

Site Investigation Report

20 Privilege Street
Woonsocket, Rhode Island

City of Woonsocket

Woonsocket, Rhode Island

February 2021



317 Iron Horse Way, Suite 204
Providence, RI 02908



FUSS & O'NEILL

February 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 20 Lot 15
20 Privilege 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,

Madelyn H. Sampson
Environmental Scientist

Patrick J. Dowling, CPG
Associate | Department Manager

/rlz

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

www.fando.com

California
Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

Attachments: Site Investigation Report Checklist
Site Investigation Report

C: Mr. Kevin Proft, City of Woonsocket
Mr. Bruce Moger, CNC International Ltd

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: **CNC International Ltd c/o Bruce Moger**
Contact Address: **PO Box 3000, Woonsocket, RI 02895**
Contact Telephone: **401-769-6100**

Site Name: **20 Privilege Street**
Site Address: **20 Privilege 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 20 Privilege Street

1	Introduction	1
1.1	Objectives	1
2	Background	1
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	3
2.6.1	Environmental Site Assessment	3
2.6.2	October 2019 Phase I ESA	4
2.7	Surrounding Land Use	5
2.8	Compounds of Concern	5
3	Site Investigation	6
3.1	Public Notice Activities.....	6
3.2	Site Investigation Field Activities	6
3.2.3	Indoor Floor and Trench Soil Sampling.....	8
3.2.4	Monitoring Well Installation and Development.....	9
3.2.5	Groundwater Sampling.....	9
3.2.6	Hazardous Building Materials Assessment.....	10
4	Investigation Results.....	10
4.1	Outdoor Soil Sampling Characterization and Analytical Results	10
4.2	Indoor Soil Sampling Characterization and Analytical Results	11
4.3	Groundwater Analytical Results	11
4.4	Hazardous Building Materials	12
5	Data Verification and Usability	12
5.1	Data Verification and Usability.....	12
5.2	Applicable Regulatory Criteria	13
6	Data Analysis and Risk Characterization	15
6.1	Soil Data Analysis.....	15
6.2	Groundwater Data Analysis.....	16

7	Conceptual Site Model and Conclusions	17
8	Remedial Alternatives Evaluation	18
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: Limited Soil Management, Site-Wide Capping, and Institutional Controls	21
8.4.1	Risk Management.....	22
8.4.2	Technical Feasibility	22
8.4.3	Compliance with Other Laws or Other Public Concerns.....	22
8.4.4	Financial Feasibility.....	22
8.5	Preferred Remedial Alternative	23
9	Certifications.....	24
10	References.....	25
11	Limitations of Work Product.....	26

Table of Contents

Site Investigation Report 20 Privilege Street

Tables		Following Page
1	Summary of Outdoor Soil Sampling Activities	7
2	Summary of Indoor Soil Sampling Activities	8
3	Summary of Monitoring Well and Groundwater Sampling Activities	9
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	13

Figures		End of Report
1	Site Location Map	
2	Site Plan	
3	Groundwater Contour Map	

Appendices		End of Report
A	City of Woonsocket Files	
B	Site Photographs	
C	Hazardous Building Materials Report	
D	Soil Boring Logs and Monitoring Well Completion	
E	Outdoor Soil Laboratory Analytical Reports	
F	Indoor Soil Laboratory Analytical Reports	
G	Groundwater Laboratory Analytical Reports	
H	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 20 Privilege 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 20 Privilege Street in Woonsocket, RI, consists of a 4.09-acre parcel identified as the City of Woonsocket Assessor's Plat 20, Lot 15. The Site is improved with a four story, approximately 200,000 square-foot mill building (Building 1) and a three-story, approximately 29,000 square foot building (Building 2), constructed in 1902. A copy of the property description card available at the City Tax Assessor's office is 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*.

According to City records, the Site has been owned by CNC International Ltd since 1986. CNC International Ltd is an organic chemical manufacturing company and its primary operations involve the synthesis, formulation, packaging and distribution of specialty chemicals; which include but are not limited to, flame retardants, defoamers of various types, anti-oxidants, surfactants, and detergents.

Early 1900s Sanborn mapping indicate the Site has been occupied by several different manufacturing companies, including a spin cotton and wool manufacturer prior to occupation by CNC International. From approximately 1902 to 1935 the Site was occupied by Lawton Spinning Mills and the buildings were utilized for cotton spinning, combing, and storage. According to the 1950 Sanborn mapping, both buildings were used as wool rag warehouses owned by B. Cohen & Sons Inc. Hasbro Industries Inc. purchased the Site in 1973 and used it for toy storage. In 1986 CNC International Ltd purchased the Site and used it for textile chemical and paper chemical manufacturing. The textile portion of the business was sold and discontinued in 1994.

According to an October 2019 *Phase I Environmental Site Assessment* (ESA) prepared by Fuss & O'Neill, the buildings are served by municipal water and sewer and heated by natural gas. Historically, the buildings were heated by fuel oil stored in an aboveground storage tank (AST) until 2000.

2.1.1 Foreseeable Future Use

We understand that the City intends to facilitate redevelop and reuse of the Site buildings by a third party developer into mixed-use facilities with associated parking and landscaped areas. The City plans to use the development of the Site as a catalyst to help modernize and increase the aesthetic value of the Privilege & Winter Street corridor, which are linear strips of industrial factories, mills, and auto repair facilities.

2.1.2 Environmental Justice Focus Area

According to RIDEM Environmental Resource mapping, the subject site is located within an *Environmental Justice Focus Area*. Therefore, public notification and outreach activities were conducted in accordance with Section 1.8.7 of the RIDEM *Remediation Regulations*. Additional details regarding public participation for the Site are included in *Section 3.1* below.

2.2 Geographic and Physiographic Setting

The topography of the Site is generally flat. The regional topography gradually slopes down to the north and east towards Harris Pond (USGS, 2018).

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

Bedrock beneath the Site is mapped as undivided metaclastic rock and is described as red to gray to green polymict conglomerate, sandstone, and shale (Hermes, et al, 1994). Based on an August 1998 *Environmental Site Assessment* report prepared by Garofalo Environmental Services Inc. (Garofalo), depth to bedrock was measured to be approximately 15 feet below grade (fbg). Fuss & O'Neill encountered refusal at approximately 12 fbg at soil boring SB-2 during the more recent October 2020 subsurface investigation, documented herein. However, it could not be verified what the source of the rig refusal at that depth was.

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 0.60 miles east 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 Mill River, as further discussed in *Section 4.2*. Groundwater depths in six monitoring wells gauged by Fuss & O'Neill during the October 2020 Site Investigation ranged from approximately seven to ten 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, Harris Pond, is located approximately 100 feet north of the Site (USGS, 2018). Harris Pond is located in Massachusetts and therefore does not have a class designation set forth by RIDEM. The next closest water body, the Mill River, flows from Harris Pond and is located approximately 0.15 miles east of the Site. Mill River is classified by RIDEM as Class B (RIDEM, 2010c). Class B waters are designated for fish and wildlife habitat and primary and secondary contact recreational activities. 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.

Based on the RIDEM Environmental Resource Map, no mapped wetlands are located on the Site. 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, no mapped floodplains are located on the Site.

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 nearby Harris Pond and the Mill River as further described in *Section 2.4*, should also be considered potential receptors.

2.6 Previous Environmental Investigations

2.6.1 Environmental Site Assessment

An *Environmental Site Assessment* (ESA) was conducted at the Site in July and August 1988 by Garofalo Environmental Services, Inc. (Garofalo). The *ESA* included Site reconnaissance visits, a limited field evaluation program, and screening analysis of soil samples. Field investigations included the installation of three monitoring wells, field screening of soil samples, and the collection of soil and groundwater samples for laboratory analysis. The three monitoring wells are no longer present at the Site. Fill material

was documented from 0 to 3 fbg in the soil boring located at the monitoring well identified as MW #2. Field screening results indicated the potential presence of volatile organic compounds (VOC) in soil at the MW #2 soil boring. Soil samples were sent for laboratory analysis of total petroleum hydrocarbons (TPH) and VOC.

Results of the soil sample analysis indicated that contaminants were reported at or below laboratory detection limits.

Groundwater samples were also sent for laboratory analysis of soluble metals, pH, specific conductance, polychlorinated biphenyls (PCBs) and VOC. Trace amounts of soluble metals were found in samples from all three monitoring wells installed during the assessment, but were below USEPA's maximum contaminant level (USEPA MCL) goals. PCB results were below laboratory detection limits and only one VOC, 1, 1, 1-trichloroethane, was detected in the sample from MW #2 at a concentration greater than the laboratory detection limits. Concentrations of groundwater detections did not exceed the applicable RIDEM regulatory criteria.

Based on the results of the field investigation, Garofalo concluded that no hazardous materials or petroleum products were released to the environment.

2.6.2 October 2019 Phase I ESA

On behalf of the City and RIDEM, Fuss & O'Neill completed a *Phase I ESA* for the Site in October 2019, as part of a Targeted Brownfield Assessment. The *Phase I ESA* identified the following Recognized Environmental Conditions (RECs) associated with the Site:

- **REC #1: Historic Underground Storage Tank (UST):** One 3,000-gallon No. 6 heating oil UST was listed at the Site. No closure documentation was available in records reviewed by Fuss & O'Neill as part of the *Phase I ESA*. As with any underground tank system, there is the potential for subsurface releases to have occurred due to leaks in the tank and/or piping.
- **REC #2: Presence of Urban Fill:** Soil on the Site is listed by the United States Department of Agriculture as Urban Fill Complex (USDA, 2010), and the property has been utilized for industrial purposes for over a century. Prior to commercial development of the Site, fill was likely transported to the Site to fill in the surrounding wetland. The nature and source of the material utilized to fill the Site is unknown and may impact the environmental quality of the Site.
- **REC #3: Current and Historical Aboveground Storage Tanks (ASTs):** An AST farm is located on the Site grounds with reportedly inactive ASTs containing No. 2 heating oil, hydrochloric acid, and isopropyl alcohol. Historical documents obtained from RIDEM revealed the tank farm once included up to 14 ASTs. Deficiencies with respect to the AST farm were noted by RIDEM in 1997, and no additional documentation regarding the addressing of the deficiencies or their compliance status was available in records reviewed for the *Phase I ESA*.
- **REC #4: Hazardous Material Handling and Storage:** Various sized drums and chemical containers were observed during the *Phase I ESA* on the first, second, third, and four floors of the Site's main-operational building. The Site buildings have been used for various operations, including the synthesis, formulation, packaging and distribution of specialty chemicals (e.g.

flame retardants, defoamers of various types, anti-oxidants, surfactants, and detergents), which includes the storage and handling of solvents and oil-based products. In February 2018, RIDEM issued a *Notice of Intent to Enforce* for several potential hazardous waste violations. Improperly stored hazardous material could potentially lead to releases of these materials to the subsurface and impact the environmental quality of the Site.

- **REC #5: Historical Spills:** Multiple spills were recorded in the RIDEM and EDR files reviewed as part of the *Phase I ESA*. The source or origination for each release listed was not identified. One of the spills that was detailed included the release of defoamers and surfactants. As with any release, there is potential for adverse impacts to the Site's environmental quality.

2.7 Surrounding Land Use

According to the October 2019 *Phase I ESA*, Sanborn maps indicated the area was mostly developed prior to 1898. The 1898 Sanborn map depicted industrial activity to the south, southwest, southeast and east of the Site, including the Harris Woolen Co. to the south and southeast, the Woonsocket Shuttle Company to the southwest, the Paint Shop and Barr Bro's Foundry to the east. A canal was positioned along the eastern border of the Site and connected to the Harris Woolen Co. property. Similar industrial and commercial activity was depicted in the 1903 Sanborn map, with the exception that the Harris Woolen Co. transitioned to the Lawton Spinning Co. cotton yarn facility and the Woonsocket Shuttle Company was used as a coal and wagon storage facility.

According to the 1911 Sanborn map, the Lawton Spinning Co. continued to operate to the south-southeast of the Site. The Paint Shop and Barr Bro's Foundry to the east were razed and vacant.

The 1950, 1955, and 1963 Sanborn maps and aerial photographs depicted substantial change to the southwest and southeast. The Lawton Spinning Co. commercial facilities to the southeast were razed and replaced by the Privilege Wrecking Co. A coal and wagon storage area to the southwest was replaced by an auto junk yard. In addition, the 1950 Sanborn map depicted a motor fort shop with fuel oil tanks to the east and the Hartford Railroad to the west.

Similar industrial and commercial activity was depicted in the 1965, 1967 and 1970 Sanborn maps, with the exception that a concrete mixing plant was constructed to the southwest of the Site and a used auto sales facility replaced the auto junk yard to the southeast. Also, the motor fort to the east added filling stations.

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 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
- TPH via USEPA Method 8100
- Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS) by ASTM D7979-17

3 Site Investigation

3.1 Public Notice Activities

Prior to conducting field activities at the Site, public notice and outreach activities were conducted in accordance with Section 1.8.7(A)(1) of the RIDEM *Remediation Regulations*. A notification letter was prepared using the RIDEM standard pre-Site Investigation template letter. This letter notified property owners that a Site Investigation was set to commence. Additionally, a site-specific fact sheet was also prepared in accordance with Section 1.8.7(B) of the RIDEM *Remediation Regulations*. The fact sheet included the known history of the Site, the suspected contamination, and the proposed Site Investigation and redevelopment activities for the Site.

Both the notification letter and fact sheet were translated into Spanish, and both English and Spanish copies along with RIDEM information materials were distributed to abutting property owners on September 30, 2020. No public comments were received by RIDEM, the City, or Fuss & O'Neill during the completion of the Site Investigation.

Furthermore, in accordance with environmental justice requirements and Section 1.8.1(F) of the *Remediation Regulations*, a sign was posted at the Site to inform local residents about the project. The sign was four feet by six feet and contained information in English and Spanish about the project and contact information for further inquiries.

3.2 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 August 2020 and approved by USEPA on September 30, 2020 and RIDEM on October 1, 2020.

Fuss & O'Neill implemented Site Investigation activities in October and November 2020. Data was collected at select locations proximal to RECs identified at the subject site during the October 2019 *Phase I ESA*. Investigation activities are summarized below in the following sections.

3.2.1 Ground Penetrating Radar (GPR)

On October 19, 2020, 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 UST was present in the area southeast of the main mill building and to further assess utilities located on the Site. Additionally, the areas surrounding twelve proposed boring locations were scanned to investigate the potential for unknown subsurface utilities or anomalies. Based on the survey results, no evidence indicating a UST was observed at the Site. Certain boring locations were relocated based on potential utility conflicts.

3.2.2 Outdoor Soil Borings and Soil Sampling

On October 27 and 28, 2020, Fuss & O'Neill performed a subsurface soil sampling and characterization program. The investigation consisted of twelve direct-push (i.e. Geoprobe®) soil borings identified as SB-1, SB-2, MW-3, MW-4, MW-5, MW-6, SB-7, MW-8, MW-9, SB-10, SB-11 and SB-12 and 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*.

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 a 100 part per million by volume isobutylene calibration gas.

Twelve soil samples plus one duplicate quality control sample were collected from the soil borings for laboratory analysis. The soil samples were submitted to Con-Test Analytical Laboratory of East Longmeadow, Massachusetts. A summary of soil sampling activities, including the requested analyses, is included in *Table 1* below.

Table 1
Summary of Outdoor Soil Sampling Activities

Location	Date	Boring Depth (fbg)	Sample Depth (fbg)	Sample Number	Analyses	
SB-1	10/27/2020	20	1.0-3.0	1027-01	VOC, PAH, PP13 metals, TPH, and PCBs	
SB-2		12	1.0-3.0	1027-02		
MW-3		23	1.0-3.0	1027-03		
MW-4		20	1.0-3.0	1027-04		
MW-5		16	1.0-3.0	1027-05		
MW-6		15	1.0-3.0	1027-06		
SB-7		20	1.0-3.0	1027-07		
MW-8	10/28/2020	21	1.0-3.0	1028-09		
			1.0-3.0	1028-10*		
MW-9		20	1.0-3.0	1028-11		
SB-10		20	1.0-3.0	1028-12		
SB-11		20	1.0-3.0	1028-13		
SB-12			20	1.0-3.0		1028-14

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

*: Duplicate Sample

3.2.3 Indoor Floor and Trench Soil Sampling

On October 30, 2020, Fuss & O'Neill collected five soil samples by hand-excavation to a maximum depth of two fbg. The investigation consisted of soil sampling in the top two feet of an area with accessible soil on the first floor and in an area with accessible soil in the basement of the main mill building. Photographs of the indoor soil sampling locations are provided as *Appendix B*. The soil samples were characterized and inspected for visual and olfactory evidence of releases of oil and/or hazardous (OHM) and field-screened for VOC using a PID. The PID was calibrated prior to use with a 100 part per million by volume isobutylene calibration gas.

The five soil samples were submitted to Con-Test Analytical Laboratory. A summary of soil sampling activities, including the requested analyses, is included in *Table 2* below.

Table 2
Summary of Indoor Soil Sampling Activities

Location	Date	Sample Depth (fbg)	Sample Number	Analyses
S-1	10/30/2020	1.0-2.0	1030-01	VOC, PAH, Priority Pollutant 13, TPH, and PCBs
S-2		1.0-2.0	1030-02	
S-3		1.0-2.0	1030-03	
S-4		1.0-2.0	1030-04	
S-5		0.0-0.5	1030-05	VOC, PAH, Priority Pollutant 13, TPH, PCBs, and TCLP metals (cadmium, chromium, and lead)

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

3.2.4 Monitoring Well Installation and Development

During the October 27 and 28, 2020 drilling event, two-inch diameter polyvinyl chloride (PVC) groundwater monitoring wells were installed by GeoLogic at soil borings MW-3, MW-4, MW-5, MW-6, MW-8, and MW-9.

On October 29, 2020, 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.

3.2.5 Groundwater Sampling

On November 3, 2020, Fuss & O'Neill personnel mobilized to the Site and collected a groundwater sample from the six 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. Six groundwater samples plus one duplicate quality control sample were submitted to Con-Test for analysis of VOC and TPH. One trip blank was also analyzed for VOC for quality control purposes.

Additionally, on November 3, 2020, one groundwater sample plus one duplicate and one field blank was collected from monitoring wells MW-3, MW-5, and MW-6 and submitted to Con-Test for analysis of PFAS by ASTM D7979-17. The groundwater samples collected for PFAS analysis were collected via

laboratory-provided pre-labelled sample bottles and powder-free nitrile gloves through dedicated high-density polyethylene (HDPE) and silicone tubing to minimize the potential for cross contamination.

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)^[1]
MW-3	13-23	11/3/2020	1103-01	VOC, TPH, PFAS	10.70
MW-5	6-16		1103-02		8.20
MW-6	5-15		1103-03		8.80
			1103-04*		
MW-9	10-20		1103-05		9.40
MW-4	8-18		1103-06	VOC, TPH	8.05
MW-8	11-21		1103-07		11.95

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

3.2.6 Hazardous Building Materials Assessment

On October 16 and 17, 2020, 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 summarized in the December 2020 *Hazardous Building Materials Assessment Report* included as *Appendix C*.

4 Investigation Results

4.1 Outdoor Soil Sampling Characterization and Analytical Results

Soil throughout the subject site was observed to consist of up to 10 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. Drill rig refusal was encountered at soil boring SB-2, at 12 fbg. Refusal was not encountered at any of the other eleven soil boring locations. Soil

boring logs and monitoring well completion reports from the October 2020 drilling event are included as *Appendix D*.

Field screening with the PID reported total VOC concentrations ranging between 0.0 and 0.6 ppmv. With the exception of the observed fill material, no staining, odors, or other evidence of a release of oil and/or hazardous materials was observed in the 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 E*. The laboratory results indicated the following:

- Several PAH were detected at levels above the laboratory reporting limits in seven of the thirteen soil samples.
- Metals were detected at levels above the laboratory reporting limits in all the thirteen soil samples.
- TPH were detected at levels above the laboratory reporting limits in all the thirteen soil samples.

4.2 Indoor Soil Sampling Characterization and Analytical Results

Soil beneath the building in the targeted sampling areas generally consisted of fine to medium sand with silt and gravel. Field screening with the PID reported total VOC concentrations ranging between 0.0 and 1.0 ppmv. The highest VOC concentration measured with the PID was from the soil sample collected from S-1, located at the first floor machine shop.

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 F*. The laboratory results indicated the following:

- One VOC, tetrachloroethylene, was detected at a level above the laboratory reporting limit in the soil sample S-1.
- Several PAH were detected at levels above the laboratory reporting limits in all five indoor soil samples.
- Metals were detected at levels above the laboratory reporting limits in all five indoor soil samples. TCLP cadmium was detected above the laboratory reporting limit in soil sample S-5.
- TPH were detected at levels above the laboratory reporting limits in all five indoor soil samples.

4.3 Groundwater Analytical Results

Groundwater elevations were gauged on September 3, 2020, prior to the commencement of groundwater sampling at the Site. The depth to groundwater was measured throughout the Site at depths of approximately seven to eleven fbg. In order 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 November 3, 2020 are depicted on *Figure 3*, which indicate the direction of groundwater flow at the Site to the east.

One groundwater sample was collected from each of the six on-Site monitoring wells, 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 and TPH. Additionally, three of the groundwater samples collected from MW-3, MW-5 and MW-6 were analyzed for PFAS, including one field blank and one duplicate collected from MW-6.

Groundwater sampling results are summarized in *Table 5*, and the Con-Test analytical data reports are included in *Appendix G*. No VOC or TPH were detected at levels above the laboratory reporting limit in the groundwater samples. Several PFAS compounds were detected at levels above the laboratory reporting limits in the four groundwater samples.

4.4 Hazardous Building Materials

A summary of the hazardous building materials analytical data is included in the December 2020 *Hazardous Building Materials Assessment Report*. The Hazardous Building Materials Assessment Report is provided as *Appendix C*.

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 C, 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 course of the sampling events, 23 primary samples plus quality control samples were collected and submitted for laboratory analysis: 17 primary soil samples plus three trip blank samples and one duplicate sample, and six 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 October 2020 soil sampling investigations, and one trip blank was submitted during the November 2020 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. Groundwater PFAS samples were collected via laboratory-supplied pre-labelled bottles and

gloves through high-density polyethylene (HDPE) and silicone tubing. A laboratory supplied field blank was collected for PFAS analysis for quality control. No equipment blanks were collected.

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

Calculated relative percent difference (RPDs) of the analytical results for the primary-duplicate pair of soil samples indicated RPDs generally greater than 30% for the detected analytes, including 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, and the elevated RPDs may, therefore, be attributed to the heterogeneity of the fill material.

Calculated relative percent difference (RPDs) of the analytical results for the primary-duplicate pair of groundwater samples indicated RPDs less than 30% for the detected PFAS compounds. RPDs were not calculated for TPH or VOC 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 C, 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 considered to be 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)
 - The Site is an industrial property. However, future site uses are not currently restricted, and future site redevelopment could potentially consist of mixed uses. Therefore, the R-DEC currently applies to the Site. Additionally, the R-DEC are utilized as threshold concentrations to determine if a reportable release has occurred.

- Industrial/Commercial Direct Exposure Criteria (I/C-DEC)
 - The Site is currently and 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.
- GAA and GAA Groundwater Quality Standards
 - A RIDEM Method 1 GB-GO has not been established for several of the analytes included in analytical methods utilized at the Site. Therefore, analytical results were compared to the GAA and GA groundwater quality standards, where they exist, as a reference to the relative concentrations of detected parameters in groundwater. However, the groundwater is classified as GB and the GAA and GA do not apply to the Site.

Laboratory reporting limits of several PAH in the soil sample S-5 were above the R-DEC and/ or the I-C-DEC. The usability of the data was not impacted because several other PAH compounds were detected in S-5 above applicable regulatory criteria, 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 E and F*. Exceedances of the applicable RIDEM Method 1 regulatory criteria are summarized in *Table 6* below.

Table 6
Summary of Soil Samples with Applicable Regulatory Exceedances

Sample Location	Depth (fbg)	Applicable Regulatory Exceedances
SB-7	1.0-3.0	R-DEC: Various PAH I/C-DEC: Benzo(a)pyrene
MW-8	1.0-3.0	R-DEC: Various PAH I/C-DEC: Benzo[a]pyrene
MW-9	1.0-3.0	R-DEC: Various PAH, TPH I/C-DEC: Benzo[a]pyrene
SB-10	1.0-3.0	R-DEC: Lead, Various PAH I/C-DEC: Benzo[a]pyrene
S-1	1.0-3.0	R-DEC: Various PAH I/C-DEC: Benzo[a]pyrene
S-2	1.0-3.0	R-DEC: Various PAH I/C-DEC: Benzo[a]pyrene, Dibenz[a,h]anthracene
S-3	1.0-3.0	R-DEC: Various PAH I/C-DEC: Benzo[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Indeno[1,2,3-cd]pyrene, TPH GB-LC: TPH
S-4	1.0-3.0	R-DEC: Various PAH I/C-DEC: Benzo[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Dibenz[a,h]anthracene, Indeno[1,2,3- cd]pyrene
S-5	1.0-3.0	R-DEC: Lead, Various PAH I/C-DEC: Benzo[a]pyrene Dibenz[a,h]anthracene, TPH GB-LC: TPH

Notes: SB: soil boring; MW: monitoring well; S: hand excavated soil sample; 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 lead:** 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. Lead was detected at concentrations above the R-DEC in the soil sample collected from soil boring SB-10 and in the soil sample from S-5, which was taken from the trench in front of the old furnace in the basement of Building 1. The primary risk posed by these compounds in soil consist of direct exposure via ingestion or inhalation of dust.

- **Soil Containing Petroleum in the Southwestern Portion of the Site:** Soil samples collected within the footprint of Building 1 and at MW-9 contained petroleum at concentrations above the R-DEC and/ or the I/C-DEC and the GB-LC in two samples. Historical records for the Site documented a former 3,000-gallon No.6 heating oil underground storage tank (UST) located adjacent to the southwest corner of Building 1. No closure documentation was available in the records reviewed by Fuss & O'Neill as part of the *Phase I ESA*. The ground penetrating radar (GPR) survey performed for this Phase II ESA did not provide evidence that a UST was located within the surveyed accessible area adjacent to the southwest corner of Building 1. However, due to obstructions (i.e. thick vegetation) and the limitations of the GPR scan depth, the possibility that a UST is present at the Site may exist. Therefore, a point source release cannot be dismissed due to the identification of a petroleum at concentrations above the R-DEC and/or I/C-DEC in the soil samples collected from MW-9, S-2, S-3, S-4, and S-5, which, based on available documents, are located proximal to the area of the former UST.

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 constitute a reportable condition under the RIDEM *Remediation Regulations*. Therefore, a *Hazardous Material Release Notification Form* was prepared and is included in *Appendix H*. 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 G*.

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. A groundwater quality standard for TPH has not been established by RIDEM for groundwater classified as GA or GB. No TPH or VOC were detected in the groundwater samples at concentrations exceeding the laboratory reporting limits during the November 2020 sampling event. 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.

A groundwater quality standard for groundwater classified as GB for PFAS has not been established by RIDEM. "Interim" groundwater quality standards have only been established for groundwater classified

as GA and GAA at 70 parts per trillion as promulgated in the *RIDEM Groundwater Quality Standard for Perfluorooheptanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS)*. PFOA and PFOS were detected at concentrations above the GAA and GA groundwater quality standard of 70ppt from the primary and duplicate groundwater samples taken from monitoring well MW-6, located on the western portion of the Site. Based on the relatively low and isolated detections of PFAS in the monitoring wells on Site, the direction of groundwater flow, and the distance to the nearest GA or GAA groundwater area, the PFAS compounds were not considered to pose a threat to drinking water sources.

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 and/or lead at levels exceeding the R-DEC and I/C-DEC. Fill materials were identified across the Site at depth up to 16 fbg. Remedial response actions will be required to bring the Site into compliance with the *RIDEM Remediation Regulations*.
- **Soil Containing Petroleum:** Soil containing TPH was identified in all four soil samples collected from the exposed soil areas located in the basement of the Building 1 and in one soil sample from monitoring well MW-9 exceeding the R-DEC and I/C-DEC. Soil containing TPH at concentrations above the GB-LC was identified in two samples from within the basement. Remedial response actions will be required to bring the Site into compliance with the *RIDEM Remediation Regulations*.
- **Groundwater Quality:** No VOC were detected in the groundwater samples collected from the Site at concentrations exceeding the *RIDEM Method 1 GB-GO*. Free-phase petroleum product was not observed in any of the six monitoring wells by Fuss & O'Neill personnel during the November 2020 sampling event. Therefore, no further response actions regarding groundwater quality at the subject are currently warranted to achieve compliance. However, future site disturbances that may require construction dewatering should be evaluated and planned to appropriately manage dewatering effluent.

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, lead, and petroleum above the RIDEM Method 1 R-DEC and I/C-DEC.
- Petroleum in soil at levels above the GB-LC was identified in the soil beneath the basement of the former mill building. However, the Site is located in a GB groundwater area, and no potable water supplies were located within a half-mile radius of the Site, based on available RIDEM mapping. The nearest surface water receptor, Harris Pond, is located directly northeast of the Site. Harris Pond and downstream waterbodies are not a source of drinking water. Furthermore, groundwater samples collected at the Site did not identify a release of petroleum-related compounds to these media, and free-phase petroleum product was not identified in the on-Site monitoring wells. The soil containing TPH at concentrations exceeding the GB-LC is currently located within the building, and therefore not exposed to infiltration or leaching from precipitation.

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. Limited Soil Management, Site-Wide Capping, 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, 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 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, lead, and petroleum may be an effective way of reducing concentrations of oil and/or hazardous (OHM) 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 the soil from the Site, 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 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 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 10 fbg, with the exception of monitoring well MW-5 where fill materials was observed up to 16 fbg. Furthermore, groundwater was observed during the investigation activities at seven to eleven fbg. Therefore, the fill material is located within the groundwater table. Consequently, excavation to remove the fill material below the water table 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. Additionally, significant excavation of soil in the vicinity and beneath the footprint of the on-site buildings has the potential to undermine their structure integrity. 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 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.

8.3.4 Financial Feasibility

The costs of excavation, transportation, and disposal of small targeted volumes of soil would likely be manageable. However, available data indicate that the extent of soil and fill material that would require excavation is potentially widespread and includes soil and fill material that may extend to a depth of ten fbg over the majority of the Site. Based on this data, approximately 65,000 cubic yards of soil and fill material may require excavation and disposal over the southern portion of Site, including the soil beneath the mill building. Soil removal from inside the mill building has the potential to impact the structural systems of the building. This would also result in a depression related to surrounding grade, which would require 65,000 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 Privilege Street in close proximity to the Site's boundary. Therefore, the total project cost would likely exceed \$5.5 million, and may not be successful in acquiring regulatory compliance due to some soil being in accessible. 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: Limited Soil Management, Site-Wide Capping, and Institutional Controls

A limited amount of soil management combined with Site-wide capping with a combination of concrete, asphalt, and landscaping would mitigate the potential for direct exposure to soil containing petroleum, PAH and lead at concentrations greater than the R-DEC and I/C-DEC may be a feasible remedial action for the subject site. The primary risk associated with the majority of the Site is the potential for direct exposure to soil by Site users. Additionally, the basement of Building 1 where soil containing petroleum was identified at levels above the GB-LC, an impermeable cap consisting of the building floor could be constructed or repaired to mitigate the potential for direct exposure and leaching of contaminants into groundwater.

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.

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:
 - 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.
 - Repair of existing impervious asphalt or concrete areas to ensure competency.
- Limited soil excavation and off-Site disposal would be conducted in Building 1 where necessary for the repair of the internal floor.
- 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 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 and the repair of the building floor to effectively cap the limited area in the basement of Building 1 with petroleum in soil at levels above the GB-LC. This would mitigate the potential for direct exposure and leaching of contaminants from the soil.

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

Limited 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.

8.4.3 Compliance with Other Laws or Other Public Concerns

Limited 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 – limited soil management, Site-wide capping, and implementation of institutional controls in the form of an ELUR and Post-Remediation SMP. The on-Site soil would be capped as described in *Section 8.4*, and excess soil that cannot be placed beneath the cap would be properly disposed off-Site.

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

2/11/2021

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

Title

Date

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, 2016, State of Rhode Island Final 303(d) List of Impaired Waters, March 2018.

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 on October 27, 28, and 30, 2020

20 Privilege Street
Woonsocket, RI

Prepared for City of Woonsocket

February 2021

Location ID	Sample Number	Sample Date	Depth Interval (fbg)	Headspace (ppmv)	Sample Type	SB-1	SB-2	MW-3	MW-4	MW-5	MW-6	SB-7	MW-8		MW-9	SB-10	SB-11	SB-12	S-1	S-2	S-3	S-4	S-5	RIDEM Regulatory Criteria		
						1027-01	1027-02	1027-03	1027-04	1027-05	1027-06	1027-07	1028-09	1028-10	1028-11	1028-12	1028-13	1028-14	1030-01	1030-02	1030-03	1030-04	1030-05	R-DEC	I/C-DEC	GB-LC
USEPA METHOD 8260C-D - VOC	Tetrachloroethylene	mg/kg	ND<0.0021	ND<0.0024	ND<0.0021	ND<0.0021	ND<0.0017	ND<0.0018	ND<0.0017	ND<0.0018	ND<0.0021	ND<0.0018	ND<0.0020	ND<0.0025	ND<0.0027	ND<0.0025	ND<0.0025	ND<0.0023	0.0036	ND<0.0022	ND<0.0016	ND<0.0017	ND<0.19	12	110	4.2
USEPA METHOD 6010D - METALS	Beryllium	mg/kg	ND<0.17	ND<0.18	ND<0.17	ND<0.18	0.22	ND<0.17	ND<0.18	ND<0.17	ND<0.18	ND<0.17	ND<0.19	0.19	ND<0.18	ND<0.19	ND<0.17	ND<0.22	ND<0.18	ND<0.20	ND<0.19	1.5	1.5	---		
	Cadmium	mg/kg	ND<0.34	ND<0.35	ND<0.33	ND<0.36	ND<0.36	ND<0.34	ND<0.36	ND<0.35	ND<0.34	ND<0.37	ND<0.37	ND<0.37	ND<0.36	ND<0.38	ND<0.34	ND<0.43	ND<0.37	ND<0.40	32	39	1,000	---		
	Chromium	mg/kg	5.9	5.2	9.4	5.5	6.5	5.9	9.4	4.0	4.2	5.1	24	7.4	6.9	4.8	6.9	5.5	6.9	120	390*	10,000	---			
	Copper	mg/kg	22	11	10	9.9	6.0	15	17	7.3	5.9	40	15	11	6.4	4.2	12	4.9	240	3,100	10,000	---				
	Lead	mg/kg	42	15	5.8	25	10	12	50	17	3.8	9.7	350	15	47	5.2	12	50	9.1	290	150	500	---			
	Nickel	mg/kg	4.8	4.8	6.1	5.0	5.4	5.3	4.7	3.8	5.5	3.5	7.6	6.0	5.4	3.5	4.0	4.8	3.8	94	1,000	10,000	---			
	Silver	mg/kg	ND<0.34	ND<0.35	ND<0.33	ND<0.36	ND<0.36	ND<0.34	ND<0.36	ND<0.35	ND<0.34	ND<0.37	ND<0.37	ND<0.36	ND<0.38	ND<0.34	ND<0.43	ND<0.37	ND<0.40	3.1	200	10,000	---			
	Zinc	mg/kg	62	52	29	33	26	68	56	47	24	21	120	29	37	25	16	59	22	1,600	6,000	10,000	---			
USEPA METHOD 7471B - MERCURY	Mercury	mg/kg	0.051	ND<0.027	ND<0.025	0.039	ND<0.028	0.041	0.077	ND<0.027	ND<0.025	ND<0.027	0.12	ND<0.027	0.054	ND<0.025	0.043	0.055	ND<0.031	0.11	23	610	---			
USEPA METHOD 8270D-E - SVOC	Acenaphthene	mg/kg	ND<0.17	ND<0.18	ND<0.18	ND<0.18	ND<0.18	ND<0.17	0.19	0.30	ND<0.17	ND<0.19	0.41	ND<0.18	ND<0.20	ND<0.18	ND<0.22	ND<0.19	1.4	ND<4.3	43	10,000	---			
	Acenaphthylene	mg/kg	ND<0.17	ND<0.18	ND<0.18	ND<0.18	ND<0.18	ND<0.17	ND<0.18	ND<0.18	ND<0.17	ND<0.19	ND<0.19	ND<0.18	ND<0.18	ND<0.18	1.2	2.9	7.1	ND<4.3	23	10,000	---			
	Anthracene	mg/kg	ND<0.17	ND<0.18	ND<0.18	ND<0.18	ND<0.18	ND<0.17	0.41	0.62	ND<0.17	0.33	0.97	ND<0.18	1.2	0.34	2.4	3.2	10	ND<4.3	35	10,000	---			
	Benzo[a]anthracene	mg/kg	ND<0.17	0.26	ND<0.18	ND<0.18	ND<0.18	ND<0.17	1.5	3.2	ND<0.17	1.0	3.4	ND<0.18	3.2	1.5	6.9	13	26	ND<4.3	0.9	7.8	---			
	Benzo[a]pyrene	mg/kg	ND<0.17	0.23	ND<0.18	ND<0.18	ND<0.18	ND<0.17	1.4	2.6	ND<0.17	0.89	2.9	ND<0.18	1.9	1.2	6.8	13	24	5.4	0.4	0.8	---			
	Benzo[b]fluoranthene	mg/kg	ND<0.17	0.29	ND<0.18	ND<0.18	ND<0.18	ND<0.17	1.7	3.3	ND<0.17	1.1	3.6	ND<0.18	2.2	1.6	7.6	27	25	4.7	0.9	7.8	---			
	Benzo[g,h,i]perylene	mg/kg	ND<0.17	ND<0.18	ND<0.18	ND<0.18	ND<0.18	ND<0.17	0.68	1.2	ND<0.17	0.61	1.6	ND<0.18	0.91	0.85	5.6	15	10	0.8	10,000	---				
	Benzo[k]fluoranthene	mg/kg	ND<0.17	ND<0.18	ND<0.18	ND<0.18	ND<0.18	ND<0.17	0.66	1.4	ND<0.17	0.44	1.5	ND<0.18	0.97	0.61	2.8	9.6	10	ND<4.3	0.9	7.8	---			
	Chrysene	mg/kg	ND<0.17	0.27	ND<0.18	ND<0.18	ND<0.18	ND<0.17	1.5	2.9	ND<0.17	0.99	3.7	ND<0.18	2.5	1.4	6.3	20	21	ND<4.3	0.4	780	---			
	Dibenz[a,h]anthracene	mg/kg	ND<0.17	ND<0.18	ND<0.18	ND<0.18	ND<0.18	ND<0.17	0.20	0.42	ND<0.17	ND<0.19	0.58	ND<0.18	0.36	0.19	1.0	2.8	3.5	ND<4.3	0.4	0.8	---			
	Fluoranthene	mg/kg	ND<0.17	0.53	ND<0.18	ND<0.18	ND<0.18	ND<0.17	2.9	5.2	ND<0.17	2.2	6.1	ND<0.18	4.9	2.8	17	51	60	ND<4.3	20	10,000	---			
	Fluorene	mg/kg	ND<0.17	ND<0.18	ND<0.18	ND<0.18	ND<0.18	ND<0.17	0.23	0.23	ND<0.17	ND<0.19	0.36	ND<0.18	ND<0.20	ND<0.18	0.33	0.55	4.6	ND<4.3	28	10,000	---			
	Indeno[1,2,3-cd]pyrene	mg/kg	ND<0.17	ND<0.18	ND<0.18	ND<0.18	ND<0.18	ND<0.17	0.82	1.5	ND<0.17	0.71	2.0	ND<0.18	1.2	0.93	5.9	17	17	5.5	0.9	7.8	---			
	2-Methylnaphthalene	mg/kg	ND<0.17	ND<0.18	ND<0.18	ND<0.18	ND<0.18	ND<0.17	ND<0.18	ND<0.18	ND<0.17	ND<0.19	ND<0.19	ND<0.18	0.74	ND<0.18	ND<0.22	0.25	0.59	ND<4.3	123	10,000	---			
	Naphthalene	mg/kg	ND<0.17	ND<0.18	ND<0.18	ND<0.18	ND<0.18	ND<0.17	ND<0.18	ND<0.18	ND<0.17	ND<0.19	0.22	ND<0.18	ND<0.20	ND<0.18	0.46	1.5	0.91	ND<4.3	54	10,000	---			
	Phenanthrene	mg/kg	ND<0.17	0.53	ND<0.18	ND<0.18	ND<0.18	ND<0.17	2.5	2.9	ND<0.17	2.0	4.6	ND<0.18	5.6	1.6	10	14	48	ND<4.3	40	10,000	---			
	Pyrene	mg/kg	0.19	0.60	ND<0.18	ND<0.18	ND<0.18	ND<0.17	3.1	4.3	ND<0.17	2.2	6.6	ND<0.18	4.6	2.2	14	37	65	ND<4.3	13	10,000	---			
USEPA METHOD 8082A - PCBs	Aroclor-1248	mg/kg	ND<0.083	ND<0.085	ND<0.084	ND<0.085	ND<0.086	ND<0.082	ND<0.087	ND<0.084	ND<0.082	ND<0.089	ND<0.088	ND<0.085	ND<0.092	ND<0.082	ND<0.10	ND<0.090	ND<0.095	0.12	10	10	10			
USEPA METHOD 8100 Modified - TPH	TPH Total	mg/kg	29	39	11	32	23	17	140	170	13	790	290	29	220	81	580	4,300	1,400	22,000	500	2,500	2,500			
USEPA Method 1311- TCLP	Cadmium	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.11	---	---	---		
	Chromium	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND<0.050	---	---	---	
	Lead	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND<0.10	NA	NA	NA	NA	NA	NA	NA	NA	ND<0.10	---	---	---	

NOTES:
fbg: 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
S: hand excavated soil sample
VOC: volatile organic compounds
SVOC: semi-volatile organic compounds
PCBs: polychlorinated biphenyls

TPH: total petroleum hydrocarbons
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
TCLP: toxicity characteristic leaching procedure
*: Conservatively assumes that all chromium is in hexavalent form.
----: not established

R-DEC: Residential direct exposure criteria
I/C-DEC: Industrial/Commercial direct exposure criteria
GB/LC: GB leachability criteria
Italicized reporting limits exceed one or more regulatory 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: APT



Table 5
Summary of Groundwater Elevations
Measurements Collected November 3, 2020

20 Privilege Street
Woonsocket, Rhode Island

Prepared for City of Woonsocket

February 2021

Well Number	Relative Elevation TPS (feet)	DTW - TPS	Relative Groundwater Elevation
MW-3	101.54	10.70	90.84
MW-4	102.76	8.05	94.71
MW-5	101.38	8.20	93.18
MW-6	101.25	8.80	92.45
MW-8	102.46	11.95	90.51
MW-9	101.60	9.40	92.20

NOTES:

DTW: depth to water

TPS: top of steel

Created by: MHS

Checked by: APT

Shallow wells with screens that intersect the water table were used to develop the groundwater contour map. Wells were surveyed on November 3, 2020 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 November 3, 2020

20 Privilege Street
Woonsocket, Rhode Island

Prepared for City of Woonsocket

February 2021

Sample Location	MW-3	MW-5	MW-6		MW-9	MW-4	MW-8	RIDEM Regulatory Criteria	RIDEM Regulatory Criteria
Sample Number	1103-01	1103-02	1103-03	1130-04	1103-05	1103-06	1103-07		
Sample Date	11/3/2020	11/3/2020	11/3/2020	11/3/2020	11/3/2020	11/3/2020	11/3/2020		
Screened Interval (fbg)	13-23	6-16	5-15		10-20	8-18	11-21		
Sample Type	Primary	Primary	Primary	Duplicate	Primary	Primary	Primary	GA-GO	GB-GO
FIELD MEASUREMENTS	Units								
pH	pH units	6.61	5.86	6.61	6.11	5.81	6.34	NE	NE
Specific Conductance	µS/cm	329.90	75.10	101.10	317.20	288.30	312.00	NE	NE
Temperature	C deg	15.97	14.82	14.49	13.77	13.59	14.41	NE	NE
Dissolved Oxygen	mg/L	0.06	8.20	8.16	0.05	1.84	1.20	NE	NE
ORP	mV	-47.90	145.90	107.40	69.90	101.50	23.00	NE	NE
Turbidity	ntu	5.73	2.76	2.59	5.84	3.75	4.18	NE	NE
SVOC by LC/MS-MS	Units								
Perfluorobutanesulfonic acid (PFBS)	ng/L	2.38	1.11	0.669	0.637	NA	NA	NA	NE
Perfluorohexanoic acid (PFHxA)	ng/L	2.82	6.12	59.30	60	NA	NA	NA	NE
Perfluorohexanesulfonic acid (PFHxS)	ng/L	1.19	0.57	ND<1.97	ND<1.99	NA	NA	NA	NE
Perfluoroheptanoic acid (PFHpA)	ng/L	2.18	7.15	83.90	76.80	NA	NA	NA	NE
Perfluorooctanoic acid (PFOA)	ng/L	4.80	9.25	180	189	NA	NA	NA	70
Perfluorooctanesulfonic acid (PFOS)	ng/L	4.44	1.83	3.35	3.14	NA	NA	NA	70
Perfluorononanoic acid (PFNA)	ng/L	0.87	7.49	128	125	NA	NA	NA	NE
Perfluorodecanoic acid (PFDA)	ng/L	ND<1.98	1.22	4.57	4.66	NA	NA	NA	NE
PFOA and PFOS*	ng/L	9.24	11.08	183.35	192.14	NA	NA	NA	70
USEPA METHOD 8100 Modified- TPH	Units								
TPH (C9-C36)	mg/L	ND<0.18	ND<0.20	ND<0.20	ND<0.20	ND<0.20	ND<0.21	ND<0.21	NE
USEPA METHOD 8260C-D - VOC	Units								
Various	µg/L	ND<Various	ND<Various	ND<Various	ND<Various	ND<Various	ND<Various	ND<Various	Various

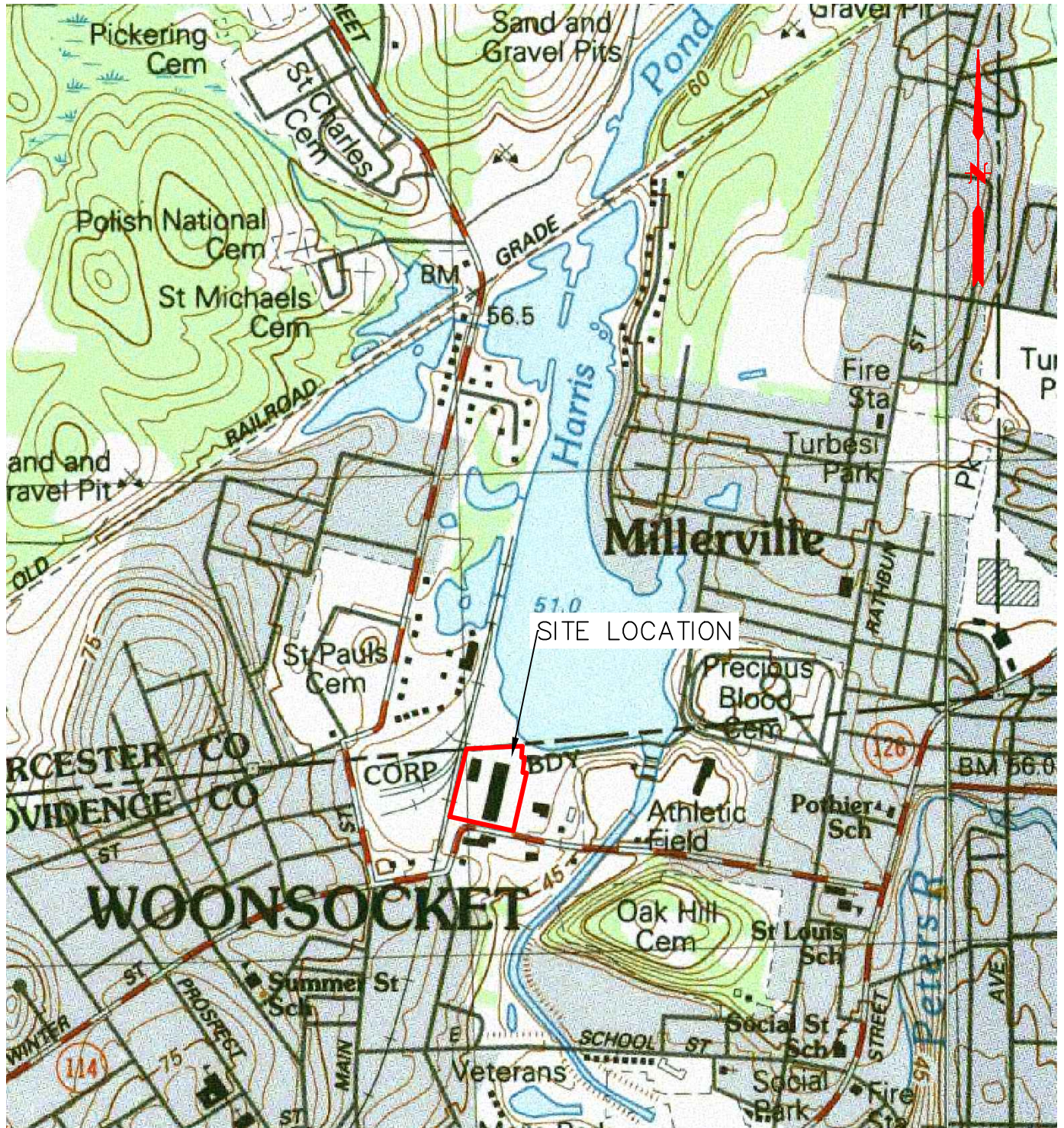
Created by: MHS
Checked by: APT

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
SVOC: semi-volatile organic compounds
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
* Combination of PFOA and PFOS
ND<Varies: compound not detected above laboratory reporting limit
GA-GO: GA Groundwater Objectives
GB-GO: GB Groundwater Objectives
NE: Not established
[Green Box] = Values exceed the GA-GO

Figures



MAP REFERENCE:

THIS MAP WAS PREPARED FROM THE FOLLOWING
 7.5 x15 MINUTE USGS TOPOGRAPHIC QUADRANGLES:
 BLACKSTONE MASSACHUSETTS 1982, REVISED 1983, 1984,
 AND 1985

SOURCE: MASSACHUSETTS GEOGRAPHIC INFORMATION SYSTEM (MassGIS).

SCALE:	
HORZ.:	1" = 1000'
VERT.:	
DATUM:	
HORZ.:	
VERT.:	
GRAPHIC SCALE	



FUSS & O'NEILL

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

CITY OF WOONSOCKET

SITE LOCATION MAP

20 PRIVILEGE STREET

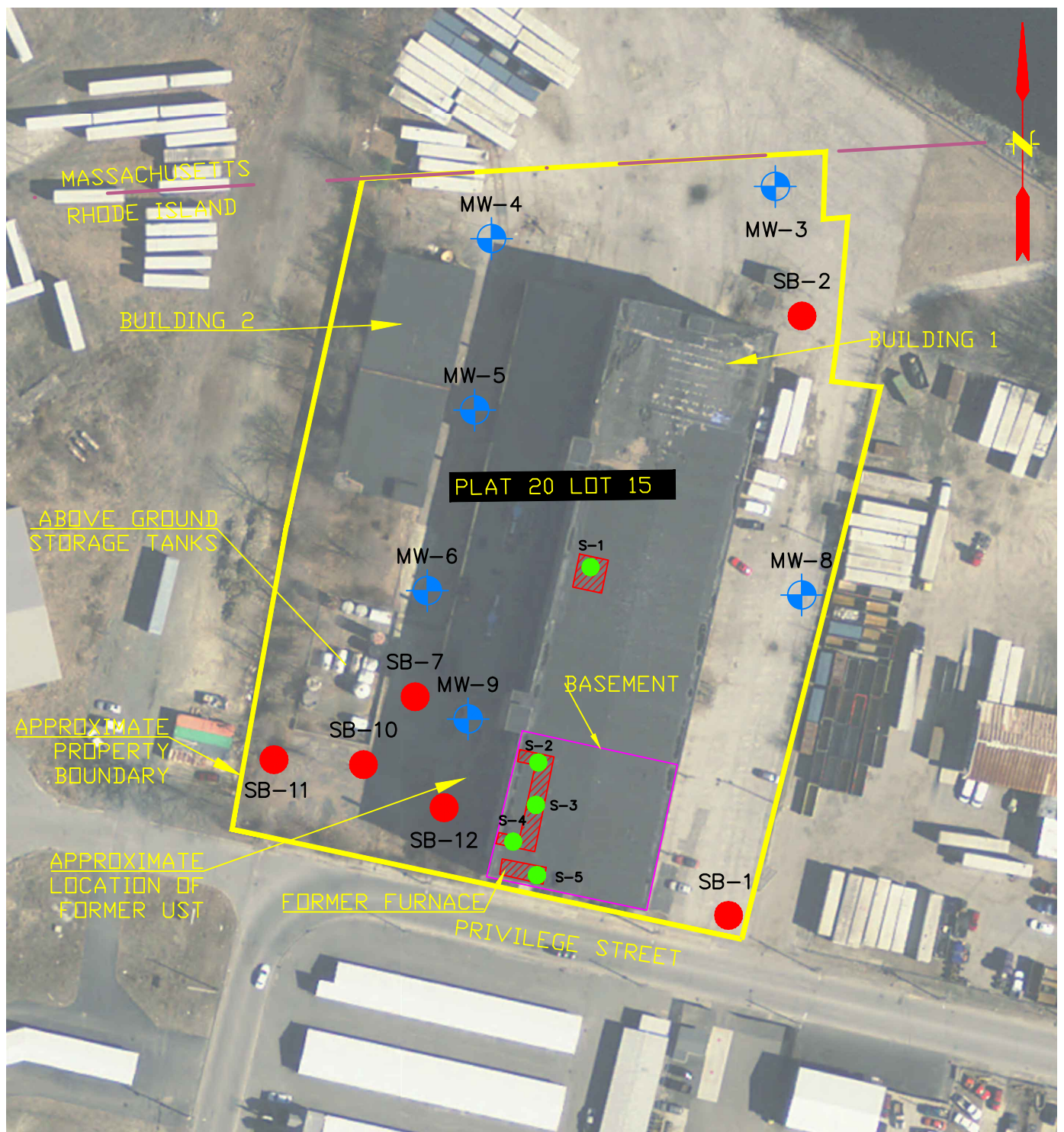
WOONSOCKET

RHODE ISLAND

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

FIGURE 1

File Path: J:\DWG\2018\1545\B10\Environmental\Plan20\Privilege Street\20181545.B10_STP.dwg Layout: 08.5X11-P Plotted: Fri, January 15, 2021 - 12:06 PM User: msampson
 MS VIEW: PLOTTER: DWG TO PDF-PC3 CTB File: FO.STB



LEGEND

- SITE BOUNDARY
- STATE BOUNDARY
- MW-XX**
 MONITORING WELL

- SB-XX**
 SOIL BORING
- S-X**
 INDOOR FLOOR AND TRENCH SOIL SAMPLE
- EXPOSED SOIL LOCATIONS

MAP REFERENCES AND NOTES

THIS MAP WAS PREPARED FROM RIGIS COLOR ORTHO IMAGERY (2014)
 SOURCE: THE RHODE ISLAND GEOGRAPHIC INFORMATION SYSTEM (RIGIS)
 SITE FEATURES ARE APPROXIMATE

SCALE:	
HORZ.:	1" = 100'
VERT.:	
DATUM:	
HORZ.:	
VERT.:	
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

20 PRIVILEGE STREET

WOONSOCKET

RHODE ISLAND


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

FIGURE 2

File Path: J:\DWG\2018\1545\B10\Environmental\Plan20 Privilege Street\20181545.B10_GW Contour.dwg Layout: 08.5X11-P Plotted: Fri, January 15, 2021 - 12:10 PM User: msampson
 Plotter: DWG TO PDF-PC3 CTB File: FO.STB
 LAYER STATE:

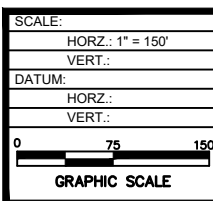


LEGEND

- SITE BOUNDARY
- STATE BOUNDARY
- GROUNDWATER FLOW DIRECTION
- GROUNDWATER ELEVATION EQUIPOTENTIAL CONTOUR
- MW-XX**
 MONITORING WELL
- XX.XX'**

MAP REFERENCES AND NOTES

THIS MAP WAS PREPARED FROM RIGIS COLOR ORTHO IMAGERY (2014)
 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
 20 PRIVILEGE STREET
 WOONSOCKET RHODE ISLAND

PROJ. No.: 20181545.B10
 DATE: FEBRUARY 2021
FIGURE 3

Appendix A

City of Woonsocket Files

20 PRIVILEGE STREET

Location 20 PRIVILEGE STREET

Mblu 20/A / 15/ 11/

Acct# 3001230

Owner C N C INTERNATIONAL

Assessment \$645,900

PID 748

Building Count 2

Current Value

Assessment			
Valuation Year	Improvements	Land	Total
2016	\$441,100	\$204,800	\$645,900

Owner of Record

Owner C N C INTERNATIONAL
Co-Owner LIMITED PARTNERSHIP
Address PO BOX 3000
 WOONSOCKET, RI 02895-0862

Sale Price \$0
Certificate
Book & Page 0723/0175
Sale Date

Ownership History

Ownership History				
Owner	Sale Price	Certificate	Book & Page	Sale Date
C N C INTERNATIONAL	\$0		0723/0175	

Building Information

Building 1 : Section 1

Year Built: 1902
Living Area: 191,686
Replacement Cost: \$7,133,618
Building Percent 5
Good:
Replacement Cost
Less Depreciation: \$356,700

Building Attributes	
Field	Description
STYLE	Mill. Bldg.
MODEL	Ind/Comm
Grade	Average
Stories:	4
Occupancy	4

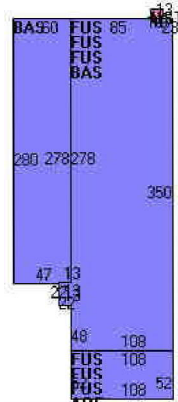
Building Photo

Building Photo

(<http://images.vgsi.com/photos/WoonsocketRIPhotos/\00\00>)

Exterior Wall 1	Brick/Masonry
Exterior Wall 2	
Roof Structure	Flat
Roof Cover	Rolled Compos
Interior Wall 1	Minim/Masonry
Interior Wall 2	
Interior Floor 1	Hardwood
Interior Floor 2	
Heating Fuel	Oil
Heating Type	Steam
AC Type	None
Bldg Use	INDUSTRL M96
Total Rooms	
Total Bedrms	00
Total Baths	0
1st Floor Use:	4000
Heat/AC	NONE
Frame Type	MASONRY
Baths/Plumbing	AVERAGE
Ceiling/Wall	NONE
Rooms/Prtns	AVERAGE
Wall Height	14
% Comn Wall	0

Building Layout



Building Sub-Areas (sq ft)		Legend	
Code	Description	Gross Area	Living Area
FUS	Upper Story, Finished	131,184	131,184
BAS	First Floor	54,886	54,886
AOF	Office, (Average)	5,616	5,616
UBM	Basement, Unfinished	5,616	0
UST	Utility, Storage, Unfinished	130	0
		197,432	191,686

Building 2 : Section 1

Year Built: 1902
Living Area: 29,160
Replacement Cost: \$982,692
Building Percent Good: 5
Replacement Cost Less Depreciation: \$49,100

Building Attributes : Bldg 2 of 2	
Field	Description
STYLE	Mill.Bldg.
MODEL	Ind/Comm
Grade	Average
Stories:	3
Occupancy	1
Exterior Wall 1	Brick/Masonry
Exterior Wall 2	
Roof Structure	Flat
Roof Cover	Tar & Gravel
Interior Wall 1	Minim/Masonry
Interior Wall 2	

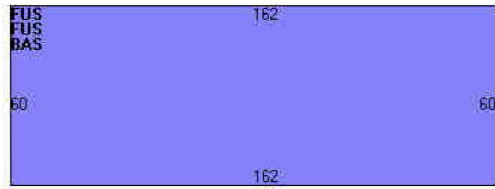
Building Photo



(<http://images.vgsi.com/photos/WoonsocketRIPhotos//default>.)

Building Layout

Interior Floor 1	Hardwood
Interior Floor 2	Concr-Finished
Heating Fuel	Coal or Wood
Heating Type	None
AC Type	None
Bldg Use	INDUSTRL M96
Total Rooms	
Total Bedrms	00
Total Baths	0
1st Floor Use:	4000
Heat/AC	NONE
Frame Type	MASONRY
Baths/Plumbing	AVERAGE
Ceiling/Wall	NONE
Rooms/Prtns	AVERAGE
Wall Height	7
% Comn Wall	0



Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
FUS	Upper Story, Finished	19,440	19,440
BAS	First Floor	9,720	9,720
		29,160	29,160

Extra Features

Extra Features				
Code	Description	Size	Value	Bldg #
SPR1	Sprinklers - Wet	147984 S.F.	\$5,900	1
A/C	Air Conditioning	3744 S.F.	\$400	1
ELV2	Elevator - Freight	4 STOP	\$4,000	1
ELV2	Elevator - Freight	4 STOP	\$4,000	1

Land

Land Use

Use Code 4000
Description INDUSTRL M96
Zone I2
Neighborhood
Alt Land Appr Category No

Land Line Valuation

Size (Acres) 4.09
Frontage 0
Depth 0
Assessed Value \$204,800

Outbuildings

Outbuildings						
Code	Description	Sub Code	Sub Description	Size	Value	Bldg #
PAV1	Paving - Asphalt			70000 S.F.	\$21,000	1
SCL1	Scales - Mechanical			1 TONS	\$0	1

Valuation History

--

Assessment			
Valuation Year	Improvements	Land	Total
2015	\$441,100	\$204,800	\$645,900
2013	\$441,100	\$227,000	\$668,100
2012	\$441,100	\$227,000	\$668,100

(c) 2016 Vision Government Solutions, Inc. All rights reserved.

DEED

HASBRO INDUSTRIES, INC., a Rhode Island corporation, for consideration paid, hereby give, grants, bargains and sells to City of Woonsocket, a municipal corporation of the State of Rhode Island, all its right, title and interest in and to the real estate described in Exhibits "A" and "B" attached hereto and made a part hereof.

IN WITNESS WHEREOF, Hasbro Industries, Inc., has executed and affixed its name and seal, by its proper officer, duly authorized this 31st day of August, A.D., 1983.

HASBRO INDUSTRIES, INC.

By Alfred J. Verrecchia Sr. Vice President/Finance

STATE OF RHODE ISLAND COUNTY OF PROVIDENCE

In Pawtucket, on the 31st day of August, A.D., 1983, before

me personally appeared ALFRED J. VERRECCHIA, Sr. Vice President/Finance of Hasbro Industries, Inc., to me known and known by me to be the party executing the foregoing instrument and he acknowledged said instrument, by him executed, to be his free act and deed in his capacity as aforesaid, and the free act and deed of said corporation.

Notary Public

THE ABOVE DESCRIBED PARCEL CONTAINS 5,606 SQUARE FEET

DJ: [unclear] 7/5/83

Description of Portion of Lot 15 on City of Woonsocket
Tax Assessor's Plat 20, dated January 1983, to be
Deeded to the City of Woonsocket.

Beginning at a point in the westerly street line of Winter Street, Woonsocket, Rhode Island, said point being formed by the intersection of the westerly street line of Winter Street and the northerly street line of Privilege Street;

- Thence (1) turning a clockwise angle of ninety degrees (90°) from the northerly street line of Privilege Street and traveling in a southerly direction along the westerly street line of Winter Street, a distance of two hundred fifty nine and forty five hundredths (259.45') feet to a point;
- Thence (2) turning a counterclockwise angle of one hundred seventy four degrees, forty nine minutes, zero seconds (174°-49'-00") from line (1) and traveling in a southerly direction along the westerly street line of Winter Street, a distance of eighty two and forty seven hundredths (82.47') feet to a point of curvature;
- Thence (3) turning and traveling in a southerly and westerly direction along the arc of a curve to the right having a radius of twenty three and eleven hundredths (23.11') feet along the westerly and northerly street line of Winter Street, a distance of twenty four and seventy three hundredths (24.73') feet to a point;
- Thence (4) turning a clockwise angle of one hundred thirteen degrees, thirty one minutes, zero seconds (113°-31'-00") from the northerly street line of Winter Street and traveling in a northerly direction along the easterly property line of lot 11 on said plat 20, a distance of one hundred twenty seven and twenty four hundredths (127.24') feet to a point;
- Thence (5) turning a counterclockwise angle of one hundred seventy five degrees, seventeen minutes, zero seconds (175°-17'-00") from line (4) and traveling in a northerly direction along the easterly property line of said lot 11, a distance of one hundred and thirty four hundredths (100.34') feet to a point;
- Thence (6) turning a counterclockwise angle of one hundred eighty four degrees, forty three minutes, zero seconds (184°-43'-00") from line (5) and traveling in a northerly direction along the easterly property line of said lot 11, a distance of one hundred thirty three and forty five hundredths (133.45') feet to a point;
- Thence (7) turning a counterclockwise angle of ninety degrees, one minute, zero seconds (90°-01'-00") from line (6) and traveling in an easterly direction, a distance of twelve and ninety hundredths (12.90') feet to the point and place of beginning.

THE ABOVE DESCRIBED PARCEL CONTAINS 5,606 SQUARE FEET OF LAND.

