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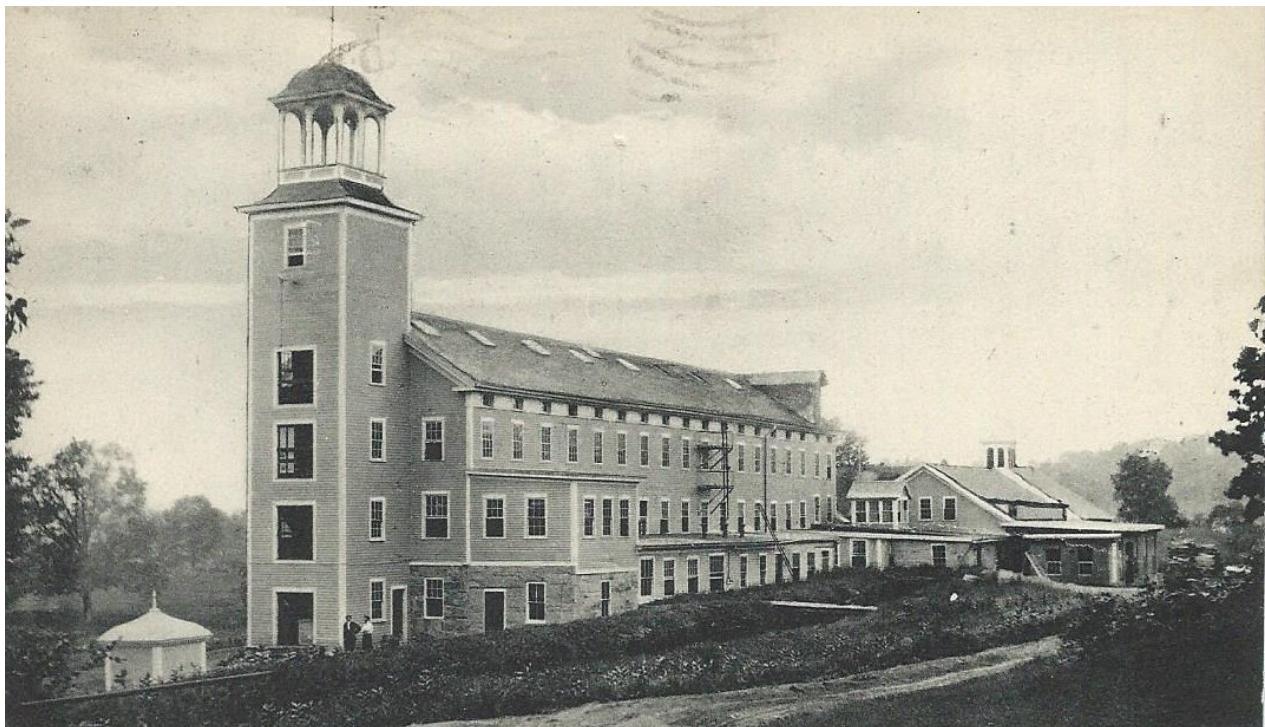
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# REPORT

June 26, 2023

ASTM Phase II Environmental  
Site Assessment  
108 Hydeville Road  
Stafford, Connecticut

Funded through the EPA Brownfields  
Assessment Grant Number BF-00A0036



## TABLE OF CONTENTS

	Page
EXECUTIVE SUMMARY .....	ES-1
TABLE OF CONTENTS .....	i
LIST OF FIGURES.....	ii
LIST OF TABLES.....	ii
LIST OF APPENDICES.....	ii
 1.0 INTRODUCTION & BACKGROUND .....	 1-1
1.1 Introduction.....	1-1
1.2 Site Location.....	1-1
1.3 Site Description and History.....	1-2
1.4 Sensitive Area Receptors .....	1-2
1.5 Geology .....	1-2
1.6 Groundwater Classification .....	1-3
1.7 Hydrogeology .....	1-3
1.8 2021 Phase I ESA Findings .....	1-3
1.9 Site Reconnaissance .....	1-4
1.10 Structural Assessment.....	1-5
 2.0 REGULATORY FRAMEWORK .....	 2-1
2.1 Remediation Standard Regulations .....	2-1
2.1.1 Soil Criteria.....	2-1
2.1.2 Groundwater Criteria .....	2-1
 3.0 PHASE II FIELD INVESTIGATION.....	 3-1
3.1 Phase II ESA Project Approach and Conceptual Site Model.....	3-1
3.2 Soil Boring and Groundwater Well Installation .....	3-2
3.3 Soil Sampling and Analysis.....	3-3
3.4 Groundwater Sampling and Analysis .....	3-4
3.5 Groundwater Elevation Measurements.....	3-4
 4.0 PHASE II RESULTS.....	 4-1
4.1 Soil Analytical Results .....	4-1
4.2 Groundwater Analytical Results .....	4-1
 5.0 HAZARDOUS BUILDING MATERIALS INVESTIGATION.....	 5-1
5.1 Asbestos Survey.....	5-1
5.2 Lead Based Paint Survey .....	5-1
 6.0 SUMMARY AND CONCLUSIONS .....	 6-1
6.1 Summary .....	6-1
6.2 Conclusions .....	6-1

7.0	LIMITATIONS.....	7-1
8.0	REFERENCES.....	8-1
9.0	SIGNATURE AND QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONAL.....	9-1

### LIST OF FIGURES

Figure 1 .....	Locus Map
Figure 2 .....	Areas of Concern
Figure 3 .....	Sampling Plan
Figure 4 .....	Groundwater Contour Map

### LIST OF TABLES

Table 1.....	Summary of Well Details
Table 2.....	Summary of Soil Sample Analytical Results
Table 3.....	Summary of Groundwater Sample Analytical Results
Table 4.....	Summary of Asbestos Analytical Results
Table 5.....	Summary of Lead in Paint Analytical Results

### LIST OF APPENDICES

Appendix A .....	Boring and Well Completion Logs
Appendix B .....	Groundwater Collection Field Logs
Appendix C .....	Soil Laboratory Analytical Results
Appendix D .....	Groundwater Laboratory Analytical Results
Appendix E .....	Asbestos Laboratory Analytical Results
Appendix F .....	Lead Laboratory Analytical Results

## EXECUTIVE SUMMARY

Weston & Sampson Engineers, Inc. (Weston & Sampson) was retained by the Town of Stafford (Town) to perform a Phase II Environmental Site Assessment (ESA) and Hazardous Building Materials Inspection (HBMI) on the parcel of land located at 108 Hydeville Road (the "Site") in Stafford, Connecticut. The Phase II ESA and HBMI were conducted to support the Town's efforts to evaluate the Site's environmental conditions to facilitate redevelopment of the property. The Site is not currently enrolled in a remedial program requiring verification. However, Weston & Sampson conducted the work in accordance with Connecticut regulations and guidance documents so that the information could be used in a potential Site verification in the future. This ESA was funded through a 2019 EPA Brownfields Assessment Grant (No. BF-00A0036).

Weston & Sampson completed a Phase I ESA for the property in April 2021.

Weston & Sampson conducted the Phase II ESA to assess the presence or absence of regulated compounds in Site soil and groundwater that may have resulted from releases of oil and/or hazardous substances at nine Areas of Concern (AOCs) identified in the Phase I ESA. The HBMI was performed to survey and sample building elements for suspected asbestos-containing building materials (ACBMs) and lead-based paint (LBP), only.

The following summarizes the findings of the Phase II ESA:

- None of the soil or groundwater data triggered a reportable condition to CT DEEP pursuant to the Significant Environmental Hazard (SHE) Statute (CGS 22a-6u).
- Extractable Total Petroleum Hydrocarbons (ETPH) and Semivolatile Organic Compounds (SVOCs) were detected in soil samples at locations where petroleum products were stored and may have been released. Analytical results exceeded applicable remedial criteria in the RSRs.
- ETPH, Metals, and SVOCs were detected in groundwater samples and, at some locations, those detections exceeded applicable remedial criteria. The ETPH, SVOCs, and metals detected in groundwater are likely attributable to former Site operations.
- The Hazardous Building Material Investigation of the Site included sampling of accessible building materials for ACBM and LBP from the debris piles found around the exterior of the former mill structure. ACBM and LBP were identified on building components during the survey.

Soil and groundwater analytical data collected to date indicate that there have been releases that impact Site soil and groundwater at concentrations that exceed potentially applicable remedial criteria. It is recommended that a Phase III ESA be performed to further characterize and delineate identified release areas.

A determination of remedial actions will depend upon the findings of a Phase III ESA and future Site use. Remedial actions are likely to include administrative actions (i.e., filing of an Environmental Use Restriction (EUR) and potentially active measures. Active measures are likely to include soil removal or capping.

## 1.0 INTRODUCTION & BACKGROUND

### 1.1 Introduction

Weston & Sampson, on behalf of the Town of Stafford, performed a Phase II ESA, which included an evaluation of soil and groundwater as well as a HBMI for the property located at 108 Hydeville Mill in Stafford, Connecticut (Site). Weston & Sampson completed a Phase I ESA for the Site in April 2021 and the findings from the Phase I ESA were used to design the activities performed as part of the Phase II ESA. The goal of the Town is to facilitate redevelopment of the property and the Phase II ESA was funded through a 2019 EPA Brownfield Assessment Grant (No. BF-00A0036).

The Site is not currently entered into a remedial program with Connecticut Department of Energy and Environmental Protection (CT DEEP). At the request of the Town, Weston & Sampson did not perform this investigation for the purposes of completing a Site Verification by a Connecticut Licensed Environmental Professional (LEP). However, all fieldwork was performed in accordance with the following CT DEEP regulations and guidance documents so that the data generated could be used in a future Site verification, if needed:

- Remedial Standard Regulations (RSRs), adopted January 1996 (revised March 2021);
- Site Characterization Guidance Document (SCGD), effective September 2007 (revised December 2010); and
- Significant Environmental Hazard (SEH) Statute (Connecticut General Statutes Section 22a-6u), effective October 1998 (revised July 2015).



The Phase II ESA work scope was based on findings of the Phase I ESA. Areas of Concern (AOCs) identified by Weston & Sampson in the Phase I ESA were investigated to evaluate the presence or absence of chemicals of concern (COCs). Prior to commencing the Phase II ESA, Weston & Sampson prepared a Site-Specific Addendum to our Generic Quality Assurance Project Plan (QAPP) for EPA Region 1 including Massachusetts, Connecticut, New Hampshire, Rhode Island, and Vermont Brownfields (dated November 19, 2019, Revision 1, EPA QA Tracking Number RFA # 19098). The Site-Specific addendum described the scope of work was approved by EPA prior to performing work at the Site. The findings of the Phase II ESA are discussed in this report.

### 1.2 Site Location

The Site is 2.99-acres and is developed with an approximately 86,300 square foot (SF) former industrial mill building that is in disrepair and structurally unsound. A Site Locus Map is included as Figure 1. Access to the Site is via Hydeville Road. The parking lot is accessible and not gated. Access to the rear of the site is gated to prevent vehicle traffic along the north and south sides of the building. The Site is identified by the Town of Stafford Assessor as Map 28, Lot 11 and is owned by Mr. Roger Lemonde (deceased).

The area immediately surrounding the Site consists of the following:

- Residential area and a dirt and sparsely vegetated grass path for access to the rear of the building to the north;
- Paved asphalt lot connecting to Hydeville Road to the east;
- A mill race, sourced off-Site from Hydeville Pond to the west; and

- Furnace Brook channeled through a sluiceway to the south.

The geographic coordinates for the approximate center of the Site are as follows:

Latitude/Longitude: 41° 59' 40.08" North / 72° 16' 39.74" West

UTM Coordinates: Zone 18

725482.41 meters Easting

4652747.09 meters Northing

### 1.3 Site Description and History

Based on information gathered during the Phase I ESA, the Site was historically developed as the Phoenix Woolen Mill in 1860. The original structure included the 3.5-story main section and the 4-story wooden stair tower (originally 6 stories). An addition in 1870 included a dye house to the west, and a 2-story addition to the northwest corner for wool storage. In 1897, three (3) 1-story additions were added to the northern side for use as gauze and picker rooms, an engine room, and a cloth dryer. The mill began manufacturing kerseys (a coarse-ribbed woolen cloth for hose and work clothes), meltons (a heavy smooth woolen fabric with short nap), and fabrics made of vicuna wool. In 1911, a brick carding building was constructed north of the raceway. Between 1911 and 1921, two (2) additions were added to the main building, including an inspecting room on the southern side of the building and a shipping room on the western side of the building. Tenants in the late 1980s included Church Pew Restoration and Wilson Woodworking. Wilson Woodworking continued to operate at the site until at least 2014. The most recent site owner was Roger Lemonde who passed away in 2011. Wendell Avery, Esquire, was appointed executor of the estate of Roger Lemonde.

A site is classified as an Establishment under the Connecticut Transfer Act if greater than one kilogram of hazardous waste was manifested from the property during any one-month period or if the dry cleaning, furniture stripping, or vehicle body repair operations were performed on the property. This Site would qualify as an establishment because (1) a former tenant registered with the EPA in 1988 as a large quantity generator of hazardous waste for generating 1,000 kg or more per month of hazardous waste, and a former tenant reportedly performed furniture stripping activities in the 1980s.

### 1.4 Sensitive Area Receptors

According to the Town of Stafford Geographic Information System (GIS), the Site and surrounding properties may contain wetlands. A determination of soil types was not performed during this Phase II ESA, so the presence of wetlands was not confirmed. The nearest surface water body is Furnace Brook, which abuts the Site to the south. However, Furnace Brook flows within a concrete channel where it abuts the property. The Site is not identified as being located within an area listed in the Natural Diversity Data Base for State and Federal Listed Species and Critical Habitats.

### 1.5 Geology

According to the "Bedrock Geological Map of Connecticut" (Rodgers, 1985), the Site is located within the Brimfield Schist formation of the Merrimack Synclinorium, an Upper to Middle Ordovician gray, medium to coarse-grained, interlayered schist and gneiss formation. Bedrock outcrops were not observed on Site, though the adjoining property owner indicated that during excavation at his property, he observed bedrock at approximately 10 feet below ground surface (ft. bgs).

According to the "Surficial Materials Map of Connecticut," (Stone et al., 1992), the anticipated surficial geology for this area is described as loams and silt loams along the adjacent Furnace Brook. Anticipated

subsurface lithology for this area is expected to be thin till (less than 10-15 ft. thick), predominantly upper till (loose to moderately compact, generally sand, commonly stony) in the central portion of the Site and sand, composed mainly of very coarse to fine sand, commonly in well-sorted (poorly graded) layers along Furnace Brook.

Some fill materials were encountered during drilling at the Site as evidenced by debris identified in the soil borings. Beneath fill materials, soil at the Site was determined to consist of varying amounts of silt and sand with gravel identified at some locations.

### 1.6 Groundwater Classification

Groundwater beneath the Site is classified as GA by the CT DEEP, which is presumed to be suitable for human consumption without treatment. Designated uses for GA classified groundwater are existing private and potential public or private water supplies.

### 1.7 Hydrogeology

Based on regional topography, groundwater in the surrounding area is estimated to flow generally in a southwest direction toward Furnace Brook. A groundwater flow map generated from data collected during the Phase II investigation indicates that groundwater flows in a south-southwest direction (discussed further in Section 3.6).

### 1.8 2021 Phase I ESA Findings

Weston & Sampson conducted a Phase I ESA for the Site in April 2021. The Phase I ESA was performed in accordance with ASTM Standard Practice E1527-13 (the applicable standard at that time), the United States Environmental Protection Agency (EPA) All Appropriate Inquiry (AAI) standard, and the CT DEEP SCGD. The Phase I ESA included an environmental database search, review of local, state, and Federal regulatory agency files, and a reconnaissance of the Site and vicinity for potential off-site sources of contamination.

The Phase I ESA identified potential on-Site releases, potential off-Site release, the potential for vapor intrusion due to known and suspected on-Site releases. Events or routine activities that may have led to releases of COCs at the Site include a fire in 1942, manufacturing activities, the acceptance/storage of hazardous materials, wood refinishing, and auto repair. Historical or reported Site features include a former 10,000-gallon heating oil UST, two former and reportedly leaking transformers, one former elevator, a documented release from a 275-gallon plastic tote, drums reportedly in poor condition, a former dye pit, and concrete tanks of unknown use.

Observed Site features include three empty aboveground storage tanks (ASTs) exterior to the buildings and two former fill/vent pipes assumed to be for interior ASTs, fill/building debris piles, and leaking heavy equipment. Off-Site features include buried/deteriorated drums west of the Jennings General Contracting building, an empty AST on the adjoining property, and historical discharges to the septic system.

Overall, the 2021 Phase I ESA identified thirty-one Areas of Concern (AOCs) at the Site, as shown on Figure 2 and listed below:

- AOC-1: Near-surface soil in the vicinity of the burned structure;
- AOC-2: Suspected location of the septic system and leach field;
- AOC-3: Interior drain system (not observed);

- AOC-4: Former dry well;
- AOC-5: Drainage ditch along the west side of the Site;
- AOC-6: Former dye pit;
- AOC-7: Former cement tanks (use unknown);
- AOC-8: Loading Docks;
- AOC-9: Loading Docks;
- AOC-10: Loading Docks;
- AOC-11: Loading Docks;
- AOC-12: Interior drain system (not observed);
- AOC-13: Unknown chemical and waste storage areas inside the Site building;
- AOC-14: One former 10,000-gallon heating oil UST;
- AOC-15: Two former transformer pads;
- AOC-16: Two former leaking transformers;
- AOC-17: One former elevator;
- AOC-18: One 275-gallon plastic tote;
- AOC-19: Empty AST;
- AOC-20: Empty AST;
- AOC-21: Empty AST;
- AOC-22: Two former fill/vent pipes for interior ASTs;
- AOC-23: Fill/building debris piles;
- AOC-24: Fill/building debris piles;
- AOC-25: Fill/building debris piles;
- AOC-26: Fill/building debris piles;
- AOC-27: Leaking heavy equipment;
- AOC-28: Buried/deteriorated drums off-Site and west of the Jennings General Contracting building;
- AOC-29: One AST on the adjoining property to the north (AOC-29)
- AOC-30: The Mill Race; and
- AOC-31: The potential for vapor intrusion due to known and suspected on-Site releases;

## 1.9 Site Reconnaissance

Weston & Sampson conducted a site reconnaissance on March 31, 2022. Weston & Sampson personnel were accompanied by Amber Wakely and David Perkins of the Town of Stafford. Glen Setzler (Building Official), Mark Morrison (Fire Marshall) and Eric Bundy (IT Director and drone pilot) all of the town of Stafford, also attended, as did Daniel Chiburis (student) and Professor Nefeli Bompotis of the Connecticut Brownfields Initiative with the University of Connecticut. As part of the site reconnaissance, Weston & Sampson observed the boundaries of the property and traversed the Site to provide an overlapping field of view, wherever possible.

Below is a summary of our findings:

- The building was observed to be structurally unsound and access to the interior of the building was limited to visual observation from accessible windows/entrances.
- Three empty aboveground storage tanks (ASTs) in poor condition.
- Possible fill/vent pipes for former ASTs along the back wall of the boiler house.
- Two nearby off-Site ASTs.
- Two former transformer pads along the northeast side of the building.
- Several piles of building materials and fill materials.

- Several areas of stained soil beneath heavy equipment from equipment leaks.
- Several potential release points, including a former septic system and dry well, a drainage ditch, and several loading docks.

### 1.10 Structural Assessment

Weston & Sampson's Structural Engineer, Peter Grandy, completed a limited Structural Assessment of the Site on October 3, 2022. The purpose of the visual structural assessment was to evaluate if any portions of the structure would be accessible for sampling and assessment activities and how close to the structure subsurface investigation activities could be performed.

Findings from the limited structural assessment included:

- Based on observed conditions at the time of the structural assessment of the onsite building, the entire structure was deemed unsafe and was not to be accessed by anyone.
- Subsurface investigation activities around the building should not be performed any closer than a distance equal to the height of the wall plus five feet at a minimum. If subsurface investigations are needed to be performed closer to the building, then the building walls will need to be demolished prior to the investigation activities being performed. **Shallow hand digging (no vibratory equipment) may be performed but limited to areas where the building is not collapsing, and structure is not more than one-story high.**
- Sampling of environmental media below or near the existing building foundation will require the demolition of the structure down to the foundation to safely perform the sampling.
- **Hazardous Building Material Investigation (HBMI) will need to mainly be performed visually.** Persons performing the HBMI may make observations up to the existing exterior walls and shall not access the building. Areas to be observed shall be approached with great care considering that many areas require walking on fallen building debris. Sampling of existing building materials is to be limited to areas outside of the building. Sampling of materials from the existing exterior walls, such as window caulking may be obtained if the sample can be retrieved by hand tools that keep vibrations and impacts to a minimum. Ladders used to obtain samples shall only be used where it is safe to do so such as near the corners of the building where the second and third floors are still intact.

## 2.0 REGULATORY FRAMEWORK

### 2.1 Remediation Standard Regulations

The RSRs provide remedial standards to which analytical data may be compared to evaluate potential risk to human health and the environment. Applicable remedial criteria are selected based upon site use, groundwater quality classification, and proximity to sensitive receptors.

Applicable RSR remediation criteria are discussed below:

#### 2.1.1 Soil Criteria

The RSRs define two criteria that apply to soil: the Direct Exposure Criteria (DEC) and the Pollutant Mobility Criteria (PMC):

DEC. The DEC defines the concentration of compounds allowed in soil to a depth of 15 feet below ground surface (ft bgs) that may pose a risk to human health due to direct exposure. The CT DEEP has established two sets of DEC using exposure assumptions appropriate for residential land use (RES DEC) or for industrial or commercial land use (I/C DEC). The RES DEC is applicable to all Site unless an Environmental Use Restriction (EUR) has been placed on the property prohibiting residential uses. The RSRs define “residential activity” to include any activity related to a residence or dwelling, or to a school, hospital, day care center, playground, or outdoor recreation area. “Industrial or commercial activity” includes any activity related to the commercial production, distribution, manufacture or sale of goods or services, or any other activity that is not defined as being residential.

The current use of the property meets the definition of industrial/commercial. However, because an EUR is not currently recorded for the Site, the RES DEC is applicable. For data presentation, both the RES DEC and I/C DEC are used in the evaluation of soil analytical data in this Phase II report.

PMC. The PMC were established by CT DEEP to prevent degradation of groundwater quality via migration of soil contaminants. These criteria vary depending on the groundwater classification of the site. The Site is located within a GA groundwater classification area and the GA PMC is the applicable remedial criteria for the Site.

#### 2.1.2 Groundwater Criteria

The RSRs define three criteria that may apply to groundwater: the Groundwater Protection Criteria (GWPC), the Surface Water Protection Criteria (SWPC), and the Volatilization Criteria (VC). Each are discussed below.

GWPC. The GWPC provides the concentration of compounds allowable in groundwater while still maintaining the potential use of groundwater as a potable water source. The GWPC applies to Sites located in a GA groundwater quality area or where groundwater is not present above bedrock. The Site is located in a GA groundwater area and overburden groundwater above bedrock has been observed; therefore, the GWPC is an applicable remedial criteria for the Site and has been used to evaluate data collected.

SWPC. The SWPC applies to groundwater that is discharging to a surface water body (i.e., wetlands, streams, rivers, ponds, and lakes). One standard has been set for all surface water bodies, regardless of groundwater or surface water quality classification. The SWPC provides the concentration of compounds allowable in groundwater to prevent the degradation of surface water quality. The SWPC is an applicable remedial criteria for the Site and groundwater analytical data are compared to the SWPC.

VC. The VC provide concentrations of “volatile organic substances” (VOCs) in groundwater that are within 30 feet or less of the ground surface or a building, and “volatile petroleum substances” that are within 10 feet or less of the ground surface or a building. The VC are designed to protect humans from potential risk due to exposure to VOCs that may migrate from groundwater to interior breathing spaces. Residential and industrial/commercial VC (RES VC and I/C VC, respectively) have been established, with the RES VC being applicable to all sites unless an EUR has been placed on the Site prohibiting residential use.

The current use of the property meets the definition of industrial/commercial. However, because groundwater beneath the property is within 10 feet of the ground surface and an EUR is not currently recorded for the Site, both the RES VC and I/C VC are used to evaluate groundwater data in this Phase II report.

Findings from the Phase I ESA indicate that the Site meets the definition of an Establishment pursuant to the Connecticut Transfer Action (Connecticut General Statutes (CGS) §22a-134 through 22a-134e). As an Establishment, the Property Transfer Program (PTP) would be applicable if the property were sold, and remediation to achieve compliance with the remedial standards listed in the RSRs and verification would be required.

The PTP will be replaced by a released-based program but the time frame for CT DEEP to implement that change in regulatory approach is uncertain. However, it is known that the Remediation Standards Regulation (Regulations of Connecticut State Agencies (RCSA) §§22a-133k-1 through -3, inclusive) will continue to be applicable to site remediation and that verification would still be required. Thus, the anticipated change in the regulations will not alter how this Site will be investigated, potentially remediated, and verified.

### 3.0 PHASE II FIELD INVESTIGATION

#### 3.1 Phase II ESA Project Approach and Conceptual Site Model

Weston & Sampson conducted a Phase II ESA to evaluate the targeted AOCs listed in the table below and shown on Figure 2. Based on the findings of the Phase I ESA, Weston & Sampson developed a Conceptual Site Model (CSM) for the Site. The CSM is a representation of an environmental system that is used as a tool for understanding and for explaining the basis and rationale for the Site investigation, and the conclusions drawn about environmental conditions at the Site. Based on Site history, discussed in greater detail in Section 3.2, impacted soil and/or groundwater may exist in the vicinity of the following AOCs:

Conceptual Site Model			
AOC NUMBER	Name	Constituents of Concern (COCs)	AOC Location
AOC-2 AOC-20 AOC-21	Septic System and Leach Fields ASTs	ETPH, VOCs PCBs, SVOCs, RSR 15 Metals, PFAS	Off the southwest corner of the building.
AOC-5	Drainage Ditch along west side of Site	ETPH, VOC, SVOCs, RSR 15 Metals	At the northwest end of the Site.
AOC-8	Loading Docks	ETPH and VOCs	Off southeast corner of the building.
AOC-9	Loading Docks	ETPH and VOCs	Off the northern end of the building.
AOC-10 AOC-12	Loading Dock Auto Repair Area	ETPH, VOCs, PCBs, SVOCs, RSR 15 Metals	At the northwest end of the site; adjacent to the building.
AOC-15	Former Transformer Pads	PCBs and ETPH	At the northeast end of the site.
AOC-23	Fill/building debris piles	ETPH, VOCs, SVOCs, RSR 15 Metals	Off the southeast end of the Site.
AOC-27	Leaking Heavy Equipment	ETPH, VOCs SVOCs, RSR 15 Metals	At the southern end of the Site.
AOC-28	Buried/deteriorated drums offsite and west of the Jennings General Contracting building	ETPH and VOCs	At the southwest end of the Site.

Abbreviations:

AOC = Area of Concern  
ETPH = Extractable Total Petroleum Hydrocarbons  
VOCs = Volatile Organic Compounds  
SVOCs = Semi-volatile Organic Compounds  
PFAS = Per and Polyfluoroalkyl Substances

To evaluate the presence or absence of environmental impacts within the AOCs identified above, Weston & Sampson implemented the following as described in the Phase II ESA work plan:

- Advanced nine soil borings within the AOCs listed above;
- Installed three groundwater monitoring wells;
- Performed a groundwater elevation survey; and
- Sampled and analyzed soil and groundwater samples for the presence of COCs.

### 3.2 Soil Boring and Groundwater Well Installation

Nine soil borings, designated B-1 to B-3 and HB-1 to HB-6, were completed at the Site on December 28, 2022. Three of the borings (B-1 to B-3) were completed by Cisco Geotechnical LLC (Cisco) of Glastonbury, Connecticut using a truck-mounted hollow stem auger drill rig to depths ranged from 12 to 15 ft bgs. Weston & Sampson used a hand auger to retrieve samples from locations HB-1 to HB-6. All borings were completed under the supervision of Weston & Sampson field staff.

The soil borings were completed within the following AOCs:

Conceptual Site Model	
AOC NUMBER AND NAME	Boring ID's
AOC-10: Loading Docks AOC-12: Auto Repair Area	B-1
AOC-2: Septic System and Leach Field AOC-20: AST AOC-21: AST	B-2
AOC-27: Leaking Heavy Equipment	B-3
AOC-5: Drainage Ditch along west side of Site	HB-1
AOC-15: Former Transformer Pads	HB-2
AOC-23: Fill/building debris piles	HB-3
AOC-8: Loading Docks	HB-4
AOC-9: Loading Docks	HB-5
AOC-28: Buried/deteriorated drums offsite and west of the Jennings General Contracting building	HB-6

The completion depth of each boring was designed based on the likely depth of potential environmental impact, refusal, and/or the presence of underground utilities. Refusal on rock was encountered at B-2 and B-3, at depths of 13.0 and 12.0 ft bgs, respectively. Groundwater was encountered in all three deep soil borings that extended to the water table at a depth of approximately 3.0 to 6.0 ft bgs. Groundwater monitoring wells were installed at all three deep soil borings (B-1, B-2, and B-3).

Each monitoring well was constructed of 2-inch ID Schedule 40 threaded polyvinyl chloride (PVC) riser pipe, a ten foot long 0.010-inch (10-slot) screen, and the bottom of the well was capped with an end

plug. A clean silica sand pack was installed in the annular space from the bottom of the boring to approximately 0.5-foot above the top of the well screen. A 0.5 to 1.0 foot thick bentonite chip seal was placed above the sand pack to prevent infiltration of surface water. The monitoring wells were completed at the surface with a locking compression plug and a protective flush-mounted road box that was cemented into place. After construction, the monitoring wells were developed by Cisco personnel using a submersible pump to remove cuttings, clean the well screen, and establish a hydraulic connection between the well and adjacent water-bearing strata.

The location of the soil borings and groundwater monitoring wells are shown on Figure 3. Boring and monitoring well completion logs documenting subsurface conditions and well construction are provided in Appendix A.

### 3.3 Soil Sampling and Analysis

Soil conditions in the borings were consistent with published sources, which identified sand and gravel at the Site. In general, observed soils were silty sands and little medium gravel.

A calibrated photoionization detector (PID) was used to screen soils for the presence of total volatile organic vapors (TVOVs) throughout the soil sampling sleeves. No PID readings above background [(0.0 parts-per-million (ppm)] were observed in any of the borings/samples advanced/collected during this investigation. Petroleum odors and/or staining were not observed in any of the borings.

Soil samples submitted for laboratory analysis were placed into laboratory-provided glassware and stored on ice in coolers. Samples were submitted under chain of custody protocols to Pace Analytical Laboratory (Pace) of East Longmeadow, Massachusetts, a Connecticut certified laboratory. Provided below is a summary of analyses performed on the soil samples:

# Samples	Parameter	Location/Rationale
13 Samples	ETPH by the Connecticut Department of Public Health (CTDPH) analytical method	Shallow and deep sample from each boring location to address remnant and/or new releases.
12 Samples	VOCs by EPA Method 8260C, preserved by EPA Method 5035	Shallow and deep sample from each boring location (except HB-2) to address remnant and/or new releases.
6 Samples	SVOCs by EPA Method 8270D	Shallow samples from B-1, HB-1, and HB-3. Deep samples from B-2 and B-3.
6 Samples	RSR 15 Total Metals by EPA Methods 6010 and 7471	Shallow samples from B-1, HB-1, and HB-3. Deep samples from B-2 and B-3.
4 Samples	PCBs by EPA Method 8082	Shallow samples from B-1 and HB-2. Deep samples from B-2

Weston & Sampson followed the CT DEEP “Guidance for Collecting and Preserving Soil and Sediment Samples for Laboratory Determination of Volatile Organic Compounds” during the collection of soil samples for VOC analysis. A duplicate sample of B-1 0.0-2.0 ft (DUP-1) was also collected for quality assurance/quality control (QA/QC) purposes for ETPH, VOCs, SVOCs, RSR 15 Metals, and PCBs analysis. The samples were analyzed in accordance with the Connecticut Reasonable Confidence Protocols (RCP).

### 3.4 Groundwater Sampling and Analysis

On January 5, 2023, Weston & Sampson returned to the Site to collect groundwater samples from the three newly installed wells MW-1, MW-2, and MW-3. Prior to sampling, Weston & Sampson gauged the groundwater monitoring wells for water level. All three wells were sampled per EPA low-flow sampling procedures (September 2017). After sampling parameters were stabilized (i.e., turbidity, temperature, conductivity, pH, oxygen reducing potential, and dissolved oxygen), the groundwater samples were collected.

Each of the groundwater samples were analyzed for the following:

- VOCs by EPA Method 8260C
- SVOCs by EPA Method 8270
- ETPH by the CT ETPH Method
- Total RSR-15 Metals by EPA Methods 6010 and 7470

Additionally, Monitoring wells MW-1 and MW-3 were analyzed for PCBs based on their proximity to the potential source/release area for PCBs. Monitoring well MW-2 was also analyzed for per- and polyfluoroalkyl substance (PFAS) based on the historic use of the property as a woolen mill.

The groundwater samples were placed into laboratory prepared glassware, stored on ice, and shipped under chain of custody protocols to Pace for analysis. A blind field duplicate groundwater sample (DUP-2) was collected from MW-3 for QA/QC purposes. A blind field duplicate groundwater sample (DUP-3) was collected from MW-2 for PFAS. Groundwater sample collection field logs are included in Appendix B.

### 3.5 Groundwater Elevation Measurements

Weston & Sampson performed a groundwater elevation survey on January 12, 2023. Depth to groundwater ranged from 2.15 to 3.19 ft bgs from previous measurements taken on January 5, 2023. Water table elevations ranged from 88.75 to 101.77 ft relative to each well location. As indicated by the contour map depicted on Figure 4, groundwater flow direction in overburden is generally south-southwest towards Furnace Brook. A summary of well details is included in Table 1.

## 4.0 PHASE II RESULTS

Analytical results for soil and groundwater are compared to remedial standards provided in the RSRs. The analytical data were also compared to the SEH conditions listed in CGS 22a-6u and none were identified.

### 4.1 Soil Analytical Results

Soil analytical results are summarized in Table 2 and the laboratory analytical report is included in Appendix C. A summary of soil results organized by constituent type is presented below.

**ETPH:** ETPH was detected in ten of the thirteen soil samples analyzed and reported concentrations ranged from 23 milligrams per kilogram (mg/kg) to 3,000 mg/kg. As highlighted on Table 2, four of the detected ETPH concentrations exceed the RES DEC, I/C DEC, or GA PMC.

**VOCs:** VOCs were not detected above laboratory reporting limits in any of the soil samples collected.

**SVOCs:** SVOCs were detected in four of the six soil samples submitted for this analysis. The detected concentrations of all SVOCs were less than the RES DEC, I/C DEC, and/or GA PMC.

**Metals:** Metals were detected above laboratory reporting limits in all six of the soil samples collected submitted for this analysis. The detected concentrations of all metals are below the RES DEC, I/C DEC, and/or GA PMC.

**PCBs:** PCBs were not detected above laboratory reporting limits in any of the five soil samples collected.

### 4.2 Groundwater Analytical Results

Groundwater analytical results are summarized in Table 3 and the laboratory analytical reports are provided in Appendix D. A summary of groundwater results organized by constituent type is presented below.

**ETPH:** ETPH was detected in groundwater samples from each of the three monitoring wells sampled. As highlighted on Table 3, the concentrations detected in MW-1 and MW-2 are greater than the SWPC. ETPH was not detected above the laboratory reporting limit in MW-3. The analytical results for duplicate sample DUP-3 were within an acceptable Relative Percent Difference (RPD) with the results of the parent sample (MW-3), indicating acceptable precision.

**VOCs:** VOCs were not detected above laboratory reporting limits in any of the groundwater samples collected. The analytical results for duplicate sample DUP-2 had an acceptable RPD with parent sample (MW-3) results, indicating acceptable precision.

**SVOCs:** One SVOC, phenanthrene, was detected in all three monitoring wells at a concentration that did not exceed the SWPC. No other SVOCs were detected. The parent and duplicate samples had an acceptable RPD indicating acceptable precision in the analysis.

**Metals:** Metals were detected above laboratory reporting limits in all three of the groundwater samples collected submitted for this analysis and lead concentrations were greater than the SWPC in all samples collected. The parent and duplicate samples had an acceptable RPD indicating acceptable precision in the analysis.

**PCBs:** PCBs were not detected above laboratory reporting limits in any of three groundwater samples collected.

**PFAS:** A total of four PFAS compounds, 6:2 Fluorotelomersulfonic acid (6:2 FTS A), perfluoroheptanoic acid (PFHpA), Perfluorooctanoic acid (PFOA), and perfluorooctanesulfonic acid (PFOS), were detected in the two groundwater samples submitted for this analysis.

CT DEEP has an Additional Polluting Substance (APS) GWPC for a sum of five PFAS compounds, Perfluorooctanoic Acid (PFOA), Perfluorooctane Sulfonate (PFOS), Perfluorononanoic Acid (PFNA), Perfluorohexane Sulfonate (PFHxS), and Perfluoroheptanoic Acid (PFHpA) of 70 ng/L. These remedial criteria were not exceeded in either sample collected. GWPC and SWPC for individual PFAS compounds are not available.

## 5.0 HAZARDOUS BUILDING MATERIALS INVESTIGATION

Weston & Sampson conducted a HBMI at the Site which included sampling of potential asbestos containing building materials (s) and lead-based paint/coatings from the debris piles surrounding the former mill structure. The purpose of the HBMI was to identify hazardous building materials or waste material that may require removal or special handling prior to any redevelopment or demolition activities involving building materials at the Site. Due to the unsafe building structures materials accessible for sampling were limited. The HBMI was therefore performed not to identify each suspect HBM present, but rather to inform future remedial activities at the Site regarding building construction type and other potential HBMs present.

### 5.1 Asbestos Survey

The asbestos sampling was performed by Weston & Sampson on December 19, 2022. Sampling was performed by a Connecticut-licensed Asbestos Inspector (Mr. Lewis Tamaccio - CT AI license #000503). A total of 16 samples of suspected ACBMs were collected to characterize the debris piles. Weston & Sampson performed the bulk sampling according to methods outlined in the EPA guidance document "Guidance for Controlling Asbestos-Containing Materials in Buildings" (Document No. 560/5-85/024). Samples were analyzed via Polarized Light Microscopy (PLM) EPA Method 600/R-93/116 by EMSL Analytical, Inc. (EMSL) in Meriden, Connecticut.

Based on the results of the PLM analyses, the laboratory did not recommend any samples to be further analyzed via Transmission Electron Microscopy (TEM). One sample of the 16 samples detected ACM, see Table 4.

The EPA and the CDPH define an ACBM as a material that contains greater than 1 percent (%) asbestos. Asbestos was detected in one of the building materials sampled by Weston & Sampson in concentrations greater than or equal to 1%.

The EPA - NESHAP (National Emissions Standard for Hazardous Air Pollutants - 40 CFR Part 61, Subpart M) and Connecticut regulations require that friable ACBM, Category I and II non-friable ACBM that has become friable, or Category I and II non-friable ACBM that will be or has been subject to sanding, grinding, or abrading, be removed from a facility being demolished or renovated prior to any activity that would disturb the material.

Asbestos analytical results are summarized in Table 4 and the laboratory analytical reports are provided in Appendix E. Suspect asbestos sample locations are depicted on Figure 3.

#### *Asbestos Survey Limitations*

The Weston & Sampson survey did not include an evaluation of underground utility conduits, the interior of the structure, mechanical systems or below grade materials that may contain ACBMs. In addition to the above listed materials, other suspect ACBMs may be present at the Site or within the buildings that were not accessible by Weston & Sampson during our survey. Weston & Sampson recommends that if any suspect materials are uncovered during demolition or renovation activities that were not identified during the survey, that the materials be sampled and analyzed for asbestos content prior to removal. This document is not intended to be, nor will it suffice to serve, as a bid document or specification.

### 5.2 Lead Based Paint Survey

As part of this building assessment, Weston & Sampson performed a lead paint screening of the debris piles on December 19, 2022. During the screening, Weston & Sampson collected paint chip samples

from representative painted/coated building materials found in the debris piles for analysis via Atomic Absorption Spectrometry using EPA Method SW846 3050B/7000B. Samples were analyzed by EMSL in Cinnaminson, New Jersey. Three samples were collected and submitted for percent lead by weight analysis. Two out of three samples were classified as lead-based paint (>0.50% weight) per HUD guidelines and two were lead containing.

Based on visual observations, it appears that the painting history within the building is inconsistent, but any painted materials should be assumed to be lead containing for the purposes of worker protection and waste disposal. The testing detected lead in 2 of the 3 samples. LBP. Lead analytical results are summarized in Table 5 and the laboratory analytical reports are provided in Appendix F. Suspect lead paint sample locations are depicted on Figure 3.

#### Regulatory Implications and Regulations

OSHA defines any detectable concentration of lead in paint as a potential lead exposure hazard to workers doing construction/demolition-type work on these surfaces, as even small concentrations of lead can result in unacceptable employee exposures depending upon the method of removal and other workplace conditions. Since these conditions can vary greatly, the lead-in-construction standard was written to require exposure monitoring or the use of historical or objective data to ensure that employee exposures do not exceed the Action Level of 30 micrograms per cubic meter of air ( $\mu\text{g}/\text{m}^3$ ). Historical data may be applied to some construction tasks involving lead.

OSHA requires that if coated surfaces with paint containing lead are impacted during demolition, then lead exposure monitoring must be performed by the contractor. Contractors and employers of staff who may disturb these materials are obligated to perform a "negative exposure assessment" in accordance with OSHA regulations in order to document that, although minimal levels of lead are present in these materials, exposure to lead does not exceed the aforementioned OSHA Action Level.

OSHA states that until the employer performs an exposure assessment (or can supply prior data regarding the same type of work which may exempt them from the standard) and documents that employees are not exposed above the permissible exposure limit (PEL) of greater than 50  $\mu\text{g}/\text{m}^3$  of air, the employer must treat employees as if they were exposed above the PEL for the following operations:

- manual demolition of structures, manual scraping, manual sanding, and use of heat gun where lead-containing coatings or paints are present;
- abrasive blasting enclosure movement and removal;
- power tool cleaning;
- lead burning;
- using lead-containing mortar or spray painting with lead-containing paint;
- abrasive blasting, rivet busting, or welding, cutting, or burning on any structure where lead-containing coatings or paint are present;
- cleanup activities where dry expendable abrasives are used; and
- any other task the employer believes may cause exposure in excess of the PEL.

The contractor must provide respiratory protection, protective work clothing and equipment, change areas, hand washing facilities, biological monitoring, and training until an exposure assessment has been performed and testing indicates that the work activity will result in an exposure below the PEL. Additional requirements under this standard include a written compliance program as well as record keeping.

## 6.0 SUMMARY AND CONCLUSIONS

### 6.1 Summary

Weston & Sampson was retained by the Town to perform a Phase II ESA and HBMI on a parcel of land located at 108 Hydeville Road in the rural area of the Town of Stafford, also referred to as Stafford, Connecticut. The Phase II ESA and HBMI were conducted to support of the Town's efforts to evaluate the Site's environmental conditions and to facilitate redevelopment of the property. Although Weston & Sampson was not performing this investigation for verification by a LEP, all work was performed to be consistent with applicable and relevant CT DEEP regulations and guidance documents. This ESA was funded through a 2019 EPA Brownfields Assessment Grant (No. BF-00A0036). Prior to commencement of the Phase II ESA and HBMI, Weston & Sampson prepared and submitted a Site-Specific Addendum to our Generic QAPP, which was approved on December 13, 2021.

The Phase II ESA was performed to assess the presence or absence of COCs in Site soil and groundwater that may have resulted from releases of oil and/or hazardous substances at nine Areas of Concern (AOCs) identified in the Phase I ESA. The HBMI was performed to survey and sample accessible building elements for suspect ACBMs and lead-based paint (LBP) only.

### 6.2 Conclusions

Provided below are conclusions drawn from the findings of Weston & Sampson's Phase II ESA and HBMI completed at the Site:

- None of the soil or groundwater data triggered a reportable condition to CT DEEP pursuant to the SEH Statute (CGS 22a-6u).
- Detections of ETPH and SVOCs indicate that releases of petroleum hydrocarbons occurred at the Site. Analytical results were greater than applicable remedial criteria in some samples and additional investigation to further characterize and delineate the extent of the releases is recommended prior to designing remedial actions, if necessary.
- Groundwater laboratory results have identified the presence of COCs including ETPH, Metals, and SVOCs and the results were greater than applicable remedial criteria in some samples. This indicates that releases to soil from Site operations may have degraded the groundwater quality. Additional investigation to further characterize and delineate the extent of the groundwater impacts is recommended prior to designing remedial actions, if necessary.
- The PFAS compounds detected in groundwater, 6:2 FTS A, PFHpA, PFOS, and PFOA are known to have been used in mist suppression in metal plating baths., among other uses. Available documents reviewed indicate that metal plating was not performed at the Site and these impacts may be due to a different use, or to an offsite source.
- The Hazardous Building Material Investigation of the Site included sampling of accessible building materials for ACBM and LBP from the debris piles found around the exterior of the former mill structure. ACBM and LBP were identified on building components during the survey. It should be assumed that ACBM and LBP are present throughout the structures.

A Phase III ESA is recommended to complete the characterization and delineation of identified release areas at the Site. The results from the Phase III ESA could be used to determine the potential need for remedial actions along with the future Site use. Any limitation on future Site use would require filing of an EUR on the property.

## 7.0 LIMITATIONS

This Phase II Environmental Site Assessment Report was prepared for use by the Town of Stafford, exclusively. The findings provided by Weston & Sampson in this report are based solely on the information reported in this document. Future investigations, and/or information that was not available to Weston & Sampson at the time of the investigation, may result in a modification of the findings stated in this report.

Should additional information become available concerning this Site or neighboring properties which could directly impact the Site in the future, that information should be made available to Weston & Sampson for review so that, if necessary, conclusions presented in this report may be modified. The conclusions of this report are based on Site conditions observed by Weston & Sampson personnel at the time of the investigation, information provided by the Town, and samples collected and analyzed on the dates shown or stated in this report. This report has been prepared in accordance with generally accepted engineering and geological practices. No other warranty, express or implied, is made.

## 8.0 REFERENCES

Connecticut Environmental Conditions Online for Stafford, Connecticut Groundwater Classification Map via <http://www.cteco.uconn.edu>.

Rodgers, J., "Bedrock Geological Map of Connecticut" Connecticut Geological and Natural History Survey, Department of Environmental Protection, 1985.

Stone, J.R. et al., "Surficial Materials Map of Connecticut" Department of the Interior, U.S. Geological Survey, 1992.

United States Geological Survey (USGS), 7.5-Minute Series Topographic Quadrangle of Stafford Springs, Connecticut, 2012.

Connecticut Department of Environmental Protection, *Site Characterization Guidance Document*, dated September 2007.

Weston & Sampson, *ASTM Phase I Environmental Site Assessment*, 108 Hydeville Road, Stafford, Connecticut, dated April 6, 2021.

## 9.0 SIGNATURE AND QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONAL

This Phase II ESA was prepared by a Qualified Environmental Professional (EP) as defined in ASTM E1527-13, EPA's proposed AAI, and in general accordance with ASTM E1903-19 for Phase II ESAs. The EP is a LEP in Connecticut and has over 20 years of environmental experience with degrees in relevant disciplines. Please note that the signatory is not acting in LEP capacity or as an LEP of Record pursuant to CGS Section 22a-133v to "verify" that an investigation has been performed at a specific property in accordance with prevailing standards and guidelines, or that pollution on such property has been remediated in accordance with the CT DEEP RSRs.



Malcolm Beeler, LEP  
Senior Technical Leader

June 26, 2023

Date

## FIGURES

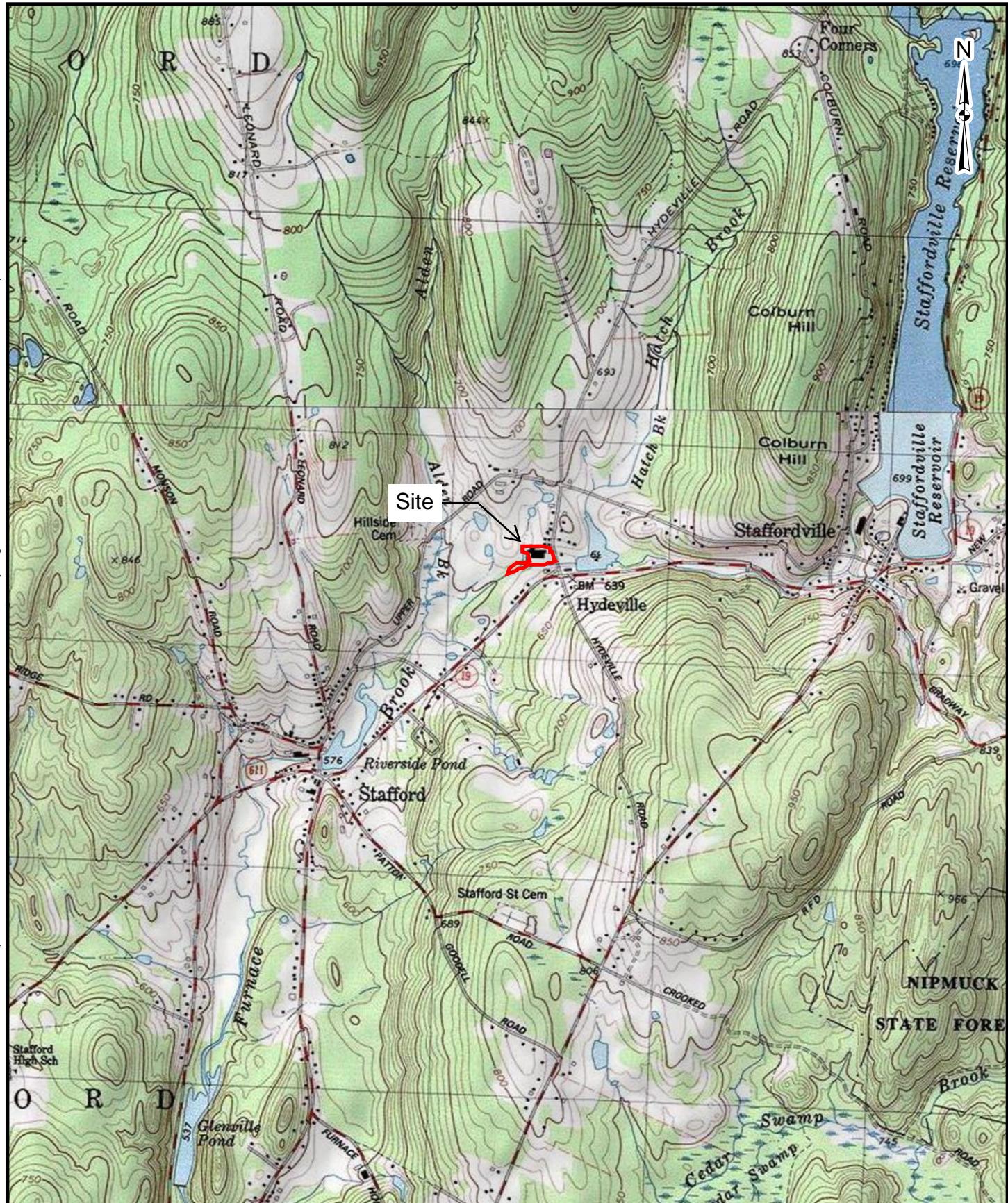
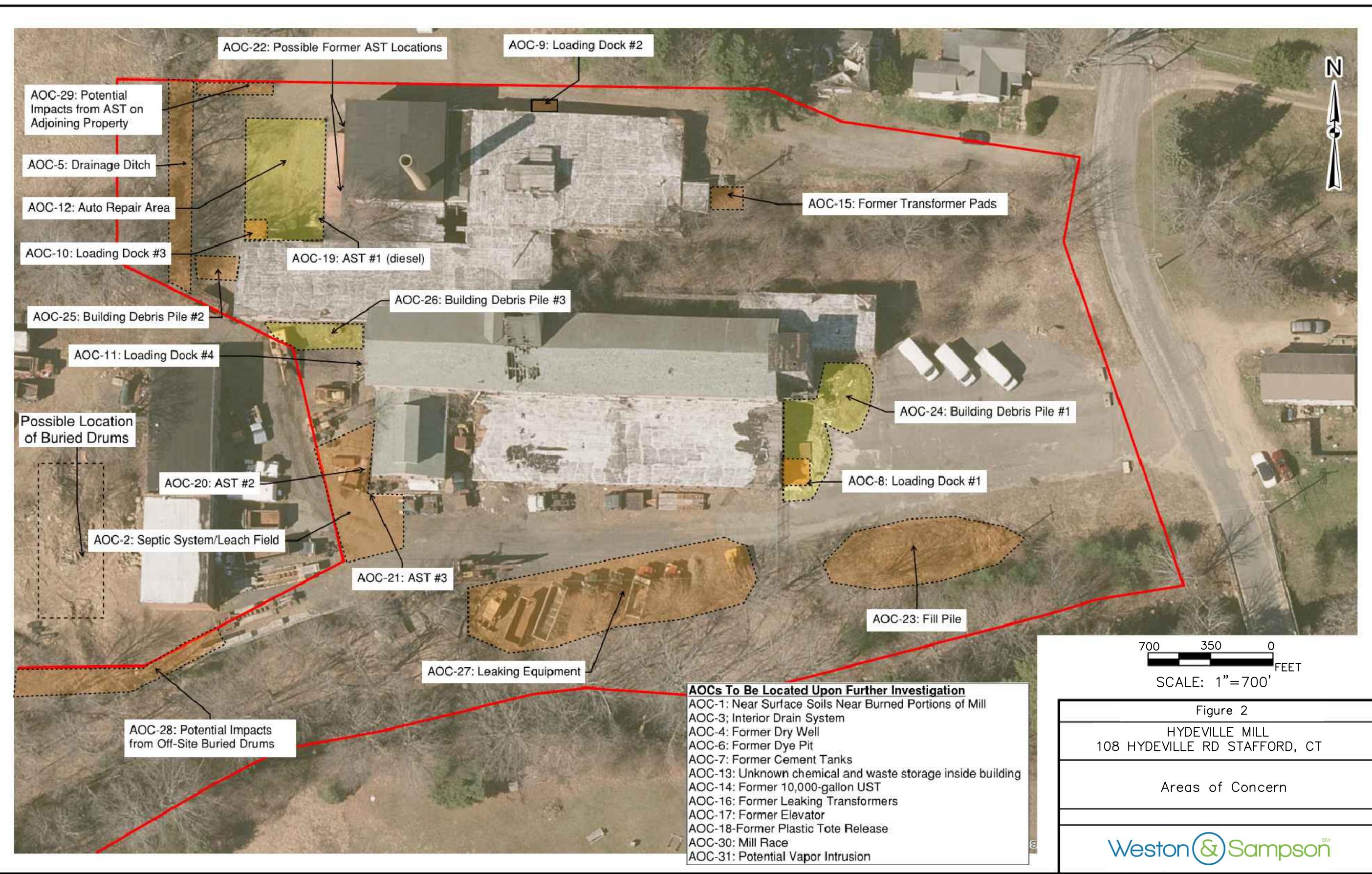
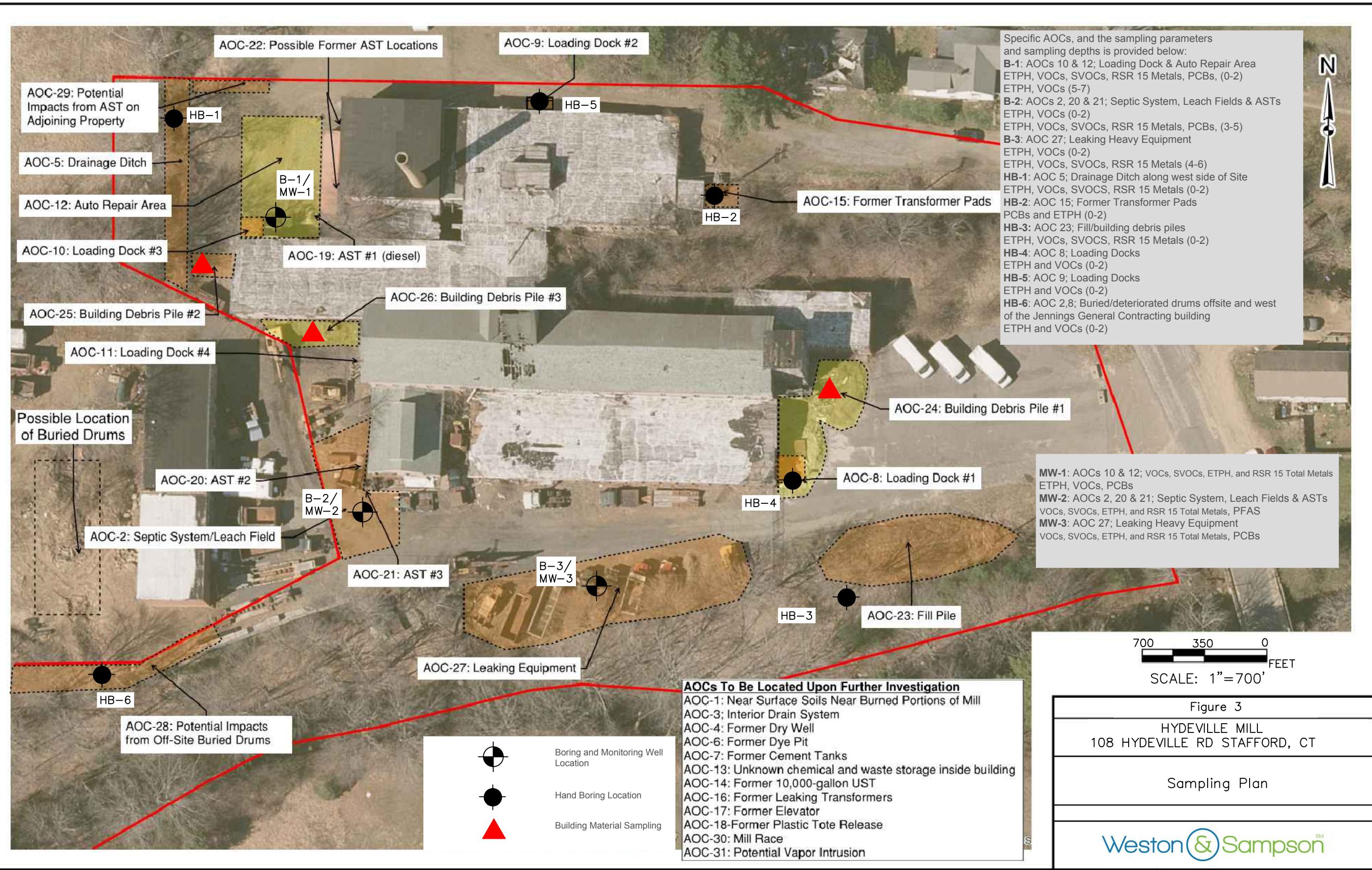


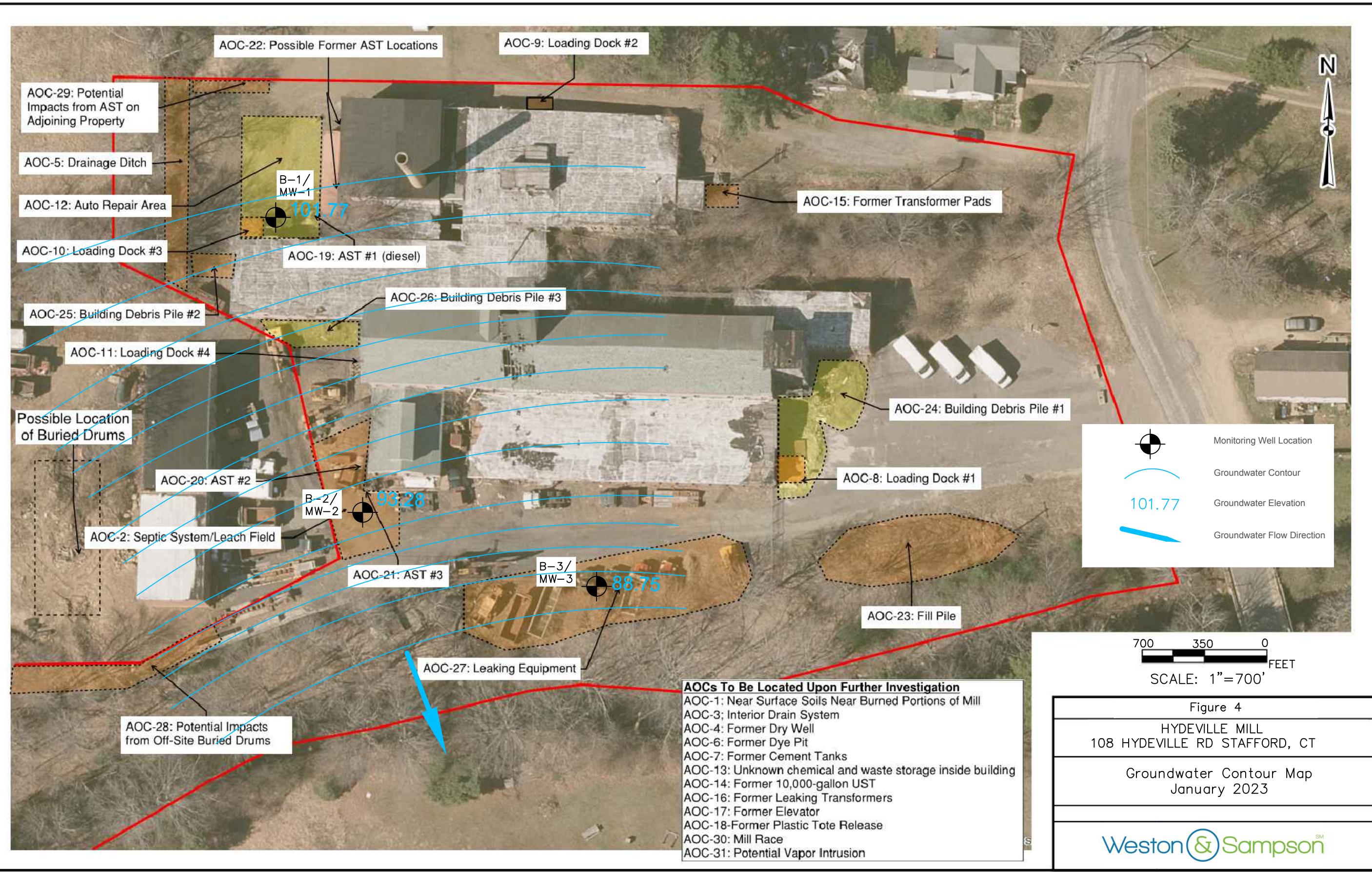
FIGURE 1  
LOCUS MAP  
108 HYDEVILLE ROAD, STAFFORD, CT



1:24,000







TABLES

**TABLE 1**  
**SUMMARY OF WELL DETAILS**  
**HYDEVILLE MILL**  
**108 HYDEVILLE ROAD STAFFORD CONNECTICUT**  
**FEBRUARY 2023**

WELL ID	Well Elevation TOC	Well Elevation PVC	Depth to Water 1/5/2023	Water Elevation 1/5/2023	Notes
MW-1	104.96	104.62	3.19	101.77	Newly Installed
MW-2	95.43	95.18	2.15	93.28	Newly Installed
MW-3	94.50	93.98	5.75	88.75	Newly Installed

Notes:

TOC - Top of Casing

**TABLE 2**  
**SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS**  
**HYDEVILLE MILL**  
**108 HYDEVILLE MILL STAFFORD CONNECTICUT**  
**FEBRUARY 2023**

SAMPLE LOCATION	REMEDIATION STANDARD REGULATIONS <sup>1</sup>			B-1	B-1/DUP-1	B-1	B-2	B-2	B-3	B-3	HB-1	HB-2	HB-3	HB-4	HB-5	HB-6
				0.0-2.0'	0.0-2.0'	5.0-7.0'	0.0-2.0'	3.0-5.0'	0.0-2.0'	4.0-6.0'	0.0-2.0'	0.0-2.0'	0.0-2.0'	0.0-2.0'	0.0-2.0'	0.0-2.0'
	SAMPLE INTERVAL (feet below ground surface)	RES DEC	I/C DEC	GB PMC <sup>3</sup>	12/28/22	12/28/22	12/28/22	12/28/22	12/28/22	12/28/22	12/28/22	12/28/22	12/28/22	12/28/22	12/28/22	12/28/22
DATE SAMPLED				22L3707	22L3707	22L3707	22L3707	22L3707	22L3707	22L3707	22L3707	22L3707	22L3707	22L3707	22L3707	22L3707
WORK ORDER NO.																
PARAMETER (Units) <sup>2</sup>																
<b>Polychlorinated Biphenyls by EPA method 8082 (mg/kg)</b>																
Total PCBs	1	10	--		BRL	BRL	NT	NT	BRL	NT	NT	BRL	NT	NT	NT	NT
<b>Volatile Organic Compounds by EPA Method 8260 (mg/kg)</b>					BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
<b>Semivolatile Organic Compounds by EPA Method 8270 (mg/kg)</b>																
Acenaphthylene	1,000	2,500	84	ND < 0.20	ND < 0.20	NT	NT	ND < 0.19	NT	ND < 0.19	ND < 0.58	NT	1.1	NT	NT	NT
Anthracene	1,000	2,500	400	ND < 0.20	ND < 0.20	NT	NT	ND < 0.19	NT	ND < 0.19	ND < 0.58	NT	0.64	NT	NT	NT
Benzo(a)anthracene	1	7.8	1	<b>0.37</b>	<b>0.25</b>	NT	NT	ND < 0.19	NT	ND < 0.19	ND < 0.58	NT	3.3	NT	NT	NT
Benzo(a)pyrene	1	1	1	<b>0.30</b>	<b>0.23</b>	NT	NT	ND < 0.19	NT	ND < 0.19	ND < 0.58	NT	3.6	NT	NT	NT
Benzo(b)fluoranthene	1	7.8	1	<b>0.38</b>	<b>0.36</b>	NT	NT	ND < 0.19	NT	ND < 0.19	<b>0.58</b>	NT	4.4	NT	NT	NT
Benzo(g,h,i)perylene <sup>4</sup>	8.4	78	1	ND < 0.20	<b>0.35</b>	NT	NT	ND < 0.19	NT	ND < 0.19	ND < 0.58	NT	2.2	NT	NT	NT
Benzo(k)fluoranthene	8.4	78	1	ND < 0.20	ND < 0.20	NT	NT	ND < 0.19	NT	ND < 0.19	ND < 0.58	NT	1.7	NT	NT	NT
Chrysene <sup>4</sup>	84	780	1	<b>0.43</b>	<b>0.28</b>	NT	NT	ND < 0.19	NT	ND < 0.19	ND < 0.58	NT	4.5	NT	NT	NT
Dibenz(a,h)anthracene <sup>4</sup>	1	1	1	ND < 0.20	ND < 0.20	NT	NT	ND < 0.19	NT	ND < 0.19	ND < 0.58	NT	0.55	NT	NT	NT
Di-n-butylphthalate	1,000	2,500	140	ND < 0.40	ND < 0.40	NT	NT	ND < 0.38	NT	ND < 0.39	ND < 1.2	NT	0.55	NT	NT	NT
Fluoranthene	1,000	2,500	56	<b>0.71</b>	<b>0.53</b>	NT	NT	ND < 0.19	NT	ND < 0.19	<b>0.89</b>	NT	6.4	NT	NT	NT
Fluorene	1,000	2,500	56	ND < 0.20	ND < 0.20	NT	NT	ND < 0.19	NT	ND < 0.19	ND < 0.58	NT	0.31	NT	NT	NT
Indeno(1,2,3-cd)pyrene <sup>4</sup>	1	7.8	1	ND < 0.20	<b>0.32</b>	NT	NT	ND < 0.19	NT	ND < 0.19	ND < 0.58	NT	2.4	NT	NT	NT
Naphthalene	1,000	2,500	56	ND < 0.20	ND < 0.20	NT	NT	ND < 0.19	NT	ND < 0.19	ND < 0.58	NT	0.35	NT	NT	NT
Phenanthrene	1,000	2,500	40	<b>0.57</b>	<b>0.45</b>	NT	NT	ND < 0.19	NT	ND < 0.19	ND < 0.58	NT	3.9	NT	NT	NT
Pyrene	1,000	2,500	40	<b>0.84</b>	<b>0.57</b>	NT	NT	ND < 0.19	NT	ND < 0.19	1.1	NT	9.3	NT	NT	NT
<b>Extractable Total Petroleum Hydrocarbons by CT Method (mg/kg)</b>	500	2,500	2,500	<b>56</b>	100	<b>23</b>	<b>3000</b>	ND < 11	<b>61</b>	ND < 11	<b>800</b>	<b>390</b>	<b>1100</b>	<b>74</b>	<b>650</b>	<b>84</b>
<b>Total RSRs 15 Metals by EPA method 6010B (mg/kg)</b>																
Arsenic	10	10	--	ND < 3.8	ND < 3.8	NT	NT	ND < 3.6	NT	ND < 3.7	ND < 11	NT	5.9	NT	NT	NT
Barium	4,700	140,000	--	<b>61</b>	<b>69</b>	NT	NT	<b>46</b>	NT	<b>42</b>	<b>180</b>	NT	62	NT	NT	NT
Beryllium	2	2	--	<b>0.3</b>	<b>0.28</b>	NT	NT	<b>0.21</b>	NT	ND < 0.18	<b>0.66</b>	NT	0.46	NT	NT	NT
Cadmium	34	1,000	--	ND < 0.38	ND < 0.38	NT	NT	ND < 0.36	NT	ND < 0.37	ND < 1.1	NT	0.51	NT	NT	NT
Chromium	100	100	--	<b>16</b>	<b>17</b>	NT	NT	<b>9.3</b>	NT	<b>27</b>	<b>65</b>	NT	54	NT	NT	NT
Copper	2,500	76,000	--	<b>18</b>	<b>22</b>	NT	NT	<b>11</b>	NT	<b>24</b>	<b>50</b>	NT	43	NT	NT	NT
Lead	400	1,000	--	<b>2.2</b>	<b>5.4</b>	NT	NT	<b>1.6</b>	NT	<b>4.3</b>	<b>69</b>	NT	140	NT	NT	NT
Mercury	20	610	--	ND < 0.029	<b>0.039</b>	NT	NT	ND < 0.029	NT	ND < 0.028	<b>0.2</b>	NT	0.21	NT	NT	NT
Nickel	1,400	7,500	--	<b>9.1</b>	<b>10.0</b>	NT	NT	<b>6.2</b>	NT	<b>20</b>	<b>24</b>	NT	9.5	NT	NT	NT
Vanadium	470	14,000	--	<b>38</b>	<b>35</b>	NT	NT	<b>22</b>	NT	<b>56</b>	<b>45</b>	NT	37	NT	NT	NT
Zinc	20,000	610,000	--	<b>29</b>	<b>31</b>	NT	NT	<b>18</b>	NT	<b>50</b>	<b>230</b>	NT	100	NT	NT	NT
<b>Total Solids (%)</b>	--	--	--	<b>86.0</b>	<b>85.8</b>	<b>88.3</b>	<b>77.0</b>	<b>89.6</b>	<b>84.4</b>	<b>87.4</b>	<b>29.4</b>	<b>77.8</b>	<b>63.4</b>	<b>89.2</b>	<b>69.8</b>	<b>86.0</b>

\wse03\local\WSE\Projects\CT\Stafford CT\Brownfields 2020\Hydeville Mill\6. Data\Tables\Table 2\_Hydeville Mill\_Soil Analytical Data\_DRAFT.xls\SOIL

**NOTES:**

1. Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised February 16, 2022).
2. Only compounds that were detected are provided in this table. For a complete list of analytes refer to laboratory report.
3. The site is located within a GB groundwater area.
4. These criteria are available through the submission and approval of a Request for Approval of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.

mg/kg = milligrams per kilogram

mg/l = milligrams per liter

**BOLD** = compound detected at that concentration.

Highlighted = compound exceeds one or more criteria

BRL < # = Not reported above specified reporting limit

NT = Not Tested

NE = Not Established by DEEP

-- = Not Applicable

RES DEC = Residential Direct Exposure Criteria

I/C DEC = Industrial/Commercial Direct Exposure Criteria

GB PMC = GB Pollutant Mobility Criteria

CS = Compound Specific



**TABLE 3**  
**SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS**  
**HYDEVILLE MILL**  
**108 HYDEVILLE MILL STAFFORD CONNECTICUT**  
**FEBRUARY 2023**

SAMPLE LOCATION DATE SAMPLED WORK ORDER NO.	REMEDIATION STANDARD REGULATIONS <sup>1</sup>			MW-1	MW-2	DUP-3 / Duplicate of MW-2	MW-3	DUP-2 / Duplicate of MW-3
	SWPC	RES VC	I/C VC	1/5/2023	1/5/2023	1/5/2023	1/5/2023	1/5/2023
				23A0661	23A0661/23A0663	23A0663	23A0661	23A0661
PARAMETER <sup>2</sup> (Units)								
Polychlorinated Biphenyls by EPA method 8082 (ug/L)								
Total PCBs	0.5	NE	NE	BRL	NA	NA	BRL	BRL
Volatile Organic Compounds by EPA Method 8260 (ug/L)				BRL	BRL	NA	BRL	BRL
Semivolatile Organic Compounds by EPA Method 8270 (ug/L)								
Phenanthrene (SIM)	14 <sup>3</sup>	NE	NE	0.15	0.089	NA	0.077	0.077
Extractable Total Petroleum Hydrocarbons by CT Method (mg/L)	0.25	NE	NE	<b>0.27</b>	<b>0.42</b>	NA	0.17	0.17
Total RCP 15 Metals by EPA method 6010B (ug/L)								
Antimony	86000	NE	NE	ND < 1.0	ND < 1.0	NA	<b>1.3</b>	<b>1.4</b>
Arsenic	4	NE	NE	<b>1.0</b>	<b>1.5</b>	NA	ND < 0.80	ND < 0.80
Barium	2,200 <sup>3</sup>	NE	NE	<b>61</b>	<b>32</b>	NA	<b>69</b>	<b>69</b>
Beryllium	4	NE	NE	ND < 0.40	ND < 0.40	NA	ND < 0.40	ND < 0.40
Cadmium	6	NE	NE	ND < 0.20	ND < 0.20	NA	ND < 0.20	ND < 0.20
Chromium	NE	NE	NE	<b>2.0</b>	<b>2.0</b>	NA	<b>1.9</b>	<b>2</b>
Copper	48	NE	NE	<b>3.5</b>	<b>3.8</b>	NA	<b>15.0</b>	<b>19.0</b>
Lead	13	NE	NE	<b>0.62</b>	ND < 0.50	NA	<b>19</b>	<b>20</b>
Mercury	0.4	NE	NE	ND < 0.10	ND < 0.10	NA	ND < 0.10	ND < 0.10
Nickel	880	NE	NE	<b>7.6</b>	<b>8.6</b>	NA	<b>8.9</b>	<b>10</b>
Selenium	50	NE	NE	ND < 5.0	ND < 5.0	NA	ND < 5.0	ND < 5.0
Silver	12	NE	NE	ND < 0.20	ND < 0.20	NA	ND < 0.20	ND < 0.20
Thallium	63	NE	NE	ND < 0.20	ND < 0.20	NA	ND < 0.20	ND < 0.20
Vanadium	50	NE	NE	ND < 5.0	ND < 5.0	NA	ND < 5.0	ND < 5.0
Zinc	123	NE	NE	ND < 10	ND < 10	NA	<b>48</b>	<b>49</b>
Per-and Polyfluorinated Alkyl Acids (PFAS) by EPA Method 537.1M Isotopic Dilution (ng/L)								
6:@ Fluorotelomersulfonic acid (6:2FTS A)	--	--	--	NA	<b>5.5</b>	<b>4.0</b>	NA	NA
PFHpA	--	--	--	NA	<b>4.4</b>	ND < 4.0	NA	NA
PFOS	--	--	--	NA	<b>11</b>	<b>11</b>	NA	NA
PFOA	--	--	--	NA	<b>6.1</b>	<b>5.3</b>	NA	NA
<b>Sum of 5 PFAS Compounds</b>	--	--	--	NA	<b>21.5</b>	<b>16.3</b>	NA	NA

**NOTES:**

- Analytical results compared to Connecticut Remediation Standard Regulations (January 1996; revised February 16, 2022).
- Only compounds that were detected are provided in this table. For a complete list of analytes refer to laboratory report.
- These criteria are available through the submission and approval of a Request for Approval of Criteria for Additional Polluting Substances and Certain Alternative Criteria Form.

- Exceeds SWPC  
- Exceeds SWPC and RES VC  
- Exceeds SWPC, RES VC and I/C VC

mg/L = milligrams per liter

ug/L = micrograms per liter

BRL = Below Reporting Limit

BRL < # = Not reported above specified reporting limit

NE = Not Established by DEEP

**BOLD** = compound detected at that concentration.

CS = Compound Specific

SWPC = Surface Water Protection Criteria

RES VC = Residential Volatilization Criteria

I/C VC = Industrial/Commercial Volatilization Criteria

**TABLE 4**  
**SUMMARY OF ASBESTOS ANALYTICAL RESULTS**  
**HYDEVILLE MILL**  
**108 HYDEVILLE ROAD**  
**FEBRUARY 2023**

Sample ID	Sample Description	Location	Analytical Result (% Asbestos)
DP-1-A-01A	Debris Pile - Red Asphalt Shingle	Debris Pile #1	NAD
DP-1-A-02A	Debris Pile - Silver/black Roofing	Debris Pile #1	<b>2% Chrysotile</b>
DP-1-07B	Debris Pile - Green Asphalt Shingle	Debris Pile #1	NAD
DP-2A-02B	Debris Pile - Silver/black Roofing	Debris Pile #2	NAD
DP-2-A-07A	Debris Pile - Green Asphalt Shingle	Debris Pile #2	NAD
DP-2-A-08A	Debris Pile - Brown Asphalt Shingle	Debris Pile #2	NAD
DP-2-A-08B	Debris Pile - Brown Asphalt Shingle	Debris Pile #2	NAD
DP-2-A-09	Debris Pile - Black Weatherproofing	Debris Pile #2	NAD
DP-2-A-10A	Debris Pile - Black Fiberboard Insulation	Debris Pile #2	NAD
DP-2-A-10B	Debris Pile - Black Fiberboard Insulation	Debris Pile #2	NAD
DP-3A-01B	Debris Pile - Red Asphalt Shingle	Debris Pile #3	NAD
DP-3-A-03	Debris Pile - Tan/gray Linoleum	Debris Pile #3	NAD
DP-3-A-04	Debris Pile - Black Weather Stripping	Debris Pile #3	NAD
DP-3-A-05	Debris Pile - White Insulation Paper	Debris Pile #3	NAD
DP-3-A-06	Debris Pile - Brown Fiber Board	Debris Pile #3	NAD
A-11	Exterior - Gray Mortar to Brick	Exterior	NAD

Notes:

**BOLD** - Asbestos detected in the sample analyzed

**BOLD / Highlighted** - Result exceeds U.S. EPA and CTDEEP ACM criteria of 1.0 %

NAD - No asbestos detected

NA - Not Analyzed

**TABLE 5**  
**SUMMARY OF LEAD IN PAINT ANALYTICAL RESULTS**  
**HYDEVILLE MILL**  
**108 HYDEVILLE ROAD STAFFORD, CT**  
**FEBRUARY 2023**

Sample ID	Sample Description/Location	Material	Substrate	Analytical Result (% wt)
DP-1-L-01	White Paint/Debris Pile #1	Paint	Paint	21.0
DP-1-L-02	White Paint/Debris Pile #3	Paint	Paint	ND<0.0080
L-03	Green Paint/Building Trim	Paint	Building Trim	8.3

Notes:

% wt - percent by weight

ND - not detected

**BOLD** - lead detected above laboratory detection limit in paint sample

**>0.5% lead by weight exceeds HUD Guidelines**

## APPENDIX A

### Boring and Well Completion Logs

				BORING LOG			Boring No.:	B-1/MW-1											
				Client	Town of Stafford		Sheet	of 1											
				Project Name:	Hydeville Mill		Project No.	ENG20-0144											
				Project Address:	Hydeville Road, Stafford, Connecticut		Checked By:												
Driller Info. BORING Co. Cisco Geotech FOREMAN John DRILL RIG Truck Mounted Drill Rig - Hollow Stem Auger SAMPLER 5' Macrocore				Project Info. WSE Geologist Richard Manandhar Date 12/28/2022 Start Time 1400 End Time 1530			Subsurface	Depth to Water (ft) 6' Refusal Well Installed <input checked="" type="checkbox"/> N Screen Interval 5-15'											
CORE STATS			SAMPLE DESCRIPTION					Contact	Sample Details										
Depth	Penetration (inches)	Recovery (inches)	Depth (feet)	PID (ppm)	Measurement	Moisture	Lithology (Modified Burnster)												
0	54/60		0		Dry		0-2.0 Light brown fine SAND, some fine Silt			(0-2)' ETPH PCBs VOCs SVOCs RSR 15 Metals DUP-1 (5-7)' ETPH VOCs									
			0		Dry	2.0-3.0 Black ASPHALT													
			0		Dry	3.0-5.0 Dark brown fine SAND, and Silt													
			0		Dry														
	5	50/60	0		Wet														
				0		Wet													
				0		Wet	5.0-10.0 Dark gray fine SILT and fine Sand												
				0		Wet													
				0		Wet													
	10	18/60	0		Wet														
			0		Wet														
			0		Wet	10.0-15.0 Light gray fine SILT and fine Sand													
			0		Wet														
			0		Wet														
15		End of Boring 15'																	
NOTES: <table border="1"> <tr><td>Terms</td><td>Percentage</td></tr> <tr><td>trace</td><td>0-10%</td></tr> <tr><td>little</td><td>10-20%</td></tr> <tr><td>some</td><td>20-35%</td></tr> <tr><td>and</td><td>35-50%</td></tr> </table>										Terms	Percentage	trace	0-10%	little	10-20%	some	20-35%	and	35-50%
Terms	Percentage																		
trace	0-10%																		
little	10-20%																		
some	20-35%																		
and	35-50%																		
1. Stratification lines represent approximate boundaries between soil types. 2. Water level readings have been made in the drill holes at times and under conditions stated on this boring log. Fluctuations in the level of groundwater may occur due to other factors than those present at the time measurements are made.																			

				BORING LOG			Boring No.:	B-2/MW-2		
				Client	Town of Stafford		Sheet	of 1		
				Project Name:	Hydeville Mill		Project No.	ENG20-0144		
				Project Address:	Hydeville Road, Stafford, Connecticut		Checked By:			
Driller Info. BORING Co. Cisco Geotech FOREMAN John DRILL RIG Truck Mounted Drill Rig - Hollow Stem Auger SAMPLER 5' Macrocore				Project Info. WSE Geologist Richard Manandhar Date 12/28/2022 Start Time 905 End Time 1030			Subsurface	Depth to Water (ft) 4' Refusal 13' Well Installed Y N Screen Interval 3'-13'		
CORE STATS			SAMPLE DESCRIPTION							
Depth	Penetration (inches)	Recovery (inches)	Depth (feet)	PID (ppm)	Measurement	Moisture	Lithology (Modified Bumster)		Contact	Sample Details
0	54/60		0		Dry		0-1.5 Light brown fine to medium SAND, little medium Gravel			(0-2') ETPH VOCs (3-5) ETPH PCBs VOCs SVOCs RSR 15 Metals
			0		Dry	1.5-3.0 Dark brown fine SILT and Sand				
			0		Dry	3.0-5.0 Brown/gray fine SILT, little fine Sand				
			0		Wet	5.0-9.0 Gray fine SILT, some fine Sand				
	5	42/60	0	0	Wet	9.0-10.0 Brown fine to medium SAND, little fine Silt				
				0	Wet	10.0-13.0 Brown fine SILT, little fine SAND				
				0	Wet	End of Boring 13'				
10	16/60	0	0	Wet	0					
			0	Wet	0					
			0	Wet	0					
	15					0				
						0				
						0				
						0				
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NOTES:

1. Stratification lines represent approximate boundaries between soil types.	Terms	Percentage
2. Water level readings have been made in the drill holes at times and under conditions stated on this boring log. Fluctuations in the level of groundwater may occur due to other factors than those present at the time measurements are made.	trace	0-10%
	little	10-20%
	some	20-35%
	and	35-50%

1. Stratification lines represent approximate boundaries between soil types.
2. Water level readings have been made in the drill holes at times and under conditions stated on this boring log. Fluctuations in the level of groundwater may occur due to other factors than those present at the time measurements are made.



BORING LOG			Boring No.:	B-3/MW-3
Client	Town of Stafford	Sheet	of 1	
Project Name:	Hydeville Mill	Project No.	ENG20-0144	
Project Address:	Hydeville Road, Stafford, Connecticut	Checked By:		

Driller Info.	BORING Co. FOREMAN DRILL RIG SAMPLER	Cisco Geotech John Truck Mounted Drill Rig - Hollow Stem Auger 5' Macrocore	Project Info.	WSE Geologist Richard Manandhar 12/28/2022 Start Time End Time	Subsurface	Depth to Water (ft) Refusal Well Installed Screen Interval	3' 12' N 2-12'
---------------	---	--	---------------	--	------------	---	-------------------------

CORE STATS			SAMPLE DESCRIPTION					Contact	Sample Details
Depth	Penetration (inches)	Recovery (inches)	Depth (feet)	PID (ppm)	Measurement	Moisture	Lithology (Modified Bumster)		
0		40/60	0	0	Dry	Dry	0-1.0 Black fine to medium SAND, little fine Silt		(0-2)' ETPH VOCs
			0	0	Dry	Dry	1.0-4.0 Black/gray fine to medium SAND, little fine Gravel and fine Silt		
			0	0	Wet	Wet	4.0-5.0 Brown fine SAND and fine Silt, some medium Gravel		
5		42/60	0	0	Wet	Wet	5.0-7.0 Brown fine SAND and Silt, little coarse Gravel		(4-6) ETPH PCBs VOCs SVOCs RSR 15 Metals
			0	0	Wet	Wet	7.0-9.0 Black fine SLT and Organics		
			0	0	Wet	Wet	9.0-10.0 Gray coarse GRAVEL		
10		16/60	0	0	Wet	Wet	10.0-12.0 Gray coarse GRAVEL, some fine SAND and Silt		
			0	0	Wet	Wet	End of Boring 12'		
15									
20									
25									
30									

NOTES:

Terms	Percentage
trace	0-10%
little	10-20%
some	20-35%
and	35-50%

1. Stratification lines represent approximate boundaries between soil types.  
 2. Water level readings have been made in the drill holes at times and under conditions stated on this boring log. Fluctuations in the level of groundwater may occur due to other factors than those present at the time measurements are made.

# GROUNDWATER MONITORING WELL INSTALLATION REPORT

PROJECT NAME/NO.	Hydeville Mill			MONITORING WELL NO.
LOCATION	Hydeville Road, Stafford, Connecticut			MW-1
CLIENT	Town of Stafford			ELEVATION
CONTRACTOR	Cisco Geotechnical	DRILLER	John	TOP OF PVC
OBSERVED BY	Richard Manandhar	DATE	12/28/22	DEPTH TO GROUNDWATER FROM
CHECKED BY		DATE		TOP OF PVC

GROUND ELEVATION	<-----	LENGTH OF CASING ABOVE GROUND SURFACE	N/A
GENERAL SOIL CONDITIONS (NOT TO SCALE)	<-----	LENGTH OF RISER PIPE ABOVE GROUND SURFACE	N/A
	<-----	THICKNESS OF SURFACE SEAL(S)	0.5'
	<-----	TYPE OF SURFACE SEAL(S)	Concrete
	<-----	TYPE OF SURFACE CASING	Flush-mounted
	<-----	ID OF SURFACE CASING	Roadbox
	<-----	DEPTH BOTTOM OF CASING	4"
	<-----	ID OF RISER PIPE	0.5'
	<-----	TYPE OF RISER PIPE	2"
	<-----	TYPE OF BACKFILL AROUND RISER PIPE	Schedule 40 PVC
	<-----	DEPTH TOP OF SEAL	Bentonite
	<-----	TYPE OF SEAL	4'
	<-----	DEPTH BOTTOM OF SEAL/TOP OF SAND COLUMN	Bentonite
	<-----	DEPTH TOP OF SCREEN	5'
	<-----	TYPE OF SCREEN	5'
	<-----	SIZE OPENINGS	PVC
	<-----	TYPE OF BACKFILL AROUND SCREEN	0.010"
	<-----	DIAMETER OF BOREHOLE	#0 Sand
	<-----		4"
	<-----	TYPE OF BACKFILL BELOW SCREEN	N/A
	<-----	DEPTH BOTTOM OF SAND COLUMN	15'
	<-----	DEPTH BOTTOM OF SCREEN	15'
	<-----	DEPTH BOTTOM OF BOREHOLE	15'

NOTES:

MONITORING WELL NO.

MW-1

Weston & Sampson<sup>SM</sup>

# GROUNDWATER MONITORING WELL INSTALLATION REPORT

PROJECT NAME/NO.	Hydeville Mill			MONITORING WELL NO.
LOCATION	Hydeville Road, Stafford, Connecticut			MW-2
CLIENT	Town of Stafford			ELEVATION
CONTRACTOR	Cisco Geotechnical	DRILLER	John	TOP OF PVC
OBSERVED BY	Richard Manandhar	DATE	12/28/22	DEPTH TO GROUNDWATER FROM
CHECKED BY		DATE		TOP OF PVC

GROUND ELEVATION	<-----	LENGTH OF CASING ABOVE GROUND SURFACE	N/A
GENERAL SOIL CONDITIONS (NOT TO SCALE)	<-----	LENGTH OF RISER PIPE ABOVE GROUND SURFACE	N/A
	<-----	THICKNESS OF SURFACE SEAL(S)	0.5'
	<-----	TYPE OF SURFACE SEAL(S)	Concrete
	<-----	TYPE OF SURFACE CASING	Flush-mounted
	<-----	ID OF SURFACE CASING	Roadbox
	<-----	DEPTH BOTTOM OF CASING	4"
	<-----	ID OF RISER PIPE	0.5'
	<-----	TYPE OF RISER PIPE	2"
	<-----	TYPE OF BACKFILL AROUND RISER PIPE	Schedule 40 PVC
	<-----	DEPTH TOP OF SEAL	Bentonite
	<-----	TYPE OF SEAL	2'
	<-----	DEPTH BOTTOM OF SEAL/TOP OF SAND COLUMN	Bentonite
	<-----	DEPTH TOP OF SCREEN	3'
	<-----	TYPE OF SCREEN	3'
	<-----	SIZE OPENINGS	PVC
	<-----	TYPE OF BACKFILL AROUND SCREEN	0.010"
	<-----	DIAMETER OF BOREHOLE	#0 Sand
	<-----		4"
	<-----	TYPE OF BACKFILL BELOW SCREEN	N/A
	<-----	DEPTH BOTTOM OF SAND COLUMN	13'
	<-----	DEPTH BOTTOM OF SCREEN	13'
	<-----	DEPTH BOTTOM OF BOREHOLE	13'

NOTES:

MONITORING WELL NO.

MW-2

Weston & Sampson<sup>SM</sup>

# GROUNDWATER MONITORING WELL INSTALLATION REPORT

PROJECT NAME/NO.	Hydeville Mill			MONITORING WELL NO.
LOCATION	Hydeville Road, Stafford, Connecticut			MW-3
CLIENT	Town of Stafford			ELEVATION
CONTRACTOR	Cisco Geotechnical	DRILLER	John	TOP OF PVC
OBSERVED BY	Richard Manandhar	DATE	12/28/22	DEPTH TO GROUNDWATER FROM
CHECKED BY		DATE		TOP OF PVC

GROUND ELEVATION	<-----	LENGTH OF CASING ABOVE GROUND SURFACE	N/A
GENERAL SOIL CONDITIONS (NOT TO SCALE)	<-----	LENGTH OF RISER PIPE ABOVE GROUND SURFACE	N/A
	<-----	THICKNESS OF SURFACE SEAL(S)	0.5'
	<-----	TYPE OF SURFACE SEAL(S)	Concrete
	<-----	TYPE OF SURFACE CASING	Flush-mounted
	<-----	ID OF SURFACE CASING	Roadbox
	<-----	DEPTH BOTTOM OF CASING	4"
	<-----	ID OF RISER PIPE	0.5'
	<-----	TYPE OF RISER PIPE	Schedule 40 PVC
	<-----	TYPE OF BACKFILL AROUND RISER PIPE	Bentonite
	<-----	DEPTH TOP OF SEAL	2'
	<-----	TYPE OF SEAL	Bentonite
	<-----	DEPTH BOTTOM OF SEAL/TOP OF SAND COLUMN	3'
	<-----	DEPTH TOP OF SCREEN	3'
	<-----	TYPE OF SCREEN	PVC
	<-----	SIZE OPENINGS	0.010"
	<-----	TYPE OF BACKFILL AROUND SCREEN	#0 Sand
	<-----	DIAMETER OF BOREHOLE	4"
	<-----	TYPE OF BACKFILL BELOW SCREEN	N/A
	<-----	DEPTH BOTTOM OF SAND COLUMN	13'
	<-----	DEPTH BOTTOM OF SCREEN	13'
	<-----	DEPTH BOTTOM OF BOREHOLE	13'

NOTES:

MONITORING WELL NO.

MW-3

Weston & Sampson<sup>SM</sup>

## APPENDIX B

### Groundwater Collection Field Logs

### Well Gauging Log

Project: *Hydenville mill - Staffa*

Project #: \_\_\_\_\_

Date: *1/5/2023*

Well	Time	Depth to LNAPL	Depth to Water	Depth to DNAPL	Depth to Bottom	LNAPL Thickness	DNAPL Thickness	Water Column Height
Mw-1	1100-1510	0.00	3.19	0.00	14.65	0.00	0.00	11.46
Mw-2	1105	0.00	2.15	0.00	13.25	0.00	0.00	11.10
Mw-3	1100	0.00	5.75	0.00	12.75	0.00	0.06	7.00'

- oil/water interface used to gauge monitoring wells







## APPENDIX C

### Soil Laboratory Analytical Results



---

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

January 18, 2023

Lewis Tamaccio  
Weston & Sampson  
712 Brook Street, Suite 103  
Rocky Hill, CT 06067

Project Location: Stafford, CT

Client Job Number:

Project Number: [none]

Laboratory Work Order Number: 22L3707

Enclosed are results of analyses for samples as received by the laboratory on December 29, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Rebecca Faust".

Rebecca Faust  
Project Manager

## Table of Contents

Sample Summary	4
Case Narrative	6
Sample Results	10
22L3707-01	10
22L3707-02	18
22L3707-03	22
22L3707-04	26
22L3707-05	34
22L3707-06	38
22L3707-07	45
22L3707-08	52
22L3707-09	55
22L3707-10	62
22L3707-11	66
22L3707-12	70
Sample Preparation Information	78
QC Data	80
Volatile Organic Compounds by GC/MS	80
B327226	80
Semivolatile Organic Compounds by GC/MS	83
B327249	83
Polychlorinated Biphenyls with 3540 Soxhlet Extraction	88
B327185	88
Petroleum Hydrocarbons Analyses	90
B327248	90

## Table of Contents (continued)

B327633	90
Metals Analyses (Total)	91
B327192	91
B327234	93
Dual Column RPD Report	94
Flag/Qualifier Summary	98
Certifications	99
Chain of Custody/Sample Receipt	105



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

Weston & Sampson  
712 Brook Street, Suite 103  
Rocky Hill, CT 06067  
ATTN: Lewis Tamaccio

REPORT DATE: 1/18/2023

PURCHASE ORDER NUMBER:

PROJECT NUMBER: [none]

#### ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22L3707

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

PROJECT LOCATION: Stafford, CT

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
B-1 (0-2)	22L3707-01	Soil		CTDEP ETPH SM 2540G SW-846 6010D SW-846 7471B SW-846 8082A SW-846 8260D SW-846 8270E	
B-1 (5-7)	22L3707-02	Soil		CTDEP ETPH SM 2540G SW-846 8260D	
B-2 (0-2)	22L3707-03	Soil		CTDEP ETPH SM 2540G SW-846 8260D	
B-2 (3-5)	22L3707-04	Soil		CTDEP ETPH SM 2540G SW-846 6010D SW-846 7471B SW-846 8082A SW-846 8260D SW-846 8270E	
B-3 (0-2)	22L3707-05	Soil		CTDEP ETPH SM 2540G SW-846 8260D	
B-3 (4-6)	22L3707-06	Soil		CTDEP ETPH SM 2540G SW-846 6010D SW-846 7471B SW-846 8260D SW-846 8270E	
HB-1 (0-2)	22L3707-07	Soil		CTDEP ETPH SM 2540G SW-846 6010D SW-846 7471B SW-846 8260D SW-846 8270E	
HB-2 (0-2)	22L3707-08	Soil		CTDEP ETPH SM 2540G SW-846 8082A	




---

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

Weston & Sampson  
712 Brook Street, Suite 103  
Rocky Hill, CT 06067  
ATTN: Lewis Tamaccio

REPORT DATE: 1/18/2023

PURCHASE ORDER NUMBER:

PROJECT NUMBER: [none]

#### ANALYTICAL SUMMARY

---

WORK ORDER NUMBER: 22L3707

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

PROJECT LOCATION: Stafford, CT

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
HB-3 (0-2)	22L3707-09	Soil		CTDEP ETPH SM 2540G SW-846 6010D SW-846 7471B SW-846 8260D SW-846 8270E	
HB-5 (0-2)	22L3707-10	Soil		CTDEP ETPH SM 2540G SW-846 8260D	
HB-6 (0-2)	22L3707-11	Soil		CTDEP ETPH SM 2540G SW-846 8260D	
DUP-1	22L3707-12	Soil		CTDEP ETPH SM 2540G SW-846 6010D SW-846 7471B SW-846 8082A SW-846 8260D SW-846 8270E	



---

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

**CASE NARRATIVE SUMMARY**

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

REVISED REPORT: HB-06 (0-2) is to be reported for only ETPH and VOCs. 1/18/23



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

**CTDEP ETPH**

**Qualifications:**

**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**

22L3707-03[B-2 (0-2)]

**SW-846 6010D**

**Qualifications:**

**B**

Analyte is found in the associated laboratory blank as well as in the sample.

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

**Copper**

22L3707-01[B-1 (0-2)], 22L3707-04[B-2 (3-5)], 22L3707-06[B-3 (4-6)], 22L3707-07[HB-1 (0-2)], 22L3707-09[HB-3 (0-2)], 22L3707-12[DUP-1], B327192-BS1, B327192-BSD1, B327192-DUP1, B327192-MS1

**B-07**

Data is not affected by elevated level in laboratory blank since sample result is >10x level found in the blank.

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

**Copper**

22L3707-01[B-1 (0-2)], 22L3707-04[B-2 (3-5)], 22L3707-06[B-3 (4-6)], 22L3707-07[HB-1 (0-2)], 22L3707-09[HB-3 (0-2)], 22L3707-12[DUP-1], B327192-BLK1

**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:**

**Lead**

B327192-BS2

**M-10**

The reporting limit verification for the AIHA lead program is outside of control limits for this element. Any reported result at or near the detection limit may be biased on the high side.

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

**Lead**

22L3707-01[B-1 (0-2)], B327192-DUP2, B327192-SRM1

**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**

22L3707-01[B-1 (0-2)], B327192-MS1

**MS-10**

Matrix spike recovery is outside of control limits. Compound is classified as a "difficult analyte" and reduced accuracy is anticipated for spike recoveries. Wider limits are used for laboratory fortified blank control samples.

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

**Lead**

22L3707-04[B-2 (3-5)], 22L3707-06[B-3 (4-6)], 22L3707-07[HB-1 (0-2)], 22L3707-09[HB-3 (0-2)], 22L3707-12[DUP-1]

**MS-11**

Matrix spike 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:**

**Barium**

22L3707-01[B-1 (0-2)], B327192-MS1

**SW-846 7471B**

**Qualifications:**



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## R-02

Duplicate RPD is outside of control limits. Outlier can be attributed to sample non-homogeneity encountered during sample prep.

### Analyte & Samples(s) Qualified:

#### Mercury

B327234-DUP1

## R-05

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

### Analyte & Samples(s) Qualified:

#### Mercury

B327234-BSD1

**SW-846 8260D**

### Qualifications:

## V-05

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

### Analyte & Samples(s) Qualified:

#### Vinyl Chloride

22L3707-01[B-1 (0-2)], 22L3707-02[B-1 (5-7)], 22L3707-03[B-2 (0-2)], 22L3707-04[B-2 (3-5)], 22L3707-05[B-3 (0-2)], 22L3707-06[B-3 (4-6)], 22L3707-07[HB-1 (0-2)], 22L3707-09[HB-3 (0-2)], 22L3707-10[HB-5 (0-2)], 22L3707-11[HB-6 (0-2)], 22L3707-12[DUP-1], B327226-BLK1, B327226-BS1, S081356-CCV1

## V-20

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

### Analyte & Samples(s) Qualified:

#### 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)

B327226-BS1, S081356-CCV1

#### Bromobenzene

B327226-BS1, S081356-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

22L3707-01[B-1 (0-2)], 22L3707-02[B-1 (5-7)], 22L3707-03[B-2 (0-2)], 22L3707-04[B-2 (3-5)], 22L3707-05[B-3 (0-2)], 22L3707-06[B-3 (4-6)], 22L3707-07[HB-1 (0-2)], 22L3707-09[HB-3 (0-2)], 22L3707-10[HB-5 (0-2)], 22L3707-11[HB-6 (0-2)], 22L3707-12[DUP-1], B327226-BLK1, B327226-BS1, S081356-CCV1

## V-35

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

### Analyte & Samples(s) Qualified:

#### Bromobenzene

B327226-BS1, S081356-CCV1

**SW-846 8270E**

### Qualifications:

## E

Reported result is estimated. Value reported over verified calibration range.

### Analyte & Samples(s) Qualified:

#### Fluoranthene

22L3707-09[HB-3 (0-2)]

#### Pyrene

22L3707-09[HB-3 (0-2)]



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**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:**

**Aniline**  
22L3707-01[B-1 (0-2)], 22L3707-04[B-2 (3-5)], 22L3707-06[B-3 (4-6)], 22L3707-07[HB-1 (0-2)], 22L3707-09[HB-3 (0-2)], B327249-BLK1, B327249-BS1, B327249-BSD1, S081522-CCV1

**Hexachlorocyclopentadiene**  
22L3707-01[B-1 (0-2)], 22L3707-04[B-2 (3-5)], 22L3707-06[B-3 (4-6)], 22L3707-07[HB-1 (0-2)], 22L3707-09[HB-3 (0-2)], 22L3707-12[DUP-1], B327249-BLK1, B327249-BS1, B327249-BSD1, S081522-CCV1, S081604-CCV1

**V-06**

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

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

**Bis(2-chloroisopropyl)ether**  
22L3707-01[B-1 (0-2)], 22L3707-04[B-2 (3-5)], 22L3707-06[B-3 (4-6)], 22L3707-07[HB-1 (0-2)], 22L3707-09[HB-3 (0-2)], 22L3707-12[DUP-1], B327249-BLK1, B327249-BS1, B327249-BSD1, S081522-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:**

**Bis(2-chloroisopropyl)ether**  
S081522-CCV1

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

Rebecca Faust  
Project Manager 1

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Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-1 (0-2)

Sampled: 12/28/2022 14:00

**Sample ID:** 22L3707-01

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	0.12	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
Acrylonitrile	ND	0.0072	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
Benzene	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
Bromobenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
Bromodichloromethane	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
Bromoform	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
Bromomethane	ND	0.012	mg/Kg dry	1	V-34	SW-846 8260D	12/30/22	12/30/22 6:50	MFF
2-Butanone (MEK)	ND	0.048	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
n-Butylbenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
sec-Butylbenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
tert-Butylbenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
Carbon Disulfide	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
Carbon Tetrachloride	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
Chlorobenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
Chlorodibromomethane	ND	0.0012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
Chloroethane	ND	0.024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
Chloroform	ND	0.0048	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
Chloromethane	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
2-Chlorotoluene	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
4-Chlorotoluene	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
1,2-Dibromoethane (EDB)	ND	0.0012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
Dibromomethane	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
1,2-Dichlorobenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
1,3-Dichlorobenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
1,4-Dichlorobenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
trans-1,4-Dichloro-2-butene	ND	0.0048	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
1,1-Dichloroethane	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
1,2-Dichloroethane	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
1,1-Dichloroethylene	ND	0.0048	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
cis-1,2-Dichloroethylene	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
trans-1,2-Dichloroethylene	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
1,2-Dichloropropane	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
1,3-Dichloropropane	ND	0.0012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
2,2-Dichloropropane	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
1,1-Dichloropropene	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
cis-1,3-Dichloropropene	ND	0.0012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
trans-1,3-Dichloropropene	ND	0.0012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
Ethylbenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
Hexachlorobutadiene	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
2-Hexanone (MBK)	ND	0.024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
Isopropylbenzene (Cumene)	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-1 (0-2)

Sampled: 12/28/2022 14:00

**Sample ID:** 22L3707-01

Sample Matrix: Soil

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Methyl tert-Butyl Ether (MTBE)	ND	0.0048	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
Methylene Chloride	ND	0.024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
Naphthalene	ND	0.0048	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
n-Propylbenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
Styrene	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
1,1,1,2-Tetrachloroethane	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
1,1,2,2-Tetrachloroethane	ND	0.0012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
Tetrachloroethylene	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
Tetrahydrofuran	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
Toluene	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
1,2,3-Trichlorobenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
1,2,4-Trichlorobenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
1,1,1-Trichloroethane	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
1,1,2-Trichloroethane	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
Trichloroethylene	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
Trichlorofluoromethane (Freon 11)	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
1,2,3-Trichloropropane	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
1,2,4-Trimethylbenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
1,3,5-Trimethylbenzene	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
Vinyl Chloride	ND	0.012	mg/Kg dry	1	V-05	SW-846 8260D	12/30/22	12/30/22 6:50	MFF
m+p Xylene	ND	0.0048	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
o-Xylene	ND	0.0024	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 6:50	MFF
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	93.1	70-130					12/30/22 6:50		
Toluene-d8	102	70-130					12/30/22 6:50		
4-Bromofluorobenzene	104	70-130					12/30/22 6:50		

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-1 (0-2)

Sampled: 12/28/2022 14:00

**Sample ID:** 22L3707-01

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	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Acenaphthylene	ND	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Aniline	ND	0.40	mg/Kg dry	1	V-05	SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Benzo(a)anthracene	0.37	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Benzo(a)pyrene	0.30	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Benzo(b)fluoranthene	0.38	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Benzo(g,h,i)perylene	ND	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Benzo(k)fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Bis(2-chloroethoxy)methane	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Bis(2-chloroethyl)ether	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Bis(2-chloroisopropyl)ether	ND	0.40	mg/Kg dry	1	V-06	SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Bis(2-Ethylhexyl)phthalate	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
4-Bromophenylphenylether	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Butylbenzylphthalate	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Carbazole	ND	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
4-Chloroaniline	ND	0.77	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
4-Chloro-3-methylphenol	ND	0.77	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
2-Chloronaphthalene	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
2-Chlorophenol	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
4-Chlorophenylphenylether	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Chrysene	0.43	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Dibenz(a,h)anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Dibenzofuran	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Di-n-butylphthalate	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
3,3-Dichlorobenzidine	ND	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
2,4-Dichlorophenol	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Diethylphthalate	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
2,4-Dimethylphenol	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Dimethylphthalate	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
4,6-Dinitro-2-methylphenol	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
2,4-Dinitrophenol	ND	0.77	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
2,4-Dinitrotoluene	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
2,6-Dinitrotoluene	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Di-n-octylphthalate	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Fluoranthene	0.71	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Fluorene	ND	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Hexachlorobenzene	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Hexachlorobutadiene	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Hexachlorocyclopentadiene	ND	0.40	mg/Kg dry	1	V-05	SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Hexachloroethane	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Indeno(1,2,3-cd)pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Isophorone	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
2-Methylnaphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-1 (0-2)

Sampled: 12/28/2022 14:00

**Sample ID:** 22L3707-01

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
3/4-Methylphenol	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Naphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
2-Nitroaniline	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
3-Nitroaniline	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
4-Nitroaniline	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Nitrobenzene	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
2-Nitrophenol	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
4-Nitrophenol	ND	0.77	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
N-Nitrosodiphenylamine/Diphenylamine	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
N-Nitrosodi-n-propylamine	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Pentachloronitrobenzene	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Pentachlorophenol	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Phenanthrene	0.57	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Phenol	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Pyrene	0.84	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
Pyridine	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
1,2,4,5-Tetrachlorobenzene	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
1,2,4-Trichlorobenzene	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
2,4,5-Trichlorophenol	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2
2,4,6-Trichlorophenol	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:14	AR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	80.4	30-130		1/4/23 18:14
Phenol-d6	84.2	30-130		1/4/23 18:14
Nitrobenzene-d5	86.2	30-130		1/4/23 18:14
2-Fluorobiphenyl	84.7	30-130		1/4/23 18:14
2,4,6-Tribromophenol	81.4	30-130		1/4/23 18:14
p-Terphenyl-d14	109	30-130		1/4/23 18:14

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-1 (0-2)

Sampled: 12/28/2022 14:00

**Sample ID:** 22L3707-01Sample Matrix: Soil**Polychlorinated Biphenyls with 3540 Soxhlet Extraction**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.093	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 21:11	TG
Aroclor-1221 [1]	ND	0.093	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 21:11	TG
Aroclor-1232 [1]	ND	0.093	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 21:11	TG
Aroclor-1242 [1]	ND	0.093	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 21:11	TG
Aroclor-1248 [1]	ND	0.093	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 21:11	TG
Aroclor-1254 [1]	ND	0.093	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 21:11	TG
Aroclor-1260 [1]	ND	0.093	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 21:11	TG
Aroclor-1262 [1]	ND	0.093	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 21:11	TG
Aroclor-1268 [1]	ND	0.093	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 21:11	TG
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Decachlorobiphenyl [1]	95.5	30-150							1/3/23 21:11
Decachlorobiphenyl [2]	80.4	30-150							1/3/23 21:11
Tetrachloro-m-xylene [1]	85.6	30-150							1/3/23 21:11
Tetrachloro-m-xylene [2]	68.2	30-150							1/3/23 21:11




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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-1 (0-2)

Sampled: 12/28/2022 14:00

**Sample ID:** 22L3707-01

Sample Matrix: Soil

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**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
CT ETPH	56	23	mg/Kg dry	2		CTDEP ETPH	12/30/22	1/4/23 12:58	SFM
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
2-Fluorobiphenyl		79.0	50-150					1/4/23 12:58	

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-1 (0-2)

Sampled: 12/28/2022 14:00

**Sample ID:** 22L3707-01

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	MS-07	SW-846 6010D	12/30/22	12/30/22 16:13	ATP
Arsenic	ND	3.8	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:13	ATP
Barium	61	1.9	mg/Kg dry	1	MS-11	SW-846 6010D	12/30/22	12/30/22 16:13	ATP
Beryllium	0.30	0.19	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:13	ATP
Cadmium	ND	0.38	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:13	ATP
Chromium	16	0.77	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:13	ATP
Copper	18	0.77	mg/Kg dry	1	B, B-07	SW-846 6010D	12/30/22	12/30/22 16:13	ATP
Lead	2.2	0.57	mg/Kg dry	1	M-10	SW-846 6010D	12/30/22	1/3/23 13:02	NC
Mercury	ND	0.029	mg/Kg dry	1		SW-846 7471B	12/30/22	1/3/23 13:01	AAJ
Nickel	9.1	0.77	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:13	ATP
Selenium	ND	3.8	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:13	ATP
Silver	ND	0.38	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:13	ATP
Thallium	ND	1.9	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:13	ATP
Vanadium	38	0.77	mg/Kg dry	1		SW-846 6010D	12/30/22	1/3/23 13:02	NC
Zinc	29	0.77	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:13	ATP




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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-1 (0-2)

Sampled: 12/28/2022 14:00

**Sample ID:** 22L3707-01Sample Matrix: Soil

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**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	86.0		% Wt	1		SM 2540G	12/30/22	12/30/22 10:28	AMZ

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-1 (5-7)

Sampled: 12/28/2022 15:00

**Sample ID:** 22L3707-02

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	0.090	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
Acrylonitrile	ND	0.0054	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
Benzene	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
Bromobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
Bromodichloromethane	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
Bromoform	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
Bromomethane	ND	0.0090	mg/Kg dry	1	V-34	SW-846 8260D	12/30/22	12/30/22 7:15	MFF
2-Butanone (MEK)	ND	0.036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
n-Butylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
sec-Butylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
tert-Butylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
Carbon Disulfide	ND	0.0090	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
Carbon Tetrachloride	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
Chlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
Chlorodibromomethane	ND	0.00090	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
Chloroethane	ND	0.018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
Chloroform	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
Chloromethane	ND	0.0090	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
2-Chlorotoluene	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
4-Chlorotoluene	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
1,2-Dibromoethane (EDB)	ND	0.00090	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
Dibromomethane	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
1,2-Dichlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
1,3-Dichlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
1,4-Dichlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
trans-1,4-Dichloro-2-butene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
1,1-Dichloroethane	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
1,2-Dichloroethane	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
1,1-Dichloroethylene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
cis-1,2-Dichloroethylene	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
trans-1,2-Dichloroethylene	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
1,2-Dichloropropane	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
1,3-Dichloropropane	ND	0.00090	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
2,2-Dichloropropane	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
1,1-Dichloropropene	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
cis-1,3-Dichloropropene	ND	0.00090	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
trans-1,3-Dichloropropene	ND	0.00090	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
Ethylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
Hexachlorobutadiene	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
2-Hexanone (MBK)	ND	0.018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
Isopropylbenzene (Cumene)	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-1 (5-7)

Sampled: 12/28/2022 15:00

**Sample ID:** 22L3707-02**Sample Matrix:** Soil**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Methyl tert-Butyl Ether (MTBE)	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
Methylene Chloride	ND	0.018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
Naphthalene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
n-Propylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
Styrene	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
1,1,1,2-Tetrachloroethane	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
1,1,2,2-Tetrachloroethane	ND	0.00090	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
Tetrachloroethylene	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
Tetrahydrofuran	ND	0.0090	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
Toluene	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
1,2,3-Trichlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
1,2,4-Trichlorobenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
1,1,1-Trichloroethane	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
1,1,2-Trichloroethane	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
Trichloroethylene	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0090	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
1,2,3-Trichloropropane	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0090	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
1,2,4-Trimethylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
1,3,5-Trimethylbenzene	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
Vinyl Chloride	ND	0.0090	mg/Kg dry	1	V-05	SW-846 8260D	12/30/22	12/30/22 7:15	MFF
m+p Xylene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
o-Xylene	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:15	MFF
<b>Surrogates</b>		<b>% Recovery</b>	<b>Recovery Limits</b>	<b>Flag/Qual</b>					
1,2-Dichloroethane-d4		95.5	70-130						
Toluene-d8		98.6	70-130						
4-Bromofluorobenzene		104	70-130						




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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-1 (5-7)

Sampled: 12/28/2022 15:00

**Sample ID:** 22L3707-02Sample Matrix: Soil

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**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
CT ETPH	23	11	mg/Kg dry	1		CTDEP ETPH	12/30/22	1/4/23 11:37	SFM
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
2-Fluorobiphenyl		71.5	50-150					1/4/23 11:37	




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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-1 (5-7)

Sampled: 12/28/2022 15:00

**Sample ID:** 22L3707-02Sample Matrix: Soil

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	88.3		% Wt	1		SM 2540G	12/30/22	12/30/22 10:28	AMZ

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-2 (0-2)

Sampled: 12/28/2022 09:30

**Sample ID:** 22L3707-03

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	0.18	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
Acrylonitrile	ND	0.011	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
Benzene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
Bromobenzene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
Bromodichloromethane	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
Bromoform	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
Bromomethane	ND	0.018	mg/Kg dry	1	V-34	SW-846 8260D	12/30/22	12/30/22 7:41	MFF
2-Butanone (MEK)	ND	0.073	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
n-Butylbenzene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
sec-Butylbenzene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
tert-Butylbenzene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
Carbon Disulfide	ND	0.018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
Carbon Tetrachloride	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
Chlorobenzene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
Chlorodibromomethane	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
Chloroethane	ND	0.036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
Chloroform	ND	0.0073	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
Chloromethane	ND	0.018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
2-Chlorotoluene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
4-Chlorotoluene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
1,2-Dibromoethane (EDB)	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
Dibromomethane	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
1,2-Dichlorobenzene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
1,3-Dichlorobenzene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
1,4-Dichlorobenzene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
trans-1,4-Dichloro-2-butene	ND	0.0073	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
1,1-Dichloroethane	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
1,2-Dichloroethane	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
1,1-Dichloroethylene	ND	0.0073	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
cis-1,2-Dichloroethylene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
trans-1,2-Dichloroethylene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
1,2-Dichloropropane	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
1,3-Dichloropropane	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
2,2-Dichloropropane	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
1,1-Dichloropropene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
cis-1,3-Dichloropropene	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
trans-1,3-Dichloropropene	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
Ethylbenzene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
Hexachlorobutadiene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
2-Hexanone (MBK)	ND	0.036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
Isopropylbenzene (Cumene)	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-2 (0-2)

Sampled: 12/28/2022 09:30

**Sample ID:** 22L3707-03

Sample Matrix: Soil

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Methyl tert-Butyl Ether (MTBE)	ND	0.0073	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
Methylene Chloride	ND	0.036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
Naphthalene	ND	0.0073	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
n-Propylbenzene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
Styrene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
1,1,1,2-Tetrachloroethane	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
1,1,2,2-Tetrachloroethane	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
Tetrachloroethylene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
Tetrahydrofuran	ND	0.018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
Toluene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
1,2,3-Trichlorobenzene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
1,2,4-Trichlorobenzene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
1,1,1-Trichloroethane	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
1,1,2-Trichloroethane	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
Trichloroethylene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
Trichlorofluoromethane (Freon 11)	ND	0.018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
1,2,3-Trichloropropane	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
1,2,4-Trimethylbenzene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
1,3,5-Trimethylbenzene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
Vinyl Chloride	ND	0.018	mg/Kg dry	1	V-05	SW-846 8260D	12/30/22	12/30/22 7:41	MFF
m+p Xylene	ND	0.0073	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
o-Xylene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 7:41	MFF
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	97.1	70-130							12/30/22 7:41
Toluene-d8	98.1	70-130							12/30/22 7:41
4-Bromofluorobenzene	101	70-130							12/30/22 7:41




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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-2 (0-2)

Sampled: 12/28/2022 09:30

**Sample ID:** 22L3707-03

Sample Matrix: Soil

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**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
CT ETPH	3000	650	mg/Kg dry	50		CTDEP ETPH	12/30/22	1/5/23 19:31	SFM
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
2-Fluorobiphenyl	*	50-150		S-01				1/5/23 19:31	




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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-2 (0-2)

Sampled: 12/28/2022 09:30

**Sample ID:** 22L3707-03Sample Matrix: Soil

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**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	77.0		% Wt	1		SM 2540G	12/30/22	12/30/22 10:28	AMZ

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-2 (3-5)

Sampled: 12/28/2022 10:30

**Sample ID:** 22L3707-04

Sample Matrix: Soil

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.10	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
Acrylonitrile	ND	0.0062	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
Benzene	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
Bromobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
Bromodichloromethane	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
Bromoform	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
Bromomethane	ND	0.010	mg/Kg dry	1	V-34	SW-846 8260D	12/30/22	12/30/22 8:07	MFF
2-Butanone (MEK)	ND	0.041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
n-Butylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
sec-Butylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
tert-Butylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
Carbon Disulfide	ND	0.010	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
Carbon Tetrachloride	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
Chlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
Chlorodibromomethane	ND	0.0010	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
Chloroethane	ND	0.021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
Chloroform	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
Chloromethane	ND	0.010	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
2-Chlorotoluene	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
4-Chlorotoluene	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
Dibromomethane	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
1,2-Dichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
1,3-Dichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
1,4-Dichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
trans-1,4-Dichloro-2-butene	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
1,1-Dichloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
1,2-Dichloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
1,1-Dichloroethylene	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
cis-1,2-Dichloroethylene	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
trans-1,2-Dichloroethylene	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
1,2-Dichloropropane	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
1,3-Dichloropropane	ND	0.0010	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
2,2-Dichloropropane	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
1,1-Dichloropropene	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
Ethylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
Hexachlorobutadiene	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
2-Hexanone (MBK)	ND	0.021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
Isopropylbenzene (Cumene)	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-2 (3-5)

Sampled: 12/28/2022 10:30

**Sample ID:** 22L3707-04**Sample Matrix:** Soil**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Methyl tert-Butyl Ether (MTBE)	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
Methylene Chloride	ND	0.021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
Naphthalene	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
n-Propylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
Styrene	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
1,1,1,2-Tetrachloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
Tetrachloroethylene	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
Tetrahydrofuran	ND	0.010	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
Toluene	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
1,2,3-Trichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
1,2,4-Trichlorobenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
1,1,1-Trichloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
1,1,2-Trichloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
Trichloroethylene	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
1,2,3-Trichloropropane	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.010	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
1,2,4-Trimethylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
1,3,5-Trimethylbenzene	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
Vinyl Chloride	ND	0.010	mg/Kg dry	1	V-05	SW-846 8260D	12/30/22	12/30/22 8:07	MFF
m+p Xylene	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF
o-Xylene	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:07	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	94.6	70-130		12/30/22 8:07
Toluene-d8	99.1	70-130		12/30/22 8:07
4-Bromofluorobenzene	103	70-130		12/30/22 8:07

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-2 (3-5)

Sampled: 12/28/2022 10:30

**Sample ID:** 22L3707-04

Sample Matrix: Soil

**Semivolatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Acenaphthylene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Aniline	ND	0.38	mg/Kg dry	1	V-05	SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Benzo(a)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Benzo(a)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Benzo(b)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Benzo(g,h,i)perylene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Benzo(k)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Bis(2-chloroethoxy)methane	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Bis(2-chloroethyl)ether	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Bis(2-chloroisopropyl)ether	ND	0.38	mg/Kg dry	1	V-06	SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Bis(2-Ethylhexyl)phthalate	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
4-Bromophenylphenylether	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Butylbenzylphthalate	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Carbazole	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
4-Chloroaniline	ND	0.74	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
4-Chloro-3-methylphenol	ND	0.74	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
2-Chloronaphthalene	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
2-Chlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
4-Chlorophenylphenylether	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Chrysene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Dibenz(a,h)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Dibenzofuran	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Di-n-butylphthalate	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
3,3-Dichlorobenzidine	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
2,4-Dichlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Diethylphthalate	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
2,4-Dimethylphenol	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Dimethylphthalate	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
4,6-Dinitro-2-methylphenol	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
2,4-Dinitrophenol	ND	0.74	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
2,4-Dinitrotoluene	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
2,6-Dinitrotoluene	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Di-n-octylphthalate	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Fluorene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Hexachlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Hexachlorobutadiene	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Hexachlorocyclopentadiene	ND	0.38	mg/Kg dry	1	V-05	SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Hexachloroethane	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Indeno(1,2,3-cd)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Isophorone	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
2-Methylnaphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-2 (3-5)

Sampled: 12/28/2022 10:30

**Sample ID:** 22L3707-04

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
3/4-Methylphenol	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Naphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
2-Nitroaniline	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
3-Nitroaniline	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
4-Nitroaniline	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Nitrobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
2-Nitrophenol	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
4-Nitrophenol	ND	0.74	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
N-Nitrosodiphenylamine/Diphenylamine	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
N-Nitrosodi-n-propylamine	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Pentachloronitrobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Pentachlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Phenanthrene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Phenol	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
Pyridine	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
1,2,4,5-Tetrachlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
1,2,4-Trichlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
2,4,5-Trichlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2
2,4,6-Trichlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:36	AR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	77.2	30-130		1/4/23 18:36
Phenol-d6	83.4	30-130		1/4/23 18:36
Nitrobenzene-d5	78.1	30-130		1/4/23 18:36
2-Fluorobiphenyl	82.4	30-130		1/4/23 18:36
2,4,6-Tribromophenol	87.8	30-130		1/4/23 18:36
p-Terphenyl-d14	97.2	30-130		1/4/23 18:36

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-2 (3-5)

Sampled: 12/28/2022 10:30

**Sample ID:** 22L3707-04

Sample Matrix: Soil

**Polychlorinated Biphenyls with 3540 Soxhlet Extraction**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 21:28	TG
Aroclor-1221 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 21:28	TG
Aroclor-1232 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 21:28	TG
Aroclor-1242 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 21:28	TG
Aroclor-1248 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 21:28	TG
Aroclor-1254 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 21:28	TG
Aroclor-1260 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 21:28	TG
Aroclor-1262 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 21:28	TG
Aroclor-1268 [1]	ND	0.089	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 21:28	TG
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		95.9	30-150					1/3/23 21:28	
Decachlorobiphenyl [2]		85.2	30-150					1/3/23 21:28	
Tetrachloro-m-xylene [1]		80.6	30-150					1/3/23 21:28	
Tetrachloro-m-xylene [2]		65.9	30-150					1/3/23 21:28	




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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-2 (3-5)

Sampled: 12/28/2022 10:30

**Sample ID:** 22L3707-04Sample Matrix: Soil

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**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
CT ETPH	ND	11	mg/Kg dry	1		CTDEP ETPH	12/30/22	1/4/23 10:56	SFM
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
2-Fluorobiphenyl		70.0	50-150					1/4/23 10:56	

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-2 (3-5)

Sampled: 12/28/2022 10:30

**Sample ID:** 22L3707-04**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	12/30/22	12/30/22 16:17	ATP
Arsenic	ND	3.6	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:17	ATP
Barium	46	1.8	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:17	ATP
Beryllium	0.21	0.18	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:17	ATP
Cadmium	ND	0.36	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:17	ATP
Chromium	9.3	0.73	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:17	ATP
Copper	11	0.73	mg/Kg dry	1	B, B-07	SW-846 6010D	12/30/22	12/30/22 16:17	ATP
Lead	1.6	0.55	mg/Kg dry	1	MS-10	SW-846 6010D	12/30/22	1/3/23 13:09	NC
Mercury	ND	0.029	mg/Kg dry	1		SW-846 7471B	12/30/22	1/3/23 13:03	AAJ
Nickel	6.2	0.73	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:17	ATP
Selenium	ND	3.6	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:17	ATP
Silver	ND	0.36	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:17	ATP
Thallium	ND	1.8	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:17	ATP
Vanadium	22	0.73	mg/Kg dry	1		SW-846 6010D	12/30/22	1/3/23 13:09	NC
Zinc	18	0.73	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:17	ATP




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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-2 (3-5)

Sampled: 12/28/2022 10:30

**Sample ID:** 22L3707-04Sample Matrix: Soil

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**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	89.6		% Wt	1		SM 2540G	12/30/22	12/30/22 10:28	AMZ

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-3 (0-2)

Sampled: 12/28/2022 12:15

**Sample ID:** 22L3707-05

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	0.21	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
Acrylonitrile	ND	0.013	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
Benzene	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
Bromobenzene	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
Bromodichloromethane	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
Bromoform	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
Bromomethane	ND	0.021	mg/Kg dry	1	V-34	SW-846 8260D	12/30/22	12/30/22 8:32	MFF
2-Butanone (MEK)	ND	0.085	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
n-Butylbenzene	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
sec-Butylbenzene	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
tert-Butylbenzene	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
Carbon Disulfide	ND	0.021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
Carbon Tetrachloride	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
Chlorobenzene	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
Chlorodibromomethane	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
Chloroethane	ND	0.043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
Chloroform	ND	0.0085	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
Chloromethane	ND	0.021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
2-Chlorotoluene	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
4-Chlorotoluene	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
1,2-Dibromoethane (EDB)	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
Dibromomethane	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
1,2-Dichlorobenzene	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
1,3-Dichlorobenzene	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
1,4-Dichlorobenzene	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
trans-1,4-Dichloro-2-butene	ND	0.0085	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
1,1-Dichloroethane	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
1,2-Dichloroethane	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
1,1-Dichloroethylene	ND	0.0085	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
cis-1,2-Dichloroethylene	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
trans-1,2-Dichloroethylene	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
1,2-Dichloropropane	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
1,3-Dichloropropane	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
2,2-Dichloropropane	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
1,1-Dichloropropene	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
cis-1,3-Dichloropropene	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
trans-1,3-Dichloropropene	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
Ethylbenzene	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
Hexachlorobutadiene	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
2-Hexanone (MBK)	ND	0.043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
Isopropylbenzene (Cumene)	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-3 (0-2)

Sampled: 12/28/2022 12:15

**Sample ID:** 22L3707-05**Sample Matrix:** Soil**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Methyl tert-Butyl Ether (MTBE)	ND	0.0085	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
Methylene Chloride	ND	0.043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
Naphthalene	ND	0.0085	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
n-Propylbenzene	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
Styrene	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
1,1,1,2-Tetrachloroethane	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
1,1,2,2-Tetrachloroethane	ND	0.0021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
Tetrachloroethylene	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
Tetrahydrofuran	ND	0.021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
Toluene	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
1,2,3-Trichlorobenzene	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
1,2,4-Trichlorobenzene	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
1,1,1-Trichloroethane	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
1,1,2-Trichloroethane	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
Trichloroethylene	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
Trichlorofluoromethane (Freon 11)	ND	0.021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
1,2,3-Trichloropropane	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.021	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
1,2,4-Trimethylbenzene	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
1,3,5-Trimethylbenzene	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
Vinyl Chloride	ND	0.021	mg/Kg dry	1	V-05	SW-846 8260D	12/30/22	12/30/22 8:32	MFF
m+p Xylene	ND	0.0085	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
o-Xylene	ND	0.0043	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:32	MFF
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	96.5	70-130							12/30/22 8:32
Toluene-d8	98.1	70-130							12/30/22 8:32
4-Bromofluorobenzene	92.6	70-130							12/30/22 8:32




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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-3 (0-2)

Sampled: 12/28/2022 12:15

**Sample ID:** 22L3707-05Sample Matrix: Soil

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**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
CT ETPH	61	24	mg/Kg dry	2		CTDEP ETPH	12/30/22	1/4/23 12:28	SFM
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
2-Fluorobiphenyl		62.0	50-150					1/4/23 12:28	




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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-3 (0-2)

Sampled: 12/28/2022 12:15

**Sample ID:** 22L3707-05Sample Matrix: Soil

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**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	84.4		% Wt	1		SM 2540G	12/30/22	12/30/22 10:28	AMZ

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-3 (4-6)

Sampled: 12/28/2022 13:00

**Sample ID:** 22L3707-06

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	0.18	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
Acrylonitrile	ND	0.011	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
Benzene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
Bromobenzene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
Bromodichloromethane	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
Bromoform	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
Bromomethane	ND	0.018	mg/Kg dry	1	V-34	SW-846 8260D	12/30/22	12/30/22 8:58	MFF
2-Butanone (MEK)	ND	0.072	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
n-Butylbenzene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
sec-Butylbenzene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
tert-Butylbenzene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
Carbon Disulfide	ND	0.018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
Carbon Tetrachloride	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
Chlorobenzene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
Chlorodibromomethane	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
Chloroethane	ND	0.036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
Chloroform	ND	0.0072	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
Chloromethane	ND	0.018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
2-Chlorotoluene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
4-Chlorotoluene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
1,2-Dibromoethane (EDB)	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
Dibromomethane	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
1,2-Dichlorobenzene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
1,3-Dichlorobenzene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
1,4-Dichlorobenzene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
trans-1,4-Dichloro-2-butene	ND	0.0072	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
1,1-Dichloroethane	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
1,2-Dichloroethane	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
1,1-Dichloroethylene	ND	0.0072	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
cis-1,2-Dichloroethylene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
trans-1,2-Dichloroethylene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
1,2-Dichloropropane	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
1,3-Dichloropropane	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
2,2-Dichloropropane	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
1,1-Dichloropropene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
cis-1,3-Dichloropropene	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
trans-1,3-Dichloropropene	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
Ethylbenzene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
Hexachlorobutadiene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
2-Hexanone (MBK)	ND	0.036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
Isopropylbenzene (Cumene)	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-3 (4-6)

Sampled: 12/28/2022 13:00

**Sample ID:** 22L3707-06**Sample Matrix:** Soil**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Methyl tert-Butyl Ether (MTBE)	ND	0.0072	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
Methylene Chloride	ND	0.036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
Naphthalene	ND	0.0072	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
n-Propylbenzene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
Styrene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
1,1,1,2-Tetrachloroethane	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
1,1,2,2-Tetrachloroethane	ND	0.0018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
Tetrachloroethylene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
Tetrahydrofuran	ND	0.018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
Toluene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
1,2,3-Trichlorobenzene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
1,2,4-Trichlorobenzene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
1,1,1-Trichloroethane	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
1,1,2-Trichloroethane	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
Trichloroethylene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
Trichlorofluoromethane (Freon 11)	ND	0.018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
1,2,3-Trichloropropane	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.018	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
1,2,4-Trimethylbenzene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
1,3,5-Trimethylbenzene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
Vinyl Chloride	ND	0.018	mg/Kg dry	1	V-05	SW-846 8260D	12/30/22	12/30/22 8:58	MFF
m+p Xylene	ND	0.0072	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
o-Xylene	ND	0.0036	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 8:58	MFF
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	97.4	70-130					12/30/22 8:58		
Toluene-d8	97.6	70-130					12/30/22 8:58		
4-Bromofluorobenzene	104	70-130					12/30/22 8:58		

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-3 (4-6)

Sampled: 12/28/2022 13:00

**Sample ID:** 22L3707-06

Sample Matrix: Soil

**Semivolatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Acenaphthylene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Aniline	ND	0.39	mg/Kg dry	1	V-05	SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Benzo(a)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Benzo(a)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Benzo(b)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Benzo(g,h,i)perylene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Benzo(k)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Bis(2-chloroethoxy)methane	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Bis(2-chloroethyl)ether	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Bis(2-chloroisopropyl)ether	ND	0.39	mg/Kg dry	1	V-06	SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Bis(2-Ethylhexyl)phthalate	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
4-Bromophenylphenylether	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Butylbenzylphthalate	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Carbazole	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
4-Chloroaniline	ND	0.76	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
4-Chloro-3-methylphenol	ND	0.76	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
2-Chloronaphthalene	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
2-Chlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
4-Chlorophenylphenylether	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Chrysene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Dibenz(a,h)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Dibenzofuran	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Di-n-butylphthalate	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
3,3-Dichlorobenzidine	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
2,4-Dichlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Diethylphthalate	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
2,4-Dimethylphenol	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Dimethylphthalate	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
4,6-Dinitro-2-methylphenol	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
2,4-Dinitrophenol	ND	0.76	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
2,4-Dinitrotoluene	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
2,6-Dinitrotoluene	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Di-n-octylphthalate	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Fluorene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Hexachlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Hexachlorobutadiene	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Hexachlorocyclopentadiene	ND	0.39	mg/Kg dry	1	V-05	SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Hexachloroethane	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Indeno(1,2,3-cd)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Isophorone	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
2-Methylnaphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-3 (4-6)

Sampled: 12/28/2022 13:00

**Sample ID:** 22L3707-06

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
3/4-Methylphenol	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Naphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
2-Nitroaniline	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
3-Nitroaniline	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
4-Nitroaniline	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Nitrobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
2-Nitrophenol	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
4-Nitrophenol	ND	0.76	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
N-Nitrosodiphenylamine/Diphenylamine	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
N-Nitrosodi-n-propylamine	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Pentachloronitrobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Pentachlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Phenanthrene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Phenol	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
Pyridine	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
1,2,4,5-Tetrachlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
1,2,4-Trichlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
2,4,5-Trichlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2
2,4,6-Trichlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 18:58	AR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	71.8	30-130		1/4/23 18:58
Phenol-d6	75.7	30-130		1/4/23 18:58
Nitrobenzene-d5	75.0	30-130		1/4/23 18:58
2-Fluorobiphenyl	74.1	30-130		1/4/23 18:58
2,4,6-Tribromophenol	75.2	30-130		1/4/23 18:58
p-Terphenyl-d14	96.7	30-130		1/4/23 18:58




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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-3 (4-6)

Sampled: 12/28/2022 13:00

**Sample ID:** 22L3707-06Sample Matrix: Soil

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**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
CT ETPH	ND	11	mg/Kg dry	1		CTDEP ETPH	12/30/22	1/4/23 11:16	SFM
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
2-Fluorobiphenyl		67.3	50-150					1/4/23 11:16	

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Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-3 (4-6)

Sampled: 12/28/2022 13:00

**Sample ID:** 22L3707-06

Sample Matrix: Soil

## Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.8	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:40	ATP
Arsenic	ND	3.7	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:40	ATP
Barium	42	1.8	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:40	ATP
Beryllium	ND	0.18	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:40	ATP
Cadmium	ND	0.37	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:40	ATP
Chromium	27	0.74	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:40	ATP
Copper	24	0.74	mg/Kg dry	1	B, B-07	SW-846 6010D	12/30/22	12/30/22 16:40	ATP
Lead	4.3	0.55	mg/Kg dry	1	MS-10	SW-846 6010D	12/30/22	1/3/23 13:16	NC
Mercury	ND	0.028	mg/Kg dry	1		SW-846 7471B	12/30/22	1/3/23 13:09	AAJ
Nickel	20	0.74	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:40	ATP
Selenium	ND	3.7	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:40	ATP
Silver	ND	0.37	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:40	ATP
Thallium	ND	1.8	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:40	ATP
Vanadium	56	0.74	mg/Kg dry	1		SW-846 6010D	12/30/22	1/3/23 13:16	NC
Zinc	50	0.74	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:40	ATP




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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** B-3 (4-6)

Sampled: 12/28/2022 13:00

**Sample ID:** 22L3707-06Sample Matrix: Soil

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**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	87.4		% Wt	1		SM 2540G	12/30/22	12/30/22 10:28	AMZ

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** HB-1 (0-2)

Sampled: 12/28/2022 14:15

**Sample ID:** 22L3707-07

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	0.58	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
Acrylonitrile	ND	0.035	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
Benzene	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
Bromobenzene	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
Bromodichloromethane	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
Bromoform	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
Bromomethane	ND	0.058	mg/Kg dry	1	V-34	SW-846 8260D	12/30/22	12/30/22 9:24	MFF
2-Butanone (MEK)	ND	0.23	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
n-Butylbenzene	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
sec-Butylbenzene	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
tert-Butylbenzene	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
Carbon Disulfide	ND	0.058	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
Carbon Tetrachloride	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
Chlorobenzene	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
Chlorodibromomethane	ND	0.0058	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
Chloroethane	ND	0.12	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
Chloroform	ND	0.023	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
Chloromethane	ND	0.058	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
2-Chlorotoluene	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
4-Chlorotoluene	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
1,2-Dibromoethane (EDB)	ND	0.0058	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
Dibromomethane	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
1,2-Dichlorobenzene	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
1,3-Dichlorobenzene	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
1,4-Dichlorobenzene	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
trans-1,4-Dichloro-2-butene	ND	0.023	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.12	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
1,1-Dichloroethane	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
1,2-Dichloroethane	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
1,1-Dichloroethylene	ND	0.023	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
cis-1,2-Dichloroethylene	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
trans-1,2-Dichloroethylene	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
1,2-Dichloropropane	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
1,3-Dichloropropane	ND	0.0058	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
2,2-Dichloropropane	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
1,1-Dichloropropene	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
cis-1,3-Dichloropropene	ND	0.0058	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
trans-1,3-Dichloropropene	ND	0.0058	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
Ethylbenzene	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
Hexachlorobutadiene	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
2-Hexanone (MBK)	ND	0.12	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
Isopropylbenzene (Cumene)	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** HB-1 (0-2)

Sampled: 12/28/2022 14:15

**Sample ID:** 22L3707-07**Sample Matrix:** Soil**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Methyl tert-Butyl Ether (MTBE)	ND	0.023	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
Methylene Chloride	ND	0.12	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.12	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
Naphthalene	ND	0.023	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
n-Propylbenzene	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
Styrene	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
1,1,1,2-Tetrachloroethane	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
1,1,2,2-Tetrachloroethane	ND	0.0058	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
Tetrachloroethylene	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
Tetrahydrofuran	ND	0.058	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
Toluene	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
1,2,3-Trichlorobenzene	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
1,2,4-Trichlorobenzene	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
1,1,1-Trichloroethane	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
1,1,2-Trichloroethane	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
Trichloroethylene	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
Trichlorofluoromethane (Freon 11)	ND	0.058	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
1,2,3-Trichloropropane	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.058	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
1,2,4-Trimethylbenzene	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
1,3,5-Trimethylbenzene	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
Vinyl Chloride	ND	0.058	mg/Kg dry	1	V-05	SW-846 8260D	12/30/22	12/30/22 9:24	MFF
m+p Xylene	ND	0.023	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF
o-Xylene	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:24	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	95.6	70-130		12/30/22 9:24
Toluene-d8	100	70-130		12/30/22 9:24
4-Bromofluorobenzene	103	70-130		12/30/22 9:24

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** HB-1 (0-2)

Sampled: 12/28/2022 14:15

**Sample ID:** 22L3707-07**Sample Matrix:** Soil**Semivolatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.58	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Acenaphthylene	ND	0.58	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Aniline	ND	1.2	mg/Kg dry	1	V-05	SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Anthracene	ND	0.58	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Benzo(a)anthracene	ND	0.58	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Benzo(a)pyrene	ND	0.58	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Benzo(b)fluoranthene	0.58	0.58	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Benzo(g,h,i)perylene	ND	0.58	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Benzo(k)fluoranthene	ND	0.58	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Bis(2-chloroethoxy)methane	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Bis(2-chloroethyl)ether	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Bis(2-chloroisopropyl)ether	ND	1.2	mg/Kg dry	1	V-06	SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Bis(2-Ethylhexyl)phthalate	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
4-Bromophenylphenylether	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Butylbenzylphthalate	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Carbazole	ND	0.58	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
4-Chloroaniline	ND	2.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
4-Chloro-3-methylphenol	ND	2.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
2-Chloronaphthalene	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
2-Chlorophenol	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
4-Chlorophenylphenylether	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Chrysene	ND	0.58	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Dibenz(a,h)anthracene	ND	0.58	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Dibenzofuran	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Di-n-butylphthalate	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
3,3-Dichlorobenzidine	ND	0.58	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
2,4-Dichlorophenol	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Diethylphthalate	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
2,4-Dimethylphenol	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Dimethylphthalate	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
4,6-Dinitro-2-methylphenol	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
2,4-Dinitrophenol	ND	2.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
2,4-Dinitrotoluene	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
2,6-Dinitrotoluene	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Di-n-octylphthalate	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Fluoranthene	0.89	0.58	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Fluorene	ND	0.58	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Hexachlorobenzene	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Hexachlorobutadiene	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Hexachlorocyclopentadiene	ND	1.2	mg/Kg dry	1	V-05	SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Hexachloroethane	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Indeno(1,2,3-cd)pyrene	ND	0.58	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Isophorone	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
2-Methylnaphthalene	ND	0.58	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** HB-1 (0-2)

Sampled: 12/28/2022 14:15

**Sample ID:** 22L3707-07

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
3/4-Methylphenol	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Naphthalene	ND	0.58	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
2-Nitroaniline	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
3-Nitroaniline	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
4-Nitroaniline	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Nitrobenzene	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
2-Nitrophenol	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
4-Nitrophenol	ND	2.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
N-Nitrosodiphenylamine/Diphenylamine	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
N-Nitrosodi-n-propylamine	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Pentachloronitrobenzene	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Pentachlorophenol	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Phenanthrene	ND	0.58	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Phenol	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Pyrene	1.1	0.58	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
Pyridine	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
1,2,4,5-Tetrachlorobenzene	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
1,2,4-Trichlorobenzene	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
2,4,5-Trichlorophenol	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2
2,4,6-Trichlorophenol	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:20	AR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	49.8	30-130		1/4/23 19:20
Phenol-d6	51.7	30-130		1/4/23 19:20
Nitrobenzene-d5	53.0	30-130		1/4/23 19:20
2-Fluorobiphenyl	52.2	30-130		1/4/23 19:20
2,4,6-Tribromophenol	49.7	30-130		1/4/23 19:20
p-Terphenyl-d14	66.9	30-130		1/4/23 19:20



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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** HB-1 (0-2)

Sampled: 12/28/2022 14:15

**Sample ID:** 22L3707-07

Sample Matrix: Soil

#### Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
CT ETPH	800	170	mg/Kg dry	5		CTDEP ETPH	1/4/23	1/6/23 17:13	RDD
<b>Surrogates</b>									
2-Fluorobiphenyl	80.4		50-150					1/6/23 17:13	

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** HB-1 (0-2)

Sampled: 12/28/2022 14:15

**Sample ID:** 22L3707-07Sample Matrix: Soil**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	5.5	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:45	ATP
Arsenic	ND	11	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:45	ATP
Barium	180	5.5	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:45	ATP
Beryllium	0.66	0.55	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:45	ATP
Cadmium	ND	1.1	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:45	ATP
Chromium	65	2.2	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:45	ATP
Copper	50	2.2	mg/Kg dry	1	B-07, B	SW-846 6010D	12/30/22	12/30/22 16:45	ATP
Lead	69	1.7	mg/Kg dry	1	MS-10	SW-846 6010D	12/30/22	1/3/23 13:23	NC
Mercury	0.20	0.087	mg/Kg dry	1		SW-846 7471B	12/30/22	1/3/23 13:11	AAJ
Nickel	24	2.2	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:45	ATP
Selenium	ND	11	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:45	ATP
Silver	ND	1.1	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:45	ATP
Thallium	ND	5.5	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:45	ATP
Vanadium	45	2.2	mg/Kg dry	1		SW-846 6010D	12/30/22	1/3/23 13:23	NC
Zinc	230	2.2	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:45	ATP




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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** HB-1 (0-2)

Sampled: 12/28/2022 14:15

**Sample ID:** 22L3707-07Sample Matrix: Soil

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**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	29.4		% Wt	1		SM 2540G	12/30/22	12/30/22 10:28	AMZ

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** HB-2 (0-2)

Sampled: 12/28/2022 13:30

**Sample ID:** 22L3707-08**Sample Matrix:** Soil**Polychlorinated Biphenyls with 3540 Soxhlet Extraction**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 21:46	TG
Aroclor-1221 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 21:46	TG
Aroclor-1232 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 21:46	TG
Aroclor-1242 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 21:46	TG
Aroclor-1248 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 21:46	TG
Aroclor-1254 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 21:46	TG
Aroclor-1260 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 21:46	TG
Aroclor-1262 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 21:46	TG
Aroclor-1268 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 21:46	TG
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Decachlorobiphenyl [1]	94.0	30-150							1/3/23 21:46
Decachlorobiphenyl [2]	96.2	30-150							1/3/23 21:46
Tetrachloro-m-xylene [1]	87.3	30-150							1/3/23 21:46
Tetrachloro-m-xylene [2]	69.4	30-150							1/3/23 21:46




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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** HB-2 (0-2)

Sampled: 12/28/2022 13:30

**Sample ID:** 22L3707-08Sample Matrix: Soil

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**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
CT ETPH	390	64	mg/Kg dry	5		CTDEP ETPH	12/30/22	1/4/23 11:57	SFM
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
2-Fluorobiphenyl		67.3	50-150					1/4/23 11:57	




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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** HB-2 (0-2)

Sampled: 12/28/2022 13:30

**Sample ID:** 22L3707-08Sample Matrix: Soil

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**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	77.8		% Wt	1		SM 2540G	12/30/22	12/30/22 10:28	AMZ

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** HB-3 (0-2)

Sampled: 12/28/2022 14:20

**Sample ID:** 22L3707-09

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	0.26	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
Acrylonitrile	ND	0.015	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
Benzene	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
Bromobenzene	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
Bromodichloromethane	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
Bromoform	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
Bromomethane	ND	0.026	mg/Kg dry	1	V-34	SW-846 8260D	12/30/22	12/30/22 9:49	MFF
2-Butanone (MEK)	ND	0.10	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
n-Butylbenzene	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
sec-Butylbenzene	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
tert-Butylbenzene	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
Carbon Disulfide	ND	0.026	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
Carbon Tetrachloride	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
Chlorobenzene	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
Chlorodibromomethane	ND	0.0026	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
Chloroethane	ND	0.052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
Chloroform	ND	0.010	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
Chloromethane	ND	0.026	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
2-Chlorotoluene	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
4-Chlorotoluene	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
1,2-Dibromoethane (EDB)	ND	0.0026	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
Dibromomethane	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
1,2-Dichlorobenzene	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
1,3-Dichlorobenzene	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
1,4-Dichlorobenzene	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
trans-1,4-Dichloro-2-butene	ND	0.010	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
1,1-Dichloroethane	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
1,2-Dichloroethane	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
1,1-Dichloroethylene	ND	0.010	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
cis-1,2-Dichloroethylene	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
trans-1,2-Dichloroethylene	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
1,2-Dichloropropane	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
1,3-Dichloropropane	ND	0.0026	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
2,2-Dichloropropane	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
1,1-Dichloropropene	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
cis-1,3-Dichloropropene	ND	0.0026	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
trans-1,3-Dichloropropene	ND	0.0026	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
Ethylbenzene	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
Hexachlorobutadiene	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
2-Hexanone (MBK)	ND	0.052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
Isopropylbenzene (Cumene)	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** HB-3 (0-2)

Sampled: 12/28/2022 14:20

**Sample ID:** 22L3707-09

Sample Matrix: Soil

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Methyl tert-Butyl Ether (MTBE)	ND	0.010	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
Methylene Chloride	ND	0.052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
Naphthalene	ND	0.010	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
n-Propylbenzene	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
Styrene	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
1,1,1,2-Tetrachloroethane	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
1,1,2,2-Tetrachloroethane	ND	0.0026	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
Tetrachloroethylene	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
Tetrahydrofuran	ND	0.026	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
Toluene	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
1,2,3-Trichlorobenzene	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
1,2,4-Trichlorobenzene	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
1,1,1-Trichloroethane	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
1,1,2-Trichloroethane	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
Trichloroethylene	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
Trichlorofluoromethane (Freon 11)	ND	0.026	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
1,2,3-Trichloropropane	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.026	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
1,2,4-Trimethylbenzene	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
1,3,5-Trimethylbenzene	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
Vinyl Chloride	ND	0.026	mg/Kg dry	1	V-05	SW-846 8260D	12/30/22	12/30/22 9:49	MFF
m+p Xylene	ND	0.010	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
o-Xylene	ND	0.0052	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 9:49	MFF
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	93.5	70-130							12/30/22 9:49
Toluene-d8	99.0	70-130							12/30/22 9:49
4-Bromofluorobenzene	99.9	70-130							12/30/22 9:49

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** HB-3 (0-2)

Sampled: 12/28/2022 14:20

**Sample ID:** 22L3707-09

Sample Matrix: Soil

**Semivolatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.27	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Acenaphthylene	1.1	0.27	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Aniline	ND	0.54	mg/Kg dry	1	V-05	SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Anthracene	0.64	0.27	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Benzo(a)anthracene	3.3	0.27	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Benzo(a)pyrene	3.6	0.27	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Benzo(b)fluoranthene	4.4	0.27	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Benzo(g,h,i)perylene	2.2	0.27	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Benzo(k)fluoranthene	1.7	0.27	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Bis(2-chloroethoxy)methane	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Bis(2-chloroethyl)ether	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Bis(2-chloroisopropyl)ether	ND	0.54	mg/Kg dry	1	V-06	SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Bis(2-Ethylhexyl)phthalate	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
4-Bromophenylphenylether	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Butylbenzylphthalate	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Carbazole	ND	0.27	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
4-Chloroaniline	ND	1.0	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
4-Chloro-3-methylphenol	ND	1.0	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
2-Chloronaphthalene	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
2-Chlorophenol	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
4-Chlorophenylphenylether	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Chrysene	4.5	0.27	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Dibenz(a,h)anthracene	0.55	0.27	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Dibenzofuran	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Di-n-butylphthalate	0.55	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
3,3-Dichlorobenzidine	ND	0.27	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
2,4-Dichlorophenol	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Diethylphthalate	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
2,4-Dimethylphenol	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Dimethylphthalate	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
4,6-Dinitro-2-methylphenol	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
2,4-Dinitrophenol	ND	1.0	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
2,4-Dinitrotoluene	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
2,6-Dinitrotoluene	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Di-n-octylphthalate	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Fluoranthene	6.4	0.27	mg/Kg dry	1	E	SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Fluoranthene	5.9	1.1	mg/Kg dry	4		SW-846 8270E	12/30/22	1/5/23 10:54	AR2
Fluorene	0.31	0.27	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Hexachlorobenzene	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Hexachlorobutadiene	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Hexachlorocyclopentadiene	ND	0.54	mg/Kg dry	1	V-05	SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Hexachloroethane	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Indeno(1,2,3-cd)pyrene	2.4	0.27	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Isophorone	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** HB-3 (0-2)

Sampled: 12/28/2022 14:20

**Sample ID:** 22L3707-09**Sample Matrix:** Soil**Semivolatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylnaphthalene	ND	0.27	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
2-Methylphenol	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
3/4-Methylphenol	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Naphthalene	0.35	0.27	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
2-Nitroaniline	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
3-Nitroaniline	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
4-Nitroaniline	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Nitrobenzene	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
2-Nitrophenol	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
4-Nitrophenol	ND	1.0	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
N-Nitrosodiphenylamine/Diphenylamine	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
N-Nitrosodi-n-propylamine	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Pentachloronitrobenzene	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Pentachlorophenol	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Phenanthrene	3.9	0.27	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Phenol	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Pyrene	9.3	0.27	mg/Kg dry	1	E	SW-846 8270E	12/30/22	1/4/23 19:42	AR2
Pyrene	7.0	1.1	mg/Kg dry	4		SW-846 8270E	12/30/22	1/5/23 10:54	AR2
Pyridine	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
1,2,4,5-Tetrachlorobenzene	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
1,2,4-Trichlorobenzene	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
2,4,5-Trichlorophenol	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2
2,4,6-Trichlorophenol	ND	0.54	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 19:42	AR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	66.3	30-130		1/4/23 19:42
2-Fluorophenol	60.0	30-130		1/5/23 10:54
Phenol-d6	69.8	30-130		1/4/23 19:42
Phenol-d6	65.2	30-130		1/5/23 10:54
Nitrobenzene-d5	70.4	30-130		1/4/23 19:42
Nitrobenzene-d5	65.3	30-130		1/5/23 10:54
2-Fluorobiphenyl	68.6	30-130		1/4/23 19:42
2-Fluorobiphenyl	62.3	30-130		1/5/23 10:54
2,4,6-Tribromophenol	63.3	30-130		1/4/23 19:42
2,4,6-Tribromophenol	51.5	30-130		1/5/23 10:54
p-Terphenyl-d14	85.0	30-130		1/4/23 19:42
p-Terphenyl-d14	62.5	30-130		1/5/23 10:54



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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** HB-3 (0-2)

Sampled: 12/28/2022 14:20

**Sample ID:** 22L3707-09

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
CT ETPH	1100	160	mg/Kg dry	10		CTDEP ETPH	12/30/22	1/4/23 16:02	SFM
<b>Surrogates</b>									
2-Fluorobiphenyl		% Recovery	Recovery Limits		Flag/Qual			1/4/23 16:02	
		74.4	50-150						

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** HB-3 (0-2)

Sampled: 12/28/2022 14:20

**Sample ID:** 22L3707-09

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.5	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:50	ATP
Arsenic	5.9	5.1	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:50	ATP
Barium	62	2.5	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:50	ATP
Beryllium	0.46	0.25	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:50	ATP
Cadmium	0.51	0.51	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:50	ATP
Chromium	54	1.0	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:50	ATP
Copper	43	1.0	mg/Kg dry	1	B, B-07	SW-846 6010D	12/30/22	12/30/22 16:50	ATP
Lead	140	0.76	mg/Kg dry	1	MS-10	SW-846 6010D	12/30/22	1/3/23 13:43	NC
Mercury	0.21	0.038	mg/Kg dry	1		SW-846 7471B	12/30/22	1/3/23 13:13	AAJ
Nickel	9.5	1.0	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:50	ATP
Selenium	ND	5.1	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:50	ATP
Silver	ND	0.51	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:50	ATP
Thallium	ND	2.5	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:50	ATP
Vanadium	37	1.0	mg/Kg dry	1		SW-846 6010D	12/30/22	1/3/23 13:43	NC
Zinc	100	1.0	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 16:50	ATP




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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** HB-3 (0-2)

Sampled: 12/28/2022 14:20

**Sample ID:** 22L3707-09Sample Matrix: Soil

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**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	63.4		% Wt	1		SM 2540G	12/30/22	12/30/22 10:28	AMZ

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** HB-5 (0-2)

Sampled: 12/28/2022 14:30

**Sample ID:** 22L3707-10

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	0.46	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
Acrylonitrile	ND	0.028	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
Benzene	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
Bromobenzene	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
Bromodichloromethane	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
Bromoform	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
Bromomethane	ND	0.046	mg/Kg dry	1	V-34	SW-846 8260D	12/30/22	12/30/22 10:15	MFF
2-Butanone (MEK)	ND	0.19	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
n-Butylbenzene	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
sec-Butylbenzene	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
tert-Butylbenzene	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
Carbon Disulfide	ND	0.046	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
Carbon Tetrachloride	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
Chlorobenzene	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
Chlorodibromomethane	ND	0.0046	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
Chloroethane	ND	0.093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
Chloroform	ND	0.019	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
Chloromethane	ND	0.046	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
2-Chlorotoluene	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
4-Chlorotoluene	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
1,2-Dibromoethane (EDB)	ND	0.0046	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
Dibromomethane	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
1,2-Dichlorobenzene	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
1,3-Dichlorobenzene	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
1,4-Dichlorobenzene	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
trans-1,4-Dichloro-2-butene	ND	0.019	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
1,1-Dichloroethane	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
1,2-Dichloroethane	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
1,1-Dichloroethylene	ND	0.019	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
cis-1,2-Dichloroethylene	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
trans-1,2-Dichloroethylene	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
1,2-Dichloropropane	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
1,3-Dichloropropane	ND	0.0046	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
2,2-Dichloropropane	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
1,1-Dichloropropene	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
cis-1,3-Dichloropropene	ND	0.0046	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
trans-1,3-Dichloropropene	ND	0.0046	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
Ethylbenzene	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
Hexachlorobutadiene	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
2-Hexanone (MBK)	ND	0.093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
Isopropylbenzene (Cumene)	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** HB-5 (0-2)

Sampled: 12/28/2022 14:30

**Sample ID:** 22L3707-10

Sample Matrix: Soil

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Methyl tert-Butyl Ether (MTBE)	ND	0.019	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
Methylene Chloride	ND	0.093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
Naphthalene	ND	0.019	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
n-Propylbenzene	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
Styrene	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
1,1,1,2-Tetrachloroethane	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
1,1,2,2-Tetrachloroethane	ND	0.0046	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
Tetrachloroethylene	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
Tetrahydrofuran	ND	0.046	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
Toluene	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
1,2,3-Trichlorobenzene	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
1,2,4-Trichlorobenzene	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
1,1,1-Trichloroethane	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
1,1,2-Trichloroethane	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
Trichloroethylene	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
Trichlorofluoromethane (Freon 11)	ND	0.046	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
1,2,3-Trichloropropane	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.046	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
1,2,4-Trimethylbenzene	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
1,3,5-Trimethylbenzene	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
Vinyl Chloride	ND	0.046	mg/Kg dry	1	V-05	SW-846 8260D	12/30/22	12/30/22 10:15	MFF
m+p Xylene	ND	0.019	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF
o-Xylene	ND	0.0093	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:15	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	95.6	70-130		12/30/22 10:15
Toluene-d8	98.9	70-130		12/30/22 10:15
4-Bromofluorobenzene	102	70-130		12/30/22 10:15




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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** HB-5 (0-2)

Sampled: 12/28/2022 14:30

**Sample ID:** 22L3707-10Sample Matrix: Soil

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**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
CT ETPH	650	140	mg/Kg dry	10		CTDEP ETPH	12/30/22	1/4/23 12:28	SFM
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
2-Fluorobiphenyl	76.5	50-150						1/4/23 12:28	




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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** HB-5 (0-2)

Sampled: 12/28/2022 14:30

**Sample ID:** 22L3707-10Sample Matrix: Soil

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**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	69.8		% Wt	1		SM 2540G	12/30/22	12/30/22 10:28	AMZ

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** HB-6 (0-2)

Sampled: 12/28/2022 11:15

**Sample ID:** 22L3707-11

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	0.20	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
Acrylonitrile	ND	0.012	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
Benzene	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
Bromobenzene	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
Bromodichloromethane	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
Bromoform	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
Bromomethane	ND	0.020	mg/Kg dry	1	V-34	SW-846 8260D	12/30/22	12/30/22 10:40	MFF
2-Butanone (MEK)	ND	0.081	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
n-Butylbenzene	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
sec-Butylbenzene	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
tert-Butylbenzene	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
Carbon Disulfide	ND	0.020	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
Carbon Tetrachloride	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
Chlorobenzene	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
Chlorodibromomethane	ND	0.0020	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
Chloroethane	ND	0.041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
Chloroform	ND	0.0081	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
Chloromethane	ND	0.020	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
2-Chlorotoluene	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
4-Chlorotoluene	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
1,2-Dibromoethane (EDB)	ND	0.0020	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
Dibromomethane	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
1,2-Dichlorobenzene	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
1,3-Dichlorobenzene	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
1,4-Dichlorobenzene	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
trans-1,4-Dichloro-2-butene	ND	0.0081	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
1,1-Dichloroethane	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
1,2-Dichloroethane	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
1,1-Dichloroethylene	ND	0.0081	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
cis-1,2-Dichloroethylene	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
trans-1,2-Dichloroethylene	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
1,2-Dichloropropane	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
1,3-Dichloropropane	ND	0.0020	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
2,2-Dichloropropane	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
1,1-Dichloropropene	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
cis-1,3-Dichloropropene	ND	0.0020	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
trans-1,3-Dichloropropene	ND	0.0020	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
Ethylbenzene	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
Hexachlorobutadiene	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
2-Hexanone (MBK)	ND	0.041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
Isopropylbenzene (Cumene)	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** HB-6 (0-2)

Sampled: 12/28/2022 11:15

**Sample ID:** 22L3707-11

Sample Matrix: Soil

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Methyl tert-Butyl Ether (MTBE)	ND	0.0081	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
Methylene Chloride	ND	0.041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
Naphthalene	ND	0.0081	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
n-Propylbenzene	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
Styrene	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
1,1,1,2-Tetrachloroethane	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
1,1,2,2-Tetrachloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
Tetrachloroethylene	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
Tetrahydrofuran	ND	0.020	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
Toluene	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
1,2,3-Trichlorobenzene	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
1,2,4-Trichlorobenzene	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
1,1,1-Trichloroethane	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
1,1,2-Trichloroethane	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
Trichloroethylene	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
Trichlorofluoromethane (Freon 11)	ND	0.020	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
1,2,3-Trichloropropane	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.020	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
1,2,4-Trimethylbenzene	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
1,3,5-Trimethylbenzene	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
Vinyl Chloride	ND	0.020	mg/Kg dry	1	V-05	SW-846 8260D	12/30/22	12/30/22 10:40	MFF
m+p Xylene	ND	0.0081	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
o-Xylene	ND	0.0041	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 10:40	MFF
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	95.5	70-130							12/30/22 10:40
Toluene-d8	97.6	70-130							12/30/22 10:40
4-Bromofluorobenzene	104	70-130							12/30/22 10:40




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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** HB-6 (0-2)

Sampled: 12/28/2022 11:15

**Sample ID:** 22L3707-11

Sample Matrix: Soil

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**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
CT ETPH	84	47	mg/Kg dry	4		CTDEP ETPH	12/30/22	1/4/23 15:01	SFM
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
2-Fluorobiphenyl		77.9	50-150					1/4/23 15:01	




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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** HB-6 (0-2)

Sampled: 12/28/2022 11:15

**Sample ID:** 22L3707-11Sample Matrix: Soil

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**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	86.0		% Wt	1		SM 2540G	12/30/22	12/30/22 10:28	AMZ

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** DUP-1

Sampled: 12/28/2022 00:00

**Sample ID:** 22L3707-12

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	0.23	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
Acrylonitrile	ND	0.014	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
Benzene	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
Bromobenzene	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
Bromodichloromethane	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
Bromoform	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
Bromomethane	ND	0.023	mg/Kg dry	1	V-34	SW-846 8260D	12/30/22	12/30/22 11:06	MFF
2-Butanone (MEK)	ND	0.090	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
n-Butylbenzene	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
sec-Butylbenzene	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
tert-Butylbenzene	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
Carbon Disulfide	ND	0.023	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
Carbon Tetrachloride	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
Chlorobenzene	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
Chlorodibromomethane	ND	0.0023	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
Chloroethane	ND	0.045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
Chloroform	ND	0.0090	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
Chloromethane	ND	0.023	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
2-Chlorotoluene	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
4-Chlorotoluene	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
1,2-Dibromoethane (EDB)	ND	0.0023	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
Dibromomethane	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
1,2-Dichlorobenzene	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
1,3-Dichlorobenzene	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
1,4-Dichlorobenzene	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
trans-1,4-Dichloro-2-butene	ND	0.0090	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
1,1-Dichloroethane	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
1,2-Dichloroethane	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
1,1-Dichloroethylene	ND	0.0090	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
cis-1,2-Dichloroethylene	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
trans-1,2-Dichloroethylene	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
1,2-Dichloropropane	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
1,3-Dichloropropane	ND	0.0023	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
2,2-Dichloropropane	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
1,1-Dichloropropene	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
cis-1,3-Dichloropropene	ND	0.0023	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
trans-1,3-Dichloropropene	ND	0.0023	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
Ethylbenzene	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
Hexachlorobutadiene	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
2-Hexanone (MBK)	ND	0.045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
Isopropylbenzene (Cumene)	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** DUP-1

Sampled: 12/28/2022 00:00

**Sample ID:** 22L3707-12

Sample Matrix: Soil

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Methyl tert-Butyl Ether (MTBE)	ND	0.0090	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
Methylene Chloride	ND	0.045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
Naphthalene	ND	0.0090	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
n-Propylbenzene	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
Styrene	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
1,1,1,2-Tetrachloroethane	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
1,1,2,2-Tetrachloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
Tetrachloroethylene	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
Tetrahydrofuran	ND	0.023	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
Toluene	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
1,2,3-Trichlorobenzene	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
1,2,4-Trichlorobenzene	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
1,1,1-Trichloroethane	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
1,1,2-Trichloroethane	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
Trichloroethylene	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
Trichlorofluoromethane (Freon 11)	ND	0.023	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
1,2,3-Trichloropropane	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.023	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
1,2,4-Trimethylbenzene	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
1,3,5-Trimethylbenzene	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
Vinyl Chloride	ND	0.023	mg/Kg dry	1	V-05	SW-846 8260D	12/30/22	12/30/22 11:06	MFF
m+p Xylene	ND	0.0090	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
o-Xylene	ND	0.0045	mg/Kg dry	1		SW-846 8260D	12/30/22	12/30/22 11:06	MFF
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	93.5	70-130							12/30/22 11:06
Toluene-d8	97.5	70-130							12/30/22 11:06
4-Bromofluorobenzene	101	70-130							12/30/22 11:06

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** DUP-1

Sampled: 12/28/2022 00:00

**Sample ID:** 22L3707-12**Sample Matrix:** Soil**Semivolatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Acenaphthylene	ND	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Aniline	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Benzo(a)anthracene	0.25	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Benzo(a)pyrene	0.23	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Benzo(b)fluoranthene	0.36	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Benzo(g,h,i)perylene	0.35	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Benzo(k)fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Bis(2-chloroethoxy)methane	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Bis(2-chloroethyl)ether	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Bis(2-chloroisopropyl)ether	ND	0.40	mg/Kg dry	1	V-06	SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Bis(2-Ethylhexyl)phthalate	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
4-Bromophenylphenylether	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Butylbenzylphthalate	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Carbazole	ND	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
4-Chloroaniline	ND	0.77	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
4-Chloro-3-methylphenol	ND	0.77	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
2-Chloronaphthalene	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
2-Chlorophenol	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
4-Chlorophenylphenylether	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Chrysene	0.28	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Dibenz(a,h)anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Dibenzofuran	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Di-n-butylphthalate	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
3,3-Dichlorobenzidine	ND	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
2,4-Dichlorophenol	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Diethylphthalate	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
2,4-Dimethylphenol	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Dimethylphthalate	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
4,6-Dinitro-2-methylphenol	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
2,4-Dinitrophenol	ND	0.77	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
2,4-Dinitrotoluene	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
2,6-Dinitrotoluene	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Di-n-octylphthalate	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Fluoranthene	0.53	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Fluorene	ND	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Hexachlorobenzene	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Hexachlorobutadiene	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Hexachlorocyclopentadiene	ND	0.40	mg/Kg dry	1	V-05	SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Hexachloroethane	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Indeno(1,2,3-cd)pyrene	0.32	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Isophorone	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
2-Methylnaphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** DUP-1

Sampled: 12/28/2022 00:00

**Sample ID:** 22L3707-12

Sample Matrix: Soil

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
3/4-Methylphenol	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Naphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
2-Nitroaniline	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
3-Nitroaniline	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
4-Nitroaniline	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Nitrobenzene	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
2-Nitrophenol	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
4-Nitrophenol	ND	0.77	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
N-Nitrosodiphenylamine/Diphenylamine	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
N-Nitrosodi-n-propylamine	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Pentachloronitrobenzene	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Pentachlorophenol	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Phenanthrene	0.45	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Phenol	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Pyrene	0.57	0.20	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
Pyridine	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
1,2,4,5-Tetrachlorobenzene	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
1,2,4-Trichlorobenzene	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
2,4,5-Trichlorophenol	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2
2,4,6-Trichlorophenol	ND	0.40	mg/Kg dry	1		SW-846 8270E	12/30/22	1/4/23 20:04	AR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	71.5	30-130		1/4/23 20:04
Phenol-d6	75.9	30-130		1/4/23 20:04
Nitrobenzene-d5	71.6	30-130		1/4/23 20:04
2-Fluorobiphenyl	75.1	30-130		1/4/23 20:04
2,4,6-Tribromophenol	80.2	30-130		1/4/23 20:04
p-Terphenyl-d14	98.0	30-130		1/4/23 20:04

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** DUP-1

Sampled: 12/28/2022 00:00

**Sample ID:** 22L3707-12

Sample Matrix: Soil

**Polychlorinated Biphenyls with 3540 Soxhlet Extraction**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.093	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 22:04	TG
Aroclor-1221 [1]	ND	0.093	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 22:04	TG
Aroclor-1232 [1]	ND	0.093	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 22:04	TG
Aroclor-1242 [1]	ND	0.093	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 22:04	TG
Aroclor-1248 [1]	ND	0.093	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 22:04	TG
Aroclor-1254 [1]	ND	0.093	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 22:04	TG
Aroclor-1260 [1]	ND	0.093	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 22:04	TG
Aroclor-1262 [1]	ND	0.093	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 22:04	TG
Aroclor-1268 [1]	ND	0.093	mg/Kg dry	4		SW-846 8082A	12/30/22	1/3/23 22:04	TG
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Decachlorobiphenyl [1]	92.4	30-150							1/3/23 22:04
Decachlorobiphenyl [2]	78.7	30-150							1/3/23 22:04
Tetrachloro-m-xylene [1]	83.2	30-150							1/3/23 22:04
Tetrachloro-m-xylene [2]	67.0	30-150							1/3/23 22:04




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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** DUP-1

Sampled: 12/28/2022 00:00

**Sample ID:** 22L3707-12Sample Matrix: Soil

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**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
CT ETPH	100	23	mg/Kg dry	2		CTDEP ETPH	12/30/22	1/4/23 11:57	SFM
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
2-Fluorobiphenyl		73.0	50-150					1/4/23 11:57	

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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** DUP-1

Sampled: 12/28/2022 00:00

**Sample ID:** 22L3707-12

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	12/30/22	12/30/22 17:01	ATP
Arsenic	ND	3.8	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 17:01	ATP
Barium	69	1.9	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 17:01	ATP
Beryllium	0.28	0.19	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 17:01	ATP
Cadmium	ND	0.38	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 17:01	ATP
Chromium	17	0.77	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 17:01	ATP
Copper	22	0.77	mg/Kg dry	1	B, B-07	SW-846 6010D	12/30/22	12/30/22 17:01	ATP
Lead	5.4	0.58	mg/Kg dry	1	MS-10	SW-846 6010D	12/30/22	1/3/23 13:57	NC
Mercury	0.039	0.029	mg/Kg dry	1		SW-846 7471B	12/30/22	1/3/23 13:14	AAJ
Nickel	10	0.77	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 17:01	ATP
Selenium	ND	3.8	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 17:01	ATP
Silver	ND	0.38	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 17:01	ATP
Thallium	ND	1.9	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 17:01	ATP
Vanadium	35	0.77	mg/Kg dry	1		SW-846 6010D	12/30/22	1/3/23 13:57	NC
Zinc	31	0.77	mg/Kg dry	1		SW-846 6010D	12/30/22	12/30/22 17:01	ATP




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

Project Location: Stafford, CT

Sample Description:

Work Order: 22L3707

Date Received: 12/29/2022

**Field Sample #:** DUP-1

Sampled: 12/28/2022 00:00

**Sample ID:** 22L3707-12Sample Matrix: Soil

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**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	85.8		% Wt	1		SM 2540G	12/30/22	12/30/22 10:28	AMZ

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**Sample Extraction Data****Prep Method: SW-846 3546      Analytical Method: CTDEP ETPH**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
22L3707-01 [B-1 (0-2)]	B327248	30.0	1.00	12/30/22
22L3707-02 [B-1 (5-7)]	B327248	30.0	1.00	12/30/22
22L3707-03 [B-2 (0-2)]	B327248	30.0	1.00	12/30/22
22L3707-04 [B-2 (3-5)]	B327248	30.0	1.00	12/30/22
22L3707-05 [B-3 (0-2)]	B327248	30.0	1.00	12/30/22
22L3707-06 [B-3 (4-6)]	B327248	30.0	1.00	12/30/22
22L3707-08 [HB-2 (0-2)]	B327248	30.0	1.00	12/30/22
22L3707-09 [HB-3 (0-2)]	B327248	30.0	1.00	12/30/22
22L3707-10 [HB-5 (0-2)]	B327248	30.0	1.00	12/30/22
22L3707-11 [HB-6 (0-2)]	B327248	30.0	1.00	12/30/22
22L3707-12 [DUP-1]	B327248	30.0	1.00	12/30/22

**Prep Method: SW-846 3546      Analytical Method: CTDEP ETPH**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
22L3707-07RE1 [HB-1 (0-2)]	B327633	30.0	1.00	01/04/23

**Prep Method: % Solids      Analytical Method: SM 2540G**

Lab Number [Field ID]	Batch	Date
22L3707-01 [B-1 (0-2)]	B327228	12/30/22
22L3707-02 [B-1 (5-7)]	B327228	12/30/22
22L3707-03 [B-2 (0-2)]	B327228	12/30/22
22L3707-04 [B-2 (3-5)]	B327228	12/30/22
22L3707-05 [B-3 (0-2)]	B327228	12/30/22
22L3707-06 [B-3 (4-6)]	B327228	12/30/22
22L3707-07 [HB-1 (0-2)]	B327228	12/30/22
22L3707-08 [HB-2 (0-2)]	B327228	12/30/22
22L3707-09 [HB-3 (0-2)]	B327228	12/30/22
22L3707-10 [HB-5 (0-2)]	B327228	12/30/22
22L3707-11 [HB-6 (0-2)]	B327228	12/30/22
22L3707-12 [DUP-1]	B327228	12/30/22

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

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
22L3707-01 [B-1 (0-2)]	B327192	1.52	50.0	12/30/22
22L3707-04 [B-2 (3-5)]	B327192	1.53	50.0	12/30/22
22L3707-06 [B-3 (4-6)]	B327192	1.55	50.0	12/30/22
22L3707-07 [HB-1 (0-2)]	B327192	1.54	50.0	12/30/22
22L3707-09 [HB-3 (0-2)]	B327192	1.56	50.0	12/30/22
22L3707-12 [DUP-1]	B327192	1.52	50.0	12/30/22

**Prep Method: SW-846 7470A/7471A      Analytical Method: SW-846 7471B**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
22L3707-01 [B-1 (0-2)]	B327234	0.596	50.0	12/30/22
22L3707-04 [B-2 (3-5)]	B327234	0.584	50.0	12/30/22
22L3707-06 [B-3 (4-6)]	B327234	0.611	50.0	12/30/22
22L3707-07 [HB-1 (0-2)]	B327234	0.584	50.0	12/30/22

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

**Sample Extraction Data****Prep Method: SW-846 7470A/7471A      Analytical Method: SW-846 7471B**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
22L3707-09 [HB-3 (0-2)]	B327234	0.614	50.0	12/30/22
22L3707-12 [DUP-1]	B327234	0.601	50.0	12/30/22

**Prep Method: SW-846 3540C      Analytical Method: SW-846 8082A**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
22L3707-01 [B-1 (0-2)]	B327185	10.0	10.0	12/30/22
22L3707-04 [B-2 (3-5)]	B327185	10.0	10.0	12/30/22
22L3707-08 [HB-2 (0-2)]	B327185	10.0	10.0	12/30/22
22L3707-12 [DUP-1]	B327185	10.0	10.0	12/30/22

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

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
22L3707-01 [B-1 (0-2)]	B327226	4.84	10.0	12/30/22
22L3707-02 [B-1 (5-7)]	B327226	6.32	10.0	12/30/22
22L3707-03 [B-2 (0-2)]	B327226	3.58	10.0	12/30/22
22L3707-04 [B-2 (3-5)]	B327226	5.40	10.0	12/30/22
22L3707-05 [B-3 (0-2)]	B327226	2.77	10.0	12/30/22
22L3707-06 [B-3 (4-6)]	B327226	3.18	10.0	12/30/22
22L3707-07 [HB-1 (0-2)]	B327226	2.92	10.0	12/30/22
22L3707-09 [HB-3 (0-2)]	B327226	3.06	10.0	12/30/22
22L3707-10 [HB-5 (0-2)]	B327226	1.54	10.0	12/30/22
22L3707-11 [HB-6 (0-2)]	B327226	2.86	10.0	12/30/22
22L3707-12 [DUP-1]	B327226	2.58	10.0	12/30/22

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

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
22L3707-01 [B-1 (0-2)]	B327249	30.0	1.00	12/30/22
22L3707-04 [B-2 (3-5)]	B327249	30.0	1.00	12/30/22
22L3707-06 [B-3 (4-6)]	B327249	30.0	1.00	12/30/22
22L3707-07 [HB-1 (0-2)]	B327249	30.0	1.00	12/30/22
22L3707-09 [HB-3 (0-2)]	B327249	30.0	1.00	12/30/22
22L3707-09RE1 [HB-3 (0-2)]	B327249	30.0	1.00	12/30/22
22L3707-12 [DUP-1]	B327249	30.0	1.00	12/30/22

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch B327226 - SW-846 5035**

<b>Blank (B327226-BLK1)</b>		Prepared & Analyzed: 12/30/22								
Acetone	ND	0.10	mg/Kg wet							
Acrylonitrile	ND	0.0060	mg/Kg wet							
Benzene	ND	0.0020	mg/Kg wet							
Bromobenzene	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							
n-Butylbenzene	ND	0.0020	mg/Kg wet							
sec-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butylbenzene	ND	0.0020	mg/Kg wet							
Carbon Disulfide	ND	0.010	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							
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 tert-Butyl Ether (MTBE)	ND	0.0040	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							

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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch B327226 - SW-846 5035**

<b>Blank (B327226-BLK1)</b>	Prepared & Analyzed: 12/30/22					
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			
1,1,1-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			V-05
m+p Xylene	ND	0.0040	mg/Kg wet			
o-Xylene	ND	0.0020	mg/Kg wet			
Surrogate: 1,2-Dichloroethane-d4	0.0474		mg/Kg wet	0.0500	94.8	70-130
Surrogate: Toluene-d8	0.0498		mg/Kg wet	0.0500	99.6	70-130
Surrogate: 4-Bromofluorobenzene	0.0522		mg/Kg wet	0.0500	104	70-130
<b>LCS (B327226-BS1)</b>	Prepared & Analyzed: 12/30/22					
Acetone	0.176	0.10	mg/Kg wet	0.200	87.9	40-160
Acrylonitrile	0.0193	0.0060	mg/Kg wet	0.0200	96.3	70-130
Benzene	0.0206	0.0020	mg/Kg wet	0.0200	103	70-130
Bromobenzene	0.0241	0.0020	mg/Kg wet	0.0200	120	70-130
Bromodichloromethane	0.0203	0.0020	mg/Kg wet	0.0200	102	70-130
Bromoform	0.0206	0.0020	mg/Kg wet	0.0200	103	70-130
Bromomethane	0.0162	0.010	mg/Kg wet	0.0200	81.1	40-160
2-Butanone (MEK)	0.180	0.040	mg/Kg wet	0.200	90.0	40-160
n-Butylbenzene	0.0196	0.0020	mg/Kg wet	0.0200	97.9	70-130
sec-Butylbenzene	0.0207	0.0020	mg/Kg wet	0.0200	104	70-130
tert-Butylbenzene	0.0206	0.0020	mg/Kg wet	0.0200	103	70-130
Carbon Disulfide	0.227	0.010	mg/Kg wet	0.200	113	70-130
Carbon Tetrachloride	0.0204	0.0020	mg/Kg wet	0.0200	102	70-130
Chlorobenzene	0.0220	0.0020	mg/Kg wet	0.0200	110	70-130
Chlorodibromomethane	0.0203	0.0010	mg/Kg wet	0.0200	102	40-160
Chloroethane	0.0168	0.020	mg/Kg wet	0.0200	84.2	70-130
Chloroform	0.0200	0.0040	mg/Kg wet	0.0200	99.8	70-130
Chloromethane	0.0247	0.010	mg/Kg wet	0.0200	124	40-160
2-Chlorotoluene	0.0219	0.0020	mg/Kg wet	0.0200	110	70-130
4-Chlorotoluene	0.0218	0.0020	mg/Kg wet	0.0200	109	70-130
1,2-Dibromo-3-chloropropane (DBCP)	0.0168	0.0020	mg/Kg wet	0.0200	84.2	70-130
1,2-Dibromoethane (EDB)	0.0203	0.0010	mg/Kg wet	0.0200	101	70-130
Dibromomethane	0.0209	0.0020	mg/Kg wet	0.0200	104	70-130
1,2-Dichlorobenzene	0.0210	0.0020	mg/Kg wet	0.0200	105	70-130
1,3-Dichlorobenzene	0.0205	0.0020	mg/Kg wet	0.0200	103	70-130
1,4-Dichlorobenzene	0.0198	0.0020	mg/Kg wet	0.0200	99.0	70-130
trans-1,4-Dichloro-2-butene	0.0174	0.0040	mg/Kg wet	0.0200	87.2	70-130
Dichlorodifluoromethane (Freon 12)	0.0236	0.020	mg/Kg wet	0.0200	118	40-160
1,1-Dichloroethane	0.0207	0.0020	mg/Kg wet	0.0200	103	70-130
1,2-Dichloroethane	0.0205	0.0020	mg/Kg wet	0.0200	103	70-130
1,1-Dichloroethylene	0.0227	0.0040	mg/Kg wet	0.0200	114	70-130

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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
<b>Batch B327226 - SW-846 5035</b>									
<b>LCS (B327226-BS1)</b>									
Prepared & Analyzed: 12/30/22									
cis-1,2-Dichloroethylene	0.0208	0.0020	mg/Kg wet	0.0200	104	70-130			
trans-1,2-Dichloroethylene	0.0206	0.0020	mg/Kg wet	0.0200	103	70-130			
1,2-Dichloropropane	0.0199	0.0020	mg/Kg wet	0.0200	99.4	70-130			
1,3-Dichloropropane	0.0208	0.0010	mg/Kg wet	0.0200	104	70-130			
2,2-Dichloropropane	0.0182	0.0020	mg/Kg wet	0.0200	90.9	70-130			
1,1-Dichloropropene	0.0208	0.0020	mg/Kg wet	0.0200	104	70-130			
cis-1,3-Dichloropropene	0.0191	0.0010	mg/Kg wet	0.0200	95.7	70-130			
trans-1,3-Dichloropropene	0.0185	0.0010	mg/Kg wet	0.0200	92.3	70-130			
Ethylbenzene	0.0225	0.0020	mg/Kg wet	0.0200	112	70-130			
Hexachlorobutadiene	0.0207	0.0020	mg/Kg wet	0.0200	104	40-160			
2-Hexanone (MBK)	0.186	0.020	mg/Kg wet	0.200	92.8	70-130			
Isopropylbenzene (Cumene)	0.0220	0.0020	mg/Kg wet	0.0200	110	70-130			
p-Isopropyltoluene (p-Cymene)	0.0203	0.0020	mg/Kg wet	0.0200	102	70-130			
Methyl tert-Butyl Ether (MTBE)	0.0190	0.0040	mg/Kg wet	0.0200	95.0	70-130			
Methylene Chloride	0.0200	0.020	mg/Kg wet	0.0200	99.8	70-130			
4-Methyl-2-pentanone (MIBK)	0.192	0.020	mg/Kg wet	0.200	96.0	40-160			
Naphthalene	0.0189	0.0040	mg/Kg wet	0.0200	94.6	70-130			
n-Propylbenzene	0.0221	0.0020	mg/Kg wet	0.0200	110	70-130			
Styrene	0.0222	0.0020	mg/Kg wet	0.0200	111	70-130			
1,1,1,2-Tetrachloroethane	0.0216	0.0020	mg/Kg wet	0.0200	108	70-130			
1,1,2,2-Tetrachloroethane	0.0207	0.0010	mg/Kg wet	0.0200	104	70-130			
Tetrachloroethylene	0.0233	0.0020	mg/Kg wet	0.0200	116	70-130			
Tetrahydrofuran	0.0175	0.010	mg/Kg wet	0.0200	87.6	70-130			
Toluene	0.0186	0.0020	mg/Kg wet	0.0200	93.2	70-130			
1,2,3-Trichlorobenzene	0.0198	0.0020	mg/Kg wet	0.0200	98.9	70-130			
1,2,4-Trichlorobenzene	0.0198	0.0020	mg/Kg wet	0.0200	99.1	70-130			
1,1,1-Trichloroethane	0.0200	0.0020	mg/Kg wet	0.0200	99.9	70-130			
1,1,2-Trichloroethane	0.0197	0.0020	mg/Kg wet	0.0200	98.5	70-130			
Trichloroethylene	0.0203	0.0020	mg/Kg wet	0.0200	101	70-130			
Trichlorofluoromethane (Freon 11)	0.0192	0.010	mg/Kg wet	0.0200	96.1	40-160			
1,2,3-Trichloropropane	0.0201	0.0020	mg/Kg wet	0.0200	100	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0258	0.010	mg/Kg wet	0.0200	129	70-130			V-20
1,2,4-Trimethylbenzene	0.0191	0.0020	mg/Kg wet	0.0200	95.5	70-130			
1,3,5-Trimethylbenzene	0.0219	0.0020	mg/Kg wet	0.0200	109	70-130			
Vinyl Chloride	0.0161	0.010	mg/Kg wet	0.0200	80.7	70-130			V-05
m+p Xylene	0.0451	0.0040	mg/Kg wet	0.0400	113	70-130			
o-Xylene	0.0220	0.0020	mg/Kg wet	0.0200	110	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0470		mg/Kg wet	0.0500	94.0	70-130			
Surrogate: Toluene-d8	0.0498		mg/Kg wet	0.0500	99.6	70-130			
Surrogate: 4-Bromofluorobenzene	0.0515		mg/Kg wet	0.0500	103	70-130			

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

**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
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**Batch B327249 - SW-846 3546**

<b>Blank (B327249-BLK1)</b>		Prepared: 12/30/22 Analyzed: 01/04/23							
Acenaphthene	ND	0.17	mg/Kg wet						
Acenaphthylene	ND	0.17	mg/Kg wet						
Aniline	ND	0.34	mg/Kg wet						V-05
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						
Bis(2-chloroethoxy)methane	ND	0.34	mg/Kg wet						
Bis(2-chloroethyl)ether	ND	0.34	mg/Kg wet						
Bis(2-chloroisopropyl)ether	ND	0.34	mg/Kg wet						V-06
Bis(2-Ethylhexyl)phthalate	ND	0.34	mg/Kg wet						
4-Bromophenylphenylether	ND	0.34	mg/Kg wet						
Butylbenzylphthalate	ND	0.34	mg/Kg wet						
Carbazole	ND	0.17	mg/Kg wet						
4-Chloroaniline	ND	0.66	mg/Kg wet						
4-Chloro-3-methylphenol	ND	0.66	mg/Kg wet						
2-Chloronaphthalene	ND	0.34	mg/Kg wet						
2-Chlorophenol	ND	0.34	mg/Kg wet						
4-Chlorophenylphenylether	ND	0.34	mg/Kg wet						
Chrysene	ND	0.17	mg/Kg wet						
Dibenz(a,h)anthracene	ND	0.17	mg/Kg wet						
Dibenzo-furan	ND	0.34	mg/Kg wet						
Di-n-butylphthalate	ND	0.34	mg/Kg wet						
3,3-Dichlorobenzidine	ND	0.17	mg/Kg wet						
2,4-Dichlorophenol	ND	0.34	mg/Kg wet						
Diethylphthalate	ND	0.34	mg/Kg wet						
2,4-Dimethylphenol	ND	0.34	mg/Kg wet						
Dimethylphthalate	ND	0.34	mg/Kg wet						
4,6-Dinitro-2-methylphenol	ND	0.34	mg/Kg wet						
2,4-Dinitrophenol	ND	0.66	mg/Kg wet						
2,4-Dinitrotoluene	ND	0.34	mg/Kg wet						
2,6-Dinitrotoluene	ND	0.34	mg/Kg wet						
Di-n-octylphthalate	ND	0.34	mg/Kg wet						
Fluoranthene	ND	0.17	mg/Kg wet						
Fluorene	ND	0.17	mg/Kg wet						
Hexachlorobenzene	ND	0.34	mg/Kg wet						
Hexachlorobutadiene	ND	0.34	mg/Kg wet						
Hexachlorocyclopentadiene	ND	0.34	mg/Kg wet						V-05
Hexachloroethane	ND	0.34	mg/Kg wet						
Indeno(1,2,3-cd)pyrene	ND	0.17	mg/Kg wet						
Isophorone	ND	0.34	mg/Kg wet						
2-Methylnaphthalene	ND	0.17	mg/Kg wet						
2-Methylphenol	ND	0.34	mg/Kg wet						
3/4-Methylphenol	ND	0.34	mg/Kg wet						
Naphthalene	ND	0.17	mg/Kg wet						
2-Nitroaniline	ND	0.34	mg/Kg wet						
3-Nitroaniline	ND	0.34	mg/Kg wet						
4-Nitroaniline	ND	0.34	mg/Kg wet						
Nitrobenzene	ND	0.34	mg/Kg wet						
2-Nitrophenol	ND	0.34	mg/Kg wet						

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

**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
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**Batch B327249 - SW-846 3546**

<b>Blank (B327249-BLK1)</b>	Prepared: 12/30/22 Analyzed: 01/04/23							
4-Nitrophenol	ND	0.66	mg/Kg wet					
N-Nitrosodiphenylamine/Diphenylamine	ND	0.34	mg/Kg wet					
N-Nitrosodi-n-propylamine	ND	0.34	mg/Kg wet					
Pentachloronitrobenzene	ND	0.34	mg/Kg wet					
Pentachlorophenol	ND	0.34	mg/Kg wet					
Phenanthrene	ND	0.17	mg/Kg wet					
Phenol	ND	0.34	mg/Kg wet					
Pyrene	ND	0.17	mg/Kg wet					
Pyridine	ND	0.34	mg/Kg wet					
1,2,4,5-Tetrachlorobenzene	ND	0.34	mg/Kg wet					
1,2,4-Trichlorobenzene	ND	0.34	mg/Kg wet					
2,4,5-Trichlorophenol	ND	0.34	mg/Kg wet					
2,4,6-Trichlorophenol	ND	0.34	mg/Kg wet					
Surrogate: 2-Fluorophenol	5.62		mg/Kg wet	6.67	84.3	30-130		
Surrogate: Phenol-d6	5.93		mg/Kg wet	6.67	89.0	30-130		
Surrogate: Nitrobenzene-d5	2.86		mg/Kg wet	3.33	85.8	30-130		
Surrogate: 2-Fluorobiphenyl	2.85		mg/Kg wet	3.33	85.6	30-130		
Surrogate: 2,4,6-Tribromophenol	5.78		mg/Kg wet	6.67	86.7	30-130		
Surrogate: p-Terphenyl-d14	3.11		mg/Kg wet	3.33	93.2	30-130		

<b>LCS (B327249-BS1)</b>	Prepared: 12/30/22 Analyzed: 01/04/23							
Acenaphthene	1.27	0.17	mg/Kg wet	1.67	76.0	40-140		
Acenaphthylene	1.29	0.17	mg/Kg wet	1.67	77.1	40-140		
Aniline	1.02	0.34	mg/Kg wet	1.67	61.3	40-140	V-05	†
Anthracene	1.34	0.17	mg/Kg wet	1.67	80.3	40-140		
Benzo(a)anthracene	1.28	0.17	mg/Kg wet	1.67	76.6	40-140		
Benzo(a)pyrene	1.20	0.17	mg/Kg wet	1.67	72.3	40-140		
Benzo(b)fluoranthene	1.29	0.17	mg/Kg wet	1.67	77.4	40-140		
Benzo(g,h,i)perylene	1.08	0.17	mg/Kg wet	1.67	65.1	40-140		
Benzo(k)fluoranthene	1.34	0.17	mg/Kg wet	1.67	80.6	40-140		
Bis(2-chloroethoxy)methane	1.29	0.34	mg/Kg wet	1.67	77.5	40-140		
Bis(2-chloroethyl)ether	1.47	0.34	mg/Kg wet	1.67	88.3	40-140		
Bis(2-chloroisopropyl)ether	1.88	0.34	mg/Kg wet	1.67	112	40-140	V-06	
Bis(2-Ethylhexyl)phthalate	1.53	0.34	mg/Kg wet	1.67	91.9	40-140		
4-Bromophenylphenylether	1.25	0.34	mg/Kg wet	1.67	74.8	40-140		
Butylbenzylphthalate	1.40	0.34	mg/Kg wet	1.67	83.7	40-140		
Carbazole	1.37	0.17	mg/Kg wet	1.67	82.2	40-140		
4-Chloroaniline	0.921	0.66	mg/Kg wet	1.67	55.3	40-140		†
4-Chloro-3-methylphenol	1.32	0.66	mg/Kg wet	1.67	79.0	30-130		
2-Chloronaphthalene	1.16	0.34	mg/Kg wet	1.67	69.5	40-140		
2-Chlorophenol	1.23	0.34	mg/Kg wet	1.67	73.8	30-130		
4-Chlorophenylphenylether	1.22	0.34	mg/Kg wet	1.67	73.5	40-140		
Chrysene	1.27	0.17	mg/Kg wet	1.67	76.0	40-140		
Dibenz(a,h)anthracene	1.18	0.17	mg/Kg wet	1.67	70.6	40-140		
Dibenzofuran	1.29	0.34	mg/Kg wet	1.67	77.5	40-140		
Di-n-butylphthalate	1.51	0.34	mg/Kg wet	1.67	90.4	40-140		
3,3-Dichlorobenzidine	1.18	0.17	mg/Kg wet	1.67	70.7	40-140		†
2,4-Dichlorophenol	1.19	0.34	mg/Kg wet	1.67	71.5	30-130		
Diethylphthalate	1.26	0.34	mg/Kg wet	1.67	75.7	40-140		
2,4-Dimethylphenol	1.32	0.34	mg/Kg wet	1.67	79.4	30-130		
Dimethylphthalate	1.31	0.34	mg/Kg wet	1.67	78.7	40-140		
4,6-Dinitro-2-methylphenol	1.24	0.34	mg/Kg wet	1.67	74.6	30-130		

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

**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
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**Batch B327249 - SW-846 3546**

<b>LCS (B327249-BS1)</b>					Prepared: 12/30/22 Analyzed: 01/04/23				
2,4-Dinitrophenol	0.673	0.66	mg/Kg wet	1.67	40.4	30-130			
2,4-Dinitrotoluene	1.30	0.34	mg/Kg wet	1.67	78.2	40-140			
2,6-Dinitrotoluene	1.39	0.34	mg/Kg wet	1.67	83.3	40-140			
Di-n-octylphthalate	1.40	0.34	mg/Kg wet	1.67	83.9	40-140			
Fluoranthene	1.41	0.17	mg/Kg wet	1.67	84.6	40-140			
Fluorene	1.31	0.17	mg/Kg wet	1.67	78.7	40-140			
Hexachlorobenzene	1.33	0.34	mg/Kg wet	1.67	80.0	40-140			
Hexachlorobutadiene	1.11	0.34	mg/Kg wet	1.67	66.6	40-140			
Hexachlorocyclopentadiene	0.959	0.34	mg/Kg wet	1.67	57.6	30-140			V-05
Hexachloroethane	1.14	0.34	mg/Kg wet	1.67	68.3	40-140			
Indeno(1,2,3-cd)pyrene	1.17	0.17	mg/Kg wet	1.67	70.1	40-140			
Isophorone	1.47	0.34	mg/Kg wet	1.67	88.0	40-140			
2-Methylnaphthalene	1.23	0.17	mg/Kg wet	1.67	74.1	40-140			
2-Methylphenol	1.33	0.34	mg/Kg wet	1.67	79.9	30-130			
3/4-Methylphenol	1.48	0.34	mg/Kg wet	1.67	88.7	30-130			
Naphthalene	1.26	0.17	mg/Kg wet	1.67	75.6	40-140			
2-Nitroaniline	1.50	0.34	mg/Kg wet	1.67	90.2	40-140			
3-Nitroaniline	1.13	0.34	mg/Kg wet	1.67	67.8	40-140			†
4-Nitroaniline	1.23	0.34	mg/Kg wet	1.67	73.7	40-140			
Nitrobenzene	1.33	0.34	mg/Kg wet	1.67	79.7	40-140			
2-Nitrophenol	1.23	0.34	mg/Kg wet	1.67	73.9	30-130			
4-Nitrophenol	1.49	0.66	mg/Kg wet	1.67	89.2	10-130			
N-Nitrosodiphenylamine/Diphenylamine	1.42	0.34	mg/Kg wet	1.67	85.3	40-140			
N-Nitrosodi-n-propylamine	1.57	0.34	mg/Kg wet	1.67	94.4	40-140			
Pentachloronitrobenzene	1.40	0.34	mg/Kg wet	1.67	83.7	40-140			
Pentachlorophenol	0.995	0.34	mg/Kg wet	1.67	59.7	30-130			
Phenanthrene	1.32	0.17	mg/Kg wet	1.67	79.0	40-140			
Phenol	1.36	0.34	mg/Kg wet	1.67	81.6	20-130			
Pyrene	1.29	0.17	mg/Kg wet	1.67	77.2	40-140			
Pyridine	0.834	0.34	mg/Kg wet	1.67	50.1	10-140			†
1,2,4,5-Tetrachlorobenzene	1.20	0.34	mg/Kg wet	1.67	72.0	40-140			
1,2,4-Trichlorobenzene	1.15	0.34	mg/Kg wet	1.67	68.7	40-140			
2,4,5-Trichlorophenol	1.29	0.34	mg/Kg wet	1.67	77.3	30-130			
2,4,6-Trichlorophenol	1.25	0.34	mg/Kg wet	1.67	75.2	30-130			
Surrogate: 2-Fluorophenol	5.85		mg/Kg wet	6.67	87.8	30-130			
Surrogate: Phenol-d6	6.13		mg/Kg wet	6.67	91.9	30-130			
Surrogate: Nitrobenzene-d5	2.95		mg/Kg wet	3.33	88.4	30-130			
Surrogate: 2-Fluorobiphenyl	3.06		mg/Kg wet	3.33	91.7	30-130			
Surrogate: 2,4,6-Tribromophenol	5.88		mg/Kg wet	6.67	88.2	30-130			
Surrogate: p-Terphenyl-d14	3.12		mg/Kg wet	3.33	93.5	30-130			

<b>LCS Dup (B327249-BSD1)</b>					Prepared: 12/30/22 Analyzed: 01/04/23				
Acenaphthene	1.28	0.17	mg/Kg wet	1.67	76.6	40-140	0.839	30	
Acenaphthylene	1.29	0.17	mg/Kg wet	1.67	77.5	40-140	0.440	30	
Aniline	1.03	0.34	mg/Kg wet	1.67	61.6	40-140	0.488	50	V-05
Anthracene	1.34	0.17	mg/Kg wet	1.67	80.3	40-140	0.00	30	
Benzo(a)anthracene	1.26	0.17	mg/Kg wet	1.67	75.4	40-140	1.61	30	
Benzo(a)pyrene	1.18	0.17	mg/Kg wet	1.67	70.7	40-140	2.21	30	
Benzo(b)fluoranthene	1.28	0.17	mg/Kg wet	1.67	76.6	40-140	0.987	30	
Benzo(g,h,i)perylene	1.21	0.17	mg/Kg wet	1.67	72.4	40-140	10.6	30	
Benzo(k)fluoranthene	1.31	0.17	mg/Kg wet	1.67	78.7	40-140	2.39	30	
Bis(2-chloroethoxy)methane	1.27	0.34	mg/Kg wet	1.67	76.2	40-140	1.80	30	

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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
<b>Batch B327249 - SW-846 3546</b>									
<b>LCS Dup (B327249-BSD1)</b>									
Prepared: 12/30/22 Analyzed: 01/04/23									
Bis(2-chloroethyl)ether	1.40	0.34	mg/Kg wet	1.67	84.1	40-140	4.83	30	V-06
Bis(2-chloroisopropyl)ether	1.78	0.34	mg/Kg wet	1.67	107	40-140	5.39	30	
Bis(2-Ethylhexyl)phthalate	1.38	0.34	mg/Kg wet	1.67	83.0	40-140	10.2	30	
4-Bromophenylphenylether	1.22	0.34	mg/Kg wet	1.67	73.3	40-140	2.05	30	
Butylbenzylphthalate	1.32	0.34	mg/Kg wet	1.67	79.1	40-140	5.67	30	
Carbazole	1.34	0.17	mg/Kg wet	1.67	80.4	40-140	2.31	30	
4-Chloroaniline	0.996	0.66	mg/Kg wet	1.67	59.7	40-140	7.76	30	†
4-Chloro-3-methylphenol	1.31	0.66	mg/Kg wet	1.67	78.6	30-130	0.457	30	
2-Chloronaphthalene	1.11	0.34	mg/Kg wet	1.67	66.8	40-140	3.99	30	
2-Chlorophenol	1.23	0.34	mg/Kg wet	1.67	73.6	30-130	0.326	30	
4-Chlorophenylphenylether	1.22	0.34	mg/Kg wet	1.67	73.1	40-140	0.600	30	
Chrysene	1.26	0.17	mg/Kg wet	1.67	75.6	40-140	0.475	30	
Dibenz(a,h)anthracene	1.26	0.17	mg/Kg wet	1.67	75.5	40-140	6.62	30	
Dibenzo furan	1.31	0.34	mg/Kg wet	1.67	78.6	40-140	1.41	30	
Di-n-butylphthalate	1.39	0.34	mg/Kg wet	1.67	83.4	40-140	8.06	30	
3,3-Dichlorobenzidine	1.25	0.17	mg/Kg wet	1.67	74.8	40-140	5.63	30	† ‡
2,4-Dichlorophenol	1.21	0.34	mg/Kg wet	1.67	72.8	30-130	1.72	30	
Diethylphthalate	1.25	0.34	mg/Kg wet	1.67	74.9	40-140	1.06	30	
2,4-Dimethylphenol	1.35	0.34	mg/Kg wet	1.67	81.2	30-130	2.24	30	
Dimethylphthalate	1.32	0.34	mg/Kg wet	1.67	79.1	40-140	0.507	50	
4,6-Dinitro-2-methylphenol	1.21	0.34	mg/Kg wet	1.67	72.5	30-130	2.83	50	
2,4-Dinitrophenol	0.690	0.66	mg/Kg wet	1.67	41.4	30-130	2.59	50	
2,4-Dinitrotoluene	1.36	0.34	mg/Kg wet	1.67	81.8	40-140	4.48	30	
2,6-Dinitrotoluene	1.40	0.34	mg/Kg wet	1.67	83.8	40-140	0.551	30	
Di-n-octylphthalate	1.24	0.34	mg/Kg wet	1.67	74.2	40-140	12.2	30	
Fluoranthene	1.36	0.17	mg/Kg wet	1.67	81.8	40-140	3.41	30	
Fluorene	1.34	0.17	mg/Kg wet	1.67	80.7	40-140	2.43	30	
Hexachlorobenzene	1.30	0.34	mg/Kg wet	1.67	78.3	40-140	2.17	30	
Hexachlorobutadiene	1.13	0.34	mg/Kg wet	1.67	67.8	40-140	1.90	30	
Hexachlorocyclopentadiene	0.934	0.34	mg/Kg wet	1.67	56.0	30-140	2.68	50	V-05
Hexachloroethane	1.15	0.34	mg/Kg wet	1.67	68.9	40-140	0.846	50	
Indeno(1,2,3-cd)pyrene	1.23	0.17	mg/Kg wet	1.67	73.6	40-140	4.84	50	
Isophorone	1.44	0.34	mg/Kg wet	1.67	86.6	40-140	1.56	30	
2-Methylnaphthalene	1.25	0.17	mg/Kg wet	1.67	75.0	40-140	1.29	30	
2-Methylphenol	1.33	0.34	mg/Kg wet	1.67	79.7	30-130	0.251	30	
3/4-Methylphenol	1.45	0.34	mg/Kg wet	1.67	87.2	30-130	1.73	30	
Naphthalene	1.29	0.17	mg/Kg wet	1.67	77.5	40-140	2.48	30	
2-Nitroaniline	1.45	0.34	mg/Kg wet	1.67	87.1	40-140	3.50	30	
3-Nitroaniline	1.22	0.34	mg/Kg wet	1.67	73.1	40-140	7.58	30	†
4-Nitroaniline	1.27	0.34	mg/Kg wet	1.67	76.3	40-140	3.44	30	
Nitrobenzene	1.33	0.34	mg/Kg wet	1.67	79.6	40-140	0.100	30	
2-Nitrophenol	1.26	0.34	mg/Kg wet	1.67	75.9	30-130	2.59	30	
4-Nitrophenol	1.50	0.66	mg/Kg wet	1.67	90.0	10-130	0.893	50	‡
N-Nitrosodiphenylamine/Diphenylamine	1.40	0.34	mg/Kg wet	1.67	83.9	40-140	1.61	30	
N-Nitrosodi-n-propylamine	1.51	0.34	mg/Kg wet	1.67	90.6	40-140	4.02	30	
Pentachloronitrobenzene	1.37	0.34	mg/Kg wet	1.67	82.3	40-140	1.71	30	
Pentachlorophenol	0.967	0.34	mg/Kg wet	1.67	58.0	30-130	2.89	50	
Phenanthrene	1.31	0.17	mg/Kg wet	1.67	78.6	40-140	0.533	30	
Phenol	1.42	0.34	mg/Kg wet	1.67	85.5	20-130	4.69	30	
Pyrene	1.26	0.17	mg/Kg wet	1.67	75.8	40-140	1.78	30	
Pyridine	0.825	0.34	mg/Kg wet	1.67	49.5	10-140	1.12	50	†
1,2,4,5-Tetrachlorobenzene	1.22	0.34	mg/Kg wet	1.67	73.5	40-140	2.04	30	

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

**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
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**Batch B327249 - SW-846 3546**

<b>LCS Dup (B327249-BSD1)</b>	Prepared: 12/30/22 Analyzed: 01/04/23							
1,2,4-Trichlorobenzene	1.18	0.34	mg/Kg wet	1.67	70.7	40-140	2.87	30
2,4,5-Trichlorophenol	1.27	0.34	mg/Kg wet	1.67	76.0	30-130	1.72	30
2,4,6-Trichlorophenol	1.24	0.34	mg/Kg wet	1.67	74.5	30-130	0.962	50
Surrogate: 2-Fluorophenol	5.74		mg/Kg wet	6.67	86.1	30-130		
Surrogate: Phenol-d6	5.97		mg/Kg wet	6.67	89.5	30-130		
Surrogate: Nitrobenzene-d5	2.92		mg/Kg wet	3.33	87.7	30-130		
Surrogate: 2-Fluorobiphenyl	3.02		mg/Kg wet	3.33	90.5	30-130		
Surrogate: 2,4,6-Tribromophenol	6.04		mg/Kg wet	6.67	90.6	30-130		
Surrogate: p-Terphenyl-d14	3.00		mg/Kg wet	3.33	89.9	30-130		

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**QUALITY CONTROL****Polychlorinated Biphenyls with 3540 Soxhlet Extraction - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch B327185 - SW-846 3540C**

<b>Blank (B327185-BLK1)</b>					Prepared: 12/30/22 Analyzed: 01/03/23					
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	0.202		mg/Kg wet	0.200		101		30-150		
Surrogate: Decachlorobiphenyl [2C]	0.190		mg/Kg wet	0.200		95.0		30-150		
Surrogate: Tetrachloro-m-xylene	0.192		mg/Kg wet	0.200		95.8		30-150		
Surrogate: Tetrachloro-m-xylene [2C]	0.162		mg/Kg wet	0.200		81.1		30-150		

<b>LCS (B327185-BS1)</b>					Prepared: 12/30/22 Analyzed: 01/03/23					
Aroclor-1016	0.18	0.020	mg/Kg wet	0.200		89.8		40-140		
Aroclor-1016 [2C]	0.16	0.020	mg/Kg wet	0.200		82.4		40-140		
Aroclor-1260	0.17	0.020	mg/Kg wet	0.200		86.7		40-140		
Aroclor-1260 [2C]	0.16	0.020	mg/Kg wet	0.200		78.8		40-140		
Surrogate: Decachlorobiphenyl	0.208		mg/Kg wet	0.200		104		30-150		
Surrogate: Decachlorobiphenyl [2C]	0.195		mg/Kg wet	0.200		97.4		30-150		
Surrogate: Tetrachloro-m-xylene	0.196		mg/Kg wet	0.200		97.9		30-150		
Surrogate: Tetrachloro-m-xylene [2C]	0.164		mg/Kg wet	0.200		81.9		30-150		

<b>LCS Dup (B327185-BSD1)</b>					Prepared: 12/30/22 Analyzed: 01/03/23					
Aroclor-1016	0.18	0.020	mg/Kg wet	0.200		90.7		40-140	0.977	30
Aroclor-1016 [2C]	0.17	0.020	mg/Kg wet	0.200		83.7		40-140	1.58	30
Aroclor-1260	0.18	0.020	mg/Kg wet	0.200		88.2		40-140	1.68	30
Aroclor-1260 [2C]	0.16	0.020	mg/Kg wet	0.200		80.8		40-140	2.49	30
Surrogate: Decachlorobiphenyl	0.207		mg/Kg wet	0.200		103		30-150		
Surrogate: Decachlorobiphenyl [2C]	0.194		mg/Kg wet	0.200		96.8		30-150		
Surrogate: Tetrachloro-m-xylene	0.198		mg/Kg wet	0.200		98.9		30-150		
Surrogate: Tetrachloro-m-xylene [2C]	0.167		mg/Kg wet	0.200		83.4		30-150		

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

**QUALITY CONTROL****Polychlorinated Biphenyls with 3540 Soxhlet Extraction - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch B327185 - SW-846 3540C**

<b>Matrix Spike (B327185-MS1)</b>	<b>Source: 22L3707-01</b>			Prepared: 12/30/22 Analyzed: 01/03/23				
Aroclor-1016	0.27	0.093	mg/Kg dry	0.233	ND	117	40-140	
Aroclor-1016 [2C]	0.24	0.093	mg/Kg dry	0.233	ND	105	40-140	
Aroclor-1260	0.23	0.093	mg/Kg dry	0.233	ND	101	40-140	
Aroclor-1260 [2C]	0.21	0.093	mg/Kg dry	0.233	ND	88.3	40-140	
Surrogate: Decachlorobiphenyl	0.251		mg/Kg dry	0.233		108	30-150	
Surrogate: Decachlorobiphenyl [2C]	0.210		mg/Kg dry	0.233		90.2	30-150	
Surrogate: Tetrachloro-m-xylene	0.231		mg/Kg dry	0.233		99.3	30-150	
Surrogate: Tetrachloro-m-xylene [2C]	0.182		mg/Kg dry	0.233		78.3	30-150	
<b>Matrix Spike Dup (B327185-MSD1)</b>	<b>Source: 22L3707-01</b>			Prepared: 12/30/22 Analyzed: 01/03/23				
Aroclor-1016	0.25	0.093	mg/Kg dry	0.233	ND	109	40-140	7.23
Aroclor-1016 [2C]	0.21	0.093	mg/Kg dry	0.233	ND	90.2	40-140	15.2
Aroclor-1260	0.23	0.093	mg/Kg dry	0.233	ND	99.5	40-140	1.37
Aroclor-1260 [2C]	0.20	0.093	mg/Kg dry	0.233	ND	88.0	40-140	0.349
Surrogate: Decachlorobiphenyl	0.251		mg/Kg dry	0.233		108	30-150	
Surrogate: Decachlorobiphenyl [2C]	0.207		mg/Kg dry	0.233		89.2	30-150	
Surrogate: Tetrachloro-m-xylene	0.223		mg/Kg dry	0.233		95.9	30-150	
Surrogate: Tetrachloro-m-xylene [2C]	0.176		mg/Kg dry	0.233		75.6	30-150	

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch B327248 - SW-846 3546**

<b>Blank (B327248-BLK1)</b>	Prepared: 12/30/22 Analyzed: 01/04/23							
CT ETPH	ND	10	mg/Kg wet					
Surrogate: 2-Fluorobiphenyl	2.12		mg/Kg wet	3.33		63.7	50-150	
<b>LCS (B327248-BS1)</b>	Prepared: 12/30/22 Analyzed: 01/04/23							
CT ETPH	26.3	10	mg/Kg wet	33.3		78.8	60-120	
Surrogate: 2-Fluorobiphenyl	2.22		mg/Kg wet	3.33		66.5	50-150	
<b>LCS Dup (B327248-BSD1)</b>	Prepared: 12/30/22 Analyzed: 01/04/23							
CT ETPH	27.6	10	mg/Kg wet	33.3		82.8	60-120	4.90
Surrogate: 2-Fluorobiphenyl	2.33		mg/Kg wet	3.33		70.0	50-150	30
<b>Matrix Spike (B327248-MS1)</b>	<b>Source: 22L3707-01</b>				Prepared: 12/30/22 Analyzed: 01/04/23			
CT ETPH	93.6	23	mg/Kg dry	38.8	56.0	97.0	50-150	
Surrogate: 2-Fluorobiphenyl	2.77		mg/Kg dry	3.88		71.6	50-150	
<b>Matrix Spike Dup (B327248-MSD1)</b>	<b>Source: 22L3707-01</b>				Prepared: 12/30/22 Analyzed: 01/04/23			
CT ETPH	104	23	mg/Kg dry	38.8	56.0	124	50-150	10.8
Surrogate: 2-Fluorobiphenyl	2.94		mg/Kg dry	3.88		75.9	50-150	30

**Batch B327633 - SW-846 3546**

<b>Blank (B327633-BLK1)</b>	Prepared: 01/04/23 Analyzed: 01/06/23							
CT ETPH	ND	10	mg/Kg wet					
Surrogate: 2-Fluorobiphenyl	2.60		mg/Kg wet	3.33		77.9	50-150	
<b>LCS (B327633-BS1)</b>	Prepared: 01/04/23 Analyzed: 01/06/23							
CT ETPH	24.6	10	mg/Kg wet	33.3		73.7	60-120	
Surrogate: 2-Fluorobiphenyl	2.34		mg/Kg wet	3.33		70.3	50-150	
<b>LCS Dup (B327633-BSD1)</b>	Prepared: 01/04/23 Analyzed: 01/06/23							
CT ETPH	23.8	10	mg/Kg wet	33.3		71.3	60-120	3.34
Surrogate: 2-Fluorobiphenyl	2.21		mg/Kg wet	3.33		66.2	50-150	30

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	RPD Limit	Notes
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**Batch B327192 - SW-846 3050B**

<b>Blank (B327192-BLK1)</b>	Prepared & Analyzed: 12/30/22						
Antimony	ND	1.6	mg/Kg wet				
Arsenic	ND	3.1	mg/Kg wet				
Barium	ND	1.6	mg/Kg wet				
Beryllium	ND	0.16	mg/Kg wet				
Cadmium	ND	0.31	mg/Kg wet				
Chromium	ND	0.63	mg/Kg wet				
Copper	0.63	0.63	mg/Kg wet				
Nickel	ND	0.63	mg/Kg wet				
Selenium	ND	3.1	mg/Kg wet				
Silver	ND	0.31	mg/Kg wet				
Thallium	ND	1.6	mg/Kg wet				
Zinc	ND	0.63	mg/Kg wet				
<b>Blank (B327192-BLK2)</b>	Prepared: 12/30/22 Analyzed: 01/03/23						
Vanadium	ND	0.63	mg/Kg wet				
<b>Blank (B327192-BLK3)</b>	Prepared: 12/30/22 Analyzed: 01/04/23						
Lead	ND	0.47	mg/Kg wet				
<b>LCS (B327192-BS1)</b>	Prepared & Analyzed: 12/30/22						
Antimony	90.5	4.8	mg/Kg wet	111	81.6	0-205.4	
Arsenic	110	9.7	mg/Kg wet	112	97.8	82-118.8	
Barium	157	4.8	mg/Kg wet	154	102	81.8-118.2	
Beryllium	119	0.48	mg/Kg wet	121	98.2	82.2-118.2	
Cadmium	186	0.97	mg/Kg wet	196	95.0	82.1-118.4	
Chromium	98.5	1.9	mg/Kg wet	103	95.7	80.8-118.4	
Copper	78.8	1.9	mg/Kg wet	70.4	112	83.4-116.6	B
Nickel	243	1.9	mg/Kg wet	249	97.4	81.9-118.1	
Selenium	206	9.7	mg/Kg wet	215	95.9	78.1-121.9	
Silver	86.7	0.97	mg/Kg wet	78.5	110	78.9-121.1	
Thallium	71.4	4.8	mg/Kg wet	67.7	106	80.1-120.1	
Zinc	361	1.9	mg/Kg wet	360	100	79.7-120.3	
<b>LCS (B327192-BS2)</b>	Prepared: 12/30/22 Analyzed: 01/03/23						
Lead	87.2	1.5	mg/Kg wet	73.2	119 *	82.8-117.3	L-07
Vanadium	172	1.9	mg/Kg wet	177	97.1	78-122	
<b>LCS Dup (B327192-BSD1)</b>	Prepared & Analyzed: 12/30/22						
Antimony	90.4	4.6	mg/Kg wet	111	81.5	0-205.4	30
Arsenic	116	9.3	mg/Kg wet	112	104	82-118.8	5.85
Barium	162	4.6	mg/Kg wet	154	105	81.8-118.2	3.17
Beryllium	123	0.46	mg/Kg wet	121	102	82.2-118.2	3.72
Cadmium	194	0.93	mg/Kg wet	196	98.9	82.1-118.4	4.08
Chromium	103	1.9	mg/Kg wet	103	99.7	80.8-118.4	4.10
Copper	81.9	1.9	mg/Kg wet	70.4	116	83.4-116.6	3.84
Nickel	252	1.9	mg/Kg wet	249	101	81.9-118.1	3.99
Selenium	215	9.3	mg/Kg wet	215	100	78.1-121.9	4.24
Silver	91.7	0.93	mg/Kg wet	78.5	117	78.9-121.1	5.55
Thallium	75.4	4.6	mg/Kg wet	67.7	111	80.1-120.1	5.43
Zinc	379	1.9	mg/Kg wet	360	105	79.7-120.3	4.89

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	RPD Limit	Notes
<b>Batch B327192 - SW-846 3050B</b>										
<b>LCS Dup (B327192-BSD2)</b>										
Prepared: 12/30/22 Analyzed: 01/03/23										
Lead	80.4	1.4	mg/Kg wet	73.2	110	82.8-117.3	8.12	30		
Vanadium	177	1.9	mg/Kg wet	177	100	78-122	3.16	30		
<b>Duplicate (B327192-DUP1)</b>										
Source: 22L3707-01 Prepared & Analyzed: 12/30/22										
Antimony	1.85	1.8	mg/Kg dry		ND		NC	35		
Arsenic	ND	3.7	mg/Kg dry		ND		NC	35		
Barium	66.9	1.8	mg/Kg dry		60.7		9.69	35		
Beryllium	0.285	0.18	mg/Kg dry		0.302		5.96	35		
Cadmium	ND	0.37	mg/Kg dry		ND		NC	35		
Chromium	17.6	0.74	mg/Kg dry		16.1		8.81	35		
Copper	17.6	0.74	mg/Kg dry		18.4		4.51	35		B
Nickel	10.6	0.74	mg/Kg dry		9.08		15.1	35		
Selenium	ND	3.7	mg/Kg dry		ND		NC	35		
Silver	ND	0.37	mg/Kg dry		ND		NC	35		
Thallium	ND	1.8	mg/Kg dry		ND		NC	35		
Zinc	32.5	0.74	mg/Kg dry		29.2		10.8	35		
<b>Duplicate (B327192-DUP2)</b>										
Source: 22L3707-01 Prepared: 12/30/22 Analyzed: 01/03/23										
Lead	2.33	0.55	mg/Kg dry		2.19		6.02	35		M-10
Vanadium	39.4	0.74	mg/Kg dry		38.1		3.32	35		
<b>Matrix Spike (B327192-MS1)</b>										
Source: 22L3707-01 Prepared & Analyzed: 12/30/22										
Antimony	7.91	1.9	mg/Kg dry	18.8	ND	42.2 *	75-125			MS-07
Arsenic	19.6	3.8	mg/Kg dry	18.8	2.81	89.3	75-125			
<b>Barium</b>	85.5	1.9	mg/Kg dry	18.8	60.7	132 *	75-125			MS-11
Beryllium	18.8	0.19	mg/Kg dry	18.8	0.302	98.5	75-125			
Cadmium	18.0	0.38	mg/Kg dry	18.8	0.229	94.5	75-125			
Chromium	36.8	0.75	mg/Kg dry	18.8	16.1	110	75-125			
Copper	58.9	0.75	mg/Kg dry	37.5	18.4	108	75-125			B
Nickel	28.2	0.75	mg/Kg dry	18.8	9.08	102	75-125			
Selenium	15.2	3.8	mg/Kg dry	18.8	ND	81.3	75-125			
Silver	19.1	0.38	mg/Kg dry	18.8	ND	102	75-125			
Thallium	18.0	1.9	mg/Kg dry	18.8	ND	95.9	75-125			
Zinc	68.2	0.75	mg/Kg dry	37.5	29.2	104	75-125			
<b>Matrix Spike (B327192-MS2)</b>										
Source: 22L3707-01 Prepared: 12/30/22 Analyzed: 01/03/23										
Lead	20.2	0.56	mg/Kg dry	18.8	2.19	95.9	75-125			
Vanadium	60.4	0.75	mg/Kg dry	18.8	38.1	119	75-125			
<b>Reference (B327192-SRM1) MRL CHECK</b>										
Prepared: 12/30/22 Analyzed: 01/04/23										
Lead	0.664	0.49	mg/Kg wet	0.491	135 *	80-120				M-10

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
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**Batch B327234 - SW-846 7470A/7471A**

<b>Blank (B327234-BLK1)</b>	Prepared: 12/30/22 Analyzed: 01/03/23											
Mercury	ND	0.025	mg/Kg wet									
<b>LCS (B327234-BS1)</b>	Prepared: 12/30/22 Analyzed: 01/03/23											
Mercury	26.0	3.7	mg/Kg wet	25.6	102	67.2-132.8						
<b>LCS Dup (B327234-BSD1)</b>	Prepared: 12/30/22 Analyzed: 01/03/23											
Mercury	19.3	3.7	mg/Kg wet	25.6	75.3	67.2-132.8	29.8	*	20	R-05		
<b>Duplicate (B327234-DUP1)</b>	<b>Source: 22L3707-01</b>			Prepared: 12/30/22 Analyzed: 01/03/23								
Mercury	0.0451	0.029	mg/Kg dry	ND			NC	20	R-02			
<b>Matrix Spike (B327234-MS1)</b>	<b>Source: 22L3707-01</b>			Prepared: 12/30/22 Analyzed: 01/03/23								
Mercury	0.468	0.030	mg/Kg dry	0.399	0.0210	112	80-120					



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

**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**  
*SW-846 8082A*

LCS

Lab Sample ID: B327185-BS1 Date(s) Analyzed: 01/03/2023 01/03/2023

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	-0.030	0.030	0.18	
	2	0.000	-0.030	0.030	0.16	11.8
Aroclor-1260	1	0.000	-0.030	0.030	0.17	
	2	0.000	-0.030	0.030	0.16	6.1



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

**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**

*SW-846 8082A*

LCS Dup

Lab Sample ID:	B327185-BSD1	Date(s) Analyzed:	01/03/2023	01/03/2023
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	-0.030	0.030	0.18	
	2	0.000	-0.030	0.030	0.17	5.7
Aroclor-1260	1	0.000	-0.030	0.030	0.18	
	2	0.000	-0.030	0.030	0.16	11.8



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

**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**  
*SW-846 8082A*

**Matrix Spike**

Lab Sample ID:	B327185-MS1	Date(s) Analyzed:	01/03/2023	01/03/2023
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	-0.030	0.030	0.27	
	2	0.000	-0.030	0.030	0.24	11.8
Aroclor-1260	1	0.000	-0.030	0.030	0.23	
	2	0.000	-0.030	0.030	0.21	13.3



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**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**

*SW-846 8082A*

**Matrix Spike Dup**

Lab Sample ID:	B327185-MSD1	Date(s) Analyzed:	01/03/2023	01/03/2023
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	-0.030	0.030	0.25	
	2	0.000	-0.030	0.030	0.21	17.4
Aroclor-1260	1	0.000	-0.030	0.030	0.23	
	2	0.000	-0.030	0.030	0.20	14.0

**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.
B	Analyte is found in the associated laboratory blank as well as in the sample.
B-07	Data is not affected by elevated level in laboratory blank since sample result is >10x level found in the blank.
E	Reported result is estimated. Value reported over verified calibration range.
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.
M-10	The reporting limit verification for the AIHA lead program is outside of control limits for this element. Any reported result at or near the detection limit may be biased 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-10	Matrix spike recovery is outside of control limits. Compound is classified as a "difficult analyte" and reduced accuracy is anticipated for spike recoveries. Wider limits are used for laboratory fortified blank control samples.
MS-11	Matrix spike 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-02	Duplicate RPD is outside of control limits. Outlier can be attributed to sample non-homogeneity encountered during sample prep.
R-05	Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
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-06	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high 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.
V-35	Initial calibration verification (ICV) did not meet method specifications and was biased on the high side for this compound. Reported result is estimated.

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

Analyte	Certifications
<b><i>CTDEP ETPH in Soil</i></b>	
CT ETPH	CT
<b><i>CTDEP ETPH in Water</i></b>	
CT ETPH	CT
<b><i>SW-846 6010D in Soil</i></b>	
Antimony	CT,NH,NY,ME,VA,NC
Arsenic	CT,NH,NY,ME,VA,NC
Barium	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
Vanadium	CT,NH,NY,ME,VA,NC
Zinc	CT,NH,NY,ME,VA,NC
<b><i>SW-846 6010D in Water</i></b>	
Antimony	CT,NH,NY,ME,VA,NC
Arsenic	CT,NH,NY,ME,VA,RI,NC
Barium	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,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,VA,NC
Vanadium	CT,NH,NY,ME,VA,NC
Zinc	CT,NH,NY,ME,VA,NC
<b><i>SW-846 7471B in Soil</i></b>	
Mercury	CT,NH,NY,NC,ME,VA
<b><i>SW-846 8082A in Soil</i></b>	
Aroclor-1016	CT,NH,NY,ME,NC,VA,PA
Aroclor-1016 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1221	CT,NH,NY,ME,NC,VA,PA
Aroclor-1221 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1232	CT,NH,NY,ME,NC,VA,PA
Aroclor-1232 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1242	CT,NH,NY,ME,NC,VA,PA
Aroclor-1242 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1248	CT,NH,NY,ME,NC,VA,PA

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

Analyte	Certifications
<b><i>SW-846 8082A in Soil</i></b>	
Aroclor-1248 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1254	CT,NH,NY,ME,NC,VA,PA
Aroclor-1254 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1260	CT,NH,NY,ME,NC,VA,PA
Aroclor-1260 [2C]	CT,NH,NY,ME,NC,VA,PA
Aroclor-1262	NY,NC,VA,PA
Aroclor-1262 [2C]	NY,NC,VA,PA
Aroclor-1268	NY,NC,VA,PA
Aroclor-1268 [2C]	NY,NC,VA,PA
<b><i>SW-846 8260D in Soil</i></b>	
Acetone	CT,NH,NY,ME
Acrylonitrile	CT,NH,NY,ME
Benzene	CT,NH,NY,ME
Bromobenzene	NH,NY,ME
Bromodichloromethane	CT,NH,NY,ME
Bromoform	CT,NH,NY,ME
Bromomethane	CT,NH,NY,ME
2-Butanone (MEK)	CT,NH,NY,ME
n-Butylbenzene	CT,NH,NY,ME
sec-Butylbenzene	CT,NH,NY,ME
tert-Butylbenzene	CT,NH,NY,ME
Carbon Disulfide	CT,NH,NY,ME
Carbon Tetrachloride	CT,NH,NY,ME
Chlorobenzene	CT,NH,NY,ME
Chlorodibromomethane	CT,NH,NY,ME
Chloroethane	CT,NH,NY,ME
Chloroform	CT,NH,NY,ME
Chloromethane	CT,NH,NY,ME
2-Chlorotoluene	CT,NH,NY,ME
4-Chlorotoluene	CT,NH,NY,ME
1,2-Dibromo-3-chloropropane (DBCP)	NY
1,2-Dibromoethane (EDB)	NH,NY
Dibromomethane	NH,NY,ME
1,2-Dichlorobenzene	CT,NH,NY,ME
1,3-Dichlorobenzene	CT,NH,NY,ME
1,4-Dichlorobenzene	CT,NH,NY,ME
trans-1,4-Dichloro-2-butene	NY
Dichlorodifluoromethane (Freon 12)	NY,ME
1,1-Dichloroethane	CT,NH,NY,ME
1,2-Dichloroethane	CT,NH,NY,ME
1,1-Dichloroethylene	CT,NH,NY,ME
cis-1,2-Dichloroethylene	CT,NH,NY,ME
trans-1,2-Dichloroethylene	CT,NH,NY,ME
1,2-Dichloropropane	CT,NH,NY,ME
1,3-Dichloropropane	NH,NY,ME
2,2-Dichloropropane	NH,NY,ME

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

Analyte	Certifications
<b><i>SW-846 8260D in Soil</i></b>	
1,1-Dichloropropene	NH,NY,ME
cis-1,3-Dichloropropene	CT,NH,NY,ME
trans-1,3-Dichloropropene	CT,NH,NY,ME
Ethylbenzene	CT,NH,NY,ME
Hexachlorobutadiene	NH,NY,ME
2-Hexanone (MBK)	CT,NH,NY,ME
Isopropylbenzene (Cumene)	CT,NH,NY,ME
p-Isopropyltoluene (p-Cymene)	NH,NY
Methyl tert-Butyl Ether (MTBE)	NH,NY
Methylene Chloride	CT,NH,NY,ME
4-Methyl-2-pentanone (MIBK)	CT,NH,NY
Naphthalene	NH,NY,ME
n-Propylbenzene	NH,NY
Styrene	CT,NH,NY,ME
1,1,1,2-Tetrachloroethane	CT,NH,NY,ME
1,1,2,2-Tetrachloroethane	CT,NH,NY,ME
Tetrachloroethylene	CT,NH,NY,ME
Toluene	CT,NH,NY,ME
1,2,4-Trichlorobenzene	NH,NY,ME
1,1,1-Trichloroethane	CT,NH,NY,ME
1,1,2-Trichloroethane	CT,NH,NY,ME
Trichloroethylene	CT,NH,NY,ME
Trichlorofluoromethane (Freon 11)	CT,NH,NY,ME
1,2,3-Trichloropropane	NH,NY,ME
1,2,4-Trimethylbenzene	CT,NH,NY,ME
1,3,5-Trimethylbenzene	CT,NH,NY,ME
Vinyl Chloride	CT,NH,NY,ME
m+p Xylene	CT,NH,NY,ME
o-Xylene	CT,NH,NY,ME
<b><i>SW-846 8270E in Soil</i></b>	
Acenaphthene	CT,NY,NH
Acenaphthylene	CT,NY,NH
Aniline	NY,NH
Anthracene	CT,NY,NH
Benzo(a)anthracene	CT,NY,NH
Benzo(a)pyrene	CT,NY,NH
Benzo(b)fluoranthene	CT,NY,NH
Benzo(g,h,i)perylene	CT,NY,NH
Benzo(k)fluoranthene	CT,NY,NH
Bis(2-chloroethoxy)methane	CT,NY,NH
Bis(2-chloroethyl)ether	CT,NY,NH
Bis(2-chloroisopropyl)ether	CT,NY,NH
Bis(2-Ethylhexyl)phthalate	CT,NY,NH
4-Bromophenylphenylether	CT,NY,NH
Butylbenzylphthalate	CT,NY,NH
4-Chloroaniline	CT,NY,NH

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

Analyte	Certifications
<b><i>SW-846 8270E in Soil</i></b>	
4-Chloro-3-methylphenol	CT,NY,NH
2-Chloronaphthalene	CT,NY,NH
2-Chlorophenol	CT,NY,NH
4-Chlorophenylphenylether	CT,NY,NH
Chrysene	CT,NY,NH
Dibenz(a,h)anthracene	CT,NY,NH
Dibenzofuran	CT,NY,NH
Di-n-butylphthalate	CT,NY,NH
1,2-Dichlorobenzene	NY,NH
1,3-Dichlorobenzene	NY,NH
1,4-Dichlorobenzene	NY,NH
3,3-Dichlorobenzidine	CT,NY,NH
2,4-Dichlorophenol	CT,NY,NH
Diethylphthalate	CT,NY,NH
2,4-Dimethylphenol	CT,NY,NH
Dimethylphthalate	CT,NY,NH
4,6-Dinitro-2-methylphenol	CT,NY,NH
2,4-Dinitrophenol	CT,NY,NH
2,4-Dinitrotoluene	CT,NY,NH
2,6-Dinitrotoluene	CT,NY,NH
Di-n-octylphthalate	CT,NY,NH
Fluoranthene	CT,NY,NH
Fluorene	NY,NH
Hexachlorobenzene	CT,NY,NH
Hexachlorobutadiene	CT,NY,NH
Hexachlorocyclopentadiene	CT,NY,NH
Hexachloroethane	CT,NY,NH
Indeno(1,2,3-cd)pyrene	CT,NY,NH
Isophorone	CT,NY,NH
2-Methylnaphthalene	CT,NY,NH
2-Methylphenol	CT,NY,NH
3/4-Methylphenol	CT,NY,NH
Naphthalene	CT,NY,NH
2-Nitroaniline	CT,NY,NH
3-Nitroaniline	CT,NY,NH
4-Nitroaniline	CT,NY,NH
Nitrobenzene	CT,NY,NH
2-Nitrophenol	CT,NY,NH
4-Nitrophenol	CT,NY,NH
N-Nitrosodi-n-propylamine	CT,NY,NH
Pentachloronitrobenzene	NY
Pentachlorophenol	CT,NY,NH
Phenanthrene	CT,NY,NH
Phenol	CT,NY,NH
Pyrene	CT,NY,NH
Pyridine	CT,NY,NH
1,2,4,5-Tetrachlorobenzene	NY

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

Analyte	Certifications
<b><i>SW-846 8270E in Soil</i></b>	
1,2,4-Trichlorobenzene	CT,NY,NH
2,4,5-Trichlorophenol	CT,NY,NH
2,4,6-Trichlorophenol	CT,NY,NH
<b><i>SW-846 8270E in Water</i></b>	
Acenaphthene	CT,NY,NH
Acenaphthylene	CT,NY,NH
Aniline	CT,NY
Anthracene	CT,NY,NH
Benzo(a)anthracene	CT,NY,NH
Benzo(a)pyrene	CT,NY,NH
Benzo(b)fluoranthene	CT,NY,NH
Benzo(g,h,i)perylene	CT,NY,NH
Benzo(k)fluoranthene	CT,NY,NH
Bis(2-chloroethoxy)methane	CT,NY,NH
Bis(2-chloroethyl)ether	CT,NY,NH
Bis(2-chloroisopropyl)ether	CT,NY,NH
Bis(2-Ethylhexyl)phthalate	CT,NY,NH
4-Bromophenylphenylether	CT,NY,NH
Butylbenzylphthalate	CT,NY,NH
4-Chloroaniline	CT,NY,NH
4-Chloro-3-methylphenol	CT,NY,NH
2-Chloronaphthalene	CT,NY,NH
2-Chlorophenol	CT,NY,NH
4-Chlorophenylphenylether	CT,NY,NH
Chrysene	CT,NY,NH
Dibenz(a,h)anthracene	CT,NY,NH
Dibenzofuran	CT,NY,NH
Di-n-butylphthalate	CT,NY,NH
1,2-Dichlorobenzene	NY
1,3-Dichlorobenzene	NY
1,4-Dichlorobenzene	NY
3,3-Dichlorobenzidine	CT,NY,NH
2,4-Dichlorophenol	CT,NY,NH
Diethylphthalate	CT,NY,NH
2,4-Dimethylphenol	CT,NY,NH
Dimethylphthalate	CT,NY,NH
4,6-Dinitro-2-methylphenol	CT,NY,NH
2,4-Dinitrophenol	CT,NY,NH
2,4-Dinitrotoluene	CT,NY,NH
2,6-Dinitrotoluene	CT,NY,NH
Di-n-octylphthalate	CT,NY,NH
Fluoranthene	CT,NY,NH
Fluorene	NY,NH
Hexachlorobenzene	CT,NY,NH
Hexachlorobutadiene	CT,NY,NH
Hexachlorocyclopentadiene	CT,NY,NH



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#### CERTIFICATIONS

##### Certified Analyses included in this Report

Analyte	Certifications
<b><i>SW-846 8270E in Water</i></b>	
Hexachloroethane	CT,NY,NH
Indeno(1,2,3-cd)pyrene	CT,NY,NH
Isophorone	CT,NY,NH
2-Methylnaphthalene	CT,NY,NH
2-Methylphenol	CT,NY,NH
3/4-Methylphenol	CT,NY,NH
Naphthalene	CT,NY,NH
2-Nitroaniline	CT,NY,NH
3-Nitroaniline	CT,NY,NH
4-Nitroaniline	CT,NY,NH
Nitrobenzene	CT,NY,NH
2-Nitrophenol	CT,NY,NH
4-Nitrophenol	CT,NY,NH
N-Nitrosodi-n-propylamine	CT,NY,NH
Pentachlorophenol	CT,NY,NH
Phenanthrene	CT,NY,NH
Phenol	CT,NY,NH
Pyrene	CT,NY,NH
Pyridine	CT,NY,NH
1,2,4,5-Tetrachlorobenzene	NY
1,2,4-Trichlorobenzene	CT,NY,NH
2,4,5-Trichlorophenol	CT,NY,NH
2,4,6-Trichlorophenol	CT,NY,NH

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO 17025:2017	100033	03/1/2024
CT	Connecticut Department of Public Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2023
NC	North Carolina Div. of Water Quality	652	12/31/2023
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2023
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2023



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Doc # 381 Rev 5\_07/13/2021

12  
Page \_\_\_\_\_ of \_\_\_\_\_

Project Name: <u>Wells and Seepage, Well 0007</u>		ANALYSIS REQUESTED												
Address: <u>712 Brook St., Pake, MA, 01028</u>		1) Dissolved Solids Samples												
Phone:		Requested At:		Due Date:		Preservation Code					Courier Use Only Total Number Of:			
Project Location: <u>Satellite</u>		7-Day PFAS 10-Day (std) Rush Approval Required		10-Day O		Field Filtered Lab Filter					VIALS GLASS PLASTIC BACTERIA ENCORE			
Project Number: <u>Hydrole mill</u>		1-Day 2-Day		3-Day 4-Day		Droptoplate Samples Field Filtered Lab Filter					Glasses in the fridge? Y/N			
Project Manager: <u>Chris Farrel</u>		Format: PDF EXCEL		Data Delivery PCB ONLY		Glassware in freezer? Y/N Pepackaged Coolers? Y/N								
Pace Quote Name/Number: <u></u>		Other: CLP Like Data Plg Required:		Email To: <u>timothy.loring@univsys.com</u>		SOXHLET NON SOXHLET					Glassware in the fridge? Y/N			
Invoice Recipient: <u>NSF</u>		Fax To #: <u></u>		Fax #:										
Sampled By: <u>Brian French</u>		Client Sample Id Description		Beginning Date/Time		Ending Date/Time	Comp/Crash	Matrix Code	Cond/Code	VIALS	Glass	PLASTIC	BACTERIA	ENCORE
Pace Work Order #	1	B-1	(0-2)	07/31/2022	10:00 AM	08/07/2022	10:00 AM	930	V	3	2	X	X	X
	2	B-1	(5-7)	10/07/2022	10:00 AM	10/07/2022	10:00 AM	930		3	2	X	X	X
	3	B-2(0-1)(3-5)			10:30		10:30			3	2			
	4	B-2	(3-5)			12:15		12:15			3	2		
	5	B-3	(0-2)				13:00		13:00					
	6	B-3	(1-6)							3	2			
	7	HB-1	(0-2)							3	2			
	8	HB-2	(0-2)							1				
	9	HB-3	(0-2)							3	2			
	10	HB-5	(0-7)							1				
Requisitioned by: _____		Date/Time: <u>2022-07-19 14:42</u>		Date/Time: <u>2022-07-19 14:42</u>		Client Comments: <u></u>								
Received by: (signature) <u>Chris Farrel</u>		Date/Time: <u>2022-07-19 14:42</u>		Date/Time: <u>2022-07-19 14:42</u>		Detection Limit Requirements W		Special Requirements MA MCP Required MCP Certification Form Required CT RCP Required RCP Certification Form Required MA State DW Required					Please use the following codes to indicate possible sample concentration within the Conc. Code column above: H = High; M = Medium; L = Low; C = Clean; U = Unknown	
Requisitioned by: (signature) <u>Chris Farrel</u>		Date/Time: <u>2022-07-19 14:42</u>		Date/Time: <u>2022-07-19 14:42</u>		Date/Time: <u>2022-07-19 14:42</u>		PWID #						
Received by: (signature) <u>Chris Farrel</u>		Date/Time: <u>2022-07-19 14:42</u>		Date/Time: <u>2022-07-19 14:42</u>		Date/Time: <u>2022-07-19 14:42</u>		MWR School METRA					Other Chromatogram AIHA-LAP LLC	
Lab Comments: <u></u>		Project Entity		Government Federal City		Municipality 21 J Brownfield								
Received by: (signature)		Date/Time:		Date/Time:		Date/Time:								

## PHONE: 413-525-2332 FAX: 413-525-6405

Access COCs and Support Requests

Wilson, Sandy, Project Manager  
 Address: 717 Brook St., Poetry Hill, MA 01066-7  
 Phone: (413) 525-6405

Project Location: Holyoke Mill  
 Project Number: Stafford, C.P.  
 Project Manager: Lynn Turcotte  
 Pace Quote Name/Number:

Invoice Recipient: WST  
 Sampled By: Richard Marinho

		CHAIN OF CUSTODY RECORD										ANALYSIS REQUESTED									
		Requested Turnaround Time				Dissemination of Samples				Sample Type				Analysis				Preservation Code			
		7-Day	10-Day	○	○	Due Date:	○	Lab to Filter	○	Field Filtered	○	○	○	○	○	○	Total Number Of:				
PFAS	10-Day (std)	□	□	□	□	PFAS Required	□	Orthophosphate Samples	○	Field Filtered	○	○	○	○	○	○	VIALS				
	1-Day	□	□	□	□	Austin Approval Required	□	Field Filtered	○	Lab to Filter	○	○	○	○	○	○	GLASS				
	2-Day	□	□	□	□	3-Day	□	Field Filtered	○	Lab to Filter	○	○	○	○	○	○	PLASTIC				
	Format:	PDF	□	EXCEL	✓	Data Delivery	PCB ONLY										BACTERIA				
	Other:	CLP Like Data Pkg Required:	□					SOXHLET	✓								ENCORE				
	Email To:							NON SOXHLET	□								Glassware in the fridge? Y/N				
	Fax To #:																Prepackaged Coolers? Y/N				
																	Pace Analytical is not responsible for missing samples from prepacked coolers				
																	1 Matrix Codes:				
																	GW = Ground Water				
																	WW = Waste Water				
																	DW = Drinking Water				
																	A = Air				
																	S = Soil				
																	SL = Sludge				
																	SOL = Solid				
																	O = Other (please define)				
																	2 Preservation Codes:				
																	I = Iced				
																	H = HCl				
																	M = Methanol				
																	N = Nitric Acid				
																	S = Sulfuric Acid				
																	B = Sodium Bisulfate				
																	X = Sodium Hydroxide				
																	T = Sodium Thiosulfate				
																	Q = Other (please define)				

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

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East Longmeadow, MA. 01028  
P: 413-525-2332  
F: 413-525-6405  
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Doc# 277 Rev 6 July 2022

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	Weston & Sampson	Date	10/31/22	Time	14:36
Received By	MEM	No Cooler		On Ice	
How were the samples received?	In Cooler <input checked="" type="checkbox"/>	Direct From Sample		Ambient	
Were samples within Temperature?	Within 2-6°C <input checked="" type="checkbox"/>		By Gun # #5	Actual Temp -	53
Was Custody Seal In tact?	<input checked="" type="checkbox"/>		By Blank #	Actual Temp -	
Was COC Relinquished?	<input checked="" type="checkbox"/>		Were Samples Tampered with?		F
Are there broken/leaking/loose caps on any samples?		Does Chain Agree With Samples?			
Is COC in ink/ Legible?	<input checked="" type="checkbox"/>		Were samples received within holding time?		
Did COC include all pertinent Information?	Client? <input checked="" type="checkbox"/>	Analysis? <input checked="" type="checkbox"/>	Sampler Name? <input checked="" type="checkbox"/>		
	Project? <input checked="" type="checkbox"/>	ID's? <input checked="" type="checkbox"/>	Collection Dates/Times? <input checked="" type="checkbox"/>		
Are Sample labels filled out and legible?	<input checked="" type="checkbox"/>		Who was notified?	n/a	
Are there Lab to Filters?	<input checked="" type="checkbox"/>		Who was notified?	n/a	
Are there Rushes?	<input checked="" type="checkbox"/>		Who was notified?	n/a	
Are there Short Holds?	<input checked="" type="checkbox"/>		Is there enough Volume?	<input checked="" type="checkbox"/>	
Samples are received within holding time?		MS/MSD? <input checked="" type="checkbox"/>	splitting samples required?	F	
Is there Headspace where applicable?	<input checked="" type="checkbox"/>		On COC? <input checked="" type="checkbox"/>	n/a	
Proper Media/Containers Used?	<input checked="" type="checkbox"/>				
Were trip blanks received?	<input checked="" type="checkbox"/>				
Do All Samples Have the proper pH?	n/a	Acid		Base	

Media	Volume	Container	Storage	Notes
Unp-	22	1 Liter Amb.		1 Liter Plastic
HCL-		500 mL Amb.		500 mL Plastic
Meoh-		250 mL Amb.		250 mL Plastic
Bisulfate-		Col./Bacteria		Flashpoint
DI-	11	Other Plastic		Other Glass
Thiosulfate-		SOC Kit		Plastic Bag
Sulfuric-		Perchlorate		Ziplock

Unused Media

Media	Volume	Container	Storage	Notes
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	
Sulfuric-	Perchlorate		Ziplock	

Comments:

C:\MSDChem\4\DATA\010423.SEC\23F004007.D

**CT ETPH Discrimination Check**

Data File Name D23F004007.D  
 Data File Path C:\MSDChem\4\DATA\010423.SEC\  
     Operator SFM  
     Date Acquired 1/4/1923 9:10  
 Acq. Method File EPH11D.M  
     Sample Name ETPH 1500  
     Instrument Name GCFID4

Name	Ret Time	Target Response	Average Response	*%D+/-20
C-9	1.46	9205652	10815358	15
C-10	2.17	9720627	10815358	10
C-12	3.14	10086192	10815358	7
C-14	3.86	10493639	10815358	3
C-16	4.47	10767539	10815358	0
C-18	5.01	11325845	10815358	-5
C-20	5.59	11087666	10815358	-3
C-22	6.30	11092330	10815358	-3
C-24	7.12	11218184	10815358	-4
C-26	7.93	11248264	10815358	-4
C-28	8.67	11180633	10815358	-3
C-30	9.36	11178126	10815358	-3
C-32	9.99	11202005	10815358	-4
C-34	10.58	11404633	10815358	-5
C-36	11.14	11019041	10815358	-2

**Samples**

22L3707-04  
 22L3707-06  
 22L3707-02  
 22L3707-12  
 22L3707-05  
 22L3707-01  
 22L3707-11  
 22L3707-09

\*One compound allowed %D</=50

C:\MSDChem\4\DATA\010423\23F004006.D

**CT ETPH Discrimination Check**

Data File Name D23F004006.D  
 Data File Path C:\MSDChem\4\DATA\010423\  
 Operator SFM  
 Date Acquired 1/4/1923 8:50  
 Acq. Method File EPH11D.M  
 Sample Name ETPH 1500  
 Instrument Name GCFID4

Name	Ret Time	Target Response	Average Response	*%D+/-20
C-9	0.93	10050420	11668982	14
C-10	1.70	10467884	11668982	10
C-12	2.84	10888769	11668982	7
C-14	3.58	11411485	11668982	2
C-16	4.19	11525468	11668982	1
C-18	4.74	12160689	11668982	-4
C-20	5.25	11893066	11668982	-2
C-22	5.87	11880428	11668982	-2
C-24	6.63	12033811	11668982	-3
C-26	7.43	12129440	11668982	-4
C-28	8.19	12044841	11668982	-3
C-30	8.88	12021567	11668982	-3
C-32	9.51	12034638	11668982	-3
C-34	10.11	12299532	11668982	-5
C-36	10.67	12192690	11668982	-4

**Samples**

22L3707-08  
22L3707-10

\*One compound allowed %D</=50

C:\MSDCHEM\4\DATA\00523.SEC\23F005051.D

**CT ETPH Discrimination Check**

Data File Name D23F005051.D  
 Data File Path C:\MSDCHEM\4\DATA\00523.SEC\  
 Operator SFM  
 Date Acquired 1/5/1923 17:39  
 Acq. Method File EPH11D.M  
 Sample Name ETPH 1500  
 Instrument Name GCFID4

Name	Ret Time	Target Response	Average Response	*%D+/-20
C-9	1.46	8316569	9374193	11
C-10	2.17	8843008	9374193	6
C-12	3.14	9131482	9374193	3
C-14	3.86	9459530	9374193	-1
C-16	4.47	9665348	9374193	-3
C-18	5.01	10178195	9374193	-9
C-20	5.59	9940363	9374193	-6
C-22	6.30	9897246	9374193	-6
C-24	7.12	10002190	9374193	-7
C-26	7.93	10012412	9374193	-7
C-28	8.67	9898203	9374193	-6
C-30	9.36	9554725	9374193	-2
C-32	9.99	8989656	9374193	4
C-34	10.58	8659182	9374193	8
C-36	11.14	8064790	9374193	14

**Samples**

22L3844-09RE1  
 22L3844-12RE1  
 22L3707-03

\*One compound allowed %D</=50

C:\MSDCHEM4\DATA\D010623\23F006006.D

**CT ETPH Discrimination Check**

Data File Name D23F006006.D  
 Data File Path C:\MSDCHEM4\DATA\D010623\  
 Operator SFM  
 Date Acquired 1/6/1923 12:37  
 Acq. Method File EPH11D.M  
 Sample Name ETPH 1500  
 Instrument Name GCFID4

Name	Ret Time	Target Response	Average Response	*%D+/-20
C-9	0.93	10315996	11766435	12
C-10	1.70	10817892	11766435	8
C-12	2.84	11162754	11766435	5
C-14	3.58	11430603	11766435	3
C-16	4.19	11708919	11766435	0
C-18	4.73	12323405	11766435	-5
C-20	5.25	12012636	11766435	-2
C-22	5.87	12014807	11766435	-2
C-24	6.62	12182217	11766435	-4
C-26	7.43	12288964	11766435	-4
C-28	8.18	12248112	11766435	-4
C-30	8.87	12150986	11766435	-3
C-32	9.51	12012564	11766435	-2
C-34	10.10	12077478	11766435	-3
C-36	10.66	11749199	11766435	0

**Samples**

23A0076-03  
 23A0076-05  
 23A0076-06  
 22L3707-07RE1@5X

\*One compound allowed %D</=50



# REASONABLE CONFIDENCE PROTOCOL LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

**Laboratory Name:** Pace New England

**Client:** Weston & Sampson

**Project Location:** Stafford, CT

**Project Number:** 22L3707

**Laboratory Sample ID(s):**

22L3707-01 thru 22L3707-12

**Sample Date(s):**

12/28/2022

**List RCP Methods Used:**

CTDEP ETPH, SW-846 6010D, SW-846 7471B, SW-846 8082A, SW-846 8260D, SW-846 8270E

<b>1</b>	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>1A</b>	Were the method specified preservation and holding time requirements met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>1B</b>	VPH and EPH Methods only: Was the VPH and EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
<b>2</b>	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>3</b>	Were samples received at an appropriate temperature (< 6 degrees C.)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
<b>4</b>	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>5A</b>	Were reporting limits specified or referenced on the chain-of-custody?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>5B</b>	Were these reporting limits met?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>6</b>	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>7</b>	Are project-specific matrix spikes and laboratory duplicates included in this data set?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence."

Lisa A. Worthington

This form may not be altered and all questions must be answered.

**I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.**

Authorized Signature:

Position: Technical Representative

Printed Name: Lisa A. Worthington

Date: 01/11/23

Name of Laboratory: Pace New England

**This certification form is to be used for RCP methods only.**



---

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

January 13, 2023

Lewis Tamaccio  
Weston & Sampson  
712 Brook Street, Suite 103  
Rocky Hill, CT 06067

Project Location: Stafford, CT

Client Job Number:

Project Number: [none]

Laboratory Work Order Number: 23A0665

Enclosed are results of analyses for samples as received by the laboratory on January 6, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Rebecca Faust".

Rebecca Faust  
Project Manager

## Table of Contents

Sample Summary	3
Case Narrative	4
Sample Results	5
23A0665-01	5
Sample Preparation Information	9
QC Data	10
Volatile Organic Compounds by GC/MS	10
B328019	10
Petroleum Hydrocarbons Analyses	13
B328031	13
Flag/Qualifier Summary	14
Certifications	15
Chain of Custody/Sample Receipt	17




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

Weston & Sampson  
712 Brook Street, Suite 103  
Rocky Hill, CT 06067  
ATTN: Lewis Tamaccio

REPORT DATE: 1/13/2023

PURCHASE ORDER NUMBER:

PROJECT NUMBER: [none]

#### ANALYTICAL SUMMARY

---

WORK ORDER NUMBER: 23A0665

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

PROJECT LOCATION: Stafford, CT

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
HB-4 (0-2)	23A0665-01	Soil		CTDEP ETPH SM 2540G SW-846 8260D	



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#### CASE NARRATIVE SUMMARY

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

#### SW-846 8260D

##### **Qualifications:**

###### **L-17**

Compound classified by CT RCP as difficult with acceptable recoveries of 40-160%. Recovery does not meet 70-130% criteria but does meet difficult compound criteria.

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

###### **Chloromethane**

B328019-BS1

###### **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:**

###### **Chloromethane**

B328019-BS1, S081663-CCV1

###### **V-35**

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

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

###### **Carbon Disulfide**

B328019-BS1, S081663-CCV1

###### **Dichlorodifluoromethane (Freon 12)**

B328019-BS1, S081663-CCV1

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

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

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

Lisa A. Worthington  
Technical Representative

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

Project Location: Stafford, CT

Sample Description:

Work Order: 23A0665

Date Received: 1/6/2023

**Field Sample #:** HB-4 (0-2)

Sampled: 1/5/2023 16:00

**Sample ID:** 23A0665-01

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	0.17	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
Acrylonitrile	ND	0.010	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
Benzene	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
Bromobenzene	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
Bromodichloromethane	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
Bromoform	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
Bromomethane	ND	0.017	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
2-Butanone (MEK)	ND	0.070	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
n-Butylbenzene	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
sec-Butylbenzene	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
tert-Butylbenzene	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
Carbon Disulfide	ND	0.017	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
Carbon Tetrachloride	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
Chlorobenzene	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
Chlorodibromomethane	ND	0.0017	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
Chloroethane	ND	0.035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
Chloroform	ND	0.0070	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
Chloromethane	ND	0.017	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
2-Chlorotoluene	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
4-Chlorotoluene	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
1,2-Dibromoethane (EDB)	ND	0.0017	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
Dibromomethane	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
1,2-Dichlorobenzene	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
1,3-Dichlorobenzene	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
1,4-Dichlorobenzene	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
trans-1,4-Dichloro-2-butene	ND	0.0070	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
1,1-Dichloroethane	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
1,2-Dichloroethane	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
1,1-Dichloroethylene	ND	0.0070	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
cis-1,2-Dichloroethylene	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
trans-1,2-Dichloroethylene	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
1,2-Dichloropropane	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
1,3-Dichloropropane	ND	0.0017	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
2,2-Dichloropropane	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
1,1-Dichloropropene	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
cis-1,3-Dichloropropene	ND	0.0017	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
trans-1,3-Dichloropropene	ND	0.0017	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
Ethylbenzene	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
Hexachlorobutadiene	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
2-Hexanone (MBK)	ND	0.035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
Isopropylbenzene (Cumene)	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF

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Project Location: Stafford, CT

Sample Description:

Work Order: 23A0665

Date Received: 1/6/2023

**Field Sample #:** HB-4 (0-2)

Sampled: 1/5/2023 16:00

**Sample ID:** 23A0665-01Sample Matrix: Soil**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Methyl tert-Butyl Ether (MTBE)	ND	0.0070	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
Methylene Chloride	ND	0.035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
Naphthalene	ND	0.0070	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
n-Propylbenzene	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
Styrene	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
1,1,1,2-Tetrachloroethane	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
1,1,2,2-Tetrachloroethane	ND	0.0017	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
Tetrachloroethylene	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
Tetrahydrofuran	ND	0.017	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
Toluene	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
1,2,3-Trichlorobenzene	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
1,2,4-Trichlorobenzene	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
1,1,1-Trichloroethane	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
1,1,2-Trichloroethane	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
Trichloroethylene	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
Trichlorofluoromethane (Freon 11)	ND	0.017	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
1,2,3-Trichloropropane	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.017	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
1,2,4-Trimethylbenzene	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
1,3,5-Trimethylbenzene	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
Vinyl Chloride	ND	0.017	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
m+p Xylene	ND	0.0070	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
o-Xylene	ND	0.0035	mg/Kg dry	1		SW-846 8260D	1/9/23	1/9/23 9:34	MFF
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	99.6	70-130						1/9/23	9:34
Toluene-d8	100	70-130						1/9/23	9:34
4-Bromofluorobenzene	95.7	70-130						1/9/23	9:34



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

Project Location: Stafford, CT

Sample Description:

Work Order: 23A0665

Date Received: 1/6/2023

**Field Sample #:** HB-4 (0-2)

Sampled: 1/5/2023 16:00

**Sample ID:** 23A0665-01Sample Matrix: Soil**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
CT ETPH	74	45	mg/Kg dry	4		CTDEP ETPH	1/9/23	1/11/23 14:54	SFM
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
2-Fluorobiphenyl	81.3	50-150						1/11/23 14:54	




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

Project Location: Stafford, CT

Sample Description:

Work Order: 23A0665

Date Received: 1/6/2023

**Field Sample #:** HB-4 (0-2)

Sampled: 1/5/2023 16:00

**Sample ID:** 23A0665-01Sample Matrix: Soil

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**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	89.2		% Wt	1		SM 2540G	1/9/23	1/9/23 18:45	AMZ



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### Sample Extraction Data

**Prep Method: SW-846 3546      Analytical Method: CTDEP ETPH**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23A0665-01 [HB-4 (0-2)]	B328031	30.0	1.00	01/09/23

**Prep Method: % Solids      Analytical Method: SM 2540G**

Lab Number [Field ID]	Batch	Date
23A0665-01 [HB-4 (0-2)]	B328104	01/09/23

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

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23A0665-01 [HB-4 (0-2)]	B328019	3.21	10.0	01/09/23

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch B328019 - SW-846 5035****Blank (B328019-BLK1)** Prepared & Analyzed: 01/09/23

Acetone	ND	0.10	mg/Kg wet
Acrylonitrile	ND	0.0060	mg/Kg wet
Benzene	ND	0.0020	mg/Kg wet
Bromobenzene	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
n-Butylbenzene	ND	0.0020	mg/Kg wet
sec-Butylbenzene	ND	0.0020	mg/Kg wet
tert-Butylbenzene	ND	0.0020	mg/Kg wet
Carbon Disulfide	ND	0.010	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
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 tert-Butyl Ether (MTBE)	ND	0.0040	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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch B328019 - SW-846 5035**

<b>Blank (B328019-BLK1)</b>	Prepared & Analyzed: 01/09/23					
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			
1,1,1-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	0.0538		mg/Kg wet	0.0500	108	70-130
Surrogate: Toluene-d8	0.0496		mg/Kg wet	0.0500	99.1	70-130
Surrogate: 4-Bromofluorobenzene	0.0494		mg/Kg wet	0.0500	98.8	70-130
<b>LCS (B328019-BS1)</b>	Prepared & Analyzed: 01/09/23					
Acetone	0.209	0.10	mg/Kg wet	0.200	105	40-160
Acrylonitrile	0.0223	0.0060	mg/Kg wet	0.0200	111	70-130
Benzene	0.0200	0.0020	mg/Kg wet	0.0200	100	70-130
Bromobenzene	0.0185	0.0020	mg/Kg wet	0.0200	92.6	70-130
Bromodichloromethane	0.0200	0.0020	mg/Kg wet	0.0200	99.9	70-130
Bromoform	0.0196	0.0020	mg/Kg wet	0.0200	97.8	70-130
Bromomethane	0.0196	0.010	mg/Kg wet	0.0200	98.1	40-160
2-Butanone (MEK)	0.242	0.040	mg/Kg wet	0.200	121	40-160
n-Butylbenzene	0.0200	0.0020	mg/Kg wet	0.0200	100	70-130
sec-Butylbenzene	0.0192	0.0020	mg/Kg wet	0.0200	96.0	70-130
tert-Butylbenzene	0.0193	0.0020	mg/Kg wet	0.0200	96.3	70-130
Carbon Disulfide	0.211	0.010	mg/Kg wet	0.200	105	70-130
Carbon Tetrachloride	0.0188	0.0020	mg/Kg wet	0.0200	94.1	70-130
Chlorobenzene	0.0194	0.0020	mg/Kg wet	0.0200	97.2	70-130
Chlorodibromomethane	0.0201	0.0010	mg/Kg wet	0.0200	100	40-160
Chloroethane	0.0236	0.020	mg/Kg wet	0.0200	118	70-130
Chloroform	0.0194	0.0040	mg/Kg wet	0.0200	97.1	70-130
Chloromethane	0.0272	0.010	mg/Kg wet	0.0200	136	40-160
2-Chlorotoluene	0.0196	0.0020	mg/Kg wet	0.0200	98.2	70-130
4-Chlorotoluene	0.0198	0.0020	mg/Kg wet	0.0200	99.1	70-130
1,2-Dibromo-3-chloropropane (DBCP)	0.0182	0.0020	mg/Kg wet	0.0200	90.9	70-130
1,2-Dibromoethane (EDB)	0.0205	0.0010	mg/Kg wet	0.0200	103	70-130
Dibromomethane	0.0204	0.0020	mg/Kg wet	0.0200	102	70-130
1,2-Dichlorobenzene	0.0202	0.0020	mg/Kg wet	0.0200	101	70-130
1,3-Dichlorobenzene	0.0195	0.0020	mg/Kg wet	0.0200	97.7	70-130
1,4-Dichlorobenzene	0.0195	0.0020	mg/Kg wet	0.0200	97.7	70-130
trans-1,4-Dichloro-2-butene	0.0196	0.0040	mg/Kg wet	0.0200	98.0	70-130
Dichlorodifluoromethane (Freon 12)	0.0176	0.020	mg/Kg wet	0.0200	88.0	40-160
1,1-Dichloroethane	0.0202	0.0020	mg/Kg wet	0.0200	101	70-130
1,2-Dichloroethane	0.0205	0.0020	mg/Kg wet	0.0200	103	70-130
1,1-Dichloroethylene	0.0200	0.0040	mg/Kg wet	0.0200	100	70-130

V-35

L-17, V-20

V-35

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
<b>Batch B328019 - SW-846 5035</b>									
<b>LCS (B328019-BS1)</b>									
Prepared & Analyzed: 01/09/23									
cis-1,2-Dichloroethylene	0.0205	0.0020	mg/Kg wet	0.0200	103	70-130			
trans-1,2-Dichloroethylene	0.0200	0.0020	mg/Kg wet	0.0200	100	70-130			
1,2-Dichloropropane	0.0200	0.0020	mg/Kg wet	0.0200	100	70-130			
1,3-Dichloropropane	0.0217	0.0010	mg/Kg wet	0.0200	108	70-130			
2,2-Dichloropropane	0.0200	0.0020	mg/Kg wet	0.0200	99.8	70-130			
1,1-Dichloropropene	0.0203	0.0020	mg/Kg wet	0.0200	102	70-130			
cis-1,3-Dichloropropene	0.0205	0.0010	mg/Kg wet	0.0200	102	70-130			
trans-1,3-Dichloropropene	0.0204	0.0010	mg/Kg wet	0.0200	102	70-130			
Ethylbenzene	0.0197	0.0020	mg/Kg wet	0.0200	98.7	70-130			
Hexachlorobutadiene	0.0184	0.0020	mg/Kg wet	0.0200	92.2	40-160			
2-Hexanone (MBK)	0.236	0.020	mg/Kg wet	0.200	118	70-130			
Isopropylbenzene (Cumene)	0.0194	0.0020	mg/Kg wet	0.0200	97.2	70-130			
p-Isopropyltoluene (p-Cymene)	0.0194	0.0020	mg/Kg wet	0.0200	97.2	70-130			
Methyl tert-Butyl Ether (MTBE)	0.0211	0.0040	mg/Kg wet	0.0200	105	70-130			
Methylene Chloride	0.0204	0.020	mg/Kg wet	0.0200	102	70-130			
4-Methyl-2-pentanone (MIBK)	0.236	0.020	mg/Kg wet	0.200	118	40-160			
Naphthalene	0.0203	0.0040	mg/Kg wet	0.0200	102	70-130			
n-Propylbenzene	0.0197	0.0020	mg/Kg wet	0.0200	98.7	70-130			
Styrene	0.0203	0.0020	mg/Kg wet	0.0200	101	70-130			
1,1,1,2-Tetrachloroethane	0.0193	0.0020	mg/Kg wet	0.0200	96.7	70-130			
1,1,2,2-Tetrachloroethane	0.0208	0.0010	mg/Kg wet	0.0200	104	70-130			
Tetrachloroethylene	0.0198	0.0020	mg/Kg wet	0.0200	98.9	70-130			
Tetrahydrofuran	0.0221	0.010	mg/Kg wet	0.0200	110	70-130			
Toluene	0.0191	0.0020	mg/Kg wet	0.0200	95.5	70-130			
1,2,3-Trichlorobenzene	0.0195	0.0020	mg/Kg wet	0.0200	97.7	70-130			
1,2,4-Trichlorobenzene	0.0189	0.0020	mg/Kg wet	0.0200	94.4	70-130			
1,1,1-Trichloroethane	0.0198	0.0020	mg/Kg wet	0.0200	98.9	70-130			
1,1,2-Trichloroethane	0.0201	0.0020	mg/Kg wet	0.0200	100	70-130			
Trichloroethylene	0.0195	0.0020	mg/Kg wet	0.0200	97.6	70-130			
Trichlorofluoromethane (Freon 11)	0.0202	0.010	mg/Kg wet	0.0200	101	40-160			
1,2,3-Trichloropropane	0.0214	0.0020	mg/Kg wet	0.0200	107	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0192	0.010	mg/Kg wet	0.0200	95.9	70-130			
1,2,4-Trimethylbenzene	0.0193	0.0020	mg/Kg wet	0.0200	96.5	70-130			
1,3,5-Trimethylbenzene	0.0198	0.0020	mg/Kg wet	0.0200	99.0	70-130			
Vinyl Chloride	0.0200	0.010	mg/Kg wet	0.0200	100	70-130			
m+p Xylene	0.0403	0.0040	mg/Kg wet	0.0400	101	70-130			
o-Xylene	0.0199	0.0020	mg/Kg wet	0.0200	99.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0516		mg/Kg wet	0.0500	103	70-130			
Surrogate: Toluene-d8	0.0509		mg/Kg wet	0.0500	102	70-130			
Surrogate: 4-Bromofluorobenzene	0.0486		mg/Kg wet	0.0500	97.2	70-130			

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch B328031 - SW-846 3546**

<b>Blank (B328031-BLK1)</b>								
CT ETPH	ND	10	mg/Kg wet	Prepared: 01/09/23 Analyzed: 01/11/23				
Surrogate: 2-Fluorobiphenyl	2.50		mg/Kg wet	3.33	74.9	50-150		
<b>LCS (B328031-BS1)</b>								
CT ETPH	23.3	10	mg/Kg wet	33.3	70.0	60-120		
Surrogate: 2-Fluorobiphenyl	2.19		mg/Kg wet	3.33	65.7	50-150		
<b>LCS Dup (B328031-BSD1)</b>								
CT ETPH	23.9	10	mg/Kg wet	33.3	71.8	60-120	2.58	30
Surrogate: 2-Fluorobiphenyl	2.27		mg/Kg wet	3.33	68.0	50-150		

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**FLAG/QUALIFIER SUMMARY**

- \* QC result is outside of established limits.
  - † Wide recovery limits established for difficult compound.
  - ‡ Wide RPD limits established for difficult compound.
  - # Data exceeded client recommended or regulatory level
  - ND Not Detected
  - RL Reporting Limit is at the level of quantitation (LOQ)
  - DL Detection Limit is the lower limit of detection determined by the MDL study
  - MCL Maximum Contaminant Level
- Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
- No results have been blank subtracted unless specified in the case narrative section.
- L-17 Compound classified by CT RCP as difficult with acceptable recoveries of 40-160%. Recovery does not meet 70-130% criteria but does meet difficult compound criteria.
  - 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-35 Initial calibration verification (ICV) did not meet method specifications and was biased on the high side for this compound. Reported result is estimated.

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## CERTIFICATIONS

## Certified Analyses included in this Report

Analyte	Certifications
<b>CTDEP ETPH in Soil</b>	
CT ETPH	CT
<b>CTDEP ETPH in Water</b>	
CT ETPH	CT
<b>SW-846 8260D in Soil</b>	
Acetone	CT,NH,NY,ME
Acrylonitrile	CT,NH,NY,ME
Benzene	CT,NH,NY,ME
Bromobenzene	NH,NY,ME
Bromodichloromethane	CT,NH,NY,ME
Bromoform	CT,NH,NY,ME
Bromomethane	CT,NH,NY,ME
2-Butanone (MEK)	CT,NH,NY,ME
n-Butylbenzene	CT,NH,NY,ME
sec-Butylbenzene	CT,NH,NY,ME
tert-Butylbenzene	CT,NH,NY,ME
Carbon Disulfide	CT,NH,NY,ME
Carbon Tetrachloride	CT,NH,NY,ME
Chlorobenzene	CT,NH,NY,ME
Chlorodibromomethane	CT,NH,NY,ME
Chloroethane	CT,NH,NY,ME
Chloroform	CT,NH,NY,ME
Chloromethane	CT,NH,NY,ME
2-Chlorotoluene	CT,NH,NY,ME
4-Chlorotoluene	CT,NH,NY,ME
1,2-Dibromo-3-chloropropane (DBCP)	NY
1,2-Dibromoethane (EDB)	NH,NY
Dibromomethane	NH,NY,ME
1,2-Dichlorobenzene	CT,NH,NY,ME
1,3-Dichlorobenzene	CT,NH,NY,ME
1,4-Dichlorobenzene	CT,NH,NY,ME
trans-1,4-Dichloro-2-butene	NY
Dichlorodifluoromethane (Freon 12)	NY,ME
1,1-Dichloroethane	CT,NH,NY,ME
1,2-Dichloroethane	CT,NH,NY,ME
1,1-Dichloroethylene	CT,NH,NY,ME
cis-1,2-Dichloroethylene	CT,NH,NY,ME
trans-1,2-Dichloroethylene	CT,NH,NY,ME
1,2-Dichloropropane	CT,NH,NY,ME
1,3-Dichloropropane	NH,NY,ME
2,2-Dichloropropane	NH,NY,ME
1,1-Dichloropropene	NH,NY,ME
cis-1,3-Dichloropropene	CT,NH,NY,ME
trans-1,3-Dichloropropene	CT,NH,NY,ME
Ethylbenzene	CT,NH,NY,ME
Hexachlorobutadiene	NH,NY,ME
2-Hexanone (MBK)	CT,NH,NY,ME



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#### CERTIFICATIONS

##### Certified Analyses included in this Report

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

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

Code	Description	Number	Expires
CT	Connecticut Department of Public Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
ME	State of Maine	MA00100	06/9/2023

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

Company Name: Weston & Sampson

Address: 712 Brook St, Suite 103

Phone: (860) 513-1473

Project Name: Hydeville Mill

Project Location: Stafford, CT

Project Number:

Project Manager: Lewis Tamaccio

Pace Analytical Quote Name/Number:

Invoice Recipient: Weston & Sampson

Sampled By: Richard Manandhar

<https://www.pacelabs.com/>

1800 Elm Street SE  
Minneapolis, MN 55414

Doc # 381 Rev 4\_01/08/2020

ANALYSIS REQUESTED

ANALYSIS REQUESTED		Preservation Code	
		Courier Use Only	
		Total Number Of:	
		VIALS	
		GLASS	
		PLASTIC	
		BACTERIA	
		ENCORE	

Glassware In the fridge? Y / N

Glassware In freezer? Y / N

Prepackaged Cooler? Y / N

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

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

! Preservation Codes:  
 I = Iced  
 H = HCL  
 M = Methanol  
 N = Nitric Acid

S = Sulfuric Acid  
 B = Sodium Bisulfate  
 X = Sodium Hydroxide  
 T = Sodium Thiosulfate

O = Other (please define)

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

11/01/23 1530

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

Requested Turnaround Time		Dissolved Metals Samples	
7-Day <input checked="" type="checkbox"/>	10-Day <input type="checkbox"/>	<input type="radio"/> Field Filtered	<input type="radio"/> Lab to Filter
PFAS 10-Day (std) <input checked="" type="checkbox"/>	Due Date: _____	<input type="radio"/> Orthophosphate Samples	
Rush-Approval Required			
1-Day <input type="checkbox"/>	3-Day <input type="checkbox"/>	<input type="radio"/> Field Filtered	
2-Day <input type="checkbox"/>	4-Day <input type="checkbox"/>	<input type="radio"/> Lab to Filter	
Data Delivery			
PCB ONLY			
SOXHLET <input type="checkbox"/>			
NON SOXHLET <input type="checkbox"/>			
Sample ID	Date Collected	Location	Comments
HB-4 (0-2)	11/5/23	16:00	Grab S V 32
VIALS	GLASS	PLASTIC	BACTERIA
H	S	S	RBR 15 Metals
BB	SD	SD	PFAS

Per client, ID is HB-4 (0-2).

-RLF 1/9/23

Detection Limit Requirements		Special Requirements				
MA	<input type="checkbox"/>	MA MCP Required				
		MCP Certification Form Required				
CT	<input type="checkbox"/>	CT RCP Required				
		RCP Certification Form Required				
Other:	<input type="checkbox"/>	MA State DW Required				
Project Entity						
Government	<input type="checkbox"/>	MWRA	<input type="checkbox"/>	Other	<input type="checkbox"/> Chromatogram	
Federal	<input type="checkbox"/>	School	<input type="checkbox"/>		<input type="checkbox"/> APTA-LAP, LLC	
City	<input type="checkbox"/>	NBTA	<input type="checkbox"/>			
Received by: (signature)	Date/Time:	Lab Comments:				
Retlinquished by: (signature)	Date/Time:					
Received by: (signature)	Date/Time:					
Retlinquished by: (signature)	Date/Time:					
Received by: (signature)	Date/Time:					
Retlinquished by: (signature)	Date/Time:					
Received by: (signature)	Date/Time:					

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

*Pace* PEOPLE ANALYZING SCIENCE  
Doc# 277 Rev 6 July 2022

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 WSS  
Received By MM

How were the samples received?	In Cooler <input checked="" type="checkbox"/>	Date <u>11/6/23</u>	No Cooler <input type="checkbox"/>	Time <u>1530</u>	On Ice <input type="checkbox"/>	Melted Ice <input type="checkbox"/>
Were samples within Temperature?	Within <input type="checkbox"/>	Ambient <input type="checkbox"/>	By Gun # <u>S</u>	Actual Temp- <u>2.8</u>	By Blank # <input type="checkbox"/>	Actual Temp- <input type="checkbox"/>
Was Custody Seal In tact?	<input type="checkbox"/>	Were Samples Tampered with? <input type="checkbox"/>	<u>N/A</u>	<input type="checkbox"/>	Does Chain Agree With Samples? <input type="checkbox"/>	<u>N/A</u>
Was COC Relinquished?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are there broken/leaking/loose caps on any samples?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is COC in ink/ Legible?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did COC include all pertinent Information?	Client? <input type="checkbox"/>	Analysis? <input type="checkbox"/>	Sampler Name? <input type="checkbox"/>	ID's? <input type="checkbox"/>	Collection Dates/Times? <input type="checkbox"/>	<input type="checkbox"/>
Are Sample labels filled out and legible?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are there Lab to Filters?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are there Rushes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are there Short Holds?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples are received within holding time?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is there Headspace where applicable?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper Media/Containers Used?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were trip blanks received?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do All Samples Have a valid pH?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Who was notified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Who was notified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Who was notified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is there enough Volume?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MS/MSD?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
splitting samples required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:	<input type="text"/>					

Unp-	1 Liter Amb.	1 Liter Plastic	16 oz Amb.
HCL-	500 mL Amb.	500 mL Plastic	8oz Amb/Clear
Mech-	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	<u>11/6/23 1530</u>

Unp-	1 Liter Amb.	1 Liter Plastic	16 oz Amb.
HCL-	500 mL Amb.	500 mL Plastic	8oz Amb/Clear
Mech-	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	

C:\MSDChem\4\DATA\011123.SEC\023F011007.D

**CT ETPH Discrimination Check**

Data File Name D23F011007.D  
 Data File Path C:\MSDChem\4\DATA\011123.SEC\  
 Operator SFM  
 Date Acquired 1/11/1923 9:30  
 Acq. Method File EPH11D.M  
 Sample Name ETPH 1500  
 Instrument Name GCFID4

Name	Ret Time	Target Response	Average Response	*%D+/-20
C-9	1.46	8883231	9921610	10
C-10	2.17	9291197	9921610	6
C-12	3.14	9596611	9921610	3
C-14	3.86	9981853	9921610	-1
C-16	4.47	10195303	9921610	-3
C-18	5.01	10706859	9921610	-8
C-20	5.59	10424318	9921610	-5
C-22	6.30	10379864	9921610	-5
C-24	7.12	10475148	9921610	-6
C-26	7.93	10513135	9921610	-6
C-28	8.67	10424258	9921610	-5
C-30	9.35	10252969	9921610	-3
C-32	9.99	9825736	9921610	1
C-34	10.58	9341064	9921610	6
C-36	11.14	8532605	9921610	14

**Samples**

23A0508-03@50X  
 23A0508-02@100X  
 23A0508-06@100X  
 23A0508-05@100X  
 23A0508-04@100X  
 23A0665-01@4X

\*One compound allowed %D</=50



# REASONABLE CONFIDENCE PROTOCOL LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

**Laboratory Name:** Pace New England

**Client:** Weston & Sampson

**Project Location:** Stafford, CT

**Project Number:** 23A0665

**Laboratory Sample ID(s):**

23A0665-01

**Sample Date(s):**

01/05/2023

*List RCP Methods Used:*

CTDEP ETPH, SW-846 8260D

<b>1</b>	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>1A</b>	Were the method specified preservation and holding time requirements met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>1B</b>	VPH and EPH Methods only: Was the VPH and EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
<b>2</b>	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>3</b>	Were samples received at an appropriate temperature (< 6 degrees C.)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
<b>4</b>	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>5A</b>	Were reporting limits specified or referenced on the chain-of-custody?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>5B</b>	Were these reporting limits met?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>6</b>	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>7</b>	Are project-specific matrix spikes and laboratory duplicates included in this data set?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence."

Lisa A. Worthington

This form may not be altered and all questions must be answered.

**I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.**

Authorized Signature:

Position: Technical Representative

Printed Name: Lisa A. Worthington

Date: 01/12/23

Name of Laboratory: Pace New England

**This certification form is to be used for RCP methods only.**

## APPENDIX D

### Groundwater Laboratory Analytical Results



---

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

January 30, 2023

Lewis Tamaccio  
Weston & Sampson  
712 Brook Street, Suite 103  
Rocky Hill, CT 06067

Project Location: Stafford, CT

Client Job Number:

Project Number: [none]

Laboratory Work Order Number: 23A0661

Enclosed are results of analyses for samples as received by the laboratory on January 6, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Rebecca Faust".

Rebecca Faust  
Project Manager

## Table of Contents

Sample Summary	4
Case Narrative	5
Sample Results	8
23A0661-01	8
23A0661-02	15
23A0661-03	21
23A0661-04	28
Sample Preparation Information	35
QC Data	37
Volatile Organic Compounds by GC/MS	37
B328127	37
Semivolatile Organic Compounds by GC/MS	40
B327956	40
B328260	43
Polychlorinated Biphenyls By GC/ECD	45
B328090	45
Petroleum Hydrocarbons Analyses	46
B327955	46
Metals Analyses (Total)	47
B328016	47
B328341	48
B328529	48
Dual Column RPD Report	50
Flag/Qualifier Summary	52
Certifications	53

## Table of Contents (continued)

Chain of Custody/Sample Receipt	57
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39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Weston & Sampson  
712 Brook Street, Suite 103  
Rocky Hill, CT 06067  
ATTN: Lewis Tamaccio

REPORT DATE: 1/30/2023

PURCHASE ORDER NUMBER:

PROJECT NUMBER: [none]

#### ANALYTICAL SUMMARY

---

WORK ORDER NUMBER: 23A0661

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

PROJECT LOCATION: Stafford, CT

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-1	23A0661-01	Ground Water		CTDEP ETPH SW-846 6020B SW-846 7470A SW-846 8082A SW-846 8260D SW-846 8270E	
MW-2	23A0661-02	Ground Water		CTDEP ETPH SW-846 6020B SW-846 7470A SW-846 8260D SW-846 8270E	
MW-3	23A0661-03	Ground Water		CTDEP ETPH SW-846 6020B SW-846 7470A SW-846 8082A SW-846 8260D SW-846 8270E	
DUP-2	23A0661-04	Ground Water		CTDEP ETPH SW-846 6020B SW-846 7470A SW-846 8082A SW-846 8260D SW-846 8270E	



---

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

**CASE NARRATIVE SUMMARY**

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



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

**SW-846 8260D**

**Qualifications:**

**L-01**

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

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

**2-Hexanone (MBK)**

B328127-BS1, S081788-CCV1

**L-03**

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

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

**1,2-Dibromo-3-chloropropane (DBCP)**

23A0661-01[MW-1], 23A0661-02[MW-2], 23A0661-03[MW-3], 23A0661-04[DUP-2], B328127-BLK1, B328127-BS1

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

23A0661-01[MW-1], 23A0661-02[MW-2], 23A0661-03[MW-3], 23A0661-04[DUP-2], B328127-BLK1, B328127-BS1

**V-05**

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

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

**1,2-Dibromo-3-chloropropane (DBCP)**

23A0661-01[MW-1], 23A0661-02[MW-2], 23A0661-03[MW-3], 23A0661-04[DUP-2], B328127-BLK1, B328127-BS1, S081788-CCV1

**Bromomethane**

23A0661-01[MW-1], 23A0661-02[MW-2], 23A0661-03[MW-3], 23A0661-04[DUP-2], B328127-BLK1, B328127-BS1, S081788-CCV1

**Naphthalene**

23A0661-01[MW-1], 23A0661-02[MW-2], 23A0661-03[MW-3], 23A0661-04[DUP-2], B328127-BLK1, B328127-BS1, S081788-CCV1

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

23A0661-01[MW-1], 23A0661-02[MW-2], 23A0661-03[MW-3], 23A0661-04[DUP-2], B328127-BLK1, B328127-BS1, S081788-CCV1

**V-20**

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

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

**2-Butanone (MEK)**

B328127-BS1, S081788-CCV1

**2-Hexanone (MBK)**

B328127-BS1, S081788-CCV1

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

B328127-BS1, S081788-CCV1

**SW-846 8270E**

**Qualifications:**

**RL-03**

Elevated reporting limit based on lowest point in calibration.

Requested reporting limit not met.

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

**Hexachlorobenzene**

23A0661-01[MW-1], 23A0661-02[MW-2], 23A0661-03[MW-3], 23A0661-04[DUP-2]

**Pentachlorophenol**

23A0661-01[MW-1], 23A0661-02[MW-2], 23A0661-03[MW-3], 23A0661-04[DUP-2]

**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:**

**Aniline**

23A0661-01[MW-1], 23A0661-02[MW-2], 23A0661-03[MW-3], 23A0661-04[DUP-2], B327956-BLK1, B327956-BS1, B327956-BSD1, S081857-CCV1

**Hexachlorocyclopentadiene**

23A0661-01[MW-1], 23A0661-02[MW-2], 23A0661-03[MW-3], 23A0661-04[DUP-2], B327956-BLK1, B327956-BS1, B327956-BSD1, S081857-CCV1

**Naphthalene (SIM)**

23A0661-01[MW-1], 23A0661-02[MW-2], 23A0661-03[MW-3], 23A0661-04[DUP-2], S081733-CCV1



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---

**V-06**

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

**Analyte & Samples(s) Qualified:****4-Nitrophenol**

B327956-BS1, B327956-BSD1, S081857-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:****4-Nitrophenol**

23A0661-01[MW-1], 23A0661-02[MW-2], 23A0661-03[MW-3], 23A0661-04[DUP-2], B327956-BLK1

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

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

Lisa A. Worthington

Technical Representative

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

Project Location: Stafford, CT

Sample Description:

Work Order: 23A0661

Date Received: 1/6/2023

**Field Sample #:** MW-1

Sampled: 1/5/2023 15:40

**Sample ID:** 23A0661-01

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	10	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
Acrylonitrile	ND	2.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
Benzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
Bromobenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
Bromoform	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
Bromomethane	ND	2.0	µg/L	1	V-05	SW-846 8260D	1/10/23	1/10/23 12:06	MFF
2-Butanone (MEK)	ND	5.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
Carbon Tetrachloride	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
Chlorobenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
Chloroethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
Chloroform	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
Chloromethane	ND	0.60	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
2-Chlorotoluene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
4-Chlorotoluene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	1.0	µg/L	1	L-03, V-05	SW-846 8260D	1/10/23	1/10/23 12:06	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
Dibromomethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
1,2-Dichlorobenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
1,3-Dichlorobenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
1,4-Dichlorobenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	L-03, V-05	SW-846 8260D	1/10/23	1/10/23 12:06	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
1,1-Dichloroethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
1,2-Dichloroethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
1,1-Dichloroethylene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
cis-1,2-Dichloroethylene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
1,2-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
2,2-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
1,1-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
Ethylbenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
2-Hexanone (MBK)	ND	5.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
Isopropylbenzene (Cumene)	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF

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

Project Location: Stafford, CT

Sample Description:

Work Order: 23A0661

Date Received: 1/6/2023

**Field Sample #:** MW-1

Sampled: 1/5/2023 15:40

**Sample ID:** 23A0661-01**Sample Matrix:** Ground Water**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Methyl tert-Butyl Ether (MTBE)	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
4-Methyl-2-pentanone (MIBK)	ND	5.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
Naphthalene	ND	2.0	µg/L	1	V-05	SW-846 8260D	1/10/23	1/10/23 12:06	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
1,1,1,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
1,2,3-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
1,2,4-Trichlorobenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
1,1,1-Trichloroethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
1,1,2-Trichloroethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
1,2,3-Trichloropropane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
1,2,4-Trimethylbenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
1,3,5-Trimethylbenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
Vinyl Chloride	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:06	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	97.0	70-130		1/10/23 12:06
Toluene-d8	101	70-130		1/10/23 12:06
4-Bromofluorobenzene	102	70-130		1/10/23 12:06

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

Project Location: Stafford, CT

Sample Description:

Work Order: 23A0661

Date Received: 1/6/2023

**Field Sample #:** MW-1

Sampled: 1/5/2023 15:40

**Sample ID:** 23A0661-01

Sample Matrix: Ground Water

**Semivolatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene (SIM)	ND	0.31	µg/L	1		SW-846 8270E	1/9/23	1/11/23 13:52	SPF
Acenaphthylene (SIM)	ND	0.21	µg/L	1		SW-846 8270E	1/9/23	1/11/23 13:52	SPF
Aniline	ND	5.2	µg/L	1	V-05	SW-846 8270E	1/7/23	1/12/23 15:54	BGL
Anthracene (SIM)	ND	0.21	µg/L	1		SW-846 8270E	1/9/23	1/11/23 13:52	SPF
Benzo(a)anthracene (SIM)	ND	0.051	µg/L	1		SW-846 8270E	1/9/23	1/11/23 13:52	SPF
Benzo(a)pyrene (SIM)	ND	0.10	µg/L	1		SW-846 8270E	1/9/23	1/11/23 13:52	SPF
Benzo(b)fluoranthene (SIM)	ND	0.051	µg/L	1		SW-846 8270E	1/9/23	1/11/23 13:52	SPF
Benzo(g,h,i)perylene (SIM)	ND	0.51	µg/L	1		SW-846 8270E	1/9/23	1/11/23 13:52	SPF
Benzo(k)fluoranthene (SIM)	ND	0.21	µg/L	1		SW-846 8270E	1/9/23	1/11/23 13:52	SPF
Bis(2-chloroethoxy)methane	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
Bis(2-chloroethyl)ether	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
Bis(2-chloroisopropyl)ether	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
Bis(2-Ethylhexyl)phthalate	ND	2.1	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
4-Bromophenylphenylether	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
Butylbenzylphthalate	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
Carbazole	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
4-Chloroaniline	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
4-Chloro-3-methylphenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
2-Chloronaphthalene	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
2-Chlorophenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
4-Chlorophenylphenylether	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
Chrysene (SIM)	ND	0.21	µg/L	1		SW-846 8270E	1/9/23	1/11/23 13:52	SPF
Dibenz(a,h)anthracene (SIM)	ND	0.10	µg/L	1		SW-846 8270E	1/9/23	1/11/23 13:52	SPF
Dibenzofuran	ND	5.2	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
Di-n-butylphthalate	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
3,3-Dichlorobenzidine	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
2,4-Dichlorophenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
Diethylphthalate	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
2,4-Dimethylphenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
Dimethylphthalate	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
4,6-Dinitro-2-methylphenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
2,4-Dinitrophenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
2,4-Dinitrotoluene	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
2,6-Dinitrotoluene	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
Di-n-octylphthalate	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
Fluoranthene (SIM)	ND	0.51	µg/L	1		SW-846 8270E	1/9/23	1/11/23 13:52	SPF
Fluorene (SIM)	ND	1.0	µg/L	1		SW-846 8270E	1/9/23	1/11/23 13:52	SPF
Hexachlorobenzene	ND	2.1	µg/L	1	RL-03	SW-846 8270E	1/7/23	1/12/23 15:54	BGL
Hexachlorobutadiene	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
Hexachlorocyclopentadiene	ND	10	µg/L	1	V-05	SW-846 8270E	1/7/23	1/12/23 15:54	BGL
Hexachloroethane	ND	2.1	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
Indeno(1,2,3-cd)pyrene (SIM)	ND	0.10	µg/L	1		SW-846 8270E	1/9/23	1/11/23 13:52	SPF
Isophorone	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
2-Methylnaphthalene (SIM)	ND	1.0	µg/L	1		SW-846 8270E	1/9/23	1/11/23 13:52	SPF

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

Project Location: Stafford, CT

Sample Description:

Work Order: 23A0661

Date Received: 1/6/2023

**Field Sample #:** MW-1

Sampled: 1/5/2023 15:40

**Sample ID:** 23A0661-01

Sample Matrix: Ground Water

**Semivolatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
3/4-Methylphenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
Naphthalene (SIM)	ND	1.0	µg/L	1	V-05	SW-846 8270E	1/9/23	1/11/23 13:52	SPF
2-Nitroaniline	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
3-Nitroaniline	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
4-Nitroaniline	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
Nitrobenzene	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
2-Nitrophenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
4-Nitrophenol	ND	10	µg/L	1	V-20	SW-846 8270E	1/7/23	1/12/23 15:54	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
N-Nitrosodi-n-propylamine	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
Pentachloronitrobenzene	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
Pentachlorophenol	ND	10	µg/L	1	RL-03	SW-846 8270E	1/7/23	1/12/23 15:54	BGL
Phenanthrene (SIM)	0.15	0.051	µg/L	1		SW-846 8270E	1/9/23	1/11/23 13:52	SPF
Phenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
Pyrene (SIM)	ND	1.0	µg/L	1		SW-846 8270E	1/9/23	1/11/23 13:52	SPF
Pyridine	ND	5.2	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
1,2,4,5-Tetrachlorobenzene	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
1,2,4-Trichlorobenzene	ND	5.2	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
2,4,5-Trichlorophenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL
2,4,6-Trichlorophenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 15:54	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	47.2	15-110		1/12/23 15:54
Phenol-d6	34.3	15-110		1/12/23 15:54
Nitrobenzene-d5	76.4	30-130		1/12/23 15:54
Nitrobenzene-d5	61.4	30-130		1/11/23 13:52
2-Fluorobiphenyl	80.7	30-130		1/12/23 15:54
2-Fluorobiphenyl	58.7	30-130		1/11/23 13:52
2,4,6-Tribromophenol	92.3	15-110		1/12/23 15:54
p-Terphenyl-d14	68.0	30-130		1/11/23 13:52
p-Terphenyl-d14	87.2	30-130		1/12/23 15:54

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

Project Location: Stafford, CT

Sample Description:

Work Order: 23A0661

Date Received: 1/6/2023

**Field Sample #:** MW-1

Sampled: 1/5/2023 15:40

**Sample ID:** 23A0661-01

Sample Matrix: Ground Water

**Polychlorinated Biphenyls By GC/ECD**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/9/23	1/10/23 13:43	TG
Aroclor-1221 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/9/23	1/10/23 13:43	TG
Aroclor-1232 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/9/23	1/10/23 13:43	TG
Aroclor-1242 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/9/23	1/10/23 13:43	TG
Aroclor-1248 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/9/23	1/10/23 13:43	TG
Aroclor-1254 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/9/23	1/10/23 13:43	TG
Aroclor-1260 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/9/23	1/10/23 13:43	TG
Aroclor-1262 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/9/23	1/10/23 13:43	TG
Aroclor-1268 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/9/23	1/10/23 13:43	TG
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Decachlorobiphenyl [1]	71.3	30-150							1/10/23 13:43
Decachlorobiphenyl [2]	68.2	30-150							1/10/23 13:43
Tetrachloro-m-xylene [1]	79.6	30-150							1/10/23 13:43
Tetrachloro-m-xylene [2]	70.1	30-150							1/10/23 13:43




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

Project Location: Stafford, CT

Sample Description:

Work Order: 23A0661

Date Received: 1/6/2023

**Field Sample #:** MW-1

Sampled: 1/5/2023 15:40

**Sample ID:** 23A0661-01Sample Matrix: Ground Water

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**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
CT ETPH	0.27	0.15	mg/L	1		CTDEP ETPH	1/7/23	1/9/23 14:02	RDD
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
2-Fluorobiphenyl	94.8	50-150						1/9/23 14:02	

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

Project Location: Stafford, CT

Sample Description:

Work Order: 23A0661

Date Received: 1/6/2023

**Field Sample #:** MW-1

Sampled: 1/5/2023 15:40

**Sample ID:** 23A0661-01Sample Matrix: Ground Water**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.0	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:28	BMV
Arsenic	1.0	0.80	µg/L	1		SW-846 6020B	1/12/23	1/16/23 18:55	MJH
Barium	61	10	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:28	BMV
Beryllium	ND	0.40	µg/L	1		SW-846 6020B	1/9/23	1/12/23 18:18	BMV
Cadmium	ND	0.20	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:28	BMV
Chromium	2.0	1.0	µg/L	1		SW-846 6020B	1/12/23	1/16/23 18:55	BMV
Copper	3.5	1.0	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:28	BMV
Lead	0.62	0.50	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:28	BMV
Mercury	ND	0.00010	mg/L	1		SW-846 7470A	1/9/23	1/11/23 11:47	AAJ
Nickel	7.6	5.0	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:28	BMV
Selenium	ND	5.0	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:28	BMV
Silver	ND	0.20	µg/L	1		SW-846 6020B	1/12/23	1/16/23 18:55	MJH
Thallium	ND	0.20	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:28	BMV
Vanadium	ND	5.0	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:28	BMV
Zinc	ND	10	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:28	BMV

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

Project Location: Stafford, CT

Sample Description:

Work Order: 23A0661

Date Received: 1/6/2023

**Field Sample #:** MW-2

Sampled: 1/5/2023 13:20

**Sample ID:** 23A0661-02

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	10	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
Acrylonitrile	ND	2.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
Benzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
Bromobenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
Bromoform	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
Bromomethane	ND	2.0	µg/L	1	V-05	SW-846 8260D	1/10/23	1/10/23 12:32	MFF
2-Butanone (MEK)	ND	5.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
Carbon Tetrachloride	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
Chlorobenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
Chloroethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
Chloroform	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
Chloromethane	ND	0.60	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
2-Chlorotoluene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
4-Chlorotoluene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	1.0	µg/L	1	L-03, V-05	SW-846 8260D	1/10/23	1/10/23 12:32	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
Dibromomethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
1,2-Dichlorobenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
1,3-Dichlorobenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
1,4-Dichlorobenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	L-03, V-05	SW-846 8260D	1/10/23	1/10/23 12:32	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
1,1-Dichloroethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
1,2-Dichloroethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
1,1-Dichloroethylene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
cis-1,2-Dichloroethylene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
1,2-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
2,2-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
1,1-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
Ethylbenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
2-Hexanone (MBK)	ND	5.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
Isopropylbenzene (Cumene)	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF

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

Project Location: Stafford, CT

Sample Description:

Work Order: 23A0661

Date Received: 1/6/2023

**Field Sample #:** MW-2

Sampled: 1/5/2023 13:20

**Sample ID:** 23A0661-02

Sample Matrix: Ground Water

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Methyl tert-Butyl Ether (MTBE)	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
4-Methyl-2-pentanone (MIBK)	ND	5.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
Naphthalene	ND	2.0	µg/L	1	V-05	SW-846 8260D	1/10/23	1/10/23 12:32	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
1,1,1,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
1,2,3-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
1,2,4-Trichlorobenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
1,1,1-Trichloroethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
1,1,2-Trichloroethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
1,2,3-Trichloropropane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
1,2,4-Trimethylbenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
1,3,5-Trimethylbenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
Vinyl Chloride	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:32	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	98.3	70-130		1/10/23 12:32
Toluene-d8	106	70-130		1/10/23 12:32
4-Bromofluorobenzene	101	70-130		1/10/23 12:32

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

Project Location: Stafford, CT

Sample Description:

Work Order: 23A0661

Date Received: 1/6/2023

**Field Sample #:** MW-2

Sampled: 1/5/2023 13:20

**Sample ID:** 23A0661-02

Sample Matrix: Ground Water

**Semivolatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene (SIM)	ND	0.31	µg/L	1		SW-846 8270E	1/9/23	1/11/23 14:15	SPF
Acenaphthylene (SIM)	ND	0.21	µg/L	1		SW-846 8270E	1/9/23	1/11/23 14:15	SPF
Aniline	ND	5.1	µg/L	1	V-05	SW-846 8270E	1/7/23	1/12/23 16:17	BGL
Anthracene (SIM)	ND	0.21	µg/L	1		SW-846 8270E	1/9/23	1/11/23 14:15	SPF
Benzo(a)anthracene (SIM)	ND	0.052	µg/L	1		SW-846 8270E	1/9/23	1/11/23 14:15	SPF
Benzo(a)pyrene (SIM)	ND	0.10	µg/L	1		SW-846 8270E	1/9/23	1/11/23 14:15	SPF
Benzo(b)fluoranthene (SIM)	ND	0.052	µg/L	1		SW-846 8270E	1/9/23	1/11/23 14:15	SPF
Benzo(g,h,i)perylene (SIM)	ND	0.52	µg/L	1		SW-846 8270E	1/9/23	1/11/23 14:15	SPF
Benzo(k)fluoranthene (SIM)	ND	0.21	µg/L	1		SW-846 8270E	1/9/23	1/11/23 14:15	SPF
Bis(2-chloroethoxy)methane	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
Bis(2-chloroethyl)ether	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
Bis(2-chloroisopropyl)ether	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
Bis(2-Ethylhexyl)phthalate	ND	2.0	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
4-Bromophenylphenylether	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
Butylbenzylphthalate	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
Carbazole	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
4-Chloroaniline	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
4-Chloro-3-methylphenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
2-Chloronaphthalene	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
2-Chlorophenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
4-Chlorophenylphenylether	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
Chrysene (SIM)	ND	0.21	µg/L	1		SW-846 8270E	1/9/23	1/11/23 14:15	SPF
Dibenz(a,h)anthracene (SIM)	ND	0.10	µg/L	1		SW-846 8270E	1/9/23	1/11/23 14:15	SPF
Dibenzofuran	ND	5.1	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
Di-n-butylphthalate	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
3,3-Dichlorobenzidine	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
2,4-Dichlorophenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
Diethylphthalate	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
2,4-Dimethylphenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
Dimethylphthalate	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
4,6-Dinitro-2-methylphenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
2,4-Dinitrophenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
2,4-Dinitrotoluene	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
2,6-Dinitrotoluene	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
Di-n-octylphthalate	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
Fluoranthene (SIM)	ND	0.52	µg/L	1		SW-846 8270E	1/9/23	1/11/23 14:15	SPF
Fluorene (SIM)	ND	1.0	µg/L	1		SW-846 8270E	1/9/23	1/11/23 14:15	SPF
Hexachlorobenzene	ND	2.0	µg/L	1	RL-03	SW-846 8270E	1/7/23	1/12/23 16:17	BGL
Hexachlorobutadiene	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
Hexachlorocyclopentadiene	ND	10	µg/L	1	V-05	SW-846 8270E	1/7/23	1/12/23 16:17	BGL
Hexachloroethane	ND	2.0	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
Indeno(1,2,3-cd)pyrene (SIM)	ND	0.10	µg/L	1		SW-846 8270E	1/9/23	1/11/23 14:15	SPF
Isophorone	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
2-Methylnaphthalene (SIM)	ND	1.0	µg/L	1		SW-846 8270E	1/9/23	1/11/23 14:15	SPF

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

Project Location: Stafford, CT

Sample Description:

Work Order: 23A0661

Date Received: 1/6/2023

**Field Sample #:** MW-2

Sampled: 1/5/2023 13:20

**Sample ID:** 23A0661-02

Sample Matrix: Ground Water

**Semivolatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
3/4-Methylphenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
Naphthalene (SIM)	ND	1.0	µg/L	1	V-05	SW-846 8270E	1/9/23	1/11/23 14:15	SPF
2-Nitroaniline	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
3-Nitroaniline	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
4-Nitroaniline	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
Nitrobenzene	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
2-Nitrophenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
4-Nitrophenol	ND	10	µg/L	1	V-20	SW-846 8270E	1/7/23	1/12/23 16:17	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
N-Nitrosodi-n-propylamine	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
Pentachloronitrobenzene	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
Pentachlorophenol	ND	10	µg/L	1	RL-03	SW-846 8270E	1/7/23	1/12/23 16:17	BGL
Phenanthrene (SIM)	0.089	0.052	µg/L	1		SW-846 8270E	1/9/23	1/11/23 14:15	SPF
Phenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
Pyrene (SIM)	ND	1.0	µg/L	1		SW-846 8270E	1/9/23	1/11/23 14:15	SPF
Pyridine	ND	5.1	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
1,2,4,5-Tetrachlorobenzene	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
1,2,4-Trichlorobenzene	ND	5.1	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
2,4,5-Trichlorophenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL
2,4,6-Trichlorophenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:17	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	47.2	15-110		1/12/23 16:17
Phenol-d6	33.7	15-110		1/12/23 16:17
Nitrobenzene-d5	53.7	30-130		1/11/23 14:15
Nitrobenzene-d5	74.9	30-130		1/12/23 16:17
2-Fluorobiphenyl	78.0	30-130		1/12/23 16:17
2-Fluorobiphenyl	52.1	30-130		1/11/23 14:15
2,4,6-Tribromophenol	90.2	15-110		1/12/23 16:17
p-Terphenyl-d14	62.9	30-130		1/11/23 14:15
p-Terphenyl-d14	86.2	30-130		1/12/23 16:17




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

Project Location: Stafford, CT

Sample Description:

Work Order: 23A0661

Date Received: 1/6/2023

**Field Sample #:** MW-2

Sampled: 1/5/2023 13:20

**Sample ID:** 23A0661-02Sample Matrix: Ground Water

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**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
CT ETPH	0.42	0.14	mg/L	1		CTDEP ETPH	1/7/23	1/9/23 14:22	RDD
<b>Surrogates</b>									
2-Fluorobiphenyl		% Recovery	Recovery Limits		Flag/Qual			1/9/23 14:22	
			50-150						

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

Project Location: Stafford, CT

Sample Description:

Work Order: 23A0661

Date Received: 1/6/2023

**Field Sample #:** MW-2

Sampled: 1/5/2023 13:20

**Sample ID:** 23A0661-02

Sample Matrix: Ground Water

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.0	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:31	BMV
Arsenic	1.5	0.80	µg/L	1		SW-846 6020B	1/12/23	1/16/23 18:58	MJH
Barium	32	10	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:31	BMV
Beryllium	ND	0.40	µg/L	1		SW-846 6020B	1/9/23	1/12/23 18:20	BMV
Cadmium	ND	0.20	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:31	BMV
Chromium	2.0	1.0	µg/L	1		SW-846 6020B	1/12/23	1/16/23 18:58	BMV
Copper	3.8	1.0	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:31	BMV
Lead	ND	0.50	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:31	BMV
Mercury	ND	0.00010	mg/L	1		SW-846 7470A	1/9/23	1/11/23 11:49	AAJ
Nickel	8.6	5.0	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:31	BMV
Selenium	ND	5.0	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:31	BMV
Silver	ND	0.20	µg/L	1		SW-846 6020B	1/12/23	1/16/23 18:58	MJH
Thallium	ND	0.20	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:31	BMV
Vanadium	ND	5.0	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:31	BMV
Zinc	ND	10	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:31	BMV

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

Project Location: Stafford, CT

Sample Description:

Work Order: 23A0661

Date Received: 1/6/2023

**Field Sample #:** MW-3

Sampled: 1/5/2023 12:15

**Sample ID:** 23A0661-03

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	10	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
Acrylonitrile	ND	2.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
Benzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
Bromobenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
Bromoform	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
Bromomethane	ND	2.0	µg/L	1	V-05	SW-846 8260D	1/10/23	1/10/23 12:59	MFF
2-Butanone (MEK)	ND	5.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
Carbon Tetrachloride	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
Chlorobenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
Chloroethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
Chloroform	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
Chloromethane	ND	0.60	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
2-Chlorotoluene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
4-Chlorotoluene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	1.0	µg/L	1	L-03, V-05	SW-846 8260D	1/10/23	1/10/23 12:59	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
Dibromomethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
1,2-Dichlorobenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
1,3-Dichlorobenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
1,4-Dichlorobenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	L-03, V-05	SW-846 8260D	1/10/23	1/10/23 12:59	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
1,1-Dichloroethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
1,2-Dichloroethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
1,1-Dichloroethylene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
cis-1,2-Dichloroethylene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
1,2-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
2,2-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
1,1-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
Ethylbenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
2-Hexanone (MBK)	ND	5.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
Isopropylbenzene (Cumene)	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF

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

Project Location: Stafford, CT

Sample Description:

Work Order: 23A0661

Date Received: 1/6/2023

**Field Sample #:** MW-3

Sampled: 1/5/2023 12:15

**Sample ID:** 23A0661-03

Sample Matrix: Ground Water

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Methyl tert-Butyl Ether (MTBE)	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
4-Methyl-2-pentanone (MIBK)	ND	5.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
Naphthalene	ND	2.0	µg/L	1	V-05	SW-846 8260D	1/10/23	1/10/23 12:59	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
1,1,1,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
1,2,3-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
1,2,4-Trichlorobenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
1,1,1-Trichloroethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
1,1,2-Trichloroethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
1,2,3-Trichloropropane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
1,2,4-Trimethylbenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
1,3,5-Trimethylbenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
Vinyl Chloride	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 12:59	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	95.3	70-130		1/10/23 12:59
Toluene-d8	102	70-130		1/10/23 12:59
4-Bromofluorobenzene	98.2	70-130		1/10/23 12:59

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

Project Location: Stafford, CT

Date Received: 1/6/2023

**Field Sample #:** MW-3

Sample Description:

Sampled: 1/5/2023 12:15

Work Order: 23A0661

**Sample ID:** 23A0661-03

Sample Matrix: Ground Water

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene (SIM)	ND	0.30	µg/L	1		SW-846 8270E	1/9/23	1/11/23 14:37	SPF
Acenaphthylene (SIM)	ND	0.20	µg/L	1		SW-846 8270E	1/9/23	1/11/23 14:37	SPF
Aniline	ND	5.2	µg/L	1	V-05	SW-846 8270E	1/7/23	1/12/23 16:40	BGL
Anthracene (SIM)	ND	0.20	µg/L	1		SW-846 8270E	1/9/23	1/11/23 14:37	SPF
Benzo(a)anthracene (SIM)	ND	0.051	µg/L	1		SW-846 8270E	1/9/23	1/11/23 14:37	SPF
Benzo(a)pyrene (SIM)	ND	0.10	µg/L	1		SW-846 8270E	1/9/23	1/11/23 14:37	SPF
Benzo(b)fluoranthene (SIM)	ND	0.051	µg/L	1		SW-846 8270E	1/9/23	1/11/23 14:37	SPF
Benzo(g,h,i)perylene (SIM)	ND	0.51	µg/L	1		SW-846 8270E	1/9/23	1/11/23 14:37	SPF
Benzo(k)fluoranthene (SIM)	ND	0.20	µg/L	1		SW-846 8270E	1/9/23	1/11/23 14:37	SPF
Bis(2-chloroethoxy)methane	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
Bis(2-chloroethyl)ether	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
Bis(2-chloroisopropyl)ether	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
Bis(2-Ethylhexyl)phthalate	ND	2.1	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
4-Bromophenylphenylether	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
Butylbenzylphthalate	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
Carbazole	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
4-Chloroaniline	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
4-Chloro-3-methylphenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
2-Chloronaphthalene	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
2-Chlorophenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
4-Chlorophenylphenylether	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
Chrysene (SIM)	ND	0.20	µg/L	1		SW-846 8270E	1/9/23	1/11/23 14:37	SPF
Dibenz(a,h)anthracene (SIM)	ND	0.10	µg/L	1		SW-846 8270E	1/9/23	1/11/23 14:37	SPF
Dibenzofuran	ND	5.2	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
Di-n-butylphthalate	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
3,3-Dichlorobenzidine	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
2,4-Dichlorophenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
Diethylphthalate	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
2,4-Dimethylphenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
Dimethylphthalate	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
4,6-Dinitro-2-methylphenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
2,4-Dinitrophenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
2,4-Dinitrotoluene	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
2,6-Dinitrotoluene	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
Di-n-octylphthalate	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
Fluoranthene (SIM)	ND	0.51	µg/L	1		SW-846 8270E	1/9/23	1/11/23 14:37	SPF
Fluorene (SIM)	ND	1.0	µg/L	1		SW-846 8270E	1/9/23	1/11/23 14:37	SPF
Hexachlorobenzene	ND	2.1	µg/L	1	RL-03	SW-846 8270E	1/7/23	1/12/23 16:40	BGL
Hexachlorobutadiene	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
Hexachlorocyclopentadiene	ND	10	µg/L	1	V-05	SW-846 8270E	1/7/23	1/12/23 16:40	BGL
Hexachloroethane	ND	2.1	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
Indeno(1,2,3-cd)pyrene (SIM)	ND	0.10	µg/L	1		SW-846 8270E	1/9/23	1/11/23 14:37	SPF
Isophorone	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
2-Methylnaphthalene (SIM)	ND	1.0	µg/L	1		SW-846 8270E	1/9/23	1/11/23 14:37	SPF

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

Project Location: Stafford, CT

Sample Description:

Work Order: 23A0661

Date Received: 1/6/2023

**Field Sample #:** MW-3

Sampled: 1/5/2023 12:15

**Sample ID:** 23A0661-03**Sample Matrix:** Ground Water

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
3/4-Methylphenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
Naphthalene (SIM)	ND	1.0	µg/L	1	V-05	SW-846 8270E	1/9/23	1/11/23 14:37	SPF
2-Nitroaniline	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
3-Nitroaniline	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
4-Nitroaniline	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
Nitrobenzene	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
2-Nitrophenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
4-Nitrophenol	ND	10	µg/L	1	V-20	SW-846 8270E	1/7/23	1/12/23 16:40	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
N-Nitrosodi-n-propylamine	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
Pentachloronitrobenzene	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
Pentachlorophenol	ND	10	µg/L	1	RL-03	SW-846 8270E	1/7/23	1/12/23 16:40	BGL
Phenanthrene (SIM)	0.077	0.051	µg/L	1		SW-846 8270E	1/9/23	1/11/23 14:37	SPF
Phenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
Pyrene (SIM)	ND	1.0	µg/L	1		SW-846 8270E	1/9/23	1/11/23 14:37	SPF
Pyridine	ND	5.2	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
1,2,4,5-Tetrachlorobenzene	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
1,2,4-Trichlorobenzene	ND	5.2	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
2,4,5-Trichlorophenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL
2,4,6-Trichlorophenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 16:40	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	48.4	15-110		1/12/23 16:40
Phenol-d6	35.1	15-110		1/12/23 16:40
Nitrobenzene-d5	51.0	30-130		1/11/23 14:37
Nitrobenzene-d5	79.1	30-130		1/12/23 16:40
2-Fluorobiphenyl	81.1	30-130		1/12/23 16:40
2-Fluorobiphenyl	53.0	30-130		1/11/23 14:37
2,4,6-Tribromophenol	89.3	15-110		1/12/23 16:40
p-Terphenyl-d14	59.3	30-130		1/11/23 14:37
p-Terphenyl-d14	85.4	30-130		1/12/23 16:40



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

Project Location: Stafford, CT

Sample Description:

Work Order: 23A0661

Date Received: 1/6/2023

**Field Sample #:** MW-3

Sampled: 1/5/2023 12:15

**Sample ID:** 23A0661-03

Sample Matrix: Ground Water

**Polychlorinated Biphenyls By GC/ECD**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/9/23	1/10/23 13:56	TG
Aroclor-1221 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/9/23	1/10/23 13:56	TG
Aroclor-1232 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/9/23	1/10/23 13:56	TG
Aroclor-1242 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/9/23	1/10/23 13:56	TG
Aroclor-1248 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/9/23	1/10/23 13:56	TG
Aroclor-1254 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/9/23	1/10/23 13:56	TG
Aroclor-1260 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/9/23	1/10/23 13:56	TG
Aroclor-1262 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/9/23	1/10/23 13:56	TG
Aroclor-1268 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/9/23	1/10/23 13:56	TG
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Decachlorobiphenyl [1]	78.2	30-150							1/10/23 13:56
Decachlorobiphenyl [2]	74.8	30-150							1/10/23 13:56
Tetrachloro-m-xylene [1]	82.7	30-150							1/10/23 13:56
Tetrachloro-m-xylene [2]	72.7	30-150							1/10/23 13:56



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

Project Location: Stafford, CT

Sample Description:

Work Order: 23A0661

Date Received: 1/6/2023

**Field Sample #:** MW-3

Sampled: 1/5/2023 12:15

**Sample ID:** 23A0661-03

Sample Matrix: Ground Water

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
CT ETPH	0.17	0.15	mg/L	1		CTDEP ETPH	1/7/23	1/9/23 14:02	RDD
<b>Surrogates</b>									
2-Fluorobiphenyl		% Recovery	Recovery Limits		Flag/Qual			1/9/23 14:02	
		75.9	50-150						

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

Project Location: Stafford, CT

Sample Description:

Work Order: 23A0661

Date Received: 1/6/2023

**Field Sample #:** MW-3

Sampled: 1/5/2023 12:15

**Sample ID:** 23A0661-03

Sample Matrix: Ground Water

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	1.3	1.0	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:34	BMV
Arsenic	ND	0.80	µg/L	1		SW-846 6020B	1/12/23	1/16/23 19:06	MJH
Barium	69	10	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:34	BMV
Beryllium	ND	0.40	µg/L	1		SW-846 6020B	1/9/23	1/12/23 18:21	BMV
Cadmium	ND	0.20	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:34	BMV
Chromium	1.9	1.0	µg/L	1		SW-846 6020B	1/12/23	1/16/23 19:06	BMV
Copper	15	1.0	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:34	BMV
Lead	19	0.50	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:34	BMV
Mercury	ND	0.00010	mg/L	1		SW-846 7470A	1/9/23	1/11/23 11:50	AAJ
Nickel	8.9	5.0	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:34	BMV
Selenium	ND	5.0	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:34	BMV
Silver	ND	0.20	µg/L	1		SW-846 6020B	1/12/23	1/16/23 19:06	MJH
Thallium	ND	0.20	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:34	BMV
Vanadium	ND	5.0	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:34	BMV
Zinc	48	10	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:34	BMV

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

Project Location: Stafford, CT

Sample Description:

Work Order: 23A0661

Date Received: 1/6/2023

**Field Sample #:** DUP-2

Sampled: 1/5/2023 00:00

**Sample ID:** 23A0661-04

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	10	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
Acrylonitrile	ND	2.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
Benzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
Bromobenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
Bromoform	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
Bromomethane	ND	2.0	µg/L	1	V-05	SW-846 8260D	1/10/23	1/10/23 13:25	MFF
2-Butanone (MEK)	ND	5.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
Carbon Tetrachloride	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
Chlorobenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
Chloroethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
Chloroform	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
Chloromethane	ND	0.60	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
2-Chlorotoluene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
4-Chlorotoluene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	1.0	µg/L	1	L-03, V-05	SW-846 8260D	1/10/23	1/10/23 13:25	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
Dibromomethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
1,2-Dichlorobenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
1,3-Dichlorobenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
1,4-Dichlorobenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	L-03, V-05	SW-846 8260D	1/10/23	1/10/23 13:25	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
1,1-Dichloroethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
1,2-Dichloroethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
1,1-Dichloroethylene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
cis-1,2-Dichloroethylene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
1,2-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
2,2-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
1,1-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
Ethylbenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
2-Hexanone (MBK)	ND	5.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
Isopropylbenzene (Cumene)	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF



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

Project Location: Stafford, CT

Sample Description:

Work Order: 23A0661

Date Received: 1/6/2023

**Field Sample #:** DUP-2

Sampled: 1/5/2023 00:00

**Sample ID:** 23A0661-04

Sample Matrix: Ground Water

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Methyl tert-Butyl Ether (MTBE)	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
4-Methyl-2-pentanone (MIBK)	ND	5.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
Naphthalene	ND	2.0	µg/L	1	V-05	SW-846 8260D	1/10/23	1/10/23 13:25	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
1,1,1,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
1,2,3-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
1,2,4-Trichlorobenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
1,1,1-Trichloroethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
1,1,2-Trichloroethane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
1,2,3-Trichloropropane	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
1,2,4-Trimethylbenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
1,3,5-Trimethylbenzene	ND	0.50	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
Vinyl Chloride	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	1/10/23	1/10/23 13:25	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	98.8	70-130		1/10/23 13:25
Toluene-d8	99.6	70-130		1/10/23 13:25
4-Bromofluorobenzene	103	70-130		1/10/23 13:25

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

Project Location: Stafford, CT

Sample Description:

Work Order: 23A0661

Date Received: 1/6/2023

Field Sample #: DUP-2

Sampled: 1/5/2023 00:00

Sample ID: 23A0661-04

Sample Matrix: Ground Water

## Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene (SIM)	ND	0.29	µg/L	1		SW-846 8270E	1/9/23	1/11/23 15:01	SPF
Acenaphthylene (SIM)	ND	0.19	µg/L	1		SW-846 8270E	1/9/23	1/11/23 15:01	SPF
Aniline	ND	5.0	µg/L	1	V-05	SW-846 8270E	1/7/23	1/12/23 17:03	BGL
Anthracene (SIM)	ND	0.19	µg/L	1		SW-846 8270E	1/9/23	1/11/23 15:01	SPF
Benzo(a)anthracene (SIM)	ND	0.048	µg/L	1		SW-846 8270E	1/9/23	1/11/23 15:01	SPF
Benzo(a)pyrene (SIM)	ND	0.095	µg/L	1		SW-846 8270E	1/9/23	1/11/23 15:01	SPF
Benzo(b)fluoranthene (SIM)	ND	0.048	µg/L	1		SW-846 8270E	1/9/23	1/11/23 15:01	SPF
Benzo(g,h,i)perylene (SIM)	ND	0.48	µg/L	1		SW-846 8270E	1/9/23	1/11/23 15:01	SPF
Benzo(k)fluoranthene (SIM)	ND	0.19	µg/L	1		SW-846 8270E	1/9/23	1/11/23 15:01	SPF
Bis(2-chloroethoxy)methane	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
Bis(2-chloroethyl)ether	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
Bis(2-chloroisopropyl)ether	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
Bis(2-Ethylhexyl)phthalate	ND	2.0	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
4-Bromophenylphenylether	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
Butylbenzylphthalate	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
Carbazole	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
4-Chloroaniline	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
4-Chloro-3-methylphenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
2-Chloronaphthalene	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
2-Chlorophenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
4-Chlorophenylphenylether	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
Chrysene (SIM)	ND	0.19	µg/L	1		SW-846 8270E	1/9/23	1/11/23 15:01	SPF
Dibenz(a,h)anthracene (SIM)	ND	0.095	µg/L	1		SW-846 8270E	1/9/23	1/11/23 15:01	SPF
Dibenzofuran	ND	5.0	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
Di-n-butylphthalate	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
3,3-Dichlorobenzidine	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
2,4-Dichlorophenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
Diethylphthalate	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
2,4-Dimethylphenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
Dimethylphthalate	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
4,6-Dinitro-2-methylphenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
2,4-Dinitrophenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
2,4-Dinitrotoluene	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
2,6-Dinitrotoluene	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
Di-n-octylphthalate	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
Fluoranthene (SIM)	ND	0.48	µg/L	1		SW-846 8270E	1/9/23	1/11/23 15:01	SPF
Fluorene (SIM)	ND	0.95	µg/L	1		SW-846 8270E	1/9/23	1/11/23 15:01	SPF
Hexachlorobenzene	ND	2.0	µg/L	1	RL-03	SW-846 8270E	1/7/23	1/12/23 17:03	BGL
Hexachlorobutadiene	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
Hexachlorocyclopentadiene	ND	10	µg/L	1	V-05	SW-846 8270E	1/7/23	1/12/23 17:03	BGL
Hexachloroethane	ND	2.0	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
Indeno(1,2,3-cd)pyrene (SIM)	ND	0.095	µg/L	1		SW-846 8270E	1/9/23	1/11/23 15:01	SPF
Isophorone	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
2-Methylnaphthalene (SIM)	ND	0.95	µg/L	1		SW-846 8270E	1/9/23	1/11/23 15:01	SPF

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

Project Location: Stafford, CT

Sample Description:

Work Order: 23A0661

Date Received: 1/6/2023

**Field Sample #:** DUP-2

Sampled: 1/5/2023 00:00

**Sample ID:** 23A0661-04

Sample Matrix: Ground Water

**Semivolatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
3/4-Methylphenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
Naphthalene (SIM)	ND	0.95	µg/L	1	V-05	SW-846 8270E	1/9/23	1/11/23 15:01	SPF
2-Nitroaniline	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
3-Nitroaniline	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
4-Nitroaniline	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
Nitrobenzene	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
2-Nitrophenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
4-Nitrophenol	ND	10	µg/L	1	V-20	SW-846 8270E	1/7/23	1/12/23 17:03	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
N-Nitrosodi-n-propylamine	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
Pentachloronitrobenzene	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
Pentachlorophenol	ND	10	µg/L	1	RL-03	SW-846 8270E	1/7/23	1/12/23 17:03	BGL
Phenanthrene (SIM)	0.077	0.048	µg/L	1		SW-846 8270E	1/9/23	1/11/23 15:01	SPF
Phenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
Pyrene (SIM)	ND	0.95	µg/L	1		SW-846 8270E	1/9/23	1/11/23 15:01	SPF
Pyridine	ND	5.0	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
1,2,4,5-Tetrachlorobenzene	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
1,2,4-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
2,4,5-Trichlorophenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL
2,4,6-Trichlorophenol	ND	10	µg/L	1		SW-846 8270E	1/7/23	1/12/23 17:03	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	49.3	15-110		1/12/23 17:03
Phenol-d6	35.5	15-110		1/12/23 17:03
Nitrobenzene-d5	55.5	30-130		1/11/23 15:01
Nitrobenzene-d5	77.9	30-130		1/12/23 17:03
2-Fluorobiphenyl	81.2	30-130		1/12/23 17:03
2-Fluorobiphenyl	58.1	30-130		1/11/23 15:01
2,4,6-Tribromophenol	91.1	15-110		1/12/23 17:03
p-Terphenyl-d14	60.3	30-130		1/11/23 15:01
p-Terphenyl-d14	93.2	30-130		1/12/23 17:03



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

Project Location: Stafford, CT

Sample Description:

Work Order: 23A0661

Date Received: 1/6/2023

**Field Sample #:** DUP-2

Sampled: 1/5/2023 00:00

**Sample ID:** 23A0661-04

Sample Matrix: Ground Water

**Polychlorinated Biphenyls By GC/ECD**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/9/23	1/10/23 14:09	TG
Aroclor-1221 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/9/23	1/10/23 14:09	TG
Aroclor-1232 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/9/23	1/10/23 14:09	TG
Aroclor-1242 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/9/23	1/10/23 14:09	TG
Aroclor-1248 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/9/23	1/10/23 14:09	TG
Aroclor-1254 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/9/23	1/10/23 14:09	TG
Aroclor-1260 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/9/23	1/10/23 14:09	TG
Aroclor-1262 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/9/23	1/10/23 14:09	TG
Aroclor-1268 [1]	ND	0.20	µg/L	1		SW-846 8082A	1/9/23	1/10/23 14:09	TG
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Decachlorobiphenyl [1]	91.5	30-150							1/10/23 14:09
Decachlorobiphenyl [2]	87.5	30-150							1/10/23 14:09
Tetrachloro-m-xylene [1]	84.5	30-150							1/10/23 14:09
Tetrachloro-m-xylene [2]	74.3	30-150							1/10/23 14:09



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

Project Location: Stafford, CT

Sample Description:

Work Order: 23A0661

Date Received: 1/6/2023

Sampled: 1/5/2023 00:00

**Field Sample #:** DUP-2

**Sample ID:** 23A0661-04

Sample Matrix: Ground Water

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
CT ETPH	0.17	0.15	mg/L	1		CTDEP ETPH	1/7/23	1/9/23 14:22	RDD
<b>Surrogates</b>									
2-Fluorobiphenyl		% Recovery	Recovery Limits		Flag/Qual			1/9/23 14:22	
		75.9	50-150						

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

Project Location: Stafford, CT

Sample Description:

Work Order: 23A0661

Date Received: 1/6/2023

**Field Sample #:** DUP-2

Sampled: 1/5/2023 00:00

**Sample ID:** 23A0661-04

Sample Matrix: Ground Water

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	1.4	1.0	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:42	BMV
Arsenic	ND	0.80	µg/L	1		SW-846 6020B	1/12/23	1/16/23 19:09	MJH
Barium	69	10	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:42	BMV
Beryllium	ND	0.40	µg/L	1		SW-846 6020B	1/9/23	1/12/23 18:22	BMV
Cadmium	ND	0.20	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:42	BMV
Chromium	2.0	1.0	µg/L	1		SW-846 6020B	1/12/23	1/16/23 19:09	BMV
Copper	19	1.0	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:42	BMV
Lead	20	0.50	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:42	BMV
Mercury	ND	0.00010	mg/L	1		SW-846 7470A	1/9/23	1/11/23 11:52	AAJ
Nickel	10	5.0	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:42	BMV
Selenium	ND	5.0	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:42	BMV
Silver	ND	0.20	µg/L	1		SW-846 6020B	1/12/23	1/16/23 19:09	MJH
Thallium	ND	0.20	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:42	BMV
Vanadium	ND	5.0	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:42	BMV
Zinc	49	10	µg/L	1		SW-846 6020B	1/9/23	1/11/23 21:42	BMV



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

**Sample Extraction Data****Prep Method: SW-846 3510C      Analytical Method: CTDEP ETPH**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23A0661-01 [MW-1]	B327955	920	0.900	01/07/23
23A0661-02 [MW-2]	B327955	980	0.900	01/07/23
23A0661-03 [MW-3]	B327955	1030	1.00	01/07/23
23A0661-04 [DUP-2]	B327955	1000	1.00	01/07/23

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23A0661-01 [MW-1]	B328016	50.0	50.0	01/09/23
23A0661-02 [MW-2]	B328016	50.0	50.0	01/09/23
23A0661-03 [MW-3]	B328016	50.0	50.0	01/09/23
23A0661-04 [DUP-2]	B328016	50.0	50.0	01/09/23

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23A0661-01RE1 [MW-1]	B328529	50.0	50.0	01/12/23
23A0661-02RE1 [MW-2]	B328529	50.0	50.0	01/12/23
23A0661-03RE1 [MW-3]	B328529	50.0	50.0	01/12/23
23A0661-04RE1 [DUP-2]	B328529	50.0	50.0	01/12/23

**Prep Method: SW-846 7470A Prep      Analytical Method: SW-846 7470A**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23A0661-01 [MW-1]	B328341	10.0	10.0	01/09/23
23A0661-02 [MW-2]	B328341	10.0	10.0	01/09/23
23A0661-03 [MW-3]	B328341	10.0	10.0	01/09/23
23A0661-04 [DUP-2]	B328341	10.0	10.0	01/09/23

**Prep Method: SW-846 3510C      Analytical Method: SW-846 8082A**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23A0661-01 [MW-1]	B328090	1020	10.0	01/09/23
23A0661-03 [MW-3]	B328090	1000	10.0	01/09/23
23A0661-04 [DUP-2]	B328090	995	10.0	01/09/23

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23A0661-01 [MW-1]	B328127	5	5.00	01/10/23
23A0661-02 [MW-2]	B328127	5	5.00	01/10/23
23A0661-03 [MW-3]	B328127	5	5.00	01/10/23
23A0661-04 [DUP-2]	B328127	5	5.00	01/10/23

**Prep Method: SW-846 3510C      Analytical Method: SW-846 8270E**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
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39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

### Sample Extraction Data

**Prep Method: SW-846 3510C      Analytical Method: SW-846 8270E**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23A0661-01 [MW-1]	B327956	970	1.00	01/07/23
23A0661-02 [MW-2]	B327956	980	1.00	01/07/23
23A0661-03 [MW-3]	B327956	970	1.00	01/07/23
23A0661-04 [DUP-2]	B327956	1000	1.00	01/07/23

**Prep Method: SW-846 3510C      Analytical Method: SW-846 8270E**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23A0661-01 [MW-1]	B328260	975	1.00	01/09/23
23A0661-02 [MW-2]	B328260	970	1.00	01/09/23
23A0661-03 [MW-3]	B328260	990	1.00	01/09/23
23A0661-04 [DUP-2]	B328260	1050	1.00	01/09/23

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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch B328127 - SW-846 5030B**

<b>Blank (B328127-BLK1)</b>	Prepared & Analyzed: 01/10/23								
Acetone	ND	10	µg/L						
Acrylonitrile	ND	2.0	µg/L						
Benzene	ND	0.50	µg/L						
Bromobenzene	ND	0.50	µg/L						
Bromodichloromethane	ND	0.50	µg/L						
Bromoform	ND	0.50	µg/L						
Bromomethane	ND	2.0	µg/L						V-05
2-Butanone (MEK)	ND	5.0	µg/L						
n-Butylbenzene	ND	1.0	µg/L						
sec-Butylbenzene	ND	1.0	µg/L						
tert-Butylbenzene	ND	1.0	µg/L						
Carbon Disulfide	ND	5.0	µg/L						
Carbon Tetrachloride	ND	0.50	µg/L						
Chlorobenzene	ND	0.50	µg/L						
Chlorodibromomethane	ND	0.50	µg/L						
Chloroethane	ND	0.50	µg/L						
Chloroform	ND	0.50	µg/L						
Chloromethane	ND	0.60	µg/L						
2-Chlorotoluene	ND	0.50	µg/L						
4-Chlorotoluene	ND	0.50	µg/L						
1,2-Dibromo-3-chloropropane (DBCP)	ND	1.0	µg/L						L-03, V-05
1,2-Dibromoethane (EDB)	ND	0.50	µg/L						
Dibromomethane	ND	0.50	µg/L						
1,2-Dichlorobenzene	ND	0.50	µg/L						
1,3-Dichlorobenzene	ND	0.50	µg/L						
1,4-Dichlorobenzene	ND	0.50	µg/L						
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L						L-03, V-05
Dichlorodifluoromethane (Freon 12)	ND	0.50	µg/L						
1,1-Dichloroethane	ND	0.50	µg/L						
1,2-Dichloroethane	ND	0.50	µg/L						
1,1-Dichloroethylene	ND	0.50	µg/L						
cis-1,2-Dichloroethylene	ND	0.50	µg/L						
trans-1,2-Dichloroethylene	ND	1.0	µg/L						
1,2-Dichloropropane	ND	0.50	µg/L						
1,3-Dichloropropane	ND	0.50	µg/L						
2,2-Dichloropropane	ND	0.50	µg/L						
1,1-Dichloropropene	ND	0.50	µg/L						
cis-1,3-Dichloropropene	ND	0.50	µg/L						
trans-1,3-Dichloropropene	ND	0.50	µg/L						
Ethylbenzene	ND	0.50	µg/L						
Hexachlorobutadiene	ND	0.60	µg/L						
2-Hexanone (MBK)	ND	5.0	µg/L						
Isopropylbenzene (Cumene)	ND	0.50	µg/L						
p-Isopropyltoluene (p-Cymene)	ND	0.50	µg/L						
Methyl tert-Butyl Ether (MTBE)	ND	0.50	µg/L						
Methylene Chloride	ND	5.0	µg/L						
4-Methyl-2-pentanone (MIBK)	ND	5.0	µg/L						
Naphthalene	ND	2.0	µg/L						V-05
n-Propylbenzene	ND	1.0	µg/L						
Styrene	ND	1.0	µg/L						
1,1,1,2-Tetrachloroethane	ND	0.50	µg/L						
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L						

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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch B328127 - SW-846 5030B**

<b>Blank (B328127-BLK1)</b>	Prepared & Analyzed: 01/10/23					
Tetrachloroethylene	ND	1.0	µg/L			
Tetrahydrofuran	ND	10	µg/L			
Toluene	ND	1.0	µg/L			
1,2,3-Trichlorobenzene	ND	1.0	µg/L			
1,2,4-Trichlorobenzene	ND	0.50	µg/L			
1,1,1-Trichloroethane	ND	0.50	µg/L			
1,1,2-Trichloroethane	ND	0.50	µg/L			
Trichloroethylene	ND	1.0	µg/L			
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L			
1,2,3-Trichloropropane	ND	0.50	µg/L			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.50	µg/L			
1,2,4-Trimethylbenzene	ND	0.50	µg/L			
1,3,5-Trimethylbenzene	ND	0.50	µg/L			
Vinyl Chloride	ND	1.0	µg/L			
m+p Xylene	ND	2.0	µg/L			
o-Xylene	ND	1.0	µg/L			
Surrogate: 1,2-Dichloroethane-d4	24.2		µg/L	25.0	96.8	70-130
Surrogate: Toluene-d8	25.1		µg/L	25.0	100	70-130
Surrogate: 4-Bromofluorobenzene	25.2		µg/L	25.0	101	70-130
<b>LCS (B328127-BS1)</b>	Prepared & Analyzed: 01/10/23					
Acetone	128	10	µg/L	100	128	40-160
Acrylonitrile	10.6	2.0	µg/L	10.0	106	70-130
Benzene	9.67	0.50	µg/L	10.0	96.7	70-130
Bromobenzene	9.31	0.50	µg/L	10.0	93.1	70-130
Bromodichloromethane	9.63	0.50	µg/L	10.0	96.3	70-130
Bromoform	8.53	0.50	µg/L	10.0	85.3	70-130
Bromomethane	5.41	2.0	µg/L	10.0	54.1	40-160
2-Butanone (MEK)	124	5.0	µg/L	100	124	40-160
n-Butylbenzene	9.22	1.0	µg/L	10.0	92.2	70-130
sec-Butylbenzene	9.17	1.0	µg/L	10.0	91.7	70-130
tert-Butylbenzene	9.34	1.0	µg/L	10.0	93.4	70-130
Carbon Disulfide	98.0	5.0	µg/L	100	98.0	70-130
Carbon Tetrachloride	9.19	0.50	µg/L	10.0	91.9	70-130
Chlorobenzene	10.8	0.50	µg/L	10.0	108	70-130
Chlorodibromomethane	10.2	0.50	µg/L	10.0	102	40-160
Chloroethane	9.80	0.50	µg/L	10.0	98.0	70-130
Chloroform	9.39	0.50	µg/L	10.0	93.9	70-130
Chloromethane	9.78	0.60	µg/L	10.0	97.8	40-160
2-Chlorotoluene	9.62	0.50	µg/L	10.0	96.2	70-130
4-Chlorotoluene	9.75	0.50	µg/L	10.0	97.5	70-130
<b>1,2-Dibromo-3-chloropropane (DBCP)</b>	6.80	1.0	µg/L	10.0	<b>68.0</b> *	70-130
1,2-Dibromoethane (EDB)	11.6	0.50	µg/L	10.0	116	70-130
Dibromomethane	11.4	0.50	µg/L	10.0	114	70-130
1,2-Dichlorobenzene	10.1	0.50	µg/L	10.0	101	70-130
1,3-Dichlorobenzene	9.93	0.50	µg/L	10.0	99.3	70-130
1,4-Dichlorobenzene	9.95	0.50	µg/L	10.0	99.5	70-130
<b>trans-1,4-Dichloro-2-butene</b>	6.92	2.0	µg/L	10.0	<b>69.2</b> *	70-130
Dichlorodifluoromethane (Freon 12)	10.7	0.50	µg/L	10.0	107	40-160
1,1-Dichloroethane	10.5	0.50	µg/L	10.0	105	70-130
1,2-Dichloroethane	11.2	0.50	µg/L	10.0	112	70-130
1,1-Dichloroethylene	11.0	0.50	µg/L	10.0	110	70-130

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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
<b>Batch B328127 - SW-846 5030B</b>									
<b>LCS (B328127-BS1)</b>									
Prepared & Analyzed: 01/10/23									
cis-1,2-Dichloroethylene	10.7	0.50	µg/L	10.0	107	70-130			
trans-1,2-Dichloroethylene	10.5	1.0	µg/L	10.0	105	70-130			
1,2-Dichloropropane	11.1	0.50	µg/L	10.0	111	70-130			
1,3-Dichloropropane	11.4	0.50	µg/L	10.0	114	70-130			
2,2-Dichloropropane	9.03	0.50	µg/L	10.0	90.3	70-130			
1,1-Dichloropropene	9.89	0.50	µg/L	10.0	98.9	70-130			
cis-1,3-Dichloropropene	9.58	0.50	µg/L	10.0	95.8	70-130			
trans-1,3-Dichloropropene	9.69	0.50	µg/L	10.0	96.9	70-130			
Ethylbenzene	10.4	0.50	µg/L	10.0	104	70-130			
Hexachlorobutadiene	9.20	0.60	µg/L	10.0	92.0	40-160			
<b>2-Hexanone (MBK)</b>	<b>133</b>	<b>5.0</b>	<b>µg/L</b>	<b>100</b>	<b>133</b>	<b>*</b>	<b>70-130</b>		<b>L-01, V-20</b>
Isopropylbenzene (Cumene)	9.34	0.50	µg/L	10.0	93.4	70-130			
p-Isopropyltoluene (p-Cymene)	9.33	0.50	µg/L	10.0	93.3	70-130			
Methyl tert-Butyl Ether (MTBE)	9.57	0.50	µg/L	10.0	95.7	70-130			
Methylene Chloride	11.7	5.0	µg/L	10.0	117	70-130			
4-Methyl-2-pentanone (MIBK)	129	5.0	µg/L	100	129	40-160			<b>V-20</b>
Naphthalene	7.50	2.0	µg/L	10.0	75.0	70-130			<b>V-05</b>
n-Propylbenzene	9.52	1.0	µg/L	10.0	95.2	70-130			
Styrene	9.54	1.0	µg/L	10.0	95.4	70-130			
1,1,1,2-Tetrachloroethane	9.70	0.50	µg/L	10.0	97.0	70-130			
1,1,2,2-Tetrachloroethane	9.37	0.50	µg/L	10.0	93.7	70-130			
Tetrachloroethylene	12.3	1.0	µg/L	10.0	123	70-130			
Tetrahydrofuran	11.0	10	µg/L	10.0	110	70-130			
Toluene	10.7	1.0	µg/L	10.0	107	70-130			
1,2,3-Trichlorobenzene	8.79	1.0	µg/L	10.0	87.9	70-130			
1,2,4-Trichlorobenzene	9.48	0.50	µg/L	10.0	94.8	70-130			
1,1,1-Trichloroethane	9.67	0.50	µg/L	10.0	96.7	70-130			
1,1,2-Trichloroethane	11.5	0.50	µg/L	10.0	115	70-130			
Trichloroethylene	11.1	1.0	µg/L	10.0	111	70-130			
Trichlorofluoromethane (Freon 11)	10.3	2.0	µg/L	10.0	103	40-160			
1,2,3-Trichloropropane	9.91	0.50	µg/L	10.0	99.1	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.2	0.50	µg/L	10.0	112	70-130			
1,2,4-Trimethylbenzene	9.43	0.50	µg/L	10.0	94.3	70-130			
1,3,5-Trimethylbenzene	9.42	0.50	µg/L	10.0	94.2	70-130			
Vinyl Chloride	10.8	1.0	µg/L	10.0	108	70-130			
m+p Xylene	21.0	2.0	µg/L	20.0	105	70-130			
o-Xylene	9.80	1.0	µg/L	10.0	98.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	24.6		µg/L	25.0	98.4	70-130			
Surrogate: Toluene-d8	25.2		µg/L	25.0	101	70-130			
Surrogate: 4-Bromofluorobenzene	24.2		µg/L	25.0	96.7	70-130			

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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
<b>Batch B327956 - SW-846 3510C</b>										
<b>Blank (B327956-BLK1)</b>										
Prepared: 01/07/23 Analyzed: 01/12/23										
Aniline	ND	5.0	µg/L							V-05
Bis(2-chloroethoxy)methane	ND	10	µg/L							
Bis(2-chloroethyl)ether	ND	10	µg/L							
Bis(2-chloroisopropyl)ether	ND	10	µg/L							
Bis(2-Ethylhexyl)phthalate	ND	2.0	µg/L							
4-Bromophenylphenylether	ND	10	µg/L							
Butylbenzylphthalate	ND	10	µg/L							
Carbazole	ND	10	µg/L							
4-Chloroaniline	ND	10	µg/L							
4-Chloro-3-methylphenol	ND	10	µg/L							
2-Chloronaphthalene	ND	10	µg/L							
2-Chlorophenol	ND	10	µg/L							
4-Chlorophenylphenylether	ND	10	µg/L							
Dibenzofuran	ND	5.0	µg/L							
Di-n-butylphthalate	ND	10	µg/L							
3,3-Dichlorobenzidine	ND	10	µg/L							
2,4-Dichlorophenol	ND	10	µg/L							
Diethylphthalate	ND	10	µg/L							
2,4-Dimethylphenol	ND	10	µg/L							
Dimethylphthalate	ND	10	µg/L							
4,6-Dinitro-2-methylphenol	ND	10	µg/L							
2,4-Dinitrophenol	ND	10	µg/L							
2,4-Dinitrotoluene	ND	10	µg/L							
2,6-Dinitrotoluene	ND	10	µg/L							
Di-n-octylphthalate	ND	10	µg/L							
Hexachlorobenzene	ND	2.0	µg/L							
Hexachlorobutadiene	ND	10	µg/L							
Hexachlorocyclopentadiene	ND	10	µg/L							V-05
Hexachloroethane	ND	2.0	µg/L							
Isophorone	ND	10	µg/L							
2-Methylphenol	ND	10	µg/L							
3/4-Methylphenol	ND	10	µg/L							
2-Nitroaniline	ND	10	µg/L							
3-Nitroaniline	ND	10	µg/L							
4-Nitroaniline	ND	10	µg/L							
Nitrobenzene	ND	10	µg/L							
2-Nitrophenol	ND	10	µg/L							
4-Nitrophenol	ND	10	µg/L							V-20
N-Nitrosodiphenylamine/Diphenylamine	ND	10	µg/L							
N-Nitrosodi-n-propylamine	ND	10	µg/L							
Pentachloronitrobenzene	ND	10	µg/L							
Pentachlorophenol	ND	10	µg/L							
Phenol	ND	10	µg/L							
Pyridine	ND	5.0	µg/L							
1,2,4,5-Tetrachlorobenzene	ND	10	µg/L							
1,2,4-Trichlorobenzene	ND	5.0	µg/L							
2,4,5-Trichlorophenol	ND	10	µg/L							
2,4,6-Trichlorophenol	ND	10	µg/L							
Surrogate: 2-Fluorophenol	103	µg/L	200		51.5	15-110				
Surrogate: Phenol-d6	73.8	µg/L	200		36.9	15-110				
Surrogate: Nitrobenzene-d5	76.8	µg/L	100		76.8	30-130				
Surrogate: 2-Fluorobiphenyl	79.6	µg/L	100		79.6	30-130				

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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
<b>Batch B327956 - SW-846 3510C</b>									
<b>Blank (B327956-BLK1)</b>									
Prepared: 01/07/23 Analyzed: 01/12/23									
Surrogate: 2,4,6-Tribromophenol	180		µg/L	200	89.8	15-110			
Surrogate: p-Terphenyl-d14	88.3		µg/L	100	88.3	30-130			
<b>LCS (B327956-BS1)</b>									
Prepared: 01/07/23 Analyzed: 01/12/23									
Aniline	31.1	5.0	µg/L	50.0	62.3	40-140		V-05	†
Bis(2-chloroethoxy)methane	40.0	10	µg/L	50.0	80.0	40-140			
Bis(2-chloroethyl)ether	40.9	10	µg/L	50.0	81.9	40-140			
Bis(2-chloroisopropyl)ether	39.8	10	µg/L	50.0	79.6	40-140			
Bis(2-Ethylhexyl)phthalate	38.4	10	µg/L	50.0	76.8	40-140			
4-Bromophenylphenylether	43.0	10	µg/L	50.0	85.9	40-140			
Butylbenzylphthalate	39.4	10	µg/L	50.0	78.7	40-140			
Carbazole	44.8	10	µg/L	50.0	89.5	40-140			
4-Chloroaniline	37.5	10	µg/L	50.0	75.0	40-140			†
4-Chloro-3-methylphenol	41.2	10	µg/L	50.0	82.5	30-130			
2-Chloronaphthalene	41.3	10	µg/L	50.0	82.6	40-140			
2-Chlorophenol	37.3	10	µg/L	50.0	74.6	30-130			
4-Chlorophenylphenylether	42.9	10	µg/L	50.0	85.8	40-140			
Dibenzofuran	43.9	5.0	µg/L	50.0	87.8	40-140			
Di-n-butylphthalate	41.8	10	µg/L	50.0	83.6	40-140			
3,3-Dichlorobenzidine	52.9	10	µg/L	50.0	106	40-140			†
2,4-Dichlorophenol	40.0	10	µg/L	50.0	80.1	30-130			
Diethylphthalate	42.4	10	µg/L	50.0	84.7	40-140			
2,4-Dimethylphenol	42.2	10	µg/L	50.0	84.3	30-130			
Dimethylphthalate	43.1	10	µg/L	50.0	86.2	40-140			
4,6-Dinitro-2-methylphenol	42.1	10	µg/L	50.0	84.2	30-130			
2,4-Dinitrophenol	37.0	10	µg/L	50.0	74.0	30-130			
2,4-Dinitrotoluene	46.4	10	µg/L	50.0	92.7	40-140			
2,6-Dinitrotoluene	46.5	10	µg/L	50.0	93.0	40-140			
Di-n-octylphthalate	34.7	10	µg/L	50.0	69.4	40-140			
Hexachlorobenzene	46.0	10	µg/L	50.0	91.9	40-140			
Hexachlorobutadiene	34.1	10	µg/L	50.0	68.1	40-140			
Hexachlorocyclopentadiene	28.4	10	µg/L	50.0	56.7	30-140		V-05	
Hexachloroethane	30.1	10	µg/L	50.0	60.3	40-140			
Isophorone	43.9	10	µg/L	50.0	87.9	40-140			
2-Methylphenol	37.4	10	µg/L	50.0	74.8	30-130			
3/4-Methylphenol	35.9	10	µg/L	50.0	71.8	30-130			
2-Nitroaniline	40.2	10	µg/L	50.0	80.5	40-140			
3-Nitroaniline	41.7	10	µg/L	50.0	83.5	40-140			†
4-Nitroaniline	44.8	10	µg/L	50.0	89.7	40-140			
Nitrobenzene	37.7	10	µg/L	50.0	75.4	40-140			
2-Nitrophenol	41.0	10	µg/L	50.0	82.1	30-130			
4-Nitrophenol	27.8	10	µg/L	50.0	55.6	10-130		V-06	
N-Nitrosodiphenylamine/Diphenylamine	43.8	10	µg/L	50.0	87.6	40-140			
N-Nitrosodi-n-propylamine	40.0	10	µg/L	50.0	80.1	40-140			
Pentachloronitrobenzene	43.4	10	µg/L	50.0	86.7	40-140			
Pentachlorophenol	36.8	10	µg/L	50.0	73.5	30-130			
Phenol	18.4	10	µg/L	50.0	36.8	20-130			
Pyridine	20.4	5.0	µg/L	50.0	40.8	10-140			†
1,2,4,5-Tetrachlorobenzene	42.2	10	µg/L	50.0	84.4	40-140			
1,2,4-Trichlorobenzene	35.9	5.0	µg/L	50.0	71.9	40-140			
2,4,5-Trichlorophenol	45.6	10	µg/L	50.0	91.1	30-130			
2,4,6-Trichlorophenol	44.2	10	µg/L	50.0	88.3	30-130			

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
<b>Batch B327956 - SW-846 3510C</b>									
<b>LCS (B327956-BS1)</b>									
Prepared: 01/07/23 Analyzed: 01/12/23									
Surrogate: 2-Fluorophenol	112		µg/L	200	55.9	15-110			
Surrogate: Phenol-d6	80.8		µg/L	200	40.4	15-110			
Surrogate: Nitrobenzene-d5	84.6		µg/L	100	84.6	30-130			
Surrogate: 2-Fluorobiphenyl	89.5		µg/L	100	89.5	30-130			
Surrogate: 2,4,6-Tribromophenol	204		µg/L	200	102	15-110			
Surrogate: p-Terphenyl-d14	88.7		µg/L	100	88.7	30-130			
<b>LCS Dup (B327956-BSD1)</b>									
Prepared: 01/07/23 Analyzed: 01/12/23									
Aniline	28.5	5.0	µg/L	50.0	56.9	40-140	8.96	50	V-05 †‡
Bis(2-chloroethoxy)methane	40.4	10	µg/L	50.0	80.9	40-140	1.09	20	
Bis(2-chloroethyl)ether	38.7	10	µg/L	50.0	77.5	40-140	5.50	20	
Bis(2-chloroisopropyl)ether	39.1	10	µg/L	50.0	78.2	40-140	1.80	20	
Bis(2-Ethylhexyl)phthalate	37.2	10	µg/L	50.0	74.5	40-140	2.99	20	
4-Bromophenylphenylether	39.8	10	µg/L	50.0	79.6	40-140	7.69	20	
Butylbenzylphthalate	37.8	10	µg/L	50.0	75.6	40-140	3.99	20	
Carbazole	43.0	10	µg/L	50.0	85.9	40-140	4.08	20	
4-Chloroaniline	36.0	10	µg/L	50.0	72.0	40-140	4.03	20	†
4-Chloro-3-methylphenol	40.2	10	µg/L	50.0	80.5	30-130	2.41	20	
2-Chloronaphthalene	35.6	10	µg/L	50.0	71.1	40-140	15.0	20	
2-Chlorophenol	38.0	10	µg/L	50.0	76.0	30-130	1.97	20	
4-Chlorophenylphenylether	41.6	10	µg/L	50.0	83.2	40-140	3.03	20	
Dibenzofuran	41.9	5.0	µg/L	50.0	83.8	40-140	4.71	20	
Di-n-butylphthalate	39.9	10	µg/L	50.0	79.7	40-140	4.75	20	
3,3-Dichlorobenzidine	50.4	10	µg/L	50.0	101	40-140	4.86	20	†‡
2,4-Dichlorophenol	40.3	10	µg/L	50.0	80.6	30-130	0.672	20	
Diethylphthalate	40.1	10	µg/L	50.0	80.2	40-140	5.48	20	
2,4-Dimethylphenol	40.3	10	µg/L	50.0	80.6	30-130	4.51	20	
Dimethylphthalate	42.4	10	µg/L	50.0	84.7	40-140	1.73	50	
4,6-Dinitro-2-methylphenol	40.8	10	µg/L	50.0	81.5	30-130	3.21	50	
2,4-Dinitrophenol	35.8	10	µg/L	50.0	71.5	30-130	3.46	50	
2,4-Dinitrotoluene	43.3	10	µg/L	50.0	86.6	40-140	6.87	20	
2,6-Dinitrotoluene	45.3	10	µg/L	50.0	90.5	40-140	2.68	20	
Di-n-octylphthalate	33.6	10	µg/L	50.0	67.1	40-140	3.37	20	
Hexachlorobenzene	43.9	10	µg/L	50.0	87.7	40-140	4.63	20	
Hexachlorobutadiene	33.4	10	µg/L	50.0	66.9	40-140	1.84	20	
Hexachlorocyclopentadiene	27.0	10	µg/L	50.0	53.9	30-140	5.03	50	V-05
Hexachloroethane	29.8	10	µg/L	50.0	59.7	40-140	0.934	50	
Isophorone	43.0	10	µg/L	50.0	86.0	40-140	2.12	20	
2-Methylphenol	37.4	10	µg/L	50.0	74.8	30-130	0.0802	20	
3/4-Methylphenol	37.9	10	µg/L	50.0	75.8	30-130	5.45	20	
2-Nitroaniline	39.4	10	µg/L	50.0	78.8	40-140	2.06	20	
3-Nitroaniline	41.5	10	µg/L	50.0	83.1	40-140	0.456	20	†
4-Nitroaniline	43.5	10	µg/L	50.0	87.0	40-140	3.03	20	
Nitrobenzene	38.5	10	µg/L	50.0	77.0	40-140	2.13	20	
2-Nitrophenol	40.5	10	µg/L	50.0	81.0	30-130	1.35	20	
4-Nitrophenol	28.3	10	µg/L	50.0	56.7	10-130	1.89	50	V-06 ‡
N-Nitrosodiphenylamine/Diphenylamine	42.8	10	µg/L	50.0	85.7	40-140	2.17	20	
N-Nitrosodi-n-propylamine	41.2	10	µg/L	50.0	82.4	40-140	2.86	20	
Pentachloronitrobenzene	43.3	10	µg/L	50.0	86.6	40-140	0.138	20	
Pentachlorophenol	35.0	10	µg/L	50.0	69.9	30-130	4.99	50	
Phenol	18.8	10	µg/L	50.0	37.6	20-130	2.15	20	
Pyridine	17.6	5.0	µg/L	50.0	35.1	10-140	15.0	50	†

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

**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
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**Batch B327956 - SW-846 3510C**

<b>LCS Dup (B327956-BSD1)</b>	Prepared: 01/07/23 Analyzed: 01/12/23							
1,2,4,5-Tetrachlorobenzene	40.2	10	µg/L	50.0	80.4	40-140	4.88	20
1,2,4-Trichlorobenzene	35.5	5.0	µg/L	50.0	71.1	40-140	1.12	20
2,4,5-Trichlorophenol	44.0	10	µg/L	50.0	87.9	30-130	3.62	20
2,4,6-Trichlorophenol	42.0	10	µg/L	50.0	84.1	30-130	4.92	50
Surrogate: 2-Fluorophenol	108		µg/L	200	54.2	15-110		
Surrogate: Phenol-d6	79.6		µg/L	200	39.8	15-110		
Surrogate: Nitrobenzene-d5	80.4		µg/L	100	80.4	30-130		
Surrogate: 2-Fluorobiphenyl	84.6		µg/L	100	84.6	30-130		
Surrogate: 2,4,6-Tribromophenol	193		µg/L	200	96.5	15-110		
Surrogate: p-Terphenyl-d14	84.6		µg/L	100	84.6	30-130		

**Batch B328260 - SW-846 3510C**

<b>Blank (B328260-BLK1)</b>	Prepared: 01/09/23 Analyzed: 01/11/23							
Acenaphthene (SIM)	ND	0.30	µg/L					
Acenaphthylene (SIM)	ND	0.20	µg/L					
Anthracene (SIM)	ND	0.20	µg/L					
Benzo(a)anthracene (SIM)	ND	0.050	µg/L					
Benzo(a)pyrene (SIM)	ND	0.10	µg/L					
Benzo(b)fluoranthene (SIM)	ND	0.050	µg/L					
Benzo(g,h,i)perylene (SIM)	ND	0.50	µg/L					
Benzo(k)fluoranthene (SIM)	ND	0.20	µg/L					
Chrysene (SIM)	ND	0.20	µg/L					
Dibenz(a,h)anthracene (SIM)	ND	0.10	µg/L					
Fluoranthene (SIM)	ND	0.50	µg/L					
Fluorene (SIM)	ND	1.0	µg/L					
Indeno(1,2,3-cd)pyrene (SIM)	ND	0.10	µg/L					
2-Methylnaphthalene (SIM)	ND	1.0	µg/L					
Naphthalene (SIM)	ND	1.0	µg/L					
Phenanthrene (SIM)	ND	0.050	µg/L					
Pyrene (SIM)	ND	1.0	µg/L					
Surrogate: Nitrobenzene-d5	50.6		µg/L	100	50.6	30-130		
Surrogate: 2-Fluorobiphenyl	56.3		µg/L	100	56.3	30-130		
Surrogate: p-Terphenyl-d14	74.6		µg/L	100	74.6	30-130		

<b>LCS (B328260-BS1)</b>	Prepared: 01/09/23 Analyzed: 01/11/23							
Acenaphthene (SIM)	32.1	6.0	µg/L	50.0	64.2	40-140		
Acenaphthylene (SIM)	34.6	4.0	µg/L	50.0	69.2	40-140		
Anthracene (SIM)	37.1	4.0	µg/L	50.0	74.2	40-140		
Benzo(a)anthracene (SIM)	36.1	1.0	µg/L	50.0	72.2	40-140		
Benzo(a)pyrene (SIM)	33.3	2.0	µg/L	50.0	66.7	40-140		
Benzo(b)fluoranthene (SIM)	36.0	1.0	µg/L	50.0	72.0	40-140		
Benzo(g,h,i)perylene (SIM)	34.9	10	µg/L	50.0	69.8	40-140		
Benzo(k)fluoranthene (SIM)	37.5	4.0	µg/L	50.0	75.0	40-140		
Chrysene (SIM)	33.8	4.0	µg/L	50.0	67.5	40-140		
Dibenz(a,h)anthracene (SIM)	35.9	2.0	µg/L	50.0	71.8	40-140		
Fluoranthene (SIM)	32.5	10	µg/L	50.0	65.1	40-140		
Fluorene (SIM)	34.5	20	µg/L	50.0	69.0	40-140		
Indeno(1,2,3-cd)pyrene (SIM)	38.3	2.0	µg/L	50.0	76.6	40-140		
2-Methylnaphthalene (SIM)	34.0	20	µg/L	50.0	68.0	40-140		
Naphthalene (SIM)	28.5	20	µg/L	50.0	57.1	40-140		
Phenanthrene (SIM)	34.5	1.0	µg/L	50.0	69.0	40-140		
Pyrene (SIM)	34.3	20	µg/L	50.0	68.6	40-140		

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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
<b>Batch B328260 - SW-846 3510C</b>									
<b>LCS (B328260-BS1)</b>									
Prepared: 01/09/23 Analyzed: 01/11/23									
Surrogate: Nitrobenzene-d5	56.0		µg/L	100	56.0	30-130			
Surrogate: 2-Fluorobiphenyl	62.9		µg/L	100	62.9	30-130			
Surrogate: p-Terphenyl-d14	77.8		µg/L	100	77.8	30-130			
<b>LCS Dup (B328260-BSD1)</b>									
Prepared: 01/09/23 Analyzed: 01/11/23									
Acenaphthene (SIM)	31.7	6.0	µg/L	50.0	63.5	40-140	1.19	20	
Acenaphthylene (SIM)	34.0	4.0	µg/L	50.0	68.0	40-140	1.75	20	
Anthracene (SIM)	37.0	4.0	µg/L	50.0	74.0	40-140	0.324	20	
Benzo(a)anthracene (SIM)	35.7	1.0	µg/L	50.0	71.4	40-140	1.17	20	
Benzo(a)pyrene (SIM)	33.1	2.0	µg/L	50.0	66.1	40-140	0.843	20	
Benzo(b)fluoranthene (SIM)	35.6	1.0	µg/L	50.0	71.1	40-140	1.29	20	
Benzo(g,h,i)perylene (SIM)	35.6	10	µg/L	50.0	71.1	40-140	1.82	20	
Benzo(k)fluoranthene (SIM)	37.3	4.0	µg/L	50.0	74.6	40-140	0.588	20	
Chrysene (SIM)	33.6	4.0	µg/L	50.0	67.2	40-140	0.535	20	
Dibenz(a,h)anthracene (SIM)	36.6	2.0	µg/L	50.0	73.2	40-140	1.88	20	
Fluoranthene (SIM)	31.9	10	µg/L	50.0	63.8	40-140	2.05	20	
Fluorene (SIM)	33.8	20	µg/L	50.0	67.6	40-140	1.99	20	
Indeno(1,2,3-cd)pyrene (SIM)	38.8	2.0	µg/L	50.0	77.5	40-140	1.25	20	
2-Methylnaphthalene (SIM)	32.6	20	µg/L	50.0	65.3	40-140	4.02	20	
Naphthalene (SIM)	27.1	20	µg/L	50.0	54.2	40-140	5.10	20	
Phenanthrene (SIM)	34.6	1.0	µg/L	50.0	69.1	40-140	0.232	20	
Pyrene (SIM)	34.8	20	µg/L	50.0	69.5	40-140	1.33	20	
Surrogate: Nitrobenzene-d5	56.1		µg/L	100	56.1	30-130			
Surrogate: 2-Fluorobiphenyl	63.4		µg/L	100	63.4	30-130			
Surrogate: p-Terphenyl-d14	78.9		µg/L	100	78.9	30-130			

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

**QUALITY CONTROL****Polychlorinated Biphenyls By GC/ECD - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch B328090 - SW-846 3510C**

<b>Blank (B328090-BLK1)</b>	Prepared: 01/09/23 Analyzed: 01/10/23					
Aroclor-1016	ND	0.20	µg/L			
Aroclor-1016 [2C]	ND	0.20	µg/L			
Aroclor-1221	ND	0.20	µg/L			
Aroclor-1221 [2C]	ND	0.20	µg/L			
Aroclor-1232	ND	0.20	µg/L			
Aroclor-1232 [2C]	ND	0.20	µg/L			
Aroclor-1242	ND	0.20	µg/L			
Aroclor-1242 [2C]	ND	0.20	µg/L			
Aroclor-1248	ND	0.20	µg/L			
Aroclor-1248 [2C]	ND	0.20	µg/L			
Aroclor-1254	ND	0.20	µg/L			
Aroclor-1254 [2C]	ND	0.20	µg/L			
Aroclor-1260	ND	0.20	µg/L			
Aroclor-1260 [2C]	ND	0.20	µg/L			
Aroclor-1262	ND	0.20	µg/L			
Aroclor-1262 [2C]	ND	0.20	µg/L			
Aroclor-1268	ND	0.20	µg/L			
Aroclor-1268 [2C]	ND	0.20	µg/L			
Surrogate: Decachlorobiphenyl	1.29		µg/L	2.00	64.7	30-150
Surrogate: Decachlorobiphenyl [2C]	1.24		µg/L	2.00	62.0	30-150
Surrogate: Tetrachloro-m-xylene	1.50		µg/L	2.00	74.9	30-150
Surrogate: Tetrachloro-m-xylene [2C]	1.33		µg/L	2.00	66.5	30-150

<b>LCS (B328090-BS1)</b>	Prepared: 01/09/23 Analyzed: 01/10/23					
Aroclor-1016	0.50	0.20	µg/L	0.500	101	40-140
Aroclor-1016 [2C]	0.45	0.20	µg/L	0.500	89.1	40-140
Aroclor-1260	0.45	0.20	µg/L	0.500	90.1	40-140
Aroclor-1260 [2C]	0.42	0.20	µg/L	0.500	83.9	40-140
Surrogate: Decachlorobiphenyl	1.12		µg/L	2.00	56.0	30-150
Surrogate: Decachlorobiphenyl [2C]	1.08		µg/L	2.00	53.9	30-150
Surrogate: Tetrachloro-m-xylene	1.71		µg/L	2.00	85.3	30-150
Surrogate: Tetrachloro-m-xylene [2C]	1.52		µg/L	2.00	75.9	30-150

<b>LCS Dup (B328090-BSD1)</b>	Prepared: 01/09/23 Analyzed: 01/10/23					
Aroclor-1016	0.53	0.20	µg/L	0.500	106	40-140
Aroclor-1016 [2C]	0.46	0.20	µg/L	0.500	92.4	40-140
Aroclor-1260	0.47	0.20	µg/L	0.500	94.9	40-140
Aroclor-1260 [2C]	0.44	0.20	µg/L	0.500	88.2	40-140
Surrogate: Decachlorobiphenyl	1.94		µg/L	2.00	96.8	30-150
Surrogate: Decachlorobiphenyl [2C]	1.87		µg/L	2.00	93.5	30-150
Surrogate: Tetrachloro-m-xylene	1.69		µg/L	2.00	84.7	30-150
Surrogate: Tetrachloro-m-xylene [2C]	1.51		µg/L	2.00	75.5	30-150

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch B327955 - SW-846 3510C**

<b>Blank (B327955-BLK1)</b>					Prepared: 01/07/23 Analyzed: 01/09/23				
CT ETPH	ND	0.15	mg/L						
Surrogate: 2-Fluorobiphenyl	0.0810		mg/L	0.100		81.0	50-150		
<b>LCS (B327955-BS1)</b>					Prepared: 01/07/23 Analyzed: 01/09/23				
CT ETPH	0.719	0.15	mg/L	1.00		71.9	60-120		
Surrogate: 2-Fluorobiphenyl	0.0654		mg/L	0.100		65.4	50-150		
<b>LCS Dup (B327955-BSD1)</b>					Prepared: 01/07/23 Analyzed: 01/09/23				
CT ETPH	0.739	0.15	mg/L	1.00		73.9	60-120	2.67	30
Surrogate: 2-Fluorobiphenyl	0.0717		mg/L	0.100		71.7	50-150		

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch B328016 - SW-846 3005A**

<b>Blank (B328016-BLK1)</b>	Prepared: 01/09/23 Analyzed: 01/11/23							
Antimony	ND	1.0	µg/L					
Barium	ND	10	µg/L					
Cadmium	ND	0.20	µg/L					
Copper	ND	1.0	µg/L					
Lead	ND	0.50	µg/L					
Nickel	ND	5.0	µg/L					
Selenium	ND	5.0	µg/L					
Thallium	ND	0.20	µg/L					
Vanadium	ND	5.0	µg/L					
Zinc	ND	10	µg/L					
<b>Blank (B328016-BLK2)</b>	Prepared: 01/09/23 Analyzed: 01/12/23							
Beryllium	ND	0.40	µg/L					
<b>LCS (B328016-BS1)</b>	Prepared: 01/09/23 Analyzed: 01/11/23							
Antimony	557	10	µg/L	500	111	80-120		
Barium	533	100	µg/L	500	107	80-120		
Cadmium	516	2.0	µg/L	500	103	80-120		
Copper	968	10	µg/L	1000	96.8	80-120		
Lead	518	5.0	µg/L	500	104	80-120		
Nickel	476	50	µg/L	500	95.2	80-120		
Selenium	493	50	µg/L	500	98.6	80-120		
Thallium	530	2.0	µg/L	500	106	80-120		
Vanadium	519	50	µg/L	500	104	80-120		
Zinc	940	100	µg/L	1000	94.0	80-120		
<b>LCS (B328016-BS2)</b>	Prepared: 01/09/23 Analyzed: 01/12/23							
Beryllium	507	4.0	µg/L	500	101	80-120		
<b>LCS Dup (B328016-BSD1)</b>	Prepared: 01/09/23 Analyzed: 01/11/23							
Antimony	555	10	µg/L	500	111	80-120	0.358	20
Barium	527	100	µg/L	500	105	80-120	1.03	20
Cadmium	512	2.0	µg/L	500	102	80-120	0.780	20
Copper	961	10	µg/L	1000	96.1	80-120	0.715	20
Lead	508	5.0	µg/L	500	102	80-120	1.91	20
Nickel	475	50	µg/L	500	95.0	80-120	0.206	20
Selenium	496	50	µg/L	500	99.2	80-120	0.606	20
Thallium	527	2.0	µg/L	500	105	80-120	0.553	20
Vanadium	521	50	µg/L	500	104	80-120	0.234	20
Zinc	967	100	µg/L	1000	96.7	80-120	2.75	20
<b>LCS Dup (B328016-BSD2)</b>	Prepared: 01/09/23 Analyzed: 01/12/23							
Beryllium	500	4.0	µg/L	500	100	80-120	1.34	20

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
<b>Batch B328016 - SW-846 3005A</b>									
<b>Duplicate (B328016-DUP1)</b>									
<b>Source: 23A0661-01</b> Prepared: 01/09/23 Analyzed: 01/11/23									
Antimony	ND	1.0	µg/L		ND		NC	20	
Barium	63.5	10	µg/L		61.2		3.57	20	
Cadmium	ND	0.20	µg/L		ND		NC	20	
Copper	3.44	1.0	µg/L		3.50		1.84	20	
Lead	0.636	0.50	µg/L		0.616		3.09	20	
Nickel	6.74	5.0	µg/L		7.62		12.3	20	
Selenium	ND	5.0	µg/L		ND		NC	20	
Thallium	ND	0.20	µg/L		ND		NC	20	
Vanadium	ND	5.0	µg/L		ND		NC	20	
Zinc	ND	10	µg/L		ND		NC	20	
<b>Duplicate (B328016-DUP2)</b>									
<b>Source: 23A0661-01</b> Prepared: 01/09/23 Analyzed: 01/12/23									
Beryllium	ND	0.40	µg/L		ND		NC	20	
<b>Matrix Spike (B328016-MS1)</b>									
<b>Source: 23A0661-01</b> Prepared: 01/09/23 Analyzed: 01/11/23									
Antimony	533	10	µg/L	500	ND 107	75-125			
Barium	568	100	µg/L	500	61.2 101	75-125			
Cadmium	490	2.0	µg/L	500	ND 98.1	75-125			
Copper	936	10	µg/L	1000	3.50 93.2	75-125			
Lead	498	5.0	µg/L	500	ND 99.5	75-125			
Nickel	460	50	µg/L	500	7.62 90.4	75-125			
Selenium	488	50	µg/L	500	ND 97.5	75-125			
Thallium	509	2.0	µg/L	500	ND 102	75-125			
Vanadium	500	50	µg/L	500	ND 100	75-125			
Zinc	957	100	µg/L	1000	ND 95.7	75-125			
<b>Matrix Spike (B328016-MS2)</b>									
<b>Source: 23A0661-01</b> Prepared: 01/09/23 Analyzed: 01/12/23									
Beryllium	501	4.0	µg/L	500	ND 100	75-125			
<b>Batch B328341 - SW-846 7470A Prep</b>									
<b>Blank (B328341-BLK1)</b> Prepared: 01/09/23 Analyzed: 01/11/23									
Mercury	ND	0.00010	mg/L						
<b>LCS (B328341-BS1)</b> Prepared: 01/09/23 Analyzed: 01/11/23									
Mercury	0.00385	0.00010	mg/L	0.00402		95.7	80-120		
<b>LCS Dup (B328341-BSD1)</b> Prepared: 01/09/23 Analyzed: 01/11/23									
Mercury	0.00376	0.00010	mg/L	0.00402		93.5	80-120	2.26	20
<b>Batch B328529 - SW-846 3005A</b>									
<b>Blank (B328529-BLK1)</b> Prepared: 01/12/23 Analyzed: 01/16/23									
Arsenic	ND	0.80	µg/L						
Chromium	ND	1.0	µg/L						
Silver	ND	0.20	µg/L						

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch B328529 - SW-846 3005A**

<b>LCS (B328529-BS1)</b>							Prepared: 01/12/23 Analyzed: 01/16/23		
Arsenic	487	8.0	µg/L	500	97.4	80-120			
Chromium	495	10	µg/L	500	99.1	80-120			
Silver	469	2.0	µg/L	500	93.8	80-120			
<b>LCS Dup (B328529-BSD1)</b>							Prepared: 01/12/23 Analyzed: 01/16/23		
Arsenic	494	8.0	µg/L	500	98.7	80-120	1.42	20	
Chromium	485	10	µg/L	500	97.0	80-120	2.15	20	
Silver	483	2.0	µg/L	500	96.5	80-120	2.87	20	



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**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**  
*SW-846 8082A*

LCS

Lab Sample ID: B328090-BS1 Date(s) Analyzed: 01/10/2023 01/10/2023

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	0.50	
	2	0.000	0.000	0.000	0.45	10.5
Aroclor-1260	1	0.000	0.000	0.000	0.45	
	2	0.000	0.000	0.000	0.42	6.9



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**IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES**

*SW-846 8082A*

LCS Dup

Lab Sample ID:	B328090-BSD1	Date(s) Analyzed:	01/10/2023	01/10/2023
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	0.53	
	2	0.000	0.000	0.000	0.46	14.1
Aroclor-1260	1	0.000	0.000	0.000	0.47	
	2	0.000	0.000	0.000	0.44	6.6

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**FLAG/QUALIFIER SUMMARY**

\* QC result is outside of established limits.

† Wide recovery limits established for difficult compound.

‡ Wide RPD limits established for difficult compound.

# Data exceeded client recommended or regulatory level

ND Not Detected

RL Reporting Limit is at the level of quantitation (LOQ)

DL Detection Limit is the lower limit of detection determined by the MDL study

MCL Maximum Contaminant Level

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

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

- L-01 Laboratory fortified blank/laboratory control sample recovery outside of control limits. Data validation is not affected since all results are "not detected" for all samples in this batch for this compound and bias is on the high side.
- L-03 Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the low side.
- RL-03 Elevated reporting limit based on lowest point in calibration.
- V-05 Requested reporting limit not met.
- V-05 Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
- V-06 Continuing calibration verification (CCV) did not meet method specifications and was biased on the high 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.

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

Analyte	Certifications
<b>CTDEP ETPH in Soil</b>	
CT ETPH	CT
<b>CTDEP ETPH in Water</b>	
CT ETPH	CT
<b>SW-846 6020B in Water</b>	
Antimony	CT,NH,NY,ME,VA,NC
Arsenic	CT,NH,NY,ME,VA,NC
Barium	CT,NH,NY,ME,VA,NC
Beryllium	CT,NH,NY,ME,VA,NC
Cadmium	CT,NH,NY,RI,ME,VA,NC
Chromium	CT,NH,NY,ME,VA,NC
Copper	CT,NH,NY,ME,VA,NC
Lead	CT,NH,NY,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
Vanadium	CT,NH,NY,ME,VA,NC
Zinc	CT,NH,NY,ME,VA,NC
<b>SW-846 7470A in Water</b>	
Mercury	CT,NH,NY,NC,ME,VA
<b>SW-846 8082A in Water</b>	
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
<b>SW-846 8260D in Water</b>	
Acetone	CT,NH,NY,ME
Acrylonitrile	CT,NY,ME
Benzene	CT,NH,NY,ME
Bromobenzene	NY
Bromodichloromethane	CT,NH,NY,ME

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

Analyte	Certifications
<b><i>SW-846 8260D in Water</i></b>	
Bromoform	CT,NH,NY,ME
Bromomethane	CT,NH,NY,ME
2-Butanone (MEK)	CT,NH,NY,ME
n-Butylbenzene	NY,ME
sec-Butylbenzene	NY,ME
tert-Butylbenzene	NY,ME
Carbon Disulfide	CT,NH,NY,ME
Carbon Tetrachloride	CT,NH,NY,ME
Chlorobenzene	CT,NH,NY,ME
Chlorodibromomethane	CT,NH,NY,ME
Chloroethane	CT,NH,NY,ME
Chloroform	CT,NH,NY,ME
Chloromethane	CT,NH,NY,ME
2-Chlorotoluene	NY,ME
4-Chlorotoluene	NY,ME
1,2-Dibromo-3-chloropropane (DBCP)	NY
1,2-Dibromoethane (EDB)	NY
Dibromomethane	NH,NY,ME
1,2-Dichlorobenzene	CT,NY,ME
1,3-Dichlorobenzene	CT,NH,NY,ME
1,4-Dichlorobenzene	CT,NH,NY,ME
trans-1,4-Dichloro-2-butene	NH,NY,ME
Dichlorodifluoromethane (Freon 12)	NH,NY,ME
1,1-Dichloroethane	CT,NH,NY,ME
1,2-Dichloroethane	CT,NH,NY,ME
1,1-Dichloroethylene	CT,NH,NY,ME
cis-1,2-Dichloroethylene	NY,ME
trans-1,2-Dichloroethylene	CT,NH,NY,ME
1,2-Dichloropropane	CT,NH,NY,ME
1,3-Dichloropropane	NY,ME
2,2-Dichloropropane	NH,NY,ME
1,1-Dichloropropene	NH,NY,ME
cis-1,3-Dichloropropene	CT,NH,NY,ME
trans-1,3-Dichloropropene	CT,NH,NY,ME
Ethylbenzene	CT,NH,NY,ME
Hexachlorobutadiene	CT,NH,NY,ME
2-Hexanone (MBK)	CT,NH,NY,ME
Isopropylbenzene (Cumene)	NY,ME
p-Isopropyltoluene (p-Cymene)	CT,NH,NY,ME
Methyl tert-Butyl Ether (MTBE)	CT,NH,NY,ME
Methylene Chloride	CT,NH,NY,ME
4-Methyl-2-pentanone (MIBK)	CT,NH,NY,ME
Naphthalene	NH,NY,ME
n-Propylbenzene	CT,NH,NY,ME
Styrene	CT,NH,NY,ME
1,1,1,2-Tetrachloroethane	CT,NH,NY,ME
1,1,2,2-Tetrachloroethane	CT,NH,NY,ME

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

Analyte	Certifications
<b><i>SW-846 8260D in Water</i></b>	
Tetrachloroethylene	CT,NH,NY,ME
Toluene	CT,NH,NY,ME
1,2,3-Trichlorobenzene	NH,NY,ME
1,2,4-Trichlorobenzene	CT,NH,NY,ME
1,1,1-Trichloroethane	CT,NH,NY,ME
1,1,2-Trichloroethane	CT,NH,NY,ME
Trichloroethylene	CT,NH,NY,ME
Trichlorofluoromethane (Freon 11)	CT,NH,NY,ME
1,2,3-Trichloropropane	NH,NY,ME
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	NY
1,2,4-Trimethylbenzene	NY,ME
1,3,5-Trimethylbenzene	NY,ME
Vinyl Chloride	CT,NH,NY,ME
m+p Xylene	NH,NY,ME
o-Xylene	NH,NY,ME
<b><i>SW-846 8270E in Water</i></b>	
Aniline	CT,NY
Bis(2-chloroethoxy)methane	CT,NY,NH
Bis(2-chloroethyl)ether	CT,NY,NH
Bis(2-chloroisopropyl)ether	CT,NY,NH
Bis(2-Ethylhexyl)phthalate	CT,NY,NH
4-Bromophenylphenylether	CT,NY,NH
Butylbenzylphthalate	CT,NY,NH
4-Chloroaniline	CT,NY,NH
4-Chloro-3-methylphenol	CT,NY,NH
2-Chloronaphthalene	CT,NY,NH
2-Chlorophenol	CT,NY,NH
4-Chlorophenylphenylether	CT,NY,NH
Dibenzofuran	CT,NY,NH
Di-n-butylphthalate	CT,NY,NH
1,2-Dichlorobenzene	NY
1,3-Dichlorobenzene	NY
1,4-Dichlorobenzene	NY
3,3-Dichlorobenzidine	CT,NY,NH
2,4-Dichlorophenol	CT,NY,NH
Diethylphthalate	CT,NY,NH
2,4-Dimethylphenol	CT,NY,NH
Dimethylphthalate	CT,NY,NH
4,6-Dinitro-2-methylphenol	CT,NY,NH
2,4-Dinitrophenol	CT,NY,NH
2,4-Dinitrotoluene	CT,NY,NH
2,6-Dinitrotoluene	CT,NY,NH
Di-n-octylphthalate	CT,NY,NH
Hexachlorobenzene	CT,NY,NH
Hexachlorobutadiene	CT,NY,NH
Hexachlorocyclopentadiene	CT,NY,NH



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#### CERTIFICATIONS

##### Certified Analyses included in this Report

Analyte	Certifications
<b><i>SW-846 8270E in Water</i></b>	
Hexachloroethane	CT,NY,NH
Isophorone	CT,NY,NH
2-Methylphenol	CT,NY,NH
3/4-Methylphenol	CT,NY,NH
Naphthalene	CT,NY,NH
2-Nitroaniline	CT,NY,NH
3-Nitroaniline	CT,NY,NH
4-Nitroaniline	CT,NY,NH
Nitrobenzene	CT,NY,NH
2-Nitrophenol	CT,NY,NH
4-Nitrophenol	CT,NY,NH
N-Nitrosodi-n-propylamine	CT,NY,NH
Pentachlorophenol	CT,NY,NH
Phenol	CT,NY,NH
Pyridine	CT,NY,NH
1,2,4,5-Tetrachlorobenzene	NY
1,2,4-Trichlorobenzene	CT,NY,NH
2,4,5-Trichlorophenol	CT,NY,NH
2,4,6-Trichlorophenol	CT,NY,NH

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

Code	Description	Number	Expires
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2023
NC	North Carolina Div. of Water Quality	652	12/31/2023
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2023
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2023

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 1800 Elm Street SE  
 Minneapolis, MN 55414

Doc # 381 Rev 4\_01/08/2020

		ANALYSIS REQUESTED														
		7-Day PFAS					10-Day (std) PFAS					Due Date: Rush+Approval Required				
		Requested Turnaround Time	10-Day	10-Day (std)	Due Date:	Field Filtered	Field Filtered	Field Filtered	Field Filtered	Field Filtered	Orthophosphate Samples	Orthophosphate Samples	Orthophosphate Samples	Orthophosphate Samples	Orthophosphate Samples	
Company Name:	Weston & Sampson															
Address:	712 Brook St, Suite 103															
Phone:	(860) 513-1473															
Project Name:	Hydeville Mill															
Project Location:	Stafford, CT															
Project Number:																
Project Manager:	Lewis Tamaccio															
Pace Analytical Quote Name/Number:																
Invoice Recipient:	Weston & Sampson															
Sampled By:	Richard Manandhar															
Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Compl. Date/Time	Matrix Code	Core Code	Vials	Glass	Plastic	Bacteria	ENCORE					
1	Mnr-1	1/5/13	1/5/13	Grb	Grb	V	2	0	1	X	X					
2	Mnr-2	1/5/13	1/5/13	Grb	Grb	V	2	4	3	X	X					
3	Mnr-3	1/5/13	1/5/13	Grb	Grb	V	2	0	1	X	X					
4	Duf-2	1/5/13	—	Grb	Grb	V	2	6	1	X	X					
	Duf-3	1/5/13	—	Grb	Grb	V	2	6	2	X	X					
Relinquished by: (Signature)	Received by: (Signature)	Date/Time:	Date/Time:	Client Comments:												
<i>JSE</i>	<i>JSE</i>	1/5/13 6:08:52	1/5/13 6:08:52	CT Branched												
Relinquished by: (Signature)	Received by: (Signature)	Date/Time:	Date/Time:	Detection Limit Requirements												
<i>JSE</i>	<i>JSE</i>	1/5/13 6:08:52	1/5/13 6:08:52	MA												
Received by: (Signature)	Received by: (Signature)	Date/Time:	Date/Time:	Special Requirements												
<i>JSE</i>	<i>JSE</i>	1/5/13 6:08:52	1/5/13 6:08:52	<input type="checkbox"/> MA MCP Required												
Relinquished by: (Signature)	Received by: (Signature)	Date/Time:	Date/Time:	<input type="checkbox"/> MCP Certification Form Required												
<i>JSE</i>	<i>JSE</i>	1/5/13 6:08:52	1/5/13 6:08:52	<input type="checkbox"/> CT RCP Required												
Received by: (Signature)	Received by: (Signature)	Date/Time:	Date/Time:	<input type="checkbox"/> RCP Certification Form Required												
<i>JSE</i>	<i>JSE</i>	1/5/13 6:08:52	1/5/13 6:08:52	<input type="checkbox"/> MA State DW Required												
Relinquished by: (Signature)	Received by: (Signature)	Date/Time:	Date/Time:	<input type="checkbox"/> PWSID #												
<i>JSE</i>	<i>JSE</i>	1/5/13 6:08:52	1/5/13 6:08:52	<input type="checkbox"/> Other												
Project Entity	Government	Municipality	<input type="checkbox"/> MWRA	<input type="checkbox"/> WRTA	<input type="checkbox"/> Other	<input type="checkbox"/> Chromatogram	<input type="checkbox"/> AHA-LAP, LLC									
	Federal	21 J	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
	City	Brownfield	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
Lab Comments:																

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

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

**2 Preservation Codes:**  
 I = Iced  
 H = HCl  
 M = Methanol  
 N = Nitric Acid  
 S = Sulfuric Acid  
 B = Sodium Bisulfate  
 X = Sodium Hydroxide  
 T = Sodium Thiosulfate  
 O = Other (please define)

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

39 Spruce St.  
East Longmeadow, MA. 01028  
P: 413-525-2332  
F: 413-525-6405  
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Doc# 277 Rev 6 July 2022

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	<u>WSS</u>	Received By	<u>M</u>	Date	<u>1/6/23</u>	Time	<u>1530</u>
How were the samples received?	In Cooler	<u>T</u>	No Cooler		On Ice	<u>T</u>	No Ice
Were samples within Temperature?	Direct From Sample		Within	Ambient		Melted Ice	
Was Custody Seal In tact?	Within		By Gun #	<u>S</u>	Actual Temp	<u>26,20</u>	
Was COC Relinquished ?	By Blank #		Actual Temp				
Are there broken/leaking/loose caps on any samples?	NA		Were Samples Tampered with?		NA		
Is COC in ink/ Legible?	Does Chain Agree With Samples?	<u>F</u>					
Did COC include all pertinent Information?	Client?	<u>T</u>	Were samples received within holding time?				
	Project?	<u>T</u>	Analysis?	<u>T</u>	Sampler Name?	<u>T</u>	
			ID's?	<u>T</u>	Collection Dates/Times?	<u>T</u>	
Are Sample labels filled out and legible?							
Are there Lab to Filters?	<u>F</u>		Who was notified?				
Are there Rushes?	<u>F</u>		Who was notified?				
Are there Short Holds?	<u>F</u>		Who was notified?				
Samples are received within holding time?							
Is there Headspace where applicable?			Is there enough Volume?				
Proper Media/Containers Used?			MS/MSD?	<u>F</u>			
Were trip blanks received?			splitting samples require	<u>NA</u>			
Do All Samples Have the proper pH?	<u>NA</u>	Acid	<u>T</u>	On COC?	<u>T</u>	Base	<u>NA</u>

Unp-	1 Liter Amb.	<u>22</u>	1 Liter Plastic		16 oz Amb.	
HCL-	<u>8</u> 500 mL Amb.		500 mL Plastic		8oz Amb/Clear	
Meoh-	250 mL Amb.		250 mL Plastic	<u>4</u>	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			

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:

--

C:\MSDCHEM\4\DATA\010923\23F009006.D

**CT ETPH Discrimination Check**

Data File Name D23F009006.D  
 Data File Path C:\MSDCHEM\4\DATA\010923\  
 Operator GJB  
 Date Acquired 1/9/1923 11:08  
 Acq. Method File EPH11D.M  
 Sample Name ETPH 1500  
 Instrument Name GCFID4

Name	Ret Time	Target Response	Average Response	*%D+/-20
C-9	0.93	11013722	12803428	14
C-10	1.70	11621663	12803428	9
C-12	2.83	12082073	12803428	6
C-14	3.58	12469116	12803428	3
C-16	4.19	12714114	12803428	1
C-18	4.73	13361633	12803428	-4
C-20	5.25	13015682	12803428	-2
C-22	5.87	13020179	12803428	-2
C-24	6.62	13145116	12803428	-3
C-26	7.43	13242432	12803428	-3
C-28	8.18	13214936	12803428	-3
C-30	8.87	13162267	12803428	-3
C-32	9.51	13206548	12803428	-3
C-34	10.11	13481362	12803428	-5
C-36	10.67	13300584	12803428	-4

**Samples**

23A0661-01  
23A0661-02

\*One compound allowed %D</=50

C:\MSDCHEM\4\DATA\ID010923.SEC\ID23F009007.D

**CT ETPH Discrimination Check**

Data File Name D23F009007.D  
 Data File Path C:\MSDCHEM\4\DATA\ID010923.SEC\  
 Operator GJB  
 Date Acquired 1/9/1923 11:29  
 Acq. Method File EPH11D.M  
 Sample Name ETPH 1500  
 Instrument Name GCFID4

Name	Ret Time	Target Response	Average Response	*%D+/-20
C-9	1.46	9904326	11734285	16
C-10	2.17	10571139	11734285	10
C-12	3.14	11076367	11734285	6
C-14	3.86	11511985	11734285	2
C-16	4.47	11759337	11734285	0
C-18	5.01	12360898	11734285	-5
C-20	5.59	12082365	11734285	-3
C-22	6.30	12046562	11734285	-3
C-24	7.12	12148224	11734285	-4
C-26	7.93	12172807	11734285	-4
C-28	8.67	12104050	11734285	-3
C-30	9.36	12086092	11734285	-3
C-32	9.99	12089298	11734285	-3
C-34	10.58	12267015	11734285	-5
C-36	11.14	11833809	11734285	-1

**Samples**

23A0661-03  
23A0661-04

\*One compound allowed %D</=50



# REASONABLE CONFIDENCE PROTOCOL LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

**Laboratory Name:** Pace New England

**Client:** Weston & Sampson

**Project Location:** Stafford, CT

**Project Number:** 23A0661

**Laboratory Sample ID(s):**

23A0661-01 thru 23A0661-04

**Sample Date(s):**

01/05/2023

**List RCP Methods Used:**

CTDEP ETPH, SW-846 6020B, SW-846 7470A, SW-846 8082A, SW-846 8260D, SW-846 8270E

<b>1</b>	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>1A</b>	Were the method specified preservation and holding time requirements met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>1B</b>	VPH and EPH Methods only: Was the VPH and EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
<b>2</b>	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>3</b>	Were samples received at an appropriate temperature (< 6 degrees C.)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
<b>4</b>	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>5A</b>	Were reporting limits specified or referenced on the chain-of-custody?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>5B</b>	Were these reporting limits met?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>6</b>	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>7</b>	Are project-specific matrix spikes and laboratory duplicates included in this data set?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence."

Lisa A. Worthington

This form may not be altered and all questions must be answered.

**I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.**

Authorized Signature:

Position: Technical Representative

Printed Name: Lisa A. Worthington

Date: 01/27/23

Name of Laboratory: Pace New England

**This certification form is to be used for RCP methods only.**



---

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

February 2, 2023

Lewis Tamaccio  
Weston & Sampson  
712 Brook Street, Suite 103  
Rocky Hill, CT 06067

Project Location: Stafford, CT

Client Job Number:

Project Number: [none]

Laboratory Work Order Number: 23A0663

Enclosed are results of analyses for samples as received by the laboratory on January 6, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Rebecca Faust".

Rebecca Faust  
Project Manager

## Table of Contents

Sample Summary	3
Case Narrative	4
Sample Results	5
23A0663-01	5
23A0663-02	6
Sample Preparation Information	7
QC Data	8
Semivolatile Organic Compounds by - LC/MS-MS	8
B329302	8
Flag/Qualifier Summary	11
Internal standard Area & RT Summary	12
Certifications	17
Chain of Custody/Sample Receipt	18




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Weston & Sampson  
712 Brook Street, Suite 103  
Rocky Hill, CT 06067  
ATTN: Lewis Tamaccio

REPORT DATE: 2/2/2023

PURCHASE ORDER NUMBER:

PROJECT NUMBER: [none]

#### ANALYTICAL SUMMARY

---

WORK ORDER NUMBER: 23A0663

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

PROJECT LOCATION: Stafford, CT

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-2	23A0663-01	Ground Water		SOP-454 PFAS	
dup 3	23A0663-02	Ground Water		SOP-454 PFAS	



---

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#### CASE NARRATIVE SUMMARY

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

#### SOP-454 PFAS

##### Qualifications:

###### D-01

Sample extracted/prepared at a dilution due to sample matrix interference.

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

23A0663-01RE1[MW-2], 23A0663-02RE1[dup 3]

---

###### S-29

Extracted Internal Standard is outside of control limits.

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

###### M2-4:2FTS

S082430-CCV4

###### M2-6:2FTS

23A0663-01RE1[MW-2], S082430-CCV4

###### M2-8:2FTS

S082430-CCV4

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

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

A handwritten signature in black ink, appearing to read "Tod E. Kopyscinski".

Tod E. Kopyscinski  
Laboratory Director

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

Project Location: Stafford, CT

Sample Description:

Work Order: 23A0663

Date Received: 1/6/2023

**Field Sample #:** MW-2

Sampled: 1/5/2023 13:20

**Sample ID:** 23A0663-01Sample Matrix: Ground Water

Sample Flags: D-01

**Semivolatile Organic Compounds by - LC/MS-MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW
Perfluorobutanesulfonic acid (PFBs)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW
Perfluoropentanoic acid (PFPeA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW
Perfluorohexanoic acid (PFHxA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW
11Cl-PF3OUDs (F53B Major)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW
9Cl-PF3ONS (F53B Minor)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW
Perfluorodecanoic acid (PFDA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW
Perfluorododecanoic acid (PFDoA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW
Perfluoroheptanesulfonic acid (PFHpS)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW
N-EtFOSAA (NEtFOSAA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW
N-MeFOSAA (NMeFOSAA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW
Perfluorotetradecanoic acid (PFTA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW
Perfluorotridecanoic acid (PFTrDA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW
Perfluorodecanesulfonic acid (PFDS)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW
Perfluorooctanesulfonamide (FOSA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW
Perfluorononanesulfonic acid (PFNS)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW
Perfluoro-1-hexanesulfonamide (FHxSA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW
Perfluoro-1-butanesulfonamide (FBSA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW
Perfluorohexamersulfonic acid (PFHxS)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW
6:2 Fluorotelomersulfonic acid (6:2FTS A)	5.5	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW
Perfluoropetanesulfonic acid (PFPeS)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW
Perfluoroundecanoic acid (PFUnA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW
Perfluoroheptanoic acid (PFHpA)	4.4	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW
Perfluorooctanoic acid (PFOA)	6.1	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW
Perfluorooctanesulfonic acid (PFOS)	11	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW
Perfluorononanoic acid (PFNA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:05	QNW

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

Project Location: Stafford, CT

Sample Description:

Work Order: 23A0663

Date Received: 1/6/2023

**Field Sample #:** dup 3

Sampled: 1/5/2023 00:00

**Sample ID:** 23A0663-02Sample Matrix: Ground Water

Sample Flags: D-01

**Semivolatile Organic Compounds by - LC/MS-MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW
Perfluorobutanesulfonic acid (PFBs)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW
Perfluoropentanoic acid (PFPeA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW
Perfluorohexanoic acid (PFHxA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW
11Cl-PF3OUDs (F53B Major)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW
9Cl-PF3ONS (F53B Minor)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW
Perfluorodecanoic acid (PFDA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW
Perfluorododecanoic acid (PFDoA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW
Perfluoroheptanesulfonic acid (PFHpS)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW
N-EtFOSAA (NEtFOSAA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW
N-MeFOSAA (NMeFOSAA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW
Perfluorotetradecanoic acid (PFTA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW
Perfluorotridecanoic acid (PFTrDA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW
Perfluorodecanesulfonic acid (PFDS)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW
Perfluoroctanesulfonamide (FOSA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW
Perfluorononanesulfonic acid (PFNS)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW
Perfluoro-1-hexanesulfonamide (FHxSA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW
Perfluoro-1-butanesulfonamide (FBSA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW
Perfluorohexamenesulfonic acid (PFHxS)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW
6:2 Fluorotelomersulfonic acid (6:2FTS A)	4.0	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW
Perfluoropetanesulfonic acid (PFPeS)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW
Perfluoroundecanoic acid (PFUnA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW
Perfluoroheptanoic acid (PFHpA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW
Perfluorooctanoic acid (PFOA)	5.3	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW
Perfluorooctanesulfonic acid (PFOS)	11	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW
Perfluorononanoic acid (PFNA)	ND	4.0	ng/L	1		SOP-454 PFAS	1/24/23	1/30/23 19:12	QNW



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39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332**Sample Extraction Data****Prep Method: SOP 454-PFAAS      Analytical Method: SOP-454 PFAS**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23A0663-01RE1 [MW-2]	B329302	124	1.00	01/24/23
23A0663-02RE1 [dup 3]	B329302	124	1.00	01/24/23

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

**QUALITY CONTROL****Semivolatile Organic Compounds by - LC/MS-MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch B329302 - SOP 454-PFAAS**

<b>Blank (B329302-BLK1)</b>									
Prepared: 01/24/23 Analyzed: 01/30/23									
Perfluorobutanoic acid (PFBA)	ND	1.8	ng/L						
Perfluorobutanesulfonic acid (PFBS)	ND	1.8	ng/L						
Perfluoropentanoic acid (PFPeA)	ND	1.8	ng/L						
Perfluorohexanoic acid (PFHxA)	ND	1.8	ng/L						
11Cl-PF3OuDS (F53B Major)	ND	1.8	ng/L						
9Cl-PF3ONS (F53B Minor)	ND	1.8	ng/L						
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8	ng/L						
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8	ng/L						
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.8	ng/L						
Perfluorodecanoic acid (PFDA)	ND	1.8	ng/L						
Perfluorododecanoic acid (PFDa)	ND	1.8	ng/L						
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8	ng/L						
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.8	ng/L						
N-EtFOSAA (NEtFOSAA)	ND	1.8	ng/L						
N-MeFOSAA (NMeFOSAA)	ND	1.8	ng/L						
Perfluorotetradecanoic acid (PFTA)	ND	1.8	ng/L						
Perfluorotridecanoic acid (PFTrDA)	ND	1.8	ng/L						
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.8	ng/L						
Perfluorodecanesulfonic acid (PFDS)	ND	1.8	ng/L						
Perfluoroctanesulfonamide (FOSA)	ND	1.8	ng/L						
Perfluorononanesulfonic acid (PFNS)	ND	1.8	ng/L						
Perfluoro-1-hexanesulfonamide (FHxSA)	ND	1.8	ng/L						
Perfluoro-1-butanesulfonamide (FBSA)	ND	1.8	ng/L						
Perfluorohexanesulfonic acid (PFHxS)	ND	1.8	ng/L						
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.8	ng/L						
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.8	ng/L						
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.8	ng/L						
Perfluoropetanesulfonic acid (PFPeS)	ND	1.8	ng/L						
Perfluoroundecanoic acid (PFUnA)	ND	1.8	ng/L						
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8	ng/L						
Perfluoroheptanoic acid (PFHpA)	ND	1.8	ng/L						
Perfluoroctanoic acid (PFOA)	ND	1.8	ng/L						
Perfluoroctanesulfonic acid (PFOS)	ND	1.8	ng/L						
Perfluorononanoic acid (PFNA)	ND	1.8	ng/L						

<b>LCS (B329302-BS1)</b>									
Prepared: 01/24/23 Analyzed: 01/30/23									
Perfluorobutanoic acid (PFBA)	8.09	1.8	ng/L	9.09	89.0	73-129			
Perfluorobutanesulfonic acid (PFBS)	6.90	1.8	ng/L	8.04	85.8	72-130			
Perfluoropentanoic acid (PFPeA)	8.04	1.8	ng/L	9.09	88.5	72-129			
Perfluorohexanoic acid (PFHxA)	8.14	1.8	ng/L	9.09	89.6	72-129			
11Cl-PF3OuDS (F53B Major)	7.30	1.8	ng/L	8.56	85.3	55.1-141			
9Cl-PF3ONS (F53B Minor)	6.28	1.8	ng/L	8.47	74.1	59.6-146			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	6.74	1.8	ng/L	8.56	78.7	60.3-131			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	7.74	1.8	ng/L	9.09	85.1	37.6-167			
8:2 Fluorotelomersulfonic acid (8:2FTS A)	8.28	1.8	ng/L	8.72	94.9	67-138			
Perfluorodecanoic acid (PFDA)	8.06	1.8	ng/L	9.09	88.7	71-129			
Perfluorododecanoic acid (PFDa)	8.22	1.8	ng/L	9.09	90.5	72-134			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	7.32	1.8	ng/L	8.09	90.5	49.4-154			

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**QUALITY CONTROL****Semivolatile Organic Compounds by - LC/MS-MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch B329302 - SOP 454-PFAAS**

<b>LCS (B329302-BS1)</b>					Prepared: 01/24/23	Analyzed: 01/30/23			
Perfluoroheptanesulfonic acid (PFHpS)	8.94	1.8	ng/L	8.68	103	69-134			
N-EtFOSAA (NEtFOSAA)	9.46	1.8	ng/L	9.09	104	61-135			
N-MeFOSAA (NMeFOSAA)	11.6	1.8	ng/L	9.09	128	65-136			
Perfluorotetradecanoic acid (PFTA)	7.83	1.8	ng/L	9.09	86.2	71-132			
Perfluorotridecanoic acid (PFTDA)	7.56	1.8	ng/L	9.09	83.2	65-144			
4:2 Fluorotelomersulfonic acid (4:2FTS A)	7.69	1.8	ng/L	8.50	90.6	63-143			
Perfluorodecanesulfonic acid (PFDS)	6.49	1.8	ng/L	8.77	74.0	53-142			
Perfluoroctanesulfonamide (FOSA)	9.40	1.8	ng/L	9.09	103	67-137			
Perfluorononanesulfonic acid (PFNS)	8.74	1.8	ng/L	8.72	100	69-127			
Perfluoro-1-hexanesulfonamide (FHxSA)	7.51	1.8	ng/L	9.09	82.6	61.7-156			
Perfluoro-1-butanesulfonamide (FBSA)	7.12	1.8	ng/L	9.09	78.4	61.3-145			
Perfluorohexamersulfonic acid (PFHxS)	7.46	1.8	ng/L	8.31	89.7	68-131			
Perfluoro-4-oxapentanoic acid (PFMPA)	8.06	1.8	ng/L	9.09	88.7	59.8-147			
Perfluoro-5-oxahexanoic acid (PFMBA)	8.03	1.8	ng/L	9.09	88.4	59.5-146			
6:2 Fluorotelomersulfonic acid (6:2FTS A)	8.05	1.8	ng/L	8.63	93.2	64-140			
Perfluoropetanesulfonic acid (PPPeS)	8.02	1.8	ng/L	8.54	93.9	71-127			
Perfluoroundecanoic acid (PFUnA)	8.49	1.8	ng/L	9.09	93.5	69-133			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.02	1.8	ng/L	9.09	88.3	58.5-143			
Perfluoroheptanoic acid (PFHpA)	7.60	1.8	ng/L	9.09	83.6	72-130			
Perfluoroctanoic acid (PFOA)	7.90	1.8	ng/L	9.09	87.0	71-133			
Perfluoroctanesulfonic acid (PFOS)	8.81	1.8	ng/L	8.40	105	65-140			
Perfluorononanoic acid (PFNA)	8.59	1.8	ng/L	9.09	94.5	69-130			

<b>LCS Dup (B329302-BS1)</b>					Prepared: 01/24/23	Analyzed: 01/30/23			
Perfluorobutanoic acid (PFBA)	7.81	1.9	ng/L	9.28	84.1	73-129	3.52	30	
Perfluorobutanesulfonic acid (PFBS)	6.75	1.9	ng/L	8.21	82.2	72-130	2.19	30	
Perfluoropentanoic acid (PFPeA)	7.93	1.9	ng/L	9.28	85.5	72-129	1.29	30	
Perfluorohexameric acid (PFHxA)	7.76	1.9	ng/L	9.28	83.6	72-129	4.82	30	
11Cl-PF3OuDS (F53B Major)	7.01	1.9	ng/L	8.74	80.2	55.1-141	4.08	30	
9Cl-PF3ONS (F53B Minor)	6.30	1.9	ng/L	8.65	72.8	59.6-146	0.385	30	
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	6.44	1.9	ng/L	8.74	73.7	60.3-131	4.55	30	
Hexafluoropropylene oxide dimer acid (HFPO-DA)	8.78	1.9	ng/L	9.28	94.7	37.6-167	12.7	30	
8:2 Fluorotelomersulfonic acid (8:2FTS A)	7.86	1.9	ng/L	8.91	88.3	67-138	5.22	30	
Perfluorodecanoic acid (PFDA)	8.17	1.9	ng/L	9.28	88.1	71-129	1.41	30	
Perfluorododecanoic acid (PFDoA)	7.81	1.9	ng/L	9.28	84.2	72-134	5.13	30	
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEsA)	6.98	1.9	ng/L	8.26	84.5	49.4-154	4.79	30	
Perfluoroheptanesulfonic acid (PFHpS)	7.98	1.9	ng/L	8.86	90.0	69-134	11.4	30	
N-EtFOSAA (NEtFOSAA)	9.58	1.9	ng/L	9.28	103	61-135	1.25	30	
N-MeFOSAA (NMeFOSAA)	11.3	1.9	ng/L	9.28	122	65-136	2.98	30	
Perfluorotetradecanoic acid (PFTA)	7.28	1.9	ng/L	9.28	78.5	71-132	7.25	30	
Perfluorotridecanoic acid (PFTDA)	7.42	1.9	ng/L	9.28	80.0	65-144	1.83	30	
4:2 Fluorotelomersulfonic acid (4:2FTS A)	7.24	1.9	ng/L	8.68	83.5	63-143	6.08	30	
Perfluorodecanesulfonic acid (PFDS)	7.06	1.9	ng/L	8.95	78.9	53-142	8.50	30	
Perfluoroctanesulfonamide (FOSA)	8.01	1.9	ng/L	9.28	86.3	67-137	16.0	30	
Perfluorononanesulfonic acid (PFNS)	8.63	1.9	ng/L	8.91	96.9	69-127	1.33	30	
Perfluoro-1-hexanesulfonamide (FHxSA)	6.60	1.9	ng/L	9.28	71.2	61.7-156	12.8	30	
Perfluoro-1-butanesulfonamide (FBSA)	6.96	1.9	ng/L	9.28	75.0	61.3-145	2.26	30	
Perfluorohexamersulfonic acid (PFHxS)	7.35	1.9	ng/L	8.49	86.6	68-131	1.43	30	
Perfluoro-4-oxapentanoic acid (PFMPA)	7.83	1.9	ng/L	9.28	84.3	59.8-147	2.90	30	
Perfluoro-5-oxahexanoic acid (PFMBA)	7.89	1.9	ng/L	9.28	85.1	59.5-146	1.71	30	

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**QUALITY CONTROL**
**Semivolatile Organic Compounds by - LC/MS-MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch B329302 - SOP 454-PFAAS**

LCS Dup (B329302-BSD1) Prepared: 01/24/23 Analyzed: 01/30/23									
6:2 Fluorotelomersulfonic acid (6:2FTS A)	8.11	1.9	ng/L	8.81	92.0	64-140	0.765	30	
Perfluoropetanesulfonic acid (PFPeS)	7.96	1.9	ng/L	8.72	91.2	71-127	0.818	30	
Perfluoroundecanoic acid (PFUnA)	8.65	1.9	ng/L	9.28	93.3	69-133	1.88	30	
Nonfluoro-3,6-dioxaheptanoic acid (NFDHA)	7.77	1.9	ng/L	9.28	83.7	58.5-143	3.22	30	
Perfluoroheptanoic acid (PFHpA)	7.75	1.9	ng/L	9.28	83.6	72-130	2.04	30	
Perfluoroctanoic acid (PFOA)	7.88	1.9	ng/L	9.28	84.9	71-133	0.372	30	
Perfluoroctanesulfonic acid (PFOS)	8.45	1.9	ng/L	8.58	98.4	65-140	4.18	30	
Perfluorononanoic acid (PFNA)	8.57	1.9	ng/L	9.28	92.3	69-130	0.212	30	

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**FLAG/QUALIFIER SUMMARY**

- \* QC result is outside of established limits.
  - † Wide recovery limits established for difficult compound.
  - ‡ Wide RPD limits established for difficult compound.
  - # Data exceeded client recommended or regulatory level
  - ND Not Detected
  - RL Reporting Limit is at the level of quantitation (LOQ)
  - DL Detection Limit is the lower limit of detection determined by the MDL study
  - MCL Maximum Contaminant Level
- Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
- No results have been blank subtracted unless specified in the case narrative section.
- D-01 Sample extracted/prepared at a dilution due to sample matrix interference.
  - S-29 Extracted Internal Standard is outside of control limits.

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**INTERNAL STANDARD AREA AND RT SUMMARY**

**SOP-454 PFAS**

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>MW-2 (23A0663-01RE1 )</b>		Lab File ID: 23A0663-01RE1.d						Analyzed: 01/30/23 19:05	
M8FOSA	471000.6	4.0765	569,349.00	4.0765	83	50 - 150	0.0000	+/-0.50	
M2-4:2FTS	194961.2	2.6531	204,480.00	2.6531	95	50 - 150	0.0000	+/-0.50	
M2PFTA	1140951	4.38655	1,504,755.00	4.38655	76	50 - 150	0.0000	+/-0.50	
M2-8:2FTS	261532.3	3.86685	209,506.00	3.86685	125	50 - 150	0.0000	+/-0.50	
MPFBA	590918.9	1.13325	600,591.00	1.13325	98	50 - 150	0.0000	+/-0.50	
M3HFPO-DA	101605	2.9622	138,326.00	2.9622	73	50 - 150	0.0000	+/-0.50	
M6PFDA	969999.6	3.867333	924,529.00	3.867333	105	50 - 150	0.0000	+/-0.50	
M3PFBS	194665	2.02765	177,724.00	2.02765	110	50 - 150	0.0000	+/-0.50	
M7PFUnA	1087045	4.009984	1,157,674.00	4.009984	94	50 - 150	0.0000	+/-0.50	
M2-6:2FTS	243222.5	3.517617	140,719.00	3.517617	173	50 - 150	0.0000	+/-0.50	*
M5PPeA	537143.1	1.8411	494,178.00	1.8411	109	50 - 150	0.0000	+/-0.50	
M5PFHxA	972994.8	2.73905	902,411.00	2.73905	108	50 - 150	0.0000	+/-0.50	
M3PFHxS	198275.5	3.300333	181,863.00	3.2923	109	50 - 150	0.0080	+/-0.50	
M4PFHpA	1135626	3.268033	1,075,551.00	3.268033	106	50 - 150	0.0000	+/-0.50	
M8PFOA	1087526	3.52615	1,045,924.00	3.52615	104	50 - 150	0.0000	+/-0.50	
M8PFOS	207270.6	3.7083	195,297.00	3.7083	106	50 - 150	0.0000	+/-0.50	
M9PFNA	925445.3	3.709283	977,868.00	3.709283	95	50 - 150	0.0000	+/-0.50	
MPFDaA	881853.8	4.14485	1,169,536.00	4.153133	75	50 - 150	-0.0083	+/-0.50	
D5-NEtFOSAA	340449.8	4.01745	290,815.00	4.01745	117	50 - 150	0.0000	+/-0.50	
D3-NMeFOSAA	366751.2	3.937883	330,848.00	3.937883	111	50 - 150	0.0000	+/-0.50	

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**INTERNAL STANDARD AREA AND RT SUMMARY**

**SOP-454 PFAS**

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>dup 3 (23A0663-02RE1 )</b>		Lab File ID: 23A0663-02RE1.d						Analyzed: 01/30/23 19:12	
M8FOSA	482668	4.0765	569,349.00	4.0765	85	50 - 150	0.0000	+/-0.50	
M2-4:2FTS	182252.2	2.6531	204,480.00	2.6531	89	50 - 150	0.0000	+/-0.50	
M2PFTA	1097382	4.38655	1,504,755.00	4.38655	73	50 - 150	0.0000	+/-0.50	
M2-8:2FTS	225232.3	3.86685	209,506.00	3.86685	108	50 - 150	0.0000	+/-0.50	
MPFBA	565039.4	1.13325	600,591.00	1.13325	94	50 - 150	0.0000	+/-0.50	
M3HFPO-DA	91503.83	2.970317	138,326.00	2.9622	66	50 - 150	0.0081	+/-0.50	
M6PFDA	878039.8	3.867333	924,529.00	3.867333	95	50 - 150	0.0000	+/-0.50	
M3PFBS	181783.7	2.02765	177,724.00	2.02765	102	50 - 150	0.0000	+/-0.50	
M7PFUnA	1052003	4.009984	1,157,674.00	4.009984	91	50 - 150	0.0000	+/-0.50	
M2-6:2FTS	196767.7	3.517617	140,719.00	3.517617	140	50 - 150	0.0000	+/-0.50	
M5PPPeA	511476.7	1.8411	494,178.00	1.8411	104	50 - 150	0.0000	+/-0.50	
M5PFHxA	937243.3	2.747233	902,411.00	2.73905	104	50 - 150	0.0082	+/-0.50	
M3PFHxS	189024.7	3.300333	181,863.00	3.2923	104	50 - 150	0.0080	+/-0.50	
M4PFHpA	1064602	3.268033	1,075,551.00	3.268033	99	50 - 150	0.0000	+/-0.50	
M8PFOA	1050741	3.52615	1,045,924.00	3.52615	100	50 - 150	0.0000	+/-0.50	
M8PFOS	175473.1	3.7083	195,297.00	3.7083	90	50 - 150	0.0000	+/-0.50	
M9PFNA	835944.3	3.709283	977,868.00	3.709283	85	50 - 150	0.0000	+/-0.50	
MPFDoA	866219.1	4.14485	1,169,536.00	4.153133	74	50 - 150	-0.0083	+/-0.50	
D5-NEtFOSAA	349462.6	4.01745	290,815.00	4.01745	120	50 - 150	0.0000	+/-0.50	
D3-NMeFOSAA	392106.4	3.937883	330,848.00	3.937883	119	50 - 150	0.0000	+/-0.50	

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**INTERNAL STANDARD AREA AND RT SUMMARY****SOP-454 PFAS**

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>Blank (B329302-BLK1 )</b>		Lab File ID: B329302-BLK1.d						Analyzed: 01/30/23 18:44	
M8FOSA	472915.5	4.0765	569,349.00	4.0765	83	50 - 150	0.0000	+/-0.50	
M2-4:2FTS	191998.8	2.6531	204,480.00	2.6531	94	50 - 150	0.0000	+/-0.50	
M2PFTA	1290523	4.386533	1,504,755.00	4.38655	86	50 - 150	0.0000	+/-0.50	
M2-8:2FTS	196711.3	3.86685	209,506.00	3.86685	94	50 - 150	0.0000	+/-0.50	
MPFBA	659252.3	1.13325	600,591.00	1.13325	110	50 - 150	0.0000	+/-0.50	
M3HFPO-DA	111376.5	2.970317	138,326.00	2.9622	81	50 - 150	0.0081	+/-0.50	
M6PFDA	869203.4	3.867333	924,529.00	3.867333	94	50 - 150	0.0000	+/-0.50	
M3PFBS	194403.4	2.035933	177,724.00	2.02765	109	50 - 150	0.0083	+/-0.50	
M7PFUnA	1130924	4.009984	1,157,674.00	4.009984	98	50 - 150	0.0000	+/-0.50	
M2-6:2FTS	151644.7	3.517617	140,719.00	3.517617	108	50 - 150	0.0000	+/-0.50	
M5PPPeA	539698.7	1.8411	494,178.00	1.8411	109	50 - 150	0.0000	+/-0.50	
M5PFHxA	982823.6	2.747233	902,411.00	2.73905	109	50 - 150	0.0082	+/-0.50	
M3PFHxS	187696.4	3.300333	181,863.00	3.2923	103	50 - 150	0.0080	+/-0.50	
M4PFHpA	1104162	3.268033	1,075,551.00	3.268033	103	50 - 150	0.0000	+/-0.50	
M8PFOA	1061453	3.52615	1,045,924.00	3.52615	101	50 - 150	0.0000	+/-0.50	
M8PFOS	185907.9	3.7083	195,297.00	3.7083	95	50 - 150	0.0000	+/-0.50	
M9PFNA	978283.7	3.709283	977,868.00	3.709283	100	50 - 150	0.0000	+/-0.50	
MPFDoA	1039427	4.153133	1,169,536.00	4.153133	89	50 - 150	0.0000	+/-0.50	
D5-NEtFOSAA	263913.8	4.01745	290,815.00	4.01745	91	50 - 150	0.0000	+/-0.50	
D3-NMeFOSAA	300962.1	3.945867	330,848.00	3.937883	91	50 - 150	0.0080	+/-0.50	

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**INTERNAL STANDARD AREA AND RT SUMMARY****SOP-454 PFAS**

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>LCS (B329302-BS1 )</b>		Lab File ID: B329302-BS1.d				Analyzed: 01/30/23 18:29			
M8FOSA	501833.8	4.0765	569,349.00	4.0765	88	50 - 150	0.0000	+/-0.50	
M2-4:2FTS	219489.1	2.6531	204,480.00	2.6531	107	50 - 150	0.0000	+/-0.50	
M2PFTA	1450615	4.38655	1,504,755.00	4.38655	96	50 - 150	0.0000	+/-0.50	
M2-8:2FTS	227059.7	3.86685	209,506.00	3.86685	108	50 - 150	0.0000	+/-0.50	
MPFBA	719824.3	1.13325	600,591.00	1.13325	120	50 - 150	0.0000	+/-0.50	
M3HFPO-DA	122502.2	2.9622	138,326.00	2.9622	89	50 - 150	0.0000	+/-0.50	
M6PFDA	1024145	3.867333	924,529.00	3.867333	111	50 - 150	0.0000	+/-0.50	
M3PFBS	210932.2	2.02765	177,724.00	2.02765	119	50 - 150	0.0000	+/-0.50	
M7PFUnA	1191298	4.009984	1,157,674.00	4.009984	103	50 - 150	0.0000	+/-0.50	
M2-6:2FTS	168317.7	3.517617	140,719.00	3.517617	120	50 - 150	0.0000	+/-0.50	
M5PPPeA	592158.4	1.8411	494,178.00	1.8411	120	50 - 150	0.0000	+/-0.50	
M5PFHxA	1079447	2.747233	902,411.00	2.73905	120	50 - 150	0.0082	+/-0.50	
M3PFHxS	213403.2	3.300333	181,863.00	3.2923	117	50 - 150	0.0080	+/-0.50	
M4PFHpA	1222886	3.268033	1,075,551.00	3.268033	114	50 - 150	0.0000	+/-0.50	
M8PFOA	1198597	3.52615	1,045,924.00	3.52615	115	50 - 150	0.0000	+/-0.50	
M8PFOS	207808.3	3.7083	195,297.00	3.7083	106	50 - 150	0.0000	+/-0.50	
M9PFNA	1074710	3.709283	977,868.00	3.709283	110	50 - 150	0.0000	+/-0.50	
MPFDoA	1183596	4.14485	1,169,536.00	4.153133	101	50 - 150	-0.0083	+/-0.50	
D5-NEtFOSAA	302463.6	4.01745	290,815.00	4.01745	104	50 - 150	0.0000	+/-0.50	
D3-NMeFOSAA	345250.8	3.937883	330,848.00	3.937883	104	50 - 150	0.0000	+/-0.50	

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

**INTERNAL STANDARD AREA AND RT SUMMARY**

**SOP-454 PFAS**

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>LCS Dup (B329302-BSD1 )</b>		Lab File ID: B329302-BSD1.d						Analyzed: 01/30/23 18:36	
M8FOSA	466138.7	4.0765	569,349.00	4.0765	82	50 - 150	0.0000	+/-0.50	
M2-4:2FTS	213547.7	2.6531	204,480.00	2.6531	104	50 - 150	0.0000	+/-0.50	
M2PFTA	1397790	4.38655	1,504,755.00	4.38655	93	50 - 150	0.0000	+/-0.50	
M2-8:2FTS	231110.8	3.86685	209,506.00	3.86685	110	50 - 150	0.0000	+/-0.50	
MPFBA	681517.1	1.13325	600,591.00	1.13325	113	50 - 150	0.0000	+/-0.50	
M3HFPO-DA	110704.6	2.9622	138,326.00	2.9622	80	50 - 150	0.0000	+/-0.50	
M6PFDA	989024.4	3.867333	924,529.00	3.867333	107	50 - 150	0.0000	+/-0.50	
M3PFBS	201218.7	2.02765	177,724.00	2.02765	113	50 - 150	0.0000	+/-0.50	
M7PFUnA	1108508	4.009984	1,157,674.00	4.009984	96	50 - 150	0.0000	+/-0.50	
M2-6:2FTS	157090.9	3.517617	140,719.00	3.517617	112	50 - 150	0.0000	+/-0.50	
M5PPPeA	553174.9	1.8411	494,178.00	1.8411	112	50 - 150	0.0000	+/-0.50	
M5PFHxA	1013380	2.73905	902,411.00	2.73905	112	50 - 150	0.0000	+/-0.50	
M3PFHxS	200944.4	3.300333	181,863.00	3.2923	110	50 - 150	0.0080	+/-0.50	
M4PFHpA	1161388	3.268033	1,075,551.00	3.268033	108	50 - 150	0.0000	+/-0.50	
M8PFOA	1156024	3.52615	1,045,924.00	3.52615	111	50 - 150	0.0000	+/-0.50	
M8PFOS	204542.1	3.7083	195,297.00	3.7083	105	50 - 150	0.0000	+/-0.50	
M9PFNA	1056240	3.709283	977,868.00	3.709283	108	50 - 150	0.0000	+/-0.50	
MPFDoA	1149439	4.153133	1,169,536.00	4.153133	98	50 - 150	0.0000	+/-0.50	
D5-NEtFOSAA	283451.1	4.01745	290,815.00	4.01745	97	50 - 150	0.0000	+/-0.50	
D3-NMeFOSAA	316408.9	3.945867	330,848.00	3.937883	96	50 - 150	0.0080	+/-0.50	



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#### CERTIFICATIONS

##### Certified Analyses included in this Report

Analyte	Certifications
<b>SOP-454 PFAS in Water</b>	
Perfluorobutanoic acid (PFBA)	NH-P
Perfluorobutanesulfonic acid (PFBS)	NH-P
Perfluoropentanoic acid (PPeA)	NH-P
Perfluorohexanoic acid (PFHxA)	NH-P
11Cl-PF3OUdS (F53B Major)	NH-P
9Cl-PF3ONS (F53B Minor)	NH-P
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NH-P
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH-P
8:2 Fluorotelomersulfonic acid (8:2FTS A)	NH-P
Perfluorodecanoic acid (PFDA)	NH-P
Perfluorododecanoic acid (PFDaA)	NH-P
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NH-P
Perfluoroheptanesulfonic acid (PFHpS)	NH-P
N-EtFOSAA (NEtFOSAA)	NH-P
N-MeFOSAA (NMeFOSAA)	NH-P
Perfluorotetradecanoic acid (PFTA)	NH-P
Perfluorotridecanoic acid (PFTrDA)	NH-P
4:2 Fluorotelomersulfonic acid (4:2FTS A)	NH-P
Perfluorodecanesulfonic acid (PFDS)	NH-P
Perfluoroctanesulfonamide (FOSA)	NH-P
Perfluorononanesulfonic acid (PFNS)	NH-P
Perfluoro-1-hexanesulfonamide (FHxSA)	NH-P
Perfluoro-1-butanesulfonamide (FBSA)	NH-P
Perfluorohexanesulfonic acid (PFHxS)	NH-P
Perfluoro-4-oxapentanoic acid (PFMPA)	NH-P
Perfluoro-5-oxahexanoic acid (PFMBA)	NH-P
6:2 Fluorotelomersulfonic acid (6:2FTS A)	NH-P
Perfluoropetanesulfonic acid (PFPes)	NH-P
Perfluoroundecanoic acid (PFUnA)	NH-P
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NH-P
Perfluoroheptanoic acid (PFHpA)	NH-P
Perfluoroctanoic acid (PFOA)	NH-P
Perfluorooctanesulfonic acid (PFOS)	NH-P
Perfluorononanoic acid (PFNA)	NH-P

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

Code	Description	Number	Expires
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2023

23A0663

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

Company Name: Weston & Sampson  
Address: 712 Brook St, Suite 103  
Phone: (860) 513-1473  
Project Name: Hydeville Mill  
Project Location: Stafford, CT  
Project Number:  
Project Manager: Lewis Tamaccio  
Pace Analytical Quote Name/Number  
Invoice Recipient: Weston & Sampson  
Sampled By: Richard Manandhar

#### CHAIN OF CUSTODY RECORD

1800 Elm Street SE  
Minneapolis, MN 55414

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

Pace Analytical Work Orders	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Compton	Veritas	Sample Code	VIALS	GLASS	PLASTIC	BACTERIA	ENCORE
	MW-1	1/15/23	1510	Gnb	GW	V	2	0			
	MW-2	1/15/23	1320	Gnb	GW	V	2	4	3		
	MW-3	1/15/23	1215	Gnb	GW	V	2	6	1		
2	Dup-2	1/15/23	-	Gnb	GW	V	7	6	1		
	Dup-3	1/15/23	-	Gnb	GW	V			2		

1	2	3	4	5	6	7	8	9	10	11	12
PCBs	SVOCs	VOCs	RSDs /S Metals	PFAS							

#### ANALYSIS REQUESTED

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

Glassware in the fridge?  Y/N

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

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

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

#### 2 Preservