg wet	0.0200		99.6	40-160	7.96	25	†
1,1-Dichloroethane	0.0225	0.0020	mg/Kg wet	0.0200		112	70-130	4.24	25	
1,2-Dichloroethane	0.0239	0.0020	mg/Kg wet	0.0200		119	70-130	6.18	25	V-20
1,1-Dichloroethylene	0.0222	0.0040	mg/Kg wet	0.0200		111	70-130	9.10	25	V-20
cis-1,2-Dichloroethylene	0.0211	0.0020	mg/Kg wet	0.0200		106	70-130	6.13	25	
trans-1,2-Dichloroethylene	0.0210	0.0020	mg/Kg wet	0.0200		105	70-130	8.12	25	
1,2-Dichloropropane	0.0214	0.0020	mg/Kg wet	0.0200		107	70-130	4.08	25	
1,3-Dichloropropane	0.0226	0.0010	mg/Kg wet	0.0200		113	70-130	0.283	25	
2,2-Dichloropropane	0.0190	0.0020	mg/Kg wet	0.0200		94.8	70-130	8.49	25	
1,1-Dichloropropene	0.0202	0.0020	mg/Kg wet	0.0200		101	70-130	4.47	25	

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B285222 - SW-846 5035</b>										
<b>LCS Dup (B285222-BSD1)</b>										
Prepared & Analyzed: 07/02/21										
cis-1,3-Dichloropropene	0.0199	0.0010	mg/Kg wet	0.0200		99.5	70-130	4.88	25	
trans-1,3-Dichloropropene	0.0206	0.0010	mg/Kg wet	0.0200		103	70-130	2.81	25	
Diethyl Ether	0.0219	0.020	mg/Kg wet	0.0200		109	70-130	3.01	25	
Diisopropyl Ether (DIPE)	0.0214	0.0010	mg/Kg wet	0.0200		107	70-130	3.83	25	
1,4-Dioxane	0.203	0.10	mg/Kg wet	0.200		101	40-160	3.04	50	† ‡
Ethylbenzene	0.0175	0.0020	mg/Kg wet	0.0200		87.7	70-130	6.18	25	
Hexachlorobutadiene	0.0156	0.0020	mg/Kg wet	0.0200		78.1	70-160	9.67	25	
2-Hexanone (MBK)	0.208	0.020	mg/Kg wet	0.200		104	70-160	4.21	25	†
Isopropylbenzene (Cumene)	0.0166	0.0020	mg/Kg wet	0.0200		83.2	70-130	6.88	25	
p-Isopropyltoluene (p-Cymene)	0.0157	0.0020	mg/Kg wet	0.0200		78.7	70-130	6.61	25	
<b>Methyl Acetate</b>	0.0301	0.0020	mg/Kg wet	0.0200		<b>150</b> *	70-130	3.31	25	L-02, V-20
Methyl tert-Butyl Ether (MTBE)	0.0213	0.0040	mg/Kg wet	0.0200		106	70-130	4.80	25	
Methyl Cyclohexane	0.0166	0.0020	mg/Kg wet	0.0200		83.1	70-130	10.6	25	
Methylene Chloride	0.0236	0.020	mg/Kg wet	0.0200		118	40-160	1.21	25	V-20 †
4-Methyl-2-pentanone (MIBK)	0.218	0.020	mg/Kg wet	0.200		109	70-160	4.90	25	†
Naphthalene	0.0158	0.0040	mg/Kg wet	0.0200		79.2	40-130	7.57	25	†
n-Propylbenzene	0.0173	0.0020	mg/Kg wet	0.0200		86.6	70-130	4.33	25	
Styrene	0.0175	0.0020	mg/Kg wet	0.0200		87.4	70-130	4.90	25	
1,1,1,2-Tetrachloroethane	0.0198	0.0020	mg/Kg wet	0.0200		98.8	70-130	5.00	25	
1,1,2,2-Tetrachloroethane	0.0191	0.0010	mg/Kg wet	0.0200		95.3	70-130	6.34	25	
Tetrachloroethylene	0.0194	0.0020	mg/Kg wet	0.0200		97.1	70-130	6.55	25	
Tetrahydrofuran	0.0199	0.010	mg/Kg wet	0.0200		99.6	70-130	5.53	25	
Toluene	0.0196	0.0020	mg/Kg wet	0.0200		97.9	70-130	7.24	25	
1,2,3-Trichlorobenzene	0.0171	0.0020	mg/Kg wet	0.0200		85.6	70-130	7.24	25	
1,2,4-Trichlorobenzene	0.0165	0.0020	mg/Kg wet	0.0200		82.3	70-130	5.63	25	
1,3,5-Trichlorobenzene	0.0158	0.0020	mg/Kg wet	0.0200		79.2	70-130	6.94	25	
1,1,1-Trichloroethane	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130	7.73	25	
1,1,2-Trichloroethane	0.0211	0.0020	mg/Kg wet	0.0200		106	70-130	3.45	25	
Trichloroethylene	0.0195	0.0020	mg/Kg wet	0.0200		97.7	70-130	3.56	25	
Trichlorofluoromethane (Freon 11)	0.0211	0.010	mg/Kg wet	0.0200		106	70-130	7.10	25	
1,2,3-Trichloropropane	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130	2.88	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0194	0.010	mg/Kg wet	0.0200		97.0	70-130	10.5	25	
1,2,4-Trimethylbenzene	0.0159	0.0020	mg/Kg wet	0.0200		79.7	70-130	3.47	25	
1,3,5-Trimethylbenzene	0.0175	0.0020	mg/Kg wet	0.0200		87.6	70-130	6.79	25	
Vinyl Chloride	0.0207	0.010	mg/Kg wet	0.0200		104	40-130	8.33	25	†
m+p Xylene	0.0364	0.0040	mg/Kg wet	0.0400		91.1	70-130	3.94	25	
o-Xylene	0.0179	0.0020	mg/Kg wet	0.0200		89.7	70-130	4.97	25	
Surrogate: 1,2-Dichloroethane-d4	0.0573		mg/Kg wet	0.0500		115	70-130			
Surrogate: Toluene-d8	0.0497		mg/Kg wet	0.0500		99.4	70-130			
Surrogate: 4-Bromofluorobenzene	0.0522		mg/Kg wet	0.0500		104	70-130			

**Batch B285252 - SW-846 5035**
**Blank (B285252-BLK1)**

Prepared &amp; Analyzed: 07/02/21

Acetone	ND	0.10	mg/Kg wet							
Acrylonitrile	ND	0.0060	mg/Kg wet							
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg wet							
Benzene	ND	0.0020	mg/Kg wet							
Bromobenzene	ND	0.0020	mg/Kg wet							
Bromochloromethane	ND	0.0020	mg/Kg wet							
Bromodichloromethane	ND	0.0020	mg/Kg wet							
Bromoform	ND	0.0020	mg/Kg wet							

**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 B285252 - SW-846 5035</b>										
<b>Blank (B285252-BLK1)</b>										
Prepared & Analyzed: 07/02/21										
Bromomethane	ND	0.010	mg/Kg wet							
2-Butanone (MEK)	ND	0.040	mg/Kg wet							
tert-Butyl Alcohol (TBA)	ND	0.10	mg/Kg wet							
n-Butylbenzene	ND	0.0020	mg/Kg wet							
sec-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg wet							
Carbon Disulfide	ND	0.0060	mg/Kg wet							V-05
Carbon Tetrachloride	ND	0.0020	mg/Kg wet							
Chlorobenzene	ND	0.0020	mg/Kg wet							
Chlorodibromomethane	ND	0.0010	mg/Kg wet							
Chloroethane	ND	0.020	mg/Kg wet							
Chloroform	ND	0.0040	mg/Kg wet							
Chloromethane	ND	0.010	mg/Kg wet							
2-Chlorotoluene	ND	0.0020	mg/Kg wet							
4-Chlorotoluene	ND	0.0020	mg/Kg wet							
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg wet							
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg wet							
Dibromomethane	ND	0.0020	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.0020	mg/Kg wet							
trans-1,4-Dichloro-2-butene	ND	0.0040	mg/Kg wet							
Dichlorodifluoromethane (Freon 12)	ND	0.020	mg/Kg wet							
1,1-Dichloroethane	ND	0.0020	mg/Kg wet							
1,2-Dichloroethane	ND	0.0020	mg/Kg wet							
1,1-Dichloroethylene	ND	0.0040	mg/Kg wet							V-05
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
1,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,3-Dichloropropane	ND	0.0010	mg/Kg wet							
2,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,1-Dichloropropene	ND	0.0020	mg/Kg wet							
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
Diethyl Ether	ND	0.020	mg/Kg wet							
Diisopropyl Ether (DIPE)	ND	0.0010	mg/Kg wet							
1,4-Dioxane	ND	0.10	mg/Kg wet							
Ethylbenzene	ND	0.0020	mg/Kg wet							
Hexachlorobutadiene	ND	0.0020	mg/Kg wet							
2-Hexanone (MBK)	ND	0.020	mg/Kg wet							
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg wet							
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg wet							
Methyl Acetate	ND	0.0020	mg/Kg wet							
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg wet							
Methyl Cyclohexane	ND	0.0020	mg/Kg wet							
Methylene Chloride	ND	0.020	mg/Kg wet							
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg wet							
Naphthalene	ND	0.0040	mg/Kg wet							
n-Propylbenzene	ND	0.0020	mg/Kg wet							
Styrene	ND	0.0020	mg/Kg wet							
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg wet							

**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 B285252 - SW-846 5035</b>										
<b>Blank (B285252-BLK1)</b>										
Prepared & Analyzed: 07/02/21										
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg wet							
Tetrachloroethylene	ND	0.0020	mg/Kg wet							
Tetrahydrofuran	ND	0.010	mg/Kg wet							
Toluene	ND	0.0020	mg/Kg wet							
1,2,3-Trichlorobenzene	ND	0.0020	mg/Kg wet							V-05
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,3,5-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,1,1-Trichloroethane	ND	0.0020	mg/Kg wet							
1,1,2-Trichloroethane	ND	0.0020	mg/Kg wet							
Trichloroethylene	ND	0.0020	mg/Kg wet							
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg wet							L-04, V-05
1,2,3-Trichloropropane	ND	0.0020	mg/Kg wet							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.010	mg/Kg wet							
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg wet							
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg wet							
Vinyl Chloride	ND	0.010	mg/Kg wet							
m+p Xylene	ND	0.0040	mg/Kg wet							
o-Xylene	ND	0.0020	mg/Kg wet							
Surrogate: 1,2-Dichloroethane-d4	0.0513		mg/Kg wet	0.0500		103	70-130			
Surrogate: Toluene-d8	0.0535		mg/Kg wet	0.0500		107	70-130			
Surrogate: 4-Bromofluorobenzene	0.0559		mg/Kg wet	0.0500		112	70-130			
<b>LCS (B285252-BS1)</b>										
Prepared & Analyzed: 07/02/21										
Acetone	0.176	0.10	mg/Kg wet	0.200		87.9	70-160			†
Acrylonitrile	0.0212	0.0060	mg/Kg wet	0.0200		106	70-130			
tert-Amyl Methyl Ether (TAME)	0.0213	0.0010	mg/Kg wet	0.0200		107	70-130			
Benzene	0.0212	0.0020	mg/Kg wet	0.0200		106	70-130			
Bromobenzene	0.0182	0.0020	mg/Kg wet	0.0200		91.2	70-130			
<b>Bromochloromethane</b>	0.0263	0.0020	mg/Kg wet	0.0200		<b>131</b>	* 70-130			L-07, V-20
Bromodichloromethane	0.0213	0.0020	mg/Kg wet	0.0200		107	70-130			
Bromoform	0.0179	0.0020	mg/Kg wet	0.0200		89.3	70-130			
<b>Bromomethane</b>	0.0277	0.010	mg/Kg wet	0.0200		<b>139</b>	* 40-130			L-02, V-20 †
2-Butanone (MEK)	0.216	0.040	mg/Kg wet	0.200		108	70-160			†
tert-Butyl Alcohol (TBA)	0.177	0.10	mg/Kg wet	0.200		88.3	40-130			†
n-Butylbenzene	0.0168	0.0020	mg/Kg wet	0.0200		83.8	70-130			
sec-Butylbenzene	0.0186	0.0020	mg/Kg wet	0.0200		93.1	70-130			
tert-Butylbenzene	0.0187	0.0020	mg/Kg wet	0.0200		93.4	70-160			†
tert-Butyl Ethyl Ether (TBEE)	0.0218	0.0010	mg/Kg wet	0.0200		109	70-130			
Carbon Disulfide	0.148	0.0060	mg/Kg wet	0.200		73.9	70-130			V-05
Carbon Tetrachloride	0.0228	0.0020	mg/Kg wet	0.0200		114	70-130			
Chlorobenzene	0.0201	0.0020	mg/Kg wet	0.0200		100	70-130			
Chlorodibromomethane	0.0222	0.0010	mg/Kg wet	0.0200		111	70-130			
Chloroethane	0.0162	0.020	mg/Kg wet	0.0200		80.9	70-130			
Chloroform	0.0226	0.0040	mg/Kg wet	0.0200		113	70-130			
Chloromethane	0.0236	0.010	mg/Kg wet	0.0200		118	70-130			
2-Chlorotoluene	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130			
4-Chlorotoluene	0.0202	0.0020	mg/Kg wet	0.0200		101	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	0.0169	0.0020	mg/Kg wet	0.0200		84.7	70-130			
1,2-Dibromoethane (EDB)	0.0226	0.0010	mg/Kg wet	0.0200		113	70-130			
Dibromomethane	0.0217	0.0020	mg/Kg wet	0.0200		109	70-130			
1,2-Dichlorobenzene	0.0180	0.0020	mg/Kg wet	0.0200		90.2	70-130			
1,3-Dichlorobenzene	0.0180	0.0020	mg/Kg wet	0.0200		90.1	70-130			

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B285252 - SW-846 5035</b>										
<b>LCS (B285252-BS1)</b>										
Prepared & Analyzed: 07/02/21										
1,4-Dichlorobenzene	0.0192	0.0020	mg/Kg wet	0.0200		95.9	70-130			
trans-1,4-Dichloro-2-butene	0.0201	0.0040	mg/Kg wet	0.0200		101	70-130			
Dichlorodifluoromethane (Freon 12)	0.0181	0.020	mg/Kg wet	0.0200		90.4	40-160			†
1,1-Dichloroethane	0.0214	0.0020	mg/Kg wet	0.0200		107	70-130			
1,2-Dichloroethane	0.0230	0.0020	mg/Kg wet	0.0200		115	70-130			
1,1-Dichloroethylene	0.0156	0.0040	mg/Kg wet	0.0200		78.1	70-130			V-05
cis-1,2-Dichloroethylene	0.0207	0.0020	mg/Kg wet	0.0200		103	70-130			
trans-1,2-Dichloroethylene	0.0214	0.0020	mg/Kg wet	0.0200		107	70-130			
1,2-Dichloropropane	0.0217	0.0020	mg/Kg wet	0.0200		108	70-130			
1,3-Dichloropropane	0.0202	0.0010	mg/Kg wet	0.0200		101	70-130			
2,2-Dichloropropane	0.0193	0.0020	mg/Kg wet	0.0200		96.6	70-130			
1,1-Dichloropropene	0.0196	0.0020	mg/Kg wet	0.0200		97.8	70-130			
cis-1,3-Dichloropropene	0.0198	0.0010	mg/Kg wet	0.0200		99.1	70-130			
trans-1,3-Dichloropropene	0.0235	0.0010	mg/Kg wet	0.0200		118	70-130			
Diethyl Ether	0.0163	0.020	mg/Kg wet	0.0200		81.7	70-130			
Diisopropyl Ether (DIPE)	0.0238	0.0010	mg/Kg wet	0.0200		119	70-130			
1,4-Dioxane	0.196	0.10	mg/Kg wet	0.200		98.2	40-160			†
Ethylbenzene	0.0196	0.0020	mg/Kg wet	0.0200		97.8	70-130			
Hexachlorobutadiene	0.0194	0.0020	mg/Kg wet	0.0200		97.1	70-160			
2-Hexanone (MBK)	0.228	0.020	mg/Kg wet	0.200		114	70-160			†
Isopropylbenzene (Cumene)	0.0186	0.0020	mg/Kg wet	0.0200		93.1	70-130			
p-Isopropyltoluene (p-Cymene)	0.0164	0.0020	mg/Kg wet	0.0200		82.2	70-130			
<b>Methyl Acetate</b>	0.0275	0.0020	mg/Kg wet	0.0200		<b>138</b>	* 70-130			L-02, V-20
Methyl tert-Butyl Ether (MTBE)	0.0186	0.0040	mg/Kg wet	0.0200		92.9	70-130			
Methyl Cyclohexane	0.0194	0.0020	mg/Kg wet	0.0200		97.1	70-130			
Methylene Chloride	0.0236	0.020	mg/Kg wet	0.0200		118	40-160			†
4-Methyl-2-pentanone (MIBK)	0.220	0.020	mg/Kg wet	0.200		110	70-160			†
Naphthalene	0.0162	0.0040	mg/Kg wet	0.0200		80.9	40-130			†
n-Propylbenzene	0.0192	0.0020	mg/Kg wet	0.0200		96.0	70-130			
Styrene	0.0183	0.0020	mg/Kg wet	0.0200		91.3	70-130			
1,1,1,2-Tetrachloroethane	0.0203	0.0020	mg/Kg wet	0.0200		101	70-130			
1,1,2,2-Tetrachloroethane	0.0179	0.0010	mg/Kg wet	0.0200		89.6	70-130			
Tetrachloroethylene	0.0232	0.0020	mg/Kg wet	0.0200		116	70-130			
Tetrahydrofuran	0.0183	0.010	mg/Kg wet	0.0200		91.6	70-130			
Toluene	0.0211	0.0020	mg/Kg wet	0.0200		106	70-130			
1,2,3-Trichlorobenzene	0.0162	0.0020	mg/Kg wet	0.0200		81.1	70-130			V-05
1,2,4-Trichlorobenzene	0.0153	0.0020	mg/Kg wet	0.0200		76.7	70-130			
1,3,5-Trichlorobenzene	0.0160	0.0020	mg/Kg wet	0.0200		80.1	70-130			
1,1,1-Trichloroethane	0.0230	0.0020	mg/Kg wet	0.0200		115	70-130			
1,1,2-Trichloroethane	0.0208	0.0020	mg/Kg wet	0.0200		104	70-130			
Trichloroethylene	0.0193	0.0020	mg/Kg wet	0.0200		96.3	70-130			
<b>Trichlorofluoromethane (Freon 11)</b>	0.0131	0.010	mg/Kg wet	0.0200		<b>65.5</b>	* 70-130			L-04, V-05
1,2,3-Trichloropropane	0.0208	0.0020	mg/Kg wet	0.0200		104	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0164	0.010	mg/Kg wet	0.0200		81.9	70-130			
1,2,4-Trimethylbenzene	0.0187	0.0020	mg/Kg wet	0.0200		93.3	70-130			
1,3,5-Trimethylbenzene	0.0198	0.0020	mg/Kg wet	0.0200		99.2	70-130			
Vinyl Chloride	0.0179	0.010	mg/Kg wet	0.0200		89.3	40-130			†
m+p Xylene	0.0388	0.0040	mg/Kg wet	0.0400		97.0	70-130			
o-Xylene	0.0205	0.0020	mg/Kg wet	0.0200		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0485		mg/Kg wet	0.0500		97.0	70-130			
Surrogate: Toluene-d8	0.0545		mg/Kg wet	0.0500		109	70-130			

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B285252 - SW-846 5035</b>										
<b>LCS (B285252-BS1)</b>					Prepared & Analyzed: 07/02/21					
Surrogate: 4-Bromofluorobenzene	0.0564		mg/Kg wet	0.0500		113	70-130			
<b>LCS Dup (B285252-BSD1)</b>					Prepared & Analyzed: 07/02/21					
Acetone	0.174	0.10	mg/Kg wet	0.200		87.2	70-160	0.811	25	†
Acrylonitrile	0.0228	0.0060	mg/Kg wet	0.0200		114	70-130	7.27	25	
tert-Amyl Methyl Ether (TAME)	0.0204	0.0010	mg/Kg wet	0.0200		102	70-130	4.60	25	
Benzene	0.0209	0.0020	mg/Kg wet	0.0200		104	70-130	1.43	25	
Bromobenzene	0.0183	0.0020	mg/Kg wet	0.0200		91.4	70-130	0.219	25	
Bromochloromethane	0.0257	0.0020	mg/Kg wet	0.0200		129	70-130	2.00	25	V-20
Bromodichloromethane	0.0210	0.0020	mg/Kg wet	0.0200		105	70-130	1.70	25	
Bromoform	0.0181	0.0020	mg/Kg wet	0.0200		90.4	70-130	1.22	25	
<b>Bromomethane</b>	0.0264	0.010	mg/Kg wet	0.0200		<b>132</b>	* 40-130	4.80	25	L-02, V-20 †
2-Butanone (MEK)	0.223	0.040	mg/Kg wet	0.200		112	70-160	3.14	25	†
tert-Butyl Alcohol (TBA)	0.182	0.10	mg/Kg wet	0.200		91.1	40-130	3.12	25	†
n-Butylbenzene	0.0165	0.0020	mg/Kg wet	0.0200		82.5	70-130	1.56	25	
sec-Butylbenzene	0.0201	0.0020	mg/Kg wet	0.0200		101	70-130	7.84	25	
tert-Butylbenzene	0.0183	0.0020	mg/Kg wet	0.0200		91.3	70-160	2.27	25	†
tert-Butyl Ethyl Ether (TBEE)	0.0209	0.0010	mg/Kg wet	0.0200		105	70-130	3.84	25	
Carbon Disulfide	0.143	0.0060	mg/Kg wet	0.200		71.6	70-130	3.11	25	V-05
Carbon Tetrachloride	0.0220	0.0020	mg/Kg wet	0.0200		110	70-130	3.57	25	
Chlorobenzene	0.0188	0.0020	mg/Kg wet	0.0200		94.1	70-130	6.58	25	
Chlorodibromomethane	0.0226	0.0010	mg/Kg wet	0.0200		113	70-130	1.78	25	
Chloroethane	0.0169	0.020	mg/Kg wet	0.0200		84.3	70-130	4.12	25	
Chloroform	0.0224	0.0040	mg/Kg wet	0.0200		112	70-130	0.533	25	
Chloromethane	0.0231	0.010	mg/Kg wet	0.0200		116	70-130	2.05	25	
2-Chlorotoluene	0.0195	0.0020	mg/Kg wet	0.0200		97.7	70-130	4.11	25	
4-Chlorotoluene	0.0202	0.0020	mg/Kg wet	0.0200		101	70-130	0.198	25	
1,2-Dibromo-3-chloropropane (DBCP)	0.0165	0.0020	mg/Kg wet	0.0200		82.4	70-130	2.75	25	
1,2-Dibromoethane (EDB)	0.0226	0.0010	mg/Kg wet	0.0200		113	70-130	0.354	25	
Dibromomethane	0.0232	0.0020	mg/Kg wet	0.0200		116	70-130	6.41	25	
1,2-Dichlorobenzene	0.0183	0.0020	mg/Kg wet	0.0200		91.3	70-130	1.21	25	
1,3-Dichlorobenzene	0.0179	0.0020	mg/Kg wet	0.0200		89.6	70-130	0.556	25	
1,4-Dichlorobenzene	0.0184	0.0020	mg/Kg wet	0.0200		92.1	70-130	4.04	25	
trans-1,4-Dichloro-2-butene	0.0187	0.0040	mg/Kg wet	0.0200		93.6	70-130	7.31	25	
Dichlorodifluoromethane (Freon 12)	0.0167	0.020	mg/Kg wet	0.0200		83.4	40-160	8.06	25	†
1,1-Dichloroethane	0.0208	0.0020	mg/Kg wet	0.0200		104	70-130	3.13	25	
1,2-Dichloroethane	0.0229	0.0020	mg/Kg wet	0.0200		114	70-130	0.349	25	
1,1-Dichloroethylene	0.0150	0.0040	mg/Kg wet	0.0200		75.0	70-130	4.05	25	V-05
cis-1,2-Dichloroethylene	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130	0.485	25	
trans-1,2-Dichloroethylene	0.0205	0.0020	mg/Kg wet	0.0200		103	70-130	4.19	25	
1,2-Dichloropropane	0.0220	0.0020	mg/Kg wet	0.0200		110	70-130	1.65	25	
1,3-Dichloropropane	0.0196	0.0010	mg/Kg wet	0.0200		97.9	70-130	3.22	25	
2,2-Dichloropropane	0.0191	0.0020	mg/Kg wet	0.0200		95.7	70-130	0.936	25	
1,1-Dichloropropene	0.0235	0.0020	mg/Kg wet	0.0200		117	70-130	18.2	25	
cis-1,3-Dichloropropene	0.0206	0.0010	mg/Kg wet	0.0200		103	70-130	3.76	25	
trans-1,3-Dichloropropene	0.0211	0.0010	mg/Kg wet	0.0200		106	70-130	10.7	25	
Diethyl Ether	0.0180	0.020	mg/Kg wet	0.0200		89.9	70-130	9.56	25	
Diisopropyl Ether (DIPE)	0.0233	0.0010	mg/Kg wet	0.0200		116	70-130	2.29	25	
1,4-Dioxane	0.255	0.10	mg/Kg wet	0.200		128	40-160	26.0	50	† ‡
Ethylbenzene	0.0199	0.0020	mg/Kg wet	0.0200		99.3	70-130	1.52	25	
Hexachlorobutadiene	0.0191	0.0020	mg/Kg wet	0.0200		95.3	70-160	1.87	25	
2-Hexanone (MBK)	0.226	0.020	mg/Kg wet	0.200		113	70-160	0.697	25	†



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B285252 - SW-846 5035</b>										
<b>LCS Dup (B285252-BSD1)</b>										
					Prepared & Analyzed: 07/02/21					
Isopropylbenzene (Cumene)	0.0181	0.0020	mg/Kg wet	0.0200		90.3	70-130	3.05	25	
p-Isopropyltoluene (p-Cymene)	0.0167	0.0020	mg/Kg wet	0.0200		83.7	70-130	1.81	25	
<b>Methyl Acetate</b>	0.0289	0.0020	mg/Kg wet	0.0200		<b>144</b> *	70-130	4.90	25	L-02, V-20
Methyl tert-Butyl Ether (MTBE)	0.0195	0.0040	mg/Kg wet	0.0200		97.4	70-130	4.73	25	
Methyl Cyclohexane	0.0197	0.0020	mg/Kg wet	0.0200		98.3	70-130	1.23	25	
Methylene Chloride	0.0235	0.020	mg/Kg wet	0.0200		117	40-160	0.680	25	†
4-Methyl-2-pentanone (MIBK)	0.223	0.020	mg/Kg wet	0.200		111	70-160	1.10	25	†
Naphthalene	0.0162	0.0040	mg/Kg wet	0.0200		81.2	40-130	0.370	25	†
n-Propylbenzene	0.0186	0.0020	mg/Kg wet	0.0200		92.8	70-130	3.39	25	
Styrene	0.0183	0.0020	mg/Kg wet	0.0200		91.7	70-130	0.437	25	
1,1,1,2-Tetrachloroethane	0.0201	0.0020	mg/Kg wet	0.0200		100	70-130	1.09	25	
1,1,1,2,2-Tetrachloroethane	0.0180	0.0010	mg/Kg wet	0.0200		89.9	70-130	0.334	25	
Tetrachloroethylene	0.0226	0.0020	mg/Kg wet	0.0200		113	70-130	2.53	25	
Tetrahydrofuran	0.0205	0.010	mg/Kg wet	0.0200		102	70-130	11.1	25	
Toluene	0.0220	0.0020	mg/Kg wet	0.0200		110	70-130	3.90	25	
1,2,3-Trichlorobenzene	0.0160	0.0020	mg/Kg wet	0.0200		80.0	70-130	1.37	25	V-05
1,2,4-Trichlorobenzene	0.0151	0.0020	mg/Kg wet	0.0200		75.3	70-130	1.84	25	
1,3,5-Trichlorobenzene	0.0164	0.0020	mg/Kg wet	0.0200		82.1	70-130	2.47	25	
1,1,1-Trichloroethane	0.0216	0.0020	mg/Kg wet	0.0200		108	70-130	6.46	25	
1,1,2-Trichloroethane	0.0195	0.0020	mg/Kg wet	0.0200		97.6	70-130	6.35	25	
Trichloroethylene	0.0193	0.0020	mg/Kg wet	0.0200		96.5	70-130	0.207	25	
<b>Trichlorofluoromethane (Freon 11)</b>	0.0131	0.010	mg/Kg wet	0.0200		<b>65.4</b> *	70-130	0.153	25	L-04, V-05
1,2,3-Trichloropropane	0.0205	0.0020	mg/Kg wet	0.0200		102	70-130	1.26	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0164	0.010	mg/Kg wet	0.0200		82.1	70-130	0.244	25	
1,2,4-Trimethylbenzene	0.0188	0.0020	mg/Kg wet	0.0200		93.8	70-130	0.534	25	
1,3,5-Trimethylbenzene	0.0205	0.0020	mg/Kg wet	0.0200		103	70-130	3.37	25	
Vinyl Chloride	0.0166	0.010	mg/Kg wet	0.0200		83.2	40-130	7.07	25	†
m+p Xylene	0.0374	0.0040	mg/Kg wet	0.0400		93.6	70-130	3.67	25	
o-Xylene	0.0195	0.0020	mg/Kg wet	0.0200		97.4	70-130	4.91	25	
Surrogate: 1,2-Dichloroethane-d4	0.0490		mg/Kg wet	0.0500		97.9	70-130			
Surrogate: Toluene-d8	0.0538		mg/Kg wet	0.0500		108	70-130			
Surrogate: 4-Bromofluorobenzene	0.0563		mg/Kg wet	0.0500		113	70-130			



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch B285209 - SW-846 3546**
**Blank (B285209-BLK1)**

Prepared: 07/02/21 Analyzed: 07/07/21

Acenaphthene	ND	0.17	mg/Kg wet							
Acenaphthylene	ND	0.17	mg/Kg wet							
Anthracene	ND	0.17	mg/Kg wet							
Benzo(a)anthracene	ND	0.17	mg/Kg wet							
Benzo(a)pyrene	ND	0.17	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.17	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.17	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.17	mg/Kg wet							
Chrysene	ND	0.17	mg/Kg wet							
Dibenz(a,h)anthracene	ND	0.17	mg/Kg wet							
Fluoranthene	ND	0.17	mg/Kg wet							
Fluorene	ND	0.17	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	ND	0.17	mg/Kg wet							
2-Methylnaphthalene	ND	0.17	mg/Kg wet							
Naphthalene	ND	0.17	mg/Kg wet							
Phenanthrene	ND	0.17	mg/Kg wet							
Pyrene	ND	0.17	mg/Kg wet							
Surrogate: Nitrobenzene-d5	2.11		mg/Kg wet	3.33		63.3	30-130			
Surrogate: 2-Fluorobiphenyl	2.16		mg/Kg wet	3.33		64.7	30-130			
Surrogate: p-Terphenyl-d14	3.77		mg/Kg wet	3.33		113	30-130			

**LCS (B285209-BS1)**

Prepared: 07/02/21 Analyzed: 07/07/21

Acenaphthene	1.03	0.17	mg/Kg wet	1.65		62.2	40-140			
Acenaphthylene	1.10	0.17	mg/Kg wet	1.65		66.8	40-140			
Anthracene	1.13	0.17	mg/Kg wet	1.65		68.2	40-140			
Benzo(a)anthracene	1.14	0.17	mg/Kg wet	1.65		69.1	40-140			
Benzo(a)pyrene	1.03	0.17	mg/Kg wet	1.65		62.6	40-140			
Benzo(b)fluoranthene	1.10	0.17	mg/Kg wet	1.65		67.0	40-140			
Benzo(g,h,i)perylene	1.17	0.17	mg/Kg wet	1.65		71.1	40-140			
Benzo(k)fluoranthene	1.08	0.17	mg/Kg wet	1.65		65.2	40-140			
Chrysene	1.09	0.17	mg/Kg wet	1.65		65.9	40-140			
Dibenz(a,h)anthracene	1.13	0.17	mg/Kg wet	1.65		68.3	40-140			
Fluoranthene	1.13	0.17	mg/Kg wet	1.65		68.6	40-140			
Fluorene	1.06	0.17	mg/Kg wet	1.65		64.5	40-140			
Indeno(1,2,3-cd)pyrene	1.13	0.17	mg/Kg wet	1.65		68.5	40-140			
2-Methylnaphthalene	1.15	0.17	mg/Kg wet	1.65		69.9	40-140			
Naphthalene	1.06	0.17	mg/Kg wet	1.65		64.3	40-140			
Phenanthrene	1.12	0.17	mg/Kg wet	1.65		67.8	40-140			
Pyrene	1.14	0.17	mg/Kg wet	1.65		69.0	40-140			
Surrogate: Nitrobenzene-d5	2.40		mg/Kg wet	3.30		72.7	30-130			
Surrogate: 2-Fluorobiphenyl	2.37		mg/Kg wet	3.30		71.8	30-130			
Surrogate: p-Terphenyl-d14	3.03		mg/Kg wet	3.30		91.8	30-130			

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B285209 - SW-846 3546</b>										
<b>LCS Dup (B285209-BSD1)</b>										
					Prepared: 07/02/21 Analyzed: 07/07/21					
Acenaphthene	1.10	0.17	mg/Kg wet	1.67		65.8	40-140	6.71	30	
Acenaphthylene	1.13	0.17	mg/Kg wet	1.67		68.0	40-140	2.81	30	
Anthracene	1.12	0.17	mg/Kg wet	1.67		67.4	40-140	0.274	30	
Benzo(a)anthracene	1.15	0.17	mg/Kg wet	1.67		68.9	40-140	0.763	30	
Benzo(a)pyrene	1.08	0.17	mg/Kg wet	1.67		64.9	40-140	4.70	30	
Benzo(b)fluoranthene	1.10	0.17	mg/Kg wet	1.67		66.1	40-140	0.267	30	
Benzo(g,h,i)perylene	1.19	0.17	mg/Kg wet	1.67		71.6	40-140	1.70	30	
Benzo(k)fluoranthene	1.11	0.17	mg/Kg wet	1.67		66.4	40-140	2.88	30	
Chrysene	1.11	0.17	mg/Kg wet	1.67		66.4	40-140	1.69	30	
Dibenz(a,h)anthracene	1.12	0.17	mg/Kg wet	1.67		67.1	40-140	0.806	30	
Fluoranthene	1.13	0.17	mg/Kg wet	1.67		67.9	40-140	0.0283	30	
Fluorene	1.09	0.17	mg/Kg wet	1.67		65.2	40-140	2.01	30	
Indeno(1,2,3-cd)pyrene	1.17	0.17	mg/Kg wet	1.67		70.4	40-140	3.73	30	
2-Methylnaphthalene	1.20	0.17	mg/Kg wet	1.67		72.2	40-140	4.20	30	
Naphthalene	1.08	0.17	mg/Kg wet	1.67		64.7	40-140	1.58	30	
Phenanthrene	1.13	0.17	mg/Kg wet	1.67		67.5	40-140	0.640	30	
Pyrene	1.16	0.17	mg/Kg wet	1.67		69.7	40-140	2.00	30	
Surrogate: Nitrobenzene-d5	2.42		mg/Kg wet	3.33		72.6	30-130			
Surrogate: 2-Fluorobiphenyl	2.45		mg/Kg wet	3.33		73.4	30-130			
Surrogate: p-Terphenyl-d14	3.11		mg/Kg wet	3.33		93.2	30-130			
<b>Matrix Spike (B285209-MS1)</b>										
			<b>Source: 21G0035-20</b>		Prepared: 07/02/21 Analyzed: 07/08/21					
Acenaphthene	1.07	0.18	mg/Kg dry	1.76	ND	60.9	40-140			
Acenaphthylene	1.13	0.18	mg/Kg dry	1.76	ND	64.0	40-140			
Anthracene	1.15	0.18	mg/Kg dry	1.76	ND	65.2	40-140			
Benzo(a)anthracene	1.24	0.18	mg/Kg dry	1.76	0.0554	67.2	40-140			
Benzo(a)pyrene	1.19	0.18	mg/Kg dry	1.76	0.103	61.6	40-140			
Benzo(b)fluoranthene	1.31	0.18	mg/Kg dry	1.76	0.206	62.6	40-140			
Benzo(g,h,i)perylene	1.23	0.18	mg/Kg dry	1.76	ND	69.5	40-140			
Benzo(k)fluoranthene	1.21	0.18	mg/Kg dry	1.76	0.0754	64.3	40-140			
Chrysene	1.21	0.18	mg/Kg dry	1.76	0.0561	65.6	40-140			
Dibenz(a,h)anthracene	1.17	0.18	mg/Kg dry	1.76	ND	66.4	40-140			
Fluoranthene	1.22	0.18	mg/Kg dry	1.76	0.0740	65.2	40-140			
Fluorene	1.10	0.18	mg/Kg dry	1.76	ND	62.2	40-140			
Indeno(1,2,3-cd)pyrene	1.27	0.18	mg/Kg dry	1.76	0.0820	67.5	40-140			
2-Methylnaphthalene	1.17	0.18	mg/Kg dry	1.76	ND	66.4	40-140			
Naphthalene	1.04	0.18	mg/Kg dry	1.76	ND	59.2	40-140			
Phenanthrene	1.18	0.18	mg/Kg dry	1.76	ND	66.6	40-140			
Pyrene	1.50	0.18	mg/Kg dry	1.76	0.0862	80.0	40-140			
Surrogate: Nitrobenzene-d5	2.33		mg/Kg dry	3.53		66.2	30-130			
Surrogate: 2-Fluorobiphenyl	2.39		mg/Kg dry	3.53		67.8	30-130			
Surrogate: p-Terphenyl-d14	3.50		mg/Kg dry	3.53		99.1	30-130			

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B285209 - SW-846 3546</b>										
<b>Matrix Spike Dup (B285209-MSD1)</b>	<b>Source: 21G0035-20</b>			Prepared: 07/02/21 Analyzed: 07/08/21						
Acenaphthene	1.01	0.18	mg/Kg dry	1.75	ND	57.4	40-140	6.65	30	
Acenaphthylene	1.07	0.18	mg/Kg dry	1.75	ND	61.2	40-140	5.26	30	
Anthracene	1.11	0.18	mg/Kg dry	1.75	ND	63.2	40-140	3.68	30	
Benzo(a)anthracene	1.15	0.18	mg/Kg dry	1.75	0.0554	62.3	40-140	7.82	30	
Benzo(a)pyrene	1.14	0.18	mg/Kg dry	1.75	0.103	59.1	40-140	4.47	30	
Benzo(b)fluoranthene	1.28	0.18	mg/Kg dry	1.75	0.206	61.6	40-140	1.94	30	
Benzo(g,h,i)perylene	1.03	0.18	mg/Kg dry	1.75	ND	58.5	40-140	17.9	30	
Benzo(k)fluoranthene	1.22	0.18	mg/Kg dry	1.75	0.0754	65.5	40-140	1.16	30	
Chrysene	1.13	0.18	mg/Kg dry	1.75	0.0561	61.5	40-140	6.83	30	
Dibenz(a,h)anthracene	0.961	0.18	mg/Kg dry	1.75	ND	54.8	40-140	19.8	30	
Fluoranthene	1.13	0.18	mg/Kg dry	1.75	0.0740	60.5	40-140	7.70	30	
Fluorene	1.02	0.18	mg/Kg dry	1.75	ND	58.4	40-140	6.93	30	
Indeno(1,2,3-cd)pyrene	1.06	0.18	mg/Kg dry	1.75	0.0820	55.9	40-140	18.1	30	
2-Methylnaphthalene	1.14	0.18	mg/Kg dry	1.75	ND	65.2	40-140	2.58	30	
Naphthalene	1.03	0.18	mg/Kg dry	1.75	ND	58.8	40-140	1.41	30	
Phenanthrene	1.13	0.18	mg/Kg dry	1.75	ND	64.5	40-140	3.96	30	
Pyrene	1.31	0.18	mg/Kg dry	1.75	0.0862	69.6	40-140	13.7	30	
Surrogate: Nitrobenzene-d5	2.26		mg/Kg dry	3.50		64.5	30-130			
Surrogate: 2-Fluorobiphenyl	2.34		mg/Kg dry	3.50		66.8	30-130			
Surrogate: p-Terphenyl-d14	3.16		mg/Kg dry	3.50		90.3	30-130			

**QUALITY CONTROL**
**Polychlorinated Biphenyls with 3540 Soxhlet Extraction - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B285421 - SW-846 3540C</b>										
<b>Blank (B285421-BLK1)</b>										
Prepared: 07/07/21 Analyzed: 07/09/21										
Aroclor-1016	ND	0.020	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1221	ND	0.020	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1232	ND	0.020	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1242	ND	0.020	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1248	ND	0.020	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1254	ND	0.020	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1260	ND	0.020	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1262	ND	0.020	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1268	ND	0.020	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.020	mg/Kg wet							
Surrogate: Decachlorobiphenyl	0.182		mg/Kg wet	0.200		90.8	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.171		mg/Kg wet	0.200		85.7	30-150			
Surrogate: Tetrachloro-m-xylene	0.170		mg/Kg wet	0.200		85.0	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.169		mg/Kg wet	0.200		84.5	30-150			
<b>LCS (B285421-BS1)</b>										
Prepared: 07/07/21 Analyzed: 07/09/21										
Aroclor-1016	0.16	0.020	mg/Kg wet	0.200		80.6	40-140			
Aroclor-1016 [2C]	0.15	0.020	mg/Kg wet	0.200		76.5	40-140			
Aroclor-1260	0.15	0.020	mg/Kg wet	0.200		76.4	40-140			
Aroclor-1260 [2C]	0.14	0.020	mg/Kg wet	0.200		69.0	40-140			
Surrogate: Decachlorobiphenyl	0.172		mg/Kg wet	0.200		85.8	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.163		mg/Kg wet	0.200		81.6	30-150			
Surrogate: Tetrachloro-m-xylene	0.157		mg/Kg wet	0.200		78.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.157		mg/Kg wet	0.200		78.6	30-150			
<b>LCS Dup (B285421-BSD1)</b>										
Prepared: 07/07/21 Analyzed: 07/09/21										
Aroclor-1016	0.16	0.020	mg/Kg wet	0.200		78.2	40-140	3.07	30	
Aroclor-1016 [2C]	0.15	0.020	mg/Kg wet	0.200		73.1	40-140	4.51	30	
Aroclor-1260	0.14	0.020	mg/Kg wet	0.200		71.8	40-140	6.31	30	
Aroclor-1260 [2C]	0.13	0.020	mg/Kg wet	0.200		65.5	40-140	5.13	30	
Surrogate: Decachlorobiphenyl	0.162		mg/Kg wet	0.200		80.9	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.156		mg/Kg wet	0.200		77.8	30-150			
Surrogate: Tetrachloro-m-xylene	0.152		mg/Kg wet	0.200		75.9	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.151		mg/Kg wet	0.200		75.6	30-150			

**QUALITY CONTROL**
**Polychlorinated Biphenyls with 3540 Soxhlet Extraction - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

**Batch B285421 - SW-846 3540C**
**Matrix Spike (B285421-MS1)**
**Source: 21G0035-11**

Prepared: 07/07/21 Analyzed: 07/10/21

Aroclor-1016	0.18	0.085	mg/Kg dry	0.213	ND	82.3	40-140			
Aroclor-1016 [2C]	0.14	0.085	mg/Kg dry	0.213	ND	65.7	40-140			
Aroclor-1260	0.14	0.085	mg/Kg dry	0.213	ND	67.7	40-140			
Aroclor-1260 [2C]	0.13	0.085	mg/Kg dry	0.213	ND	59.5	40-140			
Surrogate: Decachlorobiphenyl	0.172		mg/Kg dry	0.213		81.0	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.150		mg/Kg dry	0.213		70.3	30-150			
Surrogate: Tetrachloro-m-xylene	0.165		mg/Kg dry	0.213		77.6	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.149		mg/Kg dry	0.213		70.0	30-150			

**Matrix Spike Dup (B285421-MSD1)**
**Source: 21G0035-11**

Prepared: 07/07/21 Analyzed: 07/10/21

Aroclor-1016	0.17	0.085	mg/Kg dry	0.213	ND	80.0	40-140	2.82	50	
Aroclor-1016 [2C]	0.13	0.085	mg/Kg dry	0.213	ND	63.4	40-140	3.65	50	
Aroclor-1260	0.14	0.085	mg/Kg dry	0.213	ND	65.2	40-140	3.69	50	
Aroclor-1260 [2C]	0.12	0.085	mg/Kg dry	0.213	ND	57.2	40-140	3.83	50	
Surrogate: Decachlorobiphenyl	0.164		mg/Kg dry	0.213		77.1	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.143		mg/Kg dry	0.213		67.0	30-150			
Surrogate: Tetrachloro-m-xylene	0.157		mg/Kg dry	0.213		73.8	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.142		mg/Kg dry	0.213		66.9	30-150			

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B285208 - SW-846 3546</b>										
<b>Blank (B285208-BLK1)</b>										
					Prepared: 07/02/21 Analyzed: 07/06/21					
TPH (C9-C36)	ND	8.3	mg/Kg wet							
Surrogate: 2-Fluorobiphenyl	2.42		mg/Kg wet	3.33		72.7	40-140			
<b>LCS (B285208-BS1)</b>										
					Prepared: 07/02/21 Analyzed: 07/06/21					
TPH (C9-C36)	25.7	8.2	mg/Kg wet	32.9		78.1	40-140			
Surrogate: 2-Fluorobiphenyl	2.61		mg/Kg wet	3.29		79.4	40-140			
<b>LCS Dup (B285208-BSD1)</b>										
					Prepared: 07/02/21 Analyzed: 07/06/21					
TPH (C9-C36)	25.8	8.2	mg/Kg wet	33.0		78.2	40-140	0.491	25	
Surrogate: 2-Fluorobiphenyl	2.61		mg/Kg wet	3.30		79.0	40-140			
<b>Matrix Spike (B285208-MS1)</b>										
					Source: 21G0035-03		Prepared: 07/02/21 Analyzed: 07/07/21			
TPH (C9-C36)	73.3	9.1	mg/Kg dry	36.3	32.3	113	40-140			
Surrogate: 2-Fluorobiphenyl	1.89		mg/Kg dry	3.63		52.0	40-140			
<b>Matrix Spike Dup (B285208-MSD1)</b>										
					Source: 21G0035-03		Prepared: 07/02/21 Analyzed: 07/07/21			
TPH (C9-C36)	73.8	9.0	mg/Kg dry	36.1	32.3	115	40-140	0.612	50	
Surrogate: 2-Fluorobiphenyl	1.91		mg/Kg dry	3.61		53.0	40-140			

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch B285206 - SW-846 3050B**
**Blank (B285206-BLK1)**

Prepared: 07/02/21 Analyzed: 07/06/21

Antimony	ND	1.6	mg/Kg wet							
Arsenic	ND	3.3	mg/Kg wet							
Beryllium	ND	0.16	mg/Kg wet							
Cadmium	ND	0.33	mg/Kg wet							
Chromium	ND	0.66	mg/Kg wet							
Copper	ND	0.66	mg/Kg wet							
Lead	ND	0.49	mg/Kg wet							
Nickel	ND	0.66	mg/Kg wet							
Selenium	ND	3.3	mg/Kg wet							
Silver	ND	0.33	mg/Kg wet							
Thallium	ND	1.6	mg/Kg wet							
Zinc	ND	0.66	mg/Kg wet							

**LCS (B285206-BS1)**

Prepared: 07/02/21 Analyzed: 07/07/21

Antimony	133	5.0	mg/Kg wet	134		99.6	1.9-200.7			
Arsenic	171	10	mg/Kg wet	170		101	82.9-117.6			
<b>Beryllium</b>	143	0.50	mg/Kg wet	116		<b>123</b>	* 83.4-116.4			L-07
Cadmium	104	1.0	mg/Kg wet	89.5		116	82.8-117.3			
<b>Chromium</b>	122	2.0	mg/Kg wet	101		<b>121</b>	* 82.1-117.8			L-07
Copper	169	2.0	mg/Kg wet	149		113	83.9-116.1			
Lead	145	1.5	mg/Kg wet	140		103	82.9-117.1			
<b>Nickel</b>	85.0	2.0	mg/Kg wet	68.3		<b>124</b>	* 82.1-117.7			L-07
Selenium	201	10	mg/Kg wet	182		110	79.7-120.3			
Silver	52.9	1.0	mg/Kg wet	50.1		106	80.2-120			
Thallium	82.5	5.0	mg/Kg wet	87.7		94.0	81.1-118.6			
Zinc	262	2.0	mg/Kg wet	228		115	80.7-118.9			

**LCS Dup (B285206-BSD1)**

Prepared: 07/02/21 Analyzed: 07/07/21

Antimony	126	5.0	mg/Kg wet	134		94.2	1.9-200.7	5.54	30	
Arsenic	169	10	mg/Kg wet	170		99.7	82.9-117.6	1.10	30	
Beryllium	132	0.50	mg/Kg wet	116		114	83.4-116.4	7.48	30	
Cadmium	97.2	1.0	mg/Kg wet	89.5		109	82.8-117.3	7.04	20	
Chromium	112	2.0	mg/Kg wet	101		111	82.1-117.8	8.45	30	
Copper	161	2.0	mg/Kg wet	149		108	83.9-116.1	4.57	30	
Lead	146	1.5	mg/Kg wet	140		104	82.9-117.1	0.846	30	
Nickel	79.8	2.0	mg/Kg wet	68.3		117	82.1-117.7	6.31	30	
Selenium	198	10	mg/Kg wet	182		109	79.7-120.3	1.41	30	
Silver	53.4	1.0	mg/Kg wet	50.1		107	80.2-120	0.870	30	
Thallium	78.1	5.0	mg/Kg wet	87.7		89.1	81.1-118.6	5.41	30	
Zinc	252	2.0	mg/Kg wet	228		111	80.7-118.9	4.02	30	

**Duplicate (B285206-DUP1)**
**Source: 21G0035-18**

Prepared: 07/02/21 Analyzed: 07/06/21

Antimony	ND	1.8	mg/Kg dry		ND			NC	35	
Arsenic	ND	3.6	mg/Kg dry		ND			NC	35	
Beryllium	0.213	0.18	mg/Kg dry		0.235			9.88	35	
Cadmium	ND	0.36	mg/Kg dry		ND			NC	35	
Chromium	3.85	0.72	mg/Kg dry		4.74			20.9	35	
Copper	3.26	0.72	mg/Kg dry		3.71			13.0	35	
Lead	1.62	0.54	mg/Kg dry		1.80			10.7	35	
Nickel	2.60	0.72	mg/Kg dry		3.08			17.0	35	
Selenium	ND	3.6	mg/Kg dry		ND			NC	35	
Silver	ND	0.36	mg/Kg dry		ND			NC	35	
Thallium	ND	1.8	mg/Kg dry		ND			NC	35	

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B285206 - SW-846 3050B</b>										
<b>Duplicate (B285206-DUP1)</b>		<b>Source: 21G0035-18</b>			Prepared: 07/02/21 Analyzed: 07/06/21					
Zinc	17.8	0.72	mg/Kg dry		19.0			6.48	35	
<b>Matrix Spike (B285206-MS1)</b>		<b>Source: 21G0035-18</b>			Prepared: 07/02/21 Analyzed: 07/06/21					
<b>Antimony</b>	7.91	1.7	mg/Kg dry	17.4	0.706	<b>41.4</b>	* 75-125			MS-07
Arsenic	16.0	3.5	mg/Kg dry	17.4	1.92	80.7	75-125			
Beryllium	15.5	0.17	mg/Kg dry	17.4	0.235	87.9	75-125			
Cadmium	14.9	0.35	mg/Kg dry	17.4	ND	85.7	75-125			
Chromium	19.8	0.70	mg/Kg dry	17.4	4.74	86.4	75-125			
Copper	34.2	0.70	mg/Kg dry	34.8	3.71	87.7	75-125			
Lead	16.2	0.52	mg/Kg dry	17.4	1.80	82.5	75-125			
Nickel	17.7	0.70	mg/Kg dry	17.4	3.08	84.2	75-125			
<b>Selenium</b>	11.4	3.5	mg/Kg dry	17.4	ND	<b>65.8</b>	* 75-125			MS-07
Silver	15.5	0.35	mg/Kg dry	17.4	ND	89.0	75-125			
Thallium	18.8	1.7	mg/Kg dry	17.4	ND	108	75-125			
Zinc	50.9	0.70	mg/Kg dry	34.8	19.0	91.7	75-125			
<b>Reference (B285206-SRM1) MRL Check</b>					Prepared: 07/02/21 Analyzed: 07/06/21					
Lead	0.458	0.48	mg/Kg wet	0.481		95.1	80-120			
<b>Batch B285207 - SW-846 3050B</b>										
<b>Blank (B285207-BLK1)</b>					Prepared: 07/02/21 Analyzed: 07/06/21					
Antimony	ND	1.6	mg/Kg wet							
Arsenic	ND	3.2	mg/Kg wet							
Beryllium	ND	0.16	mg/Kg wet							
Cadmium	ND	0.32	mg/Kg wet							
Chromium	ND	0.64	mg/Kg wet							
Copper	ND	0.64	mg/Kg wet							
Lead	ND	0.48	mg/Kg wet							
Nickel	ND	0.64	mg/Kg wet							
Selenium	ND	3.2	mg/Kg wet							
Silver	ND	0.32	mg/Kg wet							
Thallium	ND	1.6	mg/Kg wet							
Zinc	ND	0.64	mg/Kg wet							
<b>LCS (B285207-BS1)</b>					Prepared: 07/02/21 Analyzed: 07/06/21					
Antimony	104	5.0	mg/Kg wet	134		78.0	1.9-200.7			
Arsenic	164	9.9	mg/Kg wet	170		96.4	82.9-117.6			
Beryllium	106	0.50	mg/Kg wet	116		91.0	83.4-116.4			
Cadmium	81.9	0.99	mg/Kg wet	89.5		91.5	82.8-117.3			
Chromium	87.2	2.0	mg/Kg wet	101		86.4	82.1-117.8			
Copper	130	2.0	mg/Kg wet	149		87.5	83.9-116.1			
Lead	142	1.5	mg/Kg wet	140		101	82.9-117.1			
Nickel	63.2	2.0	mg/Kg wet	68.3		92.6	82.1-117.7			
Selenium	186	9.9	mg/Kg wet	182		102	79.7-120.3			
Silver	40.7	0.99	mg/Kg wet	50.1		81.2	80.2-120			
Thallium	82.9	5.0	mg/Kg wet	87.7		94.5	81.1-118.6			
Zinc	196	2.0	mg/Kg wet	228		86.0	80.7-118.9			



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B285207 - SW-846 3050B</b>										
<b>LCS Dup (B285207-BSD1)</b>										
					Prepared: 07/02/21 Analyzed: 07/06/21					
Antimony	99.8	5.0	mg/Kg wet	134		74.5	1.9-200.7	4.60	30	
Arsenic	170	10	mg/Kg wet	170		99.9	82.9-117.6	3.61	30	
Beryllium	102	0.50	mg/Kg wet	116		87.5	83.4-116.4	3.89	30	
Cadmium	80.0	1.0	mg/Kg wet	89.5		89.4	82.8-117.3	2.30	20	
Chromium	85.2	2.0	mg/Kg wet	101		84.3	82.1-117.8	2.41	30	
Copper	129	2.0	mg/Kg wet	149		86.4	83.9-116.1	1.31	30	
Lead	147	1.5	mg/Kg wet	140		105	82.9-117.1	3.51	30	
Nickel	61.2	2.0	mg/Kg wet	68.3		89.6	82.1-117.7	3.24	30	
Selenium	190	10	mg/Kg wet	182		104	79.7-120.3	2.38	30	
Silver	42.9	1.0	mg/Kg wet	50.1		85.7	80.2-120	5.31	30	
Thallium	82.9	5.0	mg/Kg wet	87.7		94.6	81.1-118.6	0.0225	30	
Zinc	194	2.0	mg/Kg wet	228		84.9	80.7-118.9	1.30	30	
<b>Duplicate (B285207-DUP1)</b>										
					Source: 21G0035-01 Prepared: 07/02/21 Analyzed: 07/06/21					
Antimony	ND	1.7	mg/Kg dry		ND			NC	35	
Arsenic	8.91	3.4	mg/Kg dry		3.45			<b>88.4</b> *	35	R-04
Beryllium	0.455	0.17	mg/Kg dry		0.269			<b>51.5</b> *	35	R-04
Cadmium	ND	0.34	mg/Kg dry		ND			NC	35	
Chromium	11.1	0.68	mg/Kg dry		13.5			19.6	35	
Copper	29.8	0.68	mg/Kg dry		22.1			29.7	35	
Lead	60.8	0.51	mg/Kg dry		66.5			8.98	35	
Nickel	6.89	0.68	mg/Kg dry		5.31			25.8	35	
Selenium	ND	3.4	mg/Kg dry		ND			NC	35	
Silver	ND	0.34	mg/Kg dry		ND			NC	35	
Thallium	ND	1.7	mg/Kg dry		ND			NC	35	
Zinc	36.8	0.68	mg/Kg dry		52.2			34.5	35	
<b>Matrix Spike (B285207-MS1)</b>										
					Source: 21G0035-01 Prepared: 07/02/21 Analyzed: 07/06/21					
<b>Antimony</b>	5.75	1.7	mg/Kg dry	17.2	ND	<b>33.3</b> *	75-125			MS-07
Arsenic	21.4	3.4	mg/Kg dry	17.2	3.45	104	75-125			
Beryllium	13.7	0.17	mg/Kg dry	17.2	0.269	78.0	75-125			
Cadmium	14.1	0.34	mg/Kg dry	17.2	ND	81.7	75-125			
Chromium	30.3	0.69	mg/Kg dry	17.2	13.5	97.2	75-125			
Copper	56.0	0.69	mg/Kg dry	34.5	22.1	98.4	75-125			
Lead	86.1	0.52	mg/Kg dry	17.2	66.5	114	75-125			
Nickel	18.8	0.69	mg/Kg dry	17.2	5.31	78.0	75-125			
Selenium	13.3	3.4	mg/Kg dry	17.2	ND	77.1	75-125			
Silver	15.1	0.34	mg/Kg dry	17.2	ND	87.4	75-125			
Thallium	18.5	1.7	mg/Kg dry	17.2	ND	107	75-125			
<b>Zinc</b>	75.3	0.69	mg/Kg dry	34.5	52.2	<b>67.1</b> *	75-125			MS-07
<b>Reference (B285207-SRM1) MRL Check</b>										
					Prepared: 07/02/21 Analyzed: 07/06/21					
Lead	0.499	0.48	mg/Kg wet	0.478		104	80-120			

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B285230 - SW-846 7471</b>										
<b>Blank (B285230-BLK1)</b>				Prepared: 07/02/21 Analyzed: 07/06/21						
Mercury	ND	0.025	mg/Kg wet							
<b>LCS (B285230-BS1)</b>				Prepared: 07/02/21 Analyzed: 07/06/21						
Mercury	14.2	0.76	mg/Kg wet	15.6		91.0	59.3-140.4			
<b>LCS Dup (B285230-BSD1)</b>				Prepared: 07/02/21 Analyzed: 07/06/21						
Mercury	14.4	0.75	mg/Kg wet	15.6		92.6	59.3-140.4	1.75	20	
<b>Duplicate (B285230-DUP1)</b>				<b>Source: 21G0035-20</b>		Prepared: 07/02/21 Analyzed: 07/06/21				
Mercury	ND	0.031	mg/Kg dry		ND			NC	20	
<b>Matrix Spike (B285230-MS1)</b>				<b>Source: 21G0035-20</b>		Prepared: 07/02/21 Analyzed: 07/06/21				
Mercury	0.432	0.028	mg/Kg dry	0.376	0.0272	108	80-120			
<b>Batch B285231 - SW-846 7471</b>										
<b>Blank (B285231-BLK1)</b>				Prepared: 07/02/21 Analyzed: 07/07/21						
Mercury	ND	0.025	mg/Kg wet							
<b>LCS (B285231-BS1)</b>				Prepared: 07/02/21 Analyzed: 07/07/21						
Mercury	14.6	0.74	mg/Kg wet	15.6		93.3	59.3-140.4			
<b>LCS Dup (B285231-BSD1)</b>				Prepared: 07/02/21 Analyzed: 07/07/21						
Mercury	16.1	0.76	mg/Kg wet	15.6		103	59.3-140.4	10.1	20	
<b>Duplicate (B285231-DUP1)</b>				<b>Source: 21G0035-02</b>		Prepared: 07/02/21 Analyzed: 07/07/21				
Mercury	ND	0.029	mg/Kg dry		ND			NC	20	
<b>Matrix Spike (B285231-MS1)</b>				<b>Source: 21G0035-02</b>		Prepared: 07/02/21 Analyzed: 07/07/21				
Mercury	0.428	0.029	mg/Kg dry	0.387	ND	111	80-120			

## IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

**LCS**
*SW-846 8082A*

 Lab Sample ID:           B285421-BS1                                Date(s) Analyzed:           07/09/2021                     07/09/2021          

 Instrument ID (1):           ECD4                                                Instrument ID (2):           ECD4          

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

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	-0.030	0.030	0.16	
	2	0.000	-0.030	0.030	0.15	6.5
Aroclor-1260	1	0.000	-0.030	0.030	0.15	
	2	0.000	-0.030	0.030	0.14	6.9

**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**

LCS Dup

*SW-846 8082A*Lab Sample ID: B285421-BSD1 Date(s) Analyzed: 07/09/2021 07/09/2021Instrument ID (1): ECD4 Instrument ID (2): ECD4

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

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	-0.030	0.030	0.16	
	2	0.000	-0.030	0.030	0.15	6.5
Aroclor-1260	1	0.000	-0.030	0.030	0.14	
	2	0.000	-0.030	0.030	0.13	7.4

## IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

*SW-846 8082A*

**Matrix Spike**

 Lab Sample ID:                     B285421-MS1                                          Date(s) Analyzed:           07/10/2021                     07/10/2021          

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

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

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	-0.030	0.030	0.18	
	2	0.000	-0.030	0.030	0.14	25.0
Aroclor-1260	1	0.000	-0.030	0.030	0.14	
	2	0.000	-0.030	0.030	0.13	7.4

## IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

*SW-846 8082A*

<b>Matrix Spike Dup</b>
-------------------------

Lab Sample ID:                     B285421-MSD1                          Date(s) Analyzed:           07/10/2021                     07/10/2021          

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

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

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	-0.030	0.030	0.17	
	2	0.000	-0.030	0.030	0.13	26.7
Aroclor-1260	1	0.000	-0.030	0.030	0.14	
	2	0.000	-0.030	0.030	0.12	15.4

**FLAG/QUALIFIER SUMMARY**

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
L-02	Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.
L-04	Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.
L-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
L-07A	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD outside of control limits. Reduced precision anticipated for any reported result for this compound.
MS-07	Matrix spike recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of sample matrix effects that lead to low bias for reported result or non-homogeneous sample aliquot cannot be eliminated.
O-25	Sample contamination consists of heavy residual hydrocarbons similar to asphalt.
O-26	Sample contamination consists of heavy residual hydrocarbons similar to asphalt. Chromatogram also shows the presence of PAHs.
R-04	Duplicate relative percent difference (RPD) is a less useful indicator of sample precision for sample results that are <5 times the reporting limit (RL).
R-05	Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
RL-12	Elevated reporting limit due to matrix interference.
S-01	The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.
S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-20	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.
V-34	Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.
Z-01	Chromatogram does not match any reference standard.
Z-01a	Chromatogram shows the presence heavy hydrocarbons similar to motor oil.
Z-01b	Chromatogram shows the presence of weathered #2 diesel fuel as well as heavier hydrocarbons in the motor oil range.
Z-01c	The sample chromatographic pattern does not exhibit any fuel pattern

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

Analyte	Certifications
<b><i>SW-846 6010D in Soil</i></b>	
Antimony	CT,NH,NY,ME,VA,NC
Arsenic	CT,NH,NY,ME,VA,NC
Beryllium	CT,NH,NY,ME,VA,NC
Cadmium	CT,NH,NY,ME,VA,NC
Chromium	CT,NH,NY,ME,VA,NC
Copper	CT,NH,NY,ME,VA,NC
Lead	CT,NH,NY,AIHA,ME,VA,NC
Nickel	CT,NH,NY,ME,VA,NC
Selenium	CT,NH,NY,ME,VA,NC
Silver	CT,NH,NY,ME,VA,NC
Thallium	CT,NH,NY,ME,VA,NC
Zinc	CT,NH,NY,ME,VA,NC
<b><i>SW-846 7471B in Soil</i></b>	
Mercury	CT,NH,NY,NC,ME,VA
<b><i>SW-846 8082A in Soil</i></b>	
Aroclor-1016	CT,NH,NY,ME,NC,VA,PA
Aroclor-1016 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1221	CT,NH,NY,ME,NC,VA,PA
Aroclor-1221 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1232	CT,NH,NY,ME,NC,VA,PA
Aroclor-1232 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1242	CT,NH,NY,ME,NC,VA,PA
Aroclor-1242 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1248	CT,NH,NY,ME,NC,VA,PA
Aroclor-1248 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1254	CT,NH,NY,ME,NC,VA,PA
Aroclor-1254 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1260	CT,NH,NY,ME,NC,VA,PA
Aroclor-1260 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1262	NY,NC,VA,PA
Aroclor-1262 [2C]	NY,NC,VA,PA
Aroclor-1268	NY,NC,VA,PA
Aroclor-1268 [2C]	NY,NC,VA,PA
<b><i>SW-846 8260C-D in Soil</i></b>	
Acetone	CT,NH,NY,ME,VA
Acetone	CT,NH,NY,ME,VA
Acrylonitrile	CT,NH,NY,ME,VA
Acrylonitrile	CT,NH,NY,ME,VA
Benzene	CT,NH,NY,ME,VA
Benzene	CT,NH,NY,ME,VA
Bromobenzene	NH,NY,ME,VA
Bromobenzene	NH,NY,ME,VA
Bromochloromethane	NH,NY,ME,VA
Bromochloromethane	NH,NY,ME,VA
Bromodichloromethane	CT,NH,NY,ME,VA
Bromodichloromethane	CT,NH,NY,ME,VA



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

Analyte	Certifications
<i>SW-846 8260C-D in Soil</i>	
Bromoform	CT,NH,NY,ME,VA
Bromoform	CT,NH,NY,ME,VA
Bromomethane	CT,NH,NY,ME,VA
Bromomethane	CT,NH,NY,ME,VA
2-Butanone (MEK)	CT,NH,NY,ME,VA
2-Butanone (MEK)	CT,NH,NY,ME,VA
tert-Butyl Alcohol (TBA)	NY,ME
n-Butylbenzene	CT,NH,NY,ME,VA
n-Butylbenzene	CT,NH,NY,ME,VA
sec-Butylbenzene	CT,NH,NY,ME,VA
sec-Butylbenzene	CT,NH,NY,ME,VA
tert-Butylbenzene	CT,NH,NY,ME,VA
tert-Butylbenzene	CT,NH,NY,ME,VA
Carbon Disulfide	CT,NH,NY,ME,VA
Carbon Disulfide	CT,NH,NY,ME,VA
Carbon Tetrachloride	CT,NH,NY,ME,VA
Carbon Tetrachloride	CT,NH,NY,ME,VA
Chlorobenzene	CT,NH,NY,ME,VA
Chlorobenzene	CT,NH,NY,ME,VA
Chlorodibromomethane	CT,NH,NY,ME,VA
Chlorodibromomethane	CT,NH,NY,ME,VA
Chloroethane	CT,NH,NY,ME,VA
Chloroethane	CT,NH,NY,ME,VA
Chloroform	CT,NH,NY,ME,VA
Chloroform	CT,NH,NY,ME,VA
Chloromethane	CT,NH,NY,ME,VA
Chloromethane	CT,NH,NY,ME,VA
2-Chlorotoluene	CT,NH,NY,ME,VA
2-Chlorotoluene	CT,NH,NY,ME,VA
4-Chlorotoluene	CT,NH,NY,ME,VA
4-Chlorotoluene	CT,NH,NY,ME,VA
1,2-Dibromo-3-chloropropane (DBCP)	NY,ME
1,2-Dibromo-3-chloropropane (DBCP)	NY
1,2-Dibromoethane (EDB)	NH,NY
1,2-Dibromoethane (EDB)	NH,NY
Dibromomethane	NH,NY,ME,VA
Dibromomethane	NH,NY,ME,VA
1,2-Dichlorobenzene	CT,NH,NY,ME,VA
1,2-Dichlorobenzene	CT,NH,NY,ME,VA
1,3-Dichlorobenzene	CT,NH,NY,ME,VA
1,3-Dichlorobenzene	CT,NH,NY,ME,VA
1,4-Dichlorobenzene	CT,NH,NY,ME,VA
1,4-Dichlorobenzene	CT,NH,NY,ME,VA
trans-1,4-Dichloro-2-butene	NY,ME
Dichlorodifluoromethane (Freon 12)	NY,ME,VA
Dichlorodifluoromethane (Freon 12)	NH,NY,ME,VA
1,1-Dichloroethane	CT,NH,NY,ME,VA

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

Analyte	Certifications
<i>SW-846 8260C-D in Soil</i>	
1,1-Dichloroethane	CT,NH,NY,ME,VA
1,2-Dichloroethane	CT,NH,NY,ME,VA
1,2-Dichloroethane	CT,NH,NY,ME,VA
1,1-Dichloroethylene	CT,NH,NY,ME,VA
1,1-Dichloroethylene	CT,NH,NY,ME,VA
cis-1,2-Dichloroethylene	CT,NH,NY,ME,VA
cis-1,2-Dichloroethylene	CT,NH,NY,ME,VA
trans-1,2-Dichloroethylene	CT,NH,NY,ME,VA
trans-1,2-Dichloroethylene	CT,NH,NY,ME,VA
1,2-Dichloropropane	CT,NH,NY,ME,VA
1,2-Dichloropropane	CT,NH,NY,ME,VA
1,3-Dichloropropane	NH,NY,ME,VA
1,3-Dichloropropane	NH,NY,ME,VA
2,2-Dichloropropane	NH,NY,ME,VA
2,2-Dichloropropane	NH,NY,ME,VA
1,1-Dichloropropene	NH,NY,ME,VA
1,1-Dichloropropene	NH,NY,ME,VA
cis-1,3-Dichloropropene	CT,NH,NY,ME,VA
cis-1,3-Dichloropropene	CT,NH,NY,ME,VA
trans-1,3-Dichloropropene	CT,NH,NY,ME,VA
trans-1,3-Dichloropropene	CT,NH,NY,ME,VA
Diethyl Ether	ME
1,4-Dioxane	NY,ME
Ethylbenzene	CT,NH,NY,ME,VA
Ethylbenzene	CT,NH,NY,ME,VA
Hexachlorobutadiene	NH,NY,ME,VA
Hexachlorobutadiene	NH,NY,ME,VA
2-Hexanone (MBK)	CT,NH,NY,ME,VA
2-Hexanone (MBK)	CT,NH,NY,ME,VA
Isopropylbenzene (Cumene)	CT,NH,NY,ME,VA
Isopropylbenzene (Cumene)	CT,NH,NY,ME,VA
p-Isopropyltoluene (p-Cymene)	NH,NY
p-Isopropyltoluene (p-Cymene)	NH,NY
Methyl Acetate	NY,ME
Methyl tert-Butyl Ether (MTBE)	NY,VA
Methyl tert-Butyl Ether (MTBE)	NY,ME,VA
Methyl Cyclohexane	NY
Methylene Chloride	CT,NH,NY,ME,VA
Methylene Chloride	CT,NH,NY,ME,VA
4-Methyl-2-pentanone (MIBK)	CT,NH,NY,ME,VA
4-Methyl-2-pentanone (MIBK)	CT,NH,NY,VA
Naphthalene	NH,NY,ME,VA
Naphthalene	NH,NY,ME,VA
n-Propylbenzene	NH,NY,ME
n-Propylbenzene	NH,NY
Styrene	CT,NH,NY,ME,VA
Styrene	CT,NH,NY,ME,VA

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

Analyte	Certifications
<b><i>SW-846 8260C-D in Soil</i></b>	
1,1,1,2-Tetrachloroethane	CT,NH,NY,ME,VA
1,1,1,2-Tetrachloroethane	CT,NH,NY,ME,VA
1,1,2,2-Tetrachloroethane	CT,NH,NY,ME,VA
1,1,2,2-Tetrachloroethane	CT,NH,NY,ME,VA
Tetrachloroethylene	CT,NH,NY,ME,VA
Tetrachloroethylene	CT,NH,NY,ME,VA
Toluene	CT,NH,NY,ME,VA
Toluene	CT,NH,NY,ME,VA
1,2,3-Trichlorobenzene	NY,ME
1,2,4-Trichlorobenzene	NH,NY,ME,VA
1,2,4-Trichlorobenzene	NH,NY,ME,VA
1,3,5-Trichlorobenzene	ME
1,1,1-Trichloroethane	CT,NH,NY,ME,VA
1,1,1-Trichloroethane	CT,NH,NY,ME,VA
1,1,2-Trichloroethane	CT,NH,NY,ME,VA
1,1,2-Trichloroethane	CT,NH,NY,ME,VA
Trichloroethylene	CT,NH,NY,ME,VA
Trichloroethylene	CT,NH,NY,ME,VA
Trichlorofluoromethane (Freon 11)	CT,NH,NY,VA
Trichlorofluoromethane (Freon 11)	CT,NH,NY,ME,VA
1,2,3-Trichloropropane	NH,NY,ME,VA
1,2,3-Trichloropropane	NH,NY,ME,VA
1,2,4-Trimethylbenzene	CT,NH,NY,ME,VA
1,2,4-Trimethylbenzene	CT,NH,NY,ME,VA
1,3,5-Trimethylbenzene	CT,NH,NY,ME,VA
1,3,5-Trimethylbenzene	CT,NH,NY,ME,VA
Vinyl Chloride	CT,NH,NY,ME,VA
Vinyl Chloride	CT,NH,NY,ME,VA
m+p Xylene	CT,NH,NY,ME,VA
m+p Xylene	CT,NH,NY,ME,VA
o-Xylene	CT,NH,NY,ME,VA
o-Xylene	CT,NH,NY,ME,VA
<b><i>SW-846 8270D-E in Soil</i></b>	
Acenaphthene	CT,NY,NH,ME,NC,VA
Acenaphthylene	CT,NY,NH,ME,NC,VA
Anthracene	CT,NY,NH,ME,NC,VA
Benzo(a)anthracene	CT,NY,NH,ME,NC,VA
Benzo(a)pyrene	CT,NY,NH,ME,NC,VA
Benzo(b)fluoranthene	CT,NY,NH,ME,NC,VA
Benzo(g,h,i)perylene	CT,NY,NH,ME,NC,VA
Benzo(k)fluoranthene	CT,NY,NH,ME,NC,VA
Chrysene	CT,NY,NH,ME,NC,VA
Dibenz(a,h)anthracene	CT,NY,NH,ME,NC,VA
Fluoranthene	CT,NY,NH,ME,NC,VA
Fluorene	CT,NY,NH,ME,NC,VA
Indeno(1,2,3-cd)pyrene	CT,NY,NH,ME,NC,VA

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

Analyte	Certifications
<i>SW-846 8270D-E in Soil</i>	
2-Methylnaphthalene	CT,NY,NH,ME,NC,VA
Naphthalene	CT,NY,NH,ME,NC,VA
Phenanthrene	CT,NY,NH,ME,NC,VA
Pyrene	CT,NY,NH,ME,NC,VA

*SW-846 8270D-E in Water*

Acenaphthene	CT,NY,NH,ME,NC,VA
Acenaphthylene	CT,NY,NH,ME,NC,VA
Anthracene	CT,NY,NH,ME,NC,VA
Benzo(a)anthracene	CT,NY,NH,ME,NC,VA
Benzo(a)pyrene	CT,NY,NH,ME,NC,VA
Benzo(b)fluoranthene	CT,NY,NH,ME,NC,VA
Benzo(g,h,i)perylene	CT,NY,NH,ME,NC,VA
Benzo(k)fluoranthene	CT,NY,NH,ME,NC,VA
Chrysene	CT,NY,NH,ME,NC,VA
Dibenz(a,h)anthracene	CT,NY,NH,ME,NC,VA
Fluoranthene	CT,NY,NH,ME,NC,VA
Fluorene	CT,NY,NH,ME,NC,VA
Indeno(1,2,3-cd)pyrene	CT,NY,NH,ME,NC,VA
2-Methylnaphthalene	CT,NY,NH,ME,NC,VA
Naphthalene	CT,NY,NH,ME,NC,VA
Phenanthrene	CT,NY,NH,ME,NC,VA
Pyrene	CT,NY,NH,ME,NC,VA

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Public Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2022
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2022
RI	Rhode Island Department of Health	LAO00112	12/30/2021
NC	North Carolina Div. of Water Quality	652	12/31/2021
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2021
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2021
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2021
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2021



FUSS & O'NEILL

(860) 646-2469 • www.FandO.com

146 Hartford Road, Manchester, CT 06040

56 Quarry Road, Trumbull, CT 06611

1419 Richland Street, Columbia, SC 29201

78 Interstate Drive, West Springfield, MA 01089

317 Iron Horse Way, Suite 204, Providence, RI 02908

80 Washington Street, Suite 301, Poughkeepsie, NY

Out

per client run PCBs via sox jlh 7/2/2021

PAGE 1 of 3

# 2160035 CHAIN-OF-CUSTODY RECORD 37140

**Turnaround**

24-Hour\*    72-Hour\*    Other \_\_\_\_\_ (days)

48-Hour\*    Standard (\_\_\_\_ days)   \*Surcharge Applies

PROJECT NAME: 719 LIVEN STREET   PROJECT LOCATION: WOODSOCKET, RI   PROJECT NUMBER: 20181545, B10   LABORATORY: CON-TEST

REPORT TO: Madelyn Sampson (msampson@fand.com)

INVOICE TO: "

P.O. No.: 160320181545.B10

Sampler's Signature: Madelyn Sampson   Date: 6/28/21

Source Codes:  
 MW=Monitoring Well   PW=Potable Water   T=Treatment Facility   S=Soil   B=Sediment  
 SW=Surface Water   ST=Stormwater   W=Waste   A=Air   C=Concrete  
 X=Other \_\_\_\_\_

Analysis Request

Containers

VOC 8060  
 PAH 8070  
 PRIORITY POLLUTANT 13 METALS 6016/17A  
 TPH 8015  
 PCB 8050

Soil VOA Vial,  Methanol  
 Soil VOA Vial,  water    Na<sub>2</sub>CO<sub>3</sub>  
 Glass Soil Container (8 ) oz  
 Other:  
 Water VOA Vial,  As is    HCl  
 Glass Amber ( ) ml,  As is    H<sub>2</sub>SO<sub>4</sub>  
 Plastic - As is,  250 ml    500 ml    1000 ml  
 Plastic - H<sub>2</sub>SO<sub>4</sub>,  250 ml    500 ml  
 Plastic - HNO<sub>3</sub>, 250 ml    Filtered    0.45µ    1µ

Item No.	Transfer Check				Sample Number	Source Code	Date Sampled	Time Sampled	Analysis										Containers				Comments					
	1	2	3	4					VOC	PAH	PRIORITY	TPH	PCB	13 METALS	6016/17A	Soil VOA	Soil VOA	Glass Soil	Other	Other	Water VOA	Glass Amber		Plastic - As is	Plastic - H <sub>2</sub> SO <sub>4</sub>	Plastic - HNO <sub>3</sub>	Plastic - NaOH	
1	X				16032010628 - 01	S	6/28/21	0742	X	X	X	X	X															SB-1
2	X				- 02			0821	X	X	X	X	X															MW-2
3	X				- 03			0905	X	X	X	X	X															SB-3
4	X				- 04			0910	X	X	X	X	X															SB-3
5	X				- 05			1004	X	X	X	X	X															SB-4
6	X				- 06			1012	X	X	X	X	X															SB-4
7	X				- 07			1032	X	X	X	X	X															SB-5
8	X				- 08			1045	X	X	X	X	X															SB-5
9	X				- 09			1139	X	X	X	X	X															MW-6
10	X				- 10			1356	X	X	X	X	X															SB-7

Transfer Number	Relinquished By	Accepted By	Date	Time	Charge Exceptions: <input type="checkbox"/> CT Tax Exempt <input type="checkbox"/> QA/QC <input type="checkbox"/> Other _____ ____ Duplicates   ____ Blanks (Item Nos: _____)
1	Madelyn Sampson	FEO FRIZOLE	6/28/21	1530	Reporting and Detection Limit Requirements: <input type="checkbox"/> RCP Deliverables <input type="checkbox"/> MCP CAM Cert.
2	FEO FRIZOLE	MW JC	6/11/21	0905	T/C=Dec
3	[Signature]		7/1/21		Additional Comments:
4	Andrew Brown	[Signature]	7/1/21	9:46	HOLD EXTRA SOIL FOR POTENTIAL TELP.

Andrew Brown   2.0 AM   7/1/21   298 PM   1447





FUSS & O'NEILL  
(860) 646-2469 • www.FandO.com

- 146 Hartford Road, Manchester, CT 06040
- 56 Quarry Road, Trumbull, CT 06611
- 1419 Richland Street, Columbia, SC 29201
- 78 Interstate Drive, West Springfield, MA 01089
- 317 Iron Horse Way, Suite 204, Providence, RI 02908
- 80 Washington Street, Suite 301, Poughkeepsie, NY

# 216055 CHAIN-OF-CUSTODY RECORD 37150

Turnaround

- 24-Hour\*
- 48-Hour\*
- 72-Hour\*
- Standard (\_\_\_\_ days)
- Other \_\_\_\_\_ (days)
- \*Surcharge Applies

PROJECT NAME: PROJECT LOCATION: PROJECT NUMBER: 2081545.870

719 RIVER STREET WASHINGTON, CT 06611

REPORT TO: Madelyn Sampson (msampson@fandoc.com)

INVOICE TO: "

P.O. NO.: 1603210628

Sampler's Signature: *Maell Jyr* Date: 6/28/21

Source Codes: T=Treatment Facility B=Sediment  
 MW=Monitoring Well PW=Potable Water S=Soil W=Waste A=Air C=Concrete  
 SW=Surface Water ST=Stormwater

N=Other TRIA BLANK

LABORATORY: CON-TEST Containers

Item No.	Transfer Check	Sample Number	Date Sampled	Time Sampled	Source Code	Analysis Request	Soil VOA Val. (ppb)	Soil VOA Val. (ppm)	Water VOA Val. (ppb)	Other	Comments
11	X	1603210628 - 11	6/28/21	1405	S	X	1	0	0		SB-7
12	X	↓	↓	1416	S	X	1	0	0		SB-7
13	X	↓	↓	1430	X	X	1	0	0		TRIA BLANK
14	X	1603210629 - 14	6/29/21	0719	S	X	1	2	2		MU-6
15	X	↓	↓	0825	↓	X	1	2	2		MU-9
16	X	↓	↓	1002	↓	X	1	2	2		SB-10
17	X	↓	↓	1053	↓	X	1	2	2		SB-11
18	X	↓	↓	1101	↓	X	1	2	2		SB-11
19	X	↓	↓	1200	↓	X	1	2	2		SB-12
20	X	↓	↓	1230	↓	X	1	2	2		SB-12

Analysis Request: VOC 8260, WASH, PCB, TOH, PCB, TOH, PCB

Charge Exceptions:  CT\*Tax Exempt  QA/QC  Other \_\_\_\_\_

Reporting and Detection Limit Requirements:  RCP Deliverables  MCP CAM Cert.

Additional Comments: I/C-DEC

Relinquished By: *Maell Jyr* Date: 6/28/21

Accepted By: *Andrew Brown* Date: 7/1/21

Time: 15:30

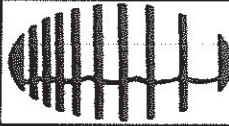
Time: 14:30

Time: 08:45

Time: 09:46

Time: 14:07

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



**con-test**  
ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

**Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False**

Client Fuss + O'Neill

Received By [Signature] Date 7/11/21 Time 1447

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

Were samples within Temperature? 2-6°C T By Gun # 5 Actual Temp - 20, 4.4  
By Blank # \_\_\_\_\_ Actual Temp - \_\_\_\_\_

Was Custody Seal Intact? n/a Were Samples Tampered with? n/a  
Was COC Relinquished? T Does Chain Agree With Samples? T

Are there broken/leaking/loose caps on any samples? F

Is COC in ink/ Legible? T Were samples received within holding time? T

Did COC include all pertinent Information? Client T Analysis T Sampler Name T  
Project T ID's T Collection Dates/Times T

Are Sample labels filled out and legible? T

Are there Lab to Filters? F Who was notified? \_\_\_\_\_

Are there Rushes? F Who was notified? \_\_\_\_\_

Are there Short Holds? F Who was notified? \_\_\_\_\_

Is there enough Volume? T

Is there Headspace where applicable? n/a MS/MSD? F

Proper Media/Containers Used? T Is splitting samples required? F

Were trip blanks received? F On COC? F

Do all samples have the proper pH? Acid n/a Base n/a

Vials	#	Containers:	#	#	#
Unp-		1 Liter Amb.		1 Liter Plastic	16 oz Amb.
HCL-		500 mL Amb.		500 mL Plastic	8oz Amb/Clear <u>40</u>
Meoh-	<u>20</u>	250 mL Amb.		250 mL Plastic	4oz Amb/Clear
Bisulfate-		Flashpoint		Col./Bacteria	2oz Amb/Clear
DI-	<u>40</u>	Other Glass		Other Plastic	Encore
Thiosulfate-		SOC Kit		Plastic Bag	Frozen: <u>7/11/21 @ 1447</u>
Sulfuric-		Perchlorate		Ziplock	

**Unused Media**

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

Comments:





July 14, 2021

Madelyn Sampson  
Fuss & O'Neill - Providence  
317 Iron Horse Way, Suite 204  
Providence, RI 02908

Project Location: 719 River St, Woonsocket, RI  
Client Job Number:  
Project Number: 20181545.B10  
Laboratory Work Order Number: 21G0036

Enclosed are results of analyses for samples received by the laboratory on July 1, 2021. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Jessica L. Hoffman  
Project Manager

# Table of Contents

Sample Summary	4
Case Narrative	6
Sample Results	9
21G0036-01	9
21G0036-02	16
21G0036-03	18
21G0036-04	25
21G0036-05	32
21G0036-06	39
21G0036-07	46
21G0036-08	53
21G0036-09	60
Sample Preparation Information	62
QC Data	64
Volatile Organic Compounds by GC/MS	64
B285252	64
Semivolatile Organic Compounds by GC/MS	69
B285210	69
Polychlorinated Biphenyls with 3540 Soxhlet Extraction	71
B285423	71
Petroleum Hydrocarbons Analyses	72
B285211	72
Metals Analyses (Total)	73
B285206	73
B285230	74

## Table of Contents (continued)

Dual Column RPD Report	75
Flag/Qualifier Summary	78
Certifications	79
Chain of Custody/Sample Receipt	83

Fuss & O'Neill - Providence  
 317 Iron Horse Way, Suite 204  
 Providence, RI 02908  
 ATTN: Madelyn Sampson

REPORT DATE: 7/14/2021

PURCHASE ORDER NUMBER: 160320181545.B10

PROJECT NUMBER: 20181545.B10

**ANALYTICAL SUMMARY**

WORK ORDER NUMBER: 21G0036

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

PROJECT LOCATION: 719 River St, Woonsocket, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
1603210629-21	21G0036-01	Soil	SB-13	SM 2540G SW-846 6010D SW-846 7471B SW-846 8015C SW-846 8082A SW-846 8260C-D SW-846 8270D-E	
1603210629-22	21G0036-02	Trip Blank Soil	Trip Blanks	SW-846 8260C-D	
1603210629-23	21G0036-03	Soil	MW-14	SM 2540G SW-846 6010D SW-846 7471B SW-846 8015C SW-846 8082A SW-846 8260C-D SW-846 8270D-E	
1603210630-24	21G0036-04	Soil	MW-14	SM 2540G SW-846 6010D SW-846 7471B SW-846 8015C SW-846 8082A SW-846 8260C-D SW-846 8270D-E	
1603210630-25	21G0036-05	Soil	MW-15	SM 2540G SW-846 6010D SW-846 7471B SW-846 8015C SW-846 8082A SW-846 8260C-D SW-846 8270D-E	
1603210630-26	21G0036-06	Soil	MW-15	SM 2540G SW-846 6010D SW-846 7471B SW-846 8015C SW-846 8082A SW-846 8260C-D SW-846 8270D-E	

Fuss & O'Neill - Providence  
317 Iron Horse Way, Suite 204  
Providence, RI 02908  
ATTN: Madelyn Sampson

REPORT DATE: 7/14/2021

PURCHASE ORDER NUMBER: 160320181545.B10

PROJECT NUMBER: 20181545.B10

**ANALYTICAL SUMMARY**

WORK ORDER NUMBER: 21G0036

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

PROJECT LOCATION: 719 River St, Woonsocket, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
1603210630-27	21G0036-07	Soil	SB-16	SM 2540G SW-846 6010D SW-846 7471B SW-846 8015C SW-846 8082A SW-846 8260C-D SW-846 8270D-E	
1603210630-28	21G0036-08	Soil	SB-16	SM 2540G SW-846 6010D SW-846 7471B SW-846 8015C SW-846 8082A SW-846 8260C-D SW-846 8270D-E	
1603210630-29	21G0036-09	Trip Blank Soil	Trip Blank	SW-846 8260C-D	

#### CASE NARRATIVE SUMMARY

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

REVISED REPORT 07-14-21: Due to a lab reporting error, the thallium results for samples 21G0036-01, 21G0036-03-08 have been revised with the correct values.

For method 8270E, only PAHs were requested and reported.

**SW-846 6010D**

**Qualifications:**

**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:**

**Beryllium**

B285206-BS1

**Chromium**

B285206-BS1

**Nickel**

B285206-BS1

**SW-846 8015C**

**Qualifications:**

**O-26**

Sample contamination consists of heavy residual hydrocarbons similar to asphalt. Chromatogram also shows the presence of PAHs.

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

**TPH (C9-C36)**

21G0036-01[1603210629-21], 21G0036-03[1603210629-23], 21G0036-04[1603210630-24], 21G0036-05[1603210630-25], 21G0036-06[1603210630-26], 21G0036-07[1603210630-27], 21G0036-08[1603210630-28]

**SW-846 8260C-D**

**Qualifications:**

**L-02**

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

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

**Bromomethane**

B285252-BS1, B285252-BSD1

**Methyl Acetate**

B285252-BS1, B285252-BSD1

**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:**

**Trichlorofluoromethane (Freon 11)**

21G0036-01[1603210629-21], 21G0036-02[1603210629-22], 21G0036-03[1603210629-23], 21G0036-04[1603210630-24], 21G0036-05[1603210630-25], 21G0036-06[1603210630-26], 21G0036-07[1603210630-27], 21G0036-08[1603210630-28], 21G0036-09[1603210630-29], B285252-BLK1, B285252-BS1, B285252-BSD1

**L-07**

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

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

**Bromochloromethane**

B285252-BS1

**V-05**

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

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

**1,1-Dichloroethylene**

21G0036-01[1603210629-21], 21G0036-02[1603210629-22], 21G0036-03[1603210629-23], 21G0036-04[1603210630-24], 21G0036-05[1603210630-25],  
21G0036-06[1603210630-26], 21G0036-07[1603210630-27], 21G0036-08[1603210630-28], 21G0036-09[1603210630-29], B285252-BLK1, B285252-BS1, B285252-BSD1,  
S061205-CCV1

**1,2,3-Trichlorobenzene**

21G0036-01[1603210629-21], 21G0036-02[1603210629-22], 21G0036-03[1603210629-23], 21G0036-04[1603210630-24], 21G0036-05[1603210630-25],  
21G0036-06[1603210630-26], 21G0036-07[1603210630-27], 21G0036-08[1603210630-28], 21G0036-09[1603210630-29], B285252-BLK1, B285252-BS1, B285252-BSD1,  
S061205-CCV1

**Carbon Disulfide**

21G0036-01[1603210629-21], 21G0036-02[1603210629-22], 21G0036-03[1603210629-23], 21G0036-04[1603210630-24], 21G0036-05[1603210630-25],  
21G0036-06[1603210630-26], 21G0036-07[1603210630-27], 21G0036-08[1603210630-28], 21G0036-09[1603210630-29], B285252-BLK1, B285252-BS1, B285252-BSD1,  
S061205-CCV1

**Trichlorofluoromethane (Freon 11)**

21G0036-01[1603210629-21], 21G0036-02[1603210629-22], 21G0036-03[1603210629-23], 21G0036-04[1603210630-24], 21G0036-05[1603210630-25],  
21G0036-06[1603210630-26], 21G0036-07[1603210630-27], 21G0036-08[1603210630-28], 21G0036-09[1603210630-29], B285252-BLK1, B285252-BS1, B285252-BSD1,  
S061205-CCV1

**V-20**

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

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

**Bromochloromethane**

B285252-BS1, B285252-BSD1, S061205-CCV1

**Bromomethane**

B285252-BS1, B285252-BSD1, S061205-CCV1

**Methyl Acetate**

B285252-BS1, B285252-BSD1, S061205-CCV1

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

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



Lisa A. Worthington  
Technical Representative



Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-13

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210629-21

Sampled: 6/29/2021 12:53

Sample ID: 21G0036-01

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.094	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
Acrylonitrile	ND	0.0056	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00094	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
Benzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
Bromobenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
Bromochloromethane	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
Bromodichloromethane	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
Bromoform	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
Bromomethane	ND	0.0094	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
2-Butanone (MEK)	ND	0.038	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
tert-Butyl Alcohol (TBA)	ND	0.094	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
n-Butylbenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
sec-Butylbenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
tert-Butylbenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00094	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
Carbon Disulfide	ND	0.0056	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
Carbon Tetrachloride	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
Chlorobenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
Chlorodibromomethane	ND	0.00094	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
Chloroethane	ND	0.019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
Chloroform	ND	0.0038	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
Chloromethane	ND	0.0094	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
2-Chlorotoluene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
4-Chlorotoluene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
1,2-Dibromoethane (EDB)	ND	0.00094	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
Dibromomethane	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
1,2-Dichlorobenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
1,3-Dichlorobenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
1,4-Dichlorobenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
trans-1,4-Dichloro-2-butene	ND	0.0038	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
1,1-Dichloroethane	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
1,2-Dichloroethane	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
1,1-Dichloroethylene	ND	0.0038	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
cis-1,2-Dichloroethylene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
trans-1,2-Dichloroethylene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
1,2-Dichloropropane	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
1,3-Dichloropropane	ND	0.00094	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
2,2-Dichloropropane	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
1,1-Dichloropropene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
cis-1,3-Dichloropropene	ND	0.00094	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
trans-1,3-Dichloropropene	ND	0.00094	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
Diethyl Ether	ND	0.019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-13

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210629-21

Sampled: 6/29/2021 12:53

Sample ID: 21G0036-01

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.00094	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
1,4-Dioxane	ND	0.094	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
Ethylbenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
Hexachlorobutadiene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
2-Hexanone (MBK)	ND	0.019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
Isopropylbenzene (Cumene)	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
Methyl Acetate	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0038	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
Methyl Cyclohexane	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
Methylene Chloride	ND	0.019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
Naphthalene	ND	0.0038	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
n-Propylbenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
Styrene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
1,1,1,2-Tetrachloroethane	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
1,1,2,2-Tetrachloroethane	ND	0.00094	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
Tetrachloroethylene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
Tetrahydrofuran	ND	0.0094	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
Toluene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
1,2,3-Trichlorobenzene	ND	0.0019	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
1,2,4-Trichlorobenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
1,3,5-Trichlorobenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
1,1,1-Trichloroethane	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
1,1,2-Trichloroethane	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
Trichloroethylene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0094	mg/Kg dry	1	L-04, V-05	SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
1,2,3-Trichloropropane	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0094	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
1,2,4-Trimethylbenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
1,3,5-Trimethylbenzene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
Vinyl Chloride	ND	0.0094	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
m+p Xylene	ND	0.0038	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
o-Xylene	ND	0.0019	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 15:50	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		107	70-130					7/2/21 15:50	
Toluene-d8		108	70-130					7/2/21 15:50	
4-Bromofluorobenzene		106	70-130					7/2/21 15:50	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-13

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210629-21

Sampled: 6/29/2021 12:53

Sample ID: 21G0036-01

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 19:56	BGL
Acenaphthylene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 19:56	BGL
Anthracene	0.22	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 19:56	BGL
Benzo(a)anthracene	1.4	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 19:56	BGL
Benzo(a)pyrene	1.5	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 19:56	BGL
Benzo(b)fluoranthene	2.4	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 19:56	BGL
Benzo(g,h,i)perylene	1.2	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 19:56	BGL
Benzo(k)fluoranthene	0.95	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 19:56	BGL
Chrysene	1.8	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 19:56	BGL
Dibenz(a,h)anthracene	0.31	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 19:56	BGL
Fluoranthene	2.8	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 19:56	BGL
Fluorene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 19:56	BGL
Indeno(1,2,3-cd)pyrene	1.3	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 19:56	BGL
2-Methylnaphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 19:56	BGL
Naphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 19:56	BGL
Phenanthrene	1.1	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 19:56	BGL
Pyrene	2.7	0.19	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 19:56	BGL
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		56.2	30-130					7/8/21 19:56	
2-Fluorobiphenyl		54.7	30-130					7/8/21 19:56	
p-Terphenyl-d14		71.2	30-130					7/8/21 19:56	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-13

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210629-21

Sampled: 6/29/2021 12:53

Sample ID: 21G0036-01

Sample Matrix: Soil

**Polychlorinated Biphenyls with 3540 Soxhlet Extraction**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 17:46	JMB
Aroclor-1221 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 17:46	JMB
Aroclor-1232 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 17:46	JMB
Aroclor-1242 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 17:46	JMB
Aroclor-1248 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 17:46	JMB
Aroclor-1254 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 17:46	JMB
Aroclor-1260 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 17:46	JMB
Aroclor-1262 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 17:46	JMB
Aroclor-1268 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 17:46	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		84.6	30-150					7/9/21 17:46	
Decachlorobiphenyl [2]		86.5	30-150					7/9/21 17:46	
Tetrachloro-m-xylene [1]		88.1	30-150					7/9/21 17:46	
Tetrachloro-m-xylene [2]		87.9	30-150					7/9/21 17:46	

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

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-13

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210629-21

Sampled: 6/29/2021 12:53

Sample ID: 21G0036-01

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	370	19	mg/Kg dry	2	O-26	SW-846 8015C	7/2/21	7/8/21 1:20	SFM
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
2-Fluorobiphenyl	55.8		40-140				7/8/21 1:20		

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-13

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210629-21

Sampled: 6/29/2021 12:53

Sample ID: 21G0036-01

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.8	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:27	MJH
Arsenic	ND	3.6	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:27	MJH
Beryllium	0.33	0.18	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:27	MJH
Cadmium	ND	0.36	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:27	MJH
Chromium	9.2	0.71	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:27	MJH
Copper	16	0.71	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:27	MJH
Lead	62	0.54	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:27	MJH
Mercury	0.079	0.033	mg/Kg dry	1		SW-846 7471B	7/2/21	7/6/21 13:13	CJV
Nickel	8.5	0.71	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:27	MJH
Selenium	ND	3.6	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:27	MJH
Silver	ND	0.36	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:27	MJH
Thallium	ND	1.8	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:27	MJH
Zinc	70	0.71	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:27	MJH



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

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-13

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210629-21

Sampled: 6/29/2021 12:53

Sample ID: 21G0036-01

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	89.9		% Wt	1		SM 2540G	7/2/21	7/3/21 9:40	JML

Project Location: 719 River St, Woonsocket, RI

Sample Description: Trip Blanks

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210629-22

Sampled: 6/29/2021 14:30

Sample ID: 21G0036-02

Sample Matrix: Trip Blank Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.10	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
Acrylonitrile	ND	0.0060	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
Benzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
Bromobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
Bromochloromethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
Bromodichloromethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
Bromoform	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
Bromomethane	ND	0.010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
2-Butanone (MEK)	ND	0.040	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
tert-Butyl Alcohol (TBA)	ND	0.10	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
n-Butylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
sec-Butylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
tert-Butylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
Carbon Disulfide	ND	0.0060	mg/Kg wet	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
Carbon Tetrachloride	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
Chlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
Chlorodibromomethane	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
Chloroethane	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
Chloroform	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
Chloromethane	ND	0.010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
2-Chlorotoluene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
4-Chlorotoluene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
Dibromomethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
1,2-Dichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
1,3-Dichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
1,4-Dichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
trans-1,4-Dichloro-2-butene	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
1,1-Dichloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
1,2-Dichloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
1,1-Dichloroethylene	ND	0.0040	mg/Kg wet	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
1,2-Dichloropropane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
1,3-Dichloropropane	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
2,2-Dichloropropane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
1,1-Dichloropropene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
Diethyl Ether	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF



Project Location: 719 River St, Woonsocket, RI

Sample Description: Trip Blanks

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210629-22

Sampled: 6/29/2021 14:30

Sample ID: 21G0036-02

Sample Matrix: Trip Blank Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
1,4-Dioxane	ND	0.10	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
Ethylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
Hexachlorobutadiene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
2-Hexanone (MBK)	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
Methyl Acetate	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
Methyl Cyclohexane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
Methylene Chloride	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
Naphthalene	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
n-Propylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
Styrene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
Tetrachloroethylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
Tetrahydrofuran	ND	0.010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
Toluene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
1,2,3-Trichlorobenzene	ND	0.0020	mg/Kg wet	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
1,3,5-Trichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
1,1,1-Trichloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
1,1,2-Trichloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
Trichloroethylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg wet	1	L-04, V-05	SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
1,2,3-Trichloropropane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
Vinyl Chloride	ND	0.010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
m+p Xylene	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
o-Xylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 12:39	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		106	70-130					7/2/21 12:39	
Toluene-d8		106	70-130					7/2/21 12:39	
4-Bromofluorobenzene		113	70-130					7/2/21 12:39	

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-14

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210629-23

Sampled: 6/29/2021 07:12

Sample ID: 21G0036-03

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.10	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
Acrylonitrile	ND	0.0060	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
Benzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
Bromobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
Bromochloromethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
Bromodichloromethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
Bromoform	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
Bromomethane	ND	0.010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
2-Butanone (MEK)	ND	0.040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
tert-Butyl Alcohol (TBA)	ND	0.10	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
n-Butylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
sec-Butylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
tert-Butylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
Carbon Disulfide	ND	0.0060	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
Carbon Tetrachloride	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
Chlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
Chlorodibromomethane	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
Chloroethane	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
Chloroform	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
Chloromethane	ND	0.010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
2-Chlorotoluene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
4-Chlorotoluene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
Dibromomethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
1,2-Dichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
1,3-Dichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
1,4-Dichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
trans-1,4-Dichloro-2-butene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
1,1-Dichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
1,2-Dichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
1,1-Dichloroethylene	ND	0.0040	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
1,2-Dichloropropane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
1,3-Dichloropropane	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
2,2-Dichloropropane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
1,1-Dichloropropene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
Diethyl Ether	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-14

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210629-23

Sampled: 6/29/2021 07:12

Sample ID: 21G0036-03

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
1,4-Dioxane	ND	0.10	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
Ethylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
Hexachlorobutadiene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
2-Hexanone (MBK)	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
Methyl Acetate	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
Methyl Cyclohexane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
Methylene Chloride	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
Naphthalene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
n-Propylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
Styrene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
Tetrachloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
Tetrahydrofuran	ND	0.010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
Toluene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
1,2,3-Trichlorobenzene	ND	0.0020	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
1,3,5-Trichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
1,1,1-Trichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
1,1,2-Trichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
Trichloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg dry	1	L-04, V-05	SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
1,2,3-Trichloropropane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
Vinyl Chloride	ND	0.010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
m+p Xylene	ND	0.0040	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
o-Xylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:19	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		107	70-130					7/2/21 16:19	
Toluene-d8		107	70-130					7/2/21 16:19	
4-Bromofluorobenzene		108	70-130					7/2/21 16:19	

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-14

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210629-23

Sampled: 6/29/2021 07:12

Sample ID: 21G0036-03

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:24	BGL
Acenaphthylene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:24	BGL
Anthracene	0.33	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:24	BGL
Benzo(a)anthracene	1.2	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:24	BGL
Benzo(a)pyrene	1.1	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:24	BGL
Benzo(b)fluoranthene	1.4	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:24	BGL
Benzo(g,h,i)perylene	0.70	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:24	BGL
Benzo(k)fluoranthene	0.52	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:24	BGL
Chrysene	1.1	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:24	BGL
Dibenz(a,h)anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:24	BGL
Fluoranthene	2.4	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:24	BGL
Fluorene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:24	BGL
Indeno(1,2,3-cd)pyrene	0.79	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:24	BGL
2-Methylnaphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:24	BGL
Naphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:24	BGL
Phenanthrene	1.7	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:24	BGL
Pyrene	2.3	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:24	BGL
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		76.1	30-130					7/8/21 20:24	
2-Fluorobiphenyl		73.5	30-130					7/8/21 20:24	
p-Terphenyl-d14		94.7	30-130					7/8/21 20:24	

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-14

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210629-23

Sampled: 6/29/2021 07:12

Sample ID: 21G0036-03

Sample Matrix: Soil

**Polychlorinated Biphenyls with 3540 Soxhlet Extraction**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:03	JMB
Aroclor-1221 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:03	JMB
Aroclor-1232 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:03	JMB
Aroclor-1242 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:03	JMB
Aroclor-1248 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:03	JMB
Aroclor-1254 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:03	JMB
Aroclor-1260 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:03	JMB
Aroclor-1262 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:03	JMB
Aroclor-1268 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:03	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		86.4	30-150					7/9/21 18:03	
Decachlorobiphenyl [2]		84.2	30-150					7/9/21 18:03	
Tetrachloro-m-xylene [1]		89.0	30-150					7/9/21 18:03	
Tetrachloro-m-xylene [2]		89.3	30-150					7/9/21 18:03	

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-14

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210629-23

Sampled: 6/29/2021 07:12

Sample ID: 21G0036-03

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	190	18	mg/Kg dry	2	O-26	SW-846 8015C	7/2/21	7/8/21 1:41	SFM
<b>Surrogates</b>		<b>% Recovery</b>	<b>Recovery Limits</b>		<b>Flag/Qual</b>				
2-Fluorobiphenyl		63.2	40-140					7/8/21 1:41	

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-14

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210629-23

Sampled: 6/29/2021 07:12

Sample ID: 21G0036-03

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.8	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:45	MJH
Arsenic	ND	3.5	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:45	MJH
Beryllium	0.32	0.18	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:45	MJH
Cadmium	ND	0.35	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:45	MJH
Chromium	16	0.70	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:45	MJH
Copper	22	0.70	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:45	MJH
Lead	57	0.53	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:45	MJH
Mercury	0.057	0.028	mg/Kg dry	1		SW-846 7471B	7/2/21	7/6/21 13:15	CJV
Nickel	7.8	0.70	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:45	MJH
Selenium	ND	3.5	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:45	MJH
Silver	ND	0.35	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:45	MJH
Thallium	ND	1.8	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:45	MJH
Zinc	52	0.70	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:45	MJH

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

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-14

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210629-23

Sampled: 6/29/2021 07:12

Sample ID: 21G0036-03

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	92.6		% Wt	1		SM 2540G	7/2/21	7/3/21 9:40	JML



Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-14

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-24

Sampled: 6/29/2021 07:22

Sample ID: 21G0036-04

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.10	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
Acrylonitrile	ND	0.0062	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
Benzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
Bromobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
Bromochloromethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
Bromodichloromethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
Bromoform	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
Bromomethane	ND	0.010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
2-Butanone (MEK)	ND	0.042	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
tert-Butyl Alcohol (TBA)	ND	0.10	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
n-Butylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
sec-Butylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
tert-Butylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
Carbon Disulfide	ND	0.0062	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
Carbon Tetrachloride	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
Chlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
Chlorodibromomethane	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
Chloroethane	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
Chloroform	ND	0.0042	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
Chloromethane	ND	0.010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
2-Chlorotoluene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
4-Chlorotoluene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
Dibromomethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
1,2-Dichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
1,3-Dichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
1,4-Dichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
trans-1,4-Dichloro-2-butene	ND	0.0042	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
1,1-Dichloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
1,2-Dichloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
1,1-Dichloroethylene	ND	0.0042	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
cis-1,2-Dichloroethylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
trans-1,2-Dichloroethylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
1,2-Dichloropropane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
1,3-Dichloropropane	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
2,2-Dichloropropane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
1,1-Dichloropropene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
Diethyl Ether	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-14

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-24

Sampled: 6/29/2021 07:22

Sample ID: 21G0036-04

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
1,4-Dioxane	ND	0.10	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
Ethylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
Hexachlorobutadiene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
2-Hexanone (MBK)	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
Isopropylbenzene (Cumene)	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
Methyl Acetate	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0042	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
Methyl Cyclohexane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
Methylene Chloride	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
Naphthalene	ND	0.0042	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
n-Propylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
Styrene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
1,1,1,2-Tetrachloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
Tetrachloroethylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
Tetrahydrofuran	ND	0.010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
Toluene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
1,2,3-Trichlorobenzene	ND	0.0021	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
1,2,4-Trichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
1,3,5-Trichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
1,1,1-Trichloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
1,1,2-Trichloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
Trichloroethylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg dry	1	L-04, V-05	SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
1,2,3-Trichloropropane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
1,2,4-Trimethylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
1,3,5-Trimethylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
Vinyl Chloride	ND	0.010	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
m+p Xylene	ND	0.0042	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
o-Xylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 16:47	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		104	70-130					7/2/21 16:47	
Toluene-d8		106	70-130					7/2/21 16:47	
4-Bromofluorobenzene		109	70-130					7/2/21 16:47	

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-14

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-24

Sampled: 6/29/2021 07:22

Sample ID: 21G0036-04

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:51	BGL
Acenaphthylene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:51	BGL
Anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:51	BGL
Benzo(a)anthracene	0.57	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:51	BGL
Benzo(a)pyrene	0.61	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:51	BGL
Benzo(b)fluoranthene	0.74	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:51	BGL
Benzo(g,h,i)perylene	0.44	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:51	BGL
Benzo(k)fluoranthene	0.29	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:51	BGL
Chrysene	0.56	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:51	BGL
Dibenz(a,h)anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:51	BGL
Fluoranthene	1.1	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:51	BGL
Fluorene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:51	BGL
Indeno(1,2,3-cd)pyrene	0.43	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:51	BGL
2-Methylnaphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:51	BGL
Naphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:51	BGL
Phenanthrene	0.73	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:51	BGL
Pyrene	1.2	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 20:51	BGL
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		68.5	30-130					7/8/21 20:51	
2-Fluorobiphenyl		70.0	30-130					7/8/21 20:51	
p-Terphenyl-d14		89.5	30-130					7/8/21 20:51	

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-14

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-24

Sampled: 6/29/2021 07:22

Sample ID: 21G0036-04

Sample Matrix: Soil

**Polychlorinated Biphenyls with 3540 Soxhlet Extraction**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:21	JMB
Aroclor-1221 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:21	JMB
Aroclor-1232 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:21	JMB
Aroclor-1242 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:21	JMB
Aroclor-1248 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:21	JMB
Aroclor-1254 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:21	JMB
Aroclor-1260 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:21	JMB
Aroclor-1262 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:21	JMB
Aroclor-1268 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:21	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		84.4	30-150					7/9/21 18:21	
Decachlorobiphenyl [2]		82.2	30-150					7/9/21 18:21	
Tetrachloro-m-xylene [1]		90.3	30-150					7/9/21 18:21	
Tetrachloro-m-xylene [2]		90.8	30-150					7/9/21 18:21	

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-14

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-24

Sampled: 6/29/2021 07:22

Sample ID: 21G0036-04

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	430	18	mg/Kg dry	2	O-26	SW-846 8015C	7/2/21	7/8/21 2:02	SFM
<b>Surrogates</b>		<b>% Recovery</b>	<b>Recovery Limits</b>		<b>Flag/Qual</b>				
2-Fluorobiphenyl		61.4	40-140					7/8/21 2:02	

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-14

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-24

Sampled: 6/29/2021 07:22

Sample ID: 21G0036-04

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.7	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:52	MJH
Arsenic	ND	3.5	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:52	MJH
Beryllium	0.26	0.17	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:52	MJH
Cadmium	ND	0.35	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:52	MJH
Chromium	12	0.70	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:52	MJH
Copper	14	0.70	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:52	MJH
Lead	11	0.52	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:52	MJH
Mercury	0.071	0.028	mg/Kg dry	1		SW-846 7471B	7/2/21	7/6/21 13:16	CJV
Nickel	7.3	0.70	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:52	MJH
Selenium	ND	3.5	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:52	MJH
Silver	ND	0.35	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:52	MJH
Thallium	ND	1.7	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:52	MJH
Zinc	32	0.70	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:52	MJH



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

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-14

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-24

Sampled: 6/29/2021 07:22

Sample ID: 21G0036-04

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	92.8		% Wt	1		SM 2540G	7/2/21	7/3/21 9:40	JML

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-15

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-25

Sampled: 6/29/2021 08:12

Sample ID: 21G0036-05

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Acrylonitrile	ND	0.0064	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Benzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Bromobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Bromochloromethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Bromodichloromethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Bromoform	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Bromomethane	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
2-Butanone (MEK)	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
tert-Butyl Alcohol (TBA)	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
n-Butylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
sec-Butylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
tert-Butylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Carbon Disulfide	ND	0.0064	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Carbon Tetrachloride	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Chlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Chlorodibromomethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Chloroethane	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Chloroform	ND	0.0043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Chloromethane	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
2-Chlorotoluene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
4-Chlorotoluene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,2-Dibromoethane (EDB)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Dibromomethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,2-Dichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,3-Dichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,4-Dichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
trans-1,4-Dichloro-2-butene	ND	0.0043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,1-Dichloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,2-Dichloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,1-Dichloroethylene	ND	0.0043	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
cis-1,2-Dichloroethylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
trans-1,2-Dichloroethylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,2-Dichloropropane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,3-Dichloropropane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
2,2-Dichloropropane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,1-Dichloropropene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
cis-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
trans-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Diethyl Ether	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF



Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-15

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-25

Sampled: 6/29/2021 08:12

Sample ID: 21G0036-05

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,4-Dioxane	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Ethylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Hexachlorobutadiene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
2-Hexanone (MBK)	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Isopropylbenzene (Cumene)	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Methyl Acetate	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Methyl Cyclohexane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Methylene Chloride	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Naphthalene	ND	0.0043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
n-Propylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Styrene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,1,1,2-Tetrachloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,1,2,2-Tetrachloroethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Tetrachloroethylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Tetrahydrofuran	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Toluene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,2,3-Trichlorobenzene	ND	0.0021	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,2,4-Trichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,3,5-Trichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,1,1-Trichloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,1,2-Trichloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Trichloroethylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Trichlorofluoromethane (Freon 11)	ND	0.011	mg/Kg dry	1	L-04, V-05	SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,2,3-Trichloropropane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,2,4-Trimethylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
1,3,5-Trimethylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Vinyl Chloride	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
m+p Xylene	ND	0.0043	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
o-Xylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:16	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		106	70-130					7/2/21 17:16	
Toluene-d8		107	70-130					7/2/21 17:16	
4-Bromofluorobenzene		106	70-130					7/2/21 17:16	

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-15

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-25

Sampled: 6/29/2021 08:12

Sample ID: 21G0036-05

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:19	BGL
Acenaphthylene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:19	BGL
Anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:19	BGL
Benzo(a)anthracene	0.54	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:19	BGL
Benzo(a)pyrene	0.46	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:19	BGL
Benzo(b)fluoranthene	0.62	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:19	BGL
Benzo(g,h,i)perylene	0.28	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:19	BGL
Benzo(k)fluoranthene	0.23	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:19	BGL
Chrysene	0.53	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:19	BGL
Dibenz(a,h)anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:19	BGL
Fluoranthene	1.1	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:19	BGL
Fluorene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:19	BGL
Indeno(1,2,3-cd)pyrene	0.32	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:19	BGL
2-Methylnaphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:19	BGL
Naphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:19	BGL
Phenanthrene	0.76	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:19	BGL
Pyrene	1.1	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:19	BGL
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		78.6	30-130					7/8/21 21:19	
2-Fluorobiphenyl		80.8	30-130					7/8/21 21:19	
p-Terphenyl-d14		109	30-130					7/8/21 21:19	

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-15

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-25

Sampled: 6/29/2021 08:12

Sample ID: 21G0036-05

Sample Matrix: Soil

**Polychlorinated Biphenyls with 3540 Soxhlet Extraction**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:39	JMB
Aroclor-1221 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:39	JMB
Aroclor-1232 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:39	JMB
Aroclor-1242 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:39	JMB
Aroclor-1248 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:39	JMB
Aroclor-1254 [2]	0.28	0.087	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:39	JMB
Aroclor-1260 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:39	JMB
Aroclor-1262 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:39	JMB
Aroclor-1268 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:39	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		85.8	30-150					7/9/21 18:39	
Decachlorobiphenyl [2]		84.6	30-150					7/9/21 18:39	
Tetrachloro-m-xylene [1]		85.6	30-150					7/9/21 18:39	
Tetrachloro-m-xylene [2]		85.0	30-150					7/9/21 18:39	

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

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-15

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-25

Sampled: 6/29/2021 08:12

Sample ID: 21G0036-05

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	190	9.0	mg/Kg dry	1	O-26	SW-846 8015C	7/2/21	7/7/21 20:28	SFM
<b>Surrogates</b>		<b>% Recovery</b>	<b>Recovery Limits</b>		<b>Flag/Qual</b>				
2-Fluorobiphenyl		65.5	40-140					7/7/21 20:28	

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-15

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-25

Sampled: 6/29/2021 08:12

Sample ID: 21G0036-05

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.7	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:59	MJH
Arsenic	ND	3.5	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:59	MJH
Beryllium	0.51	0.17	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:59	MJH
Cadmium	ND	0.35	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:59	MJH
Chromium	16	0.69	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:59	MJH
Copper	21	0.69	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:59	MJH
Lead	43	0.52	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:59	MJH
Mercury	0.14	0.031	mg/Kg dry	1		SW-846 7471B	7/2/21	7/6/21 13:18	CJV
Nickel	8.8	0.69	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:59	MJH
Selenium	ND	3.5	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:59	MJH
Silver	ND	0.35	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:59	MJH
Thallium	ND	1.7	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:59	MJH
Zinc	56	0.69	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 21:59	MJH

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

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-15

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-25

Sampled: 6/29/2021 08:12

Sample ID: 21G0036-05

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	92.2		% Wt	1		SM 2540G	7/2/21	7/3/21 9:40	JML

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-15

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-26

Sampled: 6/29/2021 08:26

Sample ID: 21G0036-06

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.14	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
Acrylonitrile	ND	0.0084	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0014	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
Benzene	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
Bromobenzene	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
Bromochloromethane	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
Bromodichloromethane	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
Bromoform	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
Bromomethane	ND	0.014	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
2-Butanone (MEK)	ND	0.056	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
tert-Butyl Alcohol (TBA)	ND	0.14	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
n-Butylbenzene	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
sec-Butylbenzene	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
tert-Butylbenzene	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0014	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
Carbon Disulfide	ND	0.0084	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
Carbon Tetrachloride	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
Chlorobenzene	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
Chlorodibromomethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
Chloroethane	ND	0.028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
Chloroform	ND	0.0056	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
Chloromethane	ND	0.014	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
2-Chlorotoluene	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
4-Chlorotoluene	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
1,2-Dibromoethane (EDB)	ND	0.0014	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
Dibromomethane	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
1,2-Dichlorobenzene	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
1,3-Dichlorobenzene	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
1,4-Dichlorobenzene	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
trans-1,4-Dichloro-2-butene	ND	0.0056	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
1,1-Dichloroethane	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
1,2-Dichloroethane	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
1,1-Dichloroethylene	ND	0.0056	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
cis-1,2-Dichloroethylene	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
trans-1,2-Dichloroethylene	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
1,2-Dichloropropane	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
1,3-Dichloropropane	ND	0.0014	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
2,2-Dichloropropane	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
1,1-Dichloropropene	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
cis-1,3-Dichloropropene	ND	0.0014	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
trans-1,3-Dichloropropene	ND	0.0014	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
Diethyl Ether	ND	0.028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-15

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-26

Sampled: 6/29/2021 08:26

Sample ID: 21G0036-06

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0014	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
1,4-Dioxane	ND	0.14	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
Ethylbenzene	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
Hexachlorobutadiene	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
2-Hexanone (MBK)	ND	0.028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
Isopropylbenzene (Cumene)	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
Methyl Acetate	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0056	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
Methyl Cyclohexane	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
Methylene Chloride	ND	0.028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
Naphthalene	ND	0.0056	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
n-Propylbenzene	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
Styrene	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
1,1,1,2-Tetrachloroethane	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
1,1,2,2-Tetrachloroethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
Tetrachloroethylene	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
Tetrahydrofuran	ND	0.014	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
Toluene	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
1,2,3-Trichlorobenzene	ND	0.0028	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
1,2,4-Trichlorobenzene	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
1,3,5-Trichlorobenzene	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
1,1,1-Trichloroethane	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
1,1,2-Trichloroethane	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
Trichloroethylene	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
Trichlorofluoromethane (Freon 11)	ND	0.014	mg/Kg dry	1	L-04, V-05	SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
1,2,3-Trichloropropane	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.014	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
1,2,4-Trimethylbenzene	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
1,3,5-Trimethylbenzene	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
Vinyl Chloride	ND	0.014	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
m+p Xylene	ND	0.0056	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
o-Xylene	ND	0.0028	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 17:43	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		98.2	70-130					7/2/21 17:43	
Toluene-d8		105	70-130					7/2/21 17:43	
4-Bromofluorobenzene		106	70-130					7/2/21 17:43	



Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-15

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-26

Sampled: 6/29/2021 08:26

Sample ID: 21G0036-06

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.21	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:46	BGL
Acenaphthylene	ND	0.21	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:46	BGL
Anthracene	ND	0.21	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:46	BGL
Benzo(a)anthracene	0.23	0.21	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:46	BGL
Benzo(a)pyrene	0.23	0.21	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:46	BGL
Benzo(b)fluoranthene	0.30	0.21	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:46	BGL
Benzo(g,h,i)perylene	ND	0.21	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:46	BGL
Benzo(k)fluoranthene	ND	0.21	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:46	BGL
Chrysene	0.25	0.21	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:46	BGL
Dibenz(a,h)anthracene	ND	0.21	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:46	BGL
Fluoranthene	0.42	0.21	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:46	BGL
Fluorene	ND	0.21	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:46	BGL
Indeno(1,2,3-cd)pyrene	ND	0.21	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:46	BGL
2-Methylnaphthalene	ND	0.21	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:46	BGL
Naphthalene	ND	0.21	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:46	BGL
Phenanthrene	0.33	0.21	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:46	BGL
Pyrene	0.46	0.21	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 21:46	BGL
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		41.8	30-130					7/8/21 21:46	
2-Fluorobiphenyl		41.7	30-130					7/8/21 21:46	
p-Terphenyl-d14		58.7	30-130					7/8/21 21:46	

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-15

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-26

Sampled: 6/29/2021 08:26

Sample ID: 21G0036-06

Sample Matrix: Soil

**Polychlorinated Biphenyls with 3540 Soxhlet Extraction**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.097	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:57	JMB
Aroclor-1221 [1]	ND	0.097	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:57	JMB
Aroclor-1232 [1]	ND	0.097	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:57	JMB
Aroclor-1242 [1]	ND	0.097	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:57	JMB
Aroclor-1248 [1]	ND	0.097	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:57	JMB
Aroclor-1254 [1]	ND	0.097	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:57	JMB
Aroclor-1260 [1]	ND	0.097	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:57	JMB
Aroclor-1262 [1]	ND	0.097	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:57	JMB
Aroclor-1268 [1]	ND	0.097	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 18:57	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		82.4	30-150					7/9/21 18:57	
Decachlorobiphenyl [2]		79.8	30-150					7/9/21 18:57	
Tetrachloro-m-xylene [1]		84.3	30-150					7/9/21 18:57	
Tetrachloro-m-xylene [2]		85.6	30-150					7/9/21 18:57	

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-15

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-26

Sampled: 6/29/2021 08:26

Sample ID: 21G0036-06

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	120	10	mg/Kg dry	1	O-26	SW-846 8015C	7/2/21	7/7/21 20:08	SFM
<b>Surrogates</b>		<b>% Recovery</b>	<b>Recovery Limits</b>		<b>Flag/Qual</b>				
2-Fluorobiphenyl		41.4	40-140					7/7/21 20:08	

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-15

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-26

Sampled: 6/29/2021 08:26

Sample ID: 21G0036-06

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.0	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:06	MJH
Arsenic	11	4.0	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:06	MJH
Beryllium	0.29	0.20	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:06	MJH
Cadmium	ND	0.40	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:06	MJH
Chromium	20	0.80	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:06	MJH
Copper	15	0.80	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:06	MJH
Lead	23	0.60	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:06	MJH
Mercury	0.046	0.030	mg/Kg dry	1		SW-846 7471B	7/2/21	7/6/21 13:25	CJV
Nickel	7.9	0.80	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:06	MJH
Selenium	ND	4.0	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:06	MJH
Silver	ND	0.40	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:06	MJH
Thallium	ND	2.0	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:06	MJH
Zinc	36	0.80	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:06	MJH

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

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-15

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-26

Sampled: 6/29/2021 08:26

Sample ID: 21G0036-06

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	82.6		% Wt	1		SM 2540G	7/2/21	7/3/21 9:41	JML

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-16

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-27

Sampled: 6/29/2021 09:52

Sample ID: 21G0036-07

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
Acrylonitrile	ND	0.0067	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
Benzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
Bromobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
Bromochloromethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
Bromodichloromethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
Bromoform	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
Bromomethane	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
2-Butanone (MEK)	ND	0.045	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
tert-Butyl Alcohol (TBA)	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
n-Butylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
sec-Butylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
tert-Butylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
Carbon Disulfide	ND	0.0067	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
Carbon Tetrachloride	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
Chlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
Chlorodibromomethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
Chloroethane	ND	0.022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
Chloroform	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
Chloromethane	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
2-Chlorotoluene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
4-Chlorotoluene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
1,2-Dibromoethane (EDB)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
Dibromomethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
1,2-Dichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
1,3-Dichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
1,4-Dichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
trans-1,4-Dichloro-2-butene	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
1,1-Dichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
1,2-Dichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
1,1-Dichloroethylene	ND	0.0045	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
cis-1,2-Dichloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
trans-1,2-Dichloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
1,2-Dichloropropane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
1,3-Dichloropropane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
2,2-Dichloropropane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
1,1-Dichloropropene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
cis-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
trans-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
Diethyl Ether	ND	0.022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-16

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-27

Sampled: 6/29/2021 09:52

Sample ID: 21G0036-07

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
1,4-Dioxane	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
Ethylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
Hexachlorobutadiene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
2-Hexanone (MBK)	ND	0.022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
Isopropylbenzene (Cumene)	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
Methyl Acetate	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
Methyl Cyclohexane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
Methylene Chloride	ND	0.022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
Naphthalene	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
n-Propylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
Styrene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
1,1,1,2-Tetrachloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
1,1,2,2-Tetrachloroethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
Tetrachloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
Tetrahydrofuran	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
Toluene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
1,2,3-Trichlorobenzene	ND	0.0022	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
1,2,4-Trichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
1,3,5-Trichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
1,1,1-Trichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
1,1,2-Trichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
Trichloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
Trichlorofluoromethane (Freon 11)	ND	0.011	mg/Kg dry	1	L-04, V-05	SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
1,2,3-Trichloropropane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
1,2,4-Trimethylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
1,3,5-Trimethylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
Vinyl Chloride	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
m+p Xylene	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
o-Xylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:10	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		99.7	70-130					7/2/21 18:10	
Toluene-d8		113	70-130					7/2/21 18:10	
4-Bromofluorobenzene		106	70-130					7/2/21 18:10	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-16

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-27

Sampled: 6/29/2021 09:52

Sample ID: 21G0036-07

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:13	BGL
Acenaphthylene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:13	BGL
Anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:13	BGL
Benzo(a)anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:13	BGL
Benzo(a)pyrene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:13	BGL
Benzo(b)fluoranthene	0.19	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:13	BGL
Benzo(g,h,i)perylene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:13	BGL
Benzo(k)fluoranthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:13	BGL
Chrysene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:13	BGL
Dibenz(a,h)anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:13	BGL
Fluoranthene	0.32	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:13	BGL
Fluorene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:13	BGL
Indeno(1,2,3-cd)pyrene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:13	BGL
2-Methylnaphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:13	BGL
Naphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:13	BGL
Phenanthrene	0.24	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:13	BGL
Pyrene	0.33	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:13	BGL
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		60.2	30-130					7/8/21 22:13	
2-Fluorobiphenyl		64.4	30-130					7/8/21 22:13	
p-Terphenyl-d14		91.1	30-130					7/8/21 22:13	



Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-16

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-27

Sampled: 6/29/2021 09:52

Sample ID: 21G0036-07

Sample Matrix: Soil

**Polychlorinated Biphenyls with 3540 Soxhlet Extraction**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 19:14	JMB
Aroclor-1221 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 19:14	JMB
Aroclor-1232 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 19:14	JMB
Aroclor-1242 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 19:14	JMB
Aroclor-1248 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 19:14	JMB
Aroclor-1254 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 19:14	JMB
Aroclor-1260 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 19:14	JMB
Aroclor-1262 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 19:14	JMB
Aroclor-1268 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 19:14	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		88.6	30-150					7/9/21 19:14	
Decachlorobiphenyl [2]		86.2	30-150					7/9/21 19:14	
Tetrachloro-m-xylene [1]		85.0	30-150					7/9/21 19:14	
Tetrachloro-m-xylene [2]		86.0	30-150					7/9/21 19:14	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-16

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-27

Sampled: 6/29/2021 09:52

Sample ID: 21G0036-07

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	53	9.1	mg/Kg dry	1	O-26	SW-846 8015C	7/2/21	7/8/21 0:59	SFM
<b>Surrogates</b>		<b>% Recovery</b>	<b>Recovery Limits</b>		<b>Flag/Qual</b>				
2-Fluorobiphenyl		64.4	40-140					7/8/21 0:59	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-16

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-27

Sampled: 6/29/2021 09:52

Sample ID: 21G0036-07

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.8	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:13	MJH
Arsenic	5.6	3.6	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:13	MJH
Beryllium	0.27	0.18	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:13	MJH
Cadmium	ND	0.36	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:13	MJH
Chromium	10	0.71	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:13	MJH
Copper	12	0.71	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:13	MJH
Lead	54	0.53	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:13	MJH
Mercury	ND	0.030	mg/Kg dry	1		SW-846 7471B	7/2/21	7/6/21 13:26	CJV
Nickel	6.6	0.71	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:13	MJH
Selenium	ND	3.6	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:13	MJH
Silver	ND	0.36	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:13	MJH
Thallium	ND	1.8	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:13	MJH
Zinc	39	0.71	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:13	MJH

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

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-16

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-27

Sampled: 6/29/2021 09:52

Sample ID: 21G0036-07

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	91.9		% Wt	1		SM 2540G	7/2/21	7/3/21 9:41	JML

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-16

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-28

Sampled: 6/29/2021 09:54

Sample ID: 21G0036-08

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.12	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
Acrylonitrile	ND	0.0071	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0012	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
Benzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
Bromobenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
Bromochloromethane	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
Bromodichloromethane	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
Bromoform	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
Bromomethane	ND	0.012	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
2-Butanone (MEK)	ND	0.047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
tert-Butyl Alcohol (TBA)	ND	0.12	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
n-Butylbenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
sec-Butylbenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
tert-Butylbenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0012	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
Carbon Disulfide	ND	0.0071	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
Carbon Tetrachloride	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
Chlorobenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
Chlorodibromomethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
Chloroethane	ND	0.024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
Chloroform	ND	0.0047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
Chloromethane	ND	0.012	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
2-Chlorotoluene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
4-Chlorotoluene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
1,2-Dibromoethane (EDB)	ND	0.0012	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
Dibromomethane	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
1,2-Dichlorobenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
1,3-Dichlorobenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
1,4-Dichlorobenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
trans-1,4-Dichloro-2-butene	ND	0.0047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
1,1-Dichloroethane	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
1,2-Dichloroethane	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
1,1-Dichloroethylene	ND	0.0047	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
cis-1,2-Dichloroethylene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
trans-1,2-Dichloroethylene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
1,2-Dichloropropane	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
1,3-Dichloropropane	ND	0.0012	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
2,2-Dichloropropane	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
1,1-Dichloropropene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
cis-1,3-Dichloropropene	ND	0.0012	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
trans-1,3-Dichloropropene	ND	0.0012	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
Diethyl Ether	ND	0.024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-16

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-28

Sampled: 6/29/2021 09:54

Sample ID: 21G0036-08

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0012	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
1,4-Dioxane	ND	0.12	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
Ethylbenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
Hexachlorobutadiene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
2-Hexanone (MBK)	ND	0.024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
Isopropylbenzene (Cumene)	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
Methyl Acetate	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
Methyl Cyclohexane	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
Methylene Chloride	ND	0.024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
Naphthalene	ND	0.0047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
n-Propylbenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
Styrene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
1,1,1,2-Tetrachloroethane	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
1,1,2,2-Tetrachloroethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
Tetrachloroethylene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
Tetrahydrofuran	ND	0.012	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
Toluene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
1,2,3-Trichlorobenzene	ND	0.0024	mg/Kg dry	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
1,2,4-Trichlorobenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
1,3,5-Trichlorobenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
1,1,1-Trichloroethane	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
1,1,2-Trichloroethane	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
Trichloroethylene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
Trichlorofluoromethane (Freon 11)	ND	0.012	mg/Kg dry	1	L-04, V-05	SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
1,2,3-Trichloropropane	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.012	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
1,2,4-Trimethylbenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
1,3,5-Trimethylbenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
Vinyl Chloride	ND	0.012	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
m+p Xylene	ND	0.0047	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
o-Xylene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	7/2/21	7/2/21 18:37	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		106	70-130					7/2/21 18:37	
Toluene-d8		106	70-130					7/2/21 18:37	
4-Bromofluorobenzene		108	70-130					7/2/21 18:37	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-16

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-28

Sampled: 6/29/2021 09:54

Sample ID: 21G0036-08

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:40	BGL
Acenaphthylene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:40	BGL
Anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:40	BGL
Benzo(a)anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:40	BGL
Benzo(a)pyrene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:40	BGL
Benzo(b)fluoranthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:40	BGL
Benzo(g,h,i)perylene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:40	BGL
Benzo(k)fluoranthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:40	BGL
Chrysene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:40	BGL
Dibenz(a,h)anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:40	BGL
Fluoranthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:40	BGL
Fluorene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:40	BGL
Indeno(1,2,3-cd)pyrene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:40	BGL
2-Methylnaphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:40	BGL
Naphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:40	BGL
Phenanthrene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:40	BGL
Pyrene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	7/2/21	7/8/21 22:40	BGL
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		74.0	30-130					7/8/21 22:40	
2-Fluorobiphenyl		75.7	30-130					7/8/21 22:40	
p-Terphenyl-d14		110	30-130					7/8/21 22:40	

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-16

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-28

Sampled: 6/29/2021 09:54

Sample ID: 21G0036-08

Sample Matrix: Soil

**Polychlorinated Biphenyls with 3540 Soxhlet Extraction**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.083	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 19:32	JMB
Aroclor-1221 [1]	ND	0.083	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 19:32	JMB
Aroclor-1232 [1]	ND	0.083	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 19:32	JMB
Aroclor-1242 [1]	ND	0.083	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 19:32	JMB
Aroclor-1248 [1]	ND	0.083	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 19:32	JMB
Aroclor-1254 [1]	ND	0.083	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 19:32	JMB
Aroclor-1260 [1]	ND	0.083	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 19:32	JMB
Aroclor-1262 [1]	ND	0.083	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 19:32	JMB
Aroclor-1268 [1]	ND	0.083	mg/Kg dry	4		SW-846 8082A	7/7/21	7/9/21 19:32	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		81.7	30-150					7/9/21 19:32	
Decachlorobiphenyl [2]		79.8	30-150					7/9/21 19:32	
Tetrachloro-m-xylene [1]		82.6	30-150					7/9/21 19:32	
Tetrachloro-m-xylene [2]		82.7	30-150					7/9/21 19:32	



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

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-16

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-28

Sampled: 6/29/2021 09:54

Sample ID: 21G0036-08

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	29	8.7	mg/Kg dry	1	O-26	SW-846 8015C	7/2/21	7/7/21 19:47	SFM
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
2-Fluorobiphenyl	75.3	40-140			7/7/21 19:47				

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-16

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-28

Sampled: 6/29/2021 09:54

Sample ID: 21G0036-08

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.7	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:20	MJH
Arsenic	ND	3.5	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:20	MJH
Beryllium	0.19	0.17	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:20	MJH
Cadmium	ND	0.35	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:20	MJH
Chromium	8.1	0.69	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:20	MJH
Copper	6.2	0.69	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:20	MJH
Lead	7.6	0.52	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:20	MJH
Mercury	ND	0.030	mg/Kg dry	1		SW-846 7471B	7/2/21	7/6/21 13:28	CJV
Nickel	5.1	0.69	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:20	MJH
Selenium	ND	3.5	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:20	MJH
Silver	ND	0.35	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:20	MJH
Thallium	ND	1.7	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:20	MJH
Zinc	18	0.69	mg/Kg dry	1		SW-846 6010D	7/2/21	7/6/21 22:20	MJH



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

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-16

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-28

Sampled: 6/29/2021 09:54

Sample ID: 21G0036-08

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	95.8		% Wt	1		SM 2540G	7/2/21	7/3/21 9:41	JML

Project Location: 719 River St, Woonsocket, RI

Sample Description: Trip Blank

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-29

Sampled: 6/29/2021 11:45

Sample ID: 21G0036-09

Sample Matrix: Trip Blank Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.10	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
Acrylonitrile	ND	0.0060	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
Benzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
Bromobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
Bromochloromethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
Bromodichloromethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
Bromoform	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
Bromomethane	ND	0.010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
2-Butanone (MEK)	ND	0.040	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
tert-Butyl Alcohol (TBA)	ND	0.10	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
n-Butylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
sec-Butylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
tert-Butylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
Carbon Disulfide	ND	0.0060	mg/Kg wet	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
Carbon Tetrachloride	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
Chlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
Chlorodibromomethane	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
Chloroethane	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
Chloroform	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
Chloromethane	ND	0.010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
2-Chlorotoluene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
4-Chlorotoluene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
Dibromomethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
1,2-Dichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
1,3-Dichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
1,4-Dichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
trans-1,4-Dichloro-2-butene	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
1,1-Dichloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
1,2-Dichloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
1,1-Dichloroethylene	ND	0.0040	mg/Kg wet	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
1,2-Dichloropropane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
1,3-Dichloropropane	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
2,2-Dichloropropane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
1,1-Dichloropropene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
Diethyl Ether	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF

Project Location: 719 River St, Woonsocket, RI

Sample Description: Trip Blank

Work Order: 21G0036

Date Received: 7/1/2021

Field Sample #: 1603210630-29

Sampled: 6/29/2021 11:45

Sample ID: 21G0036-09

Sample Matrix: Trip Blank Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
1,4-Dioxane	ND	0.10	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
Ethylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
Hexachlorobutadiene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
2-Hexanone (MBK)	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
Methyl Acetate	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
Methyl Cyclohexane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
Methylene Chloride	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
Naphthalene	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
n-Propylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
Styrene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
Tetrachloroethylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
Tetrahydrofuran	ND	0.010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
Toluene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
1,2,3-Trichlorobenzene	ND	0.0020	mg/Kg wet	1	V-05	SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
1,3,5-Trichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
1,1,1-Trichloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
1,1,2-Trichloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
Trichloroethylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg wet	1	L-04, V-05	SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
1,2,3-Trichloropropane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
Vinyl Chloride	ND	0.010	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
m+p Xylene	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
o-Xylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	7/2/21	7/2/21 13:06	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		105	70-130					7/2/21 13:06	
Toluene-d8		112	70-130					7/2/21 13:06	
4-Bromofluorobenzene		109	70-130					7/2/21 13:06	

**Sample Extraction Data**
**Prep Method: % Solids    Analytical Method: SM 2540G**

Lab Number [Field ID]	Batch	Date
21G0036-01 [1603210629-21]	B285260	07/02/21
21G0036-03 [1603210629-23]	B285260	07/02/21
21G0036-04 [1603210630-24]	B285260	07/02/21
21G0036-05 [1603210630-25]	B285260	07/02/21
21G0036-06 [1603210630-26]	B285260	07/02/21
21G0036-07 [1603210630-27]	B285260	07/02/21
21G0036-08 [1603210630-28]	B285260	07/02/21

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

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
21G0036-01 [1603210629-21]	B285206	1.56	50.0	07/02/21
21G0036-03 [1603210629-23]	B285206	1.54	50.0	07/02/21
21G0036-04 [1603210630-24]	B285206	1.54	50.0	07/02/21
21G0036-05 [1603210630-25]	B285206	1.56	50.0	07/02/21
21G0036-06 [1603210630-26]	B285206	1.51	50.0	07/02/21
21G0036-07 [1603210630-27]	B285206	1.53	50.0	07/02/21
21G0036-08 [1603210630-28]	B285206	1.51	50.0	07/02/21

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

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
21G0036-01 [1603210629-21]	B285230	0.503	50.0	07/02/21
21G0036-03 [1603210629-23]	B285230	0.573	50.0	07/02/21
21G0036-04 [1603210630-24]	B285230	0.577	50.0	07/02/21
21G0036-05 [1603210630-25]	B285230	0.528	50.0	07/02/21
21G0036-06 [1603210630-26]	B285230	0.596	50.0	07/02/21
21G0036-07 [1603210630-27]	B285230	0.551	50.0	07/02/21
21G0036-08 [1603210630-28]	B285230	0.514	50.0	07/02/21

**Prep Method: SW-846 3546    Analytical Method: SW-846 8015C**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
21G0036-01 [1603210629-21]	B285211	30.0	1.00	07/02/21
21G0036-03 [1603210629-23]	B285211	30.0	1.00	07/02/21
21G0036-04 [1603210630-24]	B285211	30.0	1.00	07/02/21
21G0036-05 [1603210630-25]	B285211	30.0	1.00	07/02/21
21G0036-06 [1603210630-26]	B285211	30.0	1.00	07/02/21
21G0036-07 [1603210630-27]	B285211	30.0	1.00	07/02/21
21G0036-08 [1603210630-28]	B285211	30.0	1.00	07/02/21

**Prep Method: SW-846 3540C    Analytical Method: SW-846 8082A**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
21G0036-01 [1603210629-21]	B285423	10.0	10.0	07/07/21
21G0036-03 [1603210629-23]	B285423	10.0	10.0	07/07/21
21G0036-04 [1603210630-24]	B285423	10.0	10.0	07/07/21
21G0036-05 [1603210630-25]	B285423	10.0	10.0	07/07/21
21G0036-06 [1603210630-26]	B285423	10.0	10.0	07/07/21
21G0036-07 [1603210630-27]	B285423	10.0	10.0	07/07/21

**Sample Extraction Data**
**Prep Method: SW-846 3540C    Analytical Method: SW-846 8082A**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
21G0036-08 [1603210630-28]	B285423	10.0	10.0	07/07/21

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

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
21G0036-01 [1603210629-21]	B285252	5.91	10.0	07/02/21
21G0036-02 [1603210629-22]	B285252	5.00	10.0	07/02/21
21G0036-03 [1603210629-23]	B285252	5.41	10.0	07/02/21
21G0036-04 [1603210630-24]	B285252	5.19	10.0	07/02/21
21G0036-05 [1603210630-25]	B285252	5.06	10.0	07/02/21
21G0036-06 [1603210630-26]	B285252	4.30	10.0	07/02/21
21G0036-07 [1603210630-27]	B285252	4.87	10.0	07/02/21
21G0036-08 [1603210630-28]	B285252	4.43	10.0	07/02/21
21G0036-09 [1603210630-29]	B285252	5.00	10.0	07/02/21

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

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
21G0036-01 [1603210629-21]	B285210	30.0	1.00	07/02/21
21G0036-03 [1603210629-23]	B285210	30.0	1.00	07/02/21
21G0036-04 [1603210630-24]	B285210	30.0	1.00	07/02/21
21G0036-05 [1603210630-25]	B285210	30.0	1.00	07/02/21
21G0036-06 [1603210630-26]	B285210	30.0	1.00	07/02/21
21G0036-07 [1603210630-27]	B285210	30.0	1.00	07/02/21
21G0036-08 [1603210630-28]	B285210	30.0	1.00	07/02/21

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch B285252 - SW-846 5035**
**Blank (B285252-BLK1)**

Prepared &amp; Analyzed: 07/02/21

Acetone	ND	0.10	mg/Kg wet							
Acrylonitrile	ND	0.0060	mg/Kg wet							
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg wet							
Benzene	ND	0.0020	mg/Kg wet							
Bromobenzene	ND	0.0020	mg/Kg wet							
Bromochloromethane	ND	0.0020	mg/Kg wet							
Bromodichloromethane	ND	0.0020	mg/Kg wet							
Bromoform	ND	0.0020	mg/Kg wet							
Bromomethane	ND	0.010	mg/Kg wet							
2-Butanone (MEK)	ND	0.040	mg/Kg wet							
tert-Butyl Alcohol (TBA)	ND	0.10	mg/Kg wet							
n-Butylbenzene	ND	0.0020	mg/Kg wet							
sec-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg wet							
Carbon Disulfide	ND	0.0060	mg/Kg wet							V-05
Carbon Tetrachloride	ND	0.0020	mg/Kg wet							
Chlorobenzene	ND	0.0020	mg/Kg wet							
Chlorodibromomethane	ND	0.0010	mg/Kg wet							
Chloroethane	ND	0.020	mg/Kg wet							
Chloroform	ND	0.0040	mg/Kg wet							
Chloromethane	ND	0.010	mg/Kg wet							
2-Chlorotoluene	ND	0.0020	mg/Kg wet							
4-Chlorotoluene	ND	0.0020	mg/Kg wet							
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg wet							
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg wet							
Dibromomethane	ND	0.0020	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.0020	mg/Kg wet							
trans-1,4-Dichloro-2-butene	ND	0.0040	mg/Kg wet							
Dichlorodifluoromethane (Freon 12)	ND	0.020	mg/Kg wet							
1,1-Dichloroethane	ND	0.0020	mg/Kg wet							
1,2-Dichloroethane	ND	0.0020	mg/Kg wet							
1,1-Dichloroethylene	ND	0.0040	mg/Kg wet							V-05
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
1,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,3-Dichloropropane	ND	0.0010	mg/Kg wet							
2,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,1-Dichloropropene	ND	0.0020	mg/Kg wet							
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
Diethyl Ether	ND	0.020	mg/Kg wet							
Diisopropyl Ether (DIPE)	ND	0.0010	mg/Kg wet							
1,4-Dioxane	ND	0.10	mg/Kg wet							
Ethylbenzene	ND	0.0020	mg/Kg wet							
Hexachlorobutadiene	ND	0.0020	mg/Kg wet							
2-Hexanone (MBK)	ND	0.020	mg/Kg wet							
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg wet							
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg wet							
Methyl Acetate	ND	0.0020	mg/Kg wet							



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B285252 - SW-846 5035</b>										
<b>Blank (B285252-BLK1)</b>										
Prepared & Analyzed: 07/02/21										
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg wet							
Methyl Cyclohexane	ND	0.0020	mg/Kg wet							
Methylene Chloride	ND	0.020	mg/Kg wet							
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg wet							
Naphthalene	ND	0.0040	mg/Kg wet							
n-Propylbenzene	ND	0.0020	mg/Kg wet							
Styrene	ND	0.0020	mg/Kg wet							
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg wet							
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg wet							
Tetrachloroethylene	ND	0.0020	mg/Kg wet							
Tetrahydrofuran	ND	0.010	mg/Kg wet							
Toluene	ND	0.0020	mg/Kg wet							
1,2,3-Trichlorobenzene	ND	0.0020	mg/Kg wet							V-05
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,3,5-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,1,1-Trichloroethane	ND	0.0020	mg/Kg wet							
1,1,2-Trichloroethane	ND	0.0020	mg/Kg wet							
Trichloroethylene	ND	0.0020	mg/Kg wet							
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg wet							L-04, V-05
1,2,3-Trichloropropane	ND	0.0020	mg/Kg wet							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.010	mg/Kg wet							
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg wet							
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg wet							
Vinyl Chloride	ND	0.010	mg/Kg wet							
m+p Xylene	ND	0.0040	mg/Kg wet							
o-Xylene	ND	0.0020	mg/Kg wet							
Surrogate: 1,2-Dichloroethane-d4	0.0513		mg/Kg wet	0.0500		103	70-130			
Surrogate: Toluene-d8	0.0535		mg/Kg wet	0.0500		107	70-130			
Surrogate: 4-Bromofluorobenzene	0.0559		mg/Kg wet	0.0500		112	70-130			
<b>LCS (B285252-BS1)</b>										
Prepared & Analyzed: 07/02/21										
Acetone	0.176	0.10	mg/Kg wet	0.200		87.9	70-160			†
Acrylonitrile	0.0212	0.0060	mg/Kg wet	0.0200		106	70-130			
tert-Amyl Methyl Ether (TAME)	0.0213	0.0010	mg/Kg wet	0.0200		107	70-130			
Benzene	0.0212	0.0020	mg/Kg wet	0.0200		106	70-130			
Bromobenzene	0.0182	0.0020	mg/Kg wet	0.0200		91.2	70-130			
<b>Bromochloromethane</b>	0.0263	0.0020	mg/Kg wet	0.0200		<b>131</b> *	70-130			L-07, V-20
Bromodichloromethane	0.0213	0.0020	mg/Kg wet	0.0200		107	70-130			
Bromoform	0.0179	0.0020	mg/Kg wet	0.0200		89.3	70-130			
<b>Bromomethane</b>	0.0277	0.010	mg/Kg wet	0.0200		<b>139</b> *	40-130			L-02, V-20 †
2-Butanone (MEK)	0.216	0.040	mg/Kg wet	0.200		108	70-160			†
tert-Butyl Alcohol (TBA)	0.177	0.10	mg/Kg wet	0.200		88.3	40-130			†
n-Butylbenzene	0.0168	0.0020	mg/Kg wet	0.0200		83.8	70-130			
sec-Butylbenzene	0.0186	0.0020	mg/Kg wet	0.0200		93.1	70-130			
tert-Butylbenzene	0.0187	0.0020	mg/Kg wet	0.0200		93.4	70-160			†
tert-Butyl Ethyl Ether (TBEE)	0.0218	0.0010	mg/Kg wet	0.0200		109	70-130			
Carbon Disulfide	0.148	0.0060	mg/Kg wet	0.200		73.9	70-130			V-05
Carbon Tetrachloride	0.0228	0.0020	mg/Kg wet	0.0200		114	70-130			
Chlorobenzene	0.0201	0.0020	mg/Kg wet	0.0200		100	70-130			
Chlorodibromomethane	0.0222	0.0010	mg/Kg wet	0.0200		111	70-130			
Chloroethane	0.0162	0.020	mg/Kg wet	0.0200		80.9	70-130			
Chloroform	0.0226	0.0040	mg/Kg wet	0.0200		113	70-130			

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B285252 - SW-846 5035</b>										
<b>LCS (B285252-BS1)</b>										
Prepared & Analyzed: 07/02/21										
Chloromethane	0.0236	0.010	mg/Kg wet	0.0200		118	70-130			
2-Chlorotoluene	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130			
4-Chlorotoluene	0.0202	0.0020	mg/Kg wet	0.0200		101	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	0.0169	0.0020	mg/Kg wet	0.0200		84.7	70-130			
1,2-Dibromoethane (EDB)	0.0226	0.0010	mg/Kg wet	0.0200		113	70-130			
Dibromomethane	0.0217	0.0020	mg/Kg wet	0.0200		109	70-130			
1,2-Dichlorobenzene	0.0180	0.0020	mg/Kg wet	0.0200		90.2	70-130			
1,3-Dichlorobenzene	0.0180	0.0020	mg/Kg wet	0.0200		90.1	70-130			
1,4-Dichlorobenzene	0.0192	0.0020	mg/Kg wet	0.0200		95.9	70-130			
trans-1,4-Dichloro-2-butene	0.0201	0.0040	mg/Kg wet	0.0200		101	70-130			
Dichlorodifluoromethane (Freon 12)	0.0181	0.020	mg/Kg wet	0.0200		90.4	40-160			†
1,1-Dichloroethane	0.0214	0.0020	mg/Kg wet	0.0200		107	70-130			
1,2-Dichloroethane	0.0230	0.0020	mg/Kg wet	0.0200		115	70-130			
1,1-Dichloroethylene	0.0156	0.0040	mg/Kg wet	0.0200		78.1	70-130			V-05
cis-1,2-Dichloroethylene	0.0207	0.0020	mg/Kg wet	0.0200		103	70-130			
trans-1,2-Dichloroethylene	0.0214	0.0020	mg/Kg wet	0.0200		107	70-130			
1,2-Dichloropropane	0.0217	0.0020	mg/Kg wet	0.0200		108	70-130			
1,3-Dichloropropane	0.0202	0.0010	mg/Kg wet	0.0200		101	70-130			
2,2-Dichloropropane	0.0193	0.0020	mg/Kg wet	0.0200		96.6	70-130			
1,1-Dichloropropene	0.0196	0.0020	mg/Kg wet	0.0200		97.8	70-130			
cis-1,3-Dichloropropene	0.0198	0.0010	mg/Kg wet	0.0200		99.1	70-130			
trans-1,3-Dichloropropene	0.0235	0.0010	mg/Kg wet	0.0200		118	70-130			
Diethyl Ether	0.0163	0.020	mg/Kg wet	0.0200		81.7	70-130			
Diisopropyl Ether (DIPE)	0.0238	0.0010	mg/Kg wet	0.0200		119	70-130			
1,4-Dioxane	0.196	0.10	mg/Kg wet	0.200		98.2	40-160			†
Ethylbenzene	0.0196	0.0020	mg/Kg wet	0.0200		97.8	70-130			
Hexachlorobutadiene	0.0194	0.0020	mg/Kg wet	0.0200		97.1	70-160			†
2-Hexanone (MBK)	0.228	0.020	mg/Kg wet	0.200		114	70-160			†
Isopropylbenzene (Cumene)	0.0186	0.0020	mg/Kg wet	0.0200		93.1	70-130			
p-Isopropyltoluene (p-Cymene)	0.0164	0.0020	mg/Kg wet	0.0200		82.2	70-130			
<b>Methyl Acetate</b>	0.0275	0.0020	mg/Kg wet	0.0200		<b>138</b> *	70-130			L-02, V-20
Methyl tert-Butyl Ether (MTBE)	0.0186	0.0040	mg/Kg wet	0.0200		92.9	70-130			
Methyl Cyclohexane	0.0194	0.0020	mg/Kg wet	0.0200		97.1	70-130			
Methylene Chloride	0.0236	0.020	mg/Kg wet	0.0200		118	40-160			†
4-Methyl-2-pentanone (MIBK)	0.220	0.020	mg/Kg wet	0.200		110	70-160			†
Naphthalene	0.0162	0.0040	mg/Kg wet	0.0200		80.9	40-130			†
n-Propylbenzene	0.0192	0.0020	mg/Kg wet	0.0200		96.0	70-130			
Styrene	0.0183	0.0020	mg/Kg wet	0.0200		91.3	70-130			
1,1,1,2-Tetrachloroethane	0.0203	0.0020	mg/Kg wet	0.0200		101	70-130			
1,1,2,2-Tetrachloroethane	0.0179	0.0010	mg/Kg wet	0.0200		89.6	70-130			
Tetrachloroethylene	0.0232	0.0020	mg/Kg wet	0.0200		116	70-130			
Tetrahydrofuran	0.0183	0.010	mg/Kg wet	0.0200		91.6	70-130			
Toluene	0.0211	0.0020	mg/Kg wet	0.0200		106	70-130			
1,2,3-Trichlorobenzene	0.0162	0.0020	mg/Kg wet	0.0200		81.1	70-130			V-05
1,2,4-Trichlorobenzene	0.0153	0.0020	mg/Kg wet	0.0200		76.7	70-130			
1,3,5-Trichlorobenzene	0.0160	0.0020	mg/Kg wet	0.0200		80.1	70-130			
1,1,1-Trichloroethane	0.0230	0.0020	mg/Kg wet	0.0200		115	70-130			
1,1,2-Trichloroethane	0.0208	0.0020	mg/Kg wet	0.0200		104	70-130			
Trichloroethylene	0.0193	0.0020	mg/Kg wet	0.0200		96.3	70-130			
<b>Trichlorofluoromethane (Freon 11)</b>	0.0131	0.010	mg/Kg wet	0.0200		<b>65.5</b> *	70-130			L-04, V-05
1,2,3-Trichloropropane	0.0208	0.0020	mg/Kg wet	0.0200		104	70-130			

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B285252 - SW-846 5035</b>										
<b>LCS (B285252-BS1)</b>										
Prepared & Analyzed: 07/02/21										
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0164	0.010	mg/Kg wet	0.0200		81.9	70-130			
1,2,4-Trimethylbenzene	0.0187	0.0020	mg/Kg wet	0.0200		93.3	70-130			
1,3,5-Trimethylbenzene	0.0198	0.0020	mg/Kg wet	0.0200		99.2	70-130			
Vinyl Chloride	0.0179	0.010	mg/Kg wet	0.0200		89.3	40-130			†
m+p Xylene	0.0388	0.0040	mg/Kg wet	0.0400		97.0	70-130			
o-Xylene	0.0205	0.0020	mg/Kg wet	0.0200		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0485		mg/Kg wet	0.0500		97.0	70-130			
Surrogate: Toluene-d8	0.0545		mg/Kg wet	0.0500		109	70-130			
Surrogate: 4-Bromofluorobenzene	0.0564		mg/Kg wet	0.0500		113	70-130			
<b>LCS Dup (B285252-BSD1)</b>										
Prepared & Analyzed: 07/02/21										
Acetone	0.174	0.10	mg/Kg wet	0.200		87.2	70-160	0.811	25	†
Acrylonitrile	0.0228	0.0060	mg/Kg wet	0.0200		114	70-130	7.27	25	
tert-Amyl Methyl Ether (TAME)	0.0204	0.0010	mg/Kg wet	0.0200		102	70-130	4.60	25	
Benzene	0.0209	0.0020	mg/Kg wet	0.0200		104	70-130	1.43	25	
Bromobenzene	0.0183	0.0020	mg/Kg wet	0.0200		91.4	70-130	0.219	25	
Bromochloromethane	0.0257	0.0020	mg/Kg wet	0.0200		129	70-130	2.00	25	V-20
Bromodichloromethane	0.0210	0.0020	mg/Kg wet	0.0200		105	70-130	1.70	25	
Bromoform	0.0181	0.0020	mg/Kg wet	0.0200		90.4	70-130	1.22	25	
<b>Bromomethane</b>	0.0264	0.010	mg/Kg wet	0.0200		<b>132</b> *	40-130	4.80	25	L-02, V-20 †
2-Butanone (MEK)	0.223	0.040	mg/Kg wet	0.200		112	70-160	3.14	25	†
tert-Butyl Alcohol (TBA)	0.182	0.10	mg/Kg wet	0.200		91.1	40-130	3.12	25	†
n-Butylbenzene	0.0165	0.0020	mg/Kg wet	0.0200		82.5	70-130	1.56	25	
sec-Butylbenzene	0.0201	0.0020	mg/Kg wet	0.0200		101	70-130	7.84	25	
tert-Butylbenzene	0.0183	0.0020	mg/Kg wet	0.0200		91.3	70-160	2.27	25	†
tert-Butyl Ethyl Ether (TBEE)	0.0209	0.0010	mg/Kg wet	0.0200		105	70-130	3.84	25	
Carbon Disulfide	0.143	0.0060	mg/Kg wet	0.200		71.6	70-130	3.11	25	V-05
Carbon Tetrachloride	0.0220	0.0020	mg/Kg wet	0.0200		110	70-130	3.57	25	
Chlorobenzene	0.0188	0.0020	mg/Kg wet	0.0200		94.1	70-130	6.58	25	
Chlorodibromomethane	0.0226	0.0010	mg/Kg wet	0.0200		113	70-130	1.78	25	
Chloroethane	0.0169	0.020	mg/Kg wet	0.0200		84.3	70-130	4.12	25	
Chloroform	0.0224	0.0040	mg/Kg wet	0.0200		112	70-130	0.533	25	
Chloromethane	0.0231	0.010	mg/Kg wet	0.0200		116	70-130	2.05	25	
2-Chlorotoluene	0.0195	0.0020	mg/Kg wet	0.0200		97.7	70-130	4.11	25	
4-Chlorotoluene	0.0202	0.0020	mg/Kg wet	0.0200		101	70-130	0.198	25	
1,2-Dibromo-3-chloropropane (DBCP)	0.0165	0.0020	mg/Kg wet	0.0200		82.4	70-130	2.75	25	
1,2-Dibromoethane (EDB)	0.0226	0.0010	mg/Kg wet	0.0200		113	70-130	0.354	25	
Dibromomethane	0.0232	0.0020	mg/Kg wet	0.0200		116	70-130	6.41	25	
1,2-Dichlorobenzene	0.0183	0.0020	mg/Kg wet	0.0200		91.3	70-130	1.21	25	
1,3-Dichlorobenzene	0.0179	0.0020	mg/Kg wet	0.0200		89.6	70-130	0.556	25	
1,4-Dichlorobenzene	0.0184	0.0020	mg/Kg wet	0.0200		92.1	70-130	4.04	25	
trans-1,4-Dichloro-2-butene	0.0187	0.0040	mg/Kg wet	0.0200		93.6	70-130	7.31	25	
Dichlorodifluoromethane (Freon 12)	0.0167	0.020	mg/Kg wet	0.0200		83.4	40-160	8.06	25	†
1,1-Dichloroethane	0.0208	0.0020	mg/Kg wet	0.0200		104	70-130	3.13	25	
1,2-Dichloroethane	0.0229	0.0020	mg/Kg wet	0.0200		114	70-130	0.349	25	
1,1-Dichloroethylene	0.0150	0.0040	mg/Kg wet	0.0200		75.0	70-130	4.05	25	V-05
cis-1,2-Dichloroethylene	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130	0.485	25	
trans-1,2-Dichloroethylene	0.0205	0.0020	mg/Kg wet	0.0200		103	70-130	4.19	25	
1,2-Dichloropropane	0.0220	0.0020	mg/Kg wet	0.0200		110	70-130	1.65	25	
1,3-Dichloropropane	0.0196	0.0010	mg/Kg wet	0.0200		97.9	70-130	3.22	25	
2,2-Dichloropropane	0.0191	0.0020	mg/Kg wet	0.0200		95.7	70-130	0.936	25	
1,1-Dichloropropene	0.0235	0.0020	mg/Kg wet	0.0200		117	70-130	18.2	25	

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B285252 - SW-846 5035</b>										
<b>LCS Dup (B285252-BSD1)</b>										
Prepared & Analyzed: 07/02/21										
cis-1,3-Dichloropropene	0.0206	0.0010	mg/Kg wet	0.0200		103	70-130	3.76	25	
trans-1,3-Dichloropropene	0.0211	0.0010	mg/Kg wet	0.0200		106	70-130	10.7	25	
Diethyl Ether	0.0180	0.020	mg/Kg wet	0.0200		89.9	70-130	9.56	25	
Diisopropyl Ether (DIPE)	0.0233	0.0010	mg/Kg wet	0.0200		116	70-130	2.29	25	
1,4-Dioxane	0.255	0.10	mg/Kg wet	0.200		128	40-160	26.0	50	† ‡
Ethylbenzene	0.0199	0.0020	mg/Kg wet	0.0200		99.3	70-130	1.52	25	
Hexachlorobutadiene	0.0191	0.0020	mg/Kg wet	0.0200		95.3	70-160	1.87	25	
2-Hexanone (MBK)	0.226	0.020	mg/Kg wet	0.200		113	70-160	0.697	25	†
Isopropylbenzene (Cumene)	0.0181	0.0020	mg/Kg wet	0.0200		90.3	70-130	3.05	25	
p-Isopropyltoluene (p-Cymene)	0.0167	0.0020	mg/Kg wet	0.0200		83.7	70-130	1.81	25	
<b>Methyl Acetate</b>	0.0289	0.0020	mg/Kg wet	0.0200		<b>144</b> *	70-130	4.90	25	L-02, V-20
Methyl tert-Butyl Ether (MTBE)	0.0195	0.0040	mg/Kg wet	0.0200		97.4	70-130	4.73	25	
Methyl Cyclohexane	0.0197	0.0020	mg/Kg wet	0.0200		98.3	70-130	1.23	25	
Methylene Chloride	0.0235	0.020	mg/Kg wet	0.0200		117	40-160	0.680	25	†
4-Methyl-2-pentanone (MIBK)	0.223	0.020	mg/Kg wet	0.200		111	70-160	1.10	25	†
Naphthalene	0.0162	0.0040	mg/Kg wet	0.0200		81.2	40-130	0.370	25	†
n-Propylbenzene	0.0186	0.0020	mg/Kg wet	0.0200		92.8	70-130	3.39	25	
Styrene	0.0183	0.0020	mg/Kg wet	0.0200		91.7	70-130	0.437	25	
1,1,1,2-Tetrachloroethane	0.0201	0.0020	mg/Kg wet	0.0200		100	70-130	1.09	25	
1,1,2,2-Tetrachloroethane	0.0180	0.0010	mg/Kg wet	0.0200		89.9	70-130	0.334	25	
Tetrachloroethylene	0.0226	0.0020	mg/Kg wet	0.0200		113	70-130	2.53	25	
Tetrahydrofuran	0.0205	0.010	mg/Kg wet	0.0200		102	70-130	11.1	25	
Toluene	0.0220	0.0020	mg/Kg wet	0.0200		110	70-130	3.90	25	
1,2,3-Trichlorobenzene	0.0160	0.0020	mg/Kg wet	0.0200		80.0	70-130	1.37	25	V-05
1,2,4-Trichlorobenzene	0.0151	0.0020	mg/Kg wet	0.0200		75.3	70-130	1.84	25	
1,3,5-Trichlorobenzene	0.0164	0.0020	mg/Kg wet	0.0200		82.1	70-130	2.47	25	
1,1,1-Trichloroethane	0.0216	0.0020	mg/Kg wet	0.0200		108	70-130	6.46	25	
1,1,2-Trichloroethane	0.0195	0.0020	mg/Kg wet	0.0200		97.6	70-130	6.35	25	
Trichloroethylene	0.0193	0.0020	mg/Kg wet	0.0200		96.5	70-130	0.207	25	
<b>Trichlorofluoromethane (Freon 11)</b>	0.0131	0.010	mg/Kg wet	0.0200		<b>65.4</b> *	70-130	0.153	25	L-04, V-05
1,2,3-Trichloropropane	0.0205	0.0020	mg/Kg wet	0.0200		102	70-130	1.26	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0164	0.010	mg/Kg wet	0.0200		82.1	70-130	0.244	25	
1,2,4-Trimethylbenzene	0.0188	0.0020	mg/Kg wet	0.0200		93.8	70-130	0.534	25	
1,3,5-Trimethylbenzene	0.0205	0.0020	mg/Kg wet	0.0200		103	70-130	3.37	25	
Vinyl Chloride	0.0166	0.010	mg/Kg wet	0.0200		83.2	40-130	7.07	25	†
m+p Xylene	0.0374	0.0040	mg/Kg wet	0.0400		93.6	70-130	3.67	25	
o-Xylene	0.0195	0.0020	mg/Kg wet	0.0200		97.4	70-130	4.91	25	
Surrogate: 1,2-Dichloroethane-d4	0.0490		mg/Kg wet	0.0500		97.9	70-130			
Surrogate: Toluene-d8	0.0538		mg/Kg wet	0.0500		108	70-130			
Surrogate: 4-Bromofluorobenzene	0.0563		mg/Kg wet	0.0500		113	70-130			

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B285210 - SW-846 3546</b>										
<b>Blank (B285210-BLK1)</b>										
Prepared: 07/02/21 Analyzed: 07/06/21										
Acenaphthene	ND	0.17	mg/Kg wet							
Acenaphthylene	ND	0.17	mg/Kg wet							
Anthracene	ND	0.17	mg/Kg wet							
Benzo(a)anthracene	ND	0.17	mg/Kg wet							
Benzo(a)pyrene	ND	0.17	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.17	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.17	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.17	mg/Kg wet							
Chrysene	ND	0.17	mg/Kg wet							
Dibenz(a,h)anthracene	ND	0.17	mg/Kg wet							
Fluoranthene	ND	0.17	mg/Kg wet							
Fluorene	ND	0.17	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	ND	0.17	mg/Kg wet							
2-Methylnaphthalene	ND	0.17	mg/Kg wet							
Naphthalene	ND	0.17	mg/Kg wet							
Phenanthrene	ND	0.17	mg/Kg wet							
Pyrene	ND	0.17	mg/Kg wet							
Surrogate: Nitrobenzene-d5	1.61		mg/Kg wet	3.33		48.2	30-130			
Surrogate: 2-Fluorobiphenyl	1.73		mg/Kg wet	3.33		51.8	30-130			
Surrogate: p-Terphenyl-d14	2.10		mg/Kg wet	3.33		63.0	30-130			
<b>LCS (B285210-BS1)</b>										
Prepared: 07/02/21 Analyzed: 07/06/21										
Acenaphthene	1.08	0.17	mg/Kg wet	1.67		65.1	40-140			
Acenaphthylene	1.07	0.17	mg/Kg wet	1.67		64.0	40-140			
Anthracene	1.09	0.17	mg/Kg wet	1.67		65.4	40-140			
Benzo(a)anthracene	1.06	0.17	mg/Kg wet	1.67		63.4	40-140			
Benzo(a)pyrene	1.01	0.17	mg/Kg wet	1.67		60.8	40-140			
Benzo(b)fluoranthene	1.02	0.17	mg/Kg wet	1.67		61.5	40-140			
Benzo(g,h,i)perylene	1.11	0.17	mg/Kg wet	1.67		66.5	40-140			
Benzo(k)fluoranthene	1.01	0.17	mg/Kg wet	1.67		60.5	40-140			
Chrysene	1.02	0.17	mg/Kg wet	1.67		61.2	40-140			
Dibenz(a,h)anthracene	1.10	0.17	mg/Kg wet	1.67		65.8	40-140			
Fluoranthene	1.17	0.17	mg/Kg wet	1.67		70.3	40-140			
Fluorene	1.14	0.17	mg/Kg wet	1.67		68.3	40-140			
Indeno(1,2,3-cd)pyrene	1.17	0.17	mg/Kg wet	1.67		70.0	40-140			
2-Methylnaphthalene	1.16	0.17	mg/Kg wet	1.67		69.9	40-140			
Naphthalene	0.998	0.17	mg/Kg wet	1.67		59.9	40-140			
Phenanthrene	1.05	0.17	mg/Kg wet	1.67		63.1	40-140			
Pyrene	0.920	0.17	mg/Kg wet	1.67		55.2	40-140			
Surrogate: Nitrobenzene-d5	2.13		mg/Kg wet	3.33		63.9	30-130			
Surrogate: 2-Fluorobiphenyl	2.03		mg/Kg wet	3.33		61.0	30-130			
Surrogate: p-Terphenyl-d14	2.49		mg/Kg wet	3.33		74.6	30-130			

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

**Batch B285210 - SW-846 3546**
**LCS Dup (B285210-BSD1)**

Prepared: 07/02/21 Analyzed: 07/06/21

Acenaphthene	1.12	0.17	mg/Kg wet	1.67		67.1	40-140	3.03	30	
Acenaphthylene	1.10	0.17	mg/Kg wet	1.67		66.0	40-140	3.04	30	
Anthracene	1.10	0.17	mg/Kg wet	1.67		66.3	40-140	1.31	30	
Benzo(a)anthracene	1.08	0.17	mg/Kg wet	1.67		64.7	40-140	2.03	30	
Benzo(a)pyrene	1.05	0.17	mg/Kg wet	1.67		62.9	40-140	3.46	30	
Benzo(b)fluoranthene	1.04	0.17	mg/Kg wet	1.67		62.6	40-140	1.74	30	
Benzo(g,h,i)perylene	1.12	0.17	mg/Kg wet	1.67		67.4	40-140	1.40	30	
Benzo(k)fluoranthene	1.04	0.17	mg/Kg wet	1.67		62.5	40-140	3.29	30	
Chrysene	1.06	0.17	mg/Kg wet	1.67		63.8	40-140	4.22	30	
Dibenz(a,h)anthracene	1.14	0.17	mg/Kg wet	1.67		68.4	40-140	3.96	30	
Fluoranthene	1.27	0.17	mg/Kg wet	1.67		76.2	40-140	8.09	30	
Fluorene	1.17	0.17	mg/Kg wet	1.67		70.1	40-140	2.63	30	
Indeno(1,2,3-cd)pyrene	1.18	0.17	mg/Kg wet	1.67		70.8	40-140	1.16	30	
2-Methylnaphthalene	1.19	0.17	mg/Kg wet	1.67		71.6	40-140	2.49	30	
Naphthalene	0.996	0.17	mg/Kg wet	1.67		59.8	40-140	0.167	30	
Phenanthrene	1.09	0.17	mg/Kg wet	1.67		65.2	40-140	3.27	30	
Pyrene	0.901	0.17	mg/Kg wet	1.67		54.0	40-140	2.09	30	
Surrogate: Nitrobenzene-d5	2.16		mg/Kg wet	3.33		64.9	30-130			
Surrogate: 2-Fluorobiphenyl	2.11		mg/Kg wet	3.33		63.4	30-130			
Surrogate: p-Terphenyl-d14	2.48		mg/Kg wet	3.33		74.4	30-130			

**QUALITY CONTROL**
**Polychlorinated Biphenyls with 3540 Soxhlet Extraction - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch B285423 - SW-846 3540C**
**Blank (B285423-BLK1)**

Prepared: 07/07/21 Analyzed: 07/09/21

Aroclor-1016	ND	0.020	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1221	ND	0.020	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1232	ND	0.020	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1242	ND	0.020	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1248	ND	0.020	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1254	ND	0.020	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1260	ND	0.020	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1262	ND	0.020	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1268	ND	0.020	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.020	mg/Kg wet							
Surrogate: Decachlorobiphenyl	0.176		mg/Kg wet	0.200		88.1	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.168		mg/Kg wet	0.200		83.8	30-150			
Surrogate: Tetrachloro-m-xylene	0.143		mg/Kg wet	0.200		71.6	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.144		mg/Kg wet	0.200		71.9	30-150			

**LCS (B285423-BS1)**

Prepared: 07/07/21 Analyzed: 07/09/21

Aroclor-1016	0.17	0.020	mg/Kg wet	0.200		83.5	40-140			
Aroclor-1016 [2C]	0.15	0.020	mg/Kg wet	0.200		77.5	40-140			
Aroclor-1260	0.16	0.020	mg/Kg wet	0.200		78.5	40-140			
Aroclor-1260 [2C]	0.14	0.020	mg/Kg wet	0.200		70.8	40-140			
Surrogate: Decachlorobiphenyl	0.172		mg/Kg wet	0.200		86.0	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.164		mg/Kg wet	0.200		81.8	30-150			
Surrogate: Tetrachloro-m-xylene	0.151		mg/Kg wet	0.200		75.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.150		mg/Kg wet	0.200		74.8	30-150			

**LCS Dup (B285423-BSD1)**

Prepared: 07/07/21 Analyzed: 07/09/21

Aroclor-1016	0.17	0.020	mg/Kg wet	0.200		86.6	40-140	3.67	30	
Aroclor-1016 [2C]	0.16	0.020	mg/Kg wet	0.200		81.8	40-140	5.37	30	
Aroclor-1260	0.16	0.020	mg/Kg wet	0.200		82.1	40-140	4.51	30	
Aroclor-1260 [2C]	0.15	0.020	mg/Kg wet	0.200		74.3	40-140	4.84	30	
Surrogate: Decachlorobiphenyl	0.178		mg/Kg wet	0.200		88.8	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.169		mg/Kg wet	0.200		84.4	30-150			
Surrogate: Tetrachloro-m-xylene	0.155		mg/Kg wet	0.200		77.7	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.154		mg/Kg wet	0.200		76.8	30-150			

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B285211 - SW-846 3546</b>									
<b>Blank (B285211-BLK1)</b>					Prepared: 07/02/21 Analyzed: 07/06/21				
TPH (C9-C36)	ND	8.3	mg/Kg wet						
Surrogate: 2-Fluorobiphenyl	2.04		mg/Kg wet	3.33		61.3 40-140			
<b>LCS (B285211-BS1)</b>					Prepared: 07/02/21 Analyzed: 07/06/21				
TPH (C9-C36)	24.8	8.3	mg/Kg wet	33.3		74.5 40-140			
Surrogate: 2-Fluorobiphenyl	2.46		mg/Kg wet	3.33		73.9 40-140			
<b>LCS Dup (B285211-BSD1)</b>					Prepared: 07/02/21 Analyzed: 07/06/21				
TPH (C9-C36)	22.8	8.3	mg/Kg wet	33.3		68.5 40-140	8.32	25	
Surrogate: 2-Fluorobiphenyl	2.14		mg/Kg wet	3.33		64.3 40-140			



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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch B285206 - SW-846 3050B**
**Blank (B285206-BLK1)**

Prepared: 07/02/21 Analyzed: 07/06/21

Antimony	ND	1.6	mg/Kg wet							
Arsenic	ND	3.3	mg/Kg wet							
Beryllium	ND	0.16	mg/Kg wet							
Cadmium	ND	0.33	mg/Kg wet							
Chromium	ND	0.66	mg/Kg wet							
Copper	ND	0.66	mg/Kg wet							
Lead	ND	0.49	mg/Kg wet							
Nickel	ND	0.66	mg/Kg wet							
Selenium	ND	3.3	mg/Kg wet							
Silver	ND	0.33	mg/Kg wet							
Thallium	ND	1.6	mg/Kg wet							
Zinc	ND	0.66	mg/Kg wet							

**LCS (B285206-BS1)**

Prepared: 07/02/21 Analyzed: 07/07/21

Antimony	133	5.0	mg/Kg wet	134		99.6	1.9-200.7			
Arsenic	171	10	mg/Kg wet	170		101	82.9-117.6			
<b>Beryllium</b>	143	0.50	mg/Kg wet	116		<b>123</b> *	83.4-116.4			L-07
Cadmium	104	1.0	mg/Kg wet	89.5		116	82.8-117.3			
<b>Chromium</b>	122	2.0	mg/Kg wet	101		<b>121</b> *	82.1-117.8			L-07
Copper	169	2.0	mg/Kg wet	149		113	83.9-116.1			
Lead	145	1.5	mg/Kg wet	140		103	82.9-117.1			
<b>Nickel</b>	85.0	2.0	mg/Kg wet	68.3		<b>124</b> *	82.1-117.7			L-07
Selenium	201	10	mg/Kg wet	182		110	79.7-120.3			
Silver	52.9	1.0	mg/Kg wet	50.1		106	80.2-120			
Thallium	82.5	5.0	mg/Kg wet	87.7		94.0	81.1-118.6			
Zinc	262	2.0	mg/Kg wet	228		115	80.7-118.9			

**LCS Dup (B285206-BSD1)**

Prepared: 07/02/21 Analyzed: 07/07/21

Antimony	126	5.0	mg/Kg wet	134		94.2	1.9-200.7	5.54	30	
Arsenic	169	10	mg/Kg wet	170		99.7	82.9-117.6	1.10	30	
Beryllium	132	0.50	mg/Kg wet	116		114	83.4-116.4	7.48	30	
Cadmium	97.2	1.0	mg/Kg wet	89.5		109	82.8-117.3	7.04	20	
Chromium	112	2.0	mg/Kg wet	101		111	82.1-117.8	8.45	30	
Copper	161	2.0	mg/Kg wet	149		108	83.9-116.1	4.57	30	
Lead	146	1.5	mg/Kg wet	140		104	82.9-117.1	0.846	30	
Nickel	79.8	2.0	mg/Kg wet	68.3		117	82.1-117.7	6.31	30	
Selenium	198	10	mg/Kg wet	182		109	79.7-120.3	1.41	30	
Silver	53.4	1.0	mg/Kg wet	50.1		107	80.2-120	0.870	30	
Thallium	78.1	5.0	mg/Kg wet	87.7		89.1	81.1-118.6	5.41	30	
Zinc	252	2.0	mg/Kg wet	228		111	80.7-118.9	4.02	30	

**Reference (B285206-SRM1) MRL Check**

Prepared: 07/02/21 Analyzed: 07/06/21

Lead	0.458	0.48	mg/Kg wet	0.481		95.1	80-120			
------	-------	------	-----------	-------	--	------	--------	--	--	--

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B285230 - SW-846 7471</b>										
<b>Blank (B285230-BLK1)</b>					Prepared: 07/02/21 Analyzed: 07/06/21					
Mercury	ND	0.025	mg/Kg wet							
<b>LCS (B285230-BS1)</b>					Prepared: 07/02/21 Analyzed: 07/06/21					
Mercury	14.2	0.76	mg/Kg wet	15.6		91.0	59.3-140.4			
<b>LCS Dup (B285230-BSD1)</b>					Prepared: 07/02/21 Analyzed: 07/06/21					
Mercury	14.4	0.75	mg/Kg wet	15.6		92.6	59.3-140.4	1.75	20	

## IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

1603210630-25

*SW-846 8082A*

Lab Sample ID: 21G0036-05 Date(s) Analyzed: 07/09/2021 07/09/2021

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

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

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	-0.030	0.030	0.26	
	2	0.000	-0.030	0.030	0.28	7.4

## IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

**LCS**
*SW-846 8082A*

 Lab Sample ID:                     B285423-BS1                                          Date(s) Analyzed:           07/09/2021                     07/09/2021          

 Instrument ID (1):                     ECD4                                          Instrument ID (2):                     ECD4                    

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

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	-0.030	0.030	0.17	
	2	0.000	-0.030	0.030	0.15	12.5
Aroclor-1260	1	0.000	-0.030	0.030	0.16	
	2	0.000	-0.030	0.030	0.14	13.3

**IDENTIFICATION SUMMARY  
 FOR SINGLE COMPONENT ANALYTES**

LCS Dup
---------

*SW-846 8082A*

 Lab Sample ID: B285423-BSD1 Date(s) Analyzed: 07/09/2021 07/09/2021

 Instrument ID (1): ECD4 Instrument ID (2): ECD4

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

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	-0.030	0.030	0.17	
	2	0.000	-0.030	0.030	0.16	6.1
Aroclor-1260	1	0.000	-0.030	0.030	0.16	
	2	0.000	-0.030	0.030	0.15	6.5

**FLAG/QUALIFIER SUMMARY**

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
L-02	Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.
L-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.
O-26	Sample contamination consists of heavy residual hydrocarbons similar to asphalt. Chromatogram also shows the presence of PAHs.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-20	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

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

Analyte	Certifications
<b><i>SW-846 6010D in Soil</i></b>	
Antimony	CT,NH,NY,ME,VA,NC
Arsenic	CT,NH,NY,ME,VA,NC
Beryllium	CT,NH,NY,ME,VA,NC
Cadmium	CT,NH,NY,ME,VA,NC
Chromium	CT,NH,NY,ME,VA,NC
Copper	CT,NH,NY,ME,VA,NC
Lead	CT,NH,NY,AIHA,ME,VA,NC
Nickel	CT,NH,NY,ME,VA,NC
Selenium	CT,NH,NY,ME,VA,NC
Silver	CT,NH,NY,ME,VA,NC
Thallium	CT,NH,NY,ME,VA,NC
Zinc	CT,NH,NY,ME,VA,NC
<b><i>SW-846 7471B in Soil</i></b>	
Mercury	CT,NH,NY,NC,ME,VA
<b><i>SW-846 8082A in Soil</i></b>	
Aroclor-1016	CT,NH,NY,ME,NC,VA,PA
Aroclor-1016 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1221	CT,NH,NY,ME,NC,VA,PA
Aroclor-1221 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1232	CT,NH,NY,ME,NC,VA,PA
Aroclor-1232 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1242	CT,NH,NY,ME,NC,VA,PA
Aroclor-1242 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1248	CT,NH,NY,ME,NC,VA,PA
Aroclor-1248 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1254	CT,NH,NY,ME,NC,VA,PA
Aroclor-1254 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1260	CT,NH,NY,ME,NC,VA,PA
Aroclor-1260 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1262	NY,NC,VA,PA
Aroclor-1262 [2C]	NY,NC,VA,PA
Aroclor-1268	NY,NC,VA,PA
Aroclor-1268 [2C]	NY,NC,VA,PA
<b><i>SW-846 8260C-D in Soil</i></b>	
Acetone	CT,NH,NY,ME,VA
Acrylonitrile	CT,NH,NY,ME,VA
Benzene	CT,NH,NY,ME,VA
Bromobenzene	NH,NY,ME,VA
Bromochloromethane	NH,NY,ME,VA
Bromodichloromethane	CT,NH,NY,ME,VA
Bromoform	CT,NH,NY,ME,VA
Bromomethane	CT,NH,NY,ME,VA
2-Butanone (MEK)	CT,NH,NY,ME,VA
tert-Butyl Alcohol (TBA)	NY,ME
n-Butylbenzene	CT,NH,NY,ME,VA
sec-Butylbenzene	CT,NH,NY,ME,VA

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

Analyte	Certifications
<i>SW-846 8260C-D in Soil</i>	
tert-Butylbenzene	CT,NH,NY,ME,VA
Carbon Disulfide	CT,NH,NY,ME,VA
Carbon Tetrachloride	CT,NH,NY,ME,VA
Chlorobenzene	CT,NH,NY,ME,VA
Chlorodibromomethane	CT,NH,NY,ME,VA
Chloroethane	CT,NH,NY,ME,VA
Chloroform	CT,NH,NY,ME,VA
Chloromethane	CT,NH,NY,ME,VA
2-Chlorotoluene	CT,NH,NY,ME,VA
4-Chlorotoluene	CT,NH,NY,ME,VA
1,2-Dibromo-3-chloropropane (DBCP)	NY,ME
1,2-Dibromoethane (EDB)	NH,NY
Dibromomethane	NH,NY,ME,VA
1,2-Dichlorobenzene	CT,NH,NY,ME,VA
1,3-Dichlorobenzene	CT,NH,NY,ME,VA
1,4-Dichlorobenzene	CT,NH,NY,ME,VA
trans-1,4-Dichloro-2-butene	NY,ME
Dichlorodifluoromethane (Freon 12)	NH,NY,ME,VA
1,1-Dichloroethane	CT,NH,NY,ME,VA
1,2-Dichloroethane	CT,NH,NY,ME,VA
1,1-Dichloroethylene	CT,NH,NY,ME,VA
cis-1,2-Dichloroethylene	CT,NH,NY,ME,VA
trans-1,2-Dichloroethylene	CT,NH,NY,ME,VA
1,2-Dichloropropane	CT,NH,NY,ME,VA
1,3-Dichloropropane	NH,NY,ME,VA
2,2-Dichloropropane	NH,NY,ME,VA
1,1-Dichloropropene	NH,NY,ME,VA
cis-1,3-Dichloropropene	CT,NH,NY,ME,VA
trans-1,3-Dichloropropene	CT,NH,NY,ME,VA
Diethyl Ether	ME
1,4-Dioxane	NY,ME
Ethylbenzene	CT,NH,NY,ME,VA
Hexachlorobutadiene	NH,NY,ME,VA
2-Hexanone (MBK)	CT,NH,NY,ME,VA
Isopropylbenzene (Cumene)	CT,NH,NY,ME,VA
p-Isopropyltoluene (p-Cymene)	NH,NY
Methyl Acetate	NY,ME
Methyl tert-Butyl Ether (MTBE)	NY,ME,VA
Methyl Cyclohexane	NY
Methylene Chloride	CT,NH,NY,ME,VA
4-Methyl-2-pentanone (MIBK)	CT,NH,NY,ME,VA
Naphthalene	NH,NY,ME,VA
n-Propylbenzene	NH,NY,ME
Styrene	CT,NH,NY,ME,VA
1,1,1,2-Tetrachloroethane	CT,NH,NY,ME,VA
1,1,2,2-Tetrachloroethane	CT,NH,NY,ME,VA
Tetrachloroethylene	CT,NH,NY,ME,VA



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

Analyte	Certifications
<b><i>SW-846 8260C-D in Soil</i></b>	
Toluene	CT,NH,NY,ME,VA
1,2,3-Trichlorobenzene	NY,ME
1,2,4-Trichlorobenzene	NH,NY,ME,VA
1,3,5-Trichlorobenzene	ME
1,1,1-Trichloroethane	CT,NH,NY,ME,VA
1,1,2-Trichloroethane	CT,NH,NY,ME,VA
Trichloroethylene	CT,NH,NY,ME,VA
Trichlorofluoromethane (Freon 11)	CT,NH,NY,ME,VA
1,2,3-Trichloropropane	NH,NY,ME,VA
1,2,4-Trimethylbenzene	CT,NH,NY,ME,VA
1,3,5-Trimethylbenzene	CT,NH,NY,ME,VA
Vinyl Chloride	CT,NH,NY,ME,VA
m+p Xylene	CT,NH,NY,ME,VA
o-Xylene	CT,NH,NY,ME,VA
<b><i>SW-846 8270D-E in Soil</i></b>	
Acenaphthene	CT,NY,NH,ME,NC,VA
Acenaphthylene	CT,NY,NH,ME,NC,VA
Anthracene	CT,NY,NH,ME,NC,VA
Benzo(a)anthracene	CT,NY,NH,ME,NC,VA
Benzo(a)pyrene	CT,NY,NH,ME,NC,VA
Benzo(b)fluoranthene	CT,NY,NH,ME,NC,VA
Benzo(g,h,i)perylene	CT,NY,NH,ME,NC,VA
Benzo(k)fluoranthene	CT,NY,NH,ME,NC,VA
Chrysene	CT,NY,NH,ME,NC,VA
Dibenz(a,h)anthracene	CT,NY,NH,ME,NC,VA
Fluoranthene	CT,NY,NH,ME,NC,VA
Fluorene	CT,NY,NH,ME,NC,VA
Indeno(1,2,3-cd)pyrene	CT,NY,NH,ME,NC,VA
2-Methylnaphthalene	CT,NY,NH,ME,NC,VA
Naphthalene	CT,NY,NH,ME,NC,VA
Phenanthrene	CT,NY,NH,ME,NC,VA
Pyrene	CT,NY,NH,ME,NC,VA
<b><i>SW-846 8270D-E in Water</i></b>	
Acenaphthene	CT,NY,NH,ME,NC,VA
Acenaphthylene	CT,NY,NH,ME,NC,VA
Anthracene	CT,NY,NH,ME,NC,VA
Benzo(a)anthracene	CT,NY,NH,ME,NC,VA
Benzo(a)pyrene	CT,NY,NH,ME,NC,VA
Benzo(b)fluoranthene	CT,NY,NH,ME,NC,VA
Benzo(g,h,i)perylene	CT,NY,NH,ME,NC,VA
Benzo(k)fluoranthene	CT,NY,NH,ME,NC,VA
Chrysene	CT,NY,NH,ME,NC,VA
Dibenz(a,h)anthracene	CT,NY,NH,ME,NC,VA
Fluoranthene	CT,NY,NH,ME,NC,VA
Fluorene	CT,NY,NH,ME,NC,VA
Indeno(1,2,3-cd)pyrene	CT,NY,NH,ME,NC,VA

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

Analyte	Certifications
2-Methylnaphthalene	CT,NY,NH,ME,NC,VA
Naphthalene	CT,NY,NH,ME,NC,VA
Phenanthrene	CT,NY,NH,ME,NC,VA
Pyrene	CT,NY,NH,ME,NC,VA

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Public Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2022
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2022
RI	Rhode Island Department of Health	LAO00112	12/30/2021
NC	North Carolina Div. of Water Quality	652	12/31/2021
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2021
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2021
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2021
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2021



FUSS & O'NEILL

(860) 646-2467 • www.fandO.com

□ 146 Hartford Road, Manchester, CT 06040

□ 56 Quarry Road, Trumbull, CT 06611

□ 1419 Richland Street, Columbia, SC 29201

□ 78 Interstate Drive, West Springfield, MA 01089

□ 317 Iron Horse Way, Suite 204, Providence, RI 02908

□ 80 Washington Street, Suite 301, Poughkeepsie, NY

per client run  
PCBS via sox jlh  
7/2/2021

PAGE 3 of 3

# 2160036 CHAIN-OF-CUSTODY RECORD

# 37153

### Turnaround

24-Hour\*    72-Hour\*    Other \_\_\_\_\_ (days)  
 48-Hour\*    Standard (\_\_\_\_ days)   \*Surcharge Applies

PROJECT NAME

719 RIVER STREET.

PROJECT LOCATION

WOONSOCKET, RI

PROJECT NUMBER

20181545.B10

LABORATORY

CON-TEST

REPORT TO: Madelyn Sampson (msampson@fundo.com)

Analysis Request

INVOICE TO: ✓

P.O. NO.: ~~1603210630~~ 16032181545.B10

Sampler's Signature: *Madelyn Sampson*

Date: 6/30/21

Source Codes:

MW=Monitoring Well   PW=Potable Water   T=Treatment Facility   S=Soil   B=Sediment  
SW=Surface Water   ST=Stormwater   W=Waste   A=Air   C=Concrete

X=Other **TKIV BLANK**

*VOC 5060  
PAH 5070  
PH 5071  
PH 6010/7471  
PCB 8082*

*Soil VOA Vial,  Methanol  
Soil VOA Vial,  water  
Glass Soil Container (8) oz.  
Other:  
Water VOA Vial,  As is    HCl  
Glass Amber ( ) ml,  As is    H<sub>2</sub>SO<sub>4</sub>  
Plastic - As is,  250 ml    500    1000 ml  
Plastic - H<sub>2</sub>SO<sub>4</sub>,  250 ml    500 ml  
Plastic - HNO<sub>3</sub>, 250 ml    Filtered    0.45µ    1µ*

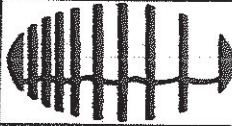
Item No.	Transfer Check				Sample Number	Source Code	Date Sampled	Time Sampled	Analysis Request										Comments			
	1	2	3	4					VOC	PAH	PH	PCB	Water	Glass	Plastic	Plastic	Plastic	Plastic				
1	X				1603210629 - 21	S	6/29/21	1253	X	X	X	X	X									SB-13
2	X				1603210629 - 22	X	6/29/21	1430	X													TKIV BLANK
3		X			1603210630 - 23	S	6/30/21	0712	X	X	X	X	X									MW-14
4		X			-24			0722	X	X	X	X	X									MW-14
5		X			-25			0812	X	X	X	X	X									MW-15
6		X			-26			0826	X	X	X	X	X									MW-15
7		X			-27			0452	X	X	X	X	X									SB-16
8		X			-28			0454	X	X	X	X	X									SB-16
9		X			-29	X	6/30/21	1145	X													

Transfer Number	Relinquished By	Accepted By	Date	Time	Charge Exceptions: <input type="checkbox"/> CT Tax Exempt <input type="checkbox"/> QA/QC <input type="checkbox"/> Other _____ _____ Duplicates <u>2</u> Blanks (Item Nos: <u>22,29</u> )
1	<i>Madelyn Sampson</i>	<i>F TO FRIDGE</i>	6/29/21	1430	Reporting and Detection Limit Requirements: <input type="checkbox"/> RCP Deliverables <input type="checkbox"/> MCP CAM Cert.
2	<i>Madelyn Sampson</i>	<i>F TO FRIDGE</i>	6/30/21	1530	<i>I/C-DEL</i>
3	<i>F TO FRIDGE</i>	<i>Madelyn Sampson</i>	7/1/21	0945	Additional Comments:
4	<i>Madelyn Sampson</i>	<i>Andrew Brown</i>	7/1/21	0946	

*Andrew Brown*   *2.0.14.4*   *7/1/21 247 PM*   *1447*



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



**CON-TEST**  
ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

**Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False**

Client Fuss + O'Neill

Received By [Signature] Date 7/11/21 Time 1447

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

Were samples within Temperature? 2-6°C T By Gun # 5 Actual Temp - 20.44  
By Blank # \_\_\_\_\_ Actual Temp - \_\_\_\_\_

Was Custody Seal Intact? n/a Were Samples Tampered with? n/a  
Was COC Relinquished? T Does Chain Agree With Samples? T

Are there broken/leaking/loose caps on any samples? F

Is COC in ink/ Legible? T Were samples received within holding time? T

Did COC include all pertinent Information? Client T Analysis T Sampler Name T  
Project F ID's T Collection Dates/Times T

Are Sample labels filled out and legible? T

Are there Lab to Filters? F

Are there Rushes? F

Are there Short Holds? F

Is there enough Volume? T

Is there Headspace where applicable? n/a

Proper Media/Containers Used? T

Were trip blanks received? T

Do all samples have the proper pH? \_\_\_\_\_

Who was notified? \_\_\_\_\_  
Who was notified? \_\_\_\_\_  
Who was notified? \_\_\_\_\_

MS/MSD? F

Is splitting samples required? F

On COC? T

Acid n/a Base n/a

Vials	#	Containers:	#	#	#	#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear
Meoh-	9	250 mL Amb.		250 mL Plastic		4oz Amb/Clear
Bisulfate-		Flashpoint		Col./Bacteria		2oz Amb/Clear
DI-	18	Other Glass		Other Plastic		Encore
Thiosulfate-		SOC Kit		Plastic Bag		Frozen: 7/11/21 @ 1447
Sulfuric-		Perchlorate		Ziplock		

**Unused Media**

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

Comments:

August 2, 2021

Madelyn Sampson  
Fuss & O'Neill - Providence  
317 Iron Horse Way, Suite 204  
Providence, RI 02908

Project Location: 719 River St, Woonsocket, RI  
Client Job Number:  
Project Number: 20181545.B10  
Laboratory Work Order Number: 21G1540

Enclosed are results of analyses for samples received by the laboratory on July 28, 2021. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Jessica L. Hoffman  
Project Manager

## Table of Contents

Sample Summary	3
Case Narrative	4
Sample Results	5
21G1540-01	5
21G1540-02	7
21G1540-03	9
21G1540-04	11
Sample Preparation Information	13
QC Data	14
TCLP - Metals Analyses	14
B287051	14
Flag/Qualifier Summary	15
Certifications	16
Chain of Custody/Sample Receipt	17



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

Fuss & O'Neill - Providence  
 317 Iron Horse Way, Suite 204  
 Providence, RI 02908  
 ATTN: Madelyn Sampson

REPORT DATE: 8/2/2021

PURCHASE ORDER NUMBER: 160320181545.B10

PROJECT NUMBER: 20181545.B10

#### ANALYTICAL SUMMARY

WORK ORDER NUMBER: 21G1540

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

PROJECT LOCATION: 719 River St, Woonsocket, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
1603210628-06	21G1540-01	Soil	SB-4	SM 2540G SW-846 6010D	
1603210628-09	21G1540-02	Soil	MW-6	SM 2540G SW-846 6010D	
1603210628-10	21G1540-03	Soil	SB-7	SM 2540G SW-846 6010D	
1603210629-14	21G1540-04	Soil	SB-7	SM 2540G SW-846 6010D	

**CASE NARRATIVE SUMMARY**

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

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

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



Lisa A. Worthington  
Technical Representative





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

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-4

Work Order: 21G1540

Date Received: 7/28/2021

Field Sample #: 1603210628-06

Sampled: 6/28/2021 10:12

Sample ID: 21G1540-01

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	90.4		% Wt	1		SM 2540G	7/2/21	7/3/21 0:00	DRL



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

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-4

Work Order: 21G1540

Date Received: 7/28/2021

Field Sample #: 1603210628-06

Sampled: 6/28/2021 10:12

Sample ID: 21G1540-01

Sample Matrix: Soil

TCLP - Metals Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Lead	0.18	0.10	mg/L	1		SW-846 6010D	7/29/21	7/30/21 4:13	MJH

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

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-6

Work Order: 21G1540

Date Received: 7/28/2021

**Field Sample #: 1603210628-09**

Sampled: 6/28/2021 11:34

**Sample ID: 21G1540-02**

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	93.2		% Wt	1		SM 2540G	7/2/21	7/3/21 0:00	DRL



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

Project Location: 719 River St, Woonsocket, RI

Sample Description: MW-6

Work Order: 21G1540

Date Received: 7/28/2021

Field Sample #: 1603210628-09

Sampled: 6/28/2021 11:34

Sample ID: 21G1540-02

Sample Matrix: Soil

## TCLP - Metals Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Lead	1.4	0.10	mg/L	1		SW-846 6010D	7/29/21	7/30/21 15:17	MJH



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

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-7

Work Order: 21G1540

Date Received: 7/28/2021

Field Sample #: 1603210628-10

Sampled: 6/28/2021 13:56

Sample ID: 21G1540-03

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	88.3		% Wt	1		SM 2540G	7/2/21	7/3/21 0:00	DRL

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

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-7

Work Order: 21G1540

Date Received: 7/28/2021

Field Sample #: 1603210628-10

Sampled: 6/28/2021 13:56

Sample ID: 21G1540-03

Sample Matrix: Soil

**TCLP - Metals Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Lead	ND	0.10	mg/L	1		SW-846 6010D	7/29/21	7/30/21 4:21	MJH

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

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-7

Work Order: 21G1540

Date Received: 7/28/2021

Field Sample #: 1603210629-14

Sampled: 6/29/2021 07:19

Sample ID: 21G1540-04

Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	88.2		% Wt	1		SM 2540G	7/2/21	7/3/21 0:00	DRL

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

Project Location: 719 River St, Woonsocket, RI

Sample Description: SB-7

Work Order: 21G1540

Date Received: 7/28/2021

Field Sample #: 1603210629-14

Sampled: 6/29/2021 07:19

Sample ID: 21G1540-04

Sample Matrix: Soil

**TCLP - Metals Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Chromium	0.090	0.050	mg/L	1		SW-846 6010D	7/29/21	7/30/21 4:29	MJH
Lead	0.35	0.10	mg/L	1		SW-846 6010D	7/29/21	7/30/21 4:29	MJH



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

**Sample Extraction Data**
**Prep Method: % Solids    Analytical Method: SM 2540G**

Lab Number [Field ID]	Batch	Date
21G1540-01 [1603210628-06]	B285260	07/02/21
21G1540-02 [1603210628-09]	B285260	07/02/21
21G1540-03 [1603210628-10]	B285260	07/02/21
21G1540-04 [1603210629-14]	B285260	07/02/21

**Prep Method: SW-846 3010A    Analytical Method: SW-846 6010A    100% Leachates were extracted on 7/28/2021 per SW-846 1311 in Batch B286958**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
21G1540-01 [1603210628-06]	B287051	50.0	50.0	07/29/21
21G1540-02 [1603210628-09]	B287051	50.0	50.0	07/29/21
21G1540-03 [1603210628-10]	B287051	50.0	50.0	07/29/21
21G1540-04 [1603210629-14]	B287051	50.0	50.0	07/29/21

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

**QUALITY CONTROL**
**TCLP - Metals Analyses - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B287051 - SW-846 3010A</b>										
<b>Blank (B287051-BLK1)</b>										
				Prepared & Analyzed: 07/29/21						
Chromium	ND	0.050	mg/L							
Lead	ND	0.10	mg/L							
<b>LCS (B287051-BS1)</b>										
				Prepared & Analyzed: 07/29/21						
Chromium	0.516	0.050	mg/L	0.500		103	80-120			
Lead	0.496	0.10	mg/L	0.500		99.2	80-120			
<b>LCS Dup (B287051-BSD1)</b>										
				Prepared & Analyzed: 07/29/21						
Chromium	0.514	0.050	mg/L	0.500		103	80-120	0.452	20	
Lead	0.493	0.10	mg/L	0.500		98.5	80-120	0.623	20	
<b>Matrix Spike (B287051-MS1)</b>										
		<b>Source: 21G1540-02</b>			Prepared & Analyzed: 07/29/21					
Chromium	0.492	0.050	mg/L	0.500	ND	98.4	75-125			
Lead	1.90	0.10	mg/L	0.500	1.40	99.6	75-125			

**FLAG/QUALIFIER SUMMARY**

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level

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

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

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

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

Analyte	Certifications
---------	----------------

**SW-846 6010D in Water**

Chromium	NY,CT,ME,NC,NH,VA
----------	-------------------

Lead	NY,CT,ME,NC,NH,VA
------	-------------------

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Public Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2022
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2022
RI	Rhode Island Department of Health	LAO00112	12/30/2021
NC	North Carolina Div. of Water Quality	652	12/31/2021
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2021
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2021
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2021
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2021



FUSS & O'NEILL

(860) 646-2469 • www.FandO.com

TCLP Lead on samples per client. JLH 7/28/2021

er, CT 06040

T 06611

ia, SC 29201

78 Interstate Drive, West Springfield, MA 01089

317 Iron Horse Way, Suite 204, Providence, RI 02908

80 Washington Street, Suite 301, Poughkeepsie, NY

Other \_\_\_\_\_

PAGE 1 of 3

21G1540

# CHAIN-OF-CUSTODY RECORD

37140

**Turnaround**

24-Hour\*    72-Hour\*    Other \_\_\_\_\_ (days)

48-Hour\*    Standard (\_\_\_\_ days)   \*Surcharge Applies

PROJECT NAME: 71A LIVEN STREET   PROJECT LOCATION: WOODSOCKET, RI   PROJECT NUMBER: 20181545, B10   LABORATORY: CON-TEST

REPORT TO: Madelyn Sampson (msampson@fand.com)

INVOICE TO: "

P.O. No.: 160320181545.B10

Sampler's Signature: Madelyn Sampson   Date: 6/28/21

Source Codes:

MW=Monitoring Well   PW=Potable Water   T=Treatment Facility   S=Soil   B=Sediment

SW=Surface Water   ST=Stormwater   W=Waste   A=Air   C=Concrete

X=Other \_\_\_\_\_

Analysis Request

VOC 8060  
PAH 8070  
PRIORITY POLLUTANT 13 Metals 6019/7A  
TPH 8015  
PCB 8050

Soil VOA Vial,  Methanol  
Soil VOA Vial,  water    Na<sub>2</sub>CO<sub>3</sub>  
Glass Soil Container (8 ) oz  
Other:  
Water VOA Vial,  As is    HCl  
Glass Amber ( ) ml,  As is    H<sub>2</sub>SO<sub>4</sub>  
Plastic - As is,  250 ml    500    1000 ml  
Plastic - H<sub>2</sub>SO<sub>4</sub>,  250 ml    500 ml  
Plastic - HNO<sub>3</sub>, 250 ml    Filtered    0.45µ    10µ

Containers

Item No.	Transfer Check				Sample Number	Source Code	Date Sampled	Time Sampled	Analysis										Comments				
	1	2	3	4					VOC	PAH	TPH	PCB	13 Metals	As is	HCl	H <sub>2</sub> SO <sub>4</sub>	500	1000 ml		Filtered	0.45µ	10µ	
1	X				1603210628 - 01	S	6/28/21	0742	X	X	X	X	X									SB-1	
2	X				- 02			0821	X	X	X	X	X										MW-2
3	X				- 03			0905	X	X	X	X	X										SB-3
4	X				- 04			0910	X	X	X	X	X										SB-3
5	X				- 05			1004	X	X	X	X	X										SB-4
6	X				- 06			1012	X	X	X	X	X										SB-4
7	X				- 07			1032	X	X	X	X	X										SB-5
8	X				- 08			1045	X	X	X	X	X										SB-5
9	X				- 09			1139	X	X	X	X	X										MW-6
10	X				- 10			1356	X	X	X	X	X										SB-7

Transfer Number	Relinquished By	Accepted By	Date	Time	Charge Exceptions: <input type="checkbox"/> CT Tax Exempt <input type="checkbox"/> QA/QC <input type="checkbox"/> Other _____ ____ Duplicates   ____ Blanks (Item Nos: _____)
1	Madelyn Sampson	FEO FRIZOLE	6/28/21	1530	Reporting and Detection Limit Requirements: <input type="checkbox"/> RCP Deliverables <input type="checkbox"/> MCP CAM Cert.
2	FEO FRIZOLE	MW JC	6/11/21	0905	T/C=Dec
3	[Signature]		7/1/21		Additional Comments:
4	Andrew Brown	[Signature]	7/1/21	9:46	HOLD EXTRA SOIL FOR POTENTIAL TCLP.

Page 17 of 19

Table of Contents



**FUSS & O'NEILL**  
 (860) 646-2469 • www.FandO.com

146 Hartford Road, Manchester, CT 06040  
 56 Quarry Road, Trumbull, CT 06611  
 1419 Richland Street, Columbia, SC 29201

78 Interstate Drive, West Springfield, MA 01089  
 317 Iron Horse Way, Suite 204, Providence, RI 02908  
 80 Washington Street, Suite 301, Poughkeepsie, NY

**Turnaround**

**216055 CHAIN-OF-CUSTODY RECORD 37150**

24-Hour\*  72-Hour\*  Other (days)  
 48-Hour\*  Standard (days) \*Surcharge Applies

**LABORATORY**

CON-TEST

**Containers**

PROJECT NUMBER  
2081545.870

PROJECT LOCATION  
WOONSOCKET, RI

REPORT TO: Madelyn Simpson (msimpson@fandoc.com)

INVOICE TO: "

P.O. NO.: 1603210628

Sampler's Signature: *Maell Jyr* Date: 6/21/11

Source Codes:  
 MW=Monitoring Well PW=Potable Water T=Treatment Facility S=Soil B=Sediment  
 SW=Surface Water ST=Stormwater W=Waste A=Air C=Concrete

X=Other TRIA BLANK

Analysis Request

Soil VOA Val. (methylated)	<input type="checkbox"/>
Soil VOA Val. (water)	<input type="checkbox"/>
Class Soil Container (oz)	<input type="checkbox"/>
Other	<input type="checkbox"/>
Water VOA Val. (As is)	<input type="checkbox"/>
Class Amber ( ) ml	<input type="checkbox"/>
Plastic - As is, 250 ml	<input type="checkbox"/>
Plastic - H2SO4, 250 ml	<input type="checkbox"/>
Plastic - HNO3, 250 ml	<input type="checkbox"/>
Plastic - NaOH, 250 ml	<input type="checkbox"/>

VOC 8260  
 WASH 8260  
 PP-13 COLIC/TM  
 TTH 8260  
 PCB 8260

Item No.	Transfer Check	Sample Number	Source Code	Date Sampled	Time Sampled	Analysis Request	Soil VOA Val. (methylated)	Soil VOA Val. (water)	Class Soil Container (oz)	Other	Water VOA Val. (As is)	Class Amber ( ) ml	Plastic - As is, 250 ml	Plastic - H2SO4, 250 ml	Plastic - HNO3, 250 ml	Plastic - NaOH, 250 ml	Comments
11	X	1603210628 - 11	S	6/21/11	1405	X	X	X	X	X	X	X	X	X	X	X	SB-7
12	X	↓	S	↓	1416	X	X	X	X	X	X	X	X	X	X	X	SB-7
13	X	↓	X	↓	1430	X	X	X	X	X	X	X	X	X	X	X	TRIA BLANK
14	X	1603210629 - 14	S	6/21/11	0719	X	X	X	X	X	X	X	X	X	X	X	MU-8
15	X	↓	↓	↓	0825	X	X	X	X	X	X	X	X	X	X	X	MU-9
16	X	↓	↓	↓	1002	X	X	X	X	X	X	X	X	X	X	X	SB-10
17	X	↓	↓	↓	1053	X	X	X	X	X	X	X	X	X	X	X	SB-11
18	X	↓	↓	↓	1101	X	X	X	X	X	X	X	X	X	X	X	SB-11
19	X	↓	↓	↓	1200	X	X	X	X	X	X	X	X	X	X	X	SB-12
20	X	↓	↓	↓	1230	X	X	X	X	X	X	X	X	X	X	X	SB-12

Transfer number	Relinquished By	Accepted By	Date	Time	Charge Exceptions:
1	Maell Jyr	F TO F+I/O/E	6/21/11	1530	<input type="checkbox"/> CT Tax Exempt <input type="checkbox"/> QA/QC <input type="checkbox"/> Other
2	Maell Jyr	F TO F+I/O/E	6/21/11	1730	<input type="checkbox"/> Duplicates <input type="checkbox"/> Blanks (Item Nos. 1-3)
3	F TO F+I/O/E	Myc for	7/1/11	0845	Reporting and Detection Limit Requirements: <input type="checkbox"/> RCP Deliverables <input type="checkbox"/> MCP CAM Cert.
4	Maell Jyr	Andrew Brown	7/1/11	9:46	Additional Comments: I/C-DEC
	Andrew Brown	Maell Jyr	7/1/11	247 PM	

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



**con-test**  
ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

**Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False**

Client Fuss + O'Neill

Received By [Signature] Date 7/11/21 Time 1447

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

Were samples within Temperature? 2-6°C T By Gun # 5 Actual Temp - 20, 4.4  
By Blank # \_\_\_\_\_ Actual Temp - \_\_\_\_\_

Was Custody Seal Intact? n/a Were Samples Tampered with? n/a  
Was COC Relinquished? T Does Chain Agree With Samples? T

Are there broken/leaking/loose caps on any samples? F

Is COC in ink/ Legible? T Were samples received within holding time? T

Did COC include all pertinent Information? Client T Analysis T Sampler Name T  
Project T ID's T Collection Dates/Times T

Are Sample labels filled out and legible? T

Are there Lab to Filters? F Who was notified? \_\_\_\_\_

Are there Rushes? F Who was notified? \_\_\_\_\_

Are there Short Holds? F Who was notified? \_\_\_\_\_

Is there enough Volume? T

Is there Headspace where applicable? n/a MS/MSD? F

Proper Media/Containers Used? T Is splitting samples required? F

Were trip blanks received? F On COC? F

Do all samples have the proper pH? Acid n/a Base n/a

Vials	#	Containers:	#	#	#
Unp-		1 Liter Amb.		1 Liter Plastic	16 oz Amb.
HCL-		500 mL Amb.		500 mL Plastic	8oz Amb/Clear
Meoh-	20	250 mL Amb.		250 mL Plastic	4oz Amb/Clear
Bisulfate-		Flashpoint		Col./Bacteria	2oz Amb/Clear
DI-	40	Other Glass		Other Plastic	Encore
Thiosulfate-		SOC Kit		Plastic Bag	Frozen: 7/11/21 @ 1447
Sulfuric-		Perchlorate		Ziplock	

**Unused Media**

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

Comments:







**GENERIC QUALITY ASSURANCE PROJECT PLAN  
 FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND  
 LABORATORY MODIFIED TIER II DATA VALIDATION CHECKLIST  
 ORGANIC COMPOUNDS**

PERFORMED AND, WHERE APPLICABLE,  
 WITHIN ACCEPTABLE LIMITS? \*\*

	<u>YES</u>	<u>NO</u>	<u>COMMENTS</u>
1. SDG Project Narratives	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2. Traffic Report	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3. Volatiles Data			
a. Sample Data			
Target Compound List (TCL) Results	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Reconstructed total ion chromatograms (RIC) for each sample	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
For each sample:			
Raw spectra and background-subtracted mass spectra of target compounds identified	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Mass spectra of all reported TICs with three best library matches	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Percent solids calculations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
b. Standards Data (all instruments)			
Initial Calibration Data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
RICs and Quan Reports for all Standards	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Continuing Calibration	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
RICs and Quan Reports for all Standards	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Internal Standard Area Summary	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
c. Raw QC Data			
Blank Data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Matrix Spike Data	<input type="checkbox"/>	<input type="checkbox"/>	NA
Matrix Spike Duplicate Data	<input type="checkbox"/>	<input type="checkbox"/>	NA
4. Semivolatiles Data			
a. QC Summary			
Surrogate Percent Recovery Summary	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
MS/MSD Summary	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Method Blank Summary	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Tuning and Mass Calibration	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____



**GENERIC QUALITY ASSURANCE PROJECT PLAN  
 FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND  
 LABORATORY MODIFIED TIER II DATA VALIDATION CHECKLIST  
 ORGANIC COMPOUNDS  
 (Continued)**

**PERFORMED AND, WHERE APPLICABLE,  
 WITHIN ACCEPTABLE LIMITS:\*\***

	<u>YES</u>	<u>NO</u>	<u>COMMENTS</u>
b. Sample Data			
TCL Results	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Tentatively Identified Compounds	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Reconstructed total ion chromatograms (RIC) for each Sample	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
For each sample:			
Raw spectra and background-subtracted mass spectra of TCL compounds	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Mass spectra of TICs with 3 best library matches	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
GPC chromatograms (if GPC performed)	<input type="checkbox"/>	<input type="checkbox"/>	NA
c. Standards Data (all instruments)			
Initial Calibration Data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
RICs and Quan Reports for all Standards	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Continuing Calibration	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
RICs and Quan Reports for all Standards	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Internal Standard Areas Summary	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Internal Standard Areas Summary	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
d. Raw QC Data			
Decafluorotriphenylphosphine (DFTPP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Blank Data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Matrix Spike Data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Matrix Spike Duplicate Data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
5. Miscellaneous Data			
Original preparation and analysis forms or copies of preparation and analysis log book pages	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Internal sample & sample extract transfer chain-of custody records	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Screening Records	<input type="checkbox"/>	<input type="checkbox"/>	NA
All instrument output, including strip charts from screening activities (describe or list)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
			quant reports / chromatograms



GENERIC QUALITY ASSURANCE PROJECT PLAN  
FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND  
LABORATORY MODIFIED TIER II DATA VALIDATION CHECKLIST  
ORGANIC COMPOUNDS  
(Continued)

PERFORMED AND, WHERE APPLICABLE,  
WITHIN ACCEPTABLE LIMITS:\*\*

	YES	NO	COMMENTS
6. Chain-of-Custody Records	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Sample Log-in Sheet (Lab & DC1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Miscellaneous Shipping/Receiving Records (describe or list)	<input type="checkbox"/>	<input type="checkbox"/>	NA
_____			
7. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
_____			
8. Other Records (describe or list)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
_____			
9. Comments:			_____
_____			
_____			

\*\* See laboratory Quality Assurance Plan for limits.

Completed by:   
(Lab) (Signature)

Daren Damboragium Manager 7-21-21  
(Printed Name/Title) Date

I certify that the above information is true and accurate. I further certify that all laboratory results associated with the above analyses will be made available for review for seven (7) years following certification of this document.

Certified by: \_\_\_\_\_  
(Lab) (Signature)

\_\_\_\_\_  
(Printed Name/Title) Date





GENERIC QUALITY ASSURANCE PROJECT PLAN  
FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND  
LABORATORY MODIFIED TIER II DATA VALIDATION CHECKLIST  
INORGANIC COMPOUNDS

PERFORMED AND, WHERE APPLICABLE,  
WITHIN ACCEPTABLE LIMITS? \*\*

	YES	NO	COMMENTS
1. SDG Project Narratives	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Inorganic Analysis Data Sheet	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Initial and Continuing Calibration Verification	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. CRDL Standard for AA and ICP	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Lead
5. Blanks	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
6. ICP Interference Check Sample	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
7. Spike Sample Recovery	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8. Post Digest Spike Sample Recovery	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
9. Duplicates	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
10. Laboratory Control Sample	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
11. Standard Addition Results	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
12. ICP Serial Dilutions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
13. Instrument Detection Limits, Quarterly	<input type="checkbox"/>	<input checked="" type="checkbox"/>	annually
14. ICP Interelement Correction Factors, Annually	<input checked="" type="checkbox"/>	<input type="checkbox"/>	semi-annually
15. ICP Linear Ranges Quarterly	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Semi-annually
16. Preparation Log	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
17. Analysis Run Log	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
18. ICP Raw Data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
19. Furnace AA Raw Data	<input type="checkbox"/>	<input type="checkbox"/>	NA
20. Mercury Raw Data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
21. Percent Solids Calculations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
22. Digestion Logs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
23. EPA Shipping/Receiving Records (List all individual records)	<input type="checkbox"/>	<input type="checkbox"/>	NA
Chain-of Custody Records	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Sample Log-In sheet	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
24. Miscellaneous Shipping/Receiving Records (List all individual records)	<input type="checkbox"/>	<input type="checkbox"/>	NA




GENERIC QUALITY ASSURANCE PROJECT PLAN  
FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND  
LABORATORY MODIFIED TIER II DATA VALIDATION CHECKLIST  
INORGANIC COMPOUNDS  
(Continued)

PERFORMED AND, WHERE APPLICABLE,  
WITHIN ACCEPTABLE LIMITS\*\*

	<u>YES</u>	<u>NO</u>	<u>COMMENTS</u>
25. Internal Lab Sample Transfer Records and Tracking Sheets (Describe or List)			
26. Internal Original Sample Preparation and analysis Records (Describe or List)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Preparation Records	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Analysis Records	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Description	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
27. Other Records (Describe or List)			
28. Comments:			

\*\* See laboratory Quality Assurance Plan for limits.

Completed by:   
(Lab) (Signature)

Daren Damlaogjan Manager  
(Printed Name/Title)

7-21-2011  
Date

I certify that the above information is true and accurate. I further certify that all laboratory results associated with the above analyses will be made available for review for seven (7) years following certification of this document.

Certified by: \_\_\_\_\_  
(Lab) (Signature)

\_\_\_\_\_  
(Printed Name/Title)

\_\_\_\_\_  
Date





**GENERIC QUALITY ASSURANCE PROJECT PLAN  
FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND  
MODIFIED TIER I COMPLETENESS CHECKLIST**

	<u>YES</u>	<u>NO</u>	
<b>1. SAMPLING AND FIELD MEASUREMENTS:</b>			
Field measurement calibration records	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Groundwater field measurements (if applicable)	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Soil sampling field measurements (if applicable)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Sediment sampling field measurements (if applicable)	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Surface water sampling field measurements (if applicable)	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Low-flow sampling field measurements (if applicable)	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Documentation of field activities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Sample numbering and labeling	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Chain-of-Custody records	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Trip blanks	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Duplicate samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Equipment blanks	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Split samples (if any)	<input type="checkbox"/>	<input type="checkbox"/>	N/A
<b>2. LABORATORY MEASUREMENTS:</b>			
Trip blanks	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Instrument blanks	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Laboratory control samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Duplicates samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Equipment blanks	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Matrix spike/matrix spike duplicates	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Analysis type	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Chain-of-Custody records	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Surrogate recoveries	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Sample Project Narratives	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Split samples (if any)	<input type="checkbox"/>	<input type="checkbox"/>	N/A

TOTAL: 14 ----

PERCENT COMPLETE: 100 %



**GENERIC QUALITY ASSURANCE PROJECT PLAN  
FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND  
FUSS & O'NEILL MODIFIED TIER II DATA VALIDATION CHECKLIST**

**PERFORMED AND, WHERE APPLICABLE,  
WITHIN ACCEPTABLE LIMITS?**

	<u>YES</u>	<u>NO</u>	<u>COMMENTS</u>
<b>1. SAMPLING AND FIELD MEASUREMENTS:</b>			
Field measurement calibration records			
pH - ± 0.3 pH units	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A
S.C. - ± 5% of calibration solution, within? calibration range	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A
Temperature - ± 0.5 °C	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A
D.O. - ± 5% of calibration solution	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A
Groundwater field measurements (if applicable)			
Water depth measured to within 0.01 ft.?	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A
Soil sampling field measurements (if applicable)			
OVM - ± 2 ppm	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
OVA - ± 2 ppm	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A
Sediment sampling field measurements (if applicable)			
Descriptive information recorded?	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A
Surface water sampling field measurements (if applicable)			
Water depth measured to within 0.01 ft.?	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A
Low-flow sampling field measurements (if applicable)			
S.C. - ± 10%	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A
pH - ± 0.2 pH units	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A
Temperature - ± 10%	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A
Turbidity - ±5 NTU	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A
Documentation of field activities			
Site-specific information documented in field notebook?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Field data sheets completed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Sample numbering and labeling			
Sample numbering conforms to sample I.D. system identified in QAPP?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Chain-of-Custody records			
Chain-of-Custody forms completed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____





**GENERIC QUALITY ASSURANCE PROJECT PLAN  
FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND  
FUSS & O'NEILL MODIFIED TIER II DATA VALIDATION CHECKLIST  
(Continued)**

**PERFORMED AND, WHERE APPLICABLE,  
WITHIN ACCEPTABLE LIMITS?**

	<u>YES</u>	<u>NO</u>	<u>COMMENTS</u>
Trip blanks			
Trip blanks submitted, one per day?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Any compounds detected in trip blanks?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Duplicate samples			
Field duplicates performed, 1/20 samples?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Duplicates performed on 10% of samples screened for explosives?	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A
Is percent difference within 30% for all field parameters?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Equipment blanks			
Equipment blanks submitted, one per sampling day?	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A
Any compounds detected in equipment blank?	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A
Split samples (if any)			
Split samples collected?	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A
Is percent difference within 30% for split samples?	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A

**2. LABORATORY MEASUREMENTS:**

Trip blanks			
Trip blanks submitted, one per day?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Any compounds detected in trip blanks?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Instrument blanks**	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A
Laboratory control samples**	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Duplicates samples**	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Equipment blanks**	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A
Matrix spike/matrix spike duplicates**	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A
Analysis type	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Chain-of-Custody records	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Surrogate recoveries**	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Sample Project Narratives	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Split samples (if any)**	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A
Most recent EPA WP-PE sample results**	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A



## **Appendix E**

---

### Groundwater Laboratory Analytical Reports





**Modified Tier II  
Data Validation Narrative**

**Project: 20181545.B10, 20 Privilege Street, Woonsocket, RI**

<b>Con-Test Analytical Laboratory Project Number:</b>	21G0947 and 21I0526
<b>Date Samples Received at Laboratory:</b>	July 6, 2021 and September 10, 2021
<b>Date of Review:</b>	September 20, 2021

Four groundwater samples, plus one duplicate sample, were collected and submitted to Con-Test Analytical Laboratory (Con-Test) of East Longmeadow, Massachusetts. The samples were analyzed for the following analytes using the designated methods:

**Groundwater:**

- Volatile Organic Compounds (VOC) via USEPA Method 8260

In addition, one laboratory-supplied trip blank was submitted for analysis of VOC by USEPA Method 8260. Dedicated sampling equipment was utilized, so equipment blanks and field blanks were not collected during these sampling activities.

No compounds were detected in the trip blanks at concentrations exceeding laboratory detection limits. Samples were received by the laboratory at 2.0 Celsius. All samples were analyzed within the method-specific holding times.

As documented in the case narrative summary included in the analytical reports 21G0947 and 21I0526, the following non-conformances were identified during analysis of these samples:

**21G0947:**

- Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side for Bromomethane. Data validation is not affected since sample result was “not detected” for this compound.
- Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this Bromomethane. Reported results were estimated for Bromomethane for all samples.

**21I056:**

- Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for Vinyl Chloride.
- Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side for 2-Hexanone, 4-Methyl-2-pentanone, Bromoform, and trans-1,4-Dichloro-2butene. Data validation is not affected since sample result was “not detected” for these compound.
- Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this Bromomethane. Reported results were estimated for Bromomethane for all samples.

No VOC of concern were identified in site groundwater. Therefore, the non-conformances during VOC analysis were not anticipated to affect the usability of the data.



Analytical results for the groundwater samples were compared to the Method 1 GB Groundwater Objectives promulgated by the Rhode Island Department of Environmental Management. Detection limits were low enough to allow direct comparison to the applicable criteria.

July 21, 2021

Madelyn Sampson  
Fuss & O'Neill - Providence  
317 Iron Horse Way, Suite 204  
Providence, RI 02908

Project Location: Woonsocket, RI  
Client Job Number:  
Project Number: 20181545.B10  
Laboratory Work Order Number: 21G0947

Enclosed are results of analyses for samples received by the laboratory on July 16, 2021. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Jessica L. Hoffman  
Project Manager

## Table of Contents

Sample Summary	3
Case Narrative	4
Sample Results	5
21G0947-01	5
21G0947-02	7
21G0947-03	9
21G0947-04	11
21G0947-05	13
21G0947-06	15
Sample Preparation Information	17
QC Data	18
Volatile Organic Compounds by GC/MS	18
B286265	18
Flag/Qualifier Summary	23
Certifications	24
Chain of Custody/Sample Receipt	27



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

 Fuss & O'Neill - Providence  
 317 Iron Horse Way, Suite 204  
 Providence, RI 02908  
 ATTN: Madelyn Sampson

REPORT DATE: 7/21/2021

PURCHASE ORDER NUMBER: 154320181545.B10

PROJECT NUMBER: 20181545.B10

**ANALYTICAL SUMMARY**

WORK ORDER NUMBER: 21G0947

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

PROJECT LOCATION: Woonsocket, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
1543210715-01	21G0947-01	Water		SW-846 8260C-D	
1543210715-02	21G0947-02	Water		SW-846 8260C-D	
1543210715-03	21G0947-03	Water		SW-846 8260C-D	
1543210715-04	21G0947-04	Water		SW-846 8260C-D	
1543210715-05	21G0947-05	Water		SW-846 8260C-D	
1543210715-06	21G0947-06	Water		SW-846 8260C-D	

**CASE NARRATIVE SUMMARY**

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

**SW-846 8260C-D**

**Qualifications:**

**V-20**

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

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

**Bromomethane**

B286265-BSD1, S061643-CCV1

**V-34**

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

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

**Bromomethane**

21G0947-01[1543210715-01], 21G0947-02[1543210715-02], 21G0947-03[1543210715-03], 21G0947-04[1543210715-04], 21G0947-05[1543210715-05], 21G0947-06[1543210715-06], B286265-BLK1, B286265-BS1, B286265-BSD1, S061643-CCV1

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

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



Lisa A. Worthington  
Technical Representative

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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 21G0947

Date Received: 7/16/2021

Field Sample #: 1543210715-01

Sampled: 7/15/2021 08:26

Sample ID: 21G0947-01

Sample Matrix: Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
Bromoform	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
Bromomethane	ND	2.0	µg/L	1	V-34	SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF

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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 21G0947

Date Received: 7/16/2021

Field Sample #: 1543210715-01

Sampled: 7/15/2021 08:26

Sample ID: 21G0947-01

Sample Matrix: Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:12	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		100	70-130					7/19/21 14:12	
Toluene-d8		97.0	70-130					7/19/21 14:12	
4-Bromofluorobenzene		95.3	70-130					7/19/21 14:12	

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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 21G0947

Date Received: 7/16/2021

Field Sample #: 1543210715-02

Sampled: 7/15/2021 09:50

Sample ID: 21G0947-02

Sample Matrix: Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
Bromoform	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
Bromomethane	ND	2.0	µg/L	1	V-34	SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF

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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 21G0947

Date Received: 7/16/2021

Field Sample #: 1543210715-02

Sampled: 7/15/2021 09:50

Sample ID: 21G0947-02

Sample Matrix: Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 14:39	MFF
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4	102	70-130						7/19/21 14:39	
Toluene-d8	96.6	70-130						7/19/21 14:39	
4-Bromofluorobenzene	93.7	70-130						7/19/21 14:39	

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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 21G0947

Date Received: 7/16/2021

Field Sample #: 1543210715-03

Sampled: 7/15/2021 09:52

Sample ID: 21G0947-03

Sample Matrix: Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
Bromoform	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
Bromomethane	ND	2.0	µg/L	1	V-34	SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 21G0947

Date Received: 7/16/2021

Field Sample #: 1543210715-03

Sampled: 7/15/2021 09:52

Sample ID: 21G0947-03

Sample Matrix: Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:06	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		101	70-130					7/19/21 15:06	
Toluene-d8		97.0	70-130					7/19/21 15:06	
4-Bromofluorobenzene		93.4	70-130					7/19/21 15:06	



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 21G0947

Date Received: 7/16/2021

Field Sample #: 1543210715-04

Sampled: 7/15/2021 11:33

Sample ID: 21G0947-04

Sample Matrix: Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
Bromoform	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
Bromomethane	ND	2.0	µg/L	1	V-34	SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF

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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 21G0947

Date Received: 7/16/2021

Field Sample #: 1543210715-04

Sampled: 7/15/2021 11:33

Sample ID: 21G0947-04

Sample Matrix: Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 15:33	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		102	70-130					7/19/21 15:33	
Toluene-d8		97.8	70-130					7/19/21 15:33	
4-Bromofluorobenzene		94.8	70-130					7/19/21 15:33	

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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 21G0947

Date Received: 7/16/2021

Field Sample #: 1543210715-05

Sampled: 7/15/2021 12:49

Sample ID: 21G0947-05

Sample Matrix: Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
Bromoform	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
Bromomethane	ND	2.0	µg/L	1	V-34	SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF

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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 21G0947

Date Received: 7/16/2021

Field Sample #: 1543210715-05

Sampled: 7/15/2021 12:49

Sample ID: 21G0947-05

Sample Matrix: Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:00	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		103	70-130					7/19/21 16:00	
Toluene-d8		97.7	70-130					7/19/21 16:00	
4-Bromofluorobenzene		95.5	70-130					7/19/21 16:00	

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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 21G0947

Date Received: 7/16/2021

Field Sample #: 1543210715-06

Sampled: 7/15/2021 13:51

Sample ID: 21G0947-06

Sample Matrix: Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
Bromoform	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
Bromomethane	ND	2.0	µg/L	1	V-34	SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF

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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 21G0947

Date Received: 7/16/2021

Field Sample #: 1543210715-06

Sampled: 7/15/2021 13:51

Sample ID: 21G0947-06

Sample Matrix: Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C-D	7/19/21	7/19/21 16:27	MFF
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	102	70-130	7/19/21 16:27						
Toluene-d8	97.2	70-130	7/19/21 16:27						
4-Bromofluorobenzene	93.0	70-130	7/19/21 16:27						

---

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

### Sample Extraction Data

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
21G0947-01 [1543210715-01]	B286265	5	5.00	07/19/21
21G0947-02 [1543210715-02]	B286265	5	5.00	07/19/21
21G0947-03 [1543210715-03]	B286265	5	5.00	07/19/21
21G0947-04 [1543210715-04]	B286265	5	5.00	07/19/21
21G0947-05 [1543210715-05]	B286265	5	5.00	07/19/21
21G0947-06 [1543210715-06]	B286265	5	5.00	07/19/21



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 B286265 - SW-846 5030B</b>										
<b>Blank (B286265-BLK1)</b>										
Prepared & Analyzed: 07/19/21										
Acetone	ND	50	µg/L							
Acrylonitrile	ND	5.0	µg/L							
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L							
Benzene	ND	1.0	µg/L							
Bromobenzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	0.50	µg/L							
Bromoform	ND	1.0	µg/L							
Bromomethane	ND	2.0	µg/L							V-34
2-Butanone (MEK)	ND	20	µg/L							
tert-Butyl Alcohol (TBA)	ND	20	µg/L							
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L							
Carbon Disulfide	ND	5.0	µg/L							
Carbon Tetrachloride	ND	5.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
Dibromomethane	ND	1.0	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							
1,1-Dichloropropene	ND	2.0	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
Diethyl Ether	ND	2.0	µg/L							
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							
Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	0.60	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl Acetate	ND	1.0	µg/L							



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 B286265 - SW-846 5030B</b>										
<b>Blank (B286265-BLK1)</b>										
Prepared & Analyzed: 07/19/21										
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							
1,2,3-Trimethylbenzene	ND	0.50	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	24.2		µg/L	25.0		96.9	70-130			
Surrogate: 4-Bromofluorobenzene	23.6		µg/L	25.0		94.6	70-130			
<b>LCS (B286265-BS1)</b>										
Prepared & Analyzed: 07/19/21										
Acetone	90.8	50	µg/L	100		90.8	70-160			†
Acrylonitrile	10.7	5.0	µg/L	10.0		107	70-130			
tert-Amyl Methyl Ether (TAME)	10.6	0.50	µg/L	10.0		106	70-130			
Benzene	9.90	1.0	µg/L	10.0		99.0	70-130			
Bromobenzene	10.6	1.0	µg/L	10.0		106	70-130			
Bromochloromethane	11.4	1.0	µg/L	10.0		114	70-130			
Bromodichloromethane	10.7	0.50	µg/L	10.0		107	70-130			
Bromoform	11.2	1.0	µg/L	10.0		112	70-130			
Bromomethane	12.1	2.0	µg/L	10.0		121	40-160		V-34	†
2-Butanone (MEK)	101	20	µg/L	100		101	40-160			†
tert-Butyl Alcohol (TBA)	95.5	20	µg/L	100		95.5	40-160			†
n-Butylbenzene	10.2	1.0	µg/L	10.0		102	70-130			
sec-Butylbenzene	10.2	1.0	µg/L	10.0		102	70-130			
tert-Butylbenzene	10.2	1.0	µg/L	10.0		102	70-130			
tert-Butyl Ethyl Ether (TBEE)	10.9	0.50	µg/L	10.0		109	70-130			
Carbon Disulfide	103	5.0	µg/L	100		103	70-130			
Carbon Tetrachloride	10.5	5.0	µg/L	10.0		105	70-130			
Chlorobenzene	10.5	1.0	µg/L	10.0		105	70-130			
Chlorodibromomethane	10.8	0.50	µg/L	10.0		108	70-130			
Chloroethane	10.3	2.0	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 Limit	Notes
<b>Batch B286265 - SW-846 5030B</b>										
<b>LCS (B286265-BS1)</b>										
Prepared & Analyzed: 07/19/21										
Chloroform	10.1	2.0	µg/L	10.0		101	70-130			
Chloromethane	11.0	2.0	µg/L	10.0		110	40-160			†
2-Chlorotoluene	9.84	1.0	µg/L	10.0		98.4	70-130			
4-Chlorotoluene	10.2	1.0	µg/L	10.0		102	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	9.54	5.0	µg/L	10.0		95.4	70-130			
1,2-Dibromoethane (EDB)	10.8	0.50	µg/L	10.0		108	70-130			
Dibromomethane	11.1	1.0	µg/L	10.0		111	70-130			
1,2-Dichlorobenzene	10.6	1.0	µg/L	10.0		106	70-130			
1,3-Dichlorobenzene	10.6	1.0	µg/L	10.0		106	70-130			
1,4-Dichlorobenzene	10.5	1.0	µg/L	10.0		105	70-130			
trans-1,4-Dichloro-2-butene	12.0	2.0	µg/L	10.0		120	70-130			
Dichlorodifluoromethane (Freon 12)	9.20	2.0	µg/L	10.0		92.0	40-160			†
1,1-Dichloroethane	10.4	1.0	µg/L	10.0		104	70-130			
1,2-Dichloroethane	10.2	1.0	µg/L	10.0		102	70-130			
1,1-Dichloroethylene	10.1	1.0	µg/L	10.0		101	70-130			
cis-1,2-Dichloroethylene	10.3	1.0	µg/L	10.0		103	70-130			
trans-1,2-Dichloroethylene	9.38	1.0	µg/L	10.0		93.8	70-130			
1,2-Dichloropropane	10.9	1.0	µg/L	10.0		109	70-130			
1,3-Dichloropropane	10.8	0.50	µg/L	10.0		108	70-130			
2,2-Dichloropropane	11.0	1.0	µg/L	10.0		110	40-130			†
1,1-Dichloropropene	10.0	2.0	µg/L	10.0		100	70-130			
cis-1,3-Dichloropropene	10.8	0.50	µg/L	10.0		108	70-130			
trans-1,3-Dichloropropene	11.1	0.50	µg/L	10.0		111	70-130			
Diethyl Ether	10.6	2.0	µg/L	10.0		106	70-130			
Diisopropyl Ether (DIPE)	10.5	0.50	µg/L	10.0		105	70-130			
1,4-Dioxane	88.8	50	µg/L	100		88.8	40-130			†
Ethylbenzene	10.2	1.0	µg/L	10.0		102	70-130			
Hexachlorobutadiene	10.1	0.60	µg/L	10.0		101	70-130			
2-Hexanone (MBK)	102	10	µg/L	100		102	70-160			†
Isopropylbenzene (Cumene)	10.1	1.0	µg/L	10.0		101	70-130			
p-Isopropyltoluene (p-Cymene)	10.1	1.0	µg/L	10.0		101	70-130			
Methyl Acetate	9.88	1.0	µg/L	10.0		98.8	70-130			
Methyl tert-Butyl Ether (MTBE)	10.5	1.0	µg/L	10.0		105	70-130			
Methyl Cyclohexane	9.87	1.0	µg/L	10.0		98.7	70-130			
Methylene Chloride	11.0	5.0	µg/L	10.0		110	70-130			
4-Methyl-2-pentanone (MIBK)	102	10	µg/L	100		102	70-160			†
Naphthalene	8.22	2.0	µg/L	10.0		82.2	40-130			†
n-Propylbenzene	10.3	1.0	µg/L	10.0		103	70-130			
Styrene	10.3	1.0	µg/L	10.0		103	70-130			
1,1,1,2-Tetrachloroethane	10.9	1.0	µg/L	10.0		109	70-130			
1,1,2,2-Tetrachloroethane	10.8	0.50	µg/L	10.0		108	70-130			
Tetrachloroethylene	10.2	1.0	µg/L	10.0		102	70-130			
Tetrahydrofuran	10.2	10	µg/L	10.0		102	70-130			
Toluene	10.1	1.0	µg/L	10.0		101	70-130			
1,2,3-Trichlorobenzene	9.08	5.0	µg/L	10.0		90.8	70-130			
1,2,4-Trichlorobenzene	9.59	1.0	µg/L	10.0		95.9	70-130			
1,3,5-Trichlorobenzene	9.83	1.0	µg/L	10.0		98.3	70-130			
1,1,1-Trichloroethane	10.4	1.0	µg/L	10.0		104	70-130			
1,1,2-Trichloroethane	10.8	1.0	µg/L	10.0		108	70-130			
Trichloroethylene	10.4	1.0	µg/L	10.0		104	70-130			
Trichlorofluoromethane (Freon 11)	10.3	2.0	µg/L	10.0		103	70-130			
1,2,3-Trichloropropane	11.0	2.0	µg/L	10.0		110	70-130			

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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B286265 - SW-846 5030B</b>										
<b>LCS (B286265-BS1)</b>										
Prepared & Analyzed: 07/19/21										
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.6	1.0	µg/L	10.0		106	70-130			
1,2,3-Trimethylbenzene	9.82	0.50	µg/L	10.0		98.2	70-130			
1,2,4-Trimethylbenzene	10.1	1.0	µg/L	10.0		101	70-130			
1,3,5-Trimethylbenzene	10.0	1.0	µg/L	10.0		100	70-130			
Vinyl Chloride	10.1	2.0	µg/L	10.0		101	40-160			†
m+p Xylene	20.5	2.0	µg/L	20.0		103	70-130			
o-Xylene	10.5	1.0	µg/L	10.0		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	24.8		µg/L	25.0		99.3	70-130			
Surrogate: Toluene-d8	23.9		µg/L	25.0		95.6	70-130			
Surrogate: 4-Bromofluorobenzene	24.3		µg/L	25.0		97.2	70-130			
<b>LCS Dup (B286265-BSD1)</b>										
Prepared & Analyzed: 07/19/21										
Acetone	92.6	50	µg/L	100		92.6	70-160	2.05	25	†
Acrylonitrile	10.7	5.0	µg/L	10.0		107	70-130	0.467	25	
tert-Amyl Methyl Ether (TAME)	10.2	0.50	µg/L	10.0		102	70-130	4.33	25	
Benzene	9.55	1.0	µg/L	10.0		95.5	70-130	3.60	25	
Bromobenzene	10.2	1.0	µg/L	10.0		102	70-130	4.43	25	
Bromochloromethane	11.3	1.0	µg/L	10.0		113	70-130	0.615	25	
Bromodichloromethane	10.4	0.50	µg/L	10.0		104	70-130	3.22	25	
Bromoform	11.0	1.0	µg/L	10.0		110	70-130	1.62	25	
Bromomethane	11.7	2.0	µg/L	10.0		117	40-160	3.19	25	V-20, V-34 †
2-Butanone (MEK)	97.8	20	µg/L	100		97.8	40-160	3.20	25	†
tert-Butyl Alcohol (TBA)	94.7	20	µg/L	100		94.7	40-160	0.820	25	†
n-Butylbenzene	9.86	1.0	µg/L	10.0		98.6	70-130	3.00	25	
sec-Butylbenzene	10.0	1.0	µg/L	10.0		100	70-130	1.38	25	
tert-Butylbenzene	9.92	1.0	µg/L	10.0		99.2	70-130	2.29	25	
tert-Butyl Ethyl Ether (TBEE)	10.6	0.50	µg/L	10.0		106	70-130	2.32	25	
Carbon Disulfide	100	5.0	µg/L	100		100	70-130	2.51	25	
Carbon Tetrachloride	10.1	5.0	µg/L	10.0		101	70-130	3.99	25	
Chlorobenzene	10.1	1.0	µg/L	10.0		101	70-130	3.40	25	
Chlorodibromomethane	10.7	0.50	µg/L	10.0		107	70-130	1.40	25	
Chloroethane	10.5	2.0	µg/L	10.0		105	70-130	1.25	25	
Chloroform	9.87	2.0	µg/L	10.0		98.7	70-130	2.50	25	
Chloromethane	10.9	2.0	µg/L	10.0		109	40-160	0.457	25	†
2-Chlorotoluene	9.54	1.0	µg/L	10.0		95.4	70-130	3.10	25	
4-Chlorotoluene	10.1	1.0	µg/L	10.0		101	70-130	0.985	25	
1,2-Dibromo-3-chloropropane (DBCP)	9.54	5.0	µg/L	10.0		95.4	70-130	0.00	25	
1,2-Dibromoethane (EDB)	10.5	0.50	µg/L	10.0		105	70-130	2.91	25	
Dibromomethane	11.0	1.0	µg/L	10.0		110	70-130	1.27	25	
1,2-Dichlorobenzene	10.5	1.0	µg/L	10.0		105	70-130	0.853	25	
1,3-Dichlorobenzene	10.4	1.0	µg/L	10.0		104	70-130	2.29	25	
1,4-Dichlorobenzene	10.4	1.0	µg/L	10.0		104	70-130	1.34	25	
trans-1,4-Dichloro-2-butene	11.5	2.0	µg/L	10.0		115	70-130	4.42	25	
Dichlorodifluoromethane (Freon 12)	8.66	2.0	µg/L	10.0		86.6	40-160	6.05	25	†
1,1-Dichloroethane	10.4	1.0	µg/L	10.0		104	70-130	0.00	25	
1,2-Dichloroethane	9.78	1.0	µg/L	10.0		97.8	70-130	3.81	25	
1,1-Dichloroethylene	9.79	1.0	µg/L	10.0		97.9	70-130	3.02	25	
cis-1,2-Dichloroethylene	10.2	1.0	µg/L	10.0		102	70-130	1.66	25	
trans-1,2-Dichloroethylene	9.27	1.0	µg/L	10.0		92.7	70-130	1.18	25	
1,2-Dichloropropane	10.4	1.0	µg/L	10.0		104	70-130	4.32	25	
1,3-Dichloropropane	10.5	0.50	µg/L	10.0		105	70-130	2.90	25	
2,2-Dichloropropane	10.5	1.0	µg/L	10.0		105	40-130	4.76	25	†

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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B286265 - SW-846 5030B</b>										
<b>LCS Dup (B286265-BSD1)</b>										
Prepared & Analyzed: 07/19/21										
1,1-Dichloropropene	9.77	2.0	µg/L	10.0		97.7	70-130	2.53	25	
cis-1,3-Dichloropropene	10.3	0.50	µg/L	10.0		103	70-130	5.22	25	
trans-1,3-Dichloropropene	10.5	0.50	µg/L	10.0		105	70-130	5.75	25	
Diethyl Ether	10.5	2.0	µg/L	10.0		105	70-130	0.570	25	
Diisopropyl Ether (DIPE)	10.2	0.50	µg/L	10.0		102	70-130	2.41	25	
1,4-Dioxane	95.5	50	µg/L	100		95.5	40-130	7.31	50	† ‡
Ethylbenzene	9.87	1.0	µg/L	10.0		98.7	70-130	3.09	25	
Hexachlorobutadiene	9.98	0.60	µg/L	10.0		99.8	70-130	1.49	25	
2-Hexanone (MBK)	102	10	µg/L	100		102	70-160	0.137	25	†
Isopropylbenzene (Cumene)	9.89	1.0	µg/L	10.0		98.9	70-130	2.00	25	
p-Isopropyltoluene (p-Cymene)	9.98	1.0	µg/L	10.0		99.8	70-130	1.20	25	
Methyl Acetate	10.1	1.0	µg/L	10.0		101	70-130	2.60	25	
Methyl tert-Butyl Ether (MTBE)	10.2	1.0	µg/L	10.0		102	70-130	3.39	25	
Methyl Cyclohexane	9.63	1.0	µg/L	10.0		96.3	70-130	2.46	25	
Methylene Chloride	11.0	5.0	µg/L	10.0		110	70-130	0.273	25	
4-Methyl-2-pentanone (MIBK)	101	10	µg/L	100		101	70-160	1.08	25	†
Naphthalene	8.19	2.0	µg/L	10.0		81.9	40-130	0.366	25	†
n-Propylbenzene	9.80	1.0	µg/L	10.0		98.0	70-130	4.59	25	
Styrene	9.95	1.0	µg/L	10.0		99.5	70-130	3.75	25	
1,1,1,2-Tetrachloroethane	10.7	1.0	µg/L	10.0		107	70-130	1.67	25	
1,1,2,2-Tetrachloroethane	10.9	0.50	µg/L	10.0		109	70-130	1.02	25	
Tetrachloroethylene	9.68	1.0	µg/L	10.0		96.8	70-130	4.74	25	
Tetrahydrofuran	9.94	10	µg/L	10.0		99.4	70-130	2.68	25	
Toluene	9.70	1.0	µg/L	10.0		97.0	70-130	4.04	25	
1,2,3-Trichlorobenzene	8.87	5.0	µg/L	10.0		88.7	70-130	2.34	25	
1,2,4-Trichlorobenzene	9.29	1.0	µg/L	10.0		92.9	70-130	3.18	25	
1,3,5-Trichlorobenzene	9.81	1.0	µg/L	10.0		98.1	70-130	0.204	25	
1,1,1-Trichloroethane	9.92	1.0	µg/L	10.0		99.2	70-130	5.20	25	
1,1,2-Trichloroethane	10.4	1.0	µg/L	10.0		104	70-130	3.78	25	
Trichloroethylene	10.1	1.0	µg/L	10.0		101	70-130	2.93	25	
Trichlorofluoromethane (Freon 11)	9.93	2.0	µg/L	10.0		99.3	70-130	3.37	25	
1,2,3-Trichloropropane	10.8	2.0	µg/L	10.0		108	70-130	2.11	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.3	1.0	µg/L	10.0		103	70-130	3.07	25	
1,2,3-Trimethylbenzene	9.68	0.50	µg/L	10.0		96.8	70-130	1.44	25	
1,2,4-Trimethylbenzene	9.90	1.0	µg/L	10.0		99.0	70-130	1.80	25	
1,3,5-Trimethylbenzene	9.67	1.0	µg/L	10.0		96.7	70-130	3.75	25	
Vinyl Chloride	9.63	2.0	µg/L	10.0		96.3	40-160	4.96	25	†
m+p Xylene	19.9	2.0	µg/L	20.0		99.6	70-130	3.11	25	
o-Xylene	10.1	1.0	µg/L	10.0		101	70-130	3.79	25	
Surrogate: 1,2-Dichloroethane-d4	24.7		µg/L	25.0		98.9	70-130			
Surrogate: Toluene-d8	24.2		µg/L	25.0		96.6	70-130			
Surrogate: 4-Bromofluorobenzene	24.2		µg/L	25.0		96.8	70-130			

**FLAG/QUALIFIER SUMMARY**

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
V-20	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.
V-34	Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.

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

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

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

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

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

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Public Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2022
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2022
RI	Rhode Island Department of Health	LAO00112	12/30/2021
NC	North Carolina Div. of Water Quality	652	12/31/2021
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2021
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2021
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2021
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2021





**FUSS & O'NEILL**  
(860) 646-2469 • www.fandoc.com

- 146 Hartford Road, Manchester, CT 06040
- 56 Quarry Road, Trumbull, CT 06611
- 1419 Richland Street, Columbia, SC 29201

- 78 Interstate Drive, West Springfield, MA 01089
- 317 Iron Horse Way, Suite 204, Providence, RI 02908
- 80 Washington Street, Suite 301, Poughkeepsie, NY

Other \_\_\_\_\_

2160947

# CHAIN-OF-CUSTODY RECORD

37156

**Turnaround**

- 24-Hour\*  72-Hour\*  Other \_\_\_\_\_ (days)
- 48-Hour\*  Standard (\_\_\_\_ days) \*Surcharge Applies

PROJECT NAME

719 LIVEN STREET WOODSOKET, NJ

PROJECT LOCATION

PROJECT NUMBER

20181545.B10

LABORATORY

CON-TEST

REPORT TO: Madelyn Sampson (msampson@fandoc.com)

Analysis Request

INVOICE TO: \_\_\_\_\_

P.O. No.: 1543 20181545.B10

Sampler's Signature: *Chris Flannery* Date: 7/15/21

Source Codes:

MW=Monitoring Well PW=Potable Water T=Treatment Facility S=Soil B=Sediment  
SW=Surface Water ST=Stormwater W=Waste A=Air C=Concrete

X=Other **TRIV BLANK**

Item No.	Transfer Check				Sample Number	Source Code	Date Sampled	Time Sampled
	1	2	3	4				
1					1543210715-01	TRIV	7/15/21 0626	X
2					-02	MW	0950	X
3					-03		0952	X
4					-04		1133	X
5					-05		1249	X
6					-06		1351	X

Other	Soil VOA Val. (mechanical)	Glass VOA Val. (water)	Other	Water VOA Val. (As is)	Glass Amber ( ) ml.	Plastic - As is, ( ) ml.	Plastic - HNO <sub>3</sub> , 250 ml	Plastic - H <sub>2</sub> SO <sub>4</sub> , 250 ml	Plastic - NaOH, 250 ml	Comments
										TRIV BLANK
										MW-6
										MW-6
										MW-9
										MW-15
										MW-14

Transfer Number	Relinquished By	Accepted By	Date	Time
1	<i>Chris Flannery</i>	F+O RAJGE	7/15/21	1530
2	<i>Chris Flannery</i>	<i>[Signature]</i>	7/16/21	1010
3	<i>[Signature]</i>	<i>[Signature]</i>	7/16/21	1745
4				

Charge Exceptions:  CTF Tax Exempt  QA/QC  Other \_\_\_\_\_  
 \_\_\_\_\_ Duplicates 1 Blanks (Item Nos: 01)  
 Reporting and Detection Limit Requirements:  RCP Deliverables  MCP CAM Cam.  
 68-60  
 Additional Comments:

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



**con-test**  
ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

**Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False**

Client Floss + O'Neill

Received By [Signature] Date 7/16/21 Time 12:45

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

Were samples within Temperature? 2-6°C T By Gun # 3 Actual Temp - 2.0  
 By Blank # \_\_\_\_\_ Actual Temp - \_\_\_\_\_

Was Custody Seal Intact? n/a Were Samples Tampered with? n/a  
 Was COC Relinquished? T Does Chain Agree With Samples? T

Are there broken/leaking/loose caps on any samples? F

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

Are Sample labels filled out and legible? T  
 Are there Lab to Filters? F Who was notified? \_\_\_\_\_  
 Are there Rushes? F Who was notified? \_\_\_\_\_  
 Are there Short Holds? F Who was notified? \_\_\_\_\_

Is there enough Volume? T  
 Is there Headspace where applicable? F MS/MSD? F  
 Proper Media/Containers Used? T Is splitting samples required? F  
 Were trip blanks received? T On COC? T  
 Do all samples have the proper pH? \_\_\_\_\_ Acid n/a Base n/a

Vials	#	Containers:	#	#	#
Unp-		1 Liter Amb.		1 Liter Plastic	16 oz Amb.
HCL-	<u>17</u>	500 mL Amb.		500 mL Plastic	8oz Amb/Clear
Meoh-		250 mL Amb.		250 mL Plastic	4oz Amb/Clear
Bisulfate-		Flashpoint		Col./Bacteria	2oz Amb/Clear
DI-		Other Glass		Other Plastic	Encore
Thiosulfate-		SOC Kit		Plastic Bag	Frozen:
Sulfuric-		Perchlorate		Ziplock	

**Unused Media**

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

Comments:



September 16, 2021

Madelyn Sampson  
Fuss & O'Neill - Providence  
317 Iron Horse Way, Suite 204  
Providence, RI 02908

Project Location: Woonsocket, RI  
Client Job Number:  
Project Number: 20181545.B10  
Laboratory Work Order Number: 21I0526

Enclosed are results of analyses for samples received by the laboratory on September 10, 2021. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Jessica L. Hoffman  
Project Manager

## Table of Contents

Sample Summary	3
Case Narrative	4
Sample Results	5
2110526-02	5
Sample Preparation Information	7
QC Data	8
Volatile Organic Compounds by GC/MS	8
B290082	8
Flag/Qualifier Summary	13
Certifications	14
Chain of Custody/Sample Receipt	17

---

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

Fuss & O'Neill - Providence  
317 Iron Horse Way, Suite 204  
Providence, RI 02908  
ATTN: Madelyn Sampson

REPORT DATE: 9/16/2021

PURCHASE ORDER NUMBER: 160320181545.B10

PROJECT NUMBER: 20181545.B10

**ANALYTICAL SUMMARY**

---

WORK ORDER NUMBER: 2110526

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

PROJECT LOCATION: Woonsocket, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
1603210909-02	2110526-02	Water		SW-846 8260C-D	



**CASE NARRATIVE SUMMARY**

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

**SW-846 8260C-D****Qualifications:**

---

**V-05**  
Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

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

2110526-02[1603210909-02], B290082-BLK1, B290082-BS1, B290082-BSD1, S063206-CCV1

---

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

**Analyte & Samples(s) Qualified:****2-Hexanone (MBK)**

B290082-BS1, B290082-BSD1, S063206-CCV1

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

B290082-BS1, B290082-BSD1, S063206-CCV1

**Bromoform**

B290082-BS1, B290082-BSD1, S063206-CCV1

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

B290082-BS1, B290082-BSD1, S063206-CCV1

---

**V-34**  
Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.

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

2110526-02[1603210909-02], B290082-BLK1, B290082-BS1, B290082-BSD1, S063206-CCV1

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

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



Lisa A. Worthington  
Technical Representative

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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 2110526

Date Received: 9/10/2021

Field Sample #: 1603210909-02

Sampled: 9/9/2021 14:43

Sample ID: 2110526-02

Sample Matrix: Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
Bromomethane	ND	2.0	µg/L	1	V-34	SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 2110526

Date Received: 9/10/2021

Field Sample #: 1603210909-02

Sampled: 9/9/2021 14:43

Sample ID: 2110526-02

Sample Matrix: Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
Vinyl Chloride	ND	2.0	µg/L	1	V-05	SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C-D	9/13/21	9/13/21 15:40	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	92.3	70-130	9/13/21 15:40						
Toluene-d8	95.3	70-130	9/13/21 15:40						
4-Bromofluorobenzene	97.4	70-130	9/13/21 15:40						

---

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

### Sample Extraction Data

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
2110526-02 [1603210909-02]	B290082	5	5.00	09/13/21

---

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 B290082 - SW-846 5030B</b>										
<b>Blank (B290082-BLK1)</b>										
Prepared & Analyzed: 09/13/21										
Acetone	ND	50	µg/L							
Acrolein	ND	10	µg/L							
Acrylonitrile	ND	5.0	µg/L							
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L							
Benzene	ND	1.0	µg/L							
Bromobenzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	0.50	µg/L							
Bromoform	ND	1.0	µg/L							
Bromomethane	ND	2.0	µg/L							V-34
2-Butanone (MEK)	ND	20	µg/L							
tert-Butyl Alcohol (TBA)	ND	20	µg/L							
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L							
Carbon Disulfide	ND	5.0	µg/L							
Carbon Tetrachloride	ND	5.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
Dibromomethane	ND	1.0	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							
1,1-Dichloropropene	ND	2.0	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
Diethyl Ether	ND	2.0	µg/L							
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							
Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	0.60	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							

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 B290082 - SW-846 5030B</b>										
<b>Blank (B290082-BLK1)</b>										
Prepared & Analyzed: 09/13/21										
Methyl Acetate	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methyl Cyclohexane	ND	1.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Naphthalene	ND	2.0	µg/L							
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Tetrahydrofuran	ND	10	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							
1,2,4-Trichlorobenzene	ND	1.0	µg/L							
1,3,5-Trichlorobenzene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							
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							V-05
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	23.6		µg/L	25.0		94.5	70-130			
Surrogate: Toluene-d8	24.2		µg/L	25.0		96.9	70-130			
Surrogate: 4-Bromofluorobenzene	24.8		µg/L	25.0		99.3	70-130			
<b>LCS (B290082-BS1)</b>										
Prepared & Analyzed: 09/13/21										
Acetone	115	50	µg/L	100		115	70-160			†
Acrolein	106	10	µg/L	100		106	70-130			
Acrylonitrile	11.9	5.0	µg/L	10.0		119	70-130			
tert-Amyl Methyl Ether (TAME)	10.3	0.50	µg/L	10.0		103	70-130			
Benzene	9.32	1.0	µg/L	10.0		93.2	70-130			
Bromobenzene	10.1	1.0	µg/L	10.0		101	70-130			
Bromochloromethane	11.0	1.0	µg/L	10.0		110	70-130			
Bromodichloromethane	11.0	0.50	µg/L	10.0		110	70-130			
Bromoform	12.7	1.0	µg/L	10.0		127	70-130			V-20
Bromomethane	9.85	2.0	µg/L	10.0		98.5	40-160			V-34 †
2-Butanone (MEK)	121	20	µg/L	100		121	40-160			†
tert-Butyl Alcohol (TBA)	110	20	µg/L	100		110	40-160			†
n-Butylbenzene	8.45	1.0	µg/L	10.0		84.5	70-130			
sec-Butylbenzene	8.70	1.0	µg/L	10.0		87.0	70-130			
tert-Butylbenzene	8.72	1.0	µg/L	10.0		87.2	70-130			
tert-Butyl Ethyl Ether (TBEE)	10.4	0.50	µg/L	10.0		104	70-130			
Carbon Disulfide	89.4	5.0	µg/L	100		89.4	70-130			
Carbon Tetrachloride	10.6	5.0	µg/L	10.0		106	70-130			
Chlorobenzene	10.0	1.0	µg/L	10.0		100	70-130			
Chlorodibromomethane	11.8	0.50	µg/L	10.0		118	70-130			

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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B290082 - SW-846 5030B</b>										
<b>LCS (B290082-BS1)</b>										
Prepared & Analyzed: 09/13/21										
Chloroethane	11.1	2.0	µg/L	10.0		111	70-130			
Chloroform	10.0	2.0	µg/L	10.0		100	70-130			
Chloromethane	7.95	2.0	µg/L	10.0		79.5	40-160			†
2-Chlorotoluene	8.73	1.0	µg/L	10.0		87.3	70-130			
4-Chlorotoluene	9.59	1.0	µg/L	10.0		95.9	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	10.5	5.0	µg/L	10.0		105	70-130			
1,2-Dibromoethane (EDB)	11.4	0.50	µg/L	10.0		114	70-130			
Dibromomethane	11.3	1.0	µg/L	10.0		113	70-130			
1,2-Dichlorobenzene	9.68	1.0	µg/L	10.0		96.8	70-130			
1,3-Dichlorobenzene	9.49	1.0	µg/L	10.0		94.9	70-130			
1,4-Dichlorobenzene	9.49	1.0	µg/L	10.0		94.9	70-130			
trans-1,4-Dichloro-2-butene	12.8	2.0	µg/L	10.0		128	70-130			V-20
Dichlorodifluoromethane (Freon 12)	9.44	2.0	µg/L	10.0		94.4	40-160			†
1,1-Dichloroethane	10.2	1.0	µg/L	10.0		102	70-130			
1,2-Dichloroethane	10.2	1.0	µg/L	10.0		102	70-130			
1,1-Dichloroethylene	9.88	1.0	µg/L	10.0		98.8	70-130			
cis-1,2-Dichloroethylene	10.0	1.0	µg/L	10.0		100	70-130			
trans-1,2-Dichloroethylene	9.09	1.0	µg/L	10.0		90.9	70-130			
1,2-Dichloropropane	10.5	1.0	µg/L	10.0		105	70-130			
1,3-Dichloropropane	10.7	0.50	µg/L	10.0		107	70-130			
2,2-Dichloropropane	10.5	1.0	µg/L	10.0		105	40-130			†
1,1-Dichloropropene	9.34	2.0	µg/L	10.0		93.4	70-130			
cis-1,3-Dichloropropene	10.6	0.50	µg/L	10.0		106	70-130			
trans-1,3-Dichloropropene	11.0	0.50	µg/L	10.0		110	70-130			
Diethyl Ether	10.3	2.0	µg/L	10.0		103	70-130			
Diisopropyl Ether (DIPE)	10.1	0.50	µg/L	10.0		101	70-130			
1,4-Dioxane	117	50	µg/L	100		117	40-130			†
Ethylbenzene	9.52	1.0	µg/L	10.0		95.2	70-130			
Hexachlorobutadiene	9.35	0.60	µg/L	10.0		93.5	70-130			
2-Hexanone (MBK)	125	10	µg/L	100		125	70-160			V-20 †
Isopropylbenzene (Cumene)	9.70	1.0	µg/L	10.0		97.0	70-130			
p-Isopropyltoluene (p-Cymene)	8.80	1.0	µg/L	10.0		88.0	70-130			
Methyl Acetate	11.1	1.0	µg/L	10.0		111	70-130			
Methyl tert-Butyl Ether (MTBE)	10.6	1.0	µg/L	10.0		106	70-130			
Methyl Cyclohexane	9.45	1.0	µg/L	10.0		94.5	70-130			
Methylene Chloride	10.8	5.0	µg/L	10.0		108	70-130			
4-Methyl-2-pentanone (MIBK)	123	10	µg/L	100		123	70-160			V-20 †
Naphthalene	8.06	2.0	µg/L	10.0		80.6	40-130			†
n-Propylbenzene	9.44	1.0	µg/L	10.0		94.4	70-130			
Styrene	9.94	1.0	µg/L	10.0		99.4	70-130			
1,1,1,2-Tetrachloroethane	11.0	1.0	µg/L	10.0		110	70-130			
1,1,2,2-Tetrachloroethane	11.5	0.50	µg/L	10.0		115	70-130			
Tetrachloroethylene	11.2	1.0	µg/L	10.0		112	70-130			
Tetrahydrofuran	10.8	10	µg/L	10.0		108	70-130			
Toluene	9.81	1.0	µg/L	10.0		98.1	70-130			
1,2,3-Trichlorobenzene	8.48	5.0	µg/L	10.0		84.8	70-130			
1,2,4-Trichlorobenzene	8.56	1.0	µg/L	10.0		85.6	70-130			
1,3,5-Trichlorobenzene	8.66	1.0	µg/L	10.0		86.6	70-130			
1,1,1-Trichloroethane	10.2	1.0	µg/L	10.0		102	70-130			
1,1,2-Trichloroethane	11.2	1.0	µg/L	10.0		112	70-130			
Trichloroethylene	10.1	1.0	µg/L	10.0		101	70-130			
Trichlorofluoromethane (Freon 11)	10.7	2.0	µg/L	10.0		107	70-130			

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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B290082 - SW-846 5030B</b>										
<b>LCS (B290082-BS1)</b>										
Prepared & Analyzed: 09/13/21										
1,2,3-Trichloropropane	11.4	2.0	µg/L	10.0		114	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.6	1.0	µg/L	10.0		106	70-130			
1,2,4-Trimethylbenzene	8.70	1.0	µg/L	10.0		87.0	70-130			
1,3,5-Trimethylbenzene	9.34	1.0	µg/L	10.0		93.4	70-130			
Vinyl Chloride	7.30	2.0	µg/L	10.0		73.0	40-160			V-05 †
m+p Xylene	19.2	2.0	µg/L	20.0		95.8	70-130			
o-Xylene	9.80	1.0	µg/L	10.0		98.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	23.3		µg/L	25.0		93.3	70-130			
Surrogate: Toluene-d8	24.1		µg/L	25.0		96.4	70-130			
Surrogate: 4-Bromofluorobenzene	25.7		µg/L	25.0		103	70-130			
<b>LCS Dup (B290082-BSD1)</b>										
Prepared & Analyzed: 09/13/21										
Acetone	113	50	µg/L	100		113	70-160	2.00	25	†
Acrolein	103	10	µg/L	100		103	70-130	2.06	25	
Acrylonitrile	11.4	5.0	µg/L	10.0		114	70-130	3.95	25	
tert-Amyl Methyl Ether (TAME)	10.6	0.50	µg/L	10.0		106	70-130	2.20	25	
Benzene	9.49	1.0	µg/L	10.0		94.9	70-130	1.81	25	
Bromobenzene	10.1	1.0	µg/L	10.0		101	70-130	0.0989	25	
Bromochloromethane	11.2	1.0	µg/L	10.0		112	70-130	1.26	25	
Bromodichloromethane	10.8	0.50	µg/L	10.0		108	70-130	1.38	25	
Bromoform	12.4	1.0	µg/L	10.0		124	70-130	2.95	25	V-20
Bromomethane	9.92	2.0	µg/L	10.0		99.2	40-160	0.708	25	V-34 †
2-Butanone (MEK)	115	20	µg/L	100		115	40-160	4.57	25	†
tert-Butyl Alcohol (TBA)	107	20	µg/L	100		107	40-160	3.00	25	†
n-Butylbenzene	8.11	1.0	µg/L	10.0		81.1	70-130	4.11	25	
sec-Butylbenzene	8.40	1.0	µg/L	10.0		84.0	70-130	3.51	25	
tert-Butylbenzene	8.52	1.0	µg/L	10.0		85.2	70-130	2.32	25	
tert-Butyl Ethyl Ether (TBEE)	10.9	0.50	µg/L	10.0		109	70-130	4.60	25	
Carbon Disulfide	90.8	5.0	µg/L	100		90.8	70-130	1.55	25	
Carbon Tetrachloride	10.8	5.0	µg/L	10.0		108	70-130	2.15	25	
Chlorobenzene	9.93	1.0	µg/L	10.0		99.3	70-130	0.902	25	
Chlorodibromomethane	11.8	0.50	µg/L	10.0		118	70-130	0.340	25	
Chloroethane	11.1	2.0	µg/L	10.0		111	70-130	0.541	25	
Chloroform	10.4	2.0	µg/L	10.0		104	70-130	3.63	25	
Chloromethane	8.38	2.0	µg/L	10.0		83.8	40-160	5.27	25	†
2-Chlorotoluene	8.87	1.0	µg/L	10.0		88.7	70-130	1.59	25	
4-Chlorotoluene	9.75	1.0	µg/L	10.0		97.5	70-130	1.65	25	
1,2-Dibromo-3-chloropropane (DBCP)	9.44	5.0	µg/L	10.0		94.4	70-130	10.4	25	
1,2-Dibromoethane (EDB)	11.5	0.50	µg/L	10.0		115	70-130	1.14	25	
Dibromomethane	11.5	1.0	µg/L	10.0		115	70-130	1.93	25	
1,2-Dichlorobenzene	9.40	1.0	µg/L	10.0		94.0	70-130	2.94	25	
1,3-Dichlorobenzene	9.28	1.0	µg/L	10.0		92.8	70-130	2.24	25	
1,4-Dichlorobenzene	9.40	1.0	µg/L	10.0		94.0	70-130	0.953	25	
trans-1,4-Dichloro-2-butene	12.0	2.0	µg/L	10.0		120	70-130	5.98	25	V-20
Dichlorodifluoromethane (Freon 12)	9.72	2.0	µg/L	10.0		97.2	40-160	2.92	25	†
1,1-Dichloroethane	10.4	1.0	µg/L	10.0		104	70-130	1.46	25	
1,2-Dichloroethane	10.3	1.0	µg/L	10.0		103	70-130	0.973	25	
1,1-Dichloroethylene	9.99	1.0	µg/L	10.0		99.9	70-130	1.11	25	
cis-1,2-Dichloroethylene	10.3	1.0	µg/L	10.0		103	70-130	2.56	25	
trans-1,2-Dichloroethylene	9.14	1.0	µg/L	10.0		91.4	70-130	0.549	25	
1,2-Dichloropropane	10.6	1.0	µg/L	10.0		106	70-130	1.23	25	
1,3-Dichloropropane	11.1	0.50	µg/L	10.0		111	70-130	3.67	25	

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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B290082 - SW-846 5030B</b>										
<b>LCS Dup (B290082-BSD1)</b>										
Prepared & Analyzed: 09/13/21										
2,2-Dichloropropane	10.8	1.0	µg/L	10.0		108	40-130	2.73	25	†
1,1-Dichloropropene	9.78	2.0	µg/L	10.0		97.8	70-130	4.60	25	
cis-1,3-Dichloropropene	10.7	0.50	µg/L	10.0		107	70-130	1.32	25	
trans-1,3-Dichloropropene	11.0	0.50	µg/L	10.0		110	70-130	0.636	25	
Diethyl Ether	10.4	2.0	µg/L	10.0		104	70-130	1.25	25	
Diisopropyl Ether (DIPE)	10.4	0.50	µg/L	10.0		104	70-130	2.92	25	
1,4-Dioxane	100	50	µg/L	100		100	40-130	15.3	50	† ‡
Ethylbenzene	9.61	1.0	µg/L	10.0		96.1	70-130	0.941	25	
Hexachlorobutadiene	9.01	0.60	µg/L	10.0		90.1	70-130	3.70	25	
2-Hexanone (MBK)	123	10	µg/L	100		123	70-160	1.27	25	V-20 †
Isopropylbenzene (Cumene)	9.64	1.0	µg/L	10.0		96.4	70-130	0.620	25	
p-Isopropyltoluene (p-Cymene)	8.44	1.0	µg/L	10.0		84.4	70-130	4.18	25	
Methyl Acetate	11.2	1.0	µg/L	10.0		112	70-130	0.986	25	
Methyl tert-Butyl Ether (MTBE)	10.7	1.0	µg/L	10.0		107	70-130	0.658	25	
Methyl Cyclohexane	9.22	1.0	µg/L	10.0		92.2	70-130	2.46	25	
Methylene Chloride	10.9	5.0	µg/L	10.0		109	70-130	1.57	25	
4-Methyl-2-pentanone (MIBK)	118	10	µg/L	100		118	70-160	4.40	25	V-20 †
Naphthalene	7.38	2.0	µg/L	10.0		73.8	40-130	8.81	25	†
n-Propylbenzene	9.18	1.0	µg/L	10.0		91.8	70-130	2.79	25	
Styrene	9.75	1.0	µg/L	10.0		97.5	70-130	1.93	25	
1,1,1,2-Tetrachloroethane	11.0	1.0	µg/L	10.0		110	70-130	0.363	25	
1,1,2,2-Tetrachloroethane	11.2	0.50	µg/L	10.0		112	70-130	2.54	25	
Tetrachloroethylene	11.2	1.0	µg/L	10.0		112	70-130	0.0892	25	
Tetrahydrofuran	10.8	10	µg/L	10.0		108	70-130	0.648	25	
Toluene	9.97	1.0	µg/L	10.0		99.7	70-130	1.62	25	
1,2,3-Trichlorobenzene	7.80	5.0	µg/L	10.0		78.0	70-130	8.35	25	
1,2,4-Trichlorobenzene	8.05	1.0	µg/L	10.0		80.5	70-130	6.14	25	
1,3,5-Trichlorobenzene	8.43	1.0	µg/L	10.0		84.3	70-130	2.69	25	
1,1,1-Trichloroethane	10.3	1.0	µg/L	10.0		103	70-130	0.682	25	
1,1,2-Trichloroethane	11.2	1.0	µg/L	10.0		112	70-130	0.446	25	
Trichloroethylene	10.2	1.0	µg/L	10.0		102	70-130	0.394	25	
Trichlorofluoromethane (Freon 11)	11.0	2.0	µg/L	10.0		110	70-130	2.77	25	
1,2,3-Trichloropropane	11.3	2.0	µg/L	10.0		113	70-130	1.23	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.8	1.0	µg/L	10.0		108	70-130	1.21	25	
1,2,4-Trimethylbenzene	8.32	1.0	µg/L	10.0		83.2	70-130	4.47	25	
1,3,5-Trimethylbenzene	9.24	1.0	µg/L	10.0		92.4	70-130	1.08	25	
Vinyl Chloride	7.88	2.0	µg/L	10.0		78.8	40-160	7.64	25	V-05 †
m+p Xylene	19.2	2.0	µg/L	20.0		96.2	70-130	0.312	25	
o-Xylene	9.76	1.0	µg/L	10.0		97.6	70-130	0.409	25	
Surrogate: 1,2-Dichloroethane-d4	23.9		µg/L	25.0		95.6	70-130			
Surrogate: Toluene-d8	24.0		µg/L	25.0		96.0	70-130			
Surrogate: 4-Bromofluorobenzene	25.9		µg/L	25.0		104	70-130			

**FLAG/QUALIFIER SUMMARY**

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-20	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.
V-34	Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.



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

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

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

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

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

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Public Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2022
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2022
RI	Rhode Island Department of Health	LAO00112	12/30/2021
NC	North Carolina Div. of Water Quality	652	12/31/2021
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2021
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2021



FUSS & O'NEILL

(860) 646-2469 • www.FandO.com

146 Hartford Road, Manchester, CT 06040

56 Quarry Road, Trumbull, CT 06611

1419 Richland Street, Columbia, SC 29201

78 Interstate Drive, West Springfield, MA 01089

317 Iron Horse Way, Suite 204, Providence, RI 02908

80 Washington Street, Suite 301, Poughkeepsie, NY

Other \_\_\_\_\_

# CHAIN-OF-CUSTODY RECORD

37161

21F0526

### Turnaround

24-Hour\*    72-Hour\*    Other \_\_\_\_\_ (days)  
 48-Hour\*    Standard (\_\_\_\_ days)   \*Surcharge Applies

PROJECT NAME

719 WIVEN STREET

PROJECT LOCATION

WOONSOCKET, NJ

PROJECT NUMBER

20181545.B10

LABORATORY

CON-TEST

REPORT TO: Madelyn Sampson (m.sampson@fondo.com)

Analysis Request

Containers

INVOICE TO:

P.O. NO.: 160320181545.B10

Sampler's Signature:

*Madelyn Sampson*

Date: 9/9/21

Source Codes:

MW=Monitoring Well   PW=Potable Water   T=Treatment Facility   S=Soil   B=Sediment  
SW=Surface Water   ST=Stormwater   W=Waste   A=Air   C=Concrete

X=Other TRIP BLANK

Item No.	Transfer Check				Sample Number	Source Code	Date Sampled	Time Sampled	Analysis	Container	Volume	Filter	Comments
	1	2	3	4									
1					1603210909 - 01	X	9/9/21	1420	X		3		TRIP BLANK
2					1603210909 - 02	MW	9/9/21	1443	X		3		MW-2

trip blank received empty.  
JLH 9/13/2021

Transfer Number	Relinquished By	Accepted By	Date	Time	Charge Exceptions: <input type="checkbox"/> CT Tax Exempt <input type="checkbox"/> QA/QC <input type="checkbox"/> Other _____ _____ Duplicates <u>1</u> Blanks (Item Nos: <u>1</u> )
1	<i>Moell Jr</i>	<i>FLO FRIOLE</i>	9/9/21	1600	Reporting and Detection Limit Requirements: <input type="checkbox"/> RCP Deliverables <input type="checkbox"/> MCP CAM Cert. Additional Comments: <b>KJDEM GA-60</b>
2	<i>Rees Gault</i>	<i>Paul Chastrow</i>	9-10-21	1144	
3	<i>Paul Chastrow</i>	<i>John 1910</i>	9-10-21	1735	
4	<i>JLH</i>	<i>Madelyn 3.3</i>	9/10/21	2035	



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



**con-test**  
ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

**Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False**

Client Fuss + O'Neill

Received By [Signature] Date 9/10/20 Time 2055

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

Were samples within Temperature? 2-6°C T By Gun # 3 Actual Temp - 3.3  
 By Blank # \_\_\_\_\_ Actual Temp - \_\_\_\_\_

Was Custody Seal Intact? n/a Were Samples Tampered with? n/a  
 Was COC Relinquished? T Does Chain Agree With Samples? T

Are there broken/leaking/loose caps on any samples? F

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

Are Sample labels filled out and legible? T  
 Are there Lab to Filters? F Who was notified? \_\_\_\_\_  
 Are there Rushes? F Who was notified? \_\_\_\_\_  
 Are there Short Holds? F Who was notified? \_\_\_\_\_  
 Is there enough Volume? \*F  
 Is there Headspace where applicable? F MS/MSD? F  
 Proper Media/Containers Used? T Is splitting samples required? F  
 Were trip blanks received? T On COC? T  
 Do all samples have the proper pH? Acid n/a Base n/a

Vials	#	Containers:	#	#	#
Unp-		1 Liter Amb.		1 Liter Plastic	16 oz Amb.
HCL-	<u>10</u>	500 mL Amb.		500 mL Plastic	8oz Amb/Clear
Meoh-		250 mL Amb.		250 mL Plastic	4oz Amb/Clear
Bisulfate-		Flashpoint		Col./Bacteria	2oz Amb/Clear
DI-		Other Glass		Other Plastic	Encore
Thiosulfate-		SOC Kit		Plastic Bag	Frozen:
Sulfuric-		Perchlorate		Ziplock	

**Unused Media**

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

**Comments:**

Trip blanks were not filled.



**GENERIC QUALITY ASSURANCE PROJECT PLAN  
 FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND  
 LABORATORY MODIFIED TIER II DATA VALIDATION CHECKLIST  
 ORGANIC COMPOUNDS**

**PERFORMED AND, WHERE APPLICABLE,  
 WITHIN ACCEPTABLE LIMITS? \*\***

	<u>YES</u>	<u>NO</u>	<u>COMMENTS</u>
1. SDG Project Narratives	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2. Traffic Report	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3. Volatiles Data			
a. Sample Data			
Target Compound List (TCL) Results	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Reconstructed total ion chromatograms (RIC) for each sample	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
For each sample:			
Raw spectra and background-subtracted mass spectra of target compounds identified	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Mass spectra of all reported TICs with three best library matches	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Na _____
Percent solids calculations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
b. Standards Data (all instruments)			
Initial Calibration Data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
RICs and Quan Reports for all Standards	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Continuing Calibration	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
RICs and Quan Reports for all Standards	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Internal Standard Area Summary	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
c. Raw QC Data			
Blank Data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Matrix Spike Data	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Na _____
Matrix Spike Duplicate Data	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Na _____
4. Semivolatiles Data			
a. QC Summary			
Surrogate Percent Recovery Summary	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
MS/MSD Summary	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Na _____
Method Blank Summary	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Tuning and Mass Calibration	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____

**GENERIC QUALITY ASSURANCE PROJECT PLAN  
 FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND  
 LABORATORY MODIFIED TIER II DATA VALIDATION CHECKLIST  
 ORGANIC COMPOUNDS  
 (Continued)**

**PERFORMED AND, WHERE APPLICABLE,  
 WITHIN ACCEPTABLE LIMITS? \*\***

	<u>YES</u>	<u>NO</u>	<u>COMMENTS</u>
b. Sample Data			
TCL Results	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Tentatively Identified Compounds	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Na _____
Reconstructed total ion chromatograms (RIC) for each Sample	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
For each sample:			
Raw spectra and background-subtracted mass spectra of TCL compounds	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Na _____
Mass spectra of TICs with 3 best library matches	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Na _____
GPC chromatograms (if GPC performed)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Na _____
c. Standards Data (all instruments)			
Initial Calibration Data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
RICs and Quan Reports for all Standards	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Continuing Calibration	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
RICs and Quan Reports for all Standards	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Internal Standard Areas Summary	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Internal Standard Areas Summary	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
d. Raw QC Data			
Decafluorotriphenylphosphine (DFTPP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Blank Data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Matrix Spike Data	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Na _____
Matrix Spike Duplicate Data	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Na _____
5. Miscellaneous Data			
Original preparation and analysis forms or copies of preparation and analysis log book pages	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Internal sample & sample extract transfer chain-of custody records	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Screening Records	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Na _____
All instrument output, including strip charts from screening activities (describe or list)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
quant reports / Chromatograms			_____





**GENERIC QUALITY ASSURANCE PROJECT PLAN  
FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND  
LABORATORY MODIFIED TIER II DATA VALIDATION CHECKLIST  
ORGANIC COMPOUNDS  
(Continued)**

**PERFORMED AND, WHERE APPLICABLE,  
WITHIN ACCEPTABLE LIMITS? \*\***

	<u>YES</u>	<u>NO</u>	<u>COMMENTS</u>
6. Chain-of-Custody Records	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Sample Log-in Sheet (Lab & DC1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Miscellaneous Shipping/Receiving Records (describe or list)	<input type="checkbox"/>	<input type="checkbox"/>	Na _____
_____			
_____			
7. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
_____			
_____			
8. Other Records (describe or list)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Na _____
_____			
_____			
9. Comments:			_____
_____			
_____			

\*\* See laboratory Quality Assurance Plan for limits.

Completed by:	_____	Fran DeRose / Laboratory Manager	8/18/2021
(Lab)	(Signature)	(Printed Name/Title)	Date

I certify that the above information is true and accurate. I further certify that all laboratory results associated with the above analyses will be made available for review for seven (7) years following certification of this document.

Certified by:	_____	_____	_____
(Lab)	(Signature)	(Printed Name/Title)	Date

**GENERIC QUALITY ASSURANCE PROJECT PLAN  
 FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND  
 LABORATORY MODIFIED TIER II DATA VALIDATION CHECKLIST  
 INORGANIC COMPOUNDS**

**PERFORMED AND, WHERE APPLICABLE,  
 WITHIN ACCEPTABLE LIMITS?\*\*\***

	<u>YES</u>	<u>NO</u>	<u>COMMENTS</u>
1. SDG Project Narratives	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2. Inorganic Analysis Data Sheet	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
3. Initial and Continuing Calibration Verification	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
4. CRDL Standard for AA and ICP	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Pb _____
5. Blanks	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
6. ICP Interference Check Sample	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
7. Spike Sample Recovery	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
8. Post Digest Spike Sample Recovery	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
9. Duplicates	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
10. Laboratory Control Sample	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
11. Standard Addition Results	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
12. ICP Serial Dilutions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
13. Instrument Detection Limits, Quarterly	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Annually _____
14. ICP Interelement Correction Factors, Annually	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Semi-Annually _____
15. ICP Linear Ranges Quarterly	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Semi-Annually _____
16. Preparation Log	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
17. Analysis Run Log	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
18. ICP Raw Data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
19. Furnace AA Raw Data	<input type="checkbox"/>	<input type="checkbox"/>	Na _____
20. Mercury Raw Data	<input type="checkbox"/>	<input type="checkbox"/>	Na _____
21. Percent Solids Calculations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
22. Digestion Logs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
23. EPA Shipping/Receiving Records (List all individual records)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Chain-of Custody Records	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Sample Log-In sheet	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
24. Miscellaneous Shipping/Receiving Records (List all individual records)	<input type="checkbox"/>	<input type="checkbox"/>	Na _____
_____			
_____			
_____			

**GENERIC QUALITY ASSURANCE PROJECT PLAN  
 FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND  
 LABORATORY MODIFIED TIER II DATA VALIDATION CHECKLIST  
 INORGANIC COMPOUNDS  
 (Continued)**

**PERFORMED AND, WHERE APPLICABLE,  
 WITHIN ACCEPTABLE LIMITS:\*\***

	<u>YES</u>	<u>NO</u>	<u>COMMENTS</u>
25. Internal Lab Sample Transfer Records and Tracking Sheets (Describe or List)			
_____			
_____			
26. Internal Original Sample Preparation and analysis Records (Describe or List	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Preparation Records	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Analysis Records	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Description	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
27. Other Records (Describe or List)			
_____			
_____			
28. Comments:			
_____			
_____			

\*\* See laboratory Quality Assurance Plan for limits.

Completed by: _____	Fran DeRose / Laboratory Manager	08/18/2021
(Lab) (Signature)	(Printed Name/Title)	Date

I certify that the above information is true and accurate. I further certify that all laboratory results associated with the above analyses will be made available for review for seven (7) years following certification of this document.

Certified by: _____	_____	_____
(Lab) (Signature)	(Printed Name/Title)	Date





**GENERIC QUALITY ASSURANCE PROJECT PLAN  
FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND  
MODIFIED TIER I COMPLETENESS CHECKLIST**

	<u>YES</u>	<u>NO</u>	
<b>1. SAMPLING AND FIELD MEASUREMENTS:</b>			
Field measurement calibration records	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Groundwater field measurements (if applicable)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Soil sampling field measurements (if applicable)	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Sediment sampling field measurements (if applicable)	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Surface water sampling field measurements (if applicable)	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Low-flow sampling field measurements (if applicable)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Documentation of field activities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Sample numbering and labeling	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Chain-of-Custody records	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Trip blanks	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Duplicate samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Equipment blanks	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Split samples (if any)	<input type="checkbox"/>	<input type="checkbox"/>	N/A
<b>2. LABORATORY MEASUREMENTS:</b>			
Trip blanks	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Instrument blanks	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Laboratory control samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Duplicates samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Equipment blanks	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Matrix spike/matrix spike duplicates	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Analysis type	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Chain-of-Custody records	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Surrogate recoveries	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Sample Project Narratives	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Split samples (if any)	<input type="checkbox"/>	<input type="checkbox"/>	N/A

TOTAL: 16 ----

PERCENT COMPLETE: 100 %



**GENERIC QUALITY ASSURANCE PROJECT PLAN  
FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND  
FUSS & O'NEILL MODIFIED TIER II DATA VALIDATION CHECKLIST**

**PERFORMED AND, WHERE APPLICABLE,  
WITHIN ACCEPTABLE LIMITS?**

	<u>YES</u>	<u>NO</u>	<u>COMMENTS</u>
<b>1. SAMPLING AND FIELD MEASUREMENTS:</b>			
Field measurement calibration records			
pH - ± 0.3 pH units	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
S.C. - ± 5% of calibration solution, within? calibration range	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Temperature - ± 0.5 °C	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
D.O. - ± 5% of calibration solution	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Groundwater field measurements (if applicable)			
Water depth measured to within 0.01 ft.?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Soil sampling field measurements (if applicable)			
OVM - ± 2 ppm	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A
OVA - ± 2 ppm	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A
Sediment sampling field measurements (if applicable)			
Descriptive information recorded?	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A
Surface water sampling field measurements (if applicable)			
Water depth measured to within 0.01 ft.?	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A
Low-flow sampling field measurements (if applicable)			
S.C. - ± 10%	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
pH - ± 0.2 pH units	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Temperature - ± 10%	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Turbidity - ±5 NTU	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Documentation of field activities			
Site-specific information documented in field notebook?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Field data sheets completed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Sample numbering and labeling			
Sample numbering conforms to sample I.D. system identified in QAPP?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Chain-of-Custody records			
Chain-of-Custody forms completed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____



**GENERIC QUALITY ASSURANCE PROJECT PLAN  
 FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND  
 FUSS & O'NEILL MODIFIED TIER II DATA VALIDATION CHECKLIST  
 (Continued)**

**PERFORMED AND, WHERE APPLICABLE,  
 WITHIN ACCEPTABLE LIMITS?**

	<u>YES</u>	<u>NO</u>	<u>COMMENTS</u>
Trip blanks			
Trip blanks submitted, one per day?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Any compounds detected in trip blanks?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Duplicate samples			
Field duplicates performed, 1/20 samples?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Duplicates performed on 10% of samples screened for explosives?	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A
Is percent difference within 30% for all field parameters?	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A
Equipment blanks			
Equipment blanks submitted, one per sampling day?	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A
Any compounds detected in equipment blank?	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A
Split samples (if any)			
Split samples collected?	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A
Is percent difference within 30% for split samples?	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A

**2. LABORATORY MEASUREMENTS:**

Trip blanks			
Trip blanks submitted, one per day?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Any compounds detected in trip blanks?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Instrument blanks**	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A
Laboratory control samples**	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Duplicates samples**	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Equipment blanks**	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A
Matrix spike/matrix spike duplicates**	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Analysis type	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Chain-of-Custody records	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Surrogate recoveries**	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Sample Project Narratives	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Split samples (if any)**	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A
Most recent EPA WP-PE sample results**	<input type="checkbox"/>	<input type="checkbox"/>	_____ N/A





## **Appendix F**

---

### Hazardous Material Release Notification Form



**Office of Land Revitalization & Sustainable Materials Management  
Site Remediation Section**

**HAZARDOUS MATERIAL RELEASE NOTIFICATION FORM**

**THIS FORM IS NOT TO BE USED TO REPORT AN IMMINENT HAZARD**

**1. Notifier Information:**

Name: Kevin Proft, City of Woonsocket

Address: 169 Main Street, Woonsocket, Rhode Island 02895

Phone: 401-762-6400

Email: kproft@woonsocketri.org

Status:             Environmental Professional             Secured Creditor  
                       Owner     Voluntary  
                       Operator

If Environmental Professional is selected, please supply the follow information for your client below:

Name:

Address:

Phone:

Email:

Status:             Owner     Secured Creditor  
                       Operator     Voluntary

**2. Property Information:**

Name of Site: 719 River Street

Site Address: 719 River Street, Woonsocket, Rhode Island, 02895

Plat/Lot Numbers: Plat 8, Lots 5, 35, 37, and 58

Approximate Acreage of Property: 5.021-acres

Latitude/Longitude: 42° 00' 23.57" N, 71° 31' 33.55" W

Site Land Usage Type:                     Residential                     Industrial/Commercial

Location of Release (Attach site sketch as necessary):

Urban fill was documented throughout the Site at depths of up to 10 feet below grade. Additionally soil and groundwater containing petroleum was identified in the central portion of the Site. Refer to Figure 2 of the Site Investigation Report.

**3. Release Information:**

Date of Discovery: June 2021

Source: Urban fill throughout the Site at depths of up to 10 feet below grade. Petroleum identified within the vicinity of two USTs located north of the mill building.

Release Media: Soil and Groundwater

**Hazardous Materials and Concentrations (Attach certificates of analysis as necessary):**

PAH, petroleum, arsenic and lead in soil. NAPL observed in monitoring well MW-8, located north of the mill building. - Refer to the laboratory analytical reports included in the SIR.

Extent of Contamination: Site-wide urban fill. Petroleum in soil and groundwater located north of the mill building.

Approximate acreage of Contaminated Area: 5.021-acres

**4. Resource Information:**

Site Land Usage:  Industrial/Commercial  Residential  
Adjacent Land Usage:  Industrial/Commercial  Residential  
Site Groundwater Class:  GA/GAA  GB  
Adjacent Groundwater Class:  GA/GAA  GB  
(if different than site groundwater classification within 500 feet)  
Nearest Surface Water or Wetland:  Less Than 500 Feet  Greater Than 500 Feet  
Potential for adverse impact?  Yes  No

**5. Potentially Responsible Parties:**

Name: Dorado Properties, LLC C/O Robert Picciotti Jr.

Address: 130 Woodward Avenue, Narragansett, RI 02882

Status:  Owner  Operator  Other: Operator and previous Owner

Name:

Address:

Status:  Owner  Operator  Other:

**6. Measures taken or proposed to be taken in response to Release:**

A Site Investigation Report has been completed in accordance with Section 1.8 of the RIDEM Remediation Regulations.

Check all that apply:  Site Investigation  Short-Term/Emergency  
 EXPRESS Policy  Dig & Haul Policy

**7. Other significant remarks about Release (Will a background determination be made?)**

See Site Investigation Report

Signature: K. R. A. T.  
Title: City Planner

Date: 11/15/21



800.286.2469  
[www.fando.com](http://www.fando.com)

ENGINEERS • SCIENTISTS • PLANNERS