EXHIBIT "B"

BOOK 572 PAGE 046

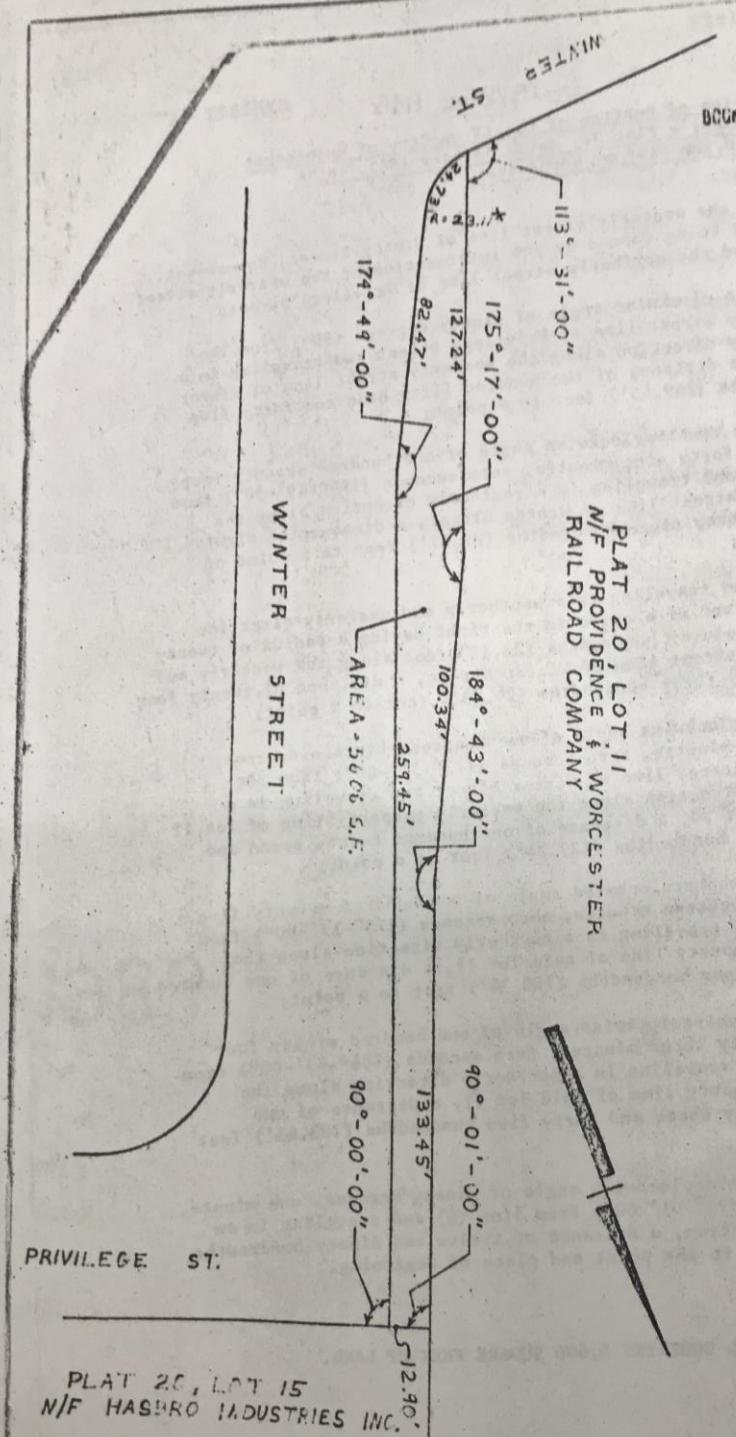
PORTION OF LOT 15 ON PLAT 20
TO BE DEEDED TO THE
CITY OF WOODSCKETT, RHODE ISLAND
ENG. DIV. JULY, 1983
SCALE 1" = 40'

PLAT 20, LOT 11
N/F PROVIDENCE & WORCESTER
RAILROAD COMPANY

WINTER STREET

PRIVILEGE ST.

PLAT 20, LOT 15
N/F HASBRO INDUSTRIES INC.





[Home](#)

[Search](#)

[Print](#)

[Previous](#)

[Next](#)

[Next Card](#)

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

Parcel Identification

Map/Lot 20A-015-011
Account 725
State Code 07
Card 1/2

Assessment

Land \$211,700
Building \$507,300
Card Total \$659,100
Parcel Total \$719,000



Prior Assessments

Fiscal Year	Land Value	Building Value	Outbuilding Value	Total Value
2019	\$211,700	\$433,100	\$74,200	\$719,000
2018	\$211,700	\$433,100	\$74,200	\$719,000
2017	\$204,800	\$420,100	\$21,000	\$645,900
2016	\$204,800	\$420,100	\$21,000	\$645,900

Location and Owner

Location 20 PRIVILEGE STREET
Owner C N C INTERNATIONAL
Owner2 LIMITED PARTNERSHIP
Owner3
Address PO BOX 3000
Address2
Address3 WOONSOCKET RI 02895-0862

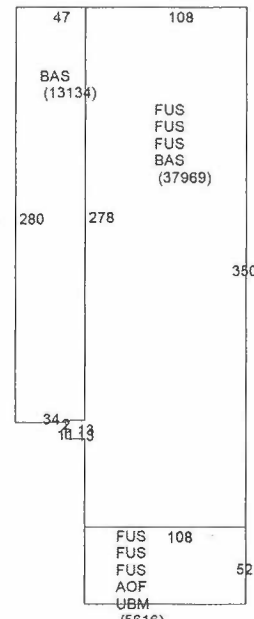
Building Information

Design Mill. Bldg.
Year Built 1902
Heat Hot Air-no D
Fireplaces 0
Rooms 0
Bedrooms 0
Bathrooms 4 Half Bath
Above Grade Living Area 187,474 SF

Sale Information

Sale Date	Sale Price	Legal Reference	Instrument
01/01/1900	\$0	0723-0175	
01/01/1900	\$0	0723-0175	

Map Not Available



Building Sub Areas

Sub Area	Net Area
Basement, Unfinished	5,616 SF
First Floor	51,103 SF
Office, (Average)	5,616 SF
Upper Story, Finished	130,755 SF

Land Information

Land Area 4.093 AC
Zoning I2
View

Neighborhood

CA

Yard Item(s)

Description	Quantity	Size	Year
Paving - Asphalt	1	70000	1995
Elevator - Freight	1	4	1964

Appendix B

Site Photographs

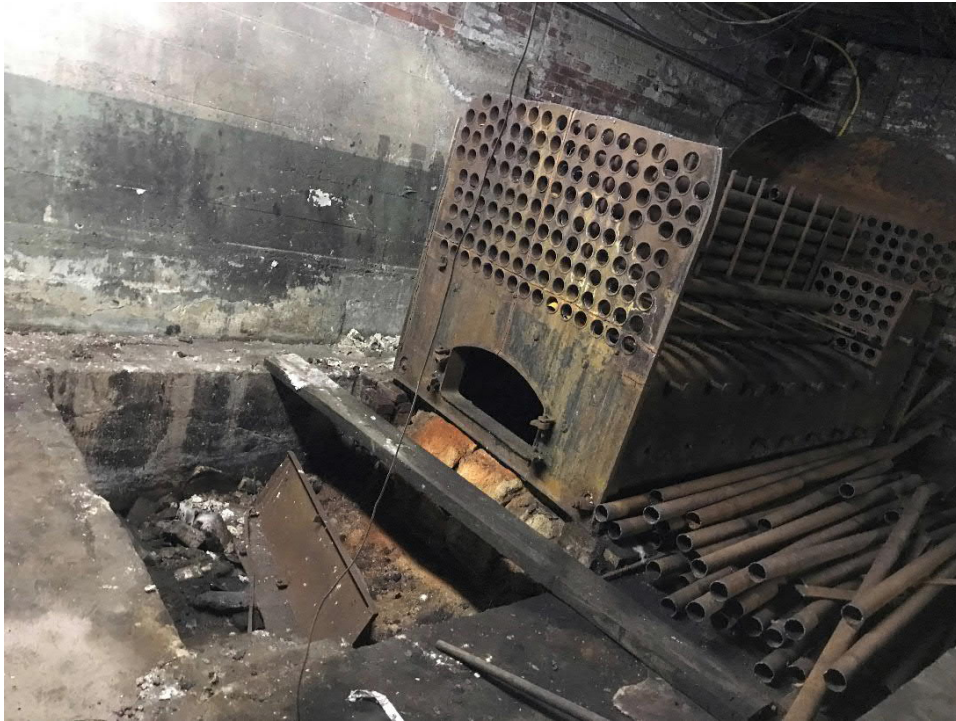


Photo 1: Former furnace located in the basement.

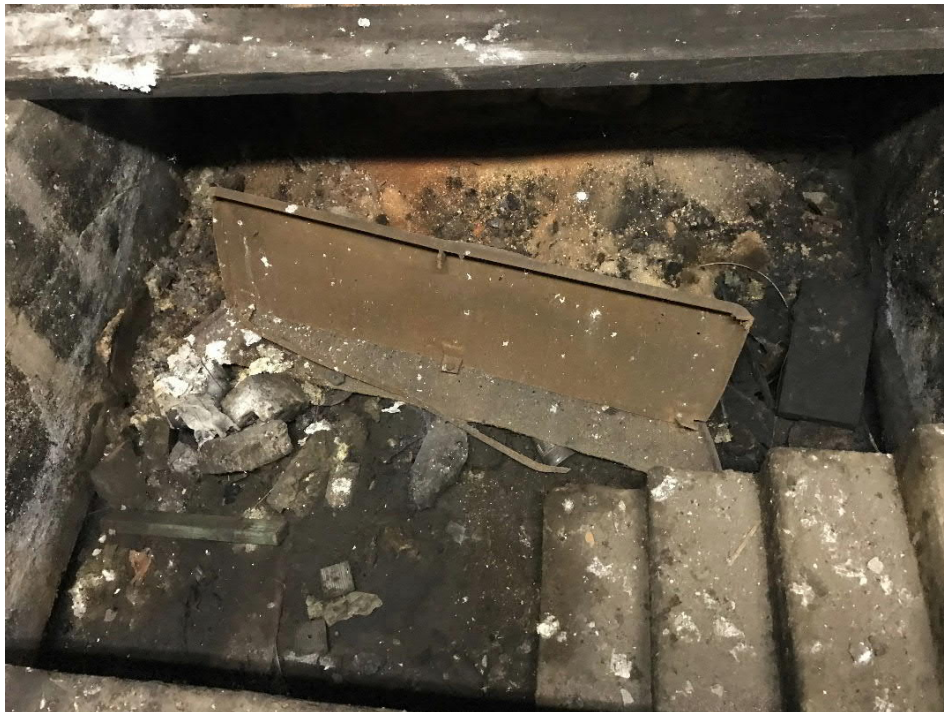


Photo 2: Exposed soil located in front of the former furnace.



Photo 3: Exposed soil located on the western portion of the basement.



Photo 4: Exposed soil located in the first floor machine shop.



Photo 5: Exposed soil located in the first floor machine shop.

Appendix C

Hazardous Building Materials Report

Limited Hazardous Building Materials Inspection Report

20 Privilege Street
Woonsocket, Rhode Island

City of Woonsocket
Woonsocket, Rhode Island

December 2020



FUSS & O'NEILL

Fuss & O'Neill, Inc.

317 Iron Horse Way, Suite 204

Providence, RI 02908



FUSS & O'NEILL

December 22, 2020

Scott A. Gibbs
City of Woonsocket
169 Main Street
Woonsocket, RI 02895

**RE: Limited Hazardous Building Materials Inspection
20 Privilege Street, Woonsocket, RI**

Dear Mr. Gibbs:

Enclosed is the limited hazardous building materials inspection summary report for the inspection conducted at 20 Privilege Street in Woonsocket, Rhode Island.

On October 16 and 17, 2020, 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 as part of a feasibility study.

The information summarized in this report is solely for the abovementioned materials only. The work was performed in accordance with our written scope of services dated June 3, 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 4703. Thank you for this opportunity to have served your environmental needs.

Sincerely,

Dustin A. Diedricksen
Associate/Department Manager

DD/rs

Enclosure

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

www.fando.com

California
Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

Table of Contents

Limited Hazardous Building Materials Inspection Report 20 Privilege Street City of Woonsocket

1	Introduction	1
1.1	Scope of Work.....	1
2	Limited Asbestos Inspection	1
2.1	Methodology	1
2.2	Results	3
2.3	Conclusions & Recommendations.....	3
3	Lead-Based Paint Screening.....	4
3.1	Methodology	4
3.2	XRF Screening Results.....	4
3.3	Discussion	5
3.4	Conclusions & Recommendations.....	5
4	Fluorescent Light Ballasts & Mercury-Containing Equipment	5
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 CERTIFICATION & EPA ACCREDITATION
APPENDIX C	ASBESTOS LABORATORY ANALYTICAL REPORT & CHAIN-OF- CUSTODY FORM
APPENDIX D	XRF LEAD-BASED PAINT SCREENING FIELD DATA SHEETS

1 Introduction

On October 16 and 17, 2020, Fuss & O'Neill, Inc. (Fuss & O'Neill) representative, Mr. Robert Mallett, performed a limited hazardous building materials inspection prior to proposed renovation activities to occur at 20 Privilege 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 August, 2020.

1.1 Scope of Work

The work was performed for City of Woonsocket (the "Client") in accordance with our written scope of services dated June 3, 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.

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.

On October 16 and 17, 2020, Mr. Mallett of 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.
3. 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). None of the collected NOB samples were analyzed for 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 report 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 renovation 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 renovation activities that are not identified in this report as being non-ACM, they shall be assumed to be ACM until laboratory analysis indicates otherwise.

If ACM are to remain at the Site following renovation/demolition activities, Fuss & O'Neill recommends the development of a written Operations and Maintenance Program (to manage ACM in place) in accordance with OSHA regulations.

This report is not intended to be utilized as a bidding or a project specification document. This report is designed to aid the building owner, architect, construction manager, general contractor(s), and asbestos abatement contractor(s) in locating ACM.

3 Lead-Based Paint Screening

On October 16 and 17, 2020, Mr. Mallett of Fuss & O'Neill performed a LBP screening associated with painted building components at the Site that may be disturbed during renovation 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/cm²) of surface area is considered toxic or dangerous by EPA and RIDOH. For the purpose of this screening, the level of 1.0 mg/cm² 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 may be impacted by potential renovation activities. Refer to *Appendix D* for the complete list of building components determined to contain levels of lead ≥ 1.0 mg/cm².

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/renovation activities. The results of this screening are also intended to provide insight into waste disposal requirements, in accordance with EPA RCRA regulations. Anticipated waste streams to be generated from any proposed specific building renovation or demolition projects should undergo further sampling and analysis for lead using the Toxicity Characterization Leaching Procedure (TCLP) to adequately characterize the waste stream for disposal planning purposes.

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 renovation and/or demolition activities that will impact LBP.

If disturbed by renovation 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 October 16 and 17, 2020, Mr. Mallett of Fuss & O'Neill performed a visual inspection of representative fluorescent light fixtures to identify possible PCB-containing ballasts at the Site. 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, 1,234 DEHP-containing fluorescent light ballasts, 138 four-foot and 548 eight-foot mercury-containing light tubes were identified at the Site.

4.4 Conclusions & Recommendations

DEHP-containing fluorescent light ballasts and mercury-containing equipment were identified at the Site 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 in the proposed renovation areas must be recycled, reclaimed, or disposed as hazardous waste or Universal Waste prior to disturbance.

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

20 Privilege Street
Woonsocket, Rhode Island

City of Woonsocket
 December 2020
 Fuss & O'Neill Reference No. 20181545.B10

Sample Number	Material Type	NESHAP Category	Sample Location	Result
01A-RCM-1016	12" x 12" Tan/Brown Mottled Floor Tile	Non-ACM	Main Lobby	ND
01B-RCM-1016	12" x 12" Tan/Brown Mottled Floor Tile	Non-ACM	Lobby Corridor	ND
02A-RCM-1016	Black Mastic Associated with 12" x 12" Tan/Brown Mottled Floor Tile	Cat 1 NF	Main Lobby	5% Chrysotile
02B-RCM-1016	Black Mastic Associated with 12" x 12" Tan/Brown Mottled Floor Tile	Cat 1 NF	Lobby Corridor	Pos Stop
03A-RCM-1016	12" x 12" Gray Floor Tile	Cat 1 NF	Beneath Carpet in Conference Room	5% Chrysotile
03B-RCM-1016	12" x 12" Gray Floor Tile	Cat 1 NF	Beneath Carpet in Conference Room	Pos Stop
04A-RCM-1016	Yellow Mastic Associated with 12" x 12" Gray Floor Tile	Non-ACM	Beneath Carpet in Conference Room	ND
04B-RCM-1016	Yellow Mastic Associated with 12" x 12" Gray Floor Tile	Non-ACM	Beneath Carpet in Conference Room	ND
05A-RCM-1016	Dark Yellow Carpet Adhesive	Non-ACM	Conference Room	ND
05B-RCM-1016	Dark Yellow Carpet Adhesive	Non-ACM	Room Across From Conference Room	ND
06A-RCM-1016	12" x 12" Tan with Multi-Color Splotch Floor Tile	Cat 1 NF	Break Room	5% Chrysotile
06B-RCM-1016	12" x 12" Tan with Multi-Color Splotch Floor Tile	Cat 1 NF	Break Room Storage	Pos Stop
07A-RCM-1016	Brown Mastic Associated with 12" x 12" Tan with Multi-Color Splotch Floor Tile	Non-ACM	Break Room	ND
07B-RCM-1016	Brown Mastic Associated with 12" x 12" Tan with Multi-Color Splotch Floor Tile	Non-ACM	Break Room Storage	ND
08A-RCM-1016	2' x 4' White Fissure & Dot Suspended Ceiling Tile	Non-ACM	Kitchen	ND
08B-RCM-1016	2' x 4' White Fissure & Dot Suspended Ceiling Tile	Non-ACM	Break Room Storage	ND
09A-RCM-1016	White Joint Compound	Non-ACM	Rooms Across from Conference Room	ND
09B-RCM-1016	White Joint Compound	Non-ACM	Rooms Across from Conference Room	ND
10A-RCM-1016	Gray Gypsum Wallboard	Non-ACM	Rooms Across from Conference Room	ND
10B-RCM-1016	Gray Gypsum Wallboard	Non-ACM	Rooms Across from Conference Room	ND
11A-RCM-1016	12" x 12" Gray Mottled Floor Tile	Non-ACM	Lab Space	ND
11B-RCM-1016	12" x 12" Gray Mottled Floor Tile	Non-ACM	Lab Space	ND
12A-RCM-1016	Black Mastic Associated with 12" x 12" Gray Mottled Floor Tile	Non-ACM	Lab Space	ND
12B-RCM-1016	Black Mastic Associated with 12" x 12" Gray Mottled Floor Tile	Non-ACM	Lab Space	ND
13A-RCM-1016	Brown Lab Countertop Laminate Adhesive	Non-ACM	Lab Space	ND

Table 1
Suspect Asbestos-Containing Materials Laboratory Analytical Data Summary

Sample Number	Material Type	NESHAP Category	Sample Location	Result
13B-RCM-1016	Brown Lab Countertop Laminate Adhesive	Non-ACM	Lab Space	ND
14A-RCM-1016	4" Black Vinyl Baseboard	Non-ACM	Lab Space	ND
14B-RCM-1016	4" Black Vinyl Baseboard	Non-ACM	Lab Space	ND
15A-RCM-1016	Yellow Adhesive Associated with 4" Black Vinyl Baseboard	Non-ACM	Lab Space	ND
15B-RCM-1016	Yellow Adhesive Associated with 4" Black Vinyl Baseboard	Non-ACM	Lab Space	ND
16A-RCM-1016	White Joint Compound	Non-ACM	Lab Space	ND
16B-RCM-1016	White Joint Compound	Non-ACM	Lab Space	ND
17-RCM-1016	Black Composite Lab Countertop	Cat 2 NF	Rear Lab Space	18% Chrysotile
18-RCM-1016	Black Fume Hood Countertop	Cat 2 NF	Rear Lab Space	10% Chrysotile
19-RCM-1016	White Fume Hood Panel	Cat 2 NF	Rear Lab Space	15% Chrysotile
20A-RCM-1016	12" x 12" Tan with Splotch Floor Tile	Cat 1 NF	Lab Sales Office	3% Chrysotile
20B-RCM-1016	12" x 12" Tan with Splotch Floor Tile	Cat 1 NF	Lab Sales Office	Pos Stop
21A-RCM-1016	Brown Mastic Associated with 12" x 12" Tan with Splotch Floor Tile	Non-ACM	Lab Sales Office	ND
21B-RCM-1016	Brown Mastic Associated with 12" x 12" Tan with Splotch Floor Tile	Non-ACM	Lab Sales Office	ND
22A-RCM-1016	12" x 12" Tan Mottled Floor Tile	Non-ACM	Left Lab Sales Office	ND
22B-RCM-1016	12" x 12" Tan Mottled Floor Tile	Non-ACM	Left Lab Sales Office	ND
23A-RCM-1016	Brown Adhesive Associated with 12" x 12" Tan Mottled Floor Tile	Non-ACM	Left Lab Sales Office	ND
23B-RCM-1016	Brown Adhesive Associated with 12" x 12" Tan Mottled Floor Tile	Non-ACM	Left Lab Sales Office	ND
24A-RCM-1016	Yellow Carpet Adhesive	Non-ACM	Executive Offices	ND
24B-RCM-1016	Yellow Carpet Adhesive	Non-ACM	Executive Offices	ND
25A-RCM-1016	Brown Flooring Beneath Carpet	Non-ACM	Executive Offices (Far Back Office)	ND
25B-RCM-1016	Brown Flooring Beneath Carpet	Non-ACM	Executive Offices (Far Back Office)	ND
26A-RCM-1016	Black Mastic Associated with Brown Flooring Beneath Carpet	Non-ACM	Executive Offices (Far Back Office)	ND
26B-RCM-1016	Black Mastic Associated with Brown Flooring Beneath Carpet	Non-ACM	Executive Offices (Far Back Office)	ND
27A-RCM-1016	White Skim Coat Plaster	Non-ACM	Executive Offices	ND
27B-RCM-1016	White Skim Coat Plaster	Non-ACM	Executive Offices	ND
27C-RCM-1016	White Skim Coat Plaster	Non-ACM	Executive Offices	ND
27D-RCM-1016	White Skim Coat Plaster	Non-ACM	Executive Offices	ND
27E-RCM-1016	White Skim Coat Plaster	Non-ACM	Executive Offices	ND

Table 1
Suspect Asbestos-Containing Materials Laboratory Analytical Data Summary

Sample Number	Material Type	NESHAP Category	Sample Location	Result
27F-RCM-1016	White Skim Coat Plaster	Non-ACM	Executive Offices	ND
27G-RCM-1016	White Skim Coat Plaster	Non-ACM	Executive Offices	ND
28A-RCM-1016	Gray Rough Coat Plaster	Non-ACM	Executive Offices	ND
28B-RCM-1016	Gray Rough Coat Plaster	Non-ACM	Executive Offices	ND
28C-RCM-1016	Gray Rough Coat Plaster	Non-ACM	Executive Offices	ND
28D-RCM-1016	Gray Rough Coat Plaster	Non-ACM	Executive Offices	ND
28E-RCM-1016	Gray Rough Coat Plaster	Non-ACM	Executive Offices	ND
28F-RCM-1016	Gray Rough Coat Plaster	Non-ACM	Executive Offices	ND
28G-RCM-1016	Gray Rough Coat Plaster	Non-ACM	Executive Offices	ND
29A-RCM-1016	Brown Boiler Gasket	Cat 1 NF	Warehouse Boiler Room	10% Chrysotile
29B-RCM-1016	Brown Boiler Gasket	Cat 1 NF	Warehouse Boiler Room	Pos Stop
30A-RCM-1016	12" x 12" Tan Mottled Floor Tile	Cat 1 NF	Warehouse Office	5% Chrysotile
30B-RCM-1016	12" x 12" Tan Mottled Floor Tile	Cat 1 NF	Warehouse Office	Pos Stop
31A-RCM-1016	Brown Mastic Associated with 12" x 12" Tan Mottled Floor Tile	Non-ACM	Warehouse Office	ND
31B-RCM-1016	Brown Mastic Associated with 12" x 12" Tan Mottled Floor Tile	Non-ACM	Warehouse Office	ND
32A-RCM-1016	2' x 4' White Suspended Ceiling Tile	Non-ACM	Warehouse Office	ND
32B-RCM-1016	2' x 4' White Suspended Ceiling Tile	Non-ACM	Warehouse Office	ND
33A-RCM-1016	12" x 12" Tan Floor Tile	Cat 1 NF	Warehouse Chemical Storage Shelf Area	5% Chrysotile
33B-RCM-1016	12" x 12" Tan Floor Tile	Cat 1 NF	Machinist Room	Pos Stop
34A-RCM-1016	Black Mastic Associated with 12" x 12" Tan Floor Tile	Non-ACM	Warehouse Chemical Storage Shelf Area	ND
34B-RCM-1016	Black Mastic Associated with 12" x 12" Tan Floor Tile	Non-ACM	Machinist Room	ND
35A-RCM-1016	Brown Floor Paper	Non-ACM	2nd Floor	ND
35B-RCM-1016	Brown Floor Paper	Non-ACM	3rd Floor	ND
36A-RCM-1016	Gray Floor Paper	Non-ACM	2nd Floor	ND
36B-RCM-1016	Gray Floor Paper	Non-ACM	3rd Floor	ND
37A-RCM-1016	Gray Stair Tread & Landing Adhesive	Non-ACM	Front Stairs	ND
37A1-RCM-1016	Gray Stair Tread & Landing Adhesive	Non-ACM	Rear Stairs	ND
37B1-RCM-1016	Stair Tread & Landing Flooring	Non-ACM	Front Stairs	ND
37B-RCM-1016	Stair Tread & Landing Flooring	Not Analyzed	Rear Stairs	Not Analyzed

Table 1
Suspect Asbestos-Containing Materials Laboratory Analytical Data Summary

Sample Number	Material Type	NESHAP Category	Sample Location	Result
38A-RCM-1016	12" x 12" Tan Floor Tile	Cat 1 NF	2nd Floor Bathroom	5% Chrysotile
38B-RCM-1016	12" x 12" Tan Floor Tile	Cat 1 NF	2nd Floor Bathroom	Pos Stop
39A-RCM-1016	Black Mastic Associated with 12" x 12" Tan Floor Tile	Cat 1 NF	2nd Floor Bathroom	3% Chrysotile
39B-RCM-1016	Black Mastic Associated with 12" x 12" Tan Floor Tile	Cat 1 NF	2nd Floor Bathroom	Pos Stop
40A-RCM-1016	4" Black Vinyl Baseboard	Non-ACM	2nd Floor Bathroom	ND
40B-RCM-1016	4" Black Vinyl Baseboard	Non-ACM	2nd Floor Bathroom	ND
41A-RCM-1016	Brown Adhesive Associated with 4" Black Vinyl Baseboard	Non-ACM	2nd Floor Bathroom	ND
41B-RCM-1016	Brown Adhesive Associated with 4" Black Vinyl Baseboard	Non-ACM	2nd Floor Bathroom	ND
42A-RCM-1016	Yellow Adhesive Associated with Masonite	Non-ACM	2nd Floor Bathroom	ND
42B-RCM-1016	Yellow Adhesive Associated with Masonite	Non-ACM	2nd Floor Bathroom	ND
43A-RCM-1016	12" x 12" Light Brown Floor Tile	Cat 1 NF	3rd Floor Bathroom	5% Chrysotile
43B-RCM-1016	12" x 12" Light Brown Floor Tile	Cat 1 NF	3rd Floor Bathroom	Pos Stop
44A-RCM-1016	Black Mastic Associated with 12" x 12" Light Brown Floor Tile	Not Analyzed	3rd Floor Bathroom	Not Analyzed
44B-RCM-1016	Black Mastic Associated with 12" x 12" Light Brown Floor Tile	Not Analyzed	3rd Floor Bathroom	Not Analyzed
45A-RCM-1016	White Glazing Compound	Non-ACM	Exterior Windows	ND
45B-RCM-1016	White Glazing Compound	Non-ACM	Exterior Windows	ND
46A-RCM-1016	White Door Lite Glazing Compound	Cat 2 NF	Women's Bathroom Doors	3% Chrysotile
46B-RCM-1016	White Door Lite Glazing Compound	Cat 2 NF	Women's Bathroom Doors	Pos Stop
47A-RCM-1016	Black Glue on Masonite	Cat 2 NF	3rd Floor Bathrooms	3% Chrysotile
47B-RCM-1016	Black Glue on Masonite	Cat 2 NF	3rd Floor Bathrooms	Pos Stop
48A-RCM-1016	Brown Adhesive Associated with 4" Baseboard	Non-ACM	3rd Floor Bathrooms	ND
48B-RCM-1016	Brown Adhesive Associated with 4" Baseboard	Non-ACM	3rd Floor Bathrooms	ND
49A-RCM-1016	12" x 12" Brown with Streak Floor Tile	Cat 1 NF	4th Floor Flammable Room	2% Chrysotile
49B-RCM-1016	12" x 12" Brown with Streak Floor Tile	Cat 1 NF	4th Floor Flammable Room	Pos Stop
50A-RCM-1016	Tan Adhesive Associated with 12" x 12" Brown with Streak Floor Tile	Non-ACM	4th Floor Flammable Room	ND
50B-RCM-1016	Tan Adhesive Associated with 12" x 12" Brown with Streak Floor Tile	Non-ACM	4th Floor Flammable Room	ND
51A-RCM-1016	Tan/Gray Glue on Masonite	Cat 2 NF	4th Floor Women's Room	3% Chrysotile
51B-RCM-1016	Tan/Gray Glue on Masonite	Cat 2 NF	4th Floor Men's Room	Pos Stop
52A-RCM-1016	Gray Exterior Window Caulking	Cat 2 NF	Exterior Windows	5% Chrysotile

Table 1
Suspect Asbestos-Containing Materials Laboratory Analytical Data Summary

Sample Number	Material Type	NESHAP Category	Sample Location	Result
52B-RCM-1016	Gray Exterior Window Caulking	Cat 2 NF	Exterior Windows	Pos Stop
53A-RCM-1016	Black Built-Up Roofing - Felt	Non-ACM	Main Roof	ND
53B-RCM-1016	Black Built-Up Roofing - Felt	Non-ACM	Lower Roof	ND
54A-RCM-1016	Black Built-Up Roofing - Tar	Non-ACM	Main Roof	ND
54B-RCM-1016	Black Built-Up Roofing - Tar	Non-ACM	Lower Roof	ND
55A-RCM-1016	Black Built-Up Roofing Base Sheet	Non-ACM	Main Roof	ND
55B-RCM-1016	Black Built-Up Roofing Base Sheet	Non-ACM	Lower Roof	ND
56-RCM-1016	White Boiler Insulation Debris	Friable	Basement	10% Chrysotile
57-RCM-1016	Black Pipe Gasket Associated with Disassembled Pipe	Cat 1 NF	Basement	30% Chrysotile
58A-RCM-1016	Black Built-Up Roofing - Felt	Non-ACM	Exterior Shed	ND
58B-RCM-1016	Black Built-Up Roofing - Felt	Non-ACM	Exterior Shed	ND
59A-RCM-1016	Black Built-Up Roofing - Asphalt	Cat 1 NF	Exterior Shed	5% Chrysotile
59B-RCM-1016	Black Built-Up Roofing - Asphalt	Cat 1 NF	Exterior Shed	Pos Stop
60A-RCM-1016	Red Floor Paper	Non-ACM	3-Story Building	ND
60B-RCM-1016	Red Floor Paper	Non-ACM	3-Story Building	ND
61A-RCM-1016	White Glazing Compound	Non-ACM	3-Story Building, Exterior Windows	ND
61B-RCM-1016	White Glazing Compound	Non-ACM	3-Story Building, Exterior Windows	ND
62A-RCM-1016	Gray Exterior Window Caulking	Cat 2 NF	3-Story Building, Exterior Windows	5% Chrysotile
62B-RCM-1016	Gray Exterior Window Caulking	Cat 2 NF	3-Story Building, Exterior Windows	Pos Stop

Pos Stop = Positive Stop

Cat 1 NF = Category I Non-Friable

Cat 2 NF = Category II Non-Friable

ND = None Detected

ACM = Asbestos-Containing Material

Table 2
Asbestos-Containing Materials Summary

20 Privilege Street
Woonsocket, Rhode Island

City of Woonsocket
December 2020
Fuss & O'Neill Reference No. 20181545.B10

Asbestos-Containing Material Type	Locations(s)	Asbestos Content	Estimated Total Quantity
Black Mastic Associated with 12" by 12" Tan/Brown Mottled Floor Tile	Main Lobby	5% Chrysotile	500 SF
12" x 12" Gray Floor Tile	Beneath Carpet in Conference Rooms/Offices across from Conference Room	5% Chrysotile	750 SF
12" x 12" Tan with Multi-Color Splotch Floor Tile	Break Room, Kitchen, & Breakroom Storage	5% Chrysotile	300 SF
12" x 12" Tan with Splotch Floor Tile	Lab Sales Offices	3% Chrysotile	500 SF
12" x 12" Tan Mottled Floor Tile	Warehouse Office	5% Chrysotile	500 SF
12" x 12" Tan Floor Tile	Warehouse Chemical Storage Shelf Area & Machinist Room	5% Chrysotile	150 SF
12" x 12" Brown with Streak Floor Tile	4th Floor Flammable Room	2% Chrysotile	50 SF
12" x 12" Tan Floor Tile	2nd, 3rd, & 4th Floor Bathrooms	5% Chrysotile	750 SF
Black Mastic Associated with 12" x 12" Tan Floor Tile		3% Chrysotile	
12" x 12" Light Brown Floor Tile		5% Chrysotile	
Black Composite Lab Countertop	Rear Lab Space	18% Chrysotile	25 SF
Black Fume Hood Countertop	Rear Lab Space	10% Chrysotile	1 EA
White Fume Hood Panel	Rear Lab Space	15% Chrysotile	
Brown Boiler Gasket	Warehouse Boiler Room	10% Chrysotile	3 EA
White Door Lite Glazing Compound	2nd, 3rd, & 4th Floor Bathroom Doors	3% Chrysotile	6 EA
Black Glue on Masonite	2nd, 3rd, & 4th Floor Bathrooms	3% Chrysotile	2,250 SF
Tan/Gray Glue on Masonite		3% Chrysotile	
Gray Exterior Window Caulking	Exterior Windows	5% Chrysotile	330 EA
White Boiler Insulation Debris	Basement	10% Chrysotile	5 CY
Black Pipe Gasket Associated with Disassembled Pipe	Basement	30% Chrysotile	15 EA
Black Built-Up Roofing - Asphalt	Exterior Shed	5% Chrysotile	50 SF
Gray Exterior Window Caulking	3-Story Building, Exterior Windows	5% Chrysotile	90 EA
Roofing Materials	3-Story Building	Assumed ACM	10,250 SF

Appendix A

Limitations

APPENDIX A

20 Privilege 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 (June 3, 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 MALLETT
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
Sr. Community Program Liaison Worker
Healthy Homes and Environment

Appendix C

Asbestos Laboratory Analytical Report & Chain-of-Custody Form



108 Myrtle Street, Suite 502, Quincy, MA 02171

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

Asbestos Bulk Sample Chain-of-Custody FormSheet 1 of 1Project Name: 20 Privilege Street Project No.: 20181545.B10 Task: 3, 110Building Name/Number: 20 Privilege Street Project Manager: DowningSite Address: 20 Privilege Street, Woonsocket, RI Total # of Samples: 131

Sample ID (#-Initials-Date)	Material Type (Size, Color, Description, Material)	Sample Location	Comments/ Quantities
01A-RCM-1016	12" x 12" Tan/Brown Mottled Floor Tile	Main Lobby	
01B-RCM-1016	12" x 12" Tan/Brown Mottled Floor Tile	Lobby Corridor	
02A-RCM-1016	Black Mastic Associated with 01A	Main Lobby	
02B-RCM-1016	Black Mastic Associated with 01B	Lobby Corridor	
03A-RCM-1016	12" x 12" Gray Floor Tile	Beneath Carpet in Conference Room	
03B-RCM-1016	12" x 12" Gray Floor Tile	Beneath Carpet in Conference Room	
04A-RCM-1016	Yellow Mastic Associated with 03	Beneath Carpet in Conference Room	
04B-RCM-1016	Yellow Mastic Associated with 03	Beneath Carpet in Conference Room	
05A-RCM-1016	Dark Yellow Carpet Adhesive	Conference Room	
05B-RCM-1016	Dark Yellow Carpet Adhesive	Room across from Conference Room	
06A-RCM-1016	12" x 12" Tan with Multi-Color Splotch	Break Room	
06B-RCM-1016	12" x 12" Tan with Multi-Color Splotch	Break Room Storage	
07A-RCM-1016	Brown Mastic Associated with 06	Break Room	
07B-RCM-1016	Brown Mastic Associated with 06	Break Room Storage	
08A-RCM-1016	2' x 4' White Fissure & Dot Suspended Ceiling Tile	Kitchen	
08B-RCM-1016	2' x 4' White Fissure & Dot Suspended Ceiling Tile	Break Room Storage	
09A-RCM-1016	White Joint Compound	Rooms across from Conference Room	
09B-RCM-1016	White Joint Compound	Rooms across from Conference Room	
10A-RCM-1016	Gray Gypsum Wallboard	Rooms across from Conference Room	
10B-RCM-1016	Gray Gypsum Wallboard	Rooms across from Conference Room	
11A-RCM-1016	12" x 12" Gray Mottled Floor Tile	Lab Space	
11B-RCM-1016	12" x 12" Gray Mottled Floor Tile	Lab Space	
12A-RCM-1016	Black Mastic Associated with 11	Lab Space	
12B-RCM-1016	Black Mastic Associated with 11	Lab Space	

REC'D MC 830
EMSL-BOSTON OCT 19 2020


EFX: 7958 5258 4656



108 Myrtle Street, Suite 502, Quincy, MA 02171

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

13A-RCM-1016	Brown Lab Counter Top Laminate Adhesive	Lab Space	
13B-RCM-1016	Brown Lab Counter Top Laminate Adhesive	Lab Space	
14A-RCM-1016	4" Black Vinyl Baseboard	Lab Space	
14B-RCM-1016	4" Black Vinyl Baseboard	Lab Space	
15A-RCM-1016	Yellow Adhesive associated with 14	Lab Space	
15B-RCM-1016	Yellow Adhesive associated with 14	Lab Space	
16A-RCM-1016	White Joint Compound	Lab Space	
16B-RCM-1016	White Joint Compound	Lab Space	
17-RCM-1016	Black Composite Lab Counter Top	Rear Lab Space	1 EA
18-RCM-1016	Black Fume Hood Counter Top	Rear Lab Space	
19-RCM-1016	White Fume Hood Panel	Rear Lab Space	
20A-RCM-1016	12" x 12" Tan with Splotch Floor Tile	Lab Sales Office	
20B-RCM-1016	12" x 12" Tan with Splotch Floor Tile	Lab Sales Office	
21A-RCM-1016	Brown Mastic associated with 20	Lab Sales Office	
21B-RCM-1016	Brown Mastic associated with 20	Lab Sales Office	
22A-RCM-1016	12" x 12" Tan Mottled Floor Tile	Left Lab Sales Office	
22B-RCM-1016	12" x 12" Tan Mottled Floor Tile	Left Lab Sales Office	
23A-RCM-1016	Brown Adhesive Associated with 22	Left Lab Sales Office	
23B-RCM-1016	Brown Adhesive Associated with 22	Left Lab Sales Office	
24A-RCM-1016	Yellow Carpet Adhesive	Executive Offices	
24B-RCM-1016	Yellow Carpet Adhesive	Executive Offices	
25A-RCM-1016	Brown Flooring beneath Carpet	Executive Offices (far back office)	
25B-RCM-1016	Brown Flooring beneath Carpet	Executive Offices (far back office)	
26A-RCM-1016	Black Mastic associated with 25	Executive Offices (far back office)	
26B-RCM-1016	Black Mastic associated with 25	Executive Offices (far back office)	
27A-RCM-1016	White Skim Coat Plaster	Executive Offices	
27B-RCM-1016	White Skim Coat Plaster	Executive Offices	
27C-RCM-1016	White Skim Coat Plaster	Executive Offices	
27D-RCM-1016	White Skim Coat Plaster	Executive Offices	

REC'D 
EMSL-BOSTON OCT 19 2020



108 Myrtle Street, Suite 502, Quincy, MA 02171

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

27E-RCM-1016	White Skim Coat Plaster	Executive Offices	
27F-RCM-1016	White Skim Coat Plaster	Executive Offices	
27G-RCM-1016	White Skim Coat Plaster	Executive Offices	
28A-RCM-1016	White Skim Coat Plaster	Executive Offices	
28B-RCM-1016	Gray Rough Coat Plaster	Executive Offices	
28C-RCM-1016	Gray Rough Coat Plaster	Executive Offices	
28D-RCM-1016	Gray Rough Coat Plaster	Executive Offices	
28E-RCM-1016	Gray Rough Coat Plaster	Executive Offices	
28F-RCM-1016	Gray Rough Coat Plaster	Executive Offices	
28G-RCM-1016	Gray Rough Coat Plaster	Executive Offices	
29A-RCM-1016	Brown Boiler Gasket	Warehouse Boiler Room	
29B-RCM-1016	Brown Boiler Gasket	Warehouse Boiler Room	
30A-RCM-1016	12" x 12" Tan Mottled Floor Tile	Warehouse Office	
30B-RCM-1016	12" x 12" Tan Mottled Floor Tile	Warehouse Office	
31A-RCM-1016	Brown Mastic associated with 30	Warehouse Office	
31B-RCM-1016	Brown Mastic associated with 30	Warehouse Office	
32A-RCM-1016	2' x 4' White Suspended Ceiling Tile	Warehouse Office	
32B-RCM-1016	2' x 4' White Suspended Ceiling Tile	Warehouse Office	
33A-RCM-1016	12" x 12" Tan Floor Tile	Warehouse Chemical Storage Shelf Area	
33B-RCM-1016	12" x 12" Tan Floor Tile	Machinist Room	
34A-RCM-1016	Black Mastic Associated with 33	Warehouse Chemical Storage Shelf Area	
34B-RCM-1016	Black Mastic Associated with 33	Machinist Room	
35A-RCM-1016	Brown Floor Paper	2 nd Floor	
35B-RCM-1016	Brown Floor Paper	3 rd Floor	
36A-RCM-1016	Gray Floor Paper	2 nd Floor	
36B-RCM-1016	Gray Floor Paper	3 rd Floor	
37A-RCM-1016	Gray Stair Tread & Landing Adhesive	Front Stairs	
37A1-RCM-1016	Gray Stair Tread & Landing Adhesive	Rear Stairs	
37B1-RCM-1016	Stair Tread & Landing Flooring	Front Stairs	

REC'D MC

EMSL-BOSTON OCT 19 2020



108 Myrtle Street, Suite 502, Quincy, MA 02171

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

37B-RCM-1016	Stair Tread & Landing Flooring	Rear Stairs	
38A-RCM-1016	12" x 12" Tan Floor Tile	2nd Floor Bathroom	
38B-RCM-1016	12" x 12" Tan Floor Tile	2nd Floor Bathroom	
39A-RCM-1016	Black Mastic associated with 38A	2nd Floor Bathroom	
39B-RCM-1016	Black Mastic associated with 38B	2nd Floor Bathroom	
40A-RCM-1016	4" Black Vinyl Baseboard	2nd Floor Bathroom	
40B-RCM-1016	4" Black Vinyl Baseboard	2nd Floor Bathroom	
41A-RCM-1016	Brown Adhesive Assocaited with 40	2nd Floor Bathroom	
41B-RCM-1016	Brown Adhesive Assocaited with 40	2nd Floor Bathroom	
42A-RCM-1016	Yellow Adhesive Associated with Masonite	2nd Floor Bathroom	
42B-RCM-1016	Yellow Adhesive Associated with Masonite	2nd Floor Bathroom	
43A-RCM-1016	12" x 12" Light Brown Floor Tile		
43B-RCM-1016	12" x 12" Light Brown Floor Tile		
44A-RCM-1016	Black Mastic Associated with 43		
44B-RCM-1016	Black Mastic Associated with 43		
45A-RCM-1016	White Window Glazing Compound	Exterior Windows	
45B-RCM-1016	White Window Glazing Compound	Exterior Windows	
46A-RCM-1016	White Door Lite Glazing Compound	Women's Bathroom Doors	
46B-RCM-1016	White Door Lite Glazing Compound	Women's Bathroom Doors	
47A-RCM-1016	Black Glue on Masonite	3rd Floor Bathrooms	
47B-RCM-1016	Black Glue on Masonite	3rd Floor Bathrooms	
48A-RCM-1016	Brown Adhesive Assocaited with 4" Vinyl Baseboard	3rd Floor Bathrooms	
48B-RCM-1016	Brown Adhesive Assocaited with 4" Vinyl Baseboard	3rd Floor Bathrooms	
49A-RCM-1016	12" x 12" Brown with Streak Floor Tile	4th Floor Flammable Room	
49B-RCM-1016	12" x 12" Brown with Streak Floor Tile	4th Floor Flammable Room	
50A-RCM-1016	Tan Adhesive Associated with 49	4th Floor Flammable Room	
50B-RCM-1016	Tan Adhesive Associated with 49	4th Floor Flammable Room	
51A-RCM-1016	Tan/Gray Glue on Masonite	4th Floor Women's Room	
51B-RCM-1016	Tan/Gray Glue on Masonite	4th Floor men's room	

REC'D *ML*
EMSL-BOSTON OCT 19 2020



108 Myrtle Street, Suite 502, Quincy, MA 02171

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

52A-RCM-1016	Gray Exterior Window Caulking	Exterior Windows	
52B-RCM-1016	Gray Exterior Window Caulking	Exterior Windows	
53A-RCM-1016	Black Built-up Roofing - Felt	Main Roof	Coal Tar
53B-RCM-1016	Black Built-up Roofing - Felt	Lower Roof	Coal Tar
54A-RCM-1016	Black Built-up Roofing - Tar	Main Roof	Coal Tar
54B-RCM-1016	Black Built-up Roofing - Tar	Lower Roof	Coal Tar
55A-RCM-1016	Black Built-Up Roofing Base Sheet	Main Roof	Coal Tar
55B-RCM-1016	Black Built-Up Roofing Base Sheet	Lower Roof	Coal Tar
56-RCM-1016	White Boiler Insulation Debris	Basement	
57-RCM-1016	Black Pipe Gasket Associated with Disassembled Pipe	Basement	
58A-RCM-1016	Black Built-Up Roofing - Felt	Exterior Shed	
58B-RCM-1016	Black Built-Up Roofing - Felt	Exterior Shed	
59A-RCM-1016	Black Built-Up Roofing - Asphalt	Exterior Shed	
59B-RCM-1016	Black Built-Up Roofing - Asphalt	Exterior Shed	
60A-RCM-1016	Red Floor Paper	3-Story Building	
60B-RCM-1016	Red Floor Paper	3-Story Building	
61A-RCM-1016	White Glazing Compound	3-Story Building, Exterior Windows	
61B-RCM-1016	White Glazing Compound	3-Story Building, Exterior Windows	
62A-RCM-1016	Gray Exterior Window Caulking	3-Story Building, Exterior Windows	
62B-RCM-1016	Gray Exterior Window Caulking	3-Story Building, Exterior Windows	

Analysis Method: PLM TEM Other _____ Turnaround Time: 72-hour

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.

Samples Collected by: [Signature] Date: 10/16/2020

Samples Sent by: [Signature] Date: 10/16/2020 Time: PM

Shipped To: EMSL Other _____

Method of Shipment: Fed Ex Lab Drop Off Other _____

REC'D AC
EMSL-BOSTON OCT 19 2020



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>

EMSL Order: 132007504

Customer ID: ENVI54

Customer PO: 20181545.B10

Project ID:

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

Phone: (860) 646-2469

Fax:

Received Date: 10/19/2020 8:30 AM

Analysis Date: 10/22/2020

Collected Date: 10/16/2020

Project: 20181545.B10/ 20 Privilege 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-RCM-1016 <small>132007504-0001</small>	Main Lobby - 12"x12" Tan/Brown Mottled Floor Tile	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
01B-RCM-1016 <small>132007504-0002</small>	Lobby Corridor - 12"x12" Tan/Brown Mottled Floor Tile	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
02A-RCM-1016 <small>132007504-0003</small>	Main Lobby - Black Mastic Assoc. w/ 01A	Black Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
02B-RCM-1016 <small>132007504-0004</small>	Lobby Corridor - Black Mastic Assoc. w/ 01B				Positive Stop (Not Analyzed)
03A-RCM-1016 <small>132007504-0005</small>	Beneath Carpet in Conference Room - 12"x12" Gray Floor Tile	Gray Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
03B-RCM-1016 <small>132007504-0006</small>	Beneath Carpet in Conference Room - 12"x12" Gray Floor Tile				Positive Stop (Not Analyzed)
04A-RCM-1016 <small>132007504-0007</small>	Beneath Carpet in Conference Room - Yellow Mastic Assoc. w/ 03	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
04B-RCM-1016 <small>132007504-0008</small>	Beneath Carpet in Conference Room - Yellow Mastic Assoc. w/ 03	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
05A-RCM-1016 <small>132007504-0009</small>	Conference Room - Dark Yellow Carpet Adhesive	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
05B-RCM-1016 <small>132007504-0010</small>	Room Across from Conference Room - Dark Yellow Carpet Adhesive	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
06A-RCM-1016 <small>132007504-0011</small>	Break Room - 12"x12" Tan w/ Multi-Color Splotch	Gray Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
06B-RCM-1016 <small>132007504-0012</small>	Break Room Storage - 12"x12" Tan w/ Multi-Color Splotch				Positive Stop (Not Analyzed)
07A-RCM-1016 <small>132007504-0013</small>	Break Room - Brown Mastic Assoc. w/ 06	Brown/Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
07B-RCM-1016 <small>132007504-0014</small>	Break Room Storage - Brown Mastic Assoc. w/ 06	Brown/Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 10/22/2020 15:04:35



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

EMSL Order: 132007504
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
08A-RCM-1016 <small>132007504-0015</small>	Kitchen - 2'x4' White Fissure & Dot Suspended Ceiling Tile	Gray/White Fibrous Homogeneous	40% Cellulose 40% Min. Wool	20% Non-fibrous (Other)	None Detected
08B-RCM-1016 <small>132007504-0016</small>	Break Room Storage - 2'x4' White Fissure & Dot Suspended Ceiling Tile	Gray/White Fibrous Homogeneous	40% Cellulose 40% Min. Wool	20% Non-fibrous (Other)	None Detected
09A-RCM-1016 <small>132007504-0017</small>	Rooms Across from Conference Room - White Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
09B-RCM-1016 <small>132007504-0018</small>	Rooms Across from Conference Room - White Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
10A-RCM-1016 <small>132007504-0019</small>	Rooms Across from Conference Room - Gray Gypsum Wallboard	Gray/Tan Fibrous Homogeneous	10% Cellulose 2% Glass	88% Non-fibrous (Other)	None Detected
10B-RCM-1016 <small>132007504-0020</small>	Rooms Across from Conference Room - Gray Gypsum Wallboard	Gray/Tan Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
11A-RCM-1016 <small>132007504-0021</small>	Lab Space - 12"x12" Gray Mottled Floor Tile	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
11B-RCM-1016 <small>132007504-0022</small>	Lab Space - 12"x12" Gray Mottled Floor Tile	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12A-RCM-1016 <small>132007504-0023</small>	Lab Space - Black Mastic Assoc. w/ 11	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12B-RCM-1016 <small>132007504-0024</small>	Lab Space - Black Mastic Assoc. w/ 11	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
13A-RCM-1016 <small>132007504-0025</small>	Lab Space - Brown Lab Countertop Laminate Adhesive	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
13B-RCM-1016 <small>132007504-0026</small>	Lab Space - Brown Lab Countertop Laminate Adhesive	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
14A-RCM-1016 <small>132007504-0027</small>	Lab Space - 4" Black Vinyl Baseboard	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
14B-RCM-1016 <small>132007504-0028</small>	Lab Space - 4" Black Vinyl Baseboard	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15A-RCM-1016 <small>132007504-0029</small>	Lab Space - Yellow Adhesive Assoc. w/ 14	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15B-RCM-1016 <small>132007504-0030</small>	Lab Space - Yellow Adhesive Assoc. w/ 14	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
16A-RCM-1016 <small>132007504-0031</small>	Lab Space - White Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 10/22/2020 15:04:35



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

EMSL Order: 132007504
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
16B-RCM-1016 <small>132007504-0032</small>	Lab Space - White Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
17-RCM-1016 <small>132007504-0033</small>	Rear Lab Space - Black Composite Lab Countertop	Gray/Black Fibrous Homogeneous		82% Non-fibrous (Other)	18% Chrysotile
18-RCM-1016 <small>132007504-0034</small>	Rear Lab Space - Black Fume Hood Countertop	Gray/Black Fibrous Homogeneous		90% Non-fibrous (Other)	10% Chrysotile
19-RCM-1016 <small>132007504-0035</small>	Rear Lab Space - White Fume Hood Panel	Gray Non-Fibrous Homogeneous		85% Non-fibrous (Other)	15% Chrysotile
20A-RCM-1016 <small>132007504-0036</small>	Lab Sales Office - 12"x12" Tan w/ Splotch Floor Tile	Tan Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
20B-RCM-1016 <small>132007504-0037</small>	Lab Sales Office - 12"x12" Tan w/ Splotch Floor Tile				Positive Stop (Not Analyzed)
21A-RCM-1016 <small>132007504-0038</small>	Lab Sales Office - Brown Mastic Assoc. w/ 20	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
21B-RCM-1016 <small>132007504-0039</small>	Lab Sales Office - Brown Mastic Assoc. w/ 20	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
22A-RCM-1016 <small>132007504-0040</small>	Left Lab Sales Office - 12"x12" Tan Mottled Floor Tile	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
22B-RCM-1016 <small>132007504-0041</small>	Left Lab Sales Office - 12"x12" Tan Mottled Floor Tile	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
23A-RCM-1016 <small>132007504-0042</small>	Left Lab Sales Office - Brown Adhesive Assoc. w/ 22	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
23B-RCM-1016 <small>132007504-0043</small>	Left Lab Sales Office - Brown Adhesive Assoc. w/ 22	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
24A-RCM-1016 <small>132007504-0044</small>	Executive Offices - Yellow Carpet Adhesive	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
24B-RCM-1016 <small>132007504-0045</small>	Executive Offices - Yellow Carpet Adhesive	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
25A-RCM-1016 <small>132007504-0046</small>	Executive Offices (Far Back Office) - Brown Flooring Beneath Carpet	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
25B-RCM-1016 <small>132007504-0047</small>	Executive Offices (Far Back Office) - Brown Flooring Beneath Carpet	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
26A-RCM-1016 <small>132007504-0048</small>	Executive Offices (Far Back Office) - Black Mastic Assoc. w/ 25	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
26B-RCM-1016 <small>132007504-0049</small>	Executive Offices (Far Back Office) - Black Mastic Assoc. w/ 25	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected

Initial report from: 10/22/2020 15:04:35



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

EMSL Order: 132007504
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
27A-RCM-1016 <small>132007504-0050</small>	Executive Offices - White Skim Coat Plaster	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
27B-RCM-1016 <small>132007504-0051</small>	Executive Offices - White Skim Coat Plaster	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
27C-RCM-1016 <small>132007504-0052</small>	Executive Offices - White Skim Coat Plaster	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
27D-RCM-1016 <small>132007504-0053</small>	Executive Offices - White Skim Coat Plaster	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
27E-RCM-1016 <small>132007504-0054</small>	Executive Offices - White Skim Coat Plaster	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
27F-RCM-1016 <small>132007504-0055</small>	Executive Offices - White Skim Coat Plaster	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
27G-RCM-1016 <small>132007504-0056</small>	Executive Offices - White Skim Coat Plaster	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
28A-RCM-1016 <small>132007504-0057</small>	Executive Offices - Gray Rough Coat Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
28B-RCM-1016 <small>132007504-0058</small>	Executive Offices - Gray Rough Coat Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
28C-RCM-1016 <small>132007504-0059</small>	Executive Offices - Gray Rough Coat Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
28D-RCM-1016 <small>132007504-0060</small>	Executive Offices - Gray Rough Coat Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
28E-RCM-1016 <small>132007504-0061</small>	Executive Offices - Gray Rough Coat Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
28F-RCM-1016 <small>132007504-0062</small>	Executive Offices - Gray Rough Coat Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
28G-RCM-1016 <small>132007504-0063</small>	Executive Offices - Gray Rough Coat Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
29A-RCM-1016 <small>132007504-0064</small>	Warehouse Boiler Room - Brown Boiler Gasket	Brown Non-Fibrous Homogeneous		90% Non-fibrous (Other)	10% Chrysotile
29B-RCM-1016 <small>132007504-0065</small>	Warehouse Boiler Room - Brown Boiler Gasket				Positive Stop (Not Analyzed)
30A-RCM-1016 <small>132007504-0066</small>	Warehouse Office - 12"x12" Tan Mottled Floor Tile	Brown/Gray Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
30B-RCM-1016 <small>132007504-0067</small>	Warehouse Office - 12"x12" Tan Mottled Floor Tile				Positive Stop (Not Analyzed)
31A-RCM-1016 <small>132007504-0068</small>	Warehouse Office - Brown Mastic Assoc. w/ 30	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 10/22/2020 15:04:35



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

EMSL Order: 132007504
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
31B-RCM-1016 <small>132007504-0069</small>	Warehouse Office - Brown Mastic Assoc. w/ 30	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
32A-RCM-1016 <small>132007504-0070</small>	Warehouse Office - 2'x4' White Suspended Ceiling Tile	Brown/White Fibrous Homogeneous	98% Cellulose	2% Non-fibrous (Other)	None Detected
32B-RCM-1016 <small>132007504-0071</small>	Warehouse Office - 2'x4' White Suspended Ceiling Tile	Brown Fibrous Homogeneous	98% Cellulose	2% Non-fibrous (Other)	None Detected
33A-RCM-1016 <small>132007504-0072</small>	Warehouse Chemical Storage Shelf Area - 12"x12" Tan Floor Tile	Tan Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
33B-RCM-1016 <small>132007504-0073</small>	Machinist Room - 12"x12" Tan Floor Tile				Positive Stop (Not Analyzed)
34A-RCM-1016 <small>132007504-0074</small>	Warehouse Chemical Storage Shelf Area - Black Mastic Assoc. w/ 33	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
34B-RCM-1016 <small>132007504-0075</small>	Machinist Room - Black Mastic Assoc. w/ 33	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
35A-RCM-1016 <small>132007504-0076</small>	2nd Floor - Brown Floor Paper	Brown Fibrous Homogeneous	95% Cellulose	5% Non-fibrous (Other)	None Detected
35B-RCM-1016 <small>132007504-0077</small>	3rd Floor - Brown Floor Paper	Brown Fibrous Homogeneous	95% Cellulose	5% Non-fibrous (Other)	None Detected
36A-RCM-1016 <small>132007504-0078</small>	2nd Floor - Gray Floor Paper	Brown Fibrous Homogeneous	95% Cellulose	5% Non-fibrous (Other)	None Detected
36B-RCM-1016 <small>132007504-0079</small>	3rd Floor - Gray Floor Paper	Brown Fibrous Homogeneous	95% Cellulose	5% Non-fibrous (Other)	None Detected
37A-RCM-1016 <small>132007504-0080</small>	Front Stairs - Gray Stair Tread & Landing Adhesive	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
37A1-RCM-1016 <small>132007504-0081</small>	Rear Stairs - Gray Stair Tread & Landing Adhesive	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
37B1-RCM-1016 <small>132007504-0082</small>	Front Stairs - Stair Tread & Landing Flooring	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
37B-RCM-1016 <small>132007504-0083</small>	Rear Stairs - Stair Tread & Landing Flooring				Not Submitted
38A-RCM-1016 <small>132007504-0084</small>	2nd Floor Bathroom - 12"x12" Tan Floor Tile	Gray/Tan Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
38B-RCM-1016 <small>132007504-0085</small>	2nd Floor Bathroom - 12"x12" Tan Floor Tile				Positive Stop (Not Analyzed)
39A-RCM-1016 <small>132007504-0086</small>	2nd Floor Bathroom - Black Mastic Assoc. w/ 38A	Tan/Black Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile

Initial report from: 10/22/2020 15:04:35



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

EMSL Order: 132007504
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
39B-RCM-1016 <small>132007504-0087</small>	2nd Floor Bathroom - Black Mastic Assoc. w/ 38B				Positive Stop (Not Analyzed)
40A-RCM-1016 <small>132007504-0088</small>	2nd Floor Bathroom - 4" Black Vinyl Baseboard	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
40B-RCM-1016 <small>132007504-0089</small>	2nd Floor Bathroom - 4" Black Vinyl Baseboard	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
41A-RCM-1016 <small>132007504-0090</small>	2nd Floor Bathroom - Brown Adhesive Assoc. w/ 40	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
41B-RCM-1016 <small>132007504-0091</small>	2nd Floor Bathroom - Brown Adhesive Assoc. w/ 40	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
42A-RCM-1016 <small>132007504-0092</small>	2nd Floor Bathroom - Yellow Adhesive Assoc. w/ Masonite	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
42B-RCM-1016 <small>132007504-0093</small>	2nd Floor Bathroom - Yellow Adhesive Assoc. w/ Masonite	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
43A-RCM-1016 <small>132007504-0094</small>	12"x12" Light Brown Floor Tile	Tan Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
43B-RCM-1016 <small>132007504-0095</small>	12"x12" Light Brown Floor Tile				Positive Stop (Not Analyzed)
44A-RCM-1016 <small>132007504-0096</small>	Black Mastic Assoc. w/ 43				Insufficient Material
44B-RCM-1016 <small>132007504-0097</small>	Black Mastic Assoc. w/ 43				Insufficient Material
45A-RCM-1016 <small>132007504-0098</small>	Exterior Windows - White Glazing Compound	Tan/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
45B-RCM-1016 <small>132007504-0099</small>	Exterior Windows - White Glazing Compound	Tan/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
46A-RCM-1016 <small>132007504-0100</small>	Women's Bathroom Doors - White Door Lite Glazing Compound	Tan Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
46B-RCM-1016 <small>132007504-0101</small>	Women's Bathroom Doors - White Door Lite Glazing Compound				Positive Stop (Not Analyzed)
47A-RCM-1016 <small>132007504-0102</small>	3rd Floor Bathrooms - Black Glue on Masonite	Brown Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
47B-RCM-1016 <small>132007504-0103</small>	3rd Floor Bathrooms - Black Glue on Masonite				Positive Stop (Not Analyzed)
48A-RCM-1016 <small>132007504-0104</small>	3rd Floor Bathrooms - Brown Adhesive Assoc. w/ 4" Baseboard	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 10/22/2020 15:04:35



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

EMSL Order: 132007504
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
48B-RCM-1016 <small>132007504-0105</small>	3rd Floor Bathrooms - Brown Adhesive Assoc. w/ 4" Baseboard	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
49A-RCM-1016 <small>132007504-0106</small>	4th Floor Flammable Room - 12"x12" Brown w/ Streak Floor Tile	Tan Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
49B-RCM-1016 <small>132007504-0107</small>	4th Floor Flammable Room - 12"x12" Brown w/ Streak Floor Tile				Positive Stop (Not Analyzed)
50A-RCM-1016 <small>132007504-0108</small>	4th Floor Flammable Room - Tan Adhesive Assoc. w/ 49	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
50B-RCM-1016 <small>132007504-0109</small>	4th Floor Flammable Room - Tan Adhesive Assoc. w/ 49	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
51A-RCM-1016 <small>132007504-0110</small>	4th Floor Women's Room - Tan/Gray Glue on Masonite	Tan Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
51B-RCM-1016 <small>132007504-0111</small>	4th Floor Men's Room - Tan/Gray Glue on Masonite				Positive Stop (Not Analyzed)
52A-RCM-1016 <small>132007504-0112</small>	Exterior Windows - Gray Exterior Window Caulking	Gray/Tan Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
52B-RCM-1016 <small>132007504-0113</small>	Exterior Windows - Gray Exterior Window Caulking				Positive Stop (Not Analyzed)
53A-RCM-1016 <small>132007504-0114</small>	Main Roof - Black Built-up Roofing - Felt	Black Fibrous Homogeneous	35% Cellulose	65% Non-fibrous (Other)	None Detected
53B-RCM-1016 <small>132007504-0115</small>	Lower Roof - Black Built-up Roofing - Felt	Black Fibrous Homogeneous	35% Cellulose	65% Non-fibrous (Other)	None Detected
54A-RCM-1016 <small>132007504-0116</small>	Main Roof - Black Built-up Roofing - Tar	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
54B-RCM-1016 <small>132007504-0117</small>	Lower Roof - Black Built-up Roofing - Tar	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
55A-RCM-1016 <small>132007504-0118</small>	Main Roof - Black Built-up Roofing Base Sheet	Black Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
55B-RCM-1016 <small>132007504-0119</small>	Lower Roof - Black Built-up Roofing Base Sheet	Black Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
56-RCM-1016 <small>132007504-0120</small>	Basement - White Boiler Insulation Debris	White Fibrous Homogeneous		90% Non-fibrous (Other)	10% Chrysotile
57-RCM-1016 <small>132007504-0121</small>	Basement - Black Pipe Gasket Assoc. w/ Disassembled Pipe	Black Fibrous Homogeneous		70% Non-fibrous (Other)	30% Chrysotile
58A-RCM-1016 <small>132007504-0122</small>	Exterior Shed - Black Built-up Roofing - Felt	Black Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected

Initial report from: 10/22/2020 15:04:35



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

EMSL Order: 132007504
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
58B-RCM-1016 <small>132007504-0123</small>	Exterior Shed - Black Built-up Roofing - Felt	Black Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
59A-RCM-1016 <small>132007504-0124</small>	Exterior Shed - Black Built-up Roofing - Asphalt	Black Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
59B-RCM-1016 <small>132007504-0125</small>	Exterior Shed - Black Built-up Roofing - Asphalt				Positive Stop (Not Analyzed)
60A-RCM-1016 <small>132007504-0126</small>	3-Story Building - Red Floor Paper	Red Fibrous Homogeneous	95% Cellulose	5% Non-fibrous (Other)	None Detected
60B-RCM-1016 <small>132007504-0127</small>	3-Story Building - Red Floor Paper	Red Fibrous Homogeneous	95% Cellulose	5% Non-fibrous (Other)	None Detected
61A-RCM-1016 <small>132007504-0128</small>	3-Story Building, Exterior Windows - White Glazing Compound	Tan/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
61B-RCM-1016 <small>132007504-0129</small>	3-Story Building, Exterior Windows - White Glazing Compound	Tan/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
62A-RCM-1016 <small>132007504-0130</small>	3-Story Building, Exterior Windows - Gray Exterior Window Caulking	Gray/Tan Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
62B-RCM-1016 <small>132007504-0131</small>	3-Story Building, Exterior Windows - Gray Exterior Window Caulking				Positive Stop (Not Analyzed)

Analyst(s)

Elizabeth Stutts (77)

Kevin McKenzie (34)

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: 10/22/2020 15:04:35

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: 20 Privilege Street Date: 10/17/2020

Building Name/Number: Project Number: 20181545.B10

Site Address: 20 Privilege Street, Woonsocket, RI Project Manager: Robert Mallett

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

	First Reading	Second Reading	Third Reading	Average
Start Check	1.0	1.0	1.0	1.0
Finish Check	1.0	1.0	1.0	1.0

Room	Side	Surface/Component	Color	Substrate*	XRF Reading	Positive
First floor, office area entrance	A	Lower Wall	Blue	B	-0.1	
First floor, office area entrance	A	Upper Wall	White	B	-0.1	
First floor, office area entrance	A	Window casing	White	W	>9.9	POS
First floor, office area entrance	A	Window sash	White	W	0.2	
First floor, office area entrance	A	Window component	White	W	0.4	
First floor, office area entrance	A	Stairwell Wall	White	W	-0.2	
First floor, office area entrance	A	Door to office area	Blue	M	2.6	POS
First floor, office area entrance	A	Wall	White	B	0.1	
First floor, office area	A	Wall panel	White	W	-.02	
First floor, office area	A	Gypsum wall board	White	P	0.0	
First floor, office area	A	Column	White	M	8.1	POS
First floor, office area, street entrance	A	Wall	White	P	1.0	POS
First floor, office area, bathroom hallway	B	Wall	White	P	0.5	
First floor, warehouse	B	Beam on wall	White	M	5.7	POS
First floor, warehouse	B	Column	Blue	M	5.2	POS
First floor, warehouse	D	Upper Wall	White	B	0.0	
First floor, warehouse	D	Lower Wall	Green	B	0.0	
First floor, warehouse	D	Window Sash	White	W	>9.9	POS
First floor, warehouse	D	Window Casing	White	W	>9.9	POS
Second floor	D	Fire Door	Red	W	3.3	POS
Second floor	D	Upper Wall	White	B	0.1	
Second floor	D	Lower Wall	Green	B	1.0	POS
Second floor		Upper Column	White	M	3.2	POS



Second floor		Lower Column	Green	M	4.8	POS
Fourth floor		Structural Beam	White	M	8.2	POS
Fourth floor		Ceiling Deck	White	W	0.5	
Fourth floor		Sprinkler System Pipe	Red	M	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 D

Soil Boring Logs and Monitoring Well Completion

LOG A EWN01 - LOG A EWN01.GDT - 12/17/20 16:49 - \\PRIVATE\DFS\PROJECT\DATA\201811545\B10\SITES\20 PRIVILEGE SITE\DELIVERABLES\APPENDICES\APPENDIX B - SOIL BORING LOGS AND MONITORING WELL COMPLETION\BORING LOGS\20 PRIVILEGE



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

SOIL BORING SB-1

PROJECT NUMBER <u>20181545.B10</u>	DATE STARTED <u>10/27/20</u>
PROJECT NAME <u>20 Privilege Street</u>	DATE COMPLETED <u>10/27/20</u>
LOCATION <u>20 Privilege Street, Woonsocket, RI</u>	CASING TYPE/DIAMETER <u>----</u>
DRILLING METHOD <u>Geologic/Geoprobe/Mc5 60" Liner</u>	SCREEN TYPE/SLOT/INTERVAL <u>----</u>
HAMMER WEIGHT/FALL <u>--</u>	GRAVEL PACK TYPE <u>----</u>
ELEVATION (FT) <u>---</u>	GROUT TYPE/QUANTITY <u>----</u>
TOP OF CASING <u>----</u>	DEPTH TO WATER (FT) <u>16.0</u>
LOGGED BY <u>Madelyn Sampson</u>	GROUND WATER ELEVATION <u>---</u>
REMARKS <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		40	GB 1027-01			FILL		SAND, fine to medium, trace silt; trace gravel; trace brick; trace coal ash; light brown, dry. No odor.	
0.2		35			5	FILL		SAND, fine to medium, trace silt; trace gravel; trace coal ash; light brown, dry. No odor.	
0.0		60			10	SP		SAND, fine to medium; trace silt; trace gravel; light brown, dry. No odor.	
0.0		45			15	SP		SAND, fine to medium; some gravel; trace silt; light brown, wet at 16 feet. No odor.	▼

Bottom of borehole at 20.0 feet.

LOG A EWNN01 - LOG A EWNN01.GDT - 12/17/20 16:49 - \\PRIVATE\DFS\PROJECT\DATA\201811545\B10\SITES\20 PRIVILEGE SITE\DELIVERABLES\IRAPPENDICES\APPENDIX B - SOIL BORING LOGS AND MONITORING WELL COMPLETION\BORING LOGS\20 PRIVILEGE



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

SOIL BORING SB-2

PAGE 1 OF 1

PROJECT NUMBER <u>20181545.B10</u>	DATE STARTED <u>10/27/20</u>
PROJECT NAME <u>20 Privilege Street</u>	DATE COMPLETED <u>10/27/20</u>
LOCATION <u>20 Privilege Street, Woonsocket, RI</u>	CASING TYPE/DIAMETER <u>----</u>
DRILLING METHOD <u>Geologic/Geoprobe/Mc5 60" Liner</u>	SCREEN TYPE/SLOT/INTERVAL <u>----</u>
HAMMER WEIGHT/FALL <u>--</u>	GRAVEL PACK TYPE <u>----</u>
ELEVATION (FT) <u>---</u>	GROUT TYPE/QUANTITY <u>----</u>
TOP OF CASING <u>----</u>	DEPTH TO WATER (FT) <u>10.0</u>
LOGGED BY <u>Madelyn Sampson</u>	GROUND WATER ELEVATION <u>---</u>
REMARKS <u>Refusal encountered at 12 feet.</u>	

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WATER DEPTH
0.4		48	GB 1027-02					SAND, fine to medium; trace silt; trace gravel; trace brick; trace coal ash; light brown, dry. No odor.	
0.0		12			5			SAND, fine to medium; trace silt; trace gravel; trace brick; trace coal ash; light brown, dry. No odor.	
0.0		18			10	SP		SAND, fine to medium; light brown; some silt; little gravel; light brown, wet at 10 feet. No odor. Refusal at 12 feet. Weathered stone at base of liner.	▼

Bottom of borehole at 12.0 feet.

SOIL BORING/MONITORING WELL MW-3



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

PROJECT NUMBER 20181545.B10 **DATE STARTED** 10/27/20
PROJECT NAME 20 Privilege Street **DATE COMPLETED** 10/27/20
LOCATION 20 Privilege Street, Woonsocket, RI **CASING TYPE/DIAMETER** PVC / 2"
DRILLING METHOD Geologic/Geoprobe/Mc5 60" Liner **SCREEN TYPE/SLOT/INTERVAL** Slotted/PVC / 0.010 / 13-23
HAMMER WEIGHT/FALL -- **GRAVEL PACK TYPE** Silica Sand
ELEVATION (FT) --- **GROUT TYPE/QUANTITY** Bentonite / 1
TOP OF CASING --- **DEPTH TO WATER (FT)** 15.0
LOGGED BY Madelyn Sampson **GROUND WATER ELEVATION** ---
REMARKS No refusal encountered.

LOG A EWINN01 - LOG A EWINN01.GDT - 12/17/20 16:49 - \\PRIVATE\DFS\PROJECT\DATA\20181545\B10\SITES\20 PRIVILEGE SITE\DELIVERABLES\IR\APPENDICES\APPENDIX B - SOIL BORING LOGS AND MONITORING WELL COMPLETION\BORING LOGS\20 PRIVILEGE

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WATER DEPTH	WELL DIAGRAM
0.6		48	GB 1027-03			SP		SAND, fine to medium; some gravel; trace silt; brown, dry. No odor.		
0.1		50			5	SP		SAND, fine to medium; some gravel; trace silt; brown, dry. No odor.		
0.0		20			10	SP		SAND, fine to coarse; some gravel; trace silt; brown, wet at 15 feet.		
0.2		48			15	SP		SAND, fine to coarse; some gravel; gray, wet. No odor.	▼	
					20	SP				

Bottom of borehole at 23.0 feet.

SOIL BORING/MONITORING WELL MW-4



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

PROJECT NUMBER 20181545.B10 **DATE STARTED** 10/27/20
PROJECT NAME 20 Privilege Street **DATE COMPLETED** 10/27/20
LOCATION 20 Privilege Street, Woonsocket, RI **CASING TYPE/DIAMETER** PVC / 2"
DRILLING METHOD Geologic/Geoprobe/Mc5 60" Liner **SCREEN TYPE/SLOT/INTERVAL** Slotted/PVC / 0.010 / 8-18
HAMMER WEIGHT/FALL -- **GRAVEL PACK TYPE** Silica Sand
ELEVATION (FT) --- **GROUT TYPE/QUANTITY** Bentonite / 1
TOP OF CASING --- **DEPTH TO WATER (FT)** 10.0
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
0.3		48	GB 1027-04			SP		SAND, fine to medium; little gravel; trace silt; light brown, dry. No odor.		
0.0		20			5	SP		SAND, fine to medium; trace silt; trace gravel; light brown, wet at 10 feet. No odor.		
0.1		60			10	SP		SAND, fine to coarse; trace silt; trace gravel; light brown, wet. No odor.	▼	
0.0		60			15	SP		SAND, fine to coarse; some gravel; trace silt; light brown, wet. No odor.		

Bottom of borehole at 20.0 feet.

LOG A EWN01 - LOG A EWN01.GDT - 12/17/20 16:49 - \\PRIVATE\DFS\PROJECT\DATA\20181545\B10\SITES\20 PRIVILEGE ST\DELIVERABLES\APPENDICES\APPENDIX B - SOIL BORING LOGS AND MONITORING WELL COMPLETION\BORING LOGS\20 PRIVILEGE ST

SOIL BORING/MONITORING WELL MW-5



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

PROJECT NUMBER 20181545.B10 **DATE STARTED** 10/27/20
PROJECT NAME 20 Privilege Street **DATE COMPLETED** 10/27/20
LOCATION 20 Privilege Street, Woonsocket, RI **CASING TYPE/DIAMETER** PVC / 2"
DRILLING METHOD Geologic/Geoprobe/Mc5 60" Liner **SCREEN TYPE/SLOT/INTERVAL** Slotted/PVC / 0.010 / 6-16
HAMMER WEIGHT/FALL -- **GRAVEL PACK TYPE** Silica Sand
ELEVATION (FT) --- **GROUT TYPE/QUANTITY** Bentonite / 1
TOP OF CASING --- **DEPTH TO WATER (FT)** 8.0
LOGGED BY Madelyn Sampson **GROUND WATER ELEVATION** ---
REMARKS No refusal encountered.

LOG A EWN01 - LOG A EWN01.GDT - 12/17/20 16:49 - \\PRIVATE\DFS\PROJECT\DATA\20181545\B10\SITES\20 PRIVILEGE ST\DELIVERABLES\IR\APPENDICES\APPENDIX B - SOIL BORING LOGS AND MONITORING WELL COMPLETION\BORING LOGS\20 PRIVILEGE ST

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WATER DEPTH	WELL DIAGRAM
0.2		30	GB 1027-05					SAND, fine to medium; some gravel; trace silt; trace brick; trace coal ash; light brown, dry. No odor.		
0.0		60			5	FILL	SAND, fine to medium; some silt; trace gravel; light brown, wet at 8 feet.			
0.1		60			10	FILL	SAND, fine to medium; little silt; trace brick; light brown, wet. No odor.			
					15	FILL				

Bottom of borehole at 16.0 feet.

SOIL BORING/MONITORING WELL MW-6



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

PROJECT NUMBER 20181545.B10 **DATE STARTED** 10/27/20
PROJECT NAME 20 Privilege Street **DATE COMPLETED** 10/27/20
LOCATION 20 Privilege Street, Woonsocket, RI **CASING TYPE/DIAMETER** PVC / 2"
DRILLING METHOD Geologic/Geoprobe/Mc5 60" Liner **SCREEN TYPE/SLOT/INTERVAL** Slotted/PVC / 0.010 / 5-15
HAMMER WEIGHT/FALL -- **GRAVEL PACK TYPE** Silica Sand
ELEVATION (FT) --- **GROUT TYPE/QUANTITY** Bentonite / 1
TOP OF CASING --- **DEPTH TO WATER (FT)** 7.0
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
0.3		48	GB 1027-06			FILL		SAND, fine to medium; little gravel; trace silt; trace brick; trace coal ash; light brown, dry. No odor.		
0.2		60			5	SP		SAND, fine to medium; little silt; little gravel; light brown, wet at 7 feet. No odor.	▼	
0.0		60			10	SP		SAND, fine to medium; some silt; trace gravel; light brown, wet. No odor.		

Bottom of borehole at 15.0 feet.

LOG A EWN01 - LOG A EWN01.GDT - 12/17/20 16:49 - \\PRIVATE\DFS\PROJECT\DATA\20181545\B10\SITES\20 PRIVILEGE SITE\DELIVERABLES\APPENDICES\APPENDIX B - SOIL BORING LOGS AND MONITORING WELL COMPLETION\BORING LOGS\20 PRIVILEGE

LOG A EWN01 - LOG A EWN01.GDT - 12/17/20 16:49 - \\PRIVATE\DFS\PROJECT\DATA\201811545\B10\SITES\20 PRIVILEGE SITE\DELIVERABLES\APPENDICES\APPENDIX B - SOIL BORING LOGS AND MONITORING WELL COMPLETION\BORING LOGS\20 PRIVILEGE



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

SOIL BORING SB-7

PROJECT NUMBER <u>20181545.B10</u>	DATE STARTED <u>10/27/20</u>
PROJECT NAME <u>20 Privilege Street</u>	DATE COMPLETED <u>10/27/20</u>
LOCATION <u>20 Privilege Street, Woonsocket, RI</u>	CASING TYPE/DIAMETER <u>----</u>
DRILLING METHOD <u>Geologic/Geoprobe/Mc5 60" Liner</u>	SCREEN TYPE/SLOT/INTERVAL <u>----</u>
HAMMER WEIGHT/FALL <u>--</u>	GRAVEL PACK TYPE <u>----</u>
ELEVATION (FT) <u>---</u>	GROUT TYPE/QUANTITY <u>----</u>
TOP OF CASING <u>----</u>	DEPTH TO WATER (FT) <u>8.0</u>
LOGGED BY <u>Madelyn Sampson</u>	GROUND WATER ELEVATION <u>---</u>
REMARKS <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
0.2		30	GB 1027-07			FILL		SAND, fine to medium; little gravel; trace silt; trace brick; brown, dry. No odor.	
0.1		50			5	FILL		SAND, fine to medium; little silt; trace brick; brown, wet at 8 feet. No odor.	
0.1		60			10	SP		SAND, fine to coarse; trace silt; little gravel; light brown, wet. No odor.	
0.1		60			15	SP		SAND, fine to very coarse; and gravel; little silt; light brown, wet. No 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** 10/28/20
PROJECT NAME 20 Privilege Street **DATE COMPLETED** 10/28/20
LOCATION 20 Privilege Street, Woonsocket, RI **CASING TYPE/DIAMETER** PVC / 2"
DRILLING METHOD Geologic/Geoprobe/Mc5 60" Liner **SCREEN TYPE/SLOT/INTERVAL** Slotted/PVC / 0.010 / 11-21
HAMMER WEIGHT/FALL -- **GRAVEL PACK TYPE** Silica Sand
ELEVATION (FT) --- **GROUT TYPE/QUANTITY** Bentonite / 1
TOP OF CASING --- **DEPTH TO WATER (FT)** 13.0
LOGGED BY Madelyn Sampson **GROUND WATER ELEVATION** ---
REMARKS No refusal encountered.

LOG A EWN01 - LOG A EWN01.GDT - 12/17/20 16:49 - \\PRIVATE\DFS\PROJECT\DATA\20181545\B10\SITES\20 PRIVILEGE ST\DELIVERABLES\IR\APPENDICES\APPENDIX B - SOIL BORING LOGS AND MONITORING WELL COMPLETION\BORING LOGS\20 PRIVILEGE ST

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WATER DEPTH	WELL DIAGRAM
0.1		50	GB 1028-09/ 1028-10			SP		SAND, fine to medium; little gravel; trace silt; light brown, dry. No odor.		
0.2		60			5	SP		SAND, fine to medium; little silt; trace gravel; light brown, dry. No odor.		
0.1		60			10	SP		SAND, fine to medium; some silt; little gravel; light brown, wet at 13 feet. No odor.		
0.2		60			15	SP		SAND, fine to coarse; some silt; little gravel; light brown, wet. No odor.		
					20					

Bottom of borehole at 21.0 feet.

SOIL BORING/MONITORING WELL MW-9



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

PROJECT NUMBER 20181545.B10 **DATE STARTED** 10/28/20
PROJECT NAME 20 Privilege Street **DATE COMPLETED** 10/28/20
LOCATION 20 Privilege Street, 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) --- **GROUT TYPE/QUANTITY** Bentonite / 1
TOP OF CASING --- **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
0.1		50	GB 1028-1			FILL		SAND, fine to medium; some silt; little gravel; light brown, dry. No odor.		
0.0		50			5	SP		SAND, fine to medium; some silt; trace brick; light brown, dry. No odor.		
0.0		60			10	SP		SAND, fine to coarse; some silt; light brown, wet at 12 feet. No odor.	▼	
0.0		60			15	SP		SAND, fine to coarse; some gravel; little silt; light brown, wet. No odor.		

Bottom of borehole at 20.0 feet.

LOG A EWN001 - LOG A EWN001.GDT - 12/17/20 16:49 - \\PRIVATE\DFS\PROJECT\DATA\20181545\B10\SITES\20 PRIVILEGE ST\DELIVERABLES\IR\APPENDICES\APPENDIX B - SOIL BORING LOGS AND MONITORING WELL COMPLETION\BORING LOGS\20 PRIVILEGE ST

LOG A EWN001 - LOG A EWN01.GDT - 12/17/20 16:49 - \\PRIVATE\DFS\PROJECT\DATA\201811545\B10\SITES\20 PRIVILEGE SITE\DELIVERABLES\IRAPPENDICES\APPENDIX B - SOIL BORING LOGS AND MONITORING WELL COMPLETION\BORING LOGS\20 PRIVILEGE



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

SOIL BORING SB-10

PROJECT NUMBER <u>20181545.B10</u>	DATE STARTED <u>10/28/20</u>
PROJECT NAME <u>20 Privilege Street</u>	DATE COMPLETED <u>10/28/20</u>
LOCATION <u>20 Privilege Street, Woonsocket, RI</u>	CASING TYPE/DIAMETER <u>----</u>
DRILLING METHOD <u>Geologic/Geoprobe/Mc5 60" Liner</u>	SCREEN TYPE/SLOT/INTERVAL <u>----</u>
HAMMER WEIGHT/FALL <u>--</u>	GRAVEL PACK TYPE <u>----</u>
ELEVATION (FT) <u>---</u>	GROUT TYPE/QUANTITY <u>----</u>
TOP OF CASING <u>----</u>	DEPTH TO WATER (FT) <u>7.0</u>
LOGGED BY <u>Madelyn Sampson</u>	GROUND WATER ELEVATION <u>---</u>
REMARKS <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
0.1		40	GB 1028-12			FILL		SAND, fine to medium; some silt; trace gravel; trace brick; trace coal ash; brown, dry. No odor.	
0.0		50			5	FILL		SAND, fine to medium; some silt; trace brick; brown, wet at 7 feet. No odor.	▼
0.1		60			10	SP		SAND, fine to medium; some silt; trace gravel; light brown, wet. No odor.	
0.0		60			15	SP		SAND, fine to medium; some silt; trace gravel; light brown, wet. No odor.	

Bottom of borehole at 20.0 feet.

LOG A EWN01 - LOG A EWN01.GDT - 12/17/20 16:49 - \\PRIVATE\DFS\PROJECT\DATA\201811545\B10\SITES\20 PRIVILEGE SITE\DELIVERABLES\IRAPPENDICES\APPENDIX B - SOIL BORING LOGS AND MONITORING WELL COMPLETION\BORING LOGS\20 PRIVILEGE



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

SOIL BORING SB-11

PROJECT NUMBER <u>20181545.B10</u>	DATE STARTED <u>10/28/20</u>
PROJECT NAME <u>20 Privilege Street</u>	DATE COMPLETED <u>10/28/20</u>
LOCATION <u>20 Privilege Street, Woonsocket, RI</u>	CASING TYPE/DIAMETER <u>----</u>
DRILLING METHOD <u>Geologic/Geoprobe/Mc5 60" Liner</u>	SCREEN TYPE/SLOT/INTERVAL <u>----</u>
HAMMER WEIGHT/FALL <u>--</u>	GRAVEL PACK TYPE <u>----</u>
ELEVATION (FT) <u>---</u>	GROUT TYPE/QUANTITY <u>----</u>
TOP OF CASING <u>----</u>	DEPTH TO WATER (FT) <u>8.0</u>
LOGGED BY <u>Madelyn Sampson</u>	GROUND WATER ELEVATION <u>---</u>
REMARKS <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
0.1		50	GB 1028-13			SP		SAND, fine to medium, light brown, little silt, little gravel, trace brick; dry. No odor.	
0.1		20			5	SP		SAND, fine to medium, light brown, little silt, little gravel, trace brick; wet at 8 feet. No odor.	▼
0.0		60			10	SP		SAND, fine to medium, some silt; wet. No odor.	
0.0		60			15	SP		SAND, fine to medium, some silt; wet. No odor.	

Bottom of borehole at 20.0 feet.

LOG A EWN001 - LOG A EWN001.GDT - 12/17/20 16:49 - \\PRIVATE\DFS\PROJECT\DATA\201811545\B10\SITES\20 PRIVILEGE SITE\DELIVERABLES\IRAPPENDICES\APPENDIX B - SOIL BORING LOGS AND MONITORING WELL COMPLETION\BORING LOGS\20 PRIVILEGE



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

SOIL BORING SB-12

PROJECT NUMBER <u>20181545.B10</u>	DATE STARTED <u>10/28/20</u>
PROJECT NAME <u>20 Privilege Street</u>	DATE COMPLETED <u>10/28/20</u>
LOCATION <u>20 Privilege Street, Woonsocket, RI</u>	CASING TYPE/DIAMETER <u>----</u>
DRILLING METHOD <u>Geologic/Geoprobe/Mc5 60" Liner</u>	SCREEN TYPE/SLOT/INTERVAL <u>----</u>
HAMMER WEIGHT/FALL <u>--</u>	GRAVEL PACK TYPE <u>----</u>
ELEVATION (FT) <u>---</u>	GROUT TYPE/QUANTITY <u>----</u>
TOP OF CASING <u>----</u>	DEPTH TO WATER (FT) <u>6.0</u>
LOGGED BY <u>Madelyn Sampson</u>	GROUND WATER ELEVATION <u>---</u>
REMARKS <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
0.2		40	GB 1028-14					SAND, fine to medium, light brown, little silt, little gravel, trace brick; dry. No odor.	
0.0		24			5	FILL		SAND, fine to medium, light brown, some silt, little gravel, trace brick; wet at 6 feet. No odor.	▼
0.0		40			10	SP		SAND, fine to coarse, light brown, little silt, trace gravel; wet. No odor.	
0.0		60			15	SP		SAND, fine to coarse, light brown, little silt, trace gravel; wet. No odor.	

Bottom of borehole at 20.0 feet.

Appendix E

Outdoor Soil Laboratory Analytical Reports

November 23, 2020

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

Project Location: 20 Privilege St, Woonsocket, RI
Client Job Number:
Project Number: 20181545.B10
Laboratory Work Order Number: 20J1670

Enclosed are results of analyses for samples received by the laboratory on October 29, 2020. 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	7
Sample Results	10
20J1670-01	10
20J1670-02	17
20J1670-03	24
20J1670-04	31
20J1670-05	38
20J1670-06	45
20J1670-07	52
20J1670-08	59
20J1670-09	61
20J1670-10	68
20J1670-11	75
20J1670-12	82
20J1670-13	89
20J1670-14	96
20J1670-15	103
Sample Preparation Information	105
QC Data	108
Volatile Organic Compounds by GC/MS	108
B269845	108
Semivolatile Organic Compounds by GC/MS	113
B270196	113
Polychlorinated Biphenyls By GC/ECD	116

Table of Contents (continued)

B270927	116
Petroleum Hydrocarbons Analyses	117
B270195	117
Metals Analyses (Total)	118
B270028	118
B270029	118
B270047	118
Dual Column RPD Report	121
Flag/Qualifier Summary	123
Certifications	124
Chain of Custody/Sample Receipt	128



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: Allen Tevyaw

REPORT DATE: 11/23/2020

PURCHASE ORDER NUMBER: 160320181545.B10

PROJECT NUMBER: 20181545.B10

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 20J1670

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

PROJECT LOCATION: 20 Privilege St, Woonsocket, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
1603201027-01	20J1670-01	Soil		SM 2540G SW-846 6010D SW-846 7471B SW-846 8082A SW-846 8100 Modified SW-846 8260C-D SW-846 8270D-E	
1603201027-02	20J1670-02	Soil		SM 2540G SW-846 6010D SW-846 7471B SW-846 8082A SW-846 8100 Modified SW-846 8260C-D SW-846 8270D-E	
1603201027-03	20J1670-03	Soil		SM 2540G SW-846 6010D SW-846 7471B SW-846 8082A SW-846 8100 Modified SW-846 8260C-D SW-846 8270D-E	
1603201027-04	20J1670-04	Soil		SM 2540G SW-846 6010D SW-846 7471B SW-846 8082A SW-846 8100 Modified SW-846 8260C-D SW-846 8270D-E	
1603201027-05	20J1670-05	Soil		SM 2540G SW-846 6010D SW-846 7471B SW-846 8082A SW-846 8100 Modified SW-846 8260C-D SW-846 8270D-E	



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: Allen Tevyaw

REPORT DATE: 11/23/2020

PURCHASE ORDER NUMBER: 160320181545.B10

PROJECT NUMBER: 20181545.B10

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 20J1670

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

PROJECT LOCATION: 20 Privilege St, Woonsocket, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
1603201027-06	20J1670-06	Soil		SM 2540G SW-846 6010D SW-846 7471B SW-846 8082A SW-846 8100 Modified SW-846 8260C-D SW-846 8270D-E	
1603201027-07	20J1670-07	Soil		SM 2540G SW-846 6010D SW-846 7471B SW-846 8082A SW-846 8100 Modified SW-846 8260C-D SW-846 8270D-E	
1603201027-08	20J1670-08	Trip Blank Soil		SW-846 8260C-D	
1603201028-09	20J1670-09	Soil		SM 2540G SW-846 6010D SW-846 7471B SW-846 8082A SW-846 8100 Modified SW-846 8260C-D SW-846 8270D-E	
1603201028-10	20J1670-10	Soil		SM 2540G SW-846 6010D SW-846 7471B SW-846 8082A SW-846 8100 Modified SW-846 8260C-D SW-846 8270D-E	
1603201028-11	20J1670-11	Soil		SM 2540G SW-846 6010D SW-846 7471B SW-846 8082A SW-846 8100 Modified SW-846 8260C-D SW-846 8270D-E	



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: Allen Tevyaw

REPORT DATE: 11/23/2020

PURCHASE ORDER NUMBER: 160320181545.B10

PROJECT NUMBER: 20181545.B10

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 20J1670

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

PROJECT LOCATION: 20 Privilege St, Woonsocket, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
1603201028-12	20J1670-12	Soil		SM 2540G SW-846 6010D SW-846 7471B SW-846 8082A SW-846 8100 Modified SW-846 8260C-D SW-846 8270D-E	
1603201028-13	20J1670-13	Soil		SM 2540G SW-846 6010D SW-846 7471B SW-846 8082A SW-846 8100 Modified SW-846 8260C-D SW-846 8270D-E	
1603201028-14	20J1670-14	Soil		SM 2540G SW-846 6010D SW-846 7471B SW-846 8082A SW-846 8100 Modified SW-846 8260C-D SW-846 8270D-E	
1603201027-15	20J1670-15	Trip Blank Soil		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 11//2320 Added PCBs per chain of custody

For method 8270E, only PAHs were requested and reported.

Qualifications:**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**

20J1670-06[1603201027-06], B270047-MS1

Zinc

20J1670-06[1603201027-06], B270047-MS1

MS-14

Matrix spike recovery is outside of control limits. Data validation is not affected since sample result is "not detected" and recovery bias is on the high side for this compound.

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

20J1670-06[1603201027-06], B270047-MS1

Qualifications:**L-02**

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

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

B269845-BS1, B269845-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:**tert-Butyl Alcohol (TBA)**

20J1670-01[1603201027-01], 20J1670-02[1603201027-02], 20J1670-03[1603201027-03], 20J1670-04[1603201027-04], 20J1670-05[1603201027-05], 20J1670-06[1603201027-06], 20J1670-07[1603201027-07], 20J1670-08[1603201027-08], 20J1670-09[1603201028-09], 20J1670-10[1603201028-10], 20J1670-11[1603201028-11], 20J1670-12[1603201028-12], 20J1670-13[1603201028-13], 20J1670-14[1603201028-14], 20J1670-15[1603201027-15], B269845-BLK1, B269845-BS1, B269845-BSD1, S053953-CCV1

trans-1,4-Dichloro-2-butene

20J1670-01[1603201027-01], 20J1670-02[1603201027-02], 20J1670-03[1603201027-03], 20J1670-04[1603201027-04], 20J1670-05[1603201027-05], 20J1670-06[1603201027-06], 20J1670-07[1603201027-07], 20J1670-08[1603201027-08], 20J1670-09[1603201028-09], 20J1670-10[1603201028-10], 20J1670-11[1603201028-11], 20J1670-12[1603201028-12], 20J1670-13[1603201028-13], 20J1670-14[1603201028-14], 20J1670-15[1603201027-15], B269845-BLK1, B269845-BS1, B269845-BSD1, S053953-CCV1

V-20

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

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

B269845-BS1, B269845-BSD1, S053953-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**

20J1670-01[1603201027-01], 20J1670-02[1603201027-02], 20J1670-03[1603201027-03], 20J1670-04[1603201027-04], 20J1670-05[1603201027-05], 20J1670-06[1603201027-06], 20J1670-07[1603201027-07], 20J1670-08[1603201027-08], 20J1670-09[1603201028-09], 20J1670-10[1603201028-10], 20J1670-11[1603201028-11], 20J1670-12[1603201028-12], 20J1670-13[1603201028-13], 20J1670-14[1603201028-14], 20J1670-15[1603201027-15], B269845-BLK1, B269845-BS1, B269845-BSD1, S053953-CCV1

SW-846 8100 Modified

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

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

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

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

Lisa A. Worthington
Technical Representative



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-01

Sampled: 10/27/2020 08:03

Sample ID: 20J1670-01

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	0.11	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
Acrylonitrile	ND	0.0064	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
Benzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
Bromobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
Bromochloromethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
Bromodichloromethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
Bromoform	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
Bromomethane	ND	0.011	mg/Kg dry	1	V-34	SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
2-Butanone (MEK)	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
tert-Butyl Alcohol (TBA)	ND	0.043	mg/Kg dry	1	V-05	SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
n-Butylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
sec-Butylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
tert-Butylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
Carbon Disulfide	ND	0.0064	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
Carbon Tetrachloride	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
Chlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
Chlorodibromomethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
Chloroethane	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
Chloroform	ND	0.0043	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
Chloromethane	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
2-Chlorotoluene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
4-Chlorotoluene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
1,2-Dibromoethane (EDB)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
Dibromomethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
1,2-Dichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
1,3-Dichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
1,4-Dichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
trans-1,4-Dichloro-2-butene	ND	0.0043	mg/Kg dry	1	V-05	SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
1,1-Dichloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
1,2-Dichloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
1,1-Dichloroethylene	ND	0.0043	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
cis-1,2-Dichloroethylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
trans-1,2-Dichloroethylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
1,2-Dichloropropane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
1,3-Dichloropropane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
2,2-Dichloropropane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
1,1-Dichloropropene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
cis-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
trans-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
Diethyl Ether	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-01

Sampled: 10/27/2020 08:03

Sample ID: 20J1670-01

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	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
1,4-Dioxane	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
Ethylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
Hexachlorobutadiene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
2-Hexanone (MBK)	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
Isopropylbenzene (Cumene)	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
Methyl Acetate	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0043	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
Methyl Cyclohexane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
Methylene Chloride	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
Naphthalene	ND	0.0043	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
n-Propylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
Styrene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
1,1,1,2-Tetrachloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
1,1,2,2-Tetrachloroethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
Tetrachloroethylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
Tetrahydrofuran	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
Toluene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
1,2,3-Trichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
1,2,4-Trichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
1,3,5-Trichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
1,1,1-Trichloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
1,1,2-Trichloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
Trichloroethylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
Trichlorofluoromethane (Freon 11)	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
1,2,3-Trichloropropane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
1,2,4-Trimethylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
1,3,5-Trimethylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
Vinyl Chloride	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
m+p Xylene	ND	0.0043	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
o-Xylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 6:55	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		111	70-130				10/30/20	6:55	
Toluene-d8		99.1	70-130				10/30/20	6:55	
4-Bromofluorobenzene		97.9	70-130				10/30/20	6:55	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-01

Sampled: 10/27/2020 08:03

Sample ID: 20J1670-01

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	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 21:17	IMR
Acenaphthylene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 21:17	IMR
Anthracene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 21:17	IMR
Benzo(a)anthracene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 21:17	IMR
Benzo(a)pyrene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 21:17	IMR
Benzo(b)fluoranthene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 21:17	IMR
Benzo(g,h,i)perylene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 21:17	IMR
Benzo(k)fluoranthene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 21:17	IMR
Chrysene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 21:17	IMR
Dibenz(a,h)anthracene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 21:17	IMR
Fluoranthene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 21:17	IMR
Fluorene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 21:17	IMR
Indeno(1,2,3-cd)pyrene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 21:17	IMR
2-Methylnaphthalene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 21:17	IMR
Naphthalene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 21:17	IMR
Phenanthrene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 21:17	IMR
Pyrene	0.19	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 21:17	IMR
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		67.9	30-130					11/5/20 21:17	
2-Fluorobiphenyl		76.2	30-130					11/5/20 21:17	
p-Terphenyl-d14		88.7	30-130					11/5/20 21:17	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-01

Sampled: 10/27/2020 08:03

Sample ID: 20J1670-01

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date	Date/Time	Analyst
							Prepared	Analyzed	
Aroclor-1016 [1]	ND	0.083	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 9:20	JMB
Aroclor-1221 [1]	ND	0.083	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 9:20	JMB
Aroclor-1232 [1]	ND	0.083	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 9:20	JMB
Aroclor-1242 [1]	ND	0.083	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 9:20	JMB
Aroclor-1248 [1]	ND	0.083	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 9:20	JMB
Aroclor-1254 [1]	ND	0.083	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 9:20	JMB
Aroclor-1260 [1]	ND	0.083	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 9:20	JMB
Aroclor-1262 [1]	ND	0.083	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 9:20	JMB
Aroclor-1268 [1]	ND	0.083	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 9:20	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		95.8	30-150					11/21/20 9:20	
Decachlorobiphenyl [2]		96.6	30-150					11/21/20 9:20	
Tetrachloro-m-xylene [1]		92.1	30-150					11/21/20 9:20	
Tetrachloro-m-xylene [2]		94.1	30-150					11/21/20 9:20	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-01

Sampled: 10/27/2020 08:03

Sample ID: 20J1670-01

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	29	8.6	mg/Kg dry	1		SW-846 8100 Modified	11/4/20	11/6/20 9:57	RDD
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
2-Fluorobiphenyl	68.9	40-140						11/6/20 9:57	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-01

Sampled: 10/27/2020 08:03

Sample ID: 20J1670-01

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		SW-846 6010D	11/2/20	11/3/20 20:16	QNW
Arsenic	ND	3.4	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:16	QNW
Beryllium	ND	0.17	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:16	QNW
Cadmium	ND	0.34	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:16	QNW
Chromium	5.9	0.69	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:16	QNW
Copper	22	0.69	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:16	QNW
Lead	42	0.51	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:16	QNW
Mercury	0.051	0.026	mg/Kg dry	1		SW-846 7471B	11/2/20	11/4/20 11:40	CJV
Nickel	4.8	0.69	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:16	QNW
Selenium	ND	3.4	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:16	QNW
Silver	ND	0.34	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:16	QNW
Thallium	ND	1.7	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:16	QNW
Zinc	62	0.69	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:16	QNW



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-01

Sampled: 10/27/2020 08:03

Sample ID: 20J1670-01

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	96.1		% Wt	1		SM 2540G	11/3/20	11/4/20 8:41	CJT



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-02

Sampled: 10/27/2020 08:27

Sample ID: 20J1670-02

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	0.12	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
Acrylonitrile	ND	0.0072	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
Benzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
Bromobenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
Bromochloromethane	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
Bromodichloromethane	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
Bromoform	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
Bromomethane	ND	0.012	mg/Kg dry	1	V-34	SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
2-Butanone (MEK)	ND	0.048	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
tert-Butyl Alcohol (TBA)	ND	0.048	mg/Kg dry	1	V-05	SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
n-Butylbenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
sec-Butylbenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
tert-Butylbenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
Carbon Disulfide	ND	0.0072	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
Carbon Tetrachloride	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
Chlorobenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
Chlorodibromomethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
Chloroethane	ND	0.024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
Chloroform	ND	0.0048	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
Chloromethane	ND	0.012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
2-Chlorotoluene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
4-Chlorotoluene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
1,2-Dibromoethane (EDB)	ND	0.0012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
Dibromomethane	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
1,2-Dichlorobenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
1,3-Dichlorobenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
1,4-Dichlorobenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
trans-1,4-Dichloro-2-butene	ND	0.0048	mg/Kg dry	1	V-05	SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
1,1-Dichloroethane	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
1,2-Dichloroethane	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
1,1-Dichloroethylene	ND	0.0048	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
cis-1,2-Dichloroethylene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
trans-1,2-Dichloroethylene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
1,2-Dichloropropane	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
1,3-Dichloropropane	ND	0.0012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
2,2-Dichloropropane	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
1,1-Dichloropropene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
cis-1,3-Dichloropropene	ND	0.0012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
trans-1,3-Dichloropropene	ND	0.0012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
Diethyl Ether	ND	0.024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-02

Sampled: 10/27/2020 08:27

Sample ID: 20J1670-02

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	0.0012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
1,4-Dioxane	ND	0.12	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
Ethylbenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
Hexachlorobutadiene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
2-Hexanone (MBK)	ND	0.024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
Isopropylbenzene (Cumene)	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
Methyl Acetate	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0048	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
Methyl Cyclohexane	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
Methylene Chloride	ND	0.024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
Naphthalene	ND	0.0048	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
n-Propylbenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
Styrene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
1,1,1,2-Tetrachloroethane	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
1,1,2,2-Tetrachloroethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
Tetrachloroethylene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
Tetrahydrofuran	ND	0.012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
Toluene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
1,2,3-Trichlorobenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
1,2,4-Trichlorobenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
1,3,5-Trichlorobenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
1,1,1-Trichloroethane	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
1,1,2-Trichloroethane	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
Trichloroethylene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
Trichlorofluoromethane (Freon 11)	ND	0.012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
1,2,3-Trichloropropane	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
1,2,4-Trimethylbenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
1,3,5-Trimethylbenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
Vinyl Chloride	ND	0.012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
m+p Xylene	ND	0.0048	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
o-Xylene	ND	0.0024	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:20	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		113	70-130				10/30/20	7:20	
Toluene-d8		102	70-130				10/30/20	7:20	
4-Bromofluorobenzene		98.4	70-130				10/30/20	7:20	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-02

Sampled: 10/27/2020 08:27

Sample ID: 20J1670-02

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	11/4/20	11/5/20 21:40	IMR
Acenaphthylene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 21:40	IMR
Anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 21:40	IMR
Benzo(a)anthracene	0.26	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 21:40	IMR
Benzo(a)pyrene	0.23	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 21:40	IMR
Benzo(b)fluoranthene	0.29	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 21:40	IMR
Benzo(g,h,i)perylene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 21:40	IMR
Benzo(k)fluoranthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 21:40	IMR
Chrysene	0.27	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 21:40	IMR
Dibenz(a,h)anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 21:40	IMR
Fluoranthene	0.53	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 21:40	IMR
Fluorene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 21:40	IMR
Indeno(1,2,3-cd)pyrene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 21:40	IMR
2-Methylnaphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 21:40	IMR
Naphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 21:40	IMR
Phenanthrene	0.53	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 21:40	IMR
Pyrene	0.60	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 21:40	IMR
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		64.6	30-130					11/5/20 21:40	
2-Fluorobiphenyl		67.8	30-130					11/5/20 21:40	
p-Terphenyl-d14		83.2	30-130					11/5/20 21:40	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-02

Sampled: 10/27/2020 08:27

Sample ID: 20J1670-02

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date	Date/Time	Analyst
							Prepared	Analyzed	
Aroclor-1016 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 9:38	JMB
Aroclor-1221 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 9:38	JMB
Aroclor-1232 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 9:38	JMB
Aroclor-1242 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 9:38	JMB
Aroclor-1248 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 9:38	JMB
Aroclor-1254 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 9:38	JMB
Aroclor-1260 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 9:38	JMB
Aroclor-1262 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 9:38	JMB
Aroclor-1268 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 9:38	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		97.2	30-150					11/21/20 9:38	
Decachlorobiphenyl [2]		97.7	30-150					11/21/20 9:38	
Tetrachloro-m-xylene [1]		92.9	30-150					11/21/20 9:38	
Tetrachloro-m-xylene [2]		97.6	30-150					11/21/20 9:38	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-02

Sampled: 10/27/2020 08:27

Sample ID: 20J1670-02

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	39	8.8	mg/Kg dry	1		SW-846 8100 Modified	11/4/20	11/6/20 10:18	RDD
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
2-Fluorobiphenyl	64.0		40-140					11/6/20 10:18	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-02

Sampled: 10/27/2020 08:27

Sample ID: 20J1670-02

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	11/2/20	11/3/20 20:21	QNW
Arsenic	ND	3.5	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:21	QNW
Beryllium	ND	0.18	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:21	QNW
Cadmium	ND	0.35	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:21	QNW
Chromium	5.2	0.71	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:21	QNW
Copper	11	0.71	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:21	QNW
Lead	15	0.53	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:21	QNW
Mercury	ND	0.027	mg/Kg dry	1		SW-846 7471B	11/2/20	11/4/20 11:41	CJV
Nickel	4.8	0.71	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:21	QNW
Selenium	ND	3.5	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:21	QNW
Silver	ND	0.35	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:21	QNW
Thallium	ND	1.8	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:21	QNW
Zinc	52	0.71	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:21	QNW



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-02

Sampled: 10/27/2020 08:27

Sample ID: 20J1670-02

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	94.2		% Wt	1		SM 2540G	11/3/20	11/4/20 8:41	CJT



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-03

Sampled: 10/27/2020 08:42

Sample ID: 20J1670-03

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	10/30/20	10/30/20 7:44	MFF
Acrylonitrile	ND	0.0063	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
Benzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
Bromobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
Bromochloromethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
Bromodichloromethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
Bromoform	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
Bromomethane	ND	0.011	mg/Kg dry	1	V-34	SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
2-Butanone (MEK)	ND	0.042	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
tert-Butyl Alcohol (TBA)	ND	0.042	mg/Kg dry	1	V-05	SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
n-Butylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
sec-Butylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
tert-Butylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
Carbon Disulfide	ND	0.0063	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
Carbon Tetrachloride	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
Chlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
Chlorodibromomethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
Chloroethane	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
Chloroform	ND	0.0042	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
Chloromethane	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
2-Chlorotoluene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
4-Chlorotoluene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
1,2-Dibromoethane (EDB)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
Dibromomethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
1,2-Dichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
1,3-Dichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
1,4-Dichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
trans-1,4-Dichloro-2-butene	ND	0.0042	mg/Kg dry	1	V-05	SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
1,1-Dichloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
1,2-Dichloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
1,1-Dichloroethylene	ND	0.0042	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
cis-1,2-Dichloroethylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
trans-1,2-Dichloroethylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
1,2-Dichloropropane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
1,3-Dichloropropane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
2,2-Dichloropropane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
1,1-Dichloropropene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
cis-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
trans-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
Diethyl Ether	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-03

Sampled: 10/27/2020 08:42

Sample ID: 20J1670-03

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	10/30/20	10/30/20 7:44	MFF
1,4-Dioxane	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
Ethylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
Hexachlorobutadiene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
2-Hexanone (MBK)	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
Isopropylbenzene (Cumene)	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
Methyl Acetate	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0042	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
Methyl Cyclohexane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
Methylene Chloride	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
Naphthalene	ND	0.0042	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
n-Propylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
Styrene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
1,1,1,2-Tetrachloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
1,1,2,2-Tetrachloroethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
Tetrachloroethylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
Tetrahydrofuran	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
Toluene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
1,2,3-Trichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
1,2,4-Trichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
1,3,5-Trichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
1,1,1-Trichloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
1,1,2-Trichloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
Trichloroethylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
Trichlorofluoromethane (Freon 11)	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
1,2,3-Trichloropropane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
1,2,4-Trimethylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
1,3,5-Trimethylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
Vinyl Chloride	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
m+p Xylene	ND	0.0042	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
o-Xylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 7:44	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		109	70-130				10/30/20	7:44	
Toluene-d8		99.8	70-130				10/30/20	7:44	
4-Bromofluorobenzene		98.0	70-130				10/30/20	7:44	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-03

Sampled: 10/27/2020 08:42

Sample ID: 20J1670-03

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	11/4/20	11/5/20 22:03	IMR
Acenaphthylene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:03	IMR
Anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:03	IMR
Benzo(a)anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:03	IMR
Benzo(a)pyrene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:03	IMR
Benzo(b)fluoranthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:03	IMR
Benzo(g,h,i)perylene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:03	IMR
Benzo(k)fluoranthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:03	IMR
Chrysene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:03	IMR
Dibenz(a,h)anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:03	IMR
Fluoranthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:03	IMR
Fluorene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:03	IMR
Indeno(1,2,3-cd)pyrene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:03	IMR
2-Methylnaphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:03	IMR
Naphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:03	IMR
Phenanthrene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:03	IMR
Pyrene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:03	IMR
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		56.9	30-130					11/5/20 22:03	
2-Fluorobiphenyl		62.4	30-130					11/5/20 22:03	
p-Terphenyl-d14		80.3	30-130					11/5/20 22:03	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-03

Sampled: 10/27/2020 08:42

Sample ID: 20J1670-03

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date	Date/Time	Analyst
							Prepared	Analyzed	
Aroclor-1016 [1]	ND	0.084	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 9:56	JMB
Aroclor-1221 [1]	ND	0.084	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 9:56	JMB
Aroclor-1232 [1]	ND	0.084	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 9:56	JMB
Aroclor-1242 [1]	ND	0.084	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 9:56	JMB
Aroclor-1248 [1]	ND	0.084	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 9:56	JMB
Aroclor-1254 [1]	ND	0.084	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 9:56	JMB
Aroclor-1260 [1]	ND	0.084	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 9:56	JMB
Aroclor-1262 [1]	ND	0.084	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 9:56	JMB
Aroclor-1268 [1]	ND	0.084	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 9:56	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		98.9	30-150					11/21/20 9:56	
Decachlorobiphenyl [2]		101	30-150					11/21/20 9:56	
Tetrachloro-m-xylene [1]		91.9	30-150					11/21/20 9:56	
Tetrachloro-m-xylene [2]		99.3	30-150					11/21/20 9:56	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-03

Sampled: 10/27/2020 08:42

Sample ID: 20J1670-03

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	11	8.7	mg/Kg dry	1		SW-846 8100 Modified	11/4/20	11/6/20 8:55	RDD
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
2-Fluorobiphenyl	57.2		40-140					11/6/20 8:55	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-03

Sampled: 10/27/2020 08:42

Sample ID: 20J1670-03

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	11/2/20	11/3/20 20:26	QNW
Arsenic	ND	3.3	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:26	QNW
Beryllium	ND	0.17	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:26	QNW
Cadmium	ND	0.33	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:26	QNW
Chromium	9.4	0.67	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:26	QNW
Copper	10	0.67	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:26	QNW
Lead	5.8	0.50	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:26	QNW
Mercury	ND	0.025	mg/Kg dry	1		SW-846 7471B	11/2/20	11/4/20 12:01	CJV
Nickel	6.1	0.67	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:26	QNW
Selenium	ND	3.3	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:26	QNW
Silver	ND	0.33	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:26	QNW
Thallium	ND	1.7	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:26	QNW
Zinc	29	0.67	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:26	QNW



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-03

Sampled: 10/27/2020 08:42

Sample ID: 20J1670-03

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	95.0		% Wt	1		SM 2540G	11/3/20	11/4/20 8:41	CJT



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-04

Sampled: 10/27/2020 10:02

Sample ID: 20J1670-04

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	10/30/20	10/30/20 8:09	MFF
Acrylonitrile	ND	0.0064	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
Benzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
Bromobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
Bromochloromethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
Bromodichloromethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
Bromoform	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
Bromomethane	ND	0.011	mg/Kg dry	1	V-34	SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
2-Butanone (MEK)	ND	0.043	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
tert-Butyl Alcohol (TBA)	ND	0.043	mg/Kg dry	1	V-05	SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
n-Butylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
sec-Butylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
tert-Butylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
Carbon Disulfide	ND	0.0064	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
Carbon Tetrachloride	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
Chlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
Chlorodibromomethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
Chloroethane	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
Chloroform	ND	0.0043	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
Chloromethane	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
2-Chlorotoluene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
4-Chlorotoluene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
1,2-Dibromoethane (EDB)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
Dibromomethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
1,2-Dichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
1,3-Dichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
1,4-Dichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
trans-1,4-Dichloro-2-butene	ND	0.0043	mg/Kg dry	1	V-05	SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
1,1-Dichloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
1,2-Dichloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
1,1-Dichloroethylene	ND	0.0043	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
cis-1,2-Dichloroethylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
trans-1,2-Dichloroethylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
1,2-Dichloropropane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
1,3-Dichloropropane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
2,2-Dichloropropane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
1,1-Dichloropropene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
cis-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
trans-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
Diethyl Ether	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-04

Sampled: 10/27/2020 10:02

Sample ID: 20J1670-04

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	10/30/20	10/30/20 8:09	MFF
1,4-Dioxane	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
Ethylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
Hexachlorobutadiene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
2-Hexanone (MBK)	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
Isopropylbenzene (Cumene)	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
Methyl Acetate	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0043	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
Methyl Cyclohexane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
Methylene Chloride	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
Naphthalene	ND	0.0043	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
n-Propylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
Styrene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
1,1,1,2-Tetrachloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
1,1,2,2-Tetrachloroethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
Tetrachloroethylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
Tetrahydrofuran	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
Toluene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
1,2,3-Trichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
1,2,4-Trichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
1,3,5-Trichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
1,1,1-Trichloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
1,1,2-Trichloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
Trichloroethylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
Trichlorofluoromethane (Freon 11)	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
1,2,3-Trichloropropane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
1,2,4-Trimethylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
1,3,5-Trimethylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
Vinyl Chloride	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
m+p Xylene	ND	0.0043	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
o-Xylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:09	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		107	70-130				10/30/20	8:09	
Toluene-d8		100	70-130				10/30/20	8:09	
4-Bromofluorobenzene		97.6	70-130				10/30/20	8:09	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-04

Sampled: 10/27/2020 10:02

Sample ID: 20J1670-04

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	11/4/20	11/5/20 22:26	IMR
Acenaphthylene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:26	IMR
Anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:26	IMR
Benzo(a)anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:26	IMR
Benzo(a)pyrene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:26	IMR
Benzo(b)fluoranthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:26	IMR
Benzo(g,h,i)perylene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:26	IMR
Benzo(k)fluoranthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:26	IMR
Chrysene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:26	IMR
Dibenz(a,h)anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:26	IMR
Fluoranthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:26	IMR
Fluorene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:26	IMR
Indeno(1,2,3-cd)pyrene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:26	IMR
2-Methylnaphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:26	IMR
Naphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:26	IMR
Phenanthrene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:26	IMR
Pyrene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:26	IMR
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		72.1	30-130					11/5/20 22:26	
2-Fluorobiphenyl		77.8	30-130					11/5/20 22:26	
p-Terphenyl-d14		92.0	30-130					11/5/20 22:26	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-04

Sampled: 10/27/2020 10:02

Sample ID: 20J1670-04

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

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	11/14/20	11/21/20 10:13	JMB
Aroclor-1221 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 10:13	JMB
Aroclor-1232 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 10:13	JMB
Aroclor-1242 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 10:13	JMB
Aroclor-1248 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 10:13	JMB
Aroclor-1254 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 10:13	JMB
Aroclor-1260 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 10:13	JMB
Aroclor-1262 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 10:13	JMB
Aroclor-1268 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 10:13	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		86.8	30-150					11/21/20 10:13	
Decachlorobiphenyl [2]		87.7	30-150					11/21/20 10:13	
Tetrachloro-m-xylene [1]		85.5	30-150					11/21/20 10:13	
Tetrachloro-m-xylene [2]		91.2	30-150					11/21/20 10:13	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-04

Sampled: 10/27/2020 10:02

Sample ID: 20J1670-04

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	32	8.8	mg/Kg dry	1		SW-846 8100 Modified	11/4/20	11/6/20 10:39	RDD
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
2-Fluorobiphenyl	70.8		40-140					11/6/20 10:39	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-04

Sampled: 10/27/2020 10:02

Sample ID: 20J1670-04

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	11/2/20	11/3/20 20:31	QNW
Arsenic	ND	3.6	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:31	QNW
Beryllium	ND	0.18	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:31	QNW
Cadmium	ND	0.36	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:31	QNW
Chromium	5.5	0.71	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:31	QNW
Copper	9.9	0.71	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:31	QNW
Lead	25	0.53	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:31	QNW
Mercury	0.039	0.026	mg/Kg dry	1		SW-846 7471B	11/2/20	11/4/20 12:03	CJV
Nickel	5.0	0.71	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:31	QNW
Selenium	ND	3.6	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:31	QNW
Silver	ND	0.36	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:31	QNW
Thallium	ND	1.8	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:31	QNW
Zinc	33	0.71	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:31	QNW



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-04

Sampled: 10/27/2020 10:02

Sample ID: 20J1670-04

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	93.8		% Wt	1		SM 2540G	11/3/20	11/4/20 8:41	CJT



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-05

Sampled: 10/27/2020 11:37

Sample ID: 20J1670-05

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	0.087	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
Acrylonitrile	ND	0.0052	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00087	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
Benzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
Bromobenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
Bromochloromethane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
Bromodichloromethane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
Bromoform	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
Bromomethane	ND	0.0087	mg/Kg dry	1	V-34	SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
2-Butanone (MEK)	ND	0.035	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
tert-Butyl Alcohol (TBA)	ND	0.035	mg/Kg dry	1	V-05	SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
n-Butylbenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
sec-Butylbenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
tert-Butylbenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00087	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
Carbon Disulfide	ND	0.0052	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
Carbon Tetrachloride	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
Chlorobenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
Chlorodibromomethane	ND	0.00087	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
Chloroethane	ND	0.017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
Chloroform	ND	0.0035	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
Chloromethane	ND	0.0087	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
2-Chlorotoluene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
4-Chlorotoluene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
1,2-Dibromoethane (EDB)	ND	0.00087	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
Dibromomethane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
1,2-Dichlorobenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
1,3-Dichlorobenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
1,4-Dichlorobenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
trans-1,4-Dichloro-2-butene	ND	0.0035	mg/Kg dry	1	V-05	SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
1,1-Dichloroethane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
1,2-Dichloroethane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
1,1-Dichloroethylene	ND	0.0035	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
cis-1,2-Dichloroethylene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
trans-1,2-Dichloroethylene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
1,2-Dichloropropane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
1,3-Dichloropropane	ND	0.00087	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
2,2-Dichloropropane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
1,1-Dichloropropene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
cis-1,3-Dichloropropene	ND	0.00087	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
trans-1,3-Dichloropropene	ND	0.00087	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
Diethyl Ether	ND	0.017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-05

Sampled: 10/27/2020 11:37

Sample ID: 20J1670-05

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	0.00087	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
1,4-Dioxane	ND	0.087	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
Ethylbenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
Hexachlorobutadiene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
2-Hexanone (MBK)	ND	0.017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
Isopropylbenzene (Cumene)	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
Methyl Acetate	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0035	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
Methyl Cyclohexane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
Methylene Chloride	ND	0.017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
Naphthalene	ND	0.0035	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
n-Propylbenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
Styrene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
1,1,1,2-Tetrachloroethane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
1,1,2,2-Tetrachloroethane	ND	0.00087	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
Tetrachloroethylene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
Tetrahydrofuran	ND	0.0087	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
Toluene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
1,2,3-Trichlorobenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
1,2,4-Trichlorobenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
1,3,5-Trichlorobenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
1,1,1-Trichloroethane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
1,1,2-Trichloroethane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
Trichloroethylene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0087	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
1,2,3-Trichloropropane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0087	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
1,2,4-Trimethylbenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
1,3,5-Trimethylbenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
Vinyl Chloride	ND	0.0087	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
m+p Xylene	ND	0.0035	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
o-Xylene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:33	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		111	70-130					10/30/20 8:33	
Toluene-d8		100	70-130					10/30/20 8:33	
4-Bromofluorobenzene		97.6	70-130					10/30/20 8:33	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-05

Sampled: 10/27/2020 11:37

Sample ID: 20J1670-05

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	11/4/20	11/5/20 22:48	IMR
Acenaphthylene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:48	IMR
Anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:48	IMR
Benzo(a)anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:48	IMR
Benzo(a)pyrene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:48	IMR
Benzo(b)fluoranthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:48	IMR
Benzo(g,h,i)perylene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:48	IMR
Benzo(k)fluoranthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:48	IMR
Chrysene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:48	IMR
Dibenz(a,h)anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:48	IMR
Fluoranthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:48	IMR
Fluorene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:48	IMR
Indeno(1,2,3-cd)pyrene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:48	IMR
2-Methylnaphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:48	IMR
Naphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:48	IMR
Phenanthrene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:48	IMR
Pyrene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 22:48	IMR
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		65.1	30-130					11/5/20 22:48	
2-Fluorobiphenyl		73.1	30-130					11/5/20 22:48	
p-Terphenyl-d14		87.2	30-130					11/5/20 22:48	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-05

Sampled: 10/27/2020 11:37

Sample ID: 20J1670-05

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

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	11/14/20	11/21/20 10:31	JMB
Aroclor-1221 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 10:31	JMB
Aroclor-1232 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 10:31	JMB
Aroclor-1242 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 10:31	JMB
Aroclor-1248 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 10:31	JMB
Aroclor-1254 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 10:31	JMB
Aroclor-1260 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 10:31	JMB
Aroclor-1262 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 10:31	JMB
Aroclor-1268 [1]	ND	0.086	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 10:31	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		87.1	30-150					11/21/20 10:31	
Decachlorobiphenyl [2]		87.5	30-150					11/21/20 10:31	
Tetrachloro-m-xylene [1]		82.9	30-150					11/21/20 10:31	
Tetrachloro-m-xylene [2]		88.0	30-150					11/21/20 10:31	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-05

Sampled: 10/27/2020 11:37

Sample ID: 20J1670-05

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	23	9.0	mg/Kg dry	1		SW-846 8100 Modified	11/4/20	11/6/20 9:36	RDD
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
2-Fluorobiphenyl	70.9	40-140						11/6/20 9:36	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-05

Sampled: 10/27/2020 11:37

Sample ID: 20J1670-05

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	11/2/20	11/3/20 20:36	QNW
Arsenic	ND	3.6	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:36	QNW
Beryllium	0.22	0.18	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:36	QNW
Cadmium	ND	0.36	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:36	QNW
Chromium	6.5	0.72	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:36	QNW
Copper	6.0	0.72	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:36	QNW
Lead	10	0.54	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:36	QNW
Mercury	ND	0.028	mg/Kg dry	1		SW-846 7471B	11/2/20	11/4/20 12:05	CJV
Nickel	5.4	0.72	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:36	QNW
Selenium	ND	3.6	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:36	QNW
Silver	ND	0.36	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:36	QNW
Thallium	ND	1.8	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:36	QNW
Zinc	26	0.72	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:36	QNW



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-05

Sampled: 10/27/2020 11:37

Sample ID: 20J1670-05

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	92.8		% Wt	1		SM 2540G	11/3/20	11/4/20 8:41	CJT



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-06

Sampled: 10/27/2020 12:22

Sample ID: 20J1670-06

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	0.089	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
Acrylonitrile	ND	0.0054	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00089	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
Benzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
Bromobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
Bromochloromethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
Bromodichloromethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
Bromoform	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
Bromomethane	ND	0.0089	mg/Kg dry	1	V-34	SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
2-Butanone (MEK)	ND	0.036	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
tert-Butyl Alcohol (TBA)	ND	0.036	mg/Kg dry	1	V-05	SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
n-Butylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
sec-Butylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
tert-Butylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00089	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
Carbon Disulfide	ND	0.0054	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
Carbon Tetrachloride	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
Chlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
Chlorodibromomethane	ND	0.00089	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
Chloroethane	ND	0.018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
Chloroform	ND	0.0036	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
Chloromethane	ND	0.0089	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
2-Chlorotoluene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
4-Chlorotoluene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
1,2-Dibromoethane (EDB)	ND	0.00089	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
Dibromomethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
1,2-Dichlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
1,3-Dichlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
1,4-Dichlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
trans-1,4-Dichloro-2-butene	ND	0.0036	mg/Kg dry	1	V-05	SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
1,1-Dichloroethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
1,2-Dichloroethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
1,1-Dichloroethylene	ND	0.0036	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
cis-1,2-Dichloroethylene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
trans-1,2-Dichloroethylene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
1,2-Dichloropropane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
1,3-Dichloropropane	ND	0.00089	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
2,2-Dichloropropane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
1,1-Dichloropropene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
cis-1,3-Dichloropropene	ND	0.00089	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
trans-1,3-Dichloropropene	ND	0.00089	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
Diethyl Ether	ND	0.018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-06

Sampled: 10/27/2020 12:22

Sample ID: 20J1670-06

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	0.00089	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
1,4-Dioxane	ND	0.089	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
Ethylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
Hexachlorobutadiene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
2-Hexanone (MBK)	ND	0.018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
Isopropylbenzene (Cumene)	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
Methyl Acetate	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0036	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
Methyl Cyclohexane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
Methylene Chloride	ND	0.018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
Naphthalene	ND	0.0036	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
n-Propylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
Styrene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
1,1,1,2-Tetrachloroethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
1,1,2,2-Tetrachloroethane	ND	0.00089	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
Tetrachloroethylene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
Tetrahydrofuran	ND	0.0089	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
Toluene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
1,2,3-Trichlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
1,2,4-Trichlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
1,3,5-Trichlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
1,1,1-Trichloroethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
1,1,2-Trichloroethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
Trichloroethylene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0089	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
1,2,3-Trichloropropane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0089	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
1,2,4-Trimethylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
1,3,5-Trimethylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
Vinyl Chloride	ND	0.0089	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
m+p Xylene	ND	0.0036	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
o-Xylene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 8:58	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		109	70-130					10/30/20 8:58	
Toluene-d8		101	70-130					10/30/20 8:58	
4-Bromofluorobenzene		96.6	70-130					10/30/20 8:58	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-06

Sampled: 10/27/2020 12:22

Sample ID: 20J1670-06

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	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:11	IMR
Acenaphthylene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:11	IMR
Anthracene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:11	IMR
Benzo(a)anthracene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:11	IMR
Benzo(a)pyrene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:11	IMR
Benzo(b)fluoranthene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:11	IMR
Benzo(g,h,i)perylene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:11	IMR
Benzo(k)fluoranthene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:11	IMR
Chrysene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:11	IMR
Dibenz(a,h)anthracene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:11	IMR
Fluoranthene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:11	IMR
Fluorene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:11	IMR
Indeno(1,2,3-cd)pyrene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:11	IMR
2-Methylnaphthalene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:11	IMR
Naphthalene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:11	IMR
Phenanthrene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:11	IMR
Pyrene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:11	IMR
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		53.8	30-130					11/5/20 23:11	
2-Fluorobiphenyl		58.0	30-130					11/5/20 23:11	
p-Terphenyl-d14		73.5	30-130					11/5/20 23:11	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-06

Sampled: 10/27/2020 12:22

Sample ID: 20J1670-06

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date	Date/Time	Analyst
							Prepared	Analyzed	
Aroclor-1016 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 10:49	JMB
Aroclor-1221 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 10:49	JMB
Aroclor-1232 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 10:49	JMB
Aroclor-1242 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 10:49	JMB
Aroclor-1248 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 10:49	JMB
Aroclor-1254 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 10:49	JMB
Aroclor-1260 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 10:49	JMB
Aroclor-1262 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 10:49	JMB
Aroclor-1268 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 10:49	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		99.9	30-150					11/21/20 10:49	
Decachlorobiphenyl [2]		102	30-150					11/21/20 10:49	
Tetrachloro-m-xylene [1]		93.9	30-150					11/21/20 10:49	
Tetrachloro-m-xylene [2]		101	30-150					11/21/20 10:49	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-06

Sampled: 10/27/2020 12:22

Sample ID: 20J1670-06

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	17	8.6	mg/Kg dry	1		SW-846 8100 Modified	11/4/20	11/6/20 9:16	RDD
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
2-Fluorobiphenyl	51.2		40-140					11/6/20 9:16	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-06

Sampled: 10/27/2020 12:22

Sample ID: 20J1670-06

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	11/2/20	11/3/20 19:30	QNW
Arsenic	ND	3.4	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 19:30	QNW
Beryllium	ND	0.17	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 19:30	QNW
Cadmium	ND	0.34	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 19:30	QNW
Chromium	5.9	0.68	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 19:30	QNW
Copper	15	0.68	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 19:30	QNW
Lead	12	0.51	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 19:30	QNW
Mercury	0.041	0.025	mg/Kg dry	1		SW-846 7471B	11/2/20	11/4/20 12:06	CJV
Nickel	5.3	0.68	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 19:30	QNW
Selenium	ND	3.4	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 19:30	QNW
Silver	ND	0.34	mg/Kg dry	1		SW-846 6010D	11/2/20	11/4/20 13:23	QNW
Thallium	ND	1.7	mg/Kg dry	1	MS-14	SW-846 6010D	11/2/20	11/3/20 19:30	QNW
Zinc	68	0.68	mg/Kg dry	1	MS-07	SW-846 6010D	11/2/20	11/3/20 19:30	QNW



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-06

Sampled: 10/27/2020 12:22

Sample ID: 20J1670-06

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	97.2		% Wt	1		SM 2540G	11/3/20	11/4/20 8:41	CJT



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-07

Sampled: 10/27/2020 13:41

Sample ID: 20J1670-07

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	10/30/20	10/30/20 9:22	MFF
Acrylonitrile	ND	0.0063	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
Benzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
Bromobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
Bromochloromethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
Bromodichloromethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
Bromoform	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
Bromomethane	ND	0.011	mg/Kg dry	1	V-34	SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
2-Butanone (MEK)	ND	0.042	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
tert-Butyl Alcohol (TBA)	ND	0.042	mg/Kg dry	1	V-05	SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
n-Butylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
sec-Butylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
tert-Butylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
Carbon Disulfide	ND	0.0063	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
Carbon Tetrachloride	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
Chlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
Chlorodibromomethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
Chloroethane	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
Chloroform	ND	0.0042	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
Chloromethane	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
2-Chlorotoluene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
4-Chlorotoluene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
1,2-Dibromoethane (EDB)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
Dibromomethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
1,2-Dichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
1,3-Dichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
1,4-Dichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
trans-1,4-Dichloro-2-butene	ND	0.0042	mg/Kg dry	1	V-05	SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
1,1-Dichloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
1,2-Dichloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
1,1-Dichloroethylene	ND	0.0042	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
cis-1,2-Dichloroethylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
trans-1,2-Dichloroethylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
1,2-Dichloropropane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
1,3-Dichloropropane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
2,2-Dichloropropane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
1,1-Dichloropropene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
cis-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
trans-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
Diethyl Ether	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-07

Sampled: 10/27/2020 13:41

Sample ID: 20J1670-07

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	10/30/20	10/30/20 9:22	MFF
1,4-Dioxane	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
Ethylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
Hexachlorobutadiene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
2-Hexanone (MBK)	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
Isopropylbenzene (Cumene)	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
Methyl Acetate	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0042	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
Methyl Cyclohexane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
Methylene Chloride	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
Naphthalene	ND	0.0042	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
n-Propylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
Styrene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
1,1,1,2-Tetrachloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
1,1,2,2-Tetrachloroethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
Tetrachloroethylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
Tetrahydrofuran	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
Toluene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
1,2,3-Trichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
1,2,4-Trichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
1,3,5-Trichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
1,1,1-Trichloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
1,1,2-Trichloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
Trichloroethylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
Trichlorofluoromethane (Freon 11)	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
1,2,3-Trichloropropane	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
1,2,4-Trimethylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
1,3,5-Trimethylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
Vinyl Chloride	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
m+p Xylene	ND	0.0042	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
o-Xylene	ND	0.0021	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 9:22	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		109	70-130				10/30/20	9:22	
Toluene-d8		100	70-130				10/30/20	9:22	
4-Bromofluorobenzene		96.7	70-130				10/30/20	9:22	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-07

Sampled: 10/27/2020 13:41

Sample ID: 20J1670-07

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	0.19	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:35	IMR
Acenaphthylene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:35	IMR
Anthracene	0.41	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:35	IMR
Benzo(a)anthracene	1.5	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:35	IMR
Benzo(a)pyrene	1.4	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:35	IMR
Benzo(b)fluoranthene	1.7	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:35	IMR
Benzo(g,h,i)perylene	0.68	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:35	IMR
Benzo(k)fluoranthene	0.66	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:35	IMR
Chrysene	1.5	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:35	IMR
Dibenz(a,h)anthracene	0.20	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:35	IMR
Fluoranthene	2.9	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:35	IMR
Fluorene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:35	IMR
Indeno(1,2,3-cd)pyrene	0.82	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:35	IMR
2-Methylnaphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:35	IMR
Naphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:35	IMR
Phenanthrene	2.5	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:35	IMR
Pyrene	3.1	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:35	IMR
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		64.9	30-130					11/5/20 23:35	
2-Fluorobiphenyl		72.8	30-130					11/5/20 23:35	
p-Terphenyl-d14		80.5	30-130					11/5/20 23:35	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-07

Sampled: 10/27/2020 13:41

Sample ID: 20J1670-07

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date	Date/Time	Analyst
							Prepared	Analyzed	
Aroclor-1016 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 11:07	JMB
Aroclor-1221 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 11:07	JMB
Aroclor-1232 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 11:07	JMB
Aroclor-1242 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 11:07	JMB
Aroclor-1248 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 11:07	JMB
Aroclor-1254 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 11:07	JMB
Aroclor-1260 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 11:07	JMB
Aroclor-1262 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 11:07	JMB
Aroclor-1268 [1]	ND	0.087	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 11:07	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		86.5	30-150					11/21/20 11:07	
Decachlorobiphenyl [2]		93.3	30-150					11/21/20 11:07	
Tetrachloro-m-xylene [1]		82.9	30-150					11/21/20 11:07	
Tetrachloro-m-xylene [2]		84.6	30-150					11/21/20 11:07	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-07

Sampled: 10/27/2020 13:41

Sample ID: 20J1670-07

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	140	9.0	mg/Kg dry	1		SW-846 8100 Modified	11/4/20	11/6/20 9:51	RDD
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
2-Fluorobiphenyl	63.5	40-140						11/6/20 9:51	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-07

Sampled: 10/27/2020 13:41

Sample ID: 20J1670-07

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	11/2/20	11/3/20 20:52	QNW
Arsenic	ND	3.6	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:52	QNW
Beryllium	ND	0.18	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:52	QNW
Cadmium	ND	0.36	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:52	QNW
Chromium	9.4	0.73	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:52	QNW
Copper	17	0.73	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:52	QNW
Lead	50	0.54	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:52	QNW
Mercury	0.077	0.026	mg/Kg dry	1		SW-846 7471B	11/2/20	11/4/20 12:08	CJV
Nickel	4.7	0.73	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:52	QNW
Selenium	ND	3.6	mg/Kg dry	1		SW-846 6010D	11/2/20	11/4/20 13:28	QNW
Silver	ND	0.36	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:52	QNW
Thallium	ND	1.8	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:52	QNW
Zinc	56	0.73	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:52	QNW



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-07

Sampled: 10/27/2020 13:41

Sample ID: 20J1670-07

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	92.4		% Wt	1		SM 2540G	11/3/20	11/4/20 8:41	CJT



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-08

Sampled: 10/27/2020 15:00

Sample ID: 20J1670-08

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	10/30/20	10/30/20 9:47	MFF
Acrylonitrile	ND	0.0060	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
Benzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
Bromobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
Bromochloromethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
Bromodichloromethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
Bromoform	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
Bromomethane	ND	0.010	mg/Kg wet	1	V-34	SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
2-Butanone (MEK)	ND	0.040	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
tert-Butyl Alcohol (TBA)	ND	0.040	mg/Kg wet	1	V-05	SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
n-Butylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
sec-Butylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
tert-Butylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
Carbon Disulfide	ND	0.0060	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
Carbon Tetrachloride	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
Chlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
Chlorodibromomethane	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
Chloroethane	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
Chloroform	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
Chloromethane	ND	0.010	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
2-Chlorotoluene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
4-Chlorotoluene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
Dibromomethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
1,2-Dichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
1,3-Dichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
1,4-Dichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
trans-1,4-Dichloro-2-butene	ND	0.0040	mg/Kg wet	1	V-05	SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
1,1-Dichloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
1,2-Dichloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
1,1-Dichloroethylene	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
1,2-Dichloropropane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
1,3-Dichloropropane	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
2,2-Dichloropropane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
1,1-Dichloropropene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
Diethyl Ether	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-08

Sampled: 10/27/2020 15:00

Sample ID: 20J1670-08

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	10/30/20	10/30/20 9:47	MFF
1,4-Dioxane	ND	0.10	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
Ethylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
Hexachlorobutadiene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
2-Hexanone (MBK)	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
Methyl Acetate	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
Methyl Cyclohexane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
Methylene Chloride	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
Naphthalene	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
n-Propylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
Styrene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
Tetrachloroethylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
Tetrahydrofuran	ND	0.010	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
Toluene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
1,2,3-Trichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
1,3,5-Trichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
1,1,1-Trichloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
1,1,2-Trichloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
Trichloroethylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
1,2,3-Trichloropropane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.010	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
Vinyl Chloride	ND	0.010	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
m+p Xylene	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
o-Xylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 9:47	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		109	70-130					10/30/20 9:47	
Toluene-d8		99.1	70-130					10/30/20 9:47	
4-Bromofluorobenzene		99.6	70-130					10/30/20 9:47	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-09

Sampled: 10/28/2020 07:42

Sample ID: 20J1670-09

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	0.090	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
Acrylonitrile	ND	0.0054	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00090	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
Benzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
Bromobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
Bromochloromethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
Bromodichloromethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
Bromoform	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
Bromomethane	ND	0.0090	mg/Kg dry	1	V-34	SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
2-Butanone (MEK)	ND	0.036	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
tert-Butyl Alcohol (TBA)	ND	0.036	mg/Kg dry	1	V-05	SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
n-Butylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
sec-Butylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
tert-Butylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00090	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
Carbon Disulfide	ND	0.0054	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
Carbon Tetrachloride	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
Chlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
Chlorodibromomethane	ND	0.00090	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
Chloroethane	ND	0.018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
Chloroform	ND	0.0036	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
Chloromethane	ND	0.0090	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
2-Chlorotoluene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
4-Chlorotoluene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
1,2-Dibromoethane (EDB)	ND	0.00090	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
Dibromomethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
1,2-Dichlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
1,3-Dichlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
1,4-Dichlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
trans-1,4-Dichloro-2-butene	ND	0.0036	mg/Kg dry	1	V-05	SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
1,1-Dichloroethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
1,2-Dichloroethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
1,1-Dichloroethylene	ND	0.0036	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
cis-1,2-Dichloroethylene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
trans-1,2-Dichloroethylene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
1,2-Dichloropropane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
1,3-Dichloropropane	ND	0.00090	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
2,2-Dichloropropane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
1,1-Dichloropropene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
cis-1,3-Dichloropropene	ND	0.00090	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
trans-1,3-Dichloropropene	ND	0.00090	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
Diethyl Ether	ND	0.018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-09

Sampled: 10/28/2020 07:42

Sample ID: 20J1670-09

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	0.00090	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
1,4-Dioxane	ND	0.090	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
Ethylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
Hexachlorobutadiene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
2-Hexanone (MBK)	ND	0.018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
Isopropylbenzene (Cumene)	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
Methyl Acetate	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0036	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
Methyl Cyclohexane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
Methylene Chloride	ND	0.018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
Naphthalene	ND	0.0036	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
n-Propylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
Styrene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
1,1,1,2-Tetrachloroethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
1,1,2,2-Tetrachloroethane	ND	0.00090	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
Tetrachloroethylene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
Tetrahydrofuran	ND	0.0090	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
Toluene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
1,2,3-Trichlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
1,2,4-Trichlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
1,3,5-Trichlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
1,1,1-Trichloroethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
1,1,2-Trichloroethane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
Trichloroethylene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0090	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
1,2,3-Trichloropropane	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0090	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
1,2,4-Trimethylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
1,3,5-Trimethylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
Vinyl Chloride	ND	0.0090	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
m+p Xylene	ND	0.0036	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
o-Xylene	ND	0.0018	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:11	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		111	70-130					10/30/20 10:11	
Toluene-d8		101	70-130					10/30/20 10:11	
4-Bromofluorobenzene		97.7	70-130					10/30/20 10:11	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-09

Sampled: 10/28/2020 07:42

Sample ID: 20J1670-09

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	0.30	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:58	IMR
Acenaphthylene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:58	IMR
Anthracene	0.62	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:58	IMR
Benzo(a)anthracene	3.2	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:58	IMR
Benzo(a)pyrene	2.6	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:58	IMR
Benzo(b)fluoranthene	3.3	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:58	IMR
Benzo(g,h,i)perylene	1.2	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:58	IMR
Benzo(k)fluoranthene	1.4	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:58	IMR
Chrysene	2.9	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:58	IMR
Dibenz(a,h)anthracene	0.42	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:58	IMR
Fluoranthene	5.2	0.88	mg/Kg dry	5		SW-846 8270D-E	11/4/20	11/6/20 11:30	IMR
Fluorene	0.23	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:58	IMR
Indeno(1,2,3-cd)pyrene	1.5	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:58	IMR
2-Methylnaphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:58	IMR
Naphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:58	IMR
Phenanthrene	2.9	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/5/20 23:58	IMR
Pyrene	4.3	0.88	mg/Kg dry	5		SW-846 8270D-E	11/4/20	11/6/20 11:30	IMR
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		67.6	30-130					11/5/20 23:58	
Nitrobenzene-d5		53.6	30-130					11/6/20 11:30	
2-Fluorobiphenyl		71.5	30-130					11/5/20 23:58	
2-Fluorobiphenyl		58.8	30-130					11/6/20 11:30	
p-Terphenyl-d14		83.3	30-130					11/5/20 23:58	
p-Terphenyl-d14		62.7	30-130					11/6/20 11:30	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-09

Sampled: 10/28/2020 07:42

Sample ID: 20J1670-09

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date	Date/Time	Analyst
							Prepared	Analyzed	
Aroclor-1016 [1]	ND	0.084	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 11:25	JMB
Aroclor-1221 [1]	ND	0.084	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 11:25	JMB
Aroclor-1232 [1]	ND	0.084	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 11:25	JMB
Aroclor-1242 [1]	ND	0.084	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 11:25	JMB
Aroclor-1248 [1]	ND	0.084	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 11:25	JMB
Aroclor-1254 [1]	ND	0.084	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 11:25	JMB
Aroclor-1260 [1]	ND	0.084	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 11:25	JMB
Aroclor-1262 [1]	ND	0.084	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 11:25	JMB
Aroclor-1268 [1]	ND	0.084	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 11:25	JMB
Surrogates	% Recovery		Recovery Limits	Flag/Qual					
Decachlorobiphenyl [1]	103		30-150			11/21/20 11:25			
Decachlorobiphenyl [2]	102		30-150			11/21/20 11:25			
Tetrachloro-m-xylene [1]	95.8		30-150			11/21/20 11:25			
Tetrachloro-m-xylene [2]	99.5		30-150			11/21/20 11:25			



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-09

Sampled: 10/28/2020 07:42

Sample ID: 20J1670-09

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	170	8.7	mg/Kg dry	1		SW-846 8100 Modified	11/4/20	11/6/20 10:11	RDD
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
2-Fluorobiphenyl	66.1		40-140					11/6/20 10:11	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-09

Sampled: 10/28/2020 07:42

Sample ID: 20J1670-09

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	11/2/20	11/3/20 20:57	QNW
Arsenic	ND	3.5	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:57	QNW
Beryllium	ND	0.17	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:57	QNW
Cadmium	ND	0.35	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:57	QNW
Chromium	4.0	0.69	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:57	QNW
Copper	14	0.69	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:57	QNW
Lead	17	0.52	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:57	QNW
Mercury	ND	0.027	mg/Kg dry	1		SW-846 7471B	11/2/20	11/4/20 12:10	CJV
Nickel	3.8	0.69	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:57	QNW
Selenium	ND	3.5	mg/Kg dry	1		SW-846 6010D	11/2/20	11/4/20 13:33	QNW
Silver	ND	0.35	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:57	QNW
Thallium	ND	1.7	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:57	QNW
Zinc	47	0.69	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 20:57	QNW



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-09

Sampled: 10/28/2020 07:42

Sample ID: 20J1670-09

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	95.7		% Wt	1		SM 2540G	11/3/20	11/4/20 8:41	CJT



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-10

Sampled: 10/28/2020 07:45

Sample ID: 20J1670-10

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	0.10	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
Acrylonitrile	ND	0.0061	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
Benzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
Bromobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
Bromochloromethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
Bromodichloromethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
Bromoform	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
Bromomethane	ND	0.010	mg/Kg dry	1	V-34	SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
2-Butanone (MEK)	ND	0.041	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
tert-Butyl Alcohol (TBA)	ND	0.041	mg/Kg dry	1	V-05	SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
n-Butylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
sec-Butylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
tert-Butylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
Carbon Disulfide	ND	0.0061	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
Carbon Tetrachloride	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
Chlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
Chlorodibromomethane	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
Chloroethane	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
Chloroform	ND	0.0041	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
Chloromethane	ND	0.010	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
2-Chlorotoluene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
4-Chlorotoluene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
Dibromomethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
1,2-Dichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
1,3-Dichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
1,4-Dichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
trans-1,4-Dichloro-2-butene	ND	0.0041	mg/Kg dry	1	V-05	SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
1,1-Dichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
1,2-Dichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
1,1-Dichloroethylene	ND	0.0041	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
1,2-Dichloropropane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
1,3-Dichloropropane	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
2,2-Dichloropropane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
1,1-Dichloropropene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
Diethyl Ether	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-10

Sampled: 10/28/2020 07:45

Sample ID: 20J1670-10

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	0.0010	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
1,4-Dioxane	ND	0.10	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
Ethylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
Hexachlorobutadiene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
2-Hexanone (MBK)	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
Methyl Acetate	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0041	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
Methyl Cyclohexane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
Methylene Chloride	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
Naphthalene	ND	0.0041	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
n-Propylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
Styrene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
Tetrachloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
Tetrahydrofuran	ND	0.010	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
Toluene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
1,2,3-Trichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
1,3,5-Trichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
1,1,1-Trichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
1,1,2-Trichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
Trichloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
1,2,3-Trichloropropane	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.010	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
Vinyl Chloride	ND	0.010	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
m+p Xylene	ND	0.0041	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
o-Xylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 10:36	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		112	70-130					10/30/20 10:36	
Toluene-d8		100	70-130					10/30/20 10:36	
4-Bromofluorobenzene		98.0	70-130					10/30/20 10:36	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-10

Sampled: 10/28/2020 07:45

Sample ID: 20J1670-10

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	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 11:20	IMR
Acenaphthylene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 11:20	IMR
Anthracene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 11:20	IMR
Benzo(a)anthracene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 11:20	IMR
Benzo(a)pyrene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 11:20	IMR
Benzo(b)fluoranthene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 11:20	IMR
Benzo(g,h,i)perylene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 11:20	IMR
Benzo(k)fluoranthene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 11:20	IMR
Chrysene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 11:20	IMR
Dibenz(a,h)anthracene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 11:20	IMR
Fluoranthene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 11:20	IMR
Fluorene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 11:20	IMR
Indeno(1,2,3-cd)pyrene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 11:20	IMR
2-Methylnaphthalene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 11:20	IMR
Naphthalene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 11:20	IMR
Phenanthrene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 11:20	IMR
Pyrene	ND	0.17	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 11:20	IMR
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		89.2	30-130					11/6/20 11:20	
2-Fluorobiphenyl		91.0	30-130					11/6/20 11:20	
p-Terphenyl-d14		96.6	30-130					11/6/20 11:20	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-10

Sampled: 10/28/2020 07:45

Sample ID: 20J1670-10

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

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	11/14/20	11/21/20 11:43	JMB
Aroclor-1221 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 11:43	JMB
Aroclor-1232 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 11:43	JMB
Aroclor-1242 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 11:43	JMB
Aroclor-1248 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 11:43	JMB
Aroclor-1254 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 11:43	JMB
Aroclor-1260 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 11:43	JMB
Aroclor-1262 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 11:43	JMB
Aroclor-1268 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 11:43	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		102	30-150					11/21/20 11:43	
Decachlorobiphenyl [2]		106	30-150					11/21/20 11:43	
Tetrachloro-m-xylene [1]		86.9	30-150					11/21/20 11:43	
Tetrachloro-m-xylene [2]		94.5	30-150					11/21/20 11:43	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-10

Sampled: 10/28/2020 07:45

Sample ID: 20J1670-10

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	13	8.5	mg/Kg dry	1		SW-846 8100 Modified	11/4/20	11/6/20 11:34	RDD
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
2-Fluorobiphenyl	72.1		40-140					11/6/20 11:34	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-10

Sampled: 10/28/2020 07:45

Sample ID: 20J1670-10

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	11/2/20	11/3/20 21:02	QNW
Arsenic	ND	3.4	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:02	QNW
Beryllium	ND	0.17	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:02	QNW
Cadmium	ND	0.34	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:02	QNW
Chromium	4.2	0.68	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:02	QNW
Copper	7.3	0.68	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:02	QNW
Lead	3.8	0.51	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:02	QNW
Mercury	ND	0.025	mg/Kg dry	1		SW-846 7471B	11/2/20	11/4/20 12:16	CJV
Nickel	5.5	0.68	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:02	QNW
Selenium	ND	3.4	mg/Kg dry	1		SW-846 6010D	11/2/20	11/4/20 13:38	QNW
Silver	ND	0.34	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:02	QNW
Thallium	ND	1.7	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:02	QNW
Zinc	24	0.68	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:02	QNW



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-10

Sampled: 10/28/2020 07:45

Sample ID: 20J1670-10

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	97.9		% Wt	1		SM 2540G	11/3/20	11/4/20 8:41	CJT



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-11

Sampled: 10/28/2020 09:05

Sample ID: 20J1670-11

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	0.12	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
Acrylonitrile	ND	0.0074	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
Benzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
Bromobenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
Bromochloromethane	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
Bromodichloromethane	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
Bromoform	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
Bromomethane	ND	0.012	mg/Kg dry	1	V-34	SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
2-Butanone (MEK)	ND	0.049	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
tert-Butyl Alcohol (TBA)	ND	0.049	mg/Kg dry	1	V-05	SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
n-Butylbenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
sec-Butylbenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
tert-Butylbenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
Carbon Disulfide	ND	0.0074	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
Carbon Tetrachloride	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
Chlorobenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
Chlorodibromomethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
Chloroethane	ND	0.025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
Chloroform	ND	0.0049	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
Chloromethane	ND	0.012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
2-Chlorotoluene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
4-Chlorotoluene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
1,2-Dibromoethane (EDB)	ND	0.0012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
Dibromomethane	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
1,2-Dichlorobenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
1,3-Dichlorobenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
1,4-Dichlorobenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
trans-1,4-Dichloro-2-butene	ND	0.0049	mg/Kg dry	1	V-05	SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
1,1-Dichloroethane	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
1,2-Dichloroethane	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
1,1-Dichloroethylene	ND	0.0049	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
cis-1,2-Dichloroethylene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
trans-1,2-Dichloroethylene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
1,2-Dichloropropane	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
1,3-Dichloropropane	ND	0.0012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
2,2-Dichloropropane	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
1,1-Dichloropropene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
cis-1,3-Dichloropropene	ND	0.0012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
trans-1,3-Dichloropropene	ND	0.0012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
Diethyl Ether	ND	0.025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-11

Sampled: 10/28/2020 09:05

Sample ID: 20J1670-11

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	0.0012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
1,4-Dioxane	ND	0.12	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
Ethylbenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
Hexachlorobutadiene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
2-Hexanone (MBK)	ND	0.025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
Isopropylbenzene (Cumene)	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
Methyl Acetate	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0049	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
Methyl Cyclohexane	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
Methylene Chloride	ND	0.025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
Naphthalene	ND	0.0049	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
n-Propylbenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
Styrene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
1,1,1,2-Tetrachloroethane	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
1,1,2,2-Tetrachloroethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
Tetrachloroethylene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
Tetrahydrofuran	ND	0.012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
Toluene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
1,2,3-Trichlorobenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
1,2,4-Trichlorobenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
1,3,5-Trichlorobenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
1,1,1-Trichloroethane	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
1,1,2-Trichloroethane	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
Trichloroethylene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
Trichlorofluoromethane (Freon 11)	ND	0.012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
1,2,3-Trichloropropane	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
1,2,4-Trimethylbenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
1,3,5-Trimethylbenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
Vinyl Chloride	ND	0.012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
m+p Xylene	ND	0.0049	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
o-Xylene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:00	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		110	70-130				10/30/20	11:00	
Toluene-d8		100	70-130				10/30/20	11:00	
4-Bromofluorobenzene		96.8	70-130				10/30/20	11:00	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-11

Sampled: 10/28/2020 09:05

Sample ID: 20J1670-11

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	11/4/20	11/6/20 11:42	IMR
Acenaphthylene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 11:42	IMR
Anthracene	0.33	0.19	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 11:42	IMR
Benzo(a)anthracene	1.0	0.19	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 11:42	IMR
Benzo(a)pyrene	0.89	0.19	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 11:42	IMR
Benzo(b)fluoranthene	1.1	0.19	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 11:42	IMR
Benzo(g,h,i)perylene	0.61	0.19	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 11:42	IMR
Benzo(k)fluoranthene	0.44	0.19	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 11:42	IMR
Chrysene	0.99	0.19	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 11:42	IMR
Dibenz(a,h)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 11:42	IMR
Fluoranthene	2.2	0.19	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 11:42	IMR
Fluorene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 11:42	IMR
Indeno(1,2,3-cd)pyrene	0.71	0.19	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 11:42	IMR
2-Methylnaphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 11:42	IMR
Naphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 11:42	IMR
Phenanthrene	2.0	0.19	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 11:42	IMR
Pyrene	2.2	0.19	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 11:42	IMR
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		66.6	30-130					11/6/20 11:42	
2-Fluorobiphenyl		74.4	30-130					11/6/20 11:42	
p-Terphenyl-d14		87.1	30-130					11/6/20 11:42	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-11

Sampled: 10/28/2020 09:05

Sample ID: 20J1670-11

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

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	11/14/20	11/21/20 12:01	JMB
Aroclor-1221 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 12:01	JMB
Aroclor-1232 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 12:01	JMB
Aroclor-1242 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 12:01	JMB
Aroclor-1248 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 12:01	JMB
Aroclor-1254 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 12:01	JMB
Aroclor-1260 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 12:01	JMB
Aroclor-1262 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 12:01	JMB
Aroclor-1268 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 12:01	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		94.5	30-150					11/21/20 12:01	
Decachlorobiphenyl [2]		98.3	30-150					11/21/20 12:01	
Tetrachloro-m-xylene [1]		92.3	30-150					11/21/20 12:01	
Tetrachloro-m-xylene [2]		98.5	30-150					11/21/20 12:01	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-11

Sampled: 10/28/2020 09:05

Sample ID: 20J1670-11

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	790	92	mg/Kg dry	10		SW-846 8100 Modified	11/4/20	11/6/20 13:13	RDD
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
2-Fluorobiphenyl	78.3		40-140					11/6/20 13:13	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-11

Sampled: 10/28/2020 09:05

Sample ID: 20J1670-11

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	11/2/20	11/3/20 21:07	QNW
Arsenic	ND	3.7	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:07	QNW
Beryllium	ND	0.19	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:07	QNW
Cadmium	ND	0.37	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:07	QNW
Chromium	5.1	0.74	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:07	QNW
Copper	5.9	0.74	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:07	QNW
Lead	9.7	0.56	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:07	QNW
Mercury	ND	0.027	mg/Kg dry	1		SW-846 7471B	11/2/20	11/4/20 12:17	CJV
Nickel	3.5	0.74	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:07	QNW
Selenium	ND	3.7	mg/Kg dry	1		SW-846 6010D	11/2/20	11/4/20 13:43	QNW
Silver	ND	0.37	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:07	QNW
Thallium	ND	1.9	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:07	QNW
Zinc	21	0.74	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:07	QNW



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-11

Sampled: 10/28/2020 09:05

Sample ID: 20J1670-11

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	90.0		% Wt	1		SM 2540G	11/3/20	11/4/20 8:41	CJT



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-12

Sampled: 10/28/2020 10:12

Sample ID: 20J1670-12

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	0.14	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
Acrylonitrile	ND	0.0081	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0014	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
Benzene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
Bromobenzene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
Bromochloromethane	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
Bromodichloromethane	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
Bromoform	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
Bromomethane	ND	0.014	mg/Kg dry	1	V-34	SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
2-Butanone (MEK)	ND	0.054	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
tert-Butyl Alcohol (TBA)	ND	0.054	mg/Kg dry	1	V-05	SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
n-Butylbenzene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
sec-Butylbenzene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
tert-Butylbenzene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0014	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
Carbon Disulfide	ND	0.0081	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
Carbon Tetrachloride	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
Chlorobenzene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
Chlorodibromomethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
Chloroethane	ND	0.027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
Chloroform	ND	0.0054	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
Chloromethane	ND	0.014	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
2-Chlorotoluene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
4-Chlorotoluene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
1,2-Dibromoethane (EDB)	ND	0.0014	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
Dibromomethane	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
1,2-Dichlorobenzene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
1,3-Dichlorobenzene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
1,4-Dichlorobenzene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
trans-1,4-Dichloro-2-butene	ND	0.0054	mg/Kg dry	1	V-05	SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
1,1-Dichloroethane	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
1,2-Dichloroethane	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
1,1-Dichloroethylene	ND	0.0054	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
cis-1,2-Dichloroethylene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
trans-1,2-Dichloroethylene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
1,2-Dichloropropane	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
1,3-Dichloropropane	ND	0.0014	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
2,2-Dichloropropane	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
1,1-Dichloropropene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
cis-1,3-Dichloropropene	ND	0.0014	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
trans-1,3-Dichloropropene	ND	0.0014	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
Diethyl Ether	ND	0.027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-12

Sampled: 10/28/2020 10:12

Sample ID: 20J1670-12

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	0.0014	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
1,4-Dioxane	ND	0.14	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
Ethylbenzene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
Hexachlorobutadiene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
2-Hexanone (MBK)	ND	0.027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
Isopropylbenzene (Cumene)	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
Methyl Acetate	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0054	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
Methyl Cyclohexane	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
Methylene Chloride	ND	0.027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
Naphthalene	ND	0.0054	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
n-Propylbenzene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
Styrene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
1,1,1,2-Tetrachloroethane	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
1,1,2,2-Tetrachloroethane	ND	0.0014	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
Tetrachloroethylene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
Tetrahydrofuran	ND	0.014	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
Toluene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
1,2,3-Trichlorobenzene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
1,2,4-Trichlorobenzene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
1,3,5-Trichlorobenzene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
1,1,1-Trichloroethane	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
1,1,2-Trichloroethane	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
Trichloroethylene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
Trichlorofluoromethane (Freon 11)	ND	0.014	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
1,2,3-Trichloropropane	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.014	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
1,2,4-Trimethylbenzene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
1,3,5-Trimethylbenzene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
Vinyl Chloride	ND	0.014	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
m+p Xylene	ND	0.0054	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
o-Xylene	ND	0.0027	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:25	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		114	70-130					10/30/20 11:25	
Toluene-d8		99.3	70-130					10/30/20 11:25	
4-Bromofluorobenzene		99.2	70-130					10/30/20 11:25	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-12

Sampled: 10/28/2020 10:12

Sample ID: 20J1670-12

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	0.41	0.19	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:04	IMR
Acenaphthylene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:04	IMR
Anthracene	0.97	0.19	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:04	IMR
Benzo(a)anthracene	3.4	0.19	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:04	IMR
Benzo(a)pyrene	2.9	0.19	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:04	IMR
Benzo(b)fluoranthene	3.6	0.19	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:04	IMR
Benzo(g,h,i)perylene	1.6	0.19	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:04	IMR
Benzo(k)fluoranthene	1.5	0.19	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:04	IMR
Chrysene	3.7	0.19	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:04	IMR
Dibenz(a,h)anthracene	0.58	0.19	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:04	IMR
Fluoranthene	6.1	0.93	mg/Kg dry	5		SW-846 8270D-E	11/4/20	11/6/20 13:12	IMR
Fluorene	0.36	0.19	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:04	IMR
Indeno(1,2,3-cd)pyrene	2.0	0.19	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:04	IMR
2-Methylnaphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:04	IMR
Naphthalene	0.22	0.19	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:04	IMR
Phenanthrene	4.6	0.93	mg/Kg dry	5		SW-846 8270D-E	11/4/20	11/6/20 13:12	IMR
Pyrene	6.6	0.93	mg/Kg dry	5		SW-846 8270D-E	11/4/20	11/6/20 13:12	IMR
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		66.5	30-130					11/6/20 12:04	
Nitrobenzene-d5		61.2	30-130					11/6/20 13:12	
2-Fluorobiphenyl		76.8	30-130					11/6/20 12:04	
2-Fluorobiphenyl		67.6	30-130					11/6/20 13:12	
p-Terphenyl-d14		83.7	30-130					11/6/20 12:04	
p-Terphenyl-d14		72.3	30-130					11/6/20 13:12	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-12

Sampled: 10/28/2020 10:12

Sample ID: 20J1670-12

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

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	11/14/20	11/21/20 12:19	JMB
Aroclor-1221 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 12:19	JMB
Aroclor-1232 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 12:19	JMB
Aroclor-1242 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 12:19	JMB
Aroclor-1248 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 12:19	JMB
Aroclor-1254 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 12:19	JMB
Aroclor-1260 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 12:19	JMB
Aroclor-1262 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 12:19	JMB
Aroclor-1268 [1]	ND	0.088	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 12:19	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		98.8	30-150					11/21/20 12:19	
Decachlorobiphenyl [2]		107	30-150					11/21/20 12:19	
Tetrachloro-m-xylene [1]		95.5	30-150					11/21/20 12:19	
Tetrachloro-m-xylene [2]		97.5	30-150					11/21/20 12:19	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-12

Sampled: 10/28/2020 10:12

Sample ID: 20J1670-12

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	290	9.2	mg/Kg dry	1		SW-846 8100 Modified	11/4/20	11/6/20 12:16	RDD
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
2-Fluorobiphenyl	59.8	40-140						11/6/20 12:16	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-12

Sampled: 10/28/2020 10:12

Sample ID: 20J1670-12

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	11/2/20	11/3/20 21:12	QNW
Arsenic	ND	3.7	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:12	QNW
Beryllium	0.19	0.18	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:12	QNW
Cadmium	ND	0.37	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:12	QNW
Chromium	24	0.74	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:12	QNW
Copper	40	0.74	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:12	QNW
Lead	350	0.55	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:12	QNW
Mercury	0.12	0.028	mg/Kg dry	1		SW-846 7471B	11/2/20	11/4/20 12:19	CJV
Nickel	7.6	0.74	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:12	QNW
Selenium	ND	3.7	mg/Kg dry	1		SW-846 6010D	11/2/20	11/4/20 13:59	QNW
Silver	ND	0.37	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:12	QNW
Thallium	ND	1.8	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:12	QNW
Zinc	120	0.74	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:12	QNW



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-12

Sampled: 10/28/2020 10:12

Sample ID: 20J1670-12

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	91.0		% Wt	1		SM 2540G	11/3/20	11/4/20 8:42	CJT



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-13

Sampled: 10/28/2020 10:26

Sample ID: 20J1670-13

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	10/30/20	10/30/20 11:49	MFF
Acrylonitrile	ND	0.0075	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
Benzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
Bromobenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
Bromochloromethane	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
Bromodichloromethane	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
Bromoform	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
Bromomethane	ND	0.012	mg/Kg dry	1	V-34	SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
2-Butanone (MEK)	ND	0.050	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
tert-Butyl Alcohol (TBA)	ND	0.050	mg/Kg dry	1	V-05	SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
n-Butylbenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
sec-Butylbenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
tert-Butylbenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
Carbon Disulfide	ND	0.0075	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
Carbon Tetrachloride	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
Chlorobenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
Chlorodibromomethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
Chloroethane	ND	0.025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
Chloroform	ND	0.0050	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
Chloromethane	ND	0.012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
2-Chlorotoluene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
4-Chlorotoluene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
1,2-Dibromoethane (EDB)	ND	0.0012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
Dibromomethane	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
1,2-Dichlorobenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
1,3-Dichlorobenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
1,4-Dichlorobenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
trans-1,4-Dichloro-2-butene	ND	0.0050	mg/Kg dry	1	V-05	SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
1,1-Dichloroethane	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
1,2-Dichloroethane	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
1,1-Dichloroethylene	ND	0.0050	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
cis-1,2-Dichloroethylene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
trans-1,2-Dichloroethylene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
1,2-Dichloropropane	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
1,3-Dichloropropane	ND	0.0012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
2,2-Dichloropropane	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
1,1-Dichloropropene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
cis-1,3-Dichloropropene	ND	0.0012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
trans-1,3-Dichloropropene	ND	0.0012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
Diethyl Ether	ND	0.025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-13

Sampled: 10/28/2020 10:26

Sample ID: 20J1670-13

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	10/30/20	10/30/20 11:49	MFF
1,4-Dioxane	ND	0.12	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
Ethylbenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
Hexachlorobutadiene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
2-Hexanone (MBK)	ND	0.025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
Isopropylbenzene (Cumene)	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
Methyl Acetate	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0050	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
Methyl Cyclohexane	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
Methylene Chloride	ND	0.025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
Naphthalene	ND	0.0050	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
n-Propylbenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
Styrene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
1,1,1,2-Tetrachloroethane	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
1,1,2,2-Tetrachloroethane	ND	0.0012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
Tetrachloroethylene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
Tetrahydrofuran	ND	0.012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
Toluene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
1,2,3-Trichlorobenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
1,2,4-Trichlorobenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
1,3,5-Trichlorobenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
1,1,1-Trichloroethane	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
1,1,2-Trichloroethane	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
Trichloroethylene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
Trichlorofluoromethane (Freon 11)	ND	0.012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
1,2,3-Trichloropropane	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
1,2,4-Trimethylbenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
1,3,5-Trimethylbenzene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
Vinyl Chloride	ND	0.012	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
m+p Xylene	ND	0.0050	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
o-Xylene	ND	0.0025	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 11:49	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		114	70-130					10/30/20 11:49	
Toluene-d8		102	70-130					10/30/20 11:49	
4-Bromofluorobenzene		96.9	70-130					10/30/20 11:49	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-13

Sampled: 10/28/2020 10:26

Sample ID: 20J1670-13

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	11/4/20	11/6/20 12:27	IMR
Acenaphthylene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:27	IMR
Anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:27	IMR
Benzo(a)anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:27	IMR
Benzo(a)pyrene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:27	IMR
Benzo(b)fluoranthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:27	IMR
Benzo(g,h,i)perylene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:27	IMR
Benzo(k)fluoranthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:27	IMR
Chrysene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:27	IMR
Dibenz(a,h)anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:27	IMR
Fluoranthene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:27	IMR
Fluorene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:27	IMR
Indeno(1,2,3-cd)pyrene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:27	IMR
2-Methylnaphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:27	IMR
Naphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:27	IMR
Phenanthrene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:27	IMR
Pyrene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:27	IMR
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		80.5	30-130					11/6/20 12:27	
2-Fluorobiphenyl		82.1	30-130					11/6/20 12:27	
p-Terphenyl-d14		92.7	30-130					11/6/20 12:27	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-13

Sampled: 10/28/2020 10:26

Sample ID: 20J1670-13

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

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	11/14/20	11/21/20 12:37	JMB
Aroclor-1221 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 12:37	JMB
Aroclor-1232 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 12:37	JMB
Aroclor-1242 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 12:37	JMB
Aroclor-1248 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 12:37	JMB
Aroclor-1254 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 12:37	JMB
Aroclor-1260 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 12:37	JMB
Aroclor-1262 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 12:37	JMB
Aroclor-1268 [1]	ND	0.085	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 12:37	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		101	30-150					11/21/20 12:37	
Decachlorobiphenyl [2]		103	30-150					11/21/20 12:37	
Tetrachloro-m-xylene [1]		95.1	30-150					11/21/20 12:37	
Tetrachloro-m-xylene [2]		101	30-150					11/21/20 12:37	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-13

Sampled: 10/28/2020 10:26

Sample ID: 20J1670-13

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	29	8.8	mg/Kg dry	1		SW-846 8100 Modified	11/4/20	11/6/20 11:14	RDD
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
2-Fluorobiphenyl	71.9	40-140						11/6/20 11:14	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-13

Sampled: 10/28/2020 10:26

Sample ID: 20J1670-13

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	11/2/20	11/3/20 21:17	QNW
Arsenic	ND	3.6	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:17	QNW
Beryllium	ND	0.18	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:17	QNW
Cadmium	ND	0.36	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:17	QNW
Chromium	7.4	0.71	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:17	QNW
Copper	15	0.71	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:17	QNW
Lead	15	0.53	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:17	QNW
Mercury	ND	0.027	mg/Kg dry	1		SW-846 7471B	11/2/20	11/4/20 12:21	CJV
Nickel	6.0	0.71	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:17	QNW
Selenium	ND	3.6	mg/Kg dry	1		SW-846 6010D	11/2/20	11/4/20 14:04	QNW
Silver	ND	0.36	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:17	QNW
Thallium	ND	1.8	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:17	QNW
Zinc	29	0.71	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:17	QNW



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-13

Sampled: 10/28/2020 10:26

Sample ID: 20J1670-13

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	11/3/20	11/4/20 8:42	CJT



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-14

Sampled: 10/28/2020 11:10

Sample ID: 20J1670-14

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	0.11	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
Acrylonitrile	ND	0.0068	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
Benzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
Bromobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
Bromochloromethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
Bromodichloromethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
Bromoform	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
Bromomethane	ND	0.011	mg/Kg dry	1	V-34	SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
2-Butanone (MEK)	ND	0.045	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
tert-Butyl Alcohol (TBA)	ND	0.045	mg/Kg dry	1	V-05	SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
n-Butylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
sec-Butylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
tert-Butylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
Carbon Disulfide	ND	0.0068	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
Carbon Tetrachloride	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
Chlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
Chlorodibromomethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
Chloroethane	ND	0.023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
Chloroform	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
Chloromethane	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
2-Chlorotoluene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
4-Chlorotoluene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
1,2-Dibromoethane (EDB)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
Dibromomethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
1,2-Dichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
1,3-Dichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
1,4-Dichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
trans-1,4-Dichloro-2-butene	ND	0.0045	mg/Kg dry	1	V-05	SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
1,1-Dichloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
1,2-Dichloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
1,1-Dichloroethylene	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
cis-1,2-Dichloroethylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
trans-1,2-Dichloroethylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
1,2-Dichloropropane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
1,3-Dichloropropane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
2,2-Dichloropropane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
1,1-Dichloropropene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
cis-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
trans-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
Diethyl Ether	ND	0.023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-14

Sampled: 10/28/2020 11:10

Sample ID: 20J1670-14

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	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
1,4-Dioxane	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
Ethylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
Hexachlorobutadiene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
2-Hexanone (MBK)	ND	0.023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
Isopropylbenzene (Cumene)	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
Methyl Acetate	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
Methyl Cyclohexane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
Methylene Chloride	ND	0.023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
Naphthalene	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
n-Propylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
Styrene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
1,1,1,2-Tetrachloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
1,1,2,2-Tetrachloroethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
Tetrachloroethylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
Tetrahydrofuran	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
Toluene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
1,2,3-Trichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
1,2,4-Trichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
1,3,5-Trichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
1,1,1-Trichloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
1,1,2-Trichloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
Trichloroethylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
Trichlorofluoromethane (Freon 11)	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
1,2,3-Trichloropropane	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
1,2,4-Trimethylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
1,3,5-Trimethylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
Vinyl Chloride	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
m+p Xylene	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
o-Xylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C-D	10/30/20	10/30/20 12:14	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		113	70-130					10/30/20 12:14	
Toluene-d8		101	70-130					10/30/20 12:14	
4-Bromofluorobenzene		97.7	70-130					10/30/20 12:14	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-14

Sampled: 10/28/2020 11:10

Sample ID: 20J1670-14

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	11/4/20	11/6/20 12:49	IMR
Acenaphthylene	0.40	0.20	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:49	IMR
Anthracene	1.2	0.20	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:49	IMR
Benzo(a)anthracene	3.2	0.20	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:49	IMR
Benzo(a)pyrene	1.9	0.20	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:49	IMR
Benzo(b)fluoranthene	2.2	0.20	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:49	IMR
Benzo(g,h,i)perylene	0.91	0.20	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:49	IMR
Benzo(k)fluoranthene	0.97	0.20	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:49	IMR
Chrysene	2.5	0.20	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:49	IMR
Dibenz(a,h)anthracene	0.36	0.20	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:49	IMR
Fluoranthene	4.9	0.39	mg/Kg dry	2		SW-846 8270D-E	11/4/20	11/6/20 14:42	IMR
Fluorene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:49	IMR
Indeno(1,2,3-cd)pyrene	1.2	0.20	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:49	IMR
2-Methylnaphthalene	0.74	0.20	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:49	IMR
Naphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D-E	11/4/20	11/6/20 12:49	IMR
Phenanthrene	5.6	0.39	mg/Kg dry	2		SW-846 8270D-E	11/4/20	11/6/20 14:42	IMR
Pyrene	4.6	0.39	mg/Kg dry	2		SW-846 8270D-E	11/4/20	11/6/20 14:42	IMR
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		88.8	30-130					11/6/20 12:49	
Nitrobenzene-d5		87.0	30-130					11/6/20 14:42	
2-Fluorobiphenyl		91.9	30-130					11/6/20 12:49	
2-Fluorobiphenyl		90.9	30-130					11/6/20 14:42	
p-Terphenyl-d14		103	30-130					11/6/20 12:49	
p-Terphenyl-d14		97.0	30-130					11/6/20 14:42	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-14

Sampled: 10/28/2020 11:10

Sample ID: 20J1670-14

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 12:55	JMB
Aroclor-1221 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 12:55	JMB
Aroclor-1232 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 12:55	JMB
Aroclor-1242 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 12:55	JMB
Aroclor-1248 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 12:55	JMB
Aroclor-1254 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 12:55	JMB
Aroclor-1260 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 12:55	JMB
Aroclor-1262 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 12:55	JMB
Aroclor-1268 [1]	ND	0.092	mg/Kg dry	4		SW-846 8082A	11/14/20	11/21/20 12:55	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		100	30-150					11/21/20 12:55	
Decachlorobiphenyl [2]		102	30-150					11/21/20 12:55	
Tetrachloro-m-xylene [1]		90.7	30-150					11/21/20 12:55	
Tetrachloro-m-xylene [2]		89.2	30-150					11/21/20 12:55	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-14

Sampled: 10/28/2020 11:10

Sample ID: 20J1670-14

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	220	9.6	mg/Kg dry	1		SW-846 8100 Modified	11/4/20	11/6/20 11:55	RDD
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
2-Fluorobiphenyl	74.8		40-140					11/6/20 11:55	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-14

Sampled: 10/28/2020 11:10

Sample ID: 20J1670-14

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	11/2/20	11/3/20 21:22	QNW
Arsenic	ND	3.8	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:22	QNW
Beryllium	ND	0.19	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:22	QNW
Cadmium	ND	0.38	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:22	QNW
Chromium	6.9	0.76	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:22	QNW
Copper	11	0.76	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:22	QNW
Lead	47	0.57	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:22	QNW
Mercury	0.054	0.029	mg/Kg dry	1		SW-846 7471B	11/2/20	11/4/20 12:22	CJV
Nickel	5.4	0.76	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:22	QNW
Selenium	ND	3.8	mg/Kg dry	1		SW-846 6010D	11/2/20	11/4/20 14:09	QNW
Silver	ND	0.38	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:22	QNW
Thallium	ND	1.9	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:22	QNW
Zinc	37	0.76	mg/Kg dry	1		SW-846 6010D	11/2/20	11/3/20 21:22	QNW



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201028-14

Sampled: 10/28/2020 11:10

Sample ID: 20J1670-14

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	86.7		% Wt	1		SM 2540G	11/3/20	11/4/20 8:42	CJT



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-15

Sampled: 10/27/2020 12:00

Sample ID: 20J1670-15

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	10/30/20	10/30/20 12:39	MFF
Acrylonitrile	ND	0.0060	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
Benzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
Bromobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
Bromochloromethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
Bromodichloromethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
Bromoform	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
Bromomethane	ND	0.010	mg/Kg wet	1	V-34	SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
2-Butanone (MEK)	ND	0.040	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
tert-Butyl Alcohol (TBA)	ND	0.040	mg/Kg wet	1	V-05	SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
n-Butylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
sec-Butylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
tert-Butylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
Carbon Disulfide	ND	0.0060	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
Carbon Tetrachloride	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
Chlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
Chlorodibromomethane	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
Chloroethane	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
Chloroform	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
Chloromethane	ND	0.010	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
2-Chlorotoluene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
4-Chlorotoluene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
Dibromomethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
1,2-Dichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
1,3-Dichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
1,4-Dichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
trans-1,4-Dichloro-2-butene	ND	0.0040	mg/Kg wet	1	V-05	SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
1,1-Dichloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
1,2-Dichloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
1,1-Dichloroethylene	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
1,2-Dichloropropane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
1,3-Dichloropropane	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
2,2-Dichloropropane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
1,1-Dichloropropene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
Diethyl Ether	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20J1670

Date Received: 10/29/2020

Field Sample #: 1603201027-15

Sampled: 10/27/2020 12:00

Sample ID: 20J1670-15

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	10/30/20	10/30/20 12:39	MFF
1,4-Dioxane	ND	0.10	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
Ethylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
Hexachlorobutadiene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
2-Hexanone (MBK)	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
Methyl Acetate	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
Methyl Cyclohexane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
Methylene Chloride	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
Naphthalene	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
n-Propylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
Styrene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
Tetrachloroethylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
Tetrahydrofuran	ND	0.010	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
Toluene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
1,2,3-Trichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
1,3,5-Trichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
1,1,1-Trichloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
1,1,2-Trichloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
Trichloroethylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
1,2,3-Trichloropropane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.010	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
Vinyl Chloride	ND	0.010	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
m+p Xylene	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
o-Xylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	10/30/20	10/30/20 12:39	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		114	70-130					10/30/20 12:39	
Toluene-d8		101	70-130					10/30/20 12:39	
4-Bromofluorobenzene		99.3	70-130					10/30/20 12:39	

Sample Extraction Data

Prep Method: % Solids Analytical Method: SM 2540G

Lab Number [Field ID]	Batch	Date
20J1670-01 [1603201027-01]	B270116	11/03/20
20J1670-02 [1603201027-02]	B270116	11/03/20
20J1670-03 [1603201027-03]	B270116	11/03/20
20J1670-04 [1603201027-04]	B270116	11/03/20
20J1670-05 [1603201027-05]	B270116	11/03/20
20J1670-06 [1603201027-06]	B270116	11/03/20
20J1670-07 [1603201027-07]	B270116	11/03/20
20J1670-09 [1603201028-09]	B270116	11/03/20
20J1670-10 [1603201028-10]	B270116	11/03/20
20J1670-11 [1603201028-11]	B270116	11/03/20
20J1670-12 [1603201028-12]	B270116	11/03/20
20J1670-13 [1603201028-13]	B270116	11/03/20
20J1670-14 [1603201028-14]	B270116	11/03/20

Prep Method: SW-846 3050B Analytical Method: SW-846 6010D

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
20J1670-01 [1603201027-01]	B270047	1.52	50.0	11/02/20
20J1670-02 [1603201027-02]	B270047	1.51	50.0	11/02/20
20J1670-03 [1603201027-03]	B270047	1.58	50.0	11/02/20
20J1670-04 [1603201027-04]	B270047	1.50	50.0	11/02/20
20J1670-05 [1603201027-05]	B270047	1.50	50.0	11/02/20
20J1670-06 [1603201027-06]	B270047	1.51	50.0	11/02/20
20J1670-07 [1603201027-07]	B270047	1.49	50.0	11/02/20
20J1670-09 [1603201028-09]	B270047	1.51	50.0	11/02/20
20J1670-10 [1603201028-10]	B270047	1.51	50.0	11/02/20
20J1670-11 [1603201028-11]	B270047	1.50	50.0	11/02/20
20J1670-12 [1603201028-12]	B270047	1.49	50.0	11/02/20
20J1670-13 [1603201028-13]	B270047	1.50	50.0	11/02/20
20J1670-14 [1603201028-14]	B270047	1.51	50.0	11/02/20

Prep Method: SW-846 7471 Analytical Method: SW-846 7471B

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
20J1670-03 [1603201027-03]	B270028	0.623	50.0	11/02/20
20J1670-04 [1603201027-04]	B270028	0.608	50.0	11/02/20
20J1670-05 [1603201027-05]	B270028	0.582	50.0	11/02/20
20J1670-06 [1603201027-06]	B270028	0.606	50.0	11/02/20
20J1670-07 [1603201027-07]	B270028	0.621	50.0	11/02/20
20J1670-09 [1603201028-09]	B270028	0.587	50.0	11/02/20
20J1670-10 [1603201028-10]	B270028	0.617	50.0	11/02/20
20J1670-11 [1603201028-11]	B270028	0.622	50.0	11/02/20
20J1670-12 [1603201028-12]	B270028	0.594	50.0	11/02/20
20J1670-13 [1603201028-13]	B270028	0.592	50.0	11/02/20
20J1670-14 [1603201028-14]	B270028	0.607	50.0	11/02/20

Prep Method: SW-846 7471 Analytical Method: SW-846 7471B

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
20J1670-01 [1603201027-01]	B270029	0.597	50.0	11/02/20
20J1670-02 [1603201027-02]	B270029	0.591	50.0	11/02/20

Sample Extraction Data

Prep Method: SW-846 3546 Analytical Method: SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
20J1670-01 [1603201027-01]	B270927	10.0	10.0	11/14/20
20J1670-02 [1603201027-02]	B270927	10.0	10.0	11/14/20
20J1670-03 [1603201027-03]	B270927	10.0	10.0	11/14/20
20J1670-04 [1603201027-04]	B270927	10.0	10.0	11/14/20
20J1670-05 [1603201027-05]	B270927	10.0	10.0	11/14/20
20J1670-06 [1603201027-06]	B270927	10.0	10.0	11/14/20
20J1670-07 [1603201027-07]	B270927	10.0	10.0	11/14/20
20J1670-09 [1603201028-09]	B270927	10.0	10.0	11/14/20
20J1670-10 [1603201028-10]	B270927	10.0	10.0	11/14/20
20J1670-11 [1603201028-11]	B270927	10.0	10.0	11/14/20
20J1670-12 [1603201028-12]	B270927	10.0	10.0	11/14/20
20J1670-13 [1603201028-13]	B270927	10.0	10.0	11/14/20
20J1670-14 [1603201028-14]	B270927	10.0	10.0	11/14/20

Prep Method: SW-846 3546 Analytical Method: SW-846 8100 Modified

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
20J1670-01 [1603201027-01]	B270195	30.4	1.00	11/04/20
20J1670-02 [1603201027-02]	B270195	30.0	1.00	11/04/20
20J1670-03 [1603201027-03]	B270195	30.1	1.00	11/04/20
20J1670-04 [1603201027-04]	B270195	30.2	1.00	11/04/20
20J1670-05 [1603201027-05]	B270195	30.0	1.00	11/04/20
20J1670-06 [1603201027-06]	B270195	30.0	1.00	11/04/20
20J1670-07 [1603201027-07]	B270195	30.2	1.00	11/04/20
20J1670-09 [1603201028-09]	B270195	30.1	1.00	11/04/20
20J1670-10 [1603201028-10]	B270195	30.2	1.00	11/04/20
20J1670-11 [1603201028-11]	B270195	30.1	1.00	11/04/20
20J1670-12 [1603201028-12]	B270195	30.0	1.00	11/04/20
20J1670-13 [1603201028-13]	B270195	30.1	1.00	11/04/20
20J1670-14 [1603201028-14]	B270195	30.1	1.00	11/04/20

Prep Method: SW-846 5035 Analytical Method: SW-846 8260C-D

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
20J1670-01 [1603201027-01]	B269845	4.89	10.0	10/30/20
20J1670-02 [1603201027-02]	B269845	4.42	10.0	10/30/20
20J1670-03 [1603201027-03]	B269845	5.00	10.0	10/30/20
20J1670-04 [1603201027-04]	B269845	4.98	10.0	10/30/20
20J1670-05 [1603201027-05]	B269845	6.20	10.0	10/30/20
20J1670-06 [1603201027-06]	B269845	5.76	10.0	10/30/20
20J1670-07 [1603201027-07]	B269845	5.15	10.0	10/30/20
20J1670-08 [1603201027-08]	B269845	5.00	10.0	10/30/20
20J1670-09 [1603201028-09]	B269845	5.83	10.0	10/30/20
20J1670-10 [1603201028-10]	B269845	5.01	10.0	10/30/20
20J1670-11 [1603201028-11]	B269845	4.50	10.0	10/30/20
20J1670-12 [1603201028-12]	B269845	4.05	10.0	10/30/20
20J1670-13 [1603201028-13]	B269845	4.26	10.0	10/30/20
20J1670-14 [1603201028-14]	B269845	5.11	10.0	10/30/20
20J1670-15 [1603201027-15]	B269845	5.00	10.0	10/30/20

Sample Extraction Data

Prep Method: SW-846 3546 Analytical Method: SW-846 8270D-E

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
20J1670-01 [1603201027-01]	B270196	30.4	1.00	11/04/20
20J1670-02 [1603201027-02]	B270196	30.4	1.00	11/04/20
20J1670-03 [1603201027-03]	B270196	30.1	1.00	11/04/20
20J1670-04 [1603201027-04]	B270196	30.2	1.00	11/04/20
20J1670-05 [1603201027-05]	B270196	30.0	1.00	11/04/20
20J1670-06 [1603201027-06]	B270196	30.0	1.00	11/04/20
20J1670-07 [1603201027-07]	B270196	30.2	1.00	11/04/20
20J1670-09 [1603201028-09]	B270196	30.1	1.00	11/04/20
20J1670-09RE1 [1603201028-09]	B270196	30.1	1.00	11/04/20
20J1670-10 [1603201028-10]	B270196	30.2	1.00	11/04/20
20J1670-11 [1603201028-11]	B270196	30.1	1.00	11/04/20
20J1670-12 [1603201028-12]	B270196	30.0	1.00	11/04/20
20J1670-12RE1 [1603201028-12]	B270196	30.0	1.00	11/04/20
20J1670-13 [1603201028-13]	B270196	30.1	1.00	11/04/20
20J1670-14 [1603201028-14]	B270196	30.1	1.00	11/04/20
20J1670-14RE1 [1603201028-14]	B270196	30.1	1.00	11/04/20

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 B269845 - SW-846 5035

Blank (B269845-BLK1)

Prepared & Analyzed: 10/30/20

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	0.040	mg/Kg wet							V-05
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 B269845 - SW-846 5035

Blank (B269845-BLK1)

Prepared & Analyzed: 10/30/20

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	0.0558		mg/Kg wet	0.0500		112	70-130			
Surrogate: Toluene-d8	0.0507		mg/Kg wet	0.0500		101	70-130			
Surrogate: 4-Bromofluorobenzene	0.0502		mg/Kg wet	0.0500		100	70-130			

LCS (B269845-BS1)

Prepared & Analyzed: 10/30/20

Acetone	0.233	0.10	mg/Kg wet	0.200		117	70-160			†
Acrylonitrile	0.0198	0.0060	mg/Kg wet	0.0200		99.2	70-130			
tert-Amyl Methyl Ether (TAME)	0.0181	0.0010	mg/Kg wet	0.0200		90.7	70-130			
Benzene	0.0183	0.0020	mg/Kg wet	0.0200		91.3	70-130			
Bromobenzene	0.0174	0.0020	mg/Kg wet	0.0200		87.1	70-130			
Bromochloromethane	0.0196	0.0020	mg/Kg wet	0.0200		98.2	70-130			
Bromodichloromethane	0.0191	0.0020	mg/Kg wet	0.0200		95.3	70-130			
Bromoform	0.0174	0.0020	mg/Kg wet	0.0200		87.0	70-130			
Bromomethane	0.0210	0.010	mg/Kg wet	0.0200		105	40-130		V-34	†
2-Butanone (MEK)	0.215	0.040	mg/Kg wet	0.200		107	70-160			†
tert-Butyl Alcohol (TBA)	0.164	0.040	mg/Kg wet	0.200		81.8	40-130		V-05	†
n-Butylbenzene	0.0176	0.0020	mg/Kg wet	0.0200		87.8	70-130			
sec-Butylbenzene	0.0171	0.0020	mg/Kg wet	0.0200		85.7	70-130			
tert-Butylbenzene	0.0170	0.0020	mg/Kg wet	0.0200		84.8	70-160			†
tert-Butyl Ethyl Ether (TBEE)	0.0193	0.0010	mg/Kg wet	0.0200		96.3	70-130			
Carbon Disulfide	0.203	0.0060	mg/Kg wet	0.200		102	70-130			
Carbon Tetrachloride	0.0184	0.0020	mg/Kg wet	0.0200		92.0	70-130			
Chlorobenzene	0.0175	0.0020	mg/Kg wet	0.0200		87.6	70-130			
Chlorodibromomethane	0.0186	0.0010	mg/Kg wet	0.0200		92.8	70-130			
Chloroethane	0.0168	0.020	mg/Kg wet	0.0200		83.9	70-130			
Chloroform	0.0187	0.0040	mg/Kg wet	0.0200		93.7	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 B269845 - SW-846 5035										
LCS (B269845-BS1)										
				Prepared & Analyzed: 10/30/20						
Chloromethane	0.0206	0.010	mg/Kg wet	0.0200		103	70-130			
2-Chlorotoluene	0.0175	0.0020	mg/Kg wet	0.0200		87.6	70-130			
4-Chlorotoluene	0.0176	0.0020	mg/Kg wet	0.0200		88.2	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	0.0170	0.0020	mg/Kg wet	0.0200		84.8	70-130			
1,2-Dibromoethane (EDB)	0.0178	0.0010	mg/Kg wet	0.0200		88.8	70-130			
Dibromomethane	0.0185	0.0020	mg/Kg wet	0.0200		92.5	70-130			
1,2-Dichlorobenzene	0.0171	0.0020	mg/Kg wet	0.0200		85.6	70-130			
1,3-Dichlorobenzene	0.0172	0.0020	mg/Kg wet	0.0200		86.0	70-130			
1,4-Dichlorobenzene	0.0171	0.0020	mg/Kg wet	0.0200		85.7	70-130			
trans-1,4-Dichloro-2-butene	0.0163	0.0040	mg/Kg wet	0.0200		81.6	70-130			V-05
Dichlorodifluoromethane (Freon 12)	0.0203	0.020	mg/Kg wet	0.0200		101	40-160			†
1,1-Dichloroethane	0.0195	0.0020	mg/Kg wet	0.0200		97.3	70-130			
1,2-Dichloroethane	0.0198	0.0020	mg/Kg wet	0.0200		99.0	70-130			
1,1-Dichloroethylene	0.0206	0.0040	mg/Kg wet	0.0200		103	70-130			
cis-1,2-Dichloroethylene	0.0192	0.0020	mg/Kg wet	0.0200		96.1	70-130			
trans-1,2-Dichloroethylene	0.0197	0.0020	mg/Kg wet	0.0200		98.6	70-130			
1,2-Dichloropropane	0.0189	0.0020	mg/Kg wet	0.0200		94.7	70-130			
1,3-Dichloropropane	0.0190	0.0010	mg/Kg wet	0.0200		95.1	70-130			
2,2-Dichloropropane	0.0167	0.0020	mg/Kg wet	0.0200		83.5	70-130			
1,1-Dichloropropene	0.0193	0.0020	mg/Kg wet	0.0200		96.6	70-130			
cis-1,3-Dichloropropene	0.0177	0.0010	mg/Kg wet	0.0200		88.6	70-130			
trans-1,3-Dichloropropene	0.0170	0.0010	mg/Kg wet	0.0200		85.0	70-130			
Diethyl Ether	0.0200	0.020	mg/Kg wet	0.0200		100	70-130			
Diisopropyl Ether (DIPE)	0.0206	0.0010	mg/Kg wet	0.0200		103	70-130			
1,4-Dioxane	0.193	0.10	mg/Kg wet	0.200		96.4	40-160			†
Ethylbenzene	0.0173	0.0020	mg/Kg wet	0.0200		86.7	70-130			
Hexachlorobutadiene	0.0167	0.0020	mg/Kg wet	0.0200		83.4	70-160			
2-Hexanone (MBK)	0.205	0.020	mg/Kg wet	0.200		102	70-160			†
Isopropylbenzene (Cumene)	0.0169	0.0020	mg/Kg wet	0.0200		84.4	70-130			
p-Isopropyltoluene (p-Cymene)	0.0169	0.0020	mg/Kg wet	0.0200		84.7	70-130			
Methyl Acetate	0.0268	0.0020	mg/Kg wet	0.0200		134 *	70-130			L-02, V-20
Methyl tert-Butyl Ether (MTBE)	0.0190	0.0040	mg/Kg wet	0.0200		95.0	70-130			
Methyl Cyclohexane	0.0180	0.0020	mg/Kg wet	0.0200		89.8	70-130			
Methylene Chloride	0.0209	0.020	mg/Kg wet	0.0200		104	40-160			†
4-Methyl-2-pentanone (MIBK)	0.205	0.020	mg/Kg wet	0.200		103	70-160			†
Naphthalene	0.0166	0.0040	mg/Kg wet	0.0200		83.0	40-130			†
n-Propylbenzene	0.0173	0.0020	mg/Kg wet	0.0200		86.6	70-130			
Styrene	0.0173	0.0020	mg/Kg wet	0.0200		86.3	70-130			
1,1,1,2-Tetrachloroethane	0.0168	0.0020	mg/Kg wet	0.0200		84.2	70-130			
1,1,2,2-Tetrachloroethane	0.0170	0.0010	mg/Kg wet	0.0200		85.2	70-130			
Tetrachloroethylene	0.0179	0.0020	mg/Kg wet	0.0200		89.6	70-130			
Tetrahydrofuran	0.0210	0.010	mg/Kg wet	0.0200		105	70-130			
Toluene	0.0182	0.0020	mg/Kg wet	0.0200		90.8	70-130			
1,2,3-Trichlorobenzene	0.0174	0.0020	mg/Kg wet	0.0200		87.0	70-130			
1,2,4-Trichlorobenzene	0.0173	0.0020	mg/Kg wet	0.0200		86.3	70-130			
1,3,5-Trichlorobenzene	0.0171	0.0020	mg/Kg wet	0.0200		85.7	70-130			
1,1,1-Trichloroethane	0.0188	0.0020	mg/Kg wet	0.0200		94.1	70-130			
1,1,2-Trichloroethane	0.0178	0.0020	mg/Kg wet	0.0200		89.0	70-130			
Trichloroethylene	0.0181	0.0020	mg/Kg wet	0.0200		90.6	70-130			
Trichlorofluoromethane (Freon 11)	0.0198	0.010	mg/Kg wet	0.0200		98.8	70-130			
1,2,3-Trichloropropane	0.0187	0.0020	mg/Kg wet	0.0200		93.6	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 B269845 - SW-846 5035										
LCS (B269845-BS1)										
Prepared & Analyzed: 10/30/20										
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0193	0.010	mg/Kg wet	0.0200		96.4	70-130			
1,2,4-Trimethylbenzene	0.0167	0.0020	mg/Kg wet	0.0200		83.5	70-130			
1,3,5-Trimethylbenzene	0.0169	0.0020	mg/Kg wet	0.0200		84.7	70-130			
Vinyl Chloride	0.0202	0.010	mg/Kg wet	0.0200		101	40-130			†
m+p Xylene	0.0349	0.0040	mg/Kg wet	0.0400		87.2	70-130			
o-Xylene	0.0174	0.0020	mg/Kg wet	0.0200		87.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0536		mg/Kg wet	0.0500		107	70-130			
Surrogate: Toluene-d8	0.0503		mg/Kg wet	0.0500		101	70-130			
Surrogate: 4-Bromofluorobenzene	0.0507		mg/Kg wet	0.0500		101	70-130			
LCS Dup (B269845-BSD1)										
Prepared & Analyzed: 10/30/20										
Acetone	0.224	0.10	mg/Kg wet	0.200		112	70-160	4.16	25	†
Acrylonitrile	0.0203	0.0060	mg/Kg wet	0.0200		101	70-130	2.16	25	
tert-Amyl Methyl Ether (TAME)	0.0198	0.0010	mg/Kg wet	0.0200		99.3	70-130	9.01	25	
Benzene	0.0187	0.0020	mg/Kg wet	0.0200		93.4	70-130	2.19	25	
Bromobenzene	0.0179	0.0020	mg/Kg wet	0.0200		89.4	70-130	2.65	25	
Bromochloromethane	0.0197	0.0020	mg/Kg wet	0.0200		98.7	70-130	0.528	25	
Bromodichloromethane	0.0193	0.0020	mg/Kg wet	0.0200		96.4	70-130	1.17	25	
Bromoform	0.0180	0.0020	mg/Kg wet	0.0200		90.0	70-130	3.38	25	
Bromomethane	0.0211	0.010	mg/Kg wet	0.0200		105	40-130	0.0570	25	V-34 †
2-Butanone (MEK)	0.216	0.040	mg/Kg wet	0.200		108	70-160	0.823	25	†
tert-Butyl Alcohol (TBA)	0.161	0.040	mg/Kg wet	0.200		80.5	40-130	1.61	25	V-05 †
n-Butylbenzene	0.0177	0.0020	mg/Kg wet	0.0200		88.3	70-130	0.591	25	
sec-Butylbenzene	0.0174	0.0020	mg/Kg wet	0.0200		87.2	70-130	1.76	25	
tert-Butylbenzene	0.0174	0.0020	mg/Kg wet	0.0200		87.2	70-160	2.72	25	†
tert-Butyl Ethyl Ether (TBEE)	0.0200	0.0010	mg/Kg wet	0.0200		100	70-130	3.81	25	
Carbon Disulfide	0.206	0.0060	mg/Kg wet	0.200		103	70-130	1.36	25	
Carbon Tetrachloride	0.0186	0.0020	mg/Kg wet	0.0200		92.8	70-130	0.877	25	
Chlorobenzene	0.0181	0.0020	mg/Kg wet	0.0200		90.5	70-130	3.21	25	
Chlorodibromomethane	0.0191	0.0010	mg/Kg wet	0.0200		95.5	70-130	2.88	25	
Chloroethane	0.0204	0.020	mg/Kg wet	0.0200		102	70-130	19.6	25	
Chloroform	0.0191	0.0040	mg/Kg wet	0.0200		95.4	70-130	1.78	25	
Chloromethane	0.0207	0.010	mg/Kg wet	0.0200		104	70-130	0.416	25	
2-Chlorotoluene	0.0182	0.0020	mg/Kg wet	0.0200		91.2	70-130	4.00	25	
4-Chlorotoluene	0.0182	0.0020	mg/Kg wet	0.0200		91.2	70-130	3.43	25	
1,2-Dibromo-3-chloropropane (DBCP)	0.0185	0.0020	mg/Kg wet	0.0200		92.4	70-130	8.63	25	
1,2-Dibromoethane (EDB)	0.0186	0.0010	mg/Kg wet	0.0200		93.2	70-130	4.91	25	
Dibromomethane	0.0186	0.0020	mg/Kg wet	0.0200		93.2	70-130	0.754	25	
1,2-Dichlorobenzene	0.0174	0.0020	mg/Kg wet	0.0200		86.9	70-130	1.45	25	
1,3-Dichlorobenzene	0.0174	0.0020	mg/Kg wet	0.0200		86.8	70-130	0.903	25	
1,4-Dichlorobenzene	0.0175	0.0020	mg/Kg wet	0.0200		87.4	70-130	1.87	25	
trans-1,4-Dichloro-2-butene	0.0159	0.0040	mg/Kg wet	0.0200		79.3	70-130	2.95	25	V-05
Dichlorodifluoromethane (Freon 12)	0.0197	0.020	mg/Kg wet	0.0200		98.5	40-160	2.75	25	†
1,1-Dichloroethane	0.0202	0.0020	mg/Kg wet	0.0200		101	70-130	3.85	25	
1,2-Dichloroethane	0.0210	0.0020	mg/Kg wet	0.0200		105	70-130	5.70	25	
1,1-Dichloroethylene	0.0206	0.0040	mg/Kg wet	0.0200		103	70-130	0.175	25	
cis-1,2-Dichloroethylene	0.0195	0.0020	mg/Kg wet	0.0200		97.7	70-130	1.63	25	
trans-1,2-Dichloroethylene	0.0201	0.0020	mg/Kg wet	0.0200		101	70-130	2.10	25	
1,2-Dichloropropane	0.0197	0.0020	mg/Kg wet	0.0200		98.4	70-130	3.83	25	
1,3-Dichloropropane	0.0199	0.0010	mg/Kg wet	0.0200		99.4	70-130	4.45	25	
2,2-Dichloropropane	0.0168	0.0020	mg/Kg wet	0.0200		84.1	70-130	0.704	25	
1,1-Dichloropropene	0.0192	0.0020	mg/Kg wet	0.0200		95.8	70-130	0.759	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
Batch B269845 - SW-846 5035										
LCS Dup (B269845-BSD1)										
Prepared & Analyzed: 10/30/20										
cis-1,3-Dichloropropene	0.0183	0.0010	mg/Kg wet	0.0200		91.7	70-130	3.51	25	
trans-1,3-Dichloropropene	0.0177	0.0010	mg/Kg wet	0.0200		88.7	70-130	4.25	25	
Diethyl Ether	0.0203	0.020	mg/Kg wet	0.0200		101	70-130	1.35	25	
Diisopropyl Ether (DIPE)	0.0215	0.0010	mg/Kg wet	0.0200		107	70-130	4.22	25	
1,4-Dioxane	0.199	0.10	mg/Kg wet	0.200		99.3	40-160	3.03	50	† ‡
Ethylbenzene	0.0177	0.0020	mg/Kg wet	0.0200		88.5	70-130	2.05	25	
Hexachlorobutadiene	0.0174	0.0020	mg/Kg wet	0.0200		86.8	70-160	4.08	25	
2-Hexanone (MBK)	0.212	0.020	mg/Kg wet	0.200		106	70-160	3.33	25	†
Isopropylbenzene (Cumene)	0.0174	0.0020	mg/Kg wet	0.0200		87.1	70-130	3.10	25	
p-Isopropyltoluene (p-Cymene)	0.0174	0.0020	mg/Kg wet	0.0200		86.9	70-130	2.56	25	
Methyl Acetate	0.0286	0.0020	mg/Kg wet	0.0200		143 *	70-130	6.67	25	L-02, V-20
Methyl tert-Butyl Ether (MTBE)	0.0198	0.0040	mg/Kg wet	0.0200		98.8	70-130	3.93	25	
Methyl Cyclohexane	0.0183	0.0020	mg/Kg wet	0.0200		91.7	70-130	2.12	25	
Methylene Chloride	0.0216	0.020	mg/Kg wet	0.0200		108	40-160	3.24	25	†
4-Methyl-2-pentanone (MIBK)	0.214	0.020	mg/Kg wet	0.200		107	70-160	4.32	25	†
Naphthalene	0.0174	0.0040	mg/Kg wet	0.0200		87.0	40-130	4.74	25	†
n-Propylbenzene	0.0179	0.0020	mg/Kg wet	0.0200		89.5	70-130	3.29	25	
Styrene	0.0174	0.0020	mg/Kg wet	0.0200		87.1	70-130	0.923	25	
1,1,1,2-Tetrachloroethane	0.0170	0.0020	mg/Kg wet	0.0200		85.0	70-130	0.945	25	
1,1,2,2-Tetrachloroethane	0.0177	0.0010	mg/Kg wet	0.0200		88.5	70-130	3.78	25	
Tetrachloroethylene	0.0184	0.0020	mg/Kg wet	0.0200		92.0	70-130	2.67	25	
Tetrahydrofuran	0.0207	0.010	mg/Kg wet	0.0200		103	70-130	1.58	25	
Toluene	0.0186	0.0020	mg/Kg wet	0.0200		92.9	70-130	2.30	25	
1,2,3-Trichlorobenzene	0.0180	0.0020	mg/Kg wet	0.0200		90.2	70-130	3.60	25	
1,2,4-Trichlorobenzene	0.0179	0.0020	mg/Kg wet	0.0200		89.4	70-130	3.48	25	
1,3,5-Trichlorobenzene	0.0174	0.0020	mg/Kg wet	0.0200		86.9	70-130	1.39	25	
1,1,1-Trichloroethane	0.0191	0.0020	mg/Kg wet	0.0200		95.6	70-130	1.63	25	
1,1,2-Trichloroethane	0.0188	0.0020	mg/Kg wet	0.0200		94.0	70-130	5.48	25	
Trichloroethylene	0.0182	0.0020	mg/Kg wet	0.0200		91.2	70-130	0.627	25	
Trichlorofluoromethane (Freon 11)	0.0203	0.010	mg/Kg wet	0.0200		102	70-130	2.85	25	
1,2,3-Trichloropropane	0.0189	0.0020	mg/Kg wet	0.0200		94.7	70-130	1.14	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0193	0.010	mg/Kg wet	0.0200		96.7	70-130	0.249	25	
1,2,4-Trimethylbenzene	0.0173	0.0020	mg/Kg wet	0.0200		86.6	70-130	3.61	25	
1,3,5-Trimethylbenzene	0.0177	0.0020	mg/Kg wet	0.0200		88.3	70-130	4.17	25	
Vinyl Chloride	0.0200	0.010	mg/Kg wet	0.0200		100	40-130	0.757	25	†
m+p Xylene	0.0356	0.0040	mg/Kg wet	0.0400		89.0	70-130	2.01	25	
o-Xylene	0.0178	0.0020	mg/Kg wet	0.0200		88.8	70-130	2.07	25	
Surrogate: 1,2-Dichloroethane-d4	0.0534		mg/Kg wet	0.0500		107	70-130			
Surrogate: Toluene-d8	0.0511		mg/Kg wet	0.0500		102	70-130			
Surrogate: 4-Bromofluorobenzene	0.0511		mg/Kg wet	0.0500		102	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 B270196 - SW-846 3546

Blank (B270196-BLK1)

Prepared: 11/04/20 Analyzed: 11/05/20

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	2.34		mg/Kg wet	3.33		70.2	30-130			
Surrogate: 2-Fluorobiphenyl	2.64		mg/Kg wet	3.33		79.2	30-130			
Surrogate: p-Terphenyl-d14	3.04		mg/Kg wet	3.33		91.1	30-130			

LCS (B270196-BS1)

Prepared: 11/04/20 Analyzed: 11/05/20

Acenaphthene	1.35	0.17	mg/Kg wet	1.67		80.9	40-140			
Acenaphthylene	1.47	0.17	mg/Kg wet	1.67		88.0	40-140			
Anthracene	1.45	0.17	mg/Kg wet	1.67		87.2	40-140			
Benzo(a)anthracene	1.33	0.17	mg/Kg wet	1.67		79.7	40-140			
Benzo(a)pyrene	1.31	0.17	mg/Kg wet	1.67		78.8	40-140			
Benzo(b)fluoranthene	1.37	0.17	mg/Kg wet	1.67		82.2	40-140			
Benzo(g,h,i)perylene	1.43	0.17	mg/Kg wet	1.67		86.0	40-140			
Benzo(k)fluoranthene	1.33	0.17	mg/Kg wet	1.67		80.0	40-140			
Chrysene	1.32	0.17	mg/Kg wet	1.67		79.3	40-140			
Dibenz(a,h)anthracene	1.31	0.17	mg/Kg wet	1.67		78.7	40-140			
Fluoranthene	1.34	0.17	mg/Kg wet	1.67		80.2	40-140			
Fluorene	1.43	0.17	mg/Kg wet	1.67		85.7	40-140			
Indeno(1,2,3-cd)pyrene	1.40	0.17	mg/Kg wet	1.67		84.2	40-140			
2-Methylnaphthalene	1.39	0.17	mg/Kg wet	1.67		83.6	40-140			
Naphthalene	1.27	0.17	mg/Kg wet	1.67		76.4	40-140			
Phenanthrene	1.43	0.17	mg/Kg wet	1.67		85.7	40-140			
Pyrene	1.38	0.17	mg/Kg wet	1.67		82.8	40-140			
Surrogate: Nitrobenzene-d5	3.00		mg/Kg wet	3.33		90.1	30-130			
Surrogate: 2-Fluorobiphenyl	3.16		mg/Kg wet	3.33		94.8	30-130			
Surrogate: p-Terphenyl-d14	3.13		mg/Kg wet	3.33		94.0	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 B270196 - SW-846 3546

LCS Dup (B270196-BSD1)

Prepared: 11/04/20 Analyzed: 11/05/20

Acenaphthene	1.37	0.17	mg/Kg wet	1.67		82.4	40-140	1.86	30	
Acenaphthylene	1.50	0.17	mg/Kg wet	1.67		90.2	40-140	2.42	30	
Anthracene	1.49	0.17	mg/Kg wet	1.67		89.6	40-140	2.69	30	
Benzo(a)anthracene	1.35	0.17	mg/Kg wet	1.67		81.3	40-140	1.99	30	
Benzo(a)pyrene	1.35	0.17	mg/Kg wet	1.67		80.9	40-140	2.56	30	
Benzo(b)fluoranthene	1.44	0.17	mg/Kg wet	1.67		86.4	40-140	4.94	30	
Benzo(g,h,i)perylene	1.45	0.17	mg/Kg wet	1.67		86.9	40-140	0.995	30	
Benzo(k)fluoranthene	1.40	0.17	mg/Kg wet	1.67		84.1	40-140	4.97	30	
Chrysene	1.36	0.17	mg/Kg wet	1.67		81.7	40-140	2.98	30	
Dibenz(a,h)anthracene	1.40	0.17	mg/Kg wet	1.67		83.8	40-140	6.27	30	
Fluoranthene	1.38	0.17	mg/Kg wet	1.67		82.9	40-140	3.31	30	
Fluorene	1.44	0.17	mg/Kg wet	1.67		86.3	40-140	0.721	30	
Indeno(1,2,3-cd)pyrene	1.45	0.17	mg/Kg wet	1.67		87.2	40-140	3.48	30	
2-Methylnaphthalene	1.41	0.17	mg/Kg wet	1.67		84.5	40-140	1.02	30	
Naphthalene	1.32	0.17	mg/Kg wet	1.67		79.0	40-140	3.24	30	
Phenanthrene	1.45	0.17	mg/Kg wet	1.67		87.3	40-140	1.87	30	
Pyrene	1.42	0.17	mg/Kg wet	1.67		85.0	40-140	2.67	30	
Surrogate: Nitrobenzene-d5	3.14		mg/Kg wet	3.33		94.1	30-130			
Surrogate: 2-Fluorobiphenyl	3.16		mg/Kg wet	3.33		94.9	30-130			
Surrogate: p-Terphenyl-d14	3.10		mg/Kg wet	3.33		92.9	30-130			

Matrix Spike (B270196-MS1)

Source: 20J1670-01

Prepared: 11/04/20 Analyzed: 11/05/20

Acenaphthene	1.15	0.18	mg/Kg dry	1.72	ND	66.8	40-140			
Acenaphthylene	1.22	0.18	mg/Kg dry	1.72	ND	70.8	40-140			
Anthracene	1.19	0.18	mg/Kg dry	1.72	ND	69.3	40-140			
Benzo(a)anthracene	1.09	0.18	mg/Kg dry	1.72	ND	63.3	40-140			
Benzo(a)pyrene	0.978	0.18	mg/Kg dry	1.72	ND	56.9	40-140			
Benzo(b)fluoranthene	1.07	0.18	mg/Kg dry	1.72	0.116	55.4	40-140			
Benzo(g,h,i)perylene	0.813	0.18	mg/Kg dry	1.72	ND	47.3	40-140			
Benzo(k)fluoranthene	1.01	0.18	mg/Kg dry	1.72	ND	58.7	40-140			
Chrysene	1.08	0.18	mg/Kg dry	1.72	ND	62.9	40-140			
Dibenz(a,h)anthracene	0.737	0.18	mg/Kg dry	1.72	ND	42.9	40-140			
Fluoranthene	1.15	0.18	mg/Kg dry	1.72	0.154	57.9	40-140			
Fluorene	1.20	0.18	mg/Kg dry	1.72	ND	69.7	40-140			
Indeno(1,2,3-cd)pyrene	0.805	0.18	mg/Kg dry	1.72	ND	46.9	40-140			
2-Methylnaphthalene	1.16	0.18	mg/Kg dry	1.72	ND	67.6	40-140			
Naphthalene	1.06	0.18	mg/Kg dry	1.72	ND	61.7	40-140			
Phenanthrene	1.30	0.18	mg/Kg dry	1.72	0.132	68.0	40-140			
Pyrene	1.35	0.18	mg/Kg dry	1.72	0.185	67.8	40-140			
Surrogate: Nitrobenzene-d5	2.41		mg/Kg dry	3.44		70.3	30-130			
Surrogate: 2-Fluorobiphenyl	2.62		mg/Kg dry	3.44		76.2	30-130			
Surrogate: p-Terphenyl-d14	2.71		mg/Kg dry	3.44		78.8	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
Batch B270196 - SW-846 3546										
Matrix Spike Dup (B270196-MSD1)		Source: 20J1670-01			Prepared: 11/04/20 Analyzed: 11/05/20					
Acenaphthene	1.13	0.18	mg/Kg dry	1.73	ND	65.5	40-140	1.33	30	
Acenaphthylene	1.21	0.18	mg/Kg dry	1.73	ND	70.0	40-140	0.588	30	
Anthracene	1.21	0.18	mg/Kg dry	1.73	ND	69.8	40-140	1.29	30	
Benzo(a)anthracene	1.12	0.18	mg/Kg dry	1.73	ND	64.7	40-140	2.91	30	
Benzo(a)pyrene	1.01	0.18	mg/Kg dry	1.73	ND	58.2	40-140	2.89	30	
Benzo(b)fluoranthene	1.07	0.18	mg/Kg dry	1.73	0.116	55.0	40-140	0.0484	30	
Benzo(g,h,i)perylene	0.736	0.18	mg/Kg dry	1.73	ND	42.6	40-140	9.93	30	
Benzo(k)fluoranthene	1.01	0.18	mg/Kg dry	1.73	ND	58.3	40-140	0.0553	30	
Chrysene	1.11	0.18	mg/Kg dry	1.73	ND	64.1	40-140	2.49	30	
Dibenz(a,h)anthracene	0.857	0.18	mg/Kg dry	1.73	ND	49.6	40-140	15.1	30	
Fluoranthene	1.15	0.18	mg/Kg dry	1.73	0.154	57.7	40-140	0.213	30	
Fluorene	1.19	0.18	mg/Kg dry	1.73	ND	69.1	40-140	0.231	30	
Indeno(1,2,3-cd)pyrene	0.751	0.18	mg/Kg dry	1.73	ND	43.4	40-140	7.00	30	
2-Methylnaphthalene	1.09	0.18	mg/Kg dry	1.73	ND	62.7	40-140	6.83	30	
Naphthalene	0.965	0.18	mg/Kg dry	1.73	ND	55.8	40-140	9.31	30	
Phenanthrene	1.32	0.18	mg/Kg dry	1.73	0.132	68.4	40-140	1.19	30	
Pyrene	1.47	0.18	mg/Kg dry	1.73	0.185	74.2	40-140	8.44	30	
Surrogate: Nitrobenzene-d5	2.26		mg/Kg dry	3.46		65.5	30-130			
Surrogate: 2-Fluorobiphenyl	2.46		mg/Kg dry	3.46		71.0	30-130			
Surrogate: p-Terphenyl-d14	2.88		mg/Kg dry	3.46		83.3	30-130			

QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B270927 - SW-846 3546

Blank (B270927-BLK1)

Prepared: 11/14/20 Analyzed: 11/19/20

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	0.214		mg/Kg wet	0.200		107	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.209		mg/Kg wet	0.200		104	30-150			
Surrogate: Tetrachloro-m-xylene	0.210		mg/Kg wet	0.200		105	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.201		mg/Kg wet	0.200		101	30-150			

LCS (B270927-BS1)

Prepared: 11/14/20 Analyzed: 11/19/20

Aroclor-1016	0.19	0.020	mg/Kg wet	0.200		96.6	40-140			
Aroclor-1016 [2C]	0.18	0.020	mg/Kg wet	0.200		90.7	40-140			
Aroclor-1260	0.18	0.020	mg/Kg wet	0.200		90.5	40-140			
Aroclor-1260 [2C]	0.17	0.020	mg/Kg wet	0.200		84.7	40-140			
Surrogate: Decachlorobiphenyl	0.203		mg/Kg wet	0.200		101	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.197		mg/Kg wet	0.200		98.6	30-150			
Surrogate: Tetrachloro-m-xylene	0.202		mg/Kg wet	0.200		101	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.195		mg/Kg wet	0.200		97.3	30-150			

LCS Dup (B270927-BSD1)

Prepared: 11/14/20 Analyzed: 11/19/20

Aroclor-1016	0.20	0.020	mg/Kg wet	0.200		102	40-140	5.41	30	
Aroclor-1016 [2C]	0.19	0.020	mg/Kg wet	0.200		94.3	40-140	3.90	30	
Aroclor-1260	0.19	0.020	mg/Kg wet	0.200		95.8	40-140	5.65	30	
Aroclor-1260 [2C]	0.18	0.020	mg/Kg wet	0.200		88.5	40-140	4.39	30	
Surrogate: Decachlorobiphenyl	0.213		mg/Kg wet	0.200		106	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.207		mg/Kg wet	0.200		103	30-150			
Surrogate: Tetrachloro-m-xylene	0.206		mg/Kg wet	0.200		103	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.197		mg/Kg wet	0.200		98.3	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
Batch B270195 - SW-846 3546										
Blank (B270195-BLK1)					Prepared: 11/04/20 Analyzed: 11/06/20					
TPH (C9-C36)	ND	8.3	mg/Kg wet							
Surrogate: 2-Fluorobiphenyl	2.31		mg/Kg wet	3.33		69.3	40-140			
LCS (B270195-BS1)					Prepared: 11/04/20 Analyzed: 11/06/20					
TPH (C9-C36)	24.9	8.3	mg/Kg wet	33.3		74.7	40-140			
Surrogate: 2-Fluorobiphenyl	2.47		mg/Kg wet	3.33		74.0	40-140			
LCS Dup (B270195-BSD1)					Prepared: 11/04/20 Analyzed: 11/06/20					
TPH (C9-C36)	25.4	8.3	mg/Kg wet	33.3		76.1	40-140	1.95	30	
Surrogate: 2-Fluorobiphenyl	2.57		mg/Kg wet	3.33		77.2	40-140			
Matrix Spike (B270195-MS1)					Source: 20J1670-04		Prepared: 11/04/20 Analyzed: 11/06/20			
TPH (C9-C36)	58.8	8.8	mg/Kg dry	35.2	32.4	75.0	40-140			
Surrogate: 2-Fluorobiphenyl	2.42		mg/Kg dry	3.52		68.9	40-140			
Matrix Spike Dup (B270195-MSD1)					Source: 20J1670-04		Prepared: 11/04/20 Analyzed: 11/06/20			
TPH (C9-C36)	54.7	8.8	mg/Kg dry	35.2	32.4	63.2	40-140	7.27	30	
Surrogate: 2-Fluorobiphenyl	2.34		mg/Kg dry	3.52		66.6	40-140			



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

QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B270028 - SW-846 7471										
Blank (B270028-BLK1) Prepared: 11/02/20 Analyzed: 11/04/20										
Mercury	ND	0.025	mg/Kg wet							
LCS (B270028-BS1) Prepared: 11/02/20 Analyzed: 11/04/20										
Mercury	18.6	0.74	mg/Kg wet	18.4		101	60.9-138.6			
LCS Dup (B270028-BSD1) Prepared: 11/02/20 Analyzed: 11/04/20										
Mercury	20.3	0.76	mg/Kg wet	18.4		110	60.9-138.6	8.73	20	
Duplicate (B270028-DUP1) Source: 20J1670-03 Prepared: 11/02/20 Analyzed: 11/04/20										
Mercury	ND	0.026	mg/Kg dry		ND			NC	20	
Matrix Spike (B270028-MS1) Source: 20J1670-03 Prepared: 11/02/20 Analyzed: 11/04/20										
Mercury	0.365	0.026	mg/Kg dry	0.351	0.0137	100	80-120			
Batch B270029 - SW-846 7471										
Blank (B270029-BLK1) Prepared: 11/02/20 Analyzed: 11/04/20										
Mercury	ND	0.025	mg/Kg wet							
LCS (B270029-BS1) Prepared: 11/02/20 Analyzed: 11/04/20										
Mercury	20.7	0.75	mg/Kg wet	18.4		112	60.9-138.6			
LCS Dup (B270029-BSD1) Prepared: 11/02/20 Analyzed: 11/04/20										
Mercury	19.0	0.74	mg/Kg wet	18.4		103	60.9-138.6	8.36	20	
Batch B270047 - SW-846 3050B										
Blank (B270047-BLK1) Prepared: 11/02/20 Analyzed: 11/03/20										
Antimony	ND	1.7	mg/Kg wet							
Arsenic	ND	3.3	mg/Kg wet							
Beryllium	ND	0.17	mg/Kg wet							
Cadmium	ND	0.33	mg/Kg wet							
Chromium	ND	0.67	mg/Kg wet							
Copper	ND	0.67	mg/Kg wet							
Lead	ND	0.50	mg/Kg wet							
Nickel	ND	0.67	mg/Kg wet							
Selenium	ND	3.3	mg/Kg wet							
Silver	ND	0.33	mg/Kg wet							
Thallium	ND	1.7	mg/Kg wet							
Zinc	ND	0.67	mg/Kg wet							

QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B270047 - SW-846 3050B

LCS (B270047-BS1)

Prepared: 11/02/20 Analyzed: 11/03/20

Antimony	93.6	5.0	mg/Kg wet	120		78.0	4.8-195			
Arsenic	85.0	10	mg/Kg wet	95.5		89.0	82.8-117.3			
Beryllium	105	0.50	mg/Kg wet	103		102	82.8-116.5			
Cadmium	136	1.0	mg/Kg wet	135		101	83-117.8			
Chromium	135	2.0	mg/Kg wet	147		92.0	82.3-117.7			
Copper	144	2.0	mg/Kg wet	150		95.9	84-116			
Lead	88.4	1.5	mg/Kg wet	92.3		95.8	83.1-117			
Nickel	59.0	2.0	mg/Kg wet	59.8		98.6	82.6-117.6			
Selenium	40.1	10	mg/Kg wet	42.0		95.5	79.5-120.5			
Silver	38.6	1.0	mg/Kg wet	40.3		95.7	80.6-119.4			
Thallium	86.0	5.0	mg/Kg wet	83.1		103	81-119			
Zinc	348	2.0	mg/Kg wet	369		94.3	80.8-119.2			

LCS Dup (B270047-BSD1)

Prepared: 11/02/20 Analyzed: 11/03/20

Antimony	98.5	5.0	mg/Kg wet	120		82.1	4.8-195	5.11	30	
Arsenic	87.0	10	mg/Kg wet	95.5		91.1	82.8-117.3	2.34	30	
Beryllium	111	0.50	mg/Kg wet	103		108	82.8-116.5	5.98	30	
Cadmium	141	1.0	mg/Kg wet	135		104	83-117.8	3.39	20	
Chromium	144	2.0	mg/Kg wet	147		97.8	82.3-117.7	6.15	30	
Copper	152	2.0	mg/Kg wet	150		101	84-116	5.54	30	
Lead	86.0	1.5	mg/Kg wet	92.3		93.2	83.1-117	2.77	30	
Nickel	62.3	2.0	mg/Kg wet	59.8		104	82.6-117.6	5.41	30	
Selenium	40.3	10	mg/Kg wet	42.0		96.1	79.5-120.5	0.557	30	
Silver	39.8	1.0	mg/Kg wet	40.3		98.8	80.6-119.4	3.20	30	
Thallium	88.7	5.0	mg/Kg wet	83.1		107	81-119	3.10	30	
Zinc	362	2.0	mg/Kg wet	369		98.1	80.8-119.2	4.04	30	

Duplicate (B270047-DUP1)

Source: 20J1670-06

Prepared: 11/02/20 Analyzed: 11/03/20

Antimony	ND	1.7	mg/Kg dry		ND			NC	35	
Arsenic	ND	3.4	mg/Kg dry		ND			NC	35	
Beryllium	ND	0.17	mg/Kg dry		ND			NC	35	
Cadmium	ND	0.34	mg/Kg dry		ND			NC	35	
Chromium	4.69	0.68	mg/Kg dry		5.90			22.9	35	
Copper	14.1	0.68	mg/Kg dry		14.8			5.18	35	
Lead	11.6	0.51	mg/Kg dry		11.9			3.28	35	
Nickel	5.07	0.68	mg/Kg dry		5.29			4.23	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	56.5	0.68	mg/Kg dry		67.8			18.3	35	

Matrix Spike (B270047-MS1)

Source: 20J1670-06

Prepared: 11/02/20 Analyzed: 11/03/20

Antimony	7.57	1.7	mg/Kg dry	17.1	ND	44.2	* 75-125			MS-07
Arsenic	16.1	3.4	mg/Kg dry	17.1	1.41	86.0	75-125			
Beryllium	15.8	0.17	mg/Kg dry	17.1	0.153	91.4	75-125			
Cadmium	16.0	0.34	mg/Kg dry	17.1	0.114	92.8	75-125			
Chromium	20.6	0.68	mg/Kg dry	17.1	5.90	86.1	75-125			
Copper	47.3	0.68	mg/Kg dry	34.2	14.8	94.8	75-125			
Lead	27.0	0.51	mg/Kg dry	17.1	11.9	88.0	75-125			
Nickel	20.5	0.68	mg/Kg dry	17.1	5.29	89.2	75-125			
Selenium	15.0	3.4	mg/Kg dry	17.1	ND	87.7	75-125			
Silver	16.7	0.34	mg/Kg dry	17.1	ND	97.7	75-125			
Thallium	23.0	1.7	mg/Kg dry	17.1	ND	134	* 75-125			MS-14



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

QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B270047 - SW-846 3050B										
Matrix Spike (B270047-MS1)		Source: 20J1670-06								
					Prepared: 11/02/20	Analyzed: 11/03/20				
Zinc	85.7	0.68	mg/Kg dry	34.2	67.8	52.2	* 75-125			MS-07
Reference (B270047-SRM1) MRL CHECK										
					Prepared: 11/02/20	Analyzed: 11/03/20				
Lead	0.572	0.50	mg/Kg wet	0.502		114	80-120			

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

LCS

SW-846 8082A

Lab Sample ID: B270927-BS1 Date(s) Analyzed 11/19/2020 11/19/2020

Instrument ID (1): ECD5 Instrument ID (2): ECD5

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.19	
	2	0.000	0.000	0.000	0.18	5.4
Aroclor-1260	1	0.000	0.000	0.000	0.18	
	2	0.000	0.000	0.000	0.17	5.7

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

LCS Dup

SW-846 8082A

Lab Sample ID: B270927-BSD1 Date(s) Analyzed 11/19/2020 11/19/2020

Instrument ID (1): ECD5 Instrument ID (2): ECD5

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.20	
	2	0.000	0.000	0.000	0.19	5.1
Aroclor-1260	1	0.000	0.000	0.000	0.19	
	2	0.000	0.000	0.000	0.18	5.4

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.
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.
MS-14	Matrix spike recovery is outside of control limits. Data validation is not affected since sample result is "not detected" and recovery bias is on the high side for this compound.
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
SW-846 6010D in Soil	
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
SW-846 7471B in Soil	
Mercury	CT,NH,NY,NC,ME,VA
SW-846 8082A in Soil	
Aroclor-1016	CT,NH,NY,NC,ME,VA,PA
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1221	CT,NH,NY,NC,ME,VA,PA
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1232	CT,NH,NY,NC,ME,VA,PA
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1242	CT,NH,NY,NC,ME,VA,PA
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1248	CT,NH,NY,NC,ME,VA,PA
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1254	CT,NH,NY,NC,ME,VA,PA
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1260	CT,NH,NY,NC,ME,VA,PA
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1262	NH,NY,NC,ME,VA,PA
Aroclor-1262 [2C]	NH,NY,NC,ME,VA,PA
Aroclor-1268	NH,NY,NC,ME,VA,PA
Aroclor-1268 [2C]	NH,NY,NC,ME,VA,PA
SW-846 8082A in Water	
Aroclor-1016	CT,NH,NY,NC,ME,VA,PA
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1221	CT,NH,NY,NC,ME,VA,PA
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1232	CT,NH,NY,NC,ME,VA,PA
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1242	CT,NH,NY,NC,ME,VA,PA
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1248	CT,NH,NY,NC,ME,VA,PA
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1254	CT,NH,NY,NC,ME,VA,PA
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA,PA

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8082A in Water</i>	
Aroclor-1260	CT,NH,NY,NC,ME,VA,PA
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1262	NH,NY,NC,ME,VA,PA
Aroclor-1262 [2C]	NH,NY,NC,ME,VA,PA
Aroclor-1268	NH,NY,NC,ME,VA,PA
Aroclor-1268 [2C]	NH,NY,NC,ME,VA,PA
<i>SW-846 8260C-D in Soil</i>	
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
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

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260C-D in Soil	
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
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
SW-846 8270D-E in Soil	
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

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8270D-E in Soil	
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

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

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2021
CT	Connecticut Department of Public Health	PH-0567	09/30/2021
NY	New York State Department of Health	10899 NELAP	04/1/2021
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2021
RI	Rhode Island Department of Health	LAO00112	12/30/2020
NC	North Carolina Div. of Water Quality	652	12/31/2020
NJ	New Jersey DEP	MA007 NELAP	06/30/2021
FL	Florida Department of Health	E871027 NELAP	06/30/2021
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2021
ME	State of Maine	2011028	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2020
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2021
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2021
NC-DW	North Carolina Department of Health	25703	07/31/2021
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2021
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2021

540 North Commercial Street, Manchester, NH 03101
 276 Newport Road, New London, NH 03257
 205 Billings Farm Road, Suite 6B, White River Junction, VT 05001
 5 Fletcher Street, Suite 1, Keenebunk, ME 04043
 23046 Avenida de la Carlota, Suite 600, Laguna Hills, CA 92653

146 Hartford Road, Manchester, CT 06040
 56 Quarry Road, Trumbull, CT 06611
 317 Iron Horse Way, Suite 204, Providence, RI 02908
 1550 Main Street, Suite 400, Springfield, MA 01103
 108 Myrtle Street, Suite 502, Quincy, MA 02171



CHAIN-OF-CUSTODY RECORD 43497

PROJECT NAME: PROJECT LOCATION: PROJECT NUMBER: 20181545.810 CON-TEST

REPORT TO: ALLEN TENVAN (alenvan@fandO.com) ANALYSIS REQUEST: VOC BY USEA METHOD 8260, PAINT BY USEA METHOD 8270, TOX BY BIO/COIS, PCBs by 8260

INVOICE TO: " "

P.O. No.: 160320181545.810

Sampler's Signature: *Meely Sany* Date: 10/28/20

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

Item No.	Transfer Check				Sample Number	Source Code	Date Sampled	Time Sampled	Comments
	1	2	3	4					
1					1603201027-01	S	10/27/20	0803	
2					-02			0827	
3					-03			0842	
4					-04			1002	
5					-05			1137	
6					-06			1222	
7					-07			1341	
8					-08	X		1500	
9					1603201028-09	S	10/28/20	0742	
10					-10	S	10/28/20	0745	

Transfer Number	Relinquished By	Accepted By	Date	Time	Charge Exceptions
1	<i>Meely Sany</i>	<i>Paul Chubb</i>	10/27/20	1430	CT Tax Exempt <input type="checkbox"/> QA/QC <input type="checkbox"/> Other <input type="checkbox"/> Duplicates <input checked="" type="checkbox"/> 2
2	<i>FRIO FRIOLE</i>	<i>Meely Sany</i>	10/28/20	0800	Reporting and Detection Limit Requirements: <input type="checkbox"/> RCP Deliverables <input type="checkbox"/> MCP CAM Cert.
3	<i>Meely Sany</i>	<i>Paul Chubb</i>	10-29-20	1716	RIDEM R-DEC & GB-LC
4	<i>Paul Chubb</i>	<i>Meely Sany</i>	10-29-20	1716	Additional Comments: SEE ATTACHED PRICE QUOTE

SEE ATTACHED CHECKLIST (PLEASE FILL OUT) *HOLD ADDITIONAL SAMPLE FOR POSSIBLE TCAD



FUSS & O'NEILL
(860) 646-2469 • www.FandO.com

- 146 Hartford Road, Manchester, CT 06040
- 56 Quarry Road, Trumbull, CT 06611
- 317 Iron Horse Way, Suite 204, Providence, RI 02908
- 1550 Main Street, Suite 400, Springfield, MA 01103
- 108 Myrtle Street, Suite 502, Quincy, MA 02171

- 540 North Commercial Street, Manchester, NH 03101
- 276 Newport Road, New London, NH 03257
- 205 Billings Farm Road, Suite 6B, White River Junction, VT 05001
- 5 Fletcher Street, Suite 1, Kennebunk, ME 04043
- 23046 Avenida de la Carlota, Suite 600, Laguna Hills, CA 92653

CHAIN-OF-CUSTODY RECORD 43496

Turnaround
 24-Hour* 72-Hour* Other _____ (days)
 48-Hour* Standard _____ days *Surcharge Applies

PROJECT NAME: **20 PLYMOUTH STREET** PROJECT LOCATION: **20 PLYMOUTH STREET, WOODSOCK, NJ** PROJECT NUMBER: **20181545.B10**
 REPORT TO: **ALLEN TEVYAW (atevya@e-fondo.com)**
 INVOICE TO: **"**
 P.O. No.: **1603201026-11**

Sampler's Signature: *Maele Scyp* Date: **10/26/20**
 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 **Top blank**

Item No.	Transfer Check				Sample Number	Date Sampled	Time Sampled	Source Code	Analysis Request	Containers	Comments
	1	2	3	4							
11					1603201026-11	10/26/20	0905	S	VOC by USEPA METHOD 8260 VOC by TOX by 8260/1015 VOC by TOX by 8260/1015 VOC by TOX by 8260/1015	6 glass 6oz 2 NaSO ₃	1 2 1 1 1 1
12					- 12	10/26/20	1012	S			1 2 1 1 1 1
13					- 13	10/26/20	1026	S			1 2 1 1 1 1
14					- 14	10/26/20	1110	S			1 2 1 1 1 1
15					- 15	10/26/20	1200	X			1 2

Transfer Number	Relinquished By	Accepted By	Date	Time
1	<i>Maele Scyp</i>	F-10 FALOGG	10/26/20	1245
2	F-10 FALOGG	<i>Maele Scyp</i>	10/26/20	0800
3	<i>Maele Scyp</i>	<i>Paul Chackray</i>	10-29-20	1216
4	<i>Paul Chackray</i>	<i>Paul Chackray</i>	10-29-20	1715

Charge Exceptions: CT Tax Exempt QA/QC Other _____
 _____ Duplicates _____ Blanks (Item Nos: **5 and 15**)
 Reporting and Detection Limit Requirements: RCP Deliverables MCP CAM Cert.
 Additional Comments: **WIDEM R-0-EC + 6B-LL**
SEE ATTACHED PRICE QUOTE
SEE ATTACHED CHEMIST
HOLD ADDITIONAL SAMPLE FOR POSSIBLE TCLP



**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 type="checkbox"/>	_____
2. Traffic Report	<input type="checkbox"/>	<input type="checkbox"/>	_____
3. Volatiles Data			
a. Sample Data			
Target Compound List (TCL) Results	<input type="checkbox"/>	<input type="checkbox"/>	_____
Reconstructed total ion chromatograms (RIC) for each sample	<input type="checkbox"/>	<input type="checkbox"/>	_____
For each sample:			
Raw spectra and background-subtracted mass spectra of target compounds identified	<input type="checkbox"/>	<input type="checkbox"/>	_____
Mass spectra of all reported TICs with three best library matches	<input type="checkbox"/>	<input type="checkbox"/>	_____
Percent solids calculations	<input type="checkbox"/>	<input type="checkbox"/>	_____
b. Standards Data (all instruments)			
Initial Calibration Data	<input type="checkbox"/>	<input type="checkbox"/>	_____
RICs and Quan Reports for all Standards	<input type="checkbox"/>	<input type="checkbox"/>	_____
Continuing Calibration	<input type="checkbox"/>	<input type="checkbox"/>	_____
RICs and Quan Reports for all Standards	<input type="checkbox"/>	<input type="checkbox"/>	_____
Internal Standard Area Summary	<input type="checkbox"/>	<input type="checkbox"/>	_____
c. Raw QC Data			
Blank Data	<input type="checkbox"/>	<input type="checkbox"/>	_____
Matrix Spike Data	<input type="checkbox"/>	<input type="checkbox"/>	_____
Matrix Spike Duplicate Data	<input type="checkbox"/>	<input type="checkbox"/>	_____
4. Semivolatiles Data			
a. QC Summary			
Surrogate Percent Recovery Summary	<input type="checkbox"/>	<input type="checkbox"/>	_____
MS/MSD Summary	<input type="checkbox"/>	<input type="checkbox"/>	_____
Method Blank Summary	<input type="checkbox"/>	<input type="checkbox"/>	_____
Tuning and Mass Calibration	<input 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 type="checkbox"/>	<input type="checkbox"/>	_____
Tentatively Identified Compounds	<input type="checkbox"/>	<input type="checkbox"/>	_____
Reconstructed total ion chromatograms (RIC) for each Sample	<input type="checkbox"/>	<input type="checkbox"/>	_____
For each sample:			
Raw spectra and background-subtracted mass spectra of TCL compounds	<input type="checkbox"/>	<input type="checkbox"/>	_____
Mass spectra of TICs with 3 best library matches	<input type="checkbox"/>	<input type="checkbox"/>	_____
GPC chromatograms (if GPC performed)	<input type="checkbox"/>	<input type="checkbox"/>	_____
c. Standards Data (all instruments)			
Initial Calibration Data	<input type="checkbox"/>	<input type="checkbox"/>	_____
RICs and Quan Reports for all Standards	<input type="checkbox"/>	<input type="checkbox"/>	_____
Continuing Calibration	<input type="checkbox"/>	<input type="checkbox"/>	_____
RICs and Quan Reports for all Standards	<input type="checkbox"/>	<input type="checkbox"/>	_____
Internal Standard Areas Summary	<input type="checkbox"/>	<input type="checkbox"/>	_____
Internal Standard Areas Summary	<input type="checkbox"/>	<input type="checkbox"/>	_____
d. Raw QC Data			
Decafluorotriphenylphosphine (DFTPP)	<input type="checkbox"/>	<input type="checkbox"/>	_____
Blank Data	<input type="checkbox"/>	<input type="checkbox"/>	_____
Matrix Spike Data	<input type="checkbox"/>	<input type="checkbox"/>	_____
Matrix Spike Duplicate Data	<input type="checkbox"/>	<input type="checkbox"/>	_____
5. Miscellaneous Data			
Original preparation and analysis forms or copies of preparation and analysis log book pages	<input type="checkbox"/>	<input type="checkbox"/>	_____
Internal sample & sample extract transfer chain-of custody records	<input type="checkbox"/>	<input type="checkbox"/>	_____
Screening Records	<input type="checkbox"/>	<input type="checkbox"/>	_____
All instrument output, including strip charts from screening activities (describe or list)	<input type="checkbox"/>	<input type="checkbox"/>	_____
<hr/>			
<hr/>			



**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 type="checkbox"/>	<input type="checkbox"/>	_____
Sample Log-in Sheet (Lab & DC1)	<input type="checkbox"/>	<input type="checkbox"/>	_____
Miscellaneous Shipping/Receiving Records (describe or list)	<input type="checkbox"/>	<input type="checkbox"/>	_____

7. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)	<input type="checkbox"/>	<input type="checkbox"/>	_____

8. Other Records (describe or list)	<input type="checkbox"/>	<input type="checkbox"/>	_____

9. Comments:			_____

** See laboratory Quality Assurance Plan for limits.

Completed by: _____
(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 type="checkbox"/>	_____
2. Inorganic Analysis Data Sheet	<input type="checkbox"/>	<input type="checkbox"/>	_____
3. Initial and Continuing Calibration Verification	<input type="checkbox"/>	<input type="checkbox"/>	_____
4. CRDL Standard for AA and ICP	<input type="checkbox"/>	<input type="checkbox"/>	_____
5. Blanks	<input type="checkbox"/>	<input type="checkbox"/>	_____
6. ICP Interference Check Sample	<input type="checkbox"/>	<input type="checkbox"/>	_____
7. Spike Sample Recovery	<input type="checkbox"/>	<input type="checkbox"/>	_____
8. Post Digest Spike Sample Recovery	<input type="checkbox"/>	<input type="checkbox"/>	_____
9. Duplicates	<input type="checkbox"/>	<input type="checkbox"/>	_____
10. Laboratory Control Sample	<input type="checkbox"/>	<input type="checkbox"/>	_____
11. Standard Addition Results	<input type="checkbox"/>	<input type="checkbox"/>	_____
12. ICP Serial Dilutions	<input type="checkbox"/>	<input type="checkbox"/>	_____
13. Instrument Detection Limits, Quarterly	<input type="checkbox"/>	<input type="checkbox"/>	_____
14. ICP Interelement Correction Factors, Annually	<input type="checkbox"/>	<input type="checkbox"/>	_____
15. ICP Linear Ranges Quarterly	<input type="checkbox"/>	<input type="checkbox"/>	_____
16. Preparation Log	<input type="checkbox"/>	<input type="checkbox"/>	_____
17. Analysis Run Log	<input type="checkbox"/>	<input type="checkbox"/>	_____
18. ICP Raw Data	<input type="checkbox"/>	<input type="checkbox"/>	_____
19. Furnace AA Raw Data	<input type="checkbox"/>	<input type="checkbox"/>	_____
20. Mercury Raw Data	<input type="checkbox"/>	<input type="checkbox"/>	_____
21. Percent Solids Calculations	<input type="checkbox"/>	<input type="checkbox"/>	_____
22. Digestion Logs	<input type="checkbox"/>	<input type="checkbox"/>	_____
23. EPA Shipping/Receiving Records			
(List all individual records)	<input type="checkbox"/>	<input type="checkbox"/>	_____
Chain-of Custody Records	<input type="checkbox"/>	<input type="checkbox"/>	_____
Sample Log-In sheet	<input type="checkbox"/>	<input type="checkbox"/>	_____
24. Miscellaneous Shipping/Receiving Records	<input type="checkbox"/>	<input type="checkbox"/>	_____
(List all individual records)			



**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)			
<hr/>			
26. Internal Original Sample Preparation and analysis Records (Describe or List	<input type="checkbox"/>	<input type="checkbox"/>	<hr/>
Preparation Records	<input type="checkbox"/>	<input type="checkbox"/>	<hr/>
Analysis Records	<input type="checkbox"/>	<input type="checkbox"/>	<hr/>
Description	<input type="checkbox"/>	<input type="checkbox"/>	<hr/>
27. Other Records (Describe or List)			
<hr/>			
28. Comments:			
<hr/>			
<hr/>			

** See laboratory Quality Assurance Plan for limits.

Completed by: _____
(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

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 and O'Neill

Received By ca Date 10/29/20 Time 1935

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

Were samples within Temperature? 2-6°C T By Gun # 2 Actual Temp - 3.9
By Blank # _____ Actual Temp - _____

Was Custody Seal Intact? NA Were Samples Tampered with? NA
Was COC Relinquished? T Does Chain Agree With Samples? T

Are there broken/leaking/loose caps on any samples? F

Is COC in ink/ Legible? 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 F

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? T MS/MSD? F

Proper Media/Containers Used? T Is splitting samples required? F

Were trip blanks received? TR on COC? TR 10/29/20

Do all samples have the proper pH? NA Acid _____ Base _____

	#	Containers:	#	#	#	#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear
Meoh-	<u>15</u>	250 mL Amb.		250 mL Plastic		4oz Amb/Clear
Bisulfate-	<u>30</u>	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:



**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 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 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 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"/>	
Mass spectra of TICs with 3 best library matches	<input type="checkbox"/>	<input type="checkbox"/>	NA
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"/>	
<i>Quant Reports Chromatograms</i>			



**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?***

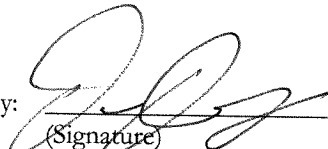
	<u>YES</u>	<u>NO</u>	<u>COMMENTS</u>
6. Chain-of-Custody Records	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Sample Log-in Sheet (Lab & DC1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Miscellaneous Shipping/Receiving Records (describe or list)	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>

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 type="checkbox"/>	<u>NA</u>

9. Comments:	_____		

** See laboratory Quality Assurance Plan for limits.

Completed by: 
(Lab) (Signature)

Daren DanLanigan Direct of ops 11-6-20
(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: Lisa Worthington
(Lab) (Signature)

Lisa Worthington Report review

11/6/20
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"/>	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 Interement 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 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? ****

YES NO COMMENTS

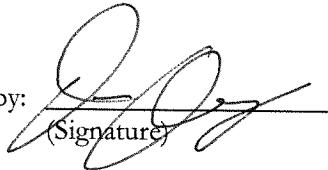
- 25. Internal Lab Sample Transfer Records and Tracking Sheets
(Describe or List)

- 26. Internal Original Sample Preparation and analysis Records
(Describe or List)

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)

Doreen Danbury Direct. & op. 11-6-2020
(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: Lisa Worthington Report Review 11/6/20
(Lab) (Signature) (Printed Name/Title) Date

December 4, 2020

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

Project Location: 20 Privilege St, Woonsocket, RI
Client Job Number:
Project Number: 20181545.B10
Laboratory Work Order Number: 20K1406

Enclosed are results of analyses for samples received by the laboratory on November 30, 2020. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, reading "Jessica Hoffman", is displayed on a light blue rectangular background.

Jessica L. Hoffman
Project Manager

Table of Contents

Sample Summary	3
Case Narrative	4
Sample Results	5
20K1406-01	5
Sample Preparation Information	7
QC Data	8
TCLP - Metals Analyses	8
B271983	8
Flag/Qualifier Summary	9
Certifications	10
Chain of Custody/Sample Receipt	11

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: Allen Tevyaw

REPORT DATE: 12/4/2020

PURCHASE ORDER NUMBER: 160320181545.B10

PROJECT NUMBER: 20181545.B10

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 20K1406

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

PROJECT LOCATION: 20 Privilege St, Woonsocket, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
1603201028-12	20K1406-01	Soil		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 the Con-Test Analytical Laboratory for testing.

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

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

Lisa A. Worthington
Technical Representative

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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20K1406

Date Received: 11/30/2020

Field Sample #: 1603201028-12

Sampled: 10/28/2020 10:12

Sample ID: 20K1406-01

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	91.0		% Wt	1		SM 2540G	12/1/20	12/1/20 9:13	CJT

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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description:

Work Order: 20K1406

Date Received: 11/30/2020

Field Sample #: 1603201028-12

Sampled: 10/28/2020 10:12

Sample ID: 20K1406-01

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	12/2/20	12/2/20 19:46	AJL

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
20K1406-01 [1603201028-12]	B271864	12/01/20

Prep Method: SW-846 3010A Analytical Method: SW-846 60100 Leachates were extracted on 12/1/2020 per SW-846 1311 in Batch B271898

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20K1406-01 [1603201028-12]	B271983	50.0	50.0	12/02/20

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
Batch B271983 - SW-846 3010A										
Blank (B271983-BLK1)				Prepared & Analyzed: 12/02/20						
Lead	ND	0.10	mg/L							
LCS (B271983-BS1)				Prepared & Analyzed: 12/02/20						
Lead	0.490	0.10	mg/L	0.500		98.0	80-120			
LCS Dup (B271983-BSD1)				Prepared & Analyzed: 12/02/20						
Lead	0.486	0.10	mg/L	0.500		97.2	80-120	0.778	20	
Matrix Spike (B271983-MS1)				Source: 20K1406-01 Prepared & Analyzed: 12/02/20						
Lead	0.479	0.10	mg/L	0.500	ND	95.8	75-125			

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

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.

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
---------	----------------

SW-846 6010D in Water

Lead NY,CT,ME,NC,NH,VA

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2021
CT	Connecticut Department of Public Health	PH-0567	09/30/2021
NY	New York State Department of Health	10899 NELAP	04/1/2021
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2021
RI	Rhode Island Department of Health	LAO00112	12/30/2020
NC	North Carolina Div. of Water Quality	652	12/31/2020
NJ	New Jersey DEP	MA007 NELAP	06/30/2021
FL	Florida Department of Health	E871027 NELAP	06/30/2021
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2021
ME	State of Maine	2011028	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2020
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2021
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2021
NC-DW	North Carolina Department of Health	25703	07/31/2021
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2021
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2021

540 North Commercial Street, Manchester, NH 03101
 276 Newport Road, New London, NH 03257
 205 Billings Farm Road, Suite 6B, White River Junction, VT 05001
 5 Fletcher Street, Suite 1, Keenebunk, ME 04043
 23046 Avenida de la Carlota, Suite 600, Laguna Hills, CA 92653

146 Hartford Road, Manchester, CT 06040
 56 Quarry Road, Trumbull, CT 06611
 317 Iron Horse Way, Suite 204, Providence, RI 02908
 1550 Main Street, Suite 400, Springfield, MA 01103
 108 Myrtle Street, Suite 502, Quincy, MA 02171

FUSS & O'NEILL
 (860) 646-2469 • www.FandO.com



20K1406

CHAIN-OF-CUSTODY RECORD

43497

Turnaround

24-Hour* 72-Hour* Other _____ (days)
 48-Hour* Standard (____) days *Surcharge Applies

PROJECT NAME: **20 WINVILLE STREET** PROJECT LOCATION: **20 WINVILLE ST, WOODSOCK, VT** PROJECT NUMBER: **20181545.810** CON-TEST

REPORT TO: **ALLEN TENYAU (atenyau@fandO.com)** Analysis Request

INVOICE TO: **"**

P.O. No.: **160320181545.810**

Sampler's Signature: *Meely Saup* Date: **10/28/20**

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

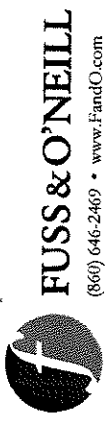
X=Other **TRIP BLANK**

Item No.	Transfer Check	Sample Number	Date Sampled	Time Sampled	Source Code	Analysis Request	Containers	Comments
1	1 2 3 4	1603201027 - 01	10/27/20	0803	S	X	Plastic - NaOH, 250 ml <input type="checkbox"/> Plastic - HNO ₃ , 250 ml <input type="checkbox"/> Plastic - H ₂ SO ₄ , 250 ml <input type="checkbox"/> Plastic - As ₂ S ₃ , 250 ml <input type="checkbox"/> Plastic - As ₂ S ₃ , 500 ml <input type="checkbox"/> Plastic - As ₂ S ₃ , 1000 ml <input type="checkbox"/> Glass Amber () ml <input type="checkbox"/> Water VOA Vol, As ₂ S ₃ <input type="checkbox"/> Other: Glass 802 <input type="checkbox"/> Glass Soil Container (2) oz <input type="checkbox"/> Soil VOA Vol, Methanol <input type="checkbox"/> Soil VOA Vol, water <input type="checkbox"/> Other: Na ₂ SO ₄ <input type="checkbox"/>	
2		- 02		0827	S	X		per client run TCCLP Lead JLH 11/30/2020
3		- 03		0842	S	X		
4		- 04		1002	S	X		
5		- 05		1137	S	X		
6		- 06		1222	S	X		
7		- 07		1341	S	X		
8		- 08		1500	S	X		
9		- 09	10/28/20	0742	S	X		
10		- 10	10/28/20	0745	S	X		
						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 _____
1	<i>Meely Saup</i>	<i>Paul Chapman</i>	10/27/20	1430	Duplicates 2 Blanks (Item Nos: 8 and 15 (not page))
2	<i>FRIO FRIOLE</i>	<i>Paul Chapman</i>	10/28/20	0800	Reporting and Detection Limit Requirements: <input type="checkbox"/> RCP Deliverables <input type="checkbox"/> MCP CAM Cert.
3	<i>Meely Saup</i>	<i>Paul Chapman</i>	10-29-20	1716	RIDEM R-DEC & GB-LC
4	<i>Paul Chapman</i>	<i>Paul Chapman</i>	10-29-20	1716	Additional Comments: SEE ATTACHED CHECKLIST (PLEASE FILL OUT) SEE ATTACHED CHECKLIST FOR POSSIBLE TCD 1

540 North Commercial Street, Manchester, NH 03101
 276 Newport Road, New London, NH 03257
 205 Billings Farm Road, Suite 6B, White River Junction, VT 05001
 5 Fletcher Street, Suite 1, Kennebunk, ME 04043
 23046 Avenida de la Carlota, Suite 600, Laguna Hills, CA 92653

146 Hartford Road, Manchester, CT 06040
 56 Quarry Road, Trumbull, CT 06611
 317 Iron Horse Way, Suite 204, Providence, RI 02908
 1550 Main Street, Suite 400, Springfield, MA 01103
 108 Myrtle Street, Suite 502, Quincy, MA 02171



CHAIN-OF-CUSTODY RECORD 43496

Turnaround
 24-Hour* 72-Hour* Other _____ (days)
 48-Hour* Standard _____ (days) *Surcharge Applies

PROJECT NAME		PROJECT LOCATION		PROJECT NUMBER		LABORATORY	
20 PLYMOUTH STREET		20 PLYMOUTH ST, WOODSOCKET, NJ		20181545.B10		CON-TEST	
REPORT TO: ALLEN TEVYAW (atevya@e-fondo.com)						Containers	
INVOICE TO: "							
P.O. No.: 1603201026-11							
Sampler's Signature: <i>Maele Scyp</i>		Date: 10/26/20					
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 <i>Top blank</i>							
Item No.	Transfer Check	Sample Number	Date Sampled	Time Sampled	Analysis Request	Analysis Request	Comments
12		1603201026-11	10/26/20	0905	VOC by USEPA METHOD 8260	VOC by USEPA METHOD 8260	
13		- 12	10/26/20	1012	TOX by EPA METHOD 8270	TOX by EPA METHOD 8270	
14		- 13	10/26/20	1026	WASTY by EPA METHOD 8270	WASTY by EPA METHOD 8270	
15		- 14	10/26/20	1110	PCBs by EPA METHOD 8270	PCBs by EPA METHOD 8270	
		- 15	10/26/20	1200			

Transfer Number	Relinquished By	Accepted By	Date	Time	Charge Exceptions:
1	<i>Maele Scyp</i>	F-10 FALGGE	10/26/20	1245	<input type="checkbox"/> CT Tax Exempt <input type="checkbox"/> QA/QC <input type="checkbox"/> Other _____ <input type="checkbox"/> Duplicates <input type="checkbox"/> Blanks (Item Nos: 5 and 15)
2	F-10 FALGGE	<i>Maele Scyp</i>	10/26/20	0800	Reporting and Detection Limit Requirements: <input type="checkbox"/> RCP Deliverables <input type="checkbox"/> MCP CAM Cert.
3	<i>Maele Scyp</i>	<i>Paul Chackray</i>	10-29-20	1216	Additional Comments: <i>WIDEM R-O-EC + GB-LLC</i>
4	<i>Paul Chackray</i>	<i>Paul Chackray</i>	10-29-20	1715	Additional Comments: <i>SEE ATTACHED CHECKLIST</i>
9-2-2018 10/26/2018 39 10/26/2018 (HOLD ADDITIONAL SAMPLE FOR POSSIBLE TCLP)					

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 and O'Neill

Received By ca Date 10/29/20 Time 1935

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

Were samples within Temperature? 2-6°C T By Gun # 2 Actual Temp - 3.9
By Blank # _____ Actual Temp - _____

Was Custody Seal Intact? NA Were Samples Tampered with? NA

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

Are there broken/leaking/loose caps on any samples? F

Is COC in ink/ Legible? 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 F

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? T

Proper Media/Containers Used? T

Were trip blanks received? TR

Do all samples have the proper pH? NA

Who was notified? _____

Who was notified? _____

Who was notified? _____

MS/MSD? F

Is splitting samples required? F

on COC? TR 10/29/20

Acid _____ Base _____

	#	Containers:	#	#	#	#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear
Meoh-	<u>15</u>	250 mL Amb.		250 mL Plastic		4oz Amb/Clear
Bisulfate-	<u>30</u>	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:



GENERIC QUALITY ASSURANCE PROJECT PLAN
FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND
MODIFIED TIER I COMPLETENESS CHECKLIST

	<u>YES</u>	<u>NO</u>	
1. SAMPLING AND FIELD MEASUREMENTS:			
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
2. LABORATORY MEASUREMENTS:			
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>
1. SAMPLING AND FIELD MEASUREMENTS:			
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 F

Indoor Soil Laboratory Analytical Reports



**Modified Tier II
Data Validation Narrative**

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

Con-Test Analytical Laboratory Project Number:	20K0181/20K1407
Date Samples Received at Laboratory:	November 4, 2020
Date of Review:	December 7, 2020

Five soil samples were collected from soil beneath the Sites building foundation. 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, one 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 4.1 degrees Celsius. All samples were analyzed within the method-specific holding times.

No case narrative summary was included in the analytical report 20K1407 for the TCLP analysis of sample 1603201030-05. As documented in the case narrative summary included in the analytical report 20K0181, the following non-conformances were identified during analysis of these samples:

- The matrix spike recovery and matrix spike duplicate recovery were outside of control limits for TPH for soil sample 1603201030-01. The possibility of sample matrix effects that lead to a high bias for reported result or non-homogeneous sample aliquots cannot be eliminated.
- The matrix spike duplicate RPD was outside of control limits for TPH. Reduced precision was anticipated for reported result for this compound in this sample.
- The surrogate recovery for 2-Fluorobiphenyl for soil samples 1603201030-03 and 1603201030-05 was not available due to sample dilution below the surrogate reporting limit required from high analytes concentration and/or matrix inferences.
- There was elevated reporting limits for all volatile compounds due to foaming sample matrix for sample 1603201030-05.
- Either the laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits for methyl acetate. RPF between the two LFB/LCS results is within method specified criteria.



- Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for acetone in sample 1603201030-05.
- Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side for bromomethane, chloromethane, dichlorodifluoromethane and methyl acetate.
- Initial calibration verification (ICV) did not meet method specification and was biased on the high side for dichlorodifluoromethane. Data validation is not affected since sample result was “not detected” for this compound.
- There was elevated reporting limits for PAH due to matrix interference in soil sample 1603201030-05.
- The surrogate recovery for soil sample 1603201030-03 was not available due to sample dilution below the surrogate reporting limit required from high analytes concentration and/or matrix interferences for 2-fluorobiphenyl, nitrobenzene-d5 and p-terphenyl-d14.
- TPH was quantitated against a calibration made with a diesel standard.

Based on the full data set for soil at the Site, the compounds of concern warranting response actions for soil were lead, 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 TPH in soil sample 1603201030-01 affected by the non-conformance was 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 concentrations of PAH in soil sample 1603201030-05 affected by the PAH-related non-conformances were below the laboratory detection limits but above the applicable regulatory standards. Based on the identification of the concentration of several PAH above the RIDEM Residential Direct Exposure (R-DEC) and/ or Industrial/ Commercial Direct Exposure Criteria (I/C-DEC) in soil sample 1603201030-05, the elevated laboratory detection limits 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. As discussed above detection limits for several PAH in soil sample 1603201030-05 were not low enough to allow direct comparison to the applicable criteria. However, detection limits for most PAH in soil sample 1603201030-05 and for all other soil samples were low enough to allow direct comparison to the applicable criteria.

November 16, 2020

Allen Tevyaw
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: 20K0181

Enclosed are results of analyses for samples received by the laboratory on November 4, 2020. 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	5
Sample Results	8
20K0181-01	8
20K0181-02	15
20K0181-03	22
20K0181-04	29
20K0181-05	36
20K0181-06	43
Sample Preparation Information	45
QC Data	47
Volatile Organic Compounds by GC/MS	47
B270264	47
B270266	52
Semivolatile Organic Compounds by GC/MS	57
B270444	57
Polychlorinated Biphenyls By GC/ECD	59
B270671	59
Petroleum Hydrocarbons Analyses	60
B270442	60
Metals Analyses (Total)	61
B270528	61
B270540	62
Dual Column RPD Report	63
Flag/Qualifier Summary	65

Table of Contents (continued)

Certifications	66
Chain of Custody/Sample Receipt	72



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: Allen Tevyaw

REPORT DATE: 11/16/2020

PURCHASE ORDER NUMBER: 160320181545.B10

PROJECT NUMBER: 20181545.B10

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 20K0181

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

PROJECT LOCATION: Woonsocket, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
1603201030-01	20K0181-01	Soil		SM 2540G SW-846 6010D SW-846 7471B SW-846 8082A SW-846 8100 Modified SW-846 8260C-D SW-846 8270D-E	
1603201030-02	20K0181-02	Soil		SM 2540G SW-846 6010D SW-846 7471B SW-846 8082A SW-846 8100 Modified SW-846 8260C-D SW-846 8270D-E	
1603201030-03	20K0181-03	Soil		SM 2540G SW-846 6010D SW-846 7471B SW-846 8082A SW-846 8100 Modified SW-846 8260C-D SW-846 8270D-E	
1603201030-04	20K0181-04	Soil		SM 2540G SW-846 6010D SW-846 7471B SW-846 8082A SW-846 8100 Modified SW-846 8260C-D SW-846 8270D-E	
1603201030-05	20K0181-05	Soil		SM 2540G SW-846 6010D SW-846 7471B SW-846 8082A SW-846 8100 Modified SW-846 8260C-D SW-846 8270D-E	
1603201030-06	20K0181-06	Trip Blank Soil		SW-846 8270D-E 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.

For method 8270E, only PAHs were requested and reported.

Qualifications:

MS-12

Matrix spike recovery and matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a high bias for reported result or non-homogeneous sample aliquots cannot be eliminated.

Analyte & Samples(s) Qualified:

TPH (C9-C36)

20K0181-01[1603201030-01], B270442-MS1, B270442-MSD1

R-06

Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.

Analyte & Samples(s) Qualified:

TPH (C9-C36)

B270442-MSD1

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

20K0181-03[1603201030-03], 20K0181-05[1603201030-05]

SW-846 8260C-D

Qualifications:

DL-01

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

Analyte & Samples(s) Qualified:

20K0181-05[1603201030-05]

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:

Methyl Acetate

B270266-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:

Acetone

20K0181-05[1603201030-05], B270264-BLK1, B270264-BS1, B270264-BSD1, S054145-CCV1

V-20

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

Analyte & Samples(s) Qualified:

Bromomethane

B270264-BS1, B270264-BSD1, S054145-CCV1

Chloromethane

B270264-BS1, B270264-BSD1, S054145-CCV1

Dichlorodifluoromethane (Freon 12)

B270266-BS1, B270266-BSD1, S054128-CCV1

Methyl Acetate

B270264-BS1, B270264-BSD1, B270266-BS1, B270266-BSD1, S054128-CCV1, S054145-CCV1

V-36

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

Analyte & Samples(s) Qualified:

Dichlorodifluoromethane (Freon 12)

B270266-BS1, B270266-BSD1, S054128-CCV1

SW-846 8270D-E

Qualifications:

RL-12

Elevated reporting limit due to matrix interference.

Analyte & Samples(s) Qualified:

20K0181-05[1603201030-05]

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

20K0181-03RE1[1603201030-03]

Nitrobenzene-d5

20K0181-03RE1[1603201030-03]

p-Terphenyl-d14

20K0181-03RE1[1603201030-03]

SW-846 8100 Modified

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

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

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



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: 20K0181

Date Received: 11/4/2020

Field Sample #: 1603201030-01

Sampled: 10/30/2020 11:09

Sample ID: 20K0181-01

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	0.084	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
Acrylonitrile	ND	0.0050	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00084	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
Benzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
Bromobenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
Bromochloromethane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
Bromodichloromethane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
Bromoform	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
Bromomethane	ND	0.0084	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
2-Butanone (MEK)	ND	0.034	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
tert-Butyl Alcohol (TBA)	ND	0.034	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
n-Butylbenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
sec-Butylbenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
tert-Butylbenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00084	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
Carbon Disulfide	ND	0.0050	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
Carbon Tetrachloride	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
Chlorobenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
Chlorodibromomethane	ND	0.00084	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
Chloroethane	ND	0.017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
Chloroform	ND	0.0034	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
Chloromethane	ND	0.0084	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
2-Chlorotoluene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
4-Chlorotoluene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
1,2-Dibromoethane (EDB)	ND	0.00084	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
Dibromomethane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
1,2-Dichlorobenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
1,3-Dichlorobenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
1,4-Dichlorobenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
trans-1,4-Dichloro-2-butene	ND	0.0034	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
1,1-Dichloroethane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
1,2-Dichloroethane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
1,1-Dichloroethylene	ND	0.0034	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
cis-1,2-Dichloroethylene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
trans-1,2-Dichloroethylene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
1,2-Dichloropropane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
1,3-Dichloropropane	ND	0.00084	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
2,2-Dichloropropane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
1,1-Dichloropropene	ND	0.0034	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
cis-1,3-Dichloropropene	ND	0.00084	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
trans-1,3-Dichloropropene	ND	0.00084	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
Diethyl Ether	ND	0.017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Field Sample #: 1603201030-01

Sampled: 10/30/2020 11:09

Sample ID: 20K0181-01

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	0.00084	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
1,4-Dioxane	ND	0.084	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
Ethylbenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
Hexachlorobutadiene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
2-Hexanone (MBK)	ND	0.017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
Isopropylbenzene (Cumene)	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
Methyl Acetate	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0034	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
Methyl Cyclohexane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
Methylene Chloride	ND	0.017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
Naphthalene	ND	0.0034	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
n-Propylbenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
Styrene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
1,1,1,2-Tetrachloroethane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
1,1,2,2-Tetrachloroethane	ND	0.00084	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
Tetrachloroethylene	0.0036	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
Tetrahydrofuran	ND	0.0084	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
Toluene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
1,2,3-Trichlorobenzene	ND	0.0034	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
1,2,4-Trichlorobenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
1,3,5-Trichlorobenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
1,1,1-Trichloroethane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
1,1,2-Trichloroethane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
Trichloroethylene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0084	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
1,2,3-Trichloropropane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0084	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
1,2,4-Trimethylbenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
1,3,5-Trimethylbenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
Vinyl Chloride	ND	0.0084	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
m+p Xylene	ND	0.0034	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
o-Xylene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 7:36	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		99.4	70-130					11/5/20 7:36	
Toluene-d8		104	70-130					11/5/20 7:36	
4-Bromofluorobenzene		101	70-130					11/5/20 7:36	



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Field Sample #: 1603201030-01

Sampled: 10/30/2020 11:09

Sample ID: 20K0181-01

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	0.18	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 13:19	BGL
Acenaphthylene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 13:19	BGL
Anthracene	0.34	0.18	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 13:19	BGL
Benzo(a)anthracene	1.5	0.18	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 13:19	BGL
Benzo(a)pyrene	1.2	0.18	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 13:19	BGL
Benzo(b)fluoranthene	1.6	0.18	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 13:19	BGL
Benzo(g,h,i)perylene	0.85	0.18	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 13:19	BGL
Benzo(k)fluoranthene	0.61	0.18	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 13:19	BGL
Chrysene	1.4	0.18	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 13:19	BGL
Dibenz(a,h)anthracene	0.19	0.18	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 13:19	BGL
Fluoranthene	2.8	0.18	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 13:19	BGL
Fluorene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 13:19	BGL
Indeno(1,2,3-cd)pyrene	0.93	0.18	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 13:19	BGL
2-Methylnaphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 13:19	BGL
Naphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 13:19	BGL
Phenanthrene	1.6	0.18	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 13:19	BGL
Pyrene	2.2	0.18	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 13:19	BGL
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		64.8	30-130					11/11/20 13:19	
2-Fluorobiphenyl		74.8	30-130					11/11/20 13:19	
p-Terphenyl-d14		81.6	30-130					11/11/20 13:19	



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Field Sample #: 1603201030-01

Sampled: 10/30/2020 11:09

Sample ID: 20K0181-01

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

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	11/11/20	11/13/20 15:01	TG
Aroclor-1221 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:01	TG
Aroclor-1232 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:01	TG
Aroclor-1242 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:01	TG
Aroclor-1248 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:01	TG
Aroclor-1254 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:01	TG
Aroclor-1260 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:01	TG
Aroclor-1262 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:01	TG
Aroclor-1268 [1]	ND	0.082	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:01	TG
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		104	30-150					11/13/20 15:01	
Decachlorobiphenyl [2]		107	30-150					11/13/20 15:01	
Tetrachloro-m-xylene [1]		96.9	30-150					11/13/20 15:01	
Tetrachloro-m-xylene [2]		102	30-150					11/13/20 15:01	



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Sampled: 10/30/2020 11:09

Field Sample #: 1603201030-01

Sample ID: 20K0181-01

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	81	8.6	mg/Kg dry	1	MS-12	SW-846 8100 Modified	11/8/20	11/11/20 14:17	RDD
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
2-Fluorobiphenyl	71.0		40-140					11/11/20 14:17	



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Field Sample #: 1603201030-01

Sampled: 10/30/2020 11:09

Sample ID: 20K0181-01

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		SW-846 6010D	11/9/20	11/10/20 14:54	MJH
Arsenic	ND	3.4	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 14:54	MJH
Beryllium	ND	0.17	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 14:54	MJH
Cadmium	ND	0.34	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 14:54	MJH
Chromium	4.8	0.69	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 14:54	MJH
Copper	6.4	0.69	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 14:54	MJH
Lead	5.2	0.52	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 14:54	MJH
Mercury	ND	0.025	mg/Kg dry	1		SW-846 7471B	11/9/20	11/10/20 14:32	CJV
Nickel	3.5	0.69	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 14:54	MJH
Selenium	ND	3.4	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 14:54	MJH
Silver	ND	0.34	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 14:54	MJH
Thallium	ND	1.7	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 14:54	MJH
Zinc	25	0.69	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 14:54	MJH



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Sampled: 10/30/2020 11:09

Field Sample #: 1603201030-01

Sample ID: 20K0181-01

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	96.0		% Wt	1		SM 2540G	11/9/20	11/10/20 8:13	RMF



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Field Sample #: 1603201030-02

Sampled: 10/30/2020 12:02

Sample ID: 20K0181-02

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	0.11	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
Acrylonitrile	ND	0.0067	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
Benzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
Bromobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
Bromochloromethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
Bromodichloromethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
Bromoform	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
Bromomethane	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
2-Butanone (MEK)	ND	0.045	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
tert-Butyl Alcohol (TBA)	ND	0.045	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
n-Butylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
sec-Butylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
tert-Butylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
Carbon Disulfide	ND	0.0067	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
Carbon Tetrachloride	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
Chlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
Chlorodibromomethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
Chloroethane	ND	0.022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
Chloroform	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
Chloromethane	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
2-Chlorotoluene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
4-Chlorotoluene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
1,2-Dibromoethane (EDB)	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
Dibromomethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
1,2-Dichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
1,3-Dichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
1,4-Dichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
trans-1,4-Dichloro-2-butene	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
1,1-Dichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
1,2-Dichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
1,1-Dichloroethylene	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
cis-1,2-Dichloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
trans-1,2-Dichloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
1,2-Dichloropropane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
1,3-Dichloropropane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
2,2-Dichloropropane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
1,1-Dichloropropene	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
cis-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
trans-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
Diethyl Ether	ND	0.022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Field Sample #: 1603201030-02

Sampled: 10/30/2020 12:02

Sample ID: 20K0181-02

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	0.0011	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
1,4-Dioxane	ND	0.11	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
Ethylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
Hexachlorobutadiene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
2-Hexanone (MBK)	ND	0.022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
Isopropylbenzene (Cumene)	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
Methyl Acetate	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
Methyl Cyclohexane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
Methylene Chloride	ND	0.022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
Naphthalene	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
n-Propylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
Styrene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
1,1,1,2-Tetrachloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
1,1,2,2-Tetrachloroethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
Tetrachloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
Tetrahydrofuran	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
Toluene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
1,2,3-Trichlorobenzene	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
1,2,4-Trichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
1,3,5-Trichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
1,1,1-Trichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
1,1,2-Trichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
Trichloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
Trichlorofluoromethane (Freon 11)	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
1,2,3-Trichloropropane	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
1,2,4-Trimethylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
1,3,5-Trimethylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
Vinyl Chloride	ND	0.011	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
m+p Xylene	ND	0.0045	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
o-Xylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:03	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		99.2	70-130					11/5/20 8:03	
Toluene-d8		98.8	70-130					11/5/20 8:03	
4-Bromofluorobenzene		106	70-130					11/5/20 8:03	



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Field Sample #: 1603201030-02

Sampled: 10/30/2020 12:02

Sample ID: 20K0181-02

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	0.22	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 12:47	IMR
Acenaphthylene	1.2	0.22	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 12:47	IMR
Anthracene	2.4	0.22	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 12:47	IMR
Benzo(a)anthracene	6.9	1.1	mg/Kg dry	5		SW-846 8270D-E	11/8/20	11/11/20 13:50	BGL
Benzo(a)pyrene	6.8	1.1	mg/Kg dry	5		SW-846 8270D-E	11/8/20	11/11/20 13:50	BGL
Benzo(b)fluoranthene	7.6	1.1	mg/Kg dry	5		SW-846 8270D-E	11/8/20	11/11/20 13:50	BGL
Benzo(g,h,i)perylene	5.6	1.1	mg/Kg dry	5		SW-846 8270D-E	11/8/20	11/11/20 13:50	BGL
Benzo(k)fluoranthene	2.8	0.22	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 12:47	IMR
Chrysene	6.3	1.1	mg/Kg dry	5		SW-846 8270D-E	11/8/20	11/11/20 13:50	BGL
Dibenz(a,h)anthracene	1.0	0.22	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 12:47	IMR
Fluoranthene	17	1.1	mg/Kg dry	5		SW-846 8270D-E	11/8/20	11/11/20 13:50	BGL
Fluorene	0.33	0.22	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 12:47	IMR
Indeno(1,2,3-cd)pyrene	5.9	1.1	mg/Kg dry	5		SW-846 8270D-E	11/8/20	11/11/20 13:50	BGL
2-Methylnaphthalene	ND	0.22	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 12:47	IMR
Naphthalene	0.46	0.22	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 12:47	IMR
Phenanthrene	10	1.1	mg/Kg dry	5		SW-846 8270D-E	11/8/20	11/11/20 13:50	BGL
Pyrene	14	1.1	mg/Kg dry	5		SW-846 8270D-E	11/8/20	11/11/20 13:50	BGL
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		62.6	30-130					11/11/20 12:47	
Nitrobenzene-d5		58.6	30-130					11/11/20 13:50	
2-Fluorobiphenyl		65.9	30-130					11/11/20 12:47	
2-Fluorobiphenyl		71.2	30-130					11/11/20 13:50	
p-Terphenyl-d14		67.1	30-130					11/11/20 12:47	
p-Terphenyl-d14		73.7	30-130					11/11/20 13:50	



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Field Sample #: 1603201030-02

Sampled: 10/30/2020 12:02

Sample ID: 20K0181-02

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:14	TG
Aroclor-1221 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:14	TG
Aroclor-1232 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:14	TG
Aroclor-1242 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:14	TG
Aroclor-1248 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:14	TG
Aroclor-1254 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:14	TG
Aroclor-1260 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:14	TG
Aroclor-1262 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:14	TG
Aroclor-1268 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:14	TG
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		99.1	30-150					11/13/20 15:14	
Decachlorobiphenyl [2]		109	30-150					11/13/20 15:14	
Tetrachloro-m-xylene [1]		98.8	30-150					11/13/20 15:14	
Tetrachloro-m-xylene [2]		101	30-150					11/13/20 15:14	



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Sampled: 10/30/2020 12:02

Field Sample #: 1603201030-02

Sample ID: 20K0181-02

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	580	53	mg/Kg dry	5		SW-846 8100 Modified	11/8/20	11/11/20 16:01	RDD
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
2-Fluorobiphenyl	55.8		40-140					11/11/20 16:01	



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Field Sample #: 1603201030-02

Sampled: 10/30/2020 12:02

Sample ID: 20K0181-02

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.2	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 14:58	MJH
Arsenic	ND	4.3	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 14:58	MJH
Beryllium	ND	0.22	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 14:58	MJH
Cadmium	ND	0.43	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 14:58	MJH
Chromium	6.9	0.87	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 14:58	MJH
Copper	4.2	0.87	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 14:58	MJH
Lead	12	0.65	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 14:58	MJH
Mercury	0.043	0.033	mg/Kg dry	1		SW-846 7471B	11/9/20	11/10/20 14:33	CJV
Nickel	4.0	0.87	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 14:58	MJH
Selenium	ND	4.3	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 14:58	MJH
Silver	ND	0.43	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 14:58	MJH
Thallium	ND	2.2	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 14:58	MJH
Zinc	16	0.87	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 14:58	MJH



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Sampled: 10/30/2020 12:02

Field Sample #: 1603201030-02

Sample ID: 20K0181-02

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	76.9		% Wt	1		SM 2540G	11/9/20	11/10/20 8:13	RMF



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Field Sample #: 1603201030-03

Sampled: 10/30/2020 12:39

Sample ID: 20K0181-03

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	0.078	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
Acrylonitrile	ND	0.0047	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00078	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
Benzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
Bromobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
Bromochloromethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
Bromodichloromethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
Bromoform	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
Bromomethane	ND	0.0078	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
2-Butanone (MEK)	ND	0.031	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
tert-Butyl Alcohol (TBA)	ND	0.031	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
n-Butylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
sec-Butylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
tert-Butylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00078	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
Carbon Disulfide	ND	0.0047	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
Carbon Tetrachloride	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
Chlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
Chlorodibromomethane	ND	0.00078	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
Chloroethane	ND	0.016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
Chloroform	ND	0.0031	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
Chloromethane	ND	0.0078	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
2-Chlorotoluene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
4-Chlorotoluene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
1,2-Dibromoethane (EDB)	ND	0.00078	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
Dibromomethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
1,2-Dichlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
1,3-Dichlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
1,4-Dichlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
trans-1,4-Dichloro-2-butene	ND	0.0031	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
1,1-Dichloroethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
1,2-Dichloroethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
1,1-Dichloroethylene	ND	0.0031	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
cis-1,2-Dichloroethylene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
trans-1,2-Dichloroethylene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
1,2-Dichloropropane	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
1,3-Dichloropropane	ND	0.00078	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
2,2-Dichloropropane	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
1,1-Dichloropropene	ND	0.0031	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
cis-1,3-Dichloropropene	ND	0.00078	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
trans-1,3-Dichloropropene	ND	0.00078	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
Diethyl Ether	ND	0.016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Field Sample #: 1603201030-03

Sampled: 10/30/2020 12:39

Sample ID: 20K0181-03

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	0.00078	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
1,4-Dioxane	ND	0.078	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
Ethylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
Hexachlorobutadiene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
2-Hexanone (MBK)	ND	0.016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
Isopropylbenzene (Cumene)	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
Methyl Acetate	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0031	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
Methyl Cyclohexane	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
Methylene Chloride	ND	0.016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
Naphthalene	ND	0.0031	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
n-Propylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
Styrene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
1,1,1,2-Tetrachloroethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
1,1,2,2-Tetrachloroethane	ND	0.00078	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
Tetrachloroethylene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
Tetrahydrofuran	ND	0.0078	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
Toluene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
1,2,3-Trichlorobenzene	ND	0.0031	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
1,2,4-Trichlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
1,3,5-Trichlorobenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
1,1,1-Trichloroethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
1,1,2-Trichloroethane	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
Trichloroethylene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0078	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
1,2,3-Trichloropropane	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0078	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
1,2,4-Trimethylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
1,3,5-Trimethylbenzene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
Vinyl Chloride	ND	0.0078	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
m+p Xylene	ND	0.0031	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
o-Xylene	ND	0.0016	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:31	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		100	70-130				11/5/20	8:31	
Toluene-d8		101	70-130				11/5/20	8:31	
4-Bromofluorobenzene		102	70-130				11/5/20	8:31	



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Field Sample #: 1603201030-03

Sampled: 10/30/2020 12:39

Sample ID: 20K0181-03

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	0.19	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 13:08	IMR
Acenaphthylene	2.9	0.19	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 13:08	IMR
Anthracene	3.2	0.19	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 13:08	IMR
Benzo(a)anthracene	13	3.9	mg/Kg dry	20		SW-846 8270D-E	11/8/20	11/11/20 15:12	BGL
Benzo(a)pyrene	13	3.9	mg/Kg dry	20		SW-846 8270D-E	11/8/20	11/11/20 15:12	BGL
Benzo(b)fluoranthene	27	3.9	mg/Kg dry	20		SW-846 8270D-E	11/8/20	11/11/20 15:12	BGL
Benzo(g,h,i)perylene	15	3.9	mg/Kg dry	20		SW-846 8270D-E	11/8/20	11/11/20 15:12	BGL
Benzo(k)fluoranthene	9.6	3.9	mg/Kg dry	20		SW-846 8270D-E	11/8/20	11/11/20 15:12	BGL
Chrysene	20	3.9	mg/Kg dry	20		SW-846 8270D-E	11/8/20	11/11/20 15:12	BGL
Dibenz(a,h)anthracene	2.8	0.19	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 13:08	IMR
Fluoranthene	51	3.9	mg/Kg dry	20		SW-846 8270D-E	11/8/20	11/11/20 15:12	BGL
Fluorene	0.55	0.19	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 13:08	IMR
Indeno(1,2,3-cd)pyrene	17	3.9	mg/Kg dry	20		SW-846 8270D-E	11/8/20	11/11/20 15:12	BGL
2-Methylnaphthalene	0.25	0.19	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 13:08	IMR
Naphthalene	1.5	0.19	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 13:08	IMR
Phenanthrene	14	3.9	mg/Kg dry	20		SW-846 8270D-E	11/8/20	11/11/20 15:12	BGL
Pyrene	37	3.9	mg/Kg dry	20		SW-846 8270D-E	11/8/20	11/11/20 15:12	BGL
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
Nitrobenzene-d5	60.7	30-130						11/11/20 13:08	
Nitrobenzene-d5	*	30-130			S-01			11/11/20 15:12	
2-Fluorobiphenyl	69.6	30-130						11/11/20 13:08	
2-Fluorobiphenyl	*	30-130			S-01			11/11/20 15:12	
p-Terphenyl-d14	85.4	30-130						11/11/20 13:08	
p-Terphenyl-d14	*	30-130			S-01			11/11/20 15:12	



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Field Sample #: 1603201030-03

Sampled: 10/30/2020 12:39

Sample ID: 20K0181-03

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.090	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:26	TG
Aroclor-1221 [1]	ND	0.090	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:26	TG
Aroclor-1232 [1]	ND	0.090	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:26	TG
Aroclor-1242 [1]	ND	0.090	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:26	TG
Aroclor-1248 [1]	ND	0.090	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:26	TG
Aroclor-1254 [1]	ND	0.090	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:26	TG
Aroclor-1260 [1]	ND	0.090	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:26	TG
Aroclor-1262 [1]	ND	0.090	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:26	TG
Aroclor-1268 [1]	ND	0.090	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:26	TG
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		78.6	30-150					11/13/20 15:26	
Decachlorobiphenyl [2]		105	30-150					11/13/20 15:26	
Tetrachloro-m-xylene [1]		84.0	30-150					11/13/20 15:26	
Tetrachloro-m-xylene [2]		86.8	30-150					11/13/20 15:26	



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Field Sample #: 1603201030-03

Sampled: 10/30/2020 12:39

Sample ID: 20K0181-03

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	4300	950	mg/Kg dry	100		SW-846 8100 Modified	11/8/20	11/12/20 10:44	RDD
Surrogates	% Recovery		Recovery Limits	Flag/Qual					
2-Fluorobiphenyl	*		40-140	S-01		11/12/20 10:44			



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Field Sample #: 1603201030-03

Sampled: 10/30/2020 12:39

Sample ID: 20K0181-03

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	11/9/20	11/10/20 15:03	MJH
Arsenic	ND	3.7	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:03	MJH
Beryllium	ND	0.18	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:03	MJH
Cadmium	ND	0.37	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:03	MJH
Chromium	5.5	0.74	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:03	MJH
Copper	12	0.74	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:03	MJH
Lead	50	0.55	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:03	MJH
Mercury	0.055	0.028	mg/Kg dry	1		SW-846 7471B	11/9/20	11/10/20 14:35	CJV
Nickel	4.8	0.74	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:03	MJH
Selenium	ND	3.7	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:03	MJH
Silver	ND	0.37	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:03	MJH
Thallium	ND	1.8	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:03	MJH
Zinc	59	0.74	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:03	MJH



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Sampled: 10/30/2020 12:39

Field Sample #: 1603201030-03

Sample ID: 20K0181-03

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	87.0		% Wt	1		SM 2540G	11/9/20	11/10/20 8:13	RMF



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Field Sample #: 1603201030-04

Sampled: 10/30/2020 13:08

Sample ID: 20K0181-04

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	0.087	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
Acrylonitrile	ND	0.0052	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00087	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
Benzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
Bromobenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
Bromochloromethane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
Bromodichloromethane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
Bromoform	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
Bromomethane	ND	0.0087	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
2-Butanone (MEK)	ND	0.035	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
tert-Butyl Alcohol (TBA)	ND	0.035	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
n-Butylbenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
sec-Butylbenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
tert-Butylbenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00087	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
Carbon Disulfide	ND	0.0052	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
Carbon Tetrachloride	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
Chlorobenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
Chlorodibromomethane	ND	0.00087	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
Chloroethane	ND	0.017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
Chloroform	ND	0.0035	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
Chloromethane	ND	0.0087	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
2-Chlorotoluene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
4-Chlorotoluene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
1,2-Dibromoethane (EDB)	ND	0.00087	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
Dibromomethane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
1,2-Dichlorobenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
1,3-Dichlorobenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
1,4-Dichlorobenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
trans-1,4-Dichloro-2-butene	ND	0.0035	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
1,1-Dichloroethane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
1,2-Dichloroethane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
1,1-Dichloroethylene	ND	0.0035	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
cis-1,2-Dichloroethylene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
trans-1,2-Dichloroethylene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
1,2-Dichloropropane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
1,3-Dichloropropane	ND	0.00087	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
2,2-Dichloropropane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
1,1-Dichloropropene	ND	0.0035	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
cis-1,3-Dichloropropene	ND	0.00087	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
trans-1,3-Dichloropropene	ND	0.00087	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
Diethyl Ether	ND	0.017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Field Sample #: 1603201030-04

Sampled: 10/30/2020 13:08

Sample ID: 20K0181-04

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	0.00087	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
1,4-Dioxane	ND	0.087	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
Ethylbenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
Hexachlorobutadiene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
2-Hexanone (MBK)	ND	0.017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
Isopropylbenzene (Cumene)	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
Methyl Acetate	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0035	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
Methyl Cyclohexane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
Methylene Chloride	ND	0.017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
Naphthalene	ND	0.0035	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
n-Propylbenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
Styrene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
1,1,1,2-Tetrachloroethane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
1,1,2,2-Tetrachloroethane	ND	0.00087	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
Tetrachloroethylene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
Tetrahydrofuran	ND	0.0087	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
Toluene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
1,2,3-Trichlorobenzene	ND	0.0035	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
1,2,4-Trichlorobenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
1,3,5-Trichlorobenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
1,1,1-Trichloroethane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
1,1,2-Trichloroethane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
Trichloroethylene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0087	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
1,2,3-Trichloropropane	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0087	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
1,2,4-Trimethylbenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
1,3,5-Trimethylbenzene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
Vinyl Chloride	ND	0.0087	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
m+p Xylene	ND	0.0035	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
o-Xylene	ND	0.0017	mg/Kg dry	1		SW-846 8260C-D	11/5/20	11/5/20 8:58	MFF
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	97.9	70-130					11/5/20	8:58	
Toluene-d8	98.5	70-130					11/5/20	8:58	
4-Bromofluorobenzene	103	70-130					11/5/20	8:58	



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Field Sample #: 1603201030-04

Sampled: 10/30/2020 13:08

Sample ID: 20K0181-04

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	1.4	0.21	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 13:31	IMR
Acenaphthylene	7.1	2.1	mg/Kg dry	10		SW-846 8270D-E	11/8/20	11/11/20 14:15	IMR
Anthracene	10	2.1	mg/Kg dry	10		SW-846 8270D-E	11/8/20	11/11/20 14:15	IMR
Benzo(a)anthracene	26	2.1	mg/Kg dry	10		SW-846 8270D-E	11/8/20	11/11/20 14:15	IMR
Benzo(a)pyrene	24	2.1	mg/Kg dry	10		SW-846 8270D-E	11/8/20	11/11/20 14:15	IMR
Benzo(b)fluoranthene	25	2.1	mg/Kg dry	10		SW-846 8270D-E	11/8/20	11/11/20 14:15	IMR
Benzo(g,h,i)perylene	15	2.1	mg/Kg dry	10		SW-846 8270D-E	11/8/20	11/11/20 14:15	IMR
Benzo(k)fluoranthene	10	2.1	mg/Kg dry	10		SW-846 8270D-E	11/8/20	11/11/20 14:15	IMR
Chrysene	21	2.1	mg/Kg dry	10		SW-846 8270D-E	11/8/20	11/11/20 14:15	IMR
Dibenz(a,h)anthracene	3.5	0.21	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 13:31	IMR
Fluoranthene	60	4.1	mg/Kg dry	20		SW-846 8270D-E	11/8/20	11/11/20 15:45	IMR
Fluorene	4.6	0.21	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 13:31	IMR
Indeno(1,2,3-cd)pyrene	17	2.1	mg/Kg dry	10		SW-846 8270D-E	11/8/20	11/11/20 14:15	IMR
2-Methylnaphthalene	0.59	0.21	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 13:31	IMR
Naphthalene	0.91	0.21	mg/Kg dry	1		SW-846 8270D-E	11/8/20	11/11/20 13:31	IMR
Phenanthrene	48	2.1	mg/Kg dry	10		SW-846 8270D-E	11/8/20	11/11/20 14:15	IMR
Pyrene	65	4.1	mg/Kg dry	20		SW-846 8270D-E	11/8/20	11/11/20 15:45	IMR

Surrogates	% Recovery	Recovery Limits	Flag/Qual
Nitrobenzene-d5	86.2	30-130	11/11/20 13:31
Nitrobenzene-d5	87.1	30-130	11/11/20 14:15
Nitrobenzene-d5	75.2	30-130	11/11/20 15:45
2-Fluorobiphenyl	92.9	30-130	11/11/20 13:31
2-Fluorobiphenyl	89.3	30-130	11/11/20 14:15
2-Fluorobiphenyl	83.2	30-130	11/11/20 15:45
p-Terphenyl-d14	122	30-130	11/11/20 13:31
p-Terphenyl-d14	107	30-130	11/11/20 14:15
p-Terphenyl-d14	96.2	30-130	11/11/20 15:45



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Field Sample #: 1603201030-04

Sampled: 10/30/2020 13:08

Sample ID: 20K0181-04

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.095	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:39	TG
Aroclor-1221 [1]	ND	0.095	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:39	TG
Aroclor-1232 [1]	ND	0.095	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:39	TG
Aroclor-1242 [1]	ND	0.095	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:39	TG
Aroclor-1248 [1]	ND	0.095	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:39	TG
Aroclor-1254 [1]	ND	0.095	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:39	TG
Aroclor-1260 [1]	ND	0.095	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:39	TG
Aroclor-1262 [1]	ND	0.095	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:39	TG
Aroclor-1268 [1]	ND	0.095	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:39	TG
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		99.9	30-150					11/13/20 15:39	
Decachlorobiphenyl [2]		101	30-150					11/13/20 15:39	
Tetrachloro-m-xylene [1]		96.4	30-150					11/13/20 15:39	
Tetrachloro-m-xylene [2]		101	30-150					11/13/20 15:39	



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Sampled: 10/30/2020 13:08

Field Sample #: 1603201030-04

Sample ID: 20K0181-04

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	1400	51	mg/Kg dry	5		SW-846 8100 Modified	11/8/20	11/11/20 16:22	RDD
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
2-Fluorobiphenyl	78.3		40-140					11/11/20 16:22	



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Field Sample #: 1603201030-04

Sampled: 10/30/2020 13:08

Sample ID: 20K0181-04

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	11/9/20	11/10/20 15:08	MJH
Arsenic	ND	4.0	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:08	MJH
Beryllium	ND	0.20	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:08	MJH
Cadmium	ND	0.40	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:08	MJH
Chromium	6.9	0.80	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:08	MJH
Copper	4.9	0.80	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:08	MJH
Lead	9.1	0.60	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:08	MJH
Mercury	ND	0.031	mg/Kg dry	1		SW-846 7471B	11/9/20	11/10/20 14:37	CJV
Nickel	3.8	0.80	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:08	MJH
Selenium	ND	4.0	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:08	MJH
Silver	ND	0.40	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:08	MJH
Thallium	ND	2.0	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:08	MJH
Zinc	22	0.80	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:08	MJH



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Sampled: 10/30/2020 13:08

Field Sample #: 1603201030-04

Sample ID: 20K0181-04

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	81.7		% Wt	1		SM 2540G	11/9/20	11/10/20 8:14	RMF



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Field Sample #: 1603201030-05

Sampled: 10/30/2020 13:45

Sample ID: 20K0181-05

Sample Matrix: Soil

Sample Flags: DL-01

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	9.6	mg/Kg dry	2	V-05	SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
Acrylonitrile	ND	0.96	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.096	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
Benzene	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
Bromobenzene	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
Bromochloromethane	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
Bromodichloromethane	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
Bromoform	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
Bromomethane	ND	0.39	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
2-Butanone (MEK)	ND	3.9	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
tert-Butyl Alcohol (TBA)	ND	3.9	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
n-Butylbenzene	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
sec-Butylbenzene	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
tert-Butylbenzene	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.096	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
Carbon Disulfide	ND	0.96	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
Carbon Tetrachloride	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
Chlorobenzene	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
Chlorodibromomethane	ND	0.096	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
Chloroethane	ND	0.39	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
Chloroform	ND	0.39	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
Chloromethane	ND	0.39	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
2-Chlorotoluene	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
4-Chlorotoluene	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.96	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
1,2-Dibromoethane (EDB)	ND	0.096	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
Dibromomethane	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
1,2-Dichlorobenzene	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
1,3-Dichlorobenzene	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
1,4-Dichlorobenzene	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
trans-1,4-Dichloro-2-butene	ND	0.39	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
Dichlorodifluoromethane (Freon 12)	ND	0.39	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
1,1-Dichloroethane	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
1,2-Dichloroethane	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
1,1-Dichloroethylene	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
cis-1,2-Dichloroethylene	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
trans-1,2-Dichloroethylene	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
1,2-Dichloropropane	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
1,3-Dichloropropane	ND	0.096	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
2,2-Dichloropropane	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
1,1-Dichloropropene	ND	0.39	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
cis-1,3-Dichloropropene	ND	0.096	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
trans-1,3-Dichloropropene	ND	0.096	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
Diethyl Ether	ND	0.39	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Field Sample #: 1603201030-05

Sampled: 10/30/2020 13:45

Sample ID: 20K0181-05

Sample Matrix: Soil

Sample Flags: DL-01

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.096	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
1,4-Dioxane	ND	9.6	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
Ethylbenzene	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
Hexachlorobutadiene	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
2-Hexanone (MBK)	ND	1.9	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
Isopropylbenzene (Cumene)	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
p-Isopropyltoluene (p-Cymene)	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
Methyl Acetate	ND	1.9	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
Methyl tert-Butyl Ether (MTBE)	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
Methyl Cyclohexane	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
Methylene Chloride	ND	0.96	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
4-Methyl-2-pentanone (MIBK)	ND	1.9	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
Naphthalene	ND	0.39	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
n-Propylbenzene	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
Styrene	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
1,1,1,2-Tetrachloroethane	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
1,1,2,2-Tetrachloroethane	ND	0.096	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
Tetrachloroethylene	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
Tetrahydrofuran	ND	1.9	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
Toluene	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
1,2,3-Trichlorobenzene	ND	0.96	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
1,2,4-Trichlorobenzene	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
1,3,5-Trichlorobenzene	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
1,1,1-Trichloroethane	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
1,1,2-Trichloroethane	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
Trichloroethylene	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
Trichlorofluoromethane (Freon 11)	ND	0.39	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
1,2,3-Trichloropropane	ND	0.39	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
1,2,4-Trimethylbenzene	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
1,3,5-Trimethylbenzene	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
Vinyl Chloride	ND	0.39	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
m+p Xylene	ND	0.39	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
o-Xylene	ND	0.19	mg/Kg dry	2		SW-846 8260C-D	11/5/20	11/5/20 21:45	EEH
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		95.5	70-130					11/5/20 21:45	
Toluene-d8		101	70-130					11/5/20 21:45	
4-Bromofluorobenzene		103	70-130					11/5/20 21:45	



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Field Sample #: 1603201030-05

Sampled: 10/30/2020 13:45

Sample ID: 20K0181-05

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	4.3	mg/Kg dry	10		SW-846 8270D-E	11/8/20	11/11/20 13:53	IMR
Acenaphthylene	ND	4.3	mg/Kg dry	10		SW-846 8270D-E	11/8/20	11/11/20 13:53	IMR
Anthracene	ND	4.3	mg/Kg dry	10		SW-846 8270D-E	11/8/20	11/11/20 13:53	IMR
Benzo(a)anthracene	ND	4.3	mg/Kg dry	10		SW-846 8270D-E	11/8/20	11/11/20 13:53	IMR
Benzo(a)pyrene	5.4	4.3	mg/Kg dry	10		SW-846 8270D-E	11/8/20	11/11/20 13:53	IMR
Benzo(b)fluoranthene	4.7	4.3	mg/Kg dry	10		SW-846 8270D-E	11/8/20	11/11/20 13:53	IMR
Benzo(g,h,i)perylene	10	4.3	mg/Kg dry	10		SW-846 8270D-E	11/8/20	11/11/20 13:53	IMR
Benzo(k)fluoranthene	ND	4.3	mg/Kg dry	10		SW-846 8270D-E	11/8/20	11/11/20 13:53	IMR
Chrysene	ND	4.3	mg/Kg dry	10		SW-846 8270D-E	11/8/20	11/11/20 13:53	IMR
Dibenz(a,h)anthracene	ND	4.3	mg/Kg dry	10		SW-846 8270D-E	11/8/20	11/11/20 13:53	IMR
Fluoranthene	ND	4.3	mg/Kg dry	10		SW-846 8270D-E	11/8/20	11/11/20 13:53	IMR
Fluorene	ND	4.3	mg/Kg dry	10		SW-846 8270D-E	11/8/20	11/11/20 13:53	IMR
Indeno(1,2,3-cd)pyrene	5.5	4.3	mg/Kg dry	10		SW-846 8270D-E	11/8/20	11/11/20 13:53	IMR
2-Methylnaphthalene	ND	4.3	mg/Kg dry	10		SW-846 8270D-E	11/8/20	11/11/20 13:53	IMR
Naphthalene	ND	4.3	mg/Kg dry	10		SW-846 8270D-E	11/8/20	11/11/20 13:53	IMR
Phenanthrene	ND	4.3	mg/Kg dry	10		SW-846 8270D-E	11/8/20	11/11/20 13:53	IMR
Pyrene	ND	4.3	mg/Kg dry	10		SW-846 8270D-E	11/8/20	11/11/20 13:53	IMR
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Nitrobenzene-d5		82.4	30-130					11/11/20 13:53	
2-Fluorobiphenyl		96.6	30-130					11/11/20 13:53	
p-Terphenyl-d14		107	30-130					11/11/20 13:53	



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Field Sample #: 1603201030-05

Sampled: 10/30/2020 13:45

Sample ID: 20K0181-05

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:52	TG
Aroclor-1221 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:52	TG
Aroclor-1232 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:52	TG
Aroclor-1242 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:52	TG
Aroclor-1248 [2]	0.12	0.10	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:52	TG
Aroclor-1254 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:52	TG
Aroclor-1260 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:52	TG
Aroclor-1262 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:52	TG
Aroclor-1268 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	11/11/20	11/13/20 15:52	TG
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		74.3	30-150					11/13/20 15:52	
Decachlorobiphenyl [2]		79.3	30-150					11/13/20 15:52	
Tetrachloro-m-xylene [1]		75.0	30-150					11/13/20 15:52	
Tetrachloro-m-xylene [2]		80.3	30-150					11/13/20 15:52	



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Field Sample #: 1603201030-05

Sampled: 10/30/2020 13:45

Sample ID: 20K0181-05

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	22000	1000	mg/Kg dry	50		SW-846 8100 Modified	11/8/20	11/12/20 11:05	RDD
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
2-Fluorobiphenyl		*	40-140		S-01			11/12/20 11:05	



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Field Sample #: 1603201030-05

Sampled: 10/30/2020 13:45

Sample ID: 20K0181-05

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.1	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:13	MJH
Arsenic	ND	4.2	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:13	MJH
Beryllium	ND	0.21	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:13	MJH
Cadmium	32	0.42	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:13	MJH
Chromium	120	0.85	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:13	MJH
Copper	240	0.85	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:13	MJH
Lead	290	0.64	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:13	MJH
Mercury	0.11	0.032	mg/Kg dry	1		SW-846 7471B	11/9/20	11/10/20 14:38	CJV
Nickel	94	0.85	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:13	MJH
Selenium	ND	4.2	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:13	MJH
Silver	3.1	0.42	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:13	MJH
Thallium	ND	2.1	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:13	MJH
Zinc	1600	0.85	mg/Kg dry	1		SW-846 6010D	11/9/20	11/10/20 15:13	MJH



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Sampled: 10/30/2020 13:45

Field Sample #: 1603201030-05

Sample ID: 20K0181-05

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	78.6		% Wt	1		SM 2540G	11/9/20	11/10/20 8:14	RMF



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Field Sample #: 1603201030-06

Sampled: 10/30/2020 14:00

Sample ID: 20K0181-06

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	11/5/20	11/5/20 9:26	MFF
Acrylonitrile	ND	0.0060	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
Benzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
Bromobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
Bromochloromethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
Bromodichloromethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
Bromoform	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
Bromomethane	ND	0.010	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
2-Butanone (MEK)	ND	0.040	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
tert-Butyl Alcohol (TBA)	ND	0.040	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
n-Butylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
sec-Butylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
tert-Butylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
Carbon Disulfide	ND	0.0060	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
Carbon Tetrachloride	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
Chlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
Chlorodibromomethane	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
Chloroethane	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
Chloroform	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
Chloromethane	ND	0.010	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
2-Chlorotoluene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
4-Chlorotoluene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
Dibromomethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
1,2-Dichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
1,3-Dichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
1,4-Dichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
trans-1,4-Dichloro-2-butene	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
1,1-Dichloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
1,2-Dichloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
1,1-Dichloroethylene	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
1,2-Dichloropropane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
1,3-Dichloropropane	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
2,2-Dichloropropane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
1,1-Dichloropropene	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
Diethyl Ether	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF



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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K0181

Date Received: 11/4/2020

Field Sample #: 1603201030-06

Sampled: 10/30/2020 14:00

Sample ID: 20K0181-06

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	11/5/20	11/5/20 9:26	MFF
1,4-Dioxane	ND	0.10	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
Ethylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
Hexachlorobutadiene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
2-Hexanone (MBK)	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
Methyl Acetate	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
Methyl Cyclohexane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
Methylene Chloride	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
Naphthalene	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
n-Propylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
Styrene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
Tetrachloroethylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
Tetrahydrofuran	ND	0.010	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
Toluene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
1,2,3-Trichlorobenzene	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
1,3,5-Trichlorobenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
1,1,1-Trichloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
1,1,2-Trichloroethane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
Trichloroethylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
1,2,3-Trichloropropane	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.010	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
Vinyl Chloride	ND	0.010	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
m+p Xylene	ND	0.0040	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
o-Xylene	ND	0.0020	mg/Kg wet	1		SW-846 8260C-D	11/5/20	11/5/20 9:26	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		99.6	70-130					11/5/20 9:26	
Toluene-d8		101	70-130					11/5/20 9:26	
4-Bromofluorobenzene		103	70-130					11/5/20 9:26	

Sample Extraction Data

Prep Method: % Solids Analytical Method: SM 2540G

Lab Number [Field ID]	Batch	Date
20K0181-01 [1603201030-01]	B270541	11/09/20
20K0181-02 [1603201030-02]	B270541	11/09/20
20K0181-03 [1603201030-03]	B270541	11/09/20
20K0181-04 [1603201030-04]	B270541	11/09/20
20K0181-05 [1603201030-05]	B270541	11/09/20

Prep Method: SW-846 3050B Analytical Method: SW-846 6010D

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
20K0181-01 [1603201030-01]	B270528	1.51	50.0	11/09/20
20K0181-02 [1603201030-02]	B270528	1.50	50.0	11/09/20
20K0181-03 [1603201030-03]	B270528	1.56	50.0	11/09/20
20K0181-04 [1603201030-04]	B270528	1.53	50.0	11/09/20
20K0181-05 [1603201030-05]	B270528	1.50	50.0	11/09/20

Prep Method: SW-846 7471 Analytical Method: SW-846 7471B

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
20K0181-01 [1603201030-01]	B270540	0.627	50.0	11/09/20
20K0181-02 [1603201030-02]	B270540	0.588	50.0	11/09/20
20K0181-03 [1603201030-03]	B270540	0.610	50.0	11/09/20
20K0181-04 [1603201030-04]	B270540	0.598	50.0	11/09/20
20K0181-05 [1603201030-05]	B270540	0.605	50.0	11/09/20

Prep Method: SW-846 3546 Analytical Method: SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
20K0181-01 [1603201030-01]	B270671	10.1	10.0	11/11/20
20K0181-02 [1603201030-02]	B270671	10.1	10.0	11/11/20
20K0181-03 [1603201030-03]	B270671	10.2	10.0	11/11/20
20K0181-04 [1603201030-04]	B270671	10.3	10.0	11/11/20
20K0181-05 [1603201030-05]	B270671	10.0	10.0	11/11/20

Prep Method: SW-846 3546 Analytical Method: SW-846 8100 Modified

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
20K0181-01 [1603201030-01]	B270442	30.2	1.00	11/08/20
20K0181-02 [1603201030-02]	B270442	30.6	1.00	11/08/20
20K0181-03 [1603201030-03]	B270442	30.1	1.00	11/08/20
20K0181-04 [1603201030-04]	B270442	30.1	1.00	11/08/20
20K0181-05 [1603201030-05]	B270442	30.4	2.00	11/08/20

Prep Method: SW-846 5035 Analytical Method: SW-846 8260C-D

Lab Number [Field ID]	Batch	Sample Amount(g)	Methanol Volume(mL)	Methanol Aliquot(mL)	Final Volume(mL)	Date
20K0181-05 [1603201030-05]	B270264	3.84	5.82	0.5	50	11/05/20

Sample Extraction Data**Prep Method: SW-846 5035 Analytical Method: SW-846 8260C-D**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
20K0181-01 [1603201030-01]	B270266	6.19	10.0	11/05/20
20K0181-02 [1603201030-02]	B270266	5.80	10.0	11/05/20
20K0181-03 [1603201030-03]	B270266	7.36	10.0	11/05/20
20K0181-04 [1603201030-04]	B270266	7.01	10.0	11/05/20
20K0181-06 [1603201030-06]	B270266	5.00	10.0	11/05/20

Prep Method: SW-846 3546 Analytical Method: SW-846 8270D-E

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
20K0181-01 [1603201030-01]	B270444	30.2	1.00	11/08/20
20K0181-02 [1603201030-02]	B270444	30.6	1.00	11/08/20
20K0181-02RE1 [1603201030-02]	B270444	30.6	1.00	11/08/20
20K0181-03 [1603201030-03]	B270444	30.1	1.00	11/08/20
20K0181-03RE1 [1603201030-03]	B270444	30.1	1.00	11/08/20
20K0181-04 [1603201030-04]	B270444	30.1	1.00	11/08/20
20K0181-04RE1 [1603201030-04]	B270444	30.1	1.00	11/08/20
20K0181-04RE2 [1603201030-04]	B270444	30.1	1.00	11/08/20
20K0181-05 [1603201030-05]	B270444	30.4	2.00	11/08/20

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 B270264 - SW-846 5035

Blank (B270264-BLK1)

Prepared & Analyzed: 11/05/20

Acetone	ND	2.5	mg/Kg wet							V-05
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							
Bromodichloromethane	ND	0.050	mg/Kg wet							
Bromoform	ND	0.050	mg/Kg wet							
Bromomethane	ND	0.10	mg/Kg wet							
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							
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 B270264 - SW-846 5035

Blank (B270264-BLK1)

Prepared & Analyzed: 11/05/20

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							
1,1,1,2,2-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	0.0237		mg/Kg wet	0.0250		94.9	70-130			
Surrogate: Toluene-d8	0.0252		mg/Kg wet	0.0250		101	70-130			
Surrogate: 4-Bromofluorobenzene	0.0252		mg/Kg wet	0.0250		101	70-130			

LCS (B270264-BS1)

Prepared & Analyzed: 11/05/20

Acetone	0.190	0.057	mg/Kg wet	0.227		83.9	70-160		V-05	†
Acrylonitrile	0.0201	0.0057	mg/Kg wet	0.0227		88.8	70-130			
tert-Amyl Methyl Ether (TAME)	0.0206	0.00057	mg/Kg wet	0.0227		91.1	70-130			
Benzene	0.0231	0.0011	mg/Kg wet	0.0227		102	70-130			
Bromobenzene	0.0233	0.0011	mg/Kg wet	0.0227		103	70-130			
Bromochloromethane	0.0240	0.0011	mg/Kg wet	0.0227		106	70-130			
Bromodichloromethane	0.0235	0.0011	mg/Kg wet	0.0227		104	70-130			
Bromoform	0.0233	0.0011	mg/Kg wet	0.0227		103	70-130			
Bromomethane	0.0184	0.0023	mg/Kg wet	0.0227		81.3	40-130		V-20	†
2-Butanone (MEK)	0.196	0.023	mg/Kg wet	0.227		86.3	70-160			†
tert-Butyl Alcohol (TBA)	0.174	0.023	mg/Kg wet	0.227		76.7	40-130			†
n-Butylbenzene	0.0239	0.0011	mg/Kg wet	0.0227		105	70-130			
sec-Butylbenzene	0.0248	0.0011	mg/Kg wet	0.0227		109	70-130			
tert-Butylbenzene	0.0246	0.0011	mg/Kg wet	0.0227		108	70-160			†
tert-Butyl Ethyl Ether (TBEE)	0.0206	0.00057	mg/Kg wet	0.0227		90.8	70-130			
Carbon Disulfide	0.0247	0.0057	mg/Kg wet	0.0227		109	70-130			
Carbon Tetrachloride	0.0222	0.0011	mg/Kg wet	0.0227		98.1	70-130			
Chlorobenzene	0.0248	0.0011	mg/Kg wet	0.0227		109	70-130			
Chlorodibromomethane	0.0229	0.00057	mg/Kg wet	0.0227		101	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 B270264 - SW-846 5035										
LCS (B270264-BS1)										
Prepared & Analyzed: 11/05/20										
Chloroethane	0.0248	0.0023	mg/Kg wet	0.0227		109	70-130			
Chloroform	0.0227	0.0023	mg/Kg wet	0.0227		100	70-130			
Chloromethane	0.0232	0.0023	mg/Kg wet	0.0227		102	70-130			V-20
2-Chlorotoluene	0.0240	0.0011	mg/Kg wet	0.0227		106	70-130			
4-Chlorotoluene	0.0239	0.0011	mg/Kg wet	0.0227		105	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	0.0222	0.0057	mg/Kg wet	0.0227		98.1	70-130			
1,2-Dibromoethane (EDB)	0.0234	0.00057	mg/Kg wet	0.0227		103	70-130			
Dibromomethane	0.0234	0.0011	mg/Kg wet	0.0227		103	70-130			
1,2-Dichlorobenzene	0.0242	0.0011	mg/Kg wet	0.0227		107	70-130			
1,3-Dichlorobenzene	0.0250	0.0011	mg/Kg wet	0.0227		110	70-130			
1,4-Dichlorobenzene	0.0236	0.0011	mg/Kg wet	0.0227		104	70-130			
trans-1,4-Dichloro-2-butene	0.0241	0.0023	mg/Kg wet	0.0227		106	70-130			
Dichlorodifluoromethane (Freon 12)	0.0245	0.0023	mg/Kg wet	0.0227		108	40-160			†
1,1-Dichloroethane	0.0234	0.0011	mg/Kg wet	0.0227		103	70-130			
1,2-Dichloroethane	0.0219	0.0011	mg/Kg wet	0.0227		96.7	70-130			
1,1-Dichloroethylene	0.0240	0.0011	mg/Kg wet	0.0227		106	70-130			
cis-1,2-Dichloroethylene	0.0244	0.0011	mg/Kg wet	0.0227		108	70-130			
trans-1,2-Dichloroethylene	0.0226	0.0011	mg/Kg wet	0.0227		99.9	70-130			
Dichlorofluoromethane (Freon 21)	0.0238	0.0011	mg/Kg wet	0.0227		105	70-130			
1,2-Dichloropropane	0.0239	0.0011	mg/Kg wet	0.0227		105	70-130			
1,3-Dichloropropane	0.0224	0.00057	mg/Kg wet	0.0227		99.0	70-130			
2,2-Dichloropropane	0.0223	0.0011	mg/Kg wet	0.0227		98.6	70-130			
1,1-Dichloropropene	0.0220	0.0023	mg/Kg wet	0.0227		97.2	70-130			
cis-1,3-Dichloropropene	0.0232	0.00057	mg/Kg wet	0.0227		103	70-130			
trans-1,3-Dichloropropene	0.0230	0.00057	mg/Kg wet	0.0227		101	70-130			
Diethyl Ether	0.0238	0.0023	mg/Kg wet	0.0227		105	70-130			
Difluorochloromethane (Freon 22)	0.0256	0.0011	mg/Kg wet	0.0227		113	70-130			
Diisopropyl Ether (DIPE)	0.0234	0.00057	mg/Kg wet	0.0227		103	70-130			
1,4-Dioxane	0.194	0.057	mg/Kg wet	0.227		85.4	40-160			†
Ethylbenzene	0.0240	0.0011	mg/Kg wet	0.0227		106	70-130			
Hexachlorobutadiene	0.0249	0.0011	mg/Kg wet	0.0227		110	70-160			
2-Hexanone (MBK)	0.194	0.011	mg/Kg wet	0.227		85.5	70-160			†
Isopropylbenzene (Cumene)	0.0251	0.0011	mg/Kg wet	0.0227		111	70-130			
p-Isopropyltoluene (p-Cymene)	0.0240	0.0011	mg/Kg wet	0.0227		106	70-130			
Methyl Acetate	0.0215	0.011	mg/Kg wet	0.0227		94.8	70-130			V-20
Methyl tert-Butyl Ether (MTBE)	0.0214	0.0011	mg/Kg wet	0.0227		94.6	70-130			
Methyl Cyclohexane	0.0248	0.0011	mg/Kg wet	0.0227		109	70-130			
Methylene Chloride	0.0224	0.0057	mg/Kg wet	0.0227		98.6	40-160			†
4-Methyl-2-pentanone (MIBK)	0.198	0.011	mg/Kg wet	0.227		87.5	70-160			†
Naphthalene	0.0217	0.0023	mg/Kg wet	0.0227		95.8	40-130			†
n-Propylbenzene	0.0243	0.0011	mg/Kg wet	0.0227		107	70-130			
Styrene	0.0245	0.0011	mg/Kg wet	0.0227		108	70-130			
1,1,1,2-Tetrachloroethane	0.0250	0.0011	mg/Kg wet	0.0227		110	70-130			
1,1,2,2-Tetrachloroethane	0.0240	0.00057	mg/Kg wet	0.0227		106	70-130			
Tetrachloroethylene	0.0248	0.0011	mg/Kg wet	0.0227		109	70-130			
Tetrahydrofuran	0.0220	0.011	mg/Kg wet	0.0227		96.8	70-130			
Toluene	0.0243	0.0011	mg/Kg wet	0.0227		107	70-130			
1,2,3-Trichlorobenzene	0.0223	0.0057	mg/Kg wet	0.0227		98.2	70-130			
1,2,4-Trichlorobenzene	0.0240	0.0011	mg/Kg wet	0.0227		106	70-130			
1,3,5-Trichlorobenzene	0.0237	0.0011	mg/Kg wet	0.0227		105	70-130			
1,1,1-Trichloroethane	0.0223	0.0011	mg/Kg wet	0.0227		98.4	70-130			
1,1,2-Trichloroethane	0.0239	0.0011	mg/Kg wet	0.0227		105	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 B270264 - SW-846 5035

LCS (B270264-BS1)

Prepared & Analyzed: 11/05/20

Trichloroethylene	0.0245	0.0011	mg/Kg wet	0.0227		108	70-130			
Trichlorofluoromethane (Freon 11)	0.0218	0.0023	mg/Kg wet	0.0227		96.1	70-130			
1,2,3-Trichloropropane	0.0207	0.0023	mg/Kg wet	0.0227		91.2	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0255	0.0011	mg/Kg wet	0.0227		113	70-130			
1,2,4-Trimethylbenzene	0.0241	0.0011	mg/Kg wet	0.0227		106	70-130			
1,3,5-Trimethylbenzene	0.0238	0.0011	mg/Kg wet	0.0227		105	70-130			
Vinyl Chloride	0.0240	0.0023	mg/Kg wet	0.0227		106	40-130			†
m+p Xylene	0.0477	0.0023	mg/Kg wet	0.0453		105	70-130			
o-Xylene	0.0242	0.0011	mg/Kg wet	0.0227		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0272		mg/Kg wet	0.0283		96.0	70-130			
Surrogate: Toluene-d8	0.0287		mg/Kg wet	0.0283		101	70-130			
Surrogate: 4-Bromofluorobenzene	0.0293		mg/Kg wet	0.0283		103	70-130			

LCS Dup (B270264-BS1)

Prepared & Analyzed: 11/05/20

Acetone	0.180	0.057	mg/Kg wet	0.227		79.5	70-160	5.35	25	V-05	†
Acrylonitrile	0.0192	0.0057	mg/Kg wet	0.0227		84.6	70-130	4.96	25		
tert-Amyl Methyl Ether (TAME)	0.0200	0.00057	mg/Kg wet	0.0227		88.3	70-130	3.06	25		
Benzene	0.0228	0.0011	mg/Kg wet	0.0227		101	70-130	1.04	25		
Bromobenzene	0.0228	0.0011	mg/Kg wet	0.0227		100	70-130	2.56	25		
Bromochloromethane	0.0236	0.0011	mg/Kg wet	0.0227		104	70-130	1.86	25		
Bromodichloromethane	0.0235	0.0011	mg/Kg wet	0.0227		104	70-130	0.241	25		
Bromoform	0.0232	0.0011	mg/Kg wet	0.0227		102	70-130	0.634	25		
Bromomethane	0.0201	0.0023	mg/Kg wet	0.0227		88.8	40-130	8.76	25	V-20	†
2-Butanone (MEK)	0.184	0.023	mg/Kg wet	0.227		81.3	70-160	5.93	25		†
tert-Butyl Alcohol (TBA)	0.167	0.023	mg/Kg wet	0.227		73.7	40-130	3.98	25		†
n-Butylbenzene	0.0236	0.0011	mg/Kg wet	0.0227		104	70-130	1.34	25		
sec-Butylbenzene	0.0245	0.0011	mg/Kg wet	0.0227		108	70-130	0.873	25		
tert-Butylbenzene	0.0235	0.0011	mg/Kg wet	0.0227		104	70-160	4.43	25		†
tert-Butyl Ethyl Ether (TBEE)	0.0201	0.00057	mg/Kg wet	0.0227		88.5	70-130	2.62	25		
Carbon Disulfide	0.0228	0.0057	mg/Kg wet	0.0227		100	70-130	7.98	25		
Carbon Tetrachloride	0.0213	0.0011	mg/Kg wet	0.0227		94.0	70-130	4.32	25		
Chlorobenzene	0.0244	0.0011	mg/Kg wet	0.0227		108	70-130	1.61	25		
Chlorodibromomethane	0.0225	0.00057	mg/Kg wet	0.0227		99.3	70-130	1.75	25		
Chloroethane	0.0229	0.0023	mg/Kg wet	0.0227		101	70-130	8.00	25		
Chloroform	0.0218	0.0023	mg/Kg wet	0.0227		96.2	70-130	4.02	25		
Chloromethane	0.0227	0.0023	mg/Kg wet	0.0227		100	70-130	1.78	25	V-20	
2-Chlorotoluene	0.0235	0.0011	mg/Kg wet	0.0227		104	70-130	2.14	25		
4-Chlorotoluene	0.0238	0.0011	mg/Kg wet	0.0227		105	70-130	0.190	25		
1,2-Dibromo-3-chloropropane (DBCP)	0.0212	0.0057	mg/Kg wet	0.0227		93.7	70-130	4.53	25		
1,2-Dibromoethane (EDB)	0.0231	0.00057	mg/Kg wet	0.0227		102	70-130	1.22	25		
Dibromomethane	0.0229	0.0011	mg/Kg wet	0.0227		101	70-130	2.06	25		
1,2-Dichlorobenzene	0.0243	0.0011	mg/Kg wet	0.0227		107	70-130	0.328	25		
1,3-Dichlorobenzene	0.0255	0.0011	mg/Kg wet	0.0227		113	70-130	2.24	25		
1,4-Dichlorobenzene	0.0240	0.0011	mg/Kg wet	0.0227		106	70-130	1.76	25		
trans-1,4-Dichloro-2-butene	0.0228	0.0023	mg/Kg wet	0.0227		101	70-130	5.41	25		
Dichlorodifluoromethane (Freon 12)	0.0236	0.0023	mg/Kg wet	0.0227		104	40-160	3.78	25		†
1,1-Dichloroethane	0.0226	0.0011	mg/Kg wet	0.0227		99.7	70-130	3.30	25		
1,2-Dichloroethane	0.0222	0.0011	mg/Kg wet	0.0227		97.9	70-130	1.28	25		
1,1-Dichloroethylene	0.0233	0.0011	mg/Kg wet	0.0227		103	70-130	2.83	25		
cis-1,2-Dichloroethylene	0.0226	0.0011	mg/Kg wet	0.0227		99.8	70-130	7.66	25		
trans-1,2-Dichloroethylene	0.0216	0.0011	mg/Kg wet	0.0227		95.2	70-130	4.82	25		
Dichlorofluoromethane (Freon 21)	0.0232	0.0011	mg/Kg wet	0.0227		102	70-130	2.36	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
Batch B270264 - SW-846 5035										
LCS Dup (B270264-BSD1)										
Prepared & Analyzed: 11/05/20										
1,2-Dichloropropane	0.0241	0.0011	mg/Kg wet	0.0227		106	70-130	0.851	25	
1,3-Dichloropropane	0.0222	0.00057	mg/Kg wet	0.0227		97.8	70-130	1.17	25	
2,2-Dichloropropane	0.0208	0.0011	mg/Kg wet	0.0227		91.7	70-130	7.25	25	
1,1-Dichloropropene	0.0212	0.0023	mg/Kg wet	0.0227		93.4	70-130	3.88	25	
cis-1,3-Dichloropropene	0.0230	0.00057	mg/Kg wet	0.0227		102	70-130	0.980	25	
trans-1,3-Dichloropropene	0.0228	0.00057	mg/Kg wet	0.0227		101	70-130	0.743	25	
Diethyl Ether	0.0227	0.0023	mg/Kg wet	0.0227		100	70-130	4.64	25	
Difluorochloromethane (Freon 22)	0.0242	0.0011	mg/Kg wet	0.0227		107	70-130	5.50	25	
Diisopropyl Ether (DIPE)	0.0226	0.00057	mg/Kg wet	0.0227		99.7	70-130	3.30	25	
1,4-Dioxane	0.190	0.057	mg/Kg wet	0.227		83.7	40-160	2.05	50	† ‡
Ethylbenzene	0.0236	0.0011	mg/Kg wet	0.0227		104	70-130	1.48	25	
Hexachlorobutadiene	0.0253	0.0011	mg/Kg wet	0.0227		111	70-160	1.54	25	
2-Hexanone (MBK)	0.187	0.011	mg/Kg wet	0.227		82.3	70-160	3.75	25	†
Isopropylbenzene (Cumene)	0.0243	0.0011	mg/Kg wet	0.0227		107	70-130	3.39	25	
p-Isopropyltoluene (p-Cymene)	0.0238	0.0011	mg/Kg wet	0.0227		105	70-130	0.900	25	
Methyl Acetate	0.0207	0.011	mg/Kg wet	0.0227		91.2	70-130	3.87	25	V-20
Methyl tert-Butyl Ether (MTBE)	0.0204	0.0011	mg/Kg wet	0.0227		90.0	70-130	4.93	25	
Methyl Cyclohexane	0.0251	0.0011	mg/Kg wet	0.0227		111	70-130	1.27	25	
Methylene Chloride	0.0221	0.0057	mg/Kg wet	0.0227		97.3	40-160	1.38	25	†
4-Methyl-2-pentanone (MIBK)	0.204	0.011	mg/Kg wet	0.227		89.9	70-160	2.69	25	†
Naphthalene	0.0226	0.0023	mg/Kg wet	0.0227		99.6	40-130	3.84	25	†
n-Propylbenzene	0.0240	0.0011	mg/Kg wet	0.0227		106	70-130	1.22	25	
Styrene	0.0244	0.0011	mg/Kg wet	0.0227		108	70-130	0.556	25	
1,1,1,2-Tetrachloroethane	0.0244	0.0011	mg/Kg wet	0.0227		108	70-130	2.47	25	
1,1,2,2-Tetrachloroethane	0.0238	0.00057	mg/Kg wet	0.0227		105	70-130	1.04	25	
Tetrachloroethylene	0.0246	0.0011	mg/Kg wet	0.0227		108	70-130	0.735	25	
Tetrahydrofuran	0.0211	0.011	mg/Kg wet	0.0227		93.2	70-130	3.84	25	
Toluene	0.0237	0.0011	mg/Kg wet	0.0227		104	70-130	2.55	25	
1,2,3-Trichlorobenzene	0.0228	0.0057	mg/Kg wet	0.0227		101	70-130	2.56	25	
1,2,4-Trichlorobenzene	0.0236	0.0011	mg/Kg wet	0.0227		104	70-130	1.76	25	
1,3,5-Trichlorobenzene	0.0236	0.0011	mg/Kg wet	0.0227		104	70-130	0.767	25	
1,1,1-Trichloroethane	0.0220	0.0011	mg/Kg wet	0.0227		97.2	70-130	1.18	25	
1,1,2-Trichloroethane	0.0237	0.0011	mg/Kg wet	0.0227		104	70-130	0.858	25	
Trichloroethylene	0.0237	0.0011	mg/Kg wet	0.0227		105	70-130	3.24	25	
Trichlorofluoromethane (Freon 11)	0.0213	0.0023	mg/Kg wet	0.0227		94.2	70-130	2.05	25	
1,2,3-Trichloropropane	0.0202	0.0023	mg/Kg wet	0.0227		89.2	70-130	2.16	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0247	0.0011	mg/Kg wet	0.0227		109	70-130	3.20	25	
1,2,4-Trimethylbenzene	0.0229	0.0011	mg/Kg wet	0.0227		101	70-130	5.11	25	
1,3,5-Trimethylbenzene	0.0236	0.0011	mg/Kg wet	0.0227		104	70-130	0.766	25	
Vinyl Chloride	0.0227	0.0023	mg/Kg wet	0.0227		100	40-130	5.72	25	†
m+p Xylene	0.0469	0.0023	mg/Kg wet	0.0453		103	70-130	1.70	25	
o-Xylene	0.0240	0.0011	mg/Kg wet	0.0227		106	70-130	0.659	25	
Surrogate: 1,2-Dichloroethane-d4	0.0264		mg/Kg wet	0.0283		93.3	70-130			
Surrogate: Toluene-d8	0.0289		mg/Kg wet	0.0283		102	70-130			
Surrogate: 4-Bromofluorobenzene	0.0290		mg/Kg wet	0.0283		102	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 B270266 - SW-846 5035

Blank (B270266-BLK1)

Prepared & Analyzed: 11/05/20

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	0.040	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							
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 B270266 - SW-846 5035

Blank (B270266-BLK1)

Prepared & Analyzed: 11/05/20

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	0.0488		mg/Kg wet	0.0500		97.7	70-130			
Surrogate: Toluene-d8	0.0511		mg/Kg wet	0.0500		102	70-130			
Surrogate: 4-Bromofluorobenzene	0.0519		mg/Kg wet	0.0500		104	70-130			

LCS (B270266-BS1)

Prepared & Analyzed: 11/05/20

Acetone	0.198	0.10	mg/Kg wet	0.200		99.0	70-160			†
Acrylonitrile	0.0194	0.0060	mg/Kg wet	0.0200		97.0	70-130			
tert-Amyl Methyl Ether (TAME)	0.0207	0.0010	mg/Kg wet	0.0200		104	70-130			
Benzene	0.0216	0.0020	mg/Kg wet	0.0200		108	70-130			
Bromobenzene	0.0195	0.0020	mg/Kg wet	0.0200		97.3	70-130			
Bromochloromethane	0.0249	0.0020	mg/Kg wet	0.0200		125	70-130			
Bromodichloromethane	0.0208	0.0020	mg/Kg wet	0.0200		104	70-130			
Bromoform	0.0196	0.0020	mg/Kg wet	0.0200		98.1	70-130			
Bromomethane	0.0245	0.010	mg/Kg wet	0.0200		123	40-130			†
2-Butanone (MEK)	0.212	0.040	mg/Kg wet	0.200		106	70-160			†
tert-Butyl Alcohol (TBA)	0.183	0.040	mg/Kg wet	0.200		91.3	40-130			†
n-Butylbenzene	0.0192	0.0020	mg/Kg wet	0.0200		96.1	70-130			
sec-Butylbenzene	0.0202	0.0020	mg/Kg wet	0.0200		101	70-130			
tert-Butylbenzene	0.0197	0.0020	mg/Kg wet	0.0200		98.5	70-160			†
tert-Butyl Ethyl Ether (TBEE)	0.0216	0.0010	mg/Kg wet	0.0200		108	70-130			
Carbon Disulfide	0.224	0.0060	mg/Kg wet	0.200		112	70-130			
Carbon Tetrachloride	0.0214	0.0020	mg/Kg wet	0.0200		107	70-130			
Chlorobenzene	0.0192	0.0020	mg/Kg wet	0.0200		96.1	70-130			
Chlorodibromomethane	0.0218	0.0010	mg/Kg wet	0.0200		109	70-130			
Chloroethane	0.0243	0.020	mg/Kg wet	0.0200		121	70-130			
Chloroform	0.0223	0.0040	mg/Kg wet	0.0200		111	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 B270266 - SW-846 5035										
LCS (B270266-BS1)										
Prepared & Analyzed: 11/05/20										
Chloromethane	0.0223	0.010	mg/Kg wet	0.0200		112	70-130			
2-Chlorotoluene	0.0195	0.0020	mg/Kg wet	0.0200		97.5	70-130			
4-Chlorotoluene	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	0.0172	0.0020	mg/Kg wet	0.0200		85.9	70-130			
1,2-Dibromoethane (EDB)	0.0218	0.0010	mg/Kg wet	0.0200		109	70-130			
Dibromomethane	0.0225	0.0020	mg/Kg wet	0.0200		112	70-130			
1,2-Dichlorobenzene	0.0196	0.0020	mg/Kg wet	0.0200		97.9	70-130			
1,3-Dichlorobenzene	0.0188	0.0020	mg/Kg wet	0.0200		94.1	70-130			
1,4-Dichlorobenzene	0.0192	0.0020	mg/Kg wet	0.0200		95.9	70-130			
trans-1,4-Dichloro-2-butene	0.0176	0.0040	mg/Kg wet	0.0200		87.8	70-130			
Dichlorodifluoromethane (Freon 12)	0.0252	0.020	mg/Kg wet	0.0200		126	40-160			V-20, V-36 †
1,1-Dichloroethane	0.0234	0.0020	mg/Kg wet	0.0200		117	70-130			
1,2-Dichloroethane	0.0218	0.0020	mg/Kg wet	0.0200		109	70-130			
1,1-Dichloroethylene	0.0227	0.0040	mg/Kg wet	0.0200		114	70-130			
cis-1,2-Dichloroethylene	0.0211	0.0020	mg/Kg wet	0.0200		105	70-130			
trans-1,2-Dichloroethylene	0.0231	0.0020	mg/Kg wet	0.0200		115	70-130			
1,2-Dichloropropane	0.0212	0.0020	mg/Kg wet	0.0200		106	70-130			
1,3-Dichloropropane	0.0225	0.0010	mg/Kg wet	0.0200		112	70-130			
2,2-Dichloropropane	0.0217	0.0020	mg/Kg wet	0.0200		108	70-130			
1,1-Dichloropropene	0.0230	0.0020	mg/Kg wet	0.0200		115	70-130			
cis-1,3-Dichloropropene	0.0225	0.0010	mg/Kg wet	0.0200		112	70-130			
trans-1,3-Dichloropropene	0.0226	0.0010	mg/Kg wet	0.0200		113	70-130			
Diethyl Ether	0.0216	0.020	mg/Kg wet	0.0200		108	70-130			
Diisopropyl Ether (DIPE)	0.0213	0.0010	mg/Kg wet	0.0200		107	70-130			
1,4-Dioxane	0.209	0.10	mg/Kg wet	0.200		105	40-160			†
Ethylbenzene	0.0207	0.0020	mg/Kg wet	0.0200		104	70-130			
Hexachlorobutadiene	0.0184	0.0020	mg/Kg wet	0.0200		92.2	70-160			
2-Hexanone (MBK)	0.210	0.020	mg/Kg wet	0.200		105	70-160			†
Isopropylbenzene (Cumene)	0.0188	0.0020	mg/Kg wet	0.0200		93.8	70-130			
p-Isopropyltoluene (p-Cymene)	0.0190	0.0020	mg/Kg wet	0.0200		94.8	70-130			
Methyl Acetate	0.0263	0.0020	mg/Kg wet	0.0200		132	* 70-130			L-07, V-20
Methyl tert-Butyl Ether (MTBE)	0.0214	0.0040	mg/Kg wet	0.0200		107	70-130			
Methyl Cyclohexane	0.0196	0.0020	mg/Kg wet	0.0200		97.9	70-130			
Methylene Chloride	0.0216	0.020	mg/Kg wet	0.0200		108	40-160			†
4-Methyl-2-pentanone (MIBK)	0.213	0.020	mg/Kg wet	0.200		107	70-160			†
Naphthalene	0.0167	0.0040	mg/Kg wet	0.0200		83.6	40-130			†
n-Propylbenzene	0.0197	0.0020	mg/Kg wet	0.0200		98.6	70-130			
Styrene	0.0209	0.0020	mg/Kg wet	0.0200		105	70-130			
1,1,1,2-Tetrachloroethane	0.0216	0.0020	mg/Kg wet	0.0200		108	70-130			
1,1,1,2,2-Tetrachloroethane	0.0192	0.0010	mg/Kg wet	0.0200		95.8	70-130			
Tetrachloroethylene	0.0224	0.0020	mg/Kg wet	0.0200		112	70-130			
Tetrahydrofuran	0.0197	0.010	mg/Kg wet	0.0200		98.7	70-130			
Toluene	0.0201	0.0020	mg/Kg wet	0.0200		100	70-130			
1,2,3-Trichlorobenzene	0.0185	0.0020	mg/Kg wet	0.0200		92.4	70-130			
1,2,4-Trichlorobenzene	0.0200	0.0020	mg/Kg wet	0.0200		100	70-130			
1,3,5-Trichlorobenzene	0.0194	0.0020	mg/Kg wet	0.0200		97.1	70-130			
1,1,1-Trichloroethane	0.0212	0.0020	mg/Kg wet	0.0200		106	70-130			
1,1,2-Trichloroethane	0.0184	0.0020	mg/Kg wet	0.0200		92.0	70-130			
Trichloroethylene	0.0224	0.0020	mg/Kg wet	0.0200		112	70-130			
Trichlorofluoromethane (Freon 11)	0.0230	0.010	mg/Kg wet	0.0200		115	70-130			
1,2,3-Trichloropropane	0.0211	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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B270266 - SW-846 5035

LCS (B270266-BS1)

Prepared & Analyzed: 11/05/20

1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0224	0.010	mg/Kg wet	0.0200		112	70-130			
1,2,4-Trimethylbenzene	0.0187	0.0020	mg/Kg wet	0.0200		93.6	70-130			
1,3,5-Trimethylbenzene	0.0201	0.0020	mg/Kg wet	0.0200		100	70-130			
Vinyl Chloride	0.0237	0.010	mg/Kg wet	0.0200		118	40-130			†
m+p Xylene	0.0413	0.0040	mg/Kg wet	0.0400		103	70-130			
o-Xylene	0.0186	0.0020	mg/Kg wet	0.0200		93.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0479		mg/Kg wet	0.0500		95.8	70-130			
Surrogate: Toluene-d8	0.0511		mg/Kg wet	0.0500		102	70-130			
Surrogate: 4-Bromofluorobenzene	0.0525		mg/Kg wet	0.0500		105	70-130			

LCS Dup (B270266-BS1)

Prepared & Analyzed: 11/05/20

Acetone	0.195	0.10	mg/Kg wet	0.200		97.4	70-160	1.61	25	†
Acrylonitrile	0.0191	0.0060	mg/Kg wet	0.0200		95.6	70-130	1.45	25	
tert-Amyl Methyl Ether (TAME)	0.0206	0.0010	mg/Kg wet	0.0200		103	70-130	0.872	25	
Benzene	0.0208	0.0020	mg/Kg wet	0.0200		104	70-130	3.59	25	
Bromobenzene	0.0174	0.0020	mg/Kg wet	0.0200		87.0	70-130	11.2	25	
Bromochloromethane	0.0242	0.0020	mg/Kg wet	0.0200		121	70-130	3.01	25	
Bromodichloromethane	0.0211	0.0020	mg/Kg wet	0.0200		106	70-130	1.24	25	
Bromoform	0.0182	0.0020	mg/Kg wet	0.0200		91.1	70-130	7.40	25	
Bromomethane	0.0234	0.010	mg/Kg wet	0.0200		117	40-130	4.67	25	†
2-Butanone (MEK)	0.203	0.040	mg/Kg wet	0.200		102	70-160	4.24	25	†
tert-Butyl Alcohol (TBA)	0.196	0.040	mg/Kg wet	0.200		98.0	40-130	7.07	25	†
n-Butylbenzene	0.0181	0.0020	mg/Kg wet	0.0200		90.7	70-130	5.78	25	
sec-Butylbenzene	0.0175	0.0020	mg/Kg wet	0.0200		87.6	70-130	14.3	25	
tert-Butylbenzene	0.0189	0.0020	mg/Kg wet	0.0200		94.4	70-160	4.25	25	†
tert-Butyl Ethyl Ether (TBEE)	0.0212	0.0010	mg/Kg wet	0.0200		106	70-130	1.96	25	
Carbon Disulfide	0.212	0.0060	mg/Kg wet	0.200		106	70-130	5.35	25	
Carbon Tetrachloride	0.0208	0.0020	mg/Kg wet	0.0200		104	70-130	3.03	25	
Chlorobenzene	0.0184	0.0020	mg/Kg wet	0.0200		91.9	70-130	4.47	25	
Chlorodibromomethane	0.0220	0.0010	mg/Kg wet	0.0200		110	70-130	0.548	25	
Chloroethane	0.0227	0.020	mg/Kg wet	0.0200		113	70-130	6.73	25	
Chloroform	0.0213	0.0040	mg/Kg wet	0.0200		107	70-130	4.22	25	
Chloromethane	0.0215	0.010	mg/Kg wet	0.0200		107	70-130	3.84	25	
2-Chlorotoluene	0.0194	0.0020	mg/Kg wet	0.0200		96.9	70-130	0.617	25	
4-Chlorotoluene	0.0205	0.0020	mg/Kg wet	0.0200		102	70-130	0.779	25	
1,2-Dibromo-3-chloropropane (DBCP)	0.0170	0.0020	mg/Kg wet	0.0200		85.2	70-130	0.818	25	
1,2-Dibromoethane (EDB)	0.0220	0.0010	mg/Kg wet	0.0200		110	70-130	1.00	25	
Dibromomethane	0.0222	0.0020	mg/Kg wet	0.0200		111	70-130	1.25	25	
1,2-Dichlorobenzene	0.0192	0.0020	mg/Kg wet	0.0200		95.9	70-130	2.06	25	
1,3-Dichlorobenzene	0.0188	0.0020	mg/Kg wet	0.0200		94.0	70-130	0.106	25	
1,4-Dichlorobenzene	0.0185	0.0020	mg/Kg wet	0.0200		92.7	70-130	3.39	25	
trans-1,4-Dichloro-2-butene	0.0172	0.0040	mg/Kg wet	0.0200		85.9	70-130	2.19	25	
Dichlorodifluoromethane (Freon 12)	0.0236	0.020	mg/Kg wet	0.0200		118	40-160	6.80	25	V-20, V-36 †
1,1-Dichloroethane	0.0229	0.0020	mg/Kg wet	0.0200		115	70-130	2.07	25	
1,2-Dichloroethane	0.0211	0.0020	mg/Kg wet	0.0200		106	70-130	3.07	25	
1,1-Dichloroethylene	0.0213	0.0040	mg/Kg wet	0.0200		106	70-130	6.45	25	
cis-1,2-Dichloroethylene	0.0205	0.0020	mg/Kg wet	0.0200		103	70-130	2.60	25	
trans-1,2-Dichloroethylene	0.0216	0.0020	mg/Kg wet	0.0200		108	70-130	6.81	25	
1,2-Dichloropropane	0.0210	0.0020	mg/Kg wet	0.0200		105	70-130	0.758	25	
1,3-Dichloropropane	0.0218	0.0010	mg/Kg wet	0.0200		109	70-130	2.98	25	
2,2-Dichloropropane	0.0208	0.0020	mg/Kg wet	0.0200		104	70-130	4.33	25	
1,1-Dichloropropene	0.0216	0.0020	mg/Kg wet	0.0200		108	70-130	6.20	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
Batch B270266 - SW-846 5035										
LCS Dup (B270266-BSD1)										
Prepared & Analyzed: 11/05/20										
cis-1,3-Dichloropropene	0.0208	0.0010	mg/Kg wet	0.0200		104	70-130	7.76	25	
trans-1,3-Dichloropropene	0.0221	0.0010	mg/Kg wet	0.0200		111	70-130	2.23	25	
Diethyl Ether	0.0201	0.020	mg/Kg wet	0.0200		101	70-130	7.00	25	
Diisopropyl Ether (DIPE)	0.0204	0.0010	mg/Kg wet	0.0200		102	70-130	4.31	25	
1,4-Dioxane	0.239	0.10	mg/Kg wet	0.200		120	40-160	13.3	50	† ‡
Ethylbenzene	0.0192	0.0020	mg/Kg wet	0.0200		95.9	70-130	7.72	25	
Hexachlorobutadiene	0.0197	0.0020	mg/Kg wet	0.0200		98.4	70-160	6.51	25	
2-Hexanone (MBK)	0.207	0.020	mg/Kg wet	0.200		104	70-160	1.45	25	†
Isopropylbenzene (Cumene)	0.0180	0.0020	mg/Kg wet	0.0200		90.2	70-130	3.91	25	
p-Isopropyltoluene (p-Cymene)	0.0195	0.0020	mg/Kg wet	0.0200		97.5	70-130	2.81	25	
Methyl Acetate	0.0255	0.0020	mg/Kg wet	0.0200		128	70-130	3.01	25	V-20
Methyl tert-Butyl Ether (MTBE)	0.0203	0.0040	mg/Kg wet	0.0200		102	70-130	5.08	25	
Methyl Cyclohexane	0.0202	0.0020	mg/Kg wet	0.0200		101	70-130	3.31	25	
Methylene Chloride	0.0223	0.020	mg/Kg wet	0.0200		111	40-160	2.91	25	†
4-Methyl-2-pentanone (MIBK)	0.209	0.020	mg/Kg wet	0.200		104	70-160	1.97	25	†
Naphthalene	0.0171	0.0040	mg/Kg wet	0.0200		85.3	40-130	2.01	25	†
n-Propylbenzene	0.0184	0.0020	mg/Kg wet	0.0200		91.9	70-130	7.03	25	
Styrene	0.0200	0.0020	mg/Kg wet	0.0200		99.8	70-130	4.79	25	
1,1,1,2-Tetrachloroethane	0.0214	0.0020	mg/Kg wet	0.0200		107	70-130	0.837	25	
1,1,2,2-Tetrachloroethane	0.0184	0.0010	mg/Kg wet	0.0200		91.9	70-130	4.16	25	
Tetrachloroethylene	0.0214	0.0020	mg/Kg wet	0.0200		107	70-130	4.39	25	
Tetrahydrofuran	0.0217	0.010	mg/Kg wet	0.0200		108	70-130	9.46	25	
Toluene	0.0214	0.0020	mg/Kg wet	0.0200		107	70-130	6.55	25	
1,2,3-Trichlorobenzene	0.0190	0.0020	mg/Kg wet	0.0200		94.8	70-130	2.56	25	
1,2,4-Trichlorobenzene	0.0183	0.0020	mg/Kg wet	0.0200		91.7	70-130	8.86	25	
1,3,5-Trichlorobenzene	0.0183	0.0020	mg/Kg wet	0.0200		91.4	70-130	6.05	25	
1,1,1-Trichloroethane	0.0210	0.0020	mg/Kg wet	0.0200		105	70-130	0.948	25	
1,1,2-Trichloroethane	0.0199	0.0020	mg/Kg wet	0.0200		99.4	70-130	7.73	25	
Trichloroethylene	0.0222	0.0020	mg/Kg wet	0.0200		111	70-130	0.898	25	
Trichlorofluoromethane (Freon 11)	0.0212	0.010	mg/Kg wet	0.0200		106	70-130	8.41	25	
1,2,3-Trichloropropane	0.0218	0.0020	mg/Kg wet	0.0200		109	70-130	3.17	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0206	0.010	mg/Kg wet	0.0200		103	70-130	8.57	25	
1,2,4-Trimethylbenzene	0.0181	0.0020	mg/Kg wet	0.0200		90.3	70-130	3.59	25	
1,3,5-Trimethylbenzene	0.0197	0.0020	mg/Kg wet	0.0200		98.7	70-130	1.61	25	
Vinyl Chloride	0.0229	0.010	mg/Kg wet	0.0200		114	40-130	3.52	25	†
m+p Xylene	0.0398	0.0040	mg/Kg wet	0.0400		99.6	70-130	3.60	25	
o-Xylene	0.0187	0.0020	mg/Kg wet	0.0200		93.5	70-130	0.321	25	
Surrogate: 1,2-Dichloroethane-d4	0.0470		mg/Kg wet	0.0500		94.0	70-130			
Surrogate: Toluene-d8	0.0502		mg/Kg wet	0.0500		100	70-130			
Surrogate: 4-Bromofluorobenzene	0.0496		mg/Kg wet	0.0500		99.2	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 B270444 - SW-846 3546

Blank (B270444-BLK1)

Prepared: 11/08/20 Analyzed: 11/09/20

Acenaphthene	ND	0.085	mg/Kg wet							
Acenaphthylene	ND	0.085	mg/Kg wet							
Anthracene	ND	0.085	mg/Kg wet							
Benzo(a)anthracene	ND	0.085	mg/Kg wet							
Benzo(a)pyrene	ND	0.085	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.085	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.085	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.085	mg/Kg wet							
Chrysene	ND	0.085	mg/Kg wet							
Dibenz(a,h)anthracene	ND	0.085	mg/Kg wet							
Fluoranthene	ND	0.085	mg/Kg wet							
Fluorene	ND	0.085	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	ND	0.085	mg/Kg wet							
2-Methylnaphthalene	ND	0.085	mg/Kg wet							
Naphthalene	ND	0.085	mg/Kg wet							
Phenanthrene	ND	0.085	mg/Kg wet							
Pyrene	ND	0.085	mg/Kg wet							
Surrogate: Nitrobenzene-d5	1.99		mg/Kg wet	3.33		59.8	30-130			
Surrogate: 2-Fluorobiphenyl	2.16		mg/Kg wet	3.33		64.8	30-130			
Surrogate: p-Terphenyl-d14	2.59		mg/Kg wet	3.33		77.6	30-130			

LCS (B270444-BS1)

Prepared: 11/08/20 Analyzed: 11/09/20

Acenaphthene	1.23	0.17	mg/Kg wet	1.67		74.0	40-140			
Acenaphthylene	1.25	0.17	mg/Kg wet	1.67		74.9	40-140			
Anthracene	1.28	0.17	mg/Kg wet	1.67		76.7	40-140			
Benzo(a)anthracene	1.22	0.17	mg/Kg wet	1.67		73.1	40-140			
Benzo(a)pyrene	1.17	0.17	mg/Kg wet	1.67		70.4	40-140			
Benzo(b)fluoranthene	1.21	0.17	mg/Kg wet	1.67		72.8	40-140			
Benzo(g,h,i)perylene	1.15	0.17	mg/Kg wet	1.67		69.3	40-140			
Benzo(k)fluoranthene	1.17	0.17	mg/Kg wet	1.67		70.4	40-140			
Chrysene	1.22	0.17	mg/Kg wet	1.67		73.2	40-140			
Dibenz(a,h)anthracene	1.16	0.17	mg/Kg wet	1.67		69.8	40-140			
Fluoranthene	1.25	0.17	mg/Kg wet	1.67		74.8	40-140			
Fluorene	1.27	0.17	mg/Kg wet	1.67		76.3	40-140			
Indeno(1,2,3-cd)pyrene	1.22	0.17	mg/Kg wet	1.67		73.5	40-140			
2-Methylnaphthalene	1.27	0.17	mg/Kg wet	1.67		75.9	40-140			
Naphthalene	1.09	0.17	mg/Kg wet	1.67		65.2	40-140			
Phenanthrene	1.24	0.17	mg/Kg wet	1.67		74.3	40-140			
Pyrene	1.18	0.17	mg/Kg wet	1.67		70.5	40-140			
Surrogate: Nitrobenzene-d5	2.14		mg/Kg wet	3.33		64.3	30-130			
Surrogate: 2-Fluorobiphenyl	2.51		mg/Kg wet	3.33		75.2	30-130			
Surrogate: p-Terphenyl-d14	2.60		mg/Kg wet	3.33		78.1	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
Batch B270444 - SW-846 3546										
LCS Dup (B270444-BSD1)										
					Prepared: 11/08/20 Analyzed: 11/09/20					
Acenaphthene	1.20	0.17	mg/Kg wet	1.67		72.1	40-140	2.63	30	
Acenaphthylene	1.20	0.17	mg/Kg wet	1.67		72.2	40-140	3.62	30	
Anthracene	1.22	0.17	mg/Kg wet	1.67		73.0	40-140	4.94	30	
Benzo(a)anthracene	1.16	0.17	mg/Kg wet	1.67		69.8	40-140	4.51	30	
Benzo(a)pyrene	1.11	0.17	mg/Kg wet	1.67		66.9	40-140	5.07	30	
Benzo(b)fluoranthene	1.18	0.17	mg/Kg wet	1.67		70.9	40-140	2.65	30	
Benzo(g,h,i)perylene	1.12	0.17	mg/Kg wet	1.67		67.2	40-140	3.05	30	
Benzo(k)fluoranthene	1.11	0.17	mg/Kg wet	1.67		66.9	40-140	5.13	30	
Chrysene	1.18	0.17	mg/Kg wet	1.67		70.9	40-140	3.19	30	
Dibenz(a,h)anthracene	1.11	0.17	mg/Kg wet	1.67		66.4	40-140	5.02	30	
Fluoranthene	1.20	0.17	mg/Kg wet	1.67		71.9	40-140	3.95	30	
Fluorene	1.22	0.17	mg/Kg wet	1.67		73.3	40-140	4.06	30	
Indeno(1,2,3-cd)pyrene	1.16	0.17	mg/Kg wet	1.67		69.4	40-140	5.68	30	
2-Methylnaphthalene	1.20	0.17	mg/Kg wet	1.67		71.9	40-140	5.49	30	
Naphthalene	1.03	0.17	mg/Kg wet	1.67		61.7	40-140	5.51	30	
Phenanthrene	1.17	0.17	mg/Kg wet	1.67		70.3	40-140	5.53	30	
Pyrene	1.13	0.17	mg/Kg wet	1.67		68.0	40-140	3.70	30	
Surrogate: Nitrobenzene-d5	2.02		mg/Kg wet	3.33		60.7	30-130			
Surrogate: 2-Fluorobiphenyl	2.40		mg/Kg wet	3.33		72.1	30-130			
Surrogate: p-Terphenyl-d14	2.47		mg/Kg wet	3.33		74.2	30-130			

QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B270671 - SW-846 3546

Blank (B270671-BLK1)

Prepared: 11/11/20 Analyzed: 11/13/20

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	0.190		mg/Kg wet	0.200		95.0	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.209		mg/Kg wet	0.200		105	30-150			
Surrogate: Tetrachloro-m-xylene	0.179		mg/Kg wet	0.200		89.6	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.192		mg/Kg wet	0.200		96.0	30-150			

LCS (B270671-BS1)

Prepared: 11/11/20 Analyzed: 11/13/20

Aroclor-1016	0.18	0.020	mg/Kg wet	0.200		90.8	40-140			
Aroclor-1016 [2C]	0.20	0.020	mg/Kg wet	0.200		99.9	40-140			
Aroclor-1260	0.18	0.020	mg/Kg wet	0.200		88.6	40-140			
Aroclor-1260 [2C]	0.18	0.020	mg/Kg wet	0.200		91.6	40-140			
Surrogate: Decachlorobiphenyl	0.188		mg/Kg wet	0.200		94.0	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.208		mg/Kg wet	0.200		104	30-150			
Surrogate: Tetrachloro-m-xylene	0.187		mg/Kg wet	0.200		93.3	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.198		mg/Kg wet	0.200		98.8	30-150			

LCS Dup (B270671-BSD1)

Prepared: 11/11/20 Analyzed: 11/13/20

Aroclor-1016	0.18	0.020	mg/Kg wet	0.200		90.7	40-140	0.153	30	
Aroclor-1016 [2C]	0.20	0.020	mg/Kg wet	0.200		101	40-140	0.932	30	
Aroclor-1260	0.18	0.020	mg/Kg wet	0.200		88.3	40-140	0.366	30	
Aroclor-1260 [2C]	0.18	0.020	mg/Kg wet	0.200		91.2	40-140	0.381	30	
Surrogate: Decachlorobiphenyl	0.189		mg/Kg wet	0.200		94.3	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.208		mg/Kg wet	0.200		104	30-150			
Surrogate: Tetrachloro-m-xylene	0.187		mg/Kg wet	0.200		93.3	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.199		mg/Kg wet	0.200		99.6	30-150			



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

QUALITY CONTROL

Petroleum Hydrocarbons Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B270442 - SW-846 3546										
Blank (B270442-BLK1)				Prepared: 11/08/20 Analyzed: 11/09/20						
TPH (C9-C36)	ND	4.2	mg/Kg wet							
Surrogate: 2-Fluorobiphenyl	2.47		mg/Kg wet	3.33		74.1	40-140			
LCS (B270442-BS1)				Prepared: 11/08/20 Analyzed: 11/09/20						
TPH (C9-C36)	28.7	8.3	mg/Kg wet	33.3		86.0	40-140			
Surrogate: 2-Fluorobiphenyl	2.66		mg/Kg wet	3.33		79.8	40-140			
LCS Dup (B270442-BSD1)				Prepared: 11/08/20 Analyzed: 11/09/20						
TPH (C9-C36)	28.3	8.3	mg/Kg wet	33.3		84.8	40-140	1.46	30	
Surrogate: 2-Fluorobiphenyl	2.73		mg/Kg wet	3.33		81.8	40-140			
Matrix Spike (B270442-MS1)				Source: 20K0181-01		Prepared: 11/08/20 Analyzed: 11/11/20				
TPH (C9-C36)	179	8.7	mg/Kg dry	34.7	80.9	284 *	40-140			MS-12
Surrogate: 2-Fluorobiphenyl	3.02		mg/Kg dry	3.47		86.9	40-140			
Matrix Spike Dup (B270442-MSD1)				Source: 20K0181-01		Prepared: 11/08/20 Analyzed: 11/11/20				
TPH (C9-C36)	246	8.6	mg/Kg dry	34.4	80.9	480 *	40-140	31.3 *	30	MS-12, R-06
Surrogate: 2-Fluorobiphenyl	3.04		mg/Kg dry	3.44		88.4	40-140			



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

QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B270528 - SW-846 3050B

Blank (B270528-BLK1)

Prepared: 11/09/20 Analyzed: 11/10/20

Antimony	ND	1.7	mg/Kg wet							
Arsenic	ND	3.3	mg/Kg wet							
Beryllium	ND	0.17	mg/Kg wet							
Cadmium	ND	0.33	mg/Kg wet							
Chromium	ND	0.67	mg/Kg wet							
Copper	ND	0.67	mg/Kg wet							
Lead	ND	0.50	mg/Kg wet							
Nickel	ND	0.67	mg/Kg wet							
Selenium	ND	3.3	mg/Kg wet							
Silver	ND	0.33	mg/Kg wet							
Thallium	ND	1.7	mg/Kg wet							
Zinc	ND	0.67	mg/Kg wet							

LCS (B270528-BS1)

Prepared: 11/09/20 Analyzed: 11/10/20

Antimony	116	5.0	mg/Kg wet	134		86.6	1.9-200.7			
Arsenic	154	10	mg/Kg wet	170		90.8	82.9-117.6			
Beryllium	111	0.50	mg/Kg wet	116		96.1	83.4-116.4			
Cadmium	85.9	1.0	mg/Kg wet	89.5		95.9	82.8-117.3			
Chromium	95.6	2.0	mg/Kg wet	101		94.6	82.1-117.8			
Copper	147	2.0	mg/Kg wet	149		98.5	83.9-116.1			
Lead	135	1.5	mg/Kg wet	140		96.1	82.9-117.1			
Nickel	66.8	2.0	mg/Kg wet	68.3		97.8	82.1-117.7			
Selenium	162	10	mg/Kg wet	182		88.9	79.7-120.3			
Silver	51.7	1.0	mg/Kg wet	50.1		103	80.2-120			
Thallium	90.2	5.0	mg/Kg wet	87.7		103	81.1-118.6			
Zinc	219	2.0	mg/Kg wet	228		96.2	80.7-118.9			

LCS Dup (B270528-BSD1)

Prepared: 11/09/20 Analyzed: 11/10/20

Antimony	121	5.0	mg/Kg wet	134		90.0	1.9-200.7	3.86	30	
Arsenic	155	10	mg/Kg wet	170		91.0	82.9-117.6	0.148	30	
Beryllium	111	0.50	mg/Kg wet	116		95.9	83.4-116.4	0.242	30	
Cadmium	86.3	1.0	mg/Kg wet	89.5		96.4	82.8-117.3	0.508	20	
Chromium	96.7	2.0	mg/Kg wet	101		95.8	82.1-117.8	1.21	30	
Copper	147	2.0	mg/Kg wet	149		99.0	83.9-116.1	0.440	30	
Lead	133	1.5	mg/Kg wet	140		94.9	82.9-117.1	1.19	30	
Nickel	67.9	2.0	mg/Kg wet	68.3		99.4	82.1-117.7	1.67	30	
Selenium	162	10	mg/Kg wet	182		89.2	79.7-120.3	0.326	30	
Silver	52.2	1.0	mg/Kg wet	50.1		104	80.2-120	0.908	30	
Thallium	89.0	5.0	mg/Kg wet	87.7		102	81.1-118.6	1.26	30	
Zinc	221	2.0	mg/Kg wet	228		97.1	80.7-118.9	0.953	30	

Reference (B270528-SRM1) MRL Check

Prepared: 11/09/20 Analyzed: 11/10/20

Lead	0.506	0.49	mg/Kg wet	0.494		102	80-120			
------	-------	------	-----------	-------	--	-----	--------	--	--	--



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

QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B270540 - SW-846 7471										
Blank (B270540-BLK1)										
					Prepared: 11/09/20 Analyzed: 11/10/20					
Mercury	ND	0.025	mg/Kg wet							
LCS (B270540-BS1)										
					Prepared: 11/09/20 Analyzed: 11/10/20					
Mercury	12.5	0.76	mg/Kg wet	15.6		80.4	59.3-140.4			
LCS Dup (B270540-BSD1)										
					Prepared: 11/09/20 Analyzed: 11/10/20					
Mercury	13.3	0.76	mg/Kg wet	15.6		85.0	59.3-140.4	5.57	20	

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

LCS

SW-846 8082A

Lab Sample ID: B270671-BS1 Date(s) Analyzed 11/13/2020 11/13/2020

Instrument ID (1): ECD10 Instrument ID (2): ECD10

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.18	
	2	0.000	0.000	0.000	0.20	10.5
Aroclor-1260	1	0.000	0.000	0.000	0.18	
	2	0.000	0.000	0.000	0.18	0.0

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

LCS Dup

SW-846 8082A

Lab Sample ID: B270671-BSD1 Date(s) Analyzed 11/13/2020 11/13/2020

Instrument ID (1): ECD10 Instrument ID (2): ECD10

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.18	
	2	0.000	0.000	0.000	0.20	10.5
Aroclor-1260	1	0.000	0.000	0.000	0.18	
	2	0.000	0.000	0.000	0.18	0.0

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
DL-01	Elevated reporting limits for all volatile compounds due to foaming sample matrix.
L-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.
MS-12	Matrix spike recovery and matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a high bias for reported result or non-homogeneous sample aliquots cannot be eliminated.
R-06	Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.
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.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-20	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.
V-36	Initial calibration verification (ICV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 6010D in Soil	
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
SW-846 7471B in Soil	
Mercury	CT,NH,NY,NC,ME,VA
SW-846 8082A in Soil	
Aroclor-1016	CT,NH,NY,NC,ME,VA,PA
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1221	CT,NH,NY,NC,ME,VA,PA
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1232	CT,NH,NY,NC,ME,VA,PA
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1242	CT,NH,NY,NC,ME,VA,PA
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1248	CT,NH,NY,NC,ME,VA,PA
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1254	CT,NH,NY,NC,ME,VA,PA
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1260	CT,NH,NY,NC,ME,VA,PA
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1262	NH,NY,NC,ME,VA,PA
Aroclor-1262 [2C]	NH,NY,NC,ME,VA,PA
Aroclor-1268	NH,NY,NC,ME,VA,PA
Aroclor-1268 [2C]	NH,NY,NC,ME,VA,PA
SW-846 8082A in Water	
Aroclor-1016	CT,NH,NY,NC,ME,VA,PA
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1221	CT,NH,NY,NC,ME,VA,PA
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1232	CT,NH,NY,NC,ME,VA,PA
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1242	CT,NH,NY,NC,ME,VA,PA
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1248	CT,NH,NY,NC,ME,VA,PA
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1254	CT,NH,NY,NC,ME,VA,PA
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA,PA

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8082A in Water</i>	
Aroclor-1260	CT,NH,NY,NC,ME,VA,PA
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1262	NH,NY,NC,ME,VA,PA
Aroclor-1262 [2C]	NH,NY,NC,ME,VA,PA
Aroclor-1268	NH,NY,NC,ME,VA,PA
Aroclor-1268 [2C]	NH,NY,NC,ME,VA,PA
<i>SW-846 8260C-D in Soil</i>	
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
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

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260C-D in Soil</i>	
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
1,2-Dibromo-3-chloropropane (DBCP)	NY,ME
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
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

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260C-D in Soil</i>	
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,ME,VA
Methyl tert-Butyl Ether (MTBE)	NY,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
n-Propylbenzene	NH,NY,ME
Styrene	CT,NH,NY,ME,VA
Styrene	CT,NH,NY,ME,VA
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

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260C-D in Soil</i>	
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
<i>SW-846 8270D-E in Soil</i>	
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
<i>SW-846 8270D-E in Water</i>	
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



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

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

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

CHAIN-OF-CUSTODY RECORD 37102

20 KORA

PROJECT NAME: PROJECT LOCATION: WOODSOLVET, NJ
 REPORT TO: ALLEN TEVYAW (atevyan@fando.com)
 INVOICE TO:

P.O. No.: 160320161545.810

Sampler's Signature: *Neil Sgan* Date: 10/30/20
 Source Codes: PW=Potable Water T=Treatment Facility S=Soil B=Sediment
 MW=Monitoring Well W=Waste A=Air C=Concrete
 SW=Surface Water
 X=Other TWJIP BLANK

Turnaround

- 24-Hour*
- 48-Hour*
- Standard (_____ days)
- 72-Hour*
- Other _____ (days)

PROJECT NUMBER: 20181545.810

LABORATORY: CON-TEST
 Containers

Analysis Request

DOC BY USEPA METHOD 8660
 TOX by USEPA METHOD 8270
 PCBs by USEPA METHOD 8160
 PCBs by USEPA METHOD 8160
 PCBs by USEPA METHOD 8160

Item No.	Transfer Check	Sample Number	Source Code	Date Sampled	Time Sampled	Soil VOA Val. <input type="checkbox"/> water <input type="checkbox"/> methanol <input type="checkbox"/> Na(SO) ₂	Glass VOA Val. <input type="checkbox"/> Asst. <input type="checkbox"/> HCl	Water VOA Val. <input type="checkbox"/> Asst. <input type="checkbox"/> HCl	Other <input type="checkbox"/> Asst. <input type="checkbox"/> HCl	Other <input type="checkbox"/> Asst. <input type="checkbox"/> HCl	Plastic - H ₂ SO ₄ 250 ml <input type="checkbox"/> H ₂ SO ₄ 500 ml <input type="checkbox"/> H ₂ SO ₄ 1000 ml	Plastic - HNO ₃ 250 ml <input type="checkbox"/> HNO ₃ 500 ml <input type="checkbox"/> HNO ₃ 1000 ml	Plastic - NaOH 250 ml <input type="checkbox"/> NaOH 500 ml <input type="checkbox"/> NaOH 1000 ml	Plastic - H ₂ O 250 ml <input type="checkbox"/> H ₂ O 500 ml <input type="checkbox"/> H ₂ O 1000 ml	Comments
1		1603201030-01	S	10/30/20	1109	X	X	X	X	X	X	X	X		
2		-02			1202	X	X	X	X	X	X	X	X		
3		-03			1239	X	X	X	X	X	X	X	X		
4		-04			1308	X	X	X	X	X	X	X	X		
5		-05			1345	X	X	X	X	X	X	X	X		
6		-06	X		1400	X	X	X	X	X	X	X	X		TWJIP BLANK

Transfer Number	Relinquished By	Accepted By	Date	Time	Change Exceptions: <input type="checkbox"/> CT Tax Exempt <input type="checkbox"/> QA/QC <input type="checkbox"/> Other _____
1	<i>Neil Sgan</i>	<i>FRO FUSOGE</i>	10/30/20	1530	Duplicates: <u>1</u> Blanks (Item Nos: <u>1603201030-06</u>)
2	<i>Neil Sgan</i>	<i>Neil Sgan</i>	11/3/20	1125	Reporting and Detection Limit Requirements: <input type="checkbox"/> RCP Deliverables <input type="checkbox"/> MCP CAM Cert.
3	<i>Neil Sgan</i>	<i>Neil Sgan</i>	11/3/20	1410	Additional Comments:
4					

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 RLF Date 11/1/20 Time 1410

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 - 4.1°C
By Blank # _____ Actual Temp - _____

Was Custody Seal Intact? NA Were Samples Tampered with? NA
Was COC Relinquished? T Does Chain Agree With Samples? T

Are there broken/leaking/loose caps on any samples? F

Is COC in ink/ Legible? 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

Are there Rushes? F

Are there Short Holds? F

Is there enough Volume? T

Is there Headspace where applicable? NA

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 NA

Base NA

Vials	#	Containers:	#	#	#
Unp-		1 Liter Amb.		1 Liter Plastic	16 oz Amb.
HCL-		500 mL Amb.		500 mL Plastic	8oz Amb/Clear
Meoh-	<u>6</u>	250 mL Amb.		250 mL Plastic	4oz Amb/Clear
Bisulfate-	<u>12</u>	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:



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 type="checkbox"/>	_____
2. Traffic Report	<input type="checkbox"/>	<input type="checkbox"/>	_____
3. Volatiles Data			
a. Sample Data			
Target Compound List (TCL) Results	<input type="checkbox"/>	<input type="checkbox"/>	_____
Reconstructed total ion chromatograms (RIC) for each sample	<input type="checkbox"/>	<input type="checkbox"/>	_____
For each sample:			
Raw spectra and background-subtracted mass spectra of target compounds identified	<input type="checkbox"/>	<input type="checkbox"/>	_____
Mass spectra of all reported TICs with three best library matches	<input type="checkbox"/>	<input type="checkbox"/>	_____
Percent solids calculations	<input type="checkbox"/>	<input type="checkbox"/>	_____
b. Standards Data (all instruments)			
Initial Calibration Data	<input type="checkbox"/>	<input type="checkbox"/>	_____
RICs and Quan Reports for all Standards	<input type="checkbox"/>	<input type="checkbox"/>	_____
Continuing Calibration	<input type="checkbox"/>	<input type="checkbox"/>	_____
RICs and Quan Reports for all Standards	<input type="checkbox"/>	<input type="checkbox"/>	_____
Internal Standard Area Summary	<input type="checkbox"/>	<input type="checkbox"/>	_____
c. Raw QC Data			
Blank Data	<input type="checkbox"/>	<input type="checkbox"/>	_____
Matrix Spike Data	<input type="checkbox"/>	<input type="checkbox"/>	_____
Matrix Spike Duplicate Data	<input type="checkbox"/>	<input type="checkbox"/>	_____
4. Semivolatiles Data			
a. QC Summary			
Surrogate Percent Recovery Summary	<input type="checkbox"/>	<input type="checkbox"/>	_____
MS/MSD Summary	<input type="checkbox"/>	<input type="checkbox"/>	_____
Method Blank Summary	<input type="checkbox"/>	<input type="checkbox"/>	_____
Tuning and Mass Calibration	<input 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 type="checkbox"/>	<input type="checkbox"/>	_____
Tentatively Identified Compounds	<input type="checkbox"/>	<input type="checkbox"/>	_____
Reconstructed total ion chromatograms (RIC) for each Sample	<input type="checkbox"/>	<input type="checkbox"/>	_____
For each sample:			
Raw spectra and background-subtracted mass spectra of TCL compounds	<input type="checkbox"/>	<input type="checkbox"/>	_____
Mass spectra of TICs with 3 best library matches	<input type="checkbox"/>	<input type="checkbox"/>	_____
GPC chromatograms (if GPC performed)	<input type="checkbox"/>	<input type="checkbox"/>	_____
c. Standards Data (all instruments)			
Initial Calibration Data	<input type="checkbox"/>	<input type="checkbox"/>	_____
RICs and Quan Reports for all Standards	<input type="checkbox"/>	<input type="checkbox"/>	_____
Continuing Calibration	<input type="checkbox"/>	<input type="checkbox"/>	_____
RICs and Quan Reports for all Standards	<input type="checkbox"/>	<input type="checkbox"/>	_____
Internal Standard Areas Summary	<input type="checkbox"/>	<input type="checkbox"/>	_____
Internal Standard Areas Summary	<input type="checkbox"/>	<input type="checkbox"/>	_____
d. Raw QC Data			
Decafluorotriphenylphosphine (DFTPP)	<input type="checkbox"/>	<input type="checkbox"/>	_____
Blank Data	<input type="checkbox"/>	<input type="checkbox"/>	_____
Matrix Spike Data	<input type="checkbox"/>	<input type="checkbox"/>	_____
Matrix Spike Duplicate Data	<input type="checkbox"/>	<input type="checkbox"/>	_____
5. Miscellaneous Data			
Original preparation and analysis forms or copies of preparation and analysis log book pages	<input type="checkbox"/>	<input type="checkbox"/>	_____
Internal sample & sample extract transfer chain-of custody records	<input type="checkbox"/>	<input type="checkbox"/>	_____
Screening Records	<input type="checkbox"/>	<input type="checkbox"/>	_____
All instrument output, including strip charts from screening activities (describe or list)	<input type="checkbox"/>	<input type="checkbox"/>	_____
<hr/>			
<hr/>			



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 type="checkbox"/>	<input type="checkbox"/>	_____
Sample Log-in Sheet (Lab & DC1)	<input type="checkbox"/>	<input type="checkbox"/>	_____
Miscellaneous Shipping/Receiving Records (describe or list)	<input type="checkbox"/>	<input type="checkbox"/>	_____

7. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)	<input type="checkbox"/>	<input type="checkbox"/>	_____

8. Other Records (describe or list)	<input type="checkbox"/>	<input type="checkbox"/>	_____

9. Comments:			_____

** See laboratory Quality Assurance Plan for limits.

Completed by: _____
(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 type="checkbox"/>	_____
2. Inorganic Analysis Data Sheet	<input type="checkbox"/>	<input type="checkbox"/>	_____
3. Initial and Continuing Calibration Verification	<input type="checkbox"/>	<input type="checkbox"/>	_____
4. CRDL Standard for AA and ICP	<input type="checkbox"/>	<input type="checkbox"/>	_____
5. Blanks	<input type="checkbox"/>	<input type="checkbox"/>	_____
6. ICP Interference Check Sample	<input type="checkbox"/>	<input type="checkbox"/>	_____
7. Spike Sample Recovery	<input type="checkbox"/>	<input type="checkbox"/>	_____
8. Post Digest Spike Sample Recovery	<input type="checkbox"/>	<input type="checkbox"/>	_____
9. Duplicates	<input type="checkbox"/>	<input type="checkbox"/>	_____
10. Laboratory Control Sample	<input type="checkbox"/>	<input type="checkbox"/>	_____
11. Standard Addition Results	<input type="checkbox"/>	<input type="checkbox"/>	_____
12. ICP Serial Dilutions	<input type="checkbox"/>	<input type="checkbox"/>	_____
13. Instrument Detection Limits, Quarterly	<input type="checkbox"/>	<input type="checkbox"/>	_____
14. ICP Interelement Correction Factors, Annually	<input type="checkbox"/>	<input type="checkbox"/>	_____
15. ICP Linear Ranges Quarterly	<input type="checkbox"/>	<input type="checkbox"/>	_____
16. Preparation Log	<input type="checkbox"/>	<input type="checkbox"/>	_____
17. Analysis Run Log	<input type="checkbox"/>	<input type="checkbox"/>	_____
18. ICP Raw Data	<input type="checkbox"/>	<input type="checkbox"/>	_____
19. Furnace AA Raw Data	<input type="checkbox"/>	<input type="checkbox"/>	_____
20. Mercury Raw Data	<input type="checkbox"/>	<input type="checkbox"/>	_____
21. Percent Solids Calculations	<input type="checkbox"/>	<input type="checkbox"/>	_____
22. Digestion Logs	<input type="checkbox"/>	<input type="checkbox"/>	_____
23. EPA Shipping/Receiving Records			
(List all individual records)	<input type="checkbox"/>	<input type="checkbox"/>	_____
Chain-of Custody Records	<input type="checkbox"/>	<input type="checkbox"/>	_____
Sample Log-In sheet	<input type="checkbox"/>	<input type="checkbox"/>	_____
24. Miscellaneous Shipping/Receiving Records	<input type="checkbox"/>	<input type="checkbox"/>	_____
(List all individual records)			

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 type="checkbox"/>	<input type="checkbox"/>	_____
	Preparation Records	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Analysis Records	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Description	<input type="checkbox"/>	<input type="checkbox"/>	_____
27.	Other Records (Describe or List) _____ _____			
28.	Comments: _____ _____			

** See laboratory Quality Assurance Plan for limits.

Completed by: _____
 (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
 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 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 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 type="checkbox"/>	<input 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 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"/>	_____
Mass spectra of TICs with 3 best library matches	<input type="checkbox"/>	<input type="checkbox"/>	NA _____
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 type="checkbox"/>	<input type="checkbox"/>	NA _____
Matrix Spike Duplicate Data	<input type="checkbox"/>	<input 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 type="checkbox"/>	NA _____
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"/>	_____
			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"/>	<u>NA</u>

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 type="checkbox"/>	<u>NA</u>

9. Comments:	_____		

** See laboratory Quality Assurance Plan for limits.

Completed by: [Signature]
(Lab) (Signature)

Dore-Dambrosian Director & Ops
(Printed Name/Title)

11-12-2020
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"/>	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 type="checkbox"/>	<input type="checkbox"/>	NA
8. Post Digest Spike Sample Recovery	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
9. Duplicates	<input type="checkbox"/>	<input type="checkbox"/>	NA
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 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? ****

YES NO COMMENTS

- | | | | | |
|-------|--|-------------------------------------|--------------------------|-------|
| 25. | Internal Lab Sample Transfer Records and Tracking Sheets
(Describe or List) | | | |
| <hr/> | | | | |
| 26. | Internal Original Sample Preparation and analysis Records
(Describe or List | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <hr/> |
| | Preparation Records | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <hr/> |
| | Analysis Records | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <hr/> |
| | Description | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <hr/> |
| 27. | Other Records (Describe or List) | | | <hr/> |
| <hr/> | | | | |
| 28. | Comments: | | | <hr/> |
| <hr/> | | | | |

** See laboratory Quality Assurance Plan for limits.

Completed by: (Lab)		<u>Daren Dambaryian Direct. Ops</u> (Printed Name/Title)	<u>11-12-2020</u> 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
------------------------	-------------	----------------------	------

December 4, 2020

Allen Tevyaw
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: 20K1407

Enclosed are results of analyses for samples received by the laboratory on November 30, 2020. 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
20K1407-01	5
Sample Preparation Information	7
QC Data	8
TCLP - Metals Analyses	8
B271983	8
Flag/Qualifier Summary	9
Certifications	10
Chain of Custody/Sample Receipt	11

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: Allen Tevyaw

REPORT DATE: 12/4/2020

PURCHASE ORDER NUMBER: 160320181545.B10

PROJECT NUMBER: 20181545.B10

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 20K1407

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

PROJECT LOCATION: Woonsocket, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
1603201030-05	20K1407-01	Soil		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 the Con-Test Analytical Laboratory for testing.

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

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

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: 20K1407

Date Received: 11/30/2020

Field Sample #: 1603201030-05

Sampled: 10/30/2020 13:45

Sample ID: 20K1407-01

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	78.6		% Wt	1		SM 2540G	12/1/20	12/1/20 9:13	CJT

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

Project Location: Woonsocket, RI

Sample Description:

Work Order: 20K1407

Date Received: 11/30/2020

Field Sample #: 1603201030-05

Sampled: 10/30/2020 13:45

Sample ID: 20K1407-01

Sample Matrix: Soil

TCLP - Metals Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Cadmium	0.11	0.010	mg/L	1		SW-846 6010D	12/2/20	12/2/20 19:53	AJL
Chromium	ND	0.050	mg/L	1		SW-846 6010D	12/2/20	12/2/20 19:53	AJL
Lead	ND	0.10	mg/L	1		SW-846 6010D	12/2/20	12/2/20 19:53	AJL

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
20K1407-01 [1603201030-05]	B271864	12/01/20

Prep Method: SW-846 3010A Analytical Method: SW-846 60100 ~~100~~ batches were extracted on 12/1/2020 per SW-846 1311 in Batch B271898

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20K1407-01 [1603201030-05]	B271983	50.0	50.0	12/02/20

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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B271983 - SW-846 3010A

Blank (B271983-BLK1)

Prepared & Analyzed: 12/02/20

Cadmium	ND	0.010	mg/L							
Chromium	ND	0.050	mg/L							
Lead	ND	0.10	mg/L							

LCS (B271983-BS1)

Prepared & Analyzed: 12/02/20

Cadmium	0.530	0.010	mg/L	0.500		106	80-120			
Chromium	0.494	0.050	mg/L	0.500		98.7	80-120			
Lead	0.490	0.10	mg/L	0.500		98.0	80-120			

LCS Dup (B271983-BSD1)

Prepared & Analyzed: 12/02/20

Cadmium	0.522	0.010	mg/L	0.500		104	80-120	1.57	20	
Chromium	0.489	0.050	mg/L	0.500		97.8	80-120	0.957	20	
Lead	0.486	0.10	mg/L	0.500		97.2	80-120	0.778	20	

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

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.

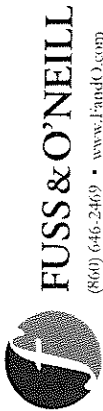
CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 6010D in Water</i>	
Cadmium	NY,CT,ME,NC,NH,VA
Chromium	NY,CT,ME,NC,NH,VA
Lead	NY,CT,ME,NC,NH,VA

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

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

CHAIN-OF-CUSTODY RECORD

37102

Turnaround

24-Hour* 72-Hour* Other _____ (days)
 48-Hour* Standard (____ days) *Surbarge Applies

PROJECT NAME: PROJECT LOCATION: PROJECT NUMBER: 20181545.810

20 MIVILLE ST. WOONSUCKET, RI

REPORT TO: ALLEN TEVYAW (atevyan@fandO.com)

INVOICE TO:

P.O. No.: 160320161545.810

Sampler's Signature: *Neil Szym* Date: 10/30/20

Source Codes: PW=Potable Water T=Treatment Facility S=Soil B=Sediment
 MW=Monitoring Well W=Waste A=Air C=Concrete
 SW=Surface Water

X=Other TWJL BLANK

Analysis Request	Soil VOA Val. (methanol)	Soil VOA Val. (water)	Other (k) or (Na2SO4)	Other (k) or (Na2SO4)	Water VOA Val. (Asst)	Water VOA Val. (Asst)	Water VOA Val. (Asst)	Plastic - Asst. (ml)	Plastic - H2SO4 (250 ml)	Plastic - HNO3 (250 ml)	Plastic - NaOH (250 ml)	Plastic - H2SO4 (500 ml)	Plastic - HNO3 (500 ml)	Plastic - NaOH (500 ml)	Plastic - H2SO4 (1000 ml)	Plastic - HNO3 (1000 ml)	Plastic - NaOH (1000 ml)	Comments
DOC by USEPA METHOD 8660	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	7WJL BLANK
Priority OASPLANT 13 METALS by USEPA METHOD 8270	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
PCBS by USEPA METHOD 8100	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
PCBS by USEPA METHOD 8100	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
PCBS by USEPA METHOD 8100	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
PCBS by USEPA METHOD 8100	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
PCBS by USEPA METHOD 8100	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

DOC by USEPA METHOD 8660
 Priority OASPLANT 13 METALS by USEPA METHOD 8270
 PCBS by USEPA METHOD 8100
 PCBS by USEPA METHOD 8100
 PCBS by USEPA METHOD 8100
 PCBS by USEPA METHOD 8100

Item No.	Transfer Check	Sample Number	Source Code	Date Sampled	Time Sampled
1		1603201030 - 01	S	10/30/20	1109
2		- 02			1202
3		- 03			1239
4		- 04			1308
5	01	- 05			1345
6		- 06	X		1400

reactivation for TCLP Pb, Cd, Cr JLH
 11/30/2020

Transfer Number	Relinquished By	Accepted By	Date	Time	Change Exceptions:
1	<i>Neil Szym</i>	<i>Fro FUSOGE</i>	10/30/20	1530	<input type="checkbox"/> CT Tax Exempt <input type="checkbox"/> QA/QC <input type="checkbox"/> Other _____ Duplicates: 1 Blanks (Item Nos): 1603201030-06
2	<i>Neil Szym</i>	<i>Fro FUSOGE</i>	11/3/20	1125	Reporting and Detection Limit Requirements: <input type="checkbox"/> RCP Deliverables <input type="checkbox"/> MCP/CAM Cert.
3	<i>Neil Szym</i>	<i>Fro FUSOGE</i>	11/3/20	1410	Additional Comments:
4					

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 RLF Date 11/1/20 Time 1410

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 - 4.1°C
By Blank # _____ Actual Temp - _____

Was Custody Seal Intact? NA Were Samples Tampered with? NA
Was COC Relinquished? T Does Chain Agree With Samples? T

Are there broken/leaking/loose caps on any samples? F

Is COC in ink/ Legible? 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? NA 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 NA Base NA

Vials	#	Containers:	#	#	#
Unp-		1 Liter Amb.		1 Liter Plastic	16 oz Amb.
HCL-		500 mL Amb.		500 mL Plastic	8oz Amb/Clear
Meoh-	<u>6</u>	250 mL Amb.		250 mL Plastic	4oz Amb/Clear
Bisulfate-	<u>12</u>	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:

**GENERIC QUALITY ASSURANCE PROJECT PLAN
 FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND
 MODIFIED TIER I COMPLETENESS CHECKLIST**

	<u>YES</u>	<u>NO</u>	
1. SAMPLING AND FIELD MEASUREMENTS:			
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 type="checkbox"/>	<input type="checkbox"/>	N/A
Equipment blanks	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Split samples (if any)	<input type="checkbox"/>	<input type="checkbox"/>	N/A
2. LABORATORY MEASUREMENTS:			
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 type="checkbox"/>	<input type="checkbox"/>	N/A
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: 12 ----

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>
1. SAMPLING AND FIELD MEASUREMENTS:			
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 G

Groundwater Laboratory Analytical Reports



**Modified Tier II
Data Validation Narrative**

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

Con-Test Analytical Laboratory Project Number:	20K0145/20K0146
Date Samples Received at Laboratory:	November 4, 2020
Date of Review:	December 7, 2020

Six 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
- Total Petroleum Hydrocarbons (TPH) via USEPA Method 8100
- Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS) by ASTM D7979-17

In addition, one laboratory-supplied trip blank was submitted for analysis of VOC by USEPA Method 8260. One laboratory-supplied field blank was submitted for analysis of PFAS by ASTM D7979-17. 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 2.9 and 4.0 degrees Celsius. All samples were analyzed within the method-specific holding times.

No case narrative summary was included in the analytical report 20K0146 for the PFAS analysis. As documented in the case narrative summary included in the analytical report 20K0145, the following non-conformances were identified during analysis of these samples:

- The matrix spike and spike duplicate recovery is outside of control limits for 1,4-Dioxane for sample 1603201103-01. Analysis is in control based on laboratory fortified blank recovery. The possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.
- Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for acetone.
- Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side for bromomethane, chloromethane and methyl acetate. Data validation is not affected since sample result was “not detected” for this compound.
- TPH was quantitated against a calibration made with a diesel standard.

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.

No non-conformances were identified during PFAS or TPH analysis.



Analytical results for the groundwater samples were compared to the Method 1 GA and 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.

November 11, 2020

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

Project Location: 20 Privilege St, Woonsocket, RI
Client Job Number:
Project Number: 20181545.B10
Laboratory Work Order Number: 20K0145

Enclosed are results of analyses for samples received by the laboratory on November 4, 2020. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Jessica Hoffman". The signature is written in a cursive style with a large, sweeping initial "J".

Jessica L. Hoffman
Project Manager

Table of Contents

Sample Summary	3
Case Narrative	4
Sample Results	5
20K0145-01	5
20K0145-02	8
20K0145-03	11
20K0145-04	14
20K0145-05	17
20K0145-06	20
20K0145-07	23
20K0145-08	26
Sample Preparation Information	28
QC Data	29
Volatile Organic Compounds by GC/MS	29
B270273	29
Petroleum Hydrocarbons Analyses	37
B270294	37
Flag/Qualifier Summary	38
Certifications	39
Chain of Custody/Sample Receipt	42



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: Allen Tevyaw

REPORT DATE: 11/11/2020

PURCHASE ORDER NUMBER: 160320181545.B10

PROJECT NUMBER: 20181545.B10

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 20K0145

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

PROJECT LOCATION: 20 Privilege St, Woonsocket, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
1603201103-01	20K0145-01	Ground Water	MW-3	SW-846 8100 Modified SW-846 8260C-D	
1603201103-02	20K0145-02	Ground Water	MW-5	SW-846 8100 Modified SW-846 8260C-D	
1603201103-03	20K0145-03	Ground Water	MW-6	SW-846 8100 Modified SW-846 8260C-D	
1603201103-04	20K0145-04	Ground Water	MW-6	SW-846 8100 Modified SW-846 8260C-D	
1603201103-05	20K0145-05	Ground Water	MW-9	SW-846 8100 Modified SW-846 8260C-D	
1603201103-06	20K0145-06	Ground Water	MW-4	SW-846 8100 Modified SW-846 8260C-D	
1603201103-07	20K0145-07	Ground Water	MW-8	SW-846 8100 Modified SW-846 8260C-D	
1603201103-08	20K0145-08	Trip Blank Water	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.

SW-846 8260C-D

Qualifications:

MS-07A

Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery.

Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.

Analyte & Samples(s) Qualified:

1,4-Dioxane

20K0145-01[1603201103-01], B270273-MS1, B270273-MSD1

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:

Acetone

20K0145-01[1603201103-01], 20K0145-02[1603201103-02], 20K0145-03[1603201103-03], 20K0145-04[1603201103-04], 20K0145-05[1603201103-05], 20K0145-06[1603201103-06], 20K0145-07[1603201103-07], 20K0145-08[1603201103-08], B270273-BLK1, B270273-BS1, B270273-BSD1, B270273-MS1, B270273-MSD1, S054143-CCV1

V-20

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

Analyte & Samples(s) Qualified:

Bromomethane

B270273-BS1, B270273-BSD1, B270273-MS1, B270273-MSD1, S054143-CCV1

Chloromethane

B270273-BS1, B270273-BSD1, B270273-MS1, B270273-MSD1, S054143-CCV1

Methyl Acetate

B270273-BS1, B270273-BSD1, B270273-MS1, B270273-MSD1, S054143-CCV1

SW-846 8100 Modified

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

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

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



Lisa A. Worthington
Technical Representative



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description: MW-3

Work Order: 20K0145

Date Received: 11/4/2020

Field Sample #: 1603201103-01

Sampled: 11/3/2020 11:36

Sample ID: 20K0145-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1	V-05	SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description: MW-3

Work Order: 20K0145

Date Received: 11/4/2020

Field Sample #: 1603201103-01

Sampled: 11/3/2020 11:36

Sample ID: 20K0145-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
1,4-Dioxane	ND	50	µg/L	1	MS-07A	SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:11	EEH
Surrogates		% Recovery		Recovery Limits		Flag/Qual			
1,2-Dichloroethane-d4		93.0		70-130				11/5/20 15:11	
Toluene-d8		103		70-130				11/5/20 15:11	
4-Bromofluorobenzene		100		70-130				11/5/20 15:11	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description: MW-3

Work Order: 20K0145

Date Received: 11/4/2020

Field Sample #: 1603201103-01

Sampled: 11/3/2020 11:36

Sample ID: 20K0145-01

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	ND	0.18	mg/L	1		SW-846 8100 Modified	11/5/20	11/10/20 13:04	RDD
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
2-Fluorobiphenyl	88.3		40-140					11/10/20 13:04	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description: MW-5

Work Order: 20K0145

Date Received: 11/4/2020

Field Sample #: 1603201103-02

Sampled: 11/3/2020 12:41

Sample ID: 20K0145-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1	V-05	SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description: MW-5

Work Order: 20K0145

Date Received: 11/4/2020

Field Sample #: 1603201103-02

Sampled: 11/3/2020 12:41

Sample ID: 20K0145-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 15:37	EEH
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		96.6	70-130					11/5/20 15:37	
Toluene-d8		100	70-130					11/5/20 15:37	
4-Bromofluorobenzene		102	70-130					11/5/20 15:37	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description: MW-5

Work Order: 20K0145

Date Received: 11/4/2020

Field Sample #: 1603201103-02

Sampled: 11/3/2020 12:41

Sample ID: 20K0145-02

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	ND	0.20	mg/L	1		SW-846 8100 Modified	11/5/20	11/9/20 16:42	RDD
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
2-Fluorobiphenyl	109		40-140					11/9/20 16:42	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description: MW-6

Work Order: 20K0145

Date Received: 11/4/2020

Field Sample #: 1603201103-03

Sampled: 11/3/2020 13:38

Sample ID: 20K0145-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1	V-05	SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description: MW-6

Work Order: 20K0145

Date Received: 11/4/2020

Field Sample #: 1603201103-03

Sampled: 11/3/2020 13:38

Sample ID: 20K0145-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:04	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	97.1	70-130						11/5/20 16:04	
Toluene-d8	99.2	70-130						11/5/20 16:04	
4-Bromofluorobenzene	102	70-130						11/5/20 16:04	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description: MW-6

Work Order: 20K0145

Date Received: 11/4/2020

Field Sample #: 1603201103-03

Sampled: 11/3/2020 13:38

Sample ID: 20K0145-03

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	ND	0.20	mg/L	1		SW-846 8100 Modified	11/5/20	11/9/20 18:25	RDD
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
2-Fluorobiphenyl	107		40-140		11/9/20 18:25				



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description: MW-6

Work Order: 20K0145

Date Received: 11/4/2020

Field Sample #: 1603201103-04

Sampled: 11/3/2020 13:42

Sample ID: 20K0145-04

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1	V-05	SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description: MW-6

Work Order: 20K0145

Date Received: 11/4/2020

Field Sample #: 1603201103-04

Sampled: 11/3/2020 13:42

Sample ID: 20K0145-04

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:30	EEH
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		98.9	70-130					11/5/20 16:30	
Toluene-d8		104	70-130					11/5/20 16:30	
4-Bromofluorobenzene		99.4	70-130					11/5/20 16:30	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description: MW-6

Work Order: 20K0145

Date Received: 11/4/2020

Field Sample #: 1603201103-04

Sampled: 11/3/2020 13:42

Sample ID: 20K0145-04

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	ND	0.20	mg/L	1		SW-846 8100 Modified	11/5/20	11/9/20 17:03	RDD
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
2-Fluorobiphenyl	85.6		40-140					11/9/20 17:03	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description: MW-9

Work Order: 20K0145

Date Received: 11/4/2020

Field Sample #: 1603201103-05

Sampled: 11/3/2020 14:52

Sample ID: 20K0145-05

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1	V-05	SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description: MW-9

Work Order: 20K0145

Date Received: 11/4/2020

Field Sample #: 1603201103-05

Sampled: 11/3/2020 14:52

Sample ID: 20K0145-05

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 16:56	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	100	70-130						11/5/20 16:56	
Toluene-d8	99.7	70-130						11/5/20 16:56	
4-Bromofluorobenzene	100	70-130						11/5/20 16:56	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description: MW-9

Work Order: 20K0145

Date Received: 11/4/2020

Field Sample #: 1603201103-05

Sampled: 11/3/2020 14:52

Sample ID: 20K0145-05

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	ND	0.20	mg/L	1		SW-846 8100 Modified	11/5/20	11/9/20 18:05	RDD
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
2-Fluorobiphenyl	107		40-140					11/9/20 18:05	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description: MW-4

Work Order: 20K0145

Date Received: 11/4/2020

Field Sample #: 1603201103-06

Sampled: 11/3/2020 15:52

Sample ID: 20K0145-06

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1	V-05	SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description: MW-4

Work Order: 20K0145

Date Received: 11/4/2020

Field Sample #: 1603201103-06

Sampled: 11/3/2020 15:52

Sample ID: 20K0145-06

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:22	EEH
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		94.0	70-130					11/5/20 17:22	
Toluene-d8		98.4	70-130					11/5/20 17:22	
4-Bromofluorobenzene		98.2	70-130					11/5/20 17:22	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description: MW-4

Work Order: 20K0145

Date Received: 11/4/2020

Field Sample #: 1603201103-06

Sampled: 11/3/2020 15:52

Sample ID: 20K0145-06

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	ND	0.21	mg/L	1		SW-846 8100 Modified	11/5/20	11/9/20 17:44	RDD
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
2-Fluorobiphenyl	96.0		40-140					11/9/20 17:44	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description: MW-8

Work Order: 20K0145

Date Received: 11/4/2020

Field Sample #: 1603201103-07

Sampled: 11/3/2020 11:40

Sample ID: 20K0145-07

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1	V-05	SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description: MW-8

Work Order: 20K0145

Date Received: 11/4/2020

Field Sample #: 1603201103-07

Sampled: 11/3/2020 11:40

Sample ID: 20K0145-07

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 17:48	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	95.5	70-130						11/5/20 17:48	
Toluene-d8	98.9	70-130						11/5/20 17:48	
4-Bromofluorobenzene	98.3	70-130						11/5/20 17:48	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description: MW-8

Work Order: 20K0145

Date Received: 11/4/2020

Field Sample #: 1603201103-07

Sampled: 11/3/2020 11:40

Sample ID: 20K0145-07

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	ND	0.21	mg/L	1		SW-846 8100 Modified	11/5/20	11/10/20 13:25	RDD
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
2-Fluorobiphenyl	93.1		40-140					11/10/20 13:25	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description: Trip Blank

Work Order: 20K0145

Date Received: 11/4/2020

Field Sample #: 1603201103-08

Sampled: 11/3/2020 17:00

Sample ID: 20K0145-08

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1	V-05	SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description: Trip Blank

Work Order: 20K0145

Date Received: 11/4/2020

Field Sample #: 1603201103-08

Sampled: 11/3/2020 17:00

Sample ID: 20K0145-08

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C-D	11/5/20	11/5/20 13:52	EEH
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		94.6	70-130					11/5/20 13:52	
Toluene-d8		99.2	70-130					11/5/20 13:52	
4-Bromofluorobenzene		106	70-130					11/5/20 13:52	

Sample Extraction Data

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20K0145-01 [1603201103-01]	B270294	980	0.900	11/05/20
20K0145-02 [1603201103-02]	B270294	980	1.00	11/05/20
20K0145-03 [1603201103-03]	B270294	980	1.00	11/05/20
20K0145-04 [1603201103-04]	B270294	980	1.00	11/05/20
20K0145-05 [1603201103-05]	B270294	990	1.00	11/05/20
20K0145-06 [1603201103-06]	B270294	970	1.00	11/05/20
20K0145-07 [1603201103-07]	B270294	970	1.00	11/05/20

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20K0145-01 [1603201103-01]	B270273	5	5.00	11/05/20
20K0145-02 [1603201103-02]	B270273	5	5.00	11/05/20
20K0145-03 [1603201103-03]	B270273	5	5.00	11/05/20
20K0145-04 [1603201103-04]	B270273	5	5.00	11/05/20
20K0145-05 [1603201103-05]	B270273	5	5.00	11/05/20
20K0145-06 [1603201103-06]	B270273	5	5.00	11/05/20
20K0145-07 [1603201103-07]	B270273	5	5.00	11/05/20
20K0145-08 [1603201103-08]	B270273	5	5.00	11/05/20

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 B270273 - SW-846 5030B

Blank (B270273-BLK1)

Prepared & Analyzed: 11/05/20

Acetone	ND	50	µg/L							V-05
Acrylonitrile	ND	5.0	µg/L							
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L							
Benzene	ND	1.0	µg/L							
Bromobenzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	0.50	µg/L							
Bromoform	ND	1.0	µg/L							
Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	20	µg/L							
tert-Butyl Alcohol (TBA)	ND	20	µg/L							
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							

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 B270273 - SW-846 5030B

Blank (B270273-BLK1)

Prepared & Analyzed: 11/05/20

Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methyl Cyclohexane	ND	1.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Naphthalene	ND	2.0	µg/L							
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Tetrahydrofuran	ND	10	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							
1,2,4-Trichlorobenzene	ND	1.0	µg/L							
1,3,5-Trichlorobenzene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							
1,2,3-Trichloropropane	ND	2.0	µg/L							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
1,3,5-Trimethylbenzene	ND	1.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	23.7		µg/L	25.0		94.9	70-130			
Surrogate: Toluene-d8	25.2		µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	25.2		µg/L	25.0		101	70-130			

LCS (B270273-BS1)

Prepared & Analyzed: 11/05/20

Acetone	168	50	µg/L	200		83.9	70-160			V-05 †
Acrylonitrile	17.8	5.0	µg/L	20.0		88.8	70-130			
tert-Amyl Methyl Ether (TAME)	18.2	0.50	µg/L	20.0		91.1	70-130			
Benzene	20.4	1.0	µg/L	20.0		102	70-130			
Bromobenzene	20.6	1.0	µg/L	20.0		103	70-130			
Bromochloromethane	21.2	1.0	µg/L	20.0		106	70-130			
Bromodichloromethane	20.7	0.50	µg/L	20.0		104	70-130			
Bromoform	20.6	1.0	µg/L	20.0		103	70-130			
Bromomethane	16.3	2.0	µg/L	20.0		81.4	40-160			V-20 †
2-Butanone (MEK)	173	20	µg/L	200		86.3	40-160			†
tert-Butyl Alcohol (TBA)	153	20	µg/L	200		76.7	40-160			†
n-Butylbenzene	21.1	1.0	µg/L	20.0		105	70-130			
sec-Butylbenzene	21.8	1.0	µg/L	20.0		109	70-130			
tert-Butylbenzene	21.7	1.0	µg/L	20.0		108	70-130			
tert-Butyl Ethyl Ether (TBEE)	18.2	0.50	µg/L	20.0		90.8	70-130			
Carbon Disulfide	21.8	5.0	µg/L	20.0		109	70-130			
Carbon Tetrachloride	19.6	5.0	µg/L	20.0		98.2	70-130			
Chlorobenzene	21.8	1.0	µg/L	20.0		109	70-130			
Chlorodibromomethane	20.2	0.50	µg/L	20.0		101	70-130			
Chloroethane	21.8	2.0	µg/L	20.0		109	70-130			
Chloroform	20.0	2.0	µg/L	20.0		100	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 B270273 - SW-846 5030B										
LCS (B270273-BS1)										
Prepared & Analyzed: 11/05/20										
Chloromethane	20.4	2.0	µg/L	20.0		102	40-160			V-20 †
2-Chlorotoluene	21.2	1.0	µg/L	20.0		106	70-130			
4-Chlorotoluene	21.1	1.0	µg/L	20.0		105	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	19.6	5.0	µg/L	20.0		98.1	70-130			
1,2-Dibromoethane (EDB)	20.6	0.50	µg/L	20.0		103	70-130			
Dibromomethane	20.6	1.0	µg/L	20.0		103	70-130			
1,2-Dichlorobenzene	21.3	1.0	µg/L	20.0		107	70-130			
1,3-Dichlorobenzene	22.0	1.0	µg/L	20.0		110	70-130			
1,4-Dichlorobenzene	20.8	1.0	µg/L	20.0		104	70-130			
trans-1,4-Dichloro-2-butene	21.2	2.0	µg/L	20.0		106	70-130			
Dichlorodifluoromethane (Freon 12)	21.6	2.0	µg/L	20.0		108	40-160			†
1,1-Dichloroethane	20.6	1.0	µg/L	20.0		103	70-130			
1,2-Dichloroethane	19.3	1.0	µg/L	20.0		96.7	70-130			
1,1-Dichloroethylene	21.2	1.0	µg/L	20.0		106	70-130			
cis-1,2-Dichloroethylene	21.6	1.0	µg/L	20.0		108	70-130			
trans-1,2-Dichloroethylene	20.0	1.0	µg/L	20.0		99.9	70-130			
1,2-Dichloropropane	21.0	1.0	µg/L	20.0		105	70-130			
1,3-Dichloropropane	19.8	0.50	µg/L	20.0		99.0	70-130			
2,2-Dichloropropane	19.7	1.0	µg/L	20.0		98.6	40-130			†
1,1-Dichloropropene	19.4	2.0	µg/L	20.0		97.2	70-130			
cis-1,3-Dichloropropene	20.5	0.50	µg/L	20.0		103	70-130			
trans-1,3-Dichloropropene	20.3	0.50	µg/L	20.0		101	70-130			
Diethyl Ether	21.0	2.0	µg/L	20.0		105	70-130			
Diisopropyl Ether (DIPE)	20.6	0.50	µg/L	20.0		103	70-130			
1,4-Dioxane	171	50	µg/L	200		85.4	40-130			†
Ethylbenzene	21.2	1.0	µg/L	20.0		106	70-130			
Hexachlorobutadiene	22.0	0.60	µg/L	20.0		110	70-130			
2-Hexanone (MBK)	171	10	µg/L	200		85.5	70-160			†
Isopropylbenzene (Cumene)	22.2	1.0	µg/L	20.0		111	70-130			
p-Isopropyltoluene (p-Cymene)	21.2	1.0	µg/L	20.0		106	70-130			
Methyl Acetate	19.0	1.0	µg/L	20.0		94.8	70-130			V-20
Methyl tert-Butyl Ether (MTBE)	18.9	1.0	µg/L	20.0		94.6	70-130			
Methyl Cyclohexane	21.9	1.0	µg/L	20.0		109	70-130			
Methylene Chloride	19.7	5.0	µg/L	20.0		98.6	70-130			
4-Methyl-2-pentanone (MIBK)	175	10	µg/L	200		87.5	70-160			†
Naphthalene	19.2	2.0	µg/L	20.0		95.8	40-130			†
n-Propylbenzene	21.4	1.0	µg/L	20.0		107	70-130			
Styrene	21.6	1.0	µg/L	20.0		108	70-130			
1,1,1,2-Tetrachloroethane	22.1	1.0	µg/L	20.0		110	70-130			
1,1,1,2,2-Tetrachloroethane	21.2	0.50	µg/L	20.0		106	70-130			
Tetrachloroethylene	21.8	1.0	µg/L	20.0		109	70-130			
Tetrahydrofuran	19.4	10	µg/L	20.0		96.8	70-130			
Toluene	21.4	1.0	µg/L	20.0		107	70-130			
1,2,3-Trichlorobenzene	19.6	5.0	µg/L	20.0		98.2	70-130			
1,2,4-Trichlorobenzene	21.2	1.0	µg/L	20.0		106	70-130			
1,3,5-Trichlorobenzene	20.9	1.0	µg/L	20.0		105	70-130			
1,1,1-Trichloroethane	19.7	1.0	µg/L	20.0		98.4	70-130			
1,1,2-Trichloroethane	21.1	1.0	µg/L	20.0		105	70-130			
Trichloroethylene	21.6	1.0	µg/L	20.0		108	70-130			
Trichlorofluoromethane (Freon 11)	19.2	2.0	µg/L	20.0		96.1	70-130			
1,2,3-Trichloropropane	18.2	2.0	µg/L	20.0		91.2	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 B270273 - SW-846 5030B

LCS (B270273-BS1)

Prepared & Analyzed: 11/05/20

1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	22.5	1.0	µg/L	20.0		113	70-130			
1,2,4-Trimethylbenzene	21.3	1.0	µg/L	20.0		106	70-130			
1,3,5-Trimethylbenzene	21.0	1.0	µg/L	20.0		105	70-130			
Vinyl Chloride	21.2	2.0	µg/L	20.0		106	40-160			†
m+p Xylene	42.0	2.0	µg/L	40.0		105	70-130			
o-Xylene	21.3	1.0	µg/L	20.0		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	24.0		µg/L	25.0		96.0	70-130			
Surrogate: Toluene-d8	25.3		µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	25.8		µg/L	25.0		103	70-130			

LCS Dup (B270273-BSD1)

Prepared & Analyzed: 11/05/20

Acetone	159	50	µg/L	200		79.5	70-160	5.35	25	V-05	†
Acrylonitrile	16.9	5.0	µg/L	20.0		84.6	70-130	4.96	25		
tert-Amyl Methyl Ether (TAME)	17.7	0.50	µg/L	20.0		88.4	70-130	3.06	25		
Benzene	20.2	1.0	µg/L	20.0		101	70-130	1.04	25		
Bromobenzene	20.1	1.0	µg/L	20.0		100	70-130	2.56	25		
Bromochloromethane	20.8	1.0	µg/L	20.0		104	70-130	1.86	25		
Bromodichloromethane	20.8	0.50	µg/L	20.0		104	70-130	0.241	25		
Bromoform	20.4	1.0	µg/L	20.0		102	70-130	0.634	25		
Bromomethane	17.8	2.0	µg/L	20.0		88.8	40-160	8.76	25	V-20	†
2-Butanone (MEK)	163	20	µg/L	200		81.3	40-160	5.93	25		†
tert-Butyl Alcohol (TBA)	147	20	µg/L	200		73.7	40-160	3.98	25		†
n-Butylbenzene	20.8	1.0	µg/L	20.0		104	70-130	1.34	25		
sec-Butylbenzene	21.7	1.0	µg/L	20.0		108	70-130	0.873	25		
tert-Butylbenzene	20.8	1.0	µg/L	20.0		104	70-130	4.43	25		
tert-Butyl Ethyl Ether (TBEE)	17.7	0.50	µg/L	20.0		88.5	70-130	2.62	25		
Carbon Disulfide	20.1	5.0	µg/L	20.0		100	70-130	7.98	25		
Carbon Tetrachloride	18.8	5.0	µg/L	20.0		94.0	70-130	4.32	25		
Chlorobenzene	21.5	1.0	µg/L	20.0		108	70-130	1.61	25		
Chlorodibromomethane	19.9	0.50	µg/L	20.0		99.3	70-130	1.75	25		
Chloroethane	20.2	2.0	µg/L	20.0		101	70-130	8.00	25		
Chloroform	19.2	2.0	µg/L	20.0		96.2	70-130	4.02	25		
Chloromethane	20.1	2.0	µg/L	20.0		100	40-160	1.78	25	V-20	†
2-Chlorotoluene	20.8	1.0	µg/L	20.0		104	70-130	2.14	25		
4-Chlorotoluene	21.0	1.0	µg/L	20.0		105	70-130	0.190	25		
1,2-Dibromo-3-chloropropane (DBCP)	18.8	5.0	µg/L	20.0		93.8	70-130	4.53	25		
1,2-Dibromoethane (EDB)	20.4	0.50	µg/L	20.0		102	70-130	1.22	25		
Dibromomethane	20.2	1.0	µg/L	20.0		101	70-130	2.06	25		
1,2-Dichlorobenzene	21.4	1.0	µg/L	20.0		107	70-130	0.327	25		
1,3-Dichlorobenzene	22.5	1.0	µg/L	20.0		113	70-130	2.24	25		
1,4-Dichlorobenzene	21.2	1.0	µg/L	20.0		106	70-130	1.76	25		
trans-1,4-Dichloro-2-butene	20.1	2.0	µg/L	20.0		101	70-130	5.41	25		
Dichlorodifluoromethane (Freon 12)	20.8	2.0	µg/L	20.0		104	40-160	3.78	25		†
1,1-Dichloroethane	20.0	1.0	µg/L	20.0		99.8	70-130	3.30	25		
1,2-Dichloroethane	19.6	1.0	µg/L	20.0		98.0	70-130	1.28	25		
1,1-Dichloroethylene	20.6	1.0	µg/L	20.0		103	70-130	2.83	25		
cis-1,2-Dichloroethylene	20.0	1.0	µg/L	20.0		99.8	70-130	7.66	25		
trans-1,2-Dichloroethylene	19.0	1.0	µg/L	20.0		95.2	70-130	4.82	25		
1,2-Dichloropropane	21.2	1.0	µg/L	20.0		106	70-130	0.851	25		
1,3-Dichloropropane	19.6	0.50	µg/L	20.0		97.8	70-130	1.17	25		
2,2-Dichloropropane	18.3	1.0	µg/L	20.0		91.7	40-130	7.25	25		†
1,1-Dichloropropene	18.7	2.0	µg/L	20.0		93.4	70-130	3.88	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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B270273 - SW-846 5030B

LCS Dup (B270273-BSD1)

Prepared & Analyzed: 11/05/20

cis-1,3-Dichloropropene	20.3	0.50	µg/L	20.0		102	70-130	0.980	25	
trans-1,3-Dichloropropene	20.1	0.50	µg/L	20.0		101	70-130	0.743	25	
Diethyl Ether	20.0	2.0	µg/L	20.0		100	70-130	4.64	25	
Diisopropyl Ether (DIPE)	19.9	0.50	µg/L	20.0		99.7	70-130	3.30	25	
1,4-Dioxane	167	50	µg/L	200		83.7	40-130	2.05	50	† ‡
Ethylbenzene	20.8	1.0	µg/L	20.0		104	70-130	1.48	25	
Hexachlorobutadiene	22.3	0.60	µg/L	20.0		111	70-130	1.54	25	
2-Hexanone (MBK)	165	10	µg/L	200		82.3	70-160	3.75	25	†
Isopropylbenzene (Cumene)	21.4	1.0	µg/L	20.0		107	70-130	3.39	25	
p-Isopropyltoluene (p-Cymene)	21.0	1.0	µg/L	20.0		105	70-130	0.900	25	
Methyl Acetate	18.2	1.0	µg/L	20.0		91.2	70-130	3.87	25	V-20
Methyl tert-Butyl Ether (MTBE)	18.0	1.0	µg/L	20.0		90.0	70-130	4.93	25	
Methyl Cyclohexane	22.2	1.0	µg/L	20.0		111	70-130	1.27	25	
Methylene Chloride	19.5	5.0	µg/L	20.0		97.3	70-130	1.38	25	
4-Methyl-2-pentanone (MIBK)	180	10	µg/L	200		89.9	70-160	2.69	25	†
Naphthalene	19.9	2.0	µg/L	20.0		99.6	40-130	3.84	25	†
n-Propylbenzene	21.2	1.0	µg/L	20.0		106	70-130	1.22	25	
Styrene	21.5	1.0	µg/L	20.0		108	70-130	0.556	25	
1,1,1,2-Tetrachloroethane	21.6	1.0	µg/L	20.0		108	70-130	2.47	25	
1,1,2,2-Tetrachloroethane	21.0	0.50	µg/L	20.0		105	70-130	1.04	25	
Tetrachloroethylene	21.7	1.0	µg/L	20.0		108	70-130	0.735	25	
Tetrahydrofuran	18.6	10	µg/L	20.0		93.2	70-130	3.84	25	
Toluene	20.9	1.0	µg/L	20.0		104	70-130	2.55	25	
1,2,3-Trichlorobenzene	20.2	5.0	µg/L	20.0		101	70-130	2.56	25	
1,2,4-Trichlorobenzene	20.8	1.0	µg/L	20.0		104	70-130	1.76	25	
1,3,5-Trichlorobenzene	20.8	1.0	µg/L	20.0		104	70-130	0.767	25	
1,1,1-Trichloroethane	19.4	1.0	µg/L	20.0		97.2	70-130	1.18	25	
1,1,2-Trichloroethane	20.9	1.0	µg/L	20.0		104	70-130	0.858	25	
Trichloroethylene	20.9	1.0	µg/L	20.0		105	70-130	3.24	25	
Trichlorofluoromethane (Freon 11)	18.8	2.0	µg/L	20.0		94.2	70-130	2.05	25	
1,2,3-Trichloropropane	17.8	2.0	µg/L	20.0		89.2	70-130	2.16	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	21.8	1.0	µg/L	20.0		109	70-130	3.20	25	
1,2,4-Trimethylbenzene	20.2	1.0	µg/L	20.0		101	70-130	5.11	25	
1,3,5-Trimethylbenzene	20.8	1.0	µg/L	20.0		104	70-130	0.766	25	
Vinyl Chloride	20.0	2.0	µg/L	20.0		100	40-160	5.72	25	†
m+p Xylene	41.3	2.0	µg/L	40.0		103	70-130	1.70	25	
o-Xylene	21.2	1.0	µg/L	20.0		106	70-130	0.659	25	
Surrogate: 1,2-Dichloroethane-d4	23.3		µg/L	25.0		93.3	70-130			
Surrogate: Toluene-d8	25.5		µg/L	25.0		102	70-130			
Surrogate: 4-Bromofluorobenzene	25.6		µg/L	25.0		102	70-130			

Matrix Spike (B270273-MS1)

Source: 20K0145-01

Prepared & Analyzed: 11/05/20

Acetone	84.2	50	µg/L	100	ND	84.2	70-130			V-05
Acrylonitrile	9.00	5.0	µg/L	10.0	ND	90.0	70-130			
tert-Amyl Methyl Ether (TAME)	9.60	0.50	µg/L	10.0	ND	96.0	70-130			
Benzene	10.9	1.0	µg/L	10.0	ND	109	70-130			
Bromobenzene	10.5	1.0	µg/L	10.0	ND	105	70-130			
Bromochloromethane	11.1	1.0	µg/L	10.0	ND	111	70-130			
Bromodichloromethane	9.77	0.50	µg/L	10.0	ND	97.7	70-130			
Bromoform	9.81	1.0	µg/L	10.0	ND	98.1	70-130			
Bromomethane	10.9	2.0	µg/L	10.0	ND	109	70-130			V-20
2-Butanone (MEK)	85.9	20	µg/L	100	ND	85.9	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 B270273 - SW-846 5030B										
Matrix Spike (B270273-MS1)	Source: 20K0145-01			Prepared & Analyzed: 11/05/20						
tert-Butyl Alcohol (TBA)	75.4	20	µg/L	100	ND	75.4	70-130			
n-Butylbenzene	10.7	1.0	µg/L	10.0	ND	107	70-130			
sec-Butylbenzene	11.6	1.0	µg/L	10.0	ND	116	70-130			
tert-Butylbenzene	11.1	1.0	µg/L	10.0	ND	111	70-130			
tert-Butyl Ethyl Ether (TBEE)	9.67	0.50	µg/L	10.0	ND	96.7	70-130			
Carbon Disulfide	11.1	5.0	µg/L	10.0	ND	111	70-130			
Carbon Tetrachloride	10.7	5.0	µg/L	10.0	ND	107	70-130			
Chlorobenzene	11.1	1.0	µg/L	10.0	ND	111	70-130			
Chlorodibromomethane	9.73	0.50	µg/L	10.0	ND	97.3	70-130			
Chloroethane	11.3	2.0	µg/L	10.0	ND	113	70-130			
Chloroform	10.4	2.0	µg/L	10.0	ND	104	70-130			
Chloromethane	11.4	2.0	µg/L	10.0	ND	114	70-130			V-20
2-Chlorotoluene	10.9	1.0	µg/L	10.0	ND	109	70-130			
4-Chlorotoluene	10.9	1.0	µg/L	10.0	ND	109	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	9.38	5.0	µg/L	10.0	ND	93.8	70-130			
1,2-Dibromoethane (EDB)	9.97	0.50	µg/L	10.0	ND	99.7	70-130			
Dibromomethane	9.47	1.0	µg/L	10.0	ND	94.7	70-130			
1,2-Dichlorobenzene	10.8	1.0	µg/L	10.0	ND	108	70-130			
1,3-Dichlorobenzene	11.0	1.0	µg/L	10.0	ND	110	70-130			
1,4-Dichlorobenzene	10.4	1.0	µg/L	10.0	ND	104	70-130			
trans-1,4-Dichloro-2-butene	9.82	2.0	µg/L	10.0	ND	98.2	70-130			
Dichlorodifluoromethane (Freon 12)	12.1	2.0	µg/L	10.0	ND	121	70-130			
1,1-Dichloroethane	10.6	1.0	µg/L	10.0	ND	106	70-130			
1,2-Dichloroethane	9.42	1.0	µg/L	10.0	ND	94.2	70-130			
1,1-Dichloroethylene	11.7	1.0	µg/L	10.0	ND	117	70-130			
cis-1,2-Dichloroethylene	10.6	1.0	µg/L	10.0	ND	106	70-130			
trans-1,2-Dichloroethylene	10.5	1.0	µg/L	10.0	ND	105	70-130			
1,2-Dichloropropane	10.3	1.0	µg/L	10.0	ND	103	70-130			
1,3-Dichloropropane	9.87	0.50	µg/L	10.0	ND	98.7	70-130			
2,2-Dichloropropane	8.33	1.0	µg/L	10.0	ND	83.3	70-130			
1,1-Dichloropropene	10.2	2.0	µg/L	10.0	ND	102	70-130			
cis-1,3-Dichloropropene	9.39	0.50	µg/L	10.0	ND	93.9	70-130			
trans-1,3-Dichloropropene	9.26	0.50	µg/L	10.0	ND	92.6	70-130			
Diethyl Ether	10.7	2.0	µg/L	10.0	ND	107	70-130			
Diisopropyl Ether (DIPE)	10.6	0.50	µg/L	10.0	ND	106	70-130			
1,4-Dioxane	53.7	50	µg/L	100	ND	53.7 *	70-130			MS-07A
Ethylbenzene	11.0	1.0	µg/L	10.0	ND	110	70-130			
Hexachlorobutadiene	11.8	0.60	µg/L	10.0	ND	118	70-130			
2-Hexanone (MBK)	88.1	10	µg/L	100	ND	88.1	70-130			
Isopropylbenzene (Cumene)	11.0	1.0	µg/L	10.0	ND	110	70-130			
p-Isopropyltoluene (p-Cymene)	10.9	1.0	µg/L	10.0	ND	109	70-130			
Methyl Acetate	7.58	1.0	µg/L	10.0	ND	75.8	70-130			V-20
Methyl tert-Butyl Ether (MTBE)	9.75	1.0	µg/L	10.0	ND	97.5	70-130			
Methyl Cyclohexane	11.4	1.0	µg/L	10.0	ND	114	70-130			
Methylene Chloride	10.4	5.0	µg/L	10.0	ND	104	70-130			
4-Methyl-2-pentanone (MIBK)	86.9	10	µg/L	100	ND	86.9	70-130			
Naphthalene	10.1	2.0	µg/L	10.0	ND	101	70-130			
n-Propylbenzene	11.0	1.0	µg/L	10.0	ND	110	70-130			
Styrene	10.6	1.0	µg/L	10.0	ND	106	70-130			
1,1,1,2-Tetrachloroethane	10.9	1.0	µg/L	10.0	ND	109	70-130			
1,1,2,2-Tetrachloroethane	10.9	0.50	µg/L	10.0	ND	109	70-130			
Tetrachloroethylene	11.1	1.0	µg/L	10.0	ND	111	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 B270273 - SW-846 5030B

Matrix Spike (B270273-MS1)	Source: 20K0145-01			Prepared & Analyzed: 11/05/20						
Tetrahydrofuran	9.89	10	µg/L	10.0	ND	98.9	70-130			
Toluene	10.4	1.0	µg/L	10.0	ND	104	70-130			
1,2,3-Trichlorobenzene	10.6	5.0	µg/L	10.0	ND	106	70-130			
1,2,4-Trichlorobenzene	10.7	1.0	µg/L	10.0	ND	107	70-130			
1,3,5-Trichlorobenzene	10.6	1.0	µg/L	10.0	ND	106	70-130			
1,1,1-Trichloroethane	10.8	1.0	µg/L	10.0	ND	108	70-130			
1,1,2-Trichloroethane	10.4	1.0	µg/L	10.0	ND	104	70-130			
Trichloroethylene	10.9	1.0	µg/L	10.0	ND	109	70-130			
Trichlorofluoromethane (Freon 11)	10.8	2.0	µg/L	10.0	ND	108	70-130			
1,2,3-Trichloropropane	9.50	2.0	µg/L	10.0	ND	95.0	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	12.4	1.0	µg/L	10.0	ND	124	70-130			
1,2,4-Trimethylbenzene	10.3	1.0	µg/L	10.0	ND	103	70-130			
1,3,5-Trimethylbenzene	10.6	1.0	µg/L	10.0	ND	106	70-130			
Vinyl Chloride	11.4	2.0	µg/L	10.0	ND	114	70-130			
m+p Xylene	21.8	2.0	µg/L	20.0	ND	109	70-130			
o-Xylene	11.2	1.0	µg/L	10.0	ND	112	70-130			
Surrogate: 1,2-Dichloroethane-d4	24.2		µg/L	25.0		96.8	70-130			
Surrogate: Toluene-d8	24.1		µg/L	25.0		96.2	70-130			
Surrogate: 4-Bromofluorobenzene	25.0		µg/L	25.0		99.8	70-130			

Matrix Spike Dup (B270273-MSD1)	Source: 20K0145-01			Prepared & Analyzed: 11/05/20						
Acetone	79.4	50	µg/L	100	ND	79.4	70-130	5.93	30	V-05
Acrylonitrile	8.50	5.0	µg/L	10.0	ND	85.0	70-130	5.71	30	
tert-Amyl Methyl Ether (TAME)	8.83	0.50	µg/L	10.0	ND	88.3	70-130	8.36	30	
Benzene	9.77	1.0	µg/L	10.0	ND	97.7	70-130	11.2	30	
Bromobenzene	9.88	1.0	µg/L	10.0	ND	98.8	70-130	5.99	30	
Bromochloromethane	9.91	1.0	µg/L	10.0	ND	99.1	70-130	11.1	30	
Bromodichloromethane	10.1	0.50	µg/L	10.0	ND	101	70-130	3.52	30	
Bromoform	9.75	1.0	µg/L	10.0	ND	97.5	70-130	0.614	30	
Bromomethane	10.6	2.0	µg/L	10.0	ND	106	70-130	3.16	30	V-20
2-Butanone (MEK)	79.2	20	µg/L	100	ND	79.2	70-130	8.08	30	
tert-Butyl Alcohol (TBA)	72.5	20	µg/L	100	ND	72.5	70-130	4.00	30	
n-Butylbenzene	10.3	1.0	µg/L	10.0	ND	103	70-130	3.82	30	
sec-Butylbenzene	11.0	1.0	µg/L	10.0	ND	110	70-130	5.14	30	
tert-Butylbenzene	10.3	1.0	µg/L	10.0	ND	103	70-130	6.91	30	
tert-Butyl Ethyl Ether (TBEE)	8.56	0.50	µg/L	10.0	ND	85.6	70-130	12.2	30	
Carbon Disulfide	9.81	5.0	µg/L	10.0	ND	98.1	70-130	12.2	30	
Carbon Tetrachloride	9.80	5.0	µg/L	10.0	ND	98.0	70-130	9.15	30	
Chlorobenzene	10.5	1.0	µg/L	10.0	ND	105	70-130	5.37	30	
Chlorodibromomethane	9.43	0.50	µg/L	10.0	ND	94.3	70-130	3.13	30	
Chloroethane	11.0	2.0	µg/L	10.0	ND	110	70-130	2.69	30	
Chloroform	9.49	2.0	µg/L	10.0	ND	94.9	70-130	8.96	30	
Chloromethane	10.1	2.0	µg/L	10.0	ND	101	70-130	11.9	30	V-20
2-Chlorotoluene	10.0	1.0	µg/L	10.0	ND	100	70-130	8.40	30	
4-Chlorotoluene	10.5	1.0	µg/L	10.0	ND	105	70-130	3.73	30	
1,2-Dibromo-3-chloropropane (DBCP)	8.85	5.0	µg/L	10.0	ND	88.5	70-130	5.81	30	
1,2-Dibromoethane (EDB)	9.74	0.50	µg/L	10.0	ND	97.4	70-130	2.33	30	
Dibromomethane	10.4	1.0	µg/L	10.0	ND	104	70-130	9.07	30	
1,2-Dichlorobenzene	10.3	1.0	µg/L	10.0	ND	103	70-130	4.27	30	
1,3-Dichlorobenzene	10.9	1.0	µg/L	10.0	ND	109	70-130	0.825	30	
1,4-Dichlorobenzene	10.1	1.0	µg/L	10.0	ND	101	70-130	3.60	30	
trans-1,4-Dichloro-2-butene	8.94	2.0	µg/L	10.0	ND	89.4	70-130	9.38	30	

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 B270273 - SW-846 5030B										
Matrix Spike Dup (B270273-MSD1)										
Source: 20K0145-01 Prepared & Analyzed: 11/05/20										
Dichlorodifluoromethane (Freon 12)	11.3	2.0	µg/L	10.0	ND	113	70-130	6.73	30	
1,1-Dichloroethane	9.75	1.0	µg/L	10.0	ND	97.5	70-130	8.82	30	
1,2-Dichloroethane	9.39	1.0	µg/L	10.0	ND	93.9	70-130	0.319	30	
1,1-Dichloroethylene	10.4	1.0	µg/L	10.0	ND	104	70-130	11.6	30	
cis-1,2-Dichloroethylene	9.54	1.0	µg/L	10.0	ND	95.4	70-130	10.6	30	
trans-1,2-Dichloroethylene	9.46	1.0	µg/L	10.0	ND	94.6	70-130	10.2	30	
1,2-Dichloropropane	10.8	1.0	µg/L	10.0	ND	108	70-130	5.01	30	
1,3-Dichloropropane	9.56	0.50	µg/L	10.0	ND	95.6	70-130	3.19	30	
2,2-Dichloropropane	7.37	1.0	µg/L	10.0	ND	73.7	70-130	12.2	30	
1,1-Dichloropropene	9.45	2.0	µg/L	10.0	ND	94.5	70-130	7.14	30	
cis-1,3-Dichloropropene	9.24	0.50	µg/L	10.0	ND	92.4	70-130	1.61	30	
trans-1,3-Dichloropropene	9.28	0.50	µg/L	10.0	ND	92.8	70-130	0.216	30	
Diethyl Ether	9.76	2.0	µg/L	10.0	ND	97.6	70-130	9.47	30	
Diisopropyl Ether (DIPE)	9.65	0.50	µg/L	10.0	ND	96.5	70-130	9.85	30	
1,4-Dioxane	67.0	50	µg/L	100	ND	67.0	* 70-130	22.1	30	MS-07A
Ethylbenzene	10.3	1.0	µg/L	10.0	ND	103	70-130	5.92	30	
Hexachlorobutadiene	10.9	0.60	µg/L	10.0	ND	109	70-130	7.65	30	
2-Hexanone (MBK)	85.5	10	µg/L	100	ND	85.5	70-130	3.02	30	
Isopropylbenzene (Cumene)	10.6	1.0	µg/L	10.0	ND	106	70-130	2.87	30	
p-Isopropyltoluene (p-Cymene)	10.4	1.0	µg/L	10.0	ND	104	70-130	5.45	30	
Methyl Acetate	7.05	1.0	µg/L	10.0	ND	70.5	70-130	7.25	30	V-20
Methyl tert-Butyl Ether (MTBE)	8.83	1.0	µg/L	10.0	ND	88.3	70-130	9.90	30	
Methyl Cyclohexane	11.7	1.0	µg/L	10.0	ND	117	70-130	1.90	30	
Methylene Chloride	9.33	5.0	µg/L	10.0	ND	93.3	70-130	11.3	30	
4-Methyl-2-pentanone (MIBK)	88.0	10	µg/L	100	ND	88.0	70-130	1.21	30	
Naphthalene	9.44	2.0	µg/L	10.0	ND	94.4	70-130	6.66	30	
n-Propylbenzene	10.5	1.0	µg/L	10.0	ND	105	70-130	4.66	30	
Styrene	9.91	1.0	µg/L	10.0	ND	99.1	70-130	7.10	30	
1,1,1,2-Tetrachloroethane	10.3	1.0	µg/L	10.0	ND	103	70-130	5.75	30	
1,1,2,2-Tetrachloroethane	10.3	0.50	µg/L	10.0	ND	103	70-130	5.75	30	
Tetrachloroethylene	11.2	1.0	µg/L	10.0	ND	112	70-130	0.449	30	
Tetrahydrofuran	9.47	10	µg/L	10.0	ND	94.7	70-130	4.34	30	
Toluene	10.2	1.0	µg/L	10.0	ND	102	70-130	1.94	30	
1,2,3-Trichlorobenzene	9.44	5.0	µg/L	10.0	ND	94.4	70-130	11.4	30	
1,2,4-Trichlorobenzene	10.2	1.0	µg/L	10.0	ND	102	70-130	4.99	30	
1,3,5-Trichlorobenzene	9.80	1.0	µg/L	10.0	ND	98.0	70-130	7.37	30	
1,1,1-Trichloroethane	9.72	1.0	µg/L	10.0	ND	97.2	70-130	10.4	30	
1,1,2-Trichloroethane	10.0	1.0	µg/L	10.0	ND	100	70-130	3.44	30	
Trichloroethylene	11.1	1.0	µg/L	10.0	ND	111	70-130	2.36	30	
Trichlorofluoromethane (Freon 11)	9.98	2.0	µg/L	10.0	ND	99.8	70-130	7.80	30	
1,2,3-Trichloropropane	9.11	2.0	µg/L	10.0	ND	91.1	70-130	4.19	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.3	1.0	µg/L	10.0	ND	113	70-130	9.60	30	
1,2,4-Trimethylbenzene	9.60	1.0	µg/L	10.0	ND	96.0	70-130	7.13	30	
1,3,5-Trimethylbenzene	10.4	1.0	µg/L	10.0	ND	104	70-130	2.18	30	
Vinyl Chloride	10.6	2.0	µg/L	10.0	ND	106	70-130	7.37	30	
m+p Xylene	20.3	2.0	µg/L	20.0	ND	101	70-130	6.95	20	
o-Xylene	10.4	1.0	µg/L	10.0	ND	104	70-130	7.71	30	
Surrogate: 1,2-Dichloroethane-d4	23.5		µg/L	25.0		93.9	70-130			
Surrogate: Toluene-d8	25.3		µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	25.4		µg/L	25.0		102	70-130			



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

QUALITY CONTROL

Petroleum Hydrocarbons Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B270294 - SW-846 3510C										
Blank (B270294-BLK1)				Prepared: 11/05/20 Analyzed: 11/09/20						
TPH (C9-C36)	ND	0.20	mg/L							
Surrogate: 2-Fluorobiphenyl	0.0984		mg/L	0.100		98.4	40-140			
LCS (B270294-BS1)				Prepared: 11/05/20 Analyzed: 11/09/20						
TPH (C9-C36)	0.865	0.20	mg/L	1.00		86.5	40-140			
Surrogate: 2-Fluorobiphenyl	0.0931		mg/L	0.100		93.1	40-140			
LCS Dup (B270294-BSD1)				Prepared: 11/05/20 Analyzed: 11/09/20						
TPH (C9-C36)	0.869	0.20	mg/L	1.00		86.9	40-140	0.412	30	
Surrogate: 2-Fluorobiphenyl	0.0998		mg/L	0.100		99.8	40-140			

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.
MS-07A	Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-20	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

CERTIFICATIONS

Certified Analyses included in this Report

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

CERTIFICATIONS

Certified Analyses included in this Report

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



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

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2021
CT	Connecticut Department of Public Health	PH-0567	09/30/2021
NY	New York State Department of Health	10899 NELAP	04/1/2021
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2021
RI	Rhode Island Department of Health	LAO00112	12/30/2020
NC	North Carolina Div. of Water Quality	652	12/31/2020
NJ	New Jersey DEP	MA007 NELAP	06/30/2021
FL	Florida Department of Health	E871027 NELAP	06/30/2021
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2021
ME	State of Maine	2011028	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2020
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2021
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2021
NC-DW	North Carolina Department of Health	25703	07/31/2021
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2021
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2021



FUSS & O'NEILL
 (860) 646-2469 • www.fandO.com
 ZOKOLHS

- 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
- 117 Iron Horse Way, Suite 204, Providence, RI 02908
- 80 Washington Street, Suite 301, Poughkeepsie, NY

Other

CHAIN-OF-CUSTODY RECORD

37103

Turnaround

- 24-Hour* 72-Hour*
- 48-Hour* Standard (____ days)
- Other (____ days)

PROJECT NAME

PROJECT LOCATION

PROJECT NUMBER

20 MAINVILLE ST. WOODSOCKET, RI

201815451B10

CON-TEST

REPORT TO: ALLEN TENYAN (atenyane@fordatom.com)

INVOICE TO: " "

Analysis Request

Containers

P.O. No.: 1603201815451B10

Sampler's Signature: *Melvin Seay* Date: 11/3/20

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 **TRIO BLANK**

Item No.	Transfer Check				Sample Number	Source Code	Date Sampled	Time Sampled
	1	2	3	4				
1					MW 1603201103-01	11/3/20	1136	
2					FIELD BLANK		1134	
3					MS/MSD		1136	
4					1603201103-02		1241	
5					-03		1336	
6					-04		1342	
7					-05		1452	
8					-06		1552	
9					-07		1610	
10					-08		1700	

TOBY USES METHOD 8100
 VOC BY USES METHOD 8260
 PESTIC BY ASTM D7979-17/837.1

Comments	Water VOA Vial	Other	Soil VOA Vial	Soil VOA Vial	Other	Water VOA Vial	Other	Soil VOA Vial	Soil VOA Vial	Other
MW-3 *	3	2	2	3	2	2	3	2	2	3
FIELD BLANK	1									
MW-3	4									
MW-5 *	3	2	2	3	2	2	3	2	2	3
MW-6 *	3	2	2	3	2	2	3	2	2	3
MW-6 *	3	2	2	3	2	2	3	2	2	3
MW-9	3	2	2	3	2	2	3	2	2	3
MW-4	3	2	2	3	2	2	3	2	2	3
MW-8	3	2	2	3	2	2	3	2	2	3
TRIO BLANK	1									

Transfer Number	Relinquished By	Accepted By	Date	Time	Change Exceptions:
1	<i>Melvin Seay</i>	<i>F40 PRIFGE</i>	11/3/20	1730	<input type="checkbox"/> CT Tax Exempt <input checked="" type="checkbox"/> QA/QC <input type="checkbox"/> Other
2	<i>F40 Fridge</i>	<i>[Signature]</i>	11/4/20	10:29	Duplicates <input checked="" type="checkbox"/> Blanks (Item Nos: 2,3,10)
3	<i>[Signature]</i>	<i>[Signature]</i>	11/4/20	10:15	Reporting and Detection Limit Requirements: <input type="checkbox"/> RCP Deliverables <input type="checkbox"/> MCP CAM Cert.
4	<i>[Signature]</i>	<i>[Signature]</i>	11-4-20	16:55	6A-60
Additional Comments: * SEE WOODSOCKET BROWNFIELD PRICE QUOTE * PFAS ANALYSIS SEE ATTACHED CHEMICALIST <i>11/4/20 KSO</i>					

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 11/4/20 Time 1750

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 -4.0, 2.9
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

Are there Rushes? F

Are there Short Holds? F

Is there enough Volume? T

Is there Headspace where applicable? T

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.	14	1 Liter Plastic	16 oz Amb.
HCL-	22	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:



**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 type="checkbox"/>	NA
Percent solids calculations	<input type="checkbox"/>	<input type="checkbox"/>	NA
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 checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Matrix Spike Duplicate Data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
4. Semivolatiles Data			
a. QC Summary			
Surrogate Percent Recovery Summary	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
MS/MSD Summary	<input type="checkbox"/>	<input type="checkbox"/>	NA
Method Blank Summary	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Tuning and Mass Calibration	<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
 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 type="checkbox"/>	NA
Reconstructed total ion chromatograms (RIC) for each Sample	<input type="checkbox"/>	<input type="checkbox"/>	NA
For each sample:			
Raw spectra and background-subtracted mass spectra of TCL compounds	<input type="checkbox"/>	<input type="checkbox"/>	NA
Mass spectra of TICs with 3 best library matches	<input type="checkbox"/>	<input type="checkbox"/>	NA
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 type="checkbox"/>	<input type="checkbox"/>	NA
Internal Standard Areas Summary	<input type="checkbox"/>	<input type="checkbox"/>	NA
d. Raw QC Data			
Decafluorotriphenylphosphine (DFTPP)	<input type="checkbox"/>	<input type="checkbox"/>	NA
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
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"/>	_____
			<u>Chromatograms</u>



**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 type="checkbox"/>	NA

9. Comments:			_____

** See laboratory Quality Assurance Plan for limits.

Completed by: [Signature]
(Lab) (Signature)

Daren Danbragan Director of Ops
(Printed Name/Title)

11-11-2020
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: Lisa Worthington Reports Dept 11/10/20
(Lab) (Signature) (Printed Name/Title) _____
Date

November 30, 2020

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

Project Location: 20 Privilege St, Woonsocket, RI
Client Job Number:
Project Number: 20181545.B10
Laboratory Work Order Number: 20K0146

Enclosed are results of analyses for samples received by the laboratory on November 4, 2020. 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
20K0146-01	5
20K0146-02	6
20K0146-03	7
20K0146-04	8
20K0146-05	9
Flag/Qualifier Summary	10
Certifications	11
Chain of Custody/Sample Receipt	12



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: Allen Tevyaw

REPORT DATE: 11/30/2020

PURCHASE ORDER NUMBER: 160320181545.B10

PROJECT NUMBER: 20181545.B10

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 20K0146

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

PROJECT LOCATION: 20 Privilege St, Woonsocket, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
1603201103-01	20K0146-01	Ground Water	MW-3	EPA 537.1	MA M-MA-086/CT PH-0574/NY11148
Field Blank	20K0146-02	Field Blank	Field Blank	EPA 537.1	MA M-MA-086/CT PH-0574/NY11148
1603201103-02	20K0146-03	Ground Water	MW-5	EPA 537.1	MA M-MA-086/CT PH-0574/NY11148
1603201103-03	20K0146-04	Ground Water	MW-6	EPA 537.1	MA M-MA-086/CT PH-0574/NY11148
1603201103-04	20K0146-05	Ground Water	MW-6	EPA 537.1	MA M-MA-086/CT PH-0574/NY11148

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 the Con-Test Analytical Laboratory for testing.

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

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

Lisa A. Worthington
Technical Representative



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description: MW-3

Work Order: 20K0146

Date Received: 11/4/2020

Field Sample #: 1603201103-01

Sampled: 11/3/2020 11:36

Sample ID: 20K0146-01

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	2.38	1.98	0.282	ng/L	1		EPA 537.1	11/18/20 20:30	AAL	
Perfluorohexanoic acid (PFHxA)	2.82	1.98	0.261	ng/L	1		EPA 537.1	11/18/20 20:30	AAL	
Perfluorohexanesulfonic acid (PFHxS)	1.19	1.98	0.476	ng/L	1	J	EPA 537.1	11/18/20 20:30	AAL	
Perfluoroheptanoic acid (PFHpA)	2.18	1.98	0.258	ng/L	1		EPA 537.1	11/18/20 20:30	AAL	
Perfluorooctanoic acid (PFOA)	4.8	1.98	0.619	ng/L	1		EPA 537.1	11/18/20 20:30	AAL	
Perfluorooctanesulfonic acid (PFOS)	4.44	1.98	0.488	ng/L	1		EPA 537.1	11/18/20 20:30	AAL	
Perfluorononanoic acid (PFNA)	0.873	1.98	0.472	ng/L	1	J	EPA 537.1	11/18/20 20:30	AAL	
Perfluorodecanoic acid (PFDA)	ND	1.98	0.936	ng/L	1		EPA 537.1	11/18/20 20:30	AAL	
N-EtFOSAA	ND	1.98	0.944	ng/L	1		EPA 537.1	11/18/20 20:30	AAL	
Perfluoroundecanoic acid (PFUnA)	ND	1.98	0.809	ng/L	1		EPA 537.1	11/18/20 20:30	AAL	
N-MeFOSAA	ND	1.98	0.928	ng/L	1		EPA 537.1	11/18/20 20:30	AAL	
Perfluorododecanoic acid (PFDoA)	ND	1.98	0.643	ng/L	1		EPA 537.1	11/18/20 20:30	AAL	
Perfluorotridecanoic acid (PFTrDA)	ND	1.98	0.504	ng/L	1		EPA 537.1	11/18/20 20:30	AAL	
Perfluorotetradecanoic acid (PFTA)	ND	1.98	0.428	ng/L	1		EPA 537.1	11/18/20 20:30	AAL	
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.97	0.448	ng/L	1		EPA 537.1	11/18/20 20:30	AAL	
11Cl-PF3OUdS (F53B Major)	ND	1.98	0.208	ng/L	1		EPA 537.1	11/18/20 20:30	AAL	
9Cl-PF3ONS (F53B Minor)	ND	1.98	0.273	ng/L	1		EPA 537.1	11/18/20 20:30	AAL	
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.98	0.071	ng/L	1		EPA 537.1	11/18/20 20:30	AAL	

Surrogates	% Recovery	Recovery Limits	Flag/Qual	Date/Time Analyzed
13C-PFHxA	75	70-130		11/18/20 20:30
M3HFPO-DA	61 *	70-130		11/18/20 20:30
13C-PFDA	81	70-130		11/18/20 20:30
d5-NEtFOSAA	88	70-130		11/18/20 20:30



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description: Field Blank

Work Order: 20K0146

Date Received: 11/4/2020

Field Sample #: Field Blank

Sampled: 11/3/2020 11:34

Sample ID: 20K0146-02

Sample Matrix: Field Blank

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	ND	1.83	0.26	ng/L	1		EPA 537.1		11/24/20 12:55	AAL
Perfluorohexanoic acid (PFHxA)	ND	1.83	0.241	ng/L	1		EPA 537.1		11/24/20 12:55	AAL
Perfluorohexanesulfonic acid (PFHxS)	ND	1.83	0.439	ng/L	1		EPA 537.1		11/24/20 12:55	AAL
Perfluoroheptanoic acid (PFHpA)	ND	1.83	0.238	ng/L	1		EPA 537.1		11/24/20 12:55	AAL
Perfluorooctanoic acid (PFOA)	ND	1.83	0.57	ng/L	1		EPA 537.1		11/24/20 12:55	AAL
Perfluorooctanesulfonic acid (PFOS)	ND	1.83	0.45	ng/L	1		EPA 537.1		11/24/20 12:55	AAL
Perfluorononanoic acid (PFNA)	ND	1.83	0.435	ng/L	1		EPA 537.1		11/24/20 12:55	AAL
Perfluorodecanoic acid (PFDA)	ND	1.83	0.589	ng/L	1		EPA 537.1		11/24/20 12:55	AAL
N-EtFOSAA	ND	1.83	0.512	ng/L	1		EPA 537.1		11/24/20 12:55	AAL
Perfluoroundecanoic acid (PFUnA)	ND	1.83	0.391	ng/L	1		EPA 537.1		11/24/20 12:55	AAL
N-MeFOSAA	ND	1.83	0.548	ng/L	1		EPA 537.1		11/24/20 12:55	AAL
Perfluorododecanoic acid (PFDoA)	ND	1.83	0.592	ng/L	1		EPA 537.1		11/24/20 12:55	AAL
Perfluorotridecanoic acid (PFTrDA)	ND	1.83	0.464	ng/L	1		EPA 537.1		11/24/20 12:55	AAL
Perfluorotetradecanoic acid (PFTA)	ND	1.83	0.395	ng/L	1		EPA 537.1		11/24/20 12:55	AAL
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.66	0.413	ng/L	1		EPA 537.1		11/24/20 12:55	AAL
11Cl-PF3OUdS (F53B Major)	ND	1.83	0.192	ng/L	1		EPA 537.1		11/24/20 12:55	AAL
9Cl-PF3ONS (F53B Minor)	ND	1.83	0.252	ng/L	1		EPA 537.1		11/24/20 12:55	AAL
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.83	0.065	ng/L	1		EPA 537.1		11/24/20 12:55	AAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual
13C-PFHxA	93	70-130	
M3HFPO-DA	86	70-130	
13C-PFDA	115	70-130	
d5-NEtFOSAA	98	70-130	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description: MW-5

Work Order: 20K0146

Date Received: 11/4/2020

Field Sample #: 1603201103-02

Sampled: 11/3/2020 12:41

Sample ID: 20K0146-03

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	1.11	1.91	0.271	ng/L	1	J	EPA 537.1	11/18/20 20:56	AAL	
Perfluorohexanoic acid (PFHxA)	6.12	1.91	0.252	ng/L	1		EPA 537.1	11/18/20 20:56	AAL	
Perfluorohexanesulfonic acid (PFHxS)	0.573	1.91	0.459	ng/L	1	J	EPA 537.1	11/18/20 20:56	AAL	
Perfluoroheptanoic acid (PFHpA)	7.15	1.91	0.248	ng/L	1		EPA 537.1	11/18/20 20:56	AAL	
Perfluorooctanoic acid (PFOA)	9.25	1.91	0.596	ng/L	1		EPA 537.1	11/18/20 20:56	AAL	
Perfluorooctanesulfonic acid (PFOS)	1.83	1.91	0.47	ng/L	1	J	EPA 537.1	11/18/20 20:56	AAL	
Perfluorononanoic acid (PFNA)	7.49	1.91	0.455	ng/L	1		EPA 537.1	11/18/20 20:56	AAL	
Perfluorodecanoic acid (PFDA)	1.22	1.91	0.615	ng/L	1	J	EPA 537.1	11/18/20 20:56	AAL	
N-EtFOSAA	ND	1.91	0.91	ng/L	1		EPA 537.1	11/18/20 20:56	AAL	
Perfluoroundecanoic acid (PFUnA)	ND	1.91	0.78	ng/L	1		EPA 537.1	11/18/20 20:56	AAL	
N-MeFOSAA	ND	1.91	0.894	ng/L	1		EPA 537.1	11/18/20 20:56	AAL	
Perfluorododecanoic acid (PFDoA)	ND	1.91	0.619	ng/L	1		EPA 537.1	11/18/20 20:56	AAL	
Perfluorotridecanoic acid (PFTrDA)	ND	1.91	0.485	ng/L	1		EPA 537.1	11/18/20 20:56	AAL	
Perfluorotetradecanoic acid (PFTA)	ND	1.91	0.413	ng/L	1		EPA 537.1	11/18/20 20:56	AAL	
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.82	0.432	ng/L	1		EPA 537.1	11/18/20 20:56	AAL	
11Cl-PF3OUdS (F53B Major)	ND	1.91	0.201	ng/L	1		EPA 537.1	11/18/20 20:56	AAL	
9Cl-PF3ONS (F53B Minor)	ND	1.91	0.263	ng/L	1		EPA 537.1	11/18/20 20:56	AAL	
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.91	0.068	ng/L	1		EPA 537.1	11/18/20 20:56	AAL	

Surrogates	% Recovery	Recovery Limits	Flag/Qual
13C-PFHxA	76	70-130	11/18/20 20:56
M3HFPO-DA	82	70-130	11/18/20 20:56
13C-PFDA	80	70-130	11/18/20 20:56
d5-NEtFOSAA	87	70-130	11/18/20 20:56



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description: MW-6

Work Order: 20K0146

Date Received: 11/4/2020

Field Sample #: 1603201103-03

Sampled: 11/3/2020 13:38

Sample ID: 20K0146-04

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	0.669	1.97	0.28	ng/L	1	J	EPA 537.1		11/18/20 21:04	AAL
Perfluorohexanoic acid (PFHxA)	59.3	1.97	0.259	ng/L	1		EPA 537.1		11/18/20 21:04	AAL
Perfluorohexanesulfonic acid (PFHxS)	ND	1.97	0.472	ng/L	1		EPA 537.1		11/18/20 21:04	AAL
Perfluoroheptanoic acid (PFHpA)	83.9	1.97	0.256	ng/L	1		EPA 537.1		11/18/20 21:04	AAL
Perfluorooctanoic acid (PFOA)	180	1.97	0.614	ng/L	1		EPA 537.1		11/18/20 21:04	AAL
Perfluorooctanesulfonic acid (PFOS)	3.35	1.97	0.484	ng/L	1		EPA 537.1		11/18/20 21:04	AAL
Perfluorononanoic acid (PFNA)	128	1.97	0.468	ng/L	1		EPA 537.1		11/18/20 21:04	AAL
Perfluorodecanoic acid (PFDA)	4.57	1.97	0.634	ng/L	1		EPA 537.1		11/18/20 21:04	AAL
N-EtFOSAA	ND	1.97	0.937	ng/L	1		EPA 537.1		11/18/20 21:04	AAL
Perfluoroundecanoic acid (PFUnA)	ND	1.97	0.803	ng/L	1		EPA 537.1		11/18/20 21:04	AAL
N-MeFOSAA	ND	1.97	0.921	ng/L	1		EPA 537.1		11/18/20 21:04	AAL
Perfluorododecanoic acid (PFDoA)	ND	1.97	0.638	ng/L	1		EPA 537.1		11/18/20 21:04	AAL
Perfluorotridecanoic acid (PFTrDA)	ND	1.97	0.5	ng/L	1		EPA 537.1		11/18/20 21:04	AAL
Perfluorotetradecanoic acid (PFTA)	ND	1.97	0.425	ng/L	1		EPA 537.1		11/18/20 21:04	AAL
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.94	0.445	ng/L	1		EPA 537.1		11/18/20 21:04	AAL
11Cl-PF3OUdS (F53B Major)	ND	1.97	0.207	ng/L	1		EPA 537.1		11/18/20 21:04	AAL
9Cl-PF3ONS (F53B Minor)	ND	1.97	0.271	ng/L	1		EPA 537.1		11/18/20 21:04	AAL
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.97	0.071	ng/L	1		EPA 537.1		11/18/20 21:04	AAL

Surrogates	% Recovery	Recovery Limits	Flag/Qual
13C-PFHxA	86	70-130	
M3HFPO-DA	88	70-130	
13C-PFDA	95	70-130	
d5-NEtFOSAA	103	70-130	



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

Project Location: 20 Privilege St, Woonsocket, RI

Sample Description: MW-6

Work Order: 20K0146

Date Received: 11/4/2020

Field Sample #: 1603201103-04

Sampled: 11/3/2020 13:42

Sample ID: 20K0146-05

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	0.637	1.99	0.283	ng/L	1	J	EPA 537.1	11/18/20 21:13	AAL	
Perfluorohexanoic acid (PFHxA)	60	1.99	0.262	ng/L	1		EPA 537.1	11/18/20 21:13	AAL	
Perfluorohexanesulfonic acid (PFHxS)	ND	1.99	0.478	ng/L	1		EPA 537.1	11/18/20 21:13	AAL	
Perfluoroheptanoic acid (PFHpA)	76.8	1.99	0.259	ng/L	1		EPA 537.1	11/18/20 21:13	AAL	
Perfluorooctanoic acid (PFOA)	189	1.99	0.621	ng/L	1		EPA 537.1	11/18/20 21:13	AAL	
Perfluorooctanesulfonic acid (PFOS)	3.14	1.99	0.49	ng/L	1		EPA 537.1	11/18/20 21:13	AAL	
Perfluorononanoic acid (PFNA)	125	1.99	0.474	ng/L	1		EPA 537.1	11/18/20 21:13	AAL	
Perfluorodecanoic acid (PFDA)	4.66	1.99	0.641	ng/L	1		EPA 537.1	11/18/20 21:13	AAL	
N-EtFOSAA	ND	1.99	0.948	ng/L	1		EPA 537.1	11/18/20 21:13	AAL	
Perfluoroundecanoic acid (PFUnA)	ND	1.99	0.812	ng/L	1		EPA 537.1	11/18/20 21:13	AAL	
N-MeFOSAA	ND	1.99	0.932	ng/L	1		EPA 537.1	11/18/20 21:13	AAL	
Perfluorododecanoic acid (PFDoA)	ND	1.99	0.645	ng/L	1		EPA 537.1	11/18/20 21:13	AAL	
Perfluorotridecanoic acid (PFTrDA)	ND	1.99	0.506	ng/L	1		EPA 537.1	11/18/20 21:13	AAL	
Perfluorotetradecanoic acid (PFTA)	ND	1.99	0.43	ng/L	1		EPA 537.1	11/18/20 21:13	AAL	
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.98	0.45	ng/L	1		EPA 537.1	11/18/20 21:13	AAL	
11Cl-PF3OUdS (F53B Major)	ND	1.99	0.209	ng/L	1		EPA 537.1	11/18/20 21:13	AAL	
9Cl-PF3ONS (F53B Minor)	ND	1.99	0.274	ng/L	1		EPA 537.1	11/18/20 21:13	AAL	
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.99	0.071	ng/L	1		EPA 537.1	11/18/20 21:13	AAL	

Surrogates	% Recovery	Recovery Limits	Flag/Qual
13C-PFHxA	88	70-130	11/18/20 21:13
M3HFPO-DA	91	70-130	11/18/20 21:13
13C-PFDA	107	70-130	11/18/20 21:13
d5-NEtFOSAA	94	70-130	11/18/20 21:13

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.
J	[Undefined]

CERTIFICATIONS**Certified Analyses included in this Report**

Analyte	Certifications
----------------	-----------------------

No certified Analyses included in this Report

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2021
CT	Connecticut Department of Public Health	PH-0567	09/30/2021
NY	New York State Department of Health	10899 NELAP	04/1/2021
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2021
RI	Rhode Island Department of Health	LAO00112	12/30/2020
NC	North Carolina Div. of Water Quality	652	12/31/2020
NJ	New Jersey DEP	MA007 NELAP	06/30/2021
FL	Florida Department of Health	E871027 NELAP	06/30/2021
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2021
ME	State of Maine	2011028	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2020
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2021
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2021
NC-DW	North Carolina Department of Health	25703	07/31/2021
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2021
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2021

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 11/4/20 Time 1750

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 - 4.0
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 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? T

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-		250 mL Amb.		250 mL Plastic	<u>13</u>	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:



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 type="checkbox"/>	_____
2.	Traffic Report	<input type="checkbox"/>	<input type="checkbox"/>	_____
3.	Volatiles Data			
	a. Sample Data			
	Target Compound List (TCL) Results	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Reconstructed total ion chromatograms (RIC) for each sample	<input type="checkbox"/>	<input type="checkbox"/>	_____
	For each sample:			
	Raw spectra and background-subtracted mass spectra of target compounds identified	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Mass spectra of all reported TICs with three best library matches	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Percent solids calculations	<input type="checkbox"/>	<input type="checkbox"/>	_____
	b. Standards Data (all instruments)			
	Initial Calibration Data	<input type="checkbox"/>	<input type="checkbox"/>	_____
	RICs and Quan Reports for all Standards	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Continuing Calibration	<input type="checkbox"/>	<input type="checkbox"/>	_____
	RICs and Quan Reports for all Standards	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Internal Standard Area Summary	<input type="checkbox"/>	<input type="checkbox"/>	_____
	c. Raw QC Data			
	Blank Data	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Matrix Spike Data	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Matrix Spike Duplicate Data	<input type="checkbox"/>	<input type="checkbox"/>	_____
4.	Semivolatiles Data			
	a. QC Summary			
	Surrogate Percent Recovery Summary	<input type="checkbox"/>	<input type="checkbox"/>	_____
	MS/MSD Summary	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Method Blank Summary	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Tuning and Mass Calibration	<input 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 type="checkbox"/>	<input type="checkbox"/>	_____
Tentatively Identified Compounds	<input type="checkbox"/>	<input type="checkbox"/>	_____
Reconstructed total ion chromatograms (RIC) for each Sample	<input type="checkbox"/>	<input type="checkbox"/>	_____
For each sample:			
Raw spectra and background-subtracted mass spectra of TCL compounds	<input type="checkbox"/>	<input type="checkbox"/>	_____
Mass spectra of TICs with 3 best library matches	<input type="checkbox"/>	<input type="checkbox"/>	_____
GPC chromatograms (if GPC performed)	<input type="checkbox"/>	<input type="checkbox"/>	_____
c. Standards Data (all instruments)			
Initial Calibration Data	<input type="checkbox"/>	<input type="checkbox"/>	_____
RICs and Quan Reports for all Standards	<input type="checkbox"/>	<input type="checkbox"/>	_____
Continuing Calibration	<input type="checkbox"/>	<input type="checkbox"/>	_____
RICs and Quan Reports for all Standards	<input type="checkbox"/>	<input type="checkbox"/>	_____
Internal Standard Areas Summary	<input type="checkbox"/>	<input type="checkbox"/>	_____
Internal Standard Areas Summary	<input type="checkbox"/>	<input type="checkbox"/>	_____
d. Raw QC Data			
Decafluorotriphenylphosphine (DFTPP)	<input type="checkbox"/>	<input type="checkbox"/>	_____
Blank Data	<input type="checkbox"/>	<input type="checkbox"/>	_____
Matrix Spike Data	<input type="checkbox"/>	<input type="checkbox"/>	_____
Matrix Spike Duplicate Data	<input type="checkbox"/>	<input type="checkbox"/>	_____
5. Miscellaneous Data			
Original preparation and analysis forms or copies of preparation and analysis log book pages	<input type="checkbox"/>	<input type="checkbox"/>	_____
Internal sample & sample extract transfer chain-of custody records	<input type="checkbox"/>	<input type="checkbox"/>	_____
Screening Records	<input type="checkbox"/>	<input type="checkbox"/>	_____
All instrument output, including strip charts from screening activities (describe or list)	<input 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>
6. Chain-of-Custody Records	<input type="checkbox"/>	<input type="checkbox"/>	_____
Sample Log-in Sheet (Lab & DC1)	<input type="checkbox"/>	<input type="checkbox"/>	_____
Miscellaneous Shipping/Receiving Records (describe or list)	<input type="checkbox"/>	<input type="checkbox"/>	_____

7. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)	<input type="checkbox"/>	<input type="checkbox"/>	_____

8. Other Records (describe or list)	<input type="checkbox"/>	<input type="checkbox"/>	_____

9. Comments:			_____

** See laboratory Quality Assurance Plan for limits.

Completed by: _____
(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 type="checkbox"/>	_____
2. Inorganic Analysis Data Sheet	<input type="checkbox"/>	<input type="checkbox"/>	_____
3. Initial and Continuing Calibration Verification	<input type="checkbox"/>	<input type="checkbox"/>	_____
4. CRDL Standard for AA and ICP	<input type="checkbox"/>	<input type="checkbox"/>	_____
5. Blanks	<input type="checkbox"/>	<input type="checkbox"/>	_____
6. ICP Interference Check Sample	<input type="checkbox"/>	<input type="checkbox"/>	_____
7. Spike Sample Recovery	<input type="checkbox"/>	<input type="checkbox"/>	_____
8. Post Digest Spike Sample Recovery	<input type="checkbox"/>	<input type="checkbox"/>	_____
9. Duplicates	<input type="checkbox"/>	<input type="checkbox"/>	_____
10. Laboratory Control Sample	<input type="checkbox"/>	<input type="checkbox"/>	_____
11. Standard Addition Results	<input type="checkbox"/>	<input type="checkbox"/>	_____
12. ICP Serial Dilutions	<input type="checkbox"/>	<input type="checkbox"/>	_____
13. Instrument Detection Limits, Quarterly	<input type="checkbox"/>	<input type="checkbox"/>	_____
14. ICP Interelement Correction Factors, Annually	<input type="checkbox"/>	<input type="checkbox"/>	_____
15. ICP Linear Ranges Quarterly	<input type="checkbox"/>	<input type="checkbox"/>	_____
16. Preparation Log	<input type="checkbox"/>	<input type="checkbox"/>	_____
17. Analysis Run Log	<input type="checkbox"/>	<input type="checkbox"/>	_____
18. ICP Raw Data	<input type="checkbox"/>	<input type="checkbox"/>	_____
19. Furnace AA Raw Data	<input type="checkbox"/>	<input type="checkbox"/>	_____
20. Mercury Raw Data	<input type="checkbox"/>	<input type="checkbox"/>	_____
21. Percent Solids Calculations	<input type="checkbox"/>	<input type="checkbox"/>	_____
22. Digestion Logs	<input type="checkbox"/>	<input type="checkbox"/>	_____
23. EPA Shipping/Receiving Records (List all individual records)	<input type="checkbox"/>	<input type="checkbox"/>	_____
Chain-of Custody Records	<input type="checkbox"/>	<input type="checkbox"/>	_____
Sample Log-In sheet	<input type="checkbox"/>	<input type="checkbox"/>	_____
24. Miscellaneous Shipping/Receiving Records (List all individual records)	<input 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
 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 Preparation Records Analysis Records Description Other Records (Describe or List)	<input type="checkbox"/>	<input type="checkbox"/>	_____ _____ _____ _____
27.	Other Records (Describe or List) _____ _____			
28.	Comments: _____ _____			

** See laboratory Quality Assurance Plan for limits.

Completed by: _____
 (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>	
1. SAMPLING AND FIELD MEASUREMENTS:			
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
2. LABORATORY MEASUREMENTS:			
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>
1. SAMPLING AND FIELD MEASUREMENTS:			
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 H

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: CNC International Ltd c/o Bruce Moger

Address: PO Box 3000, Woonsocket, RI 02895

Phone: 401-769-6100

Email:

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: 20 Privilege Street

Site Address: 20 Privilege Street, Woonsocket, RI 02895

Plat/Lot Numbers: Plat 20 Lot 15

Approximate Acreage of Property: 0.526 acres

Latitude/Longitude: 42° 00' 55.6" N, 71° 30' 38.6" 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 containing petroleum was identified within the footprint of building one. Refer to Figure 2 of the Site Investigation Report.

3. Release Information:

Date of Discovery: November 2020

Source: Urban fill throughout the Site at depths of up to 10 feet below grade.

Release Media: Soil

Hazardous Materials and Concentrations (Attach certificates of analysis as necessary):

PAH, petroleum, and lead in soil - Refer to the laboratory analytical reports included in the SIR.

Extent of Contamination: Site-wide urban fill and petroleum in soil in the southwestern portion of Site.

Approximate acreage of Contaminated Area: 0.526 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: Bruce D. Moger, C.N.C Limited Partnership

Address: PO Box 3000, Woonsocket, RI

Status: Owner Operator Other:

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?)

Signature: _____ Date: _____

Title: _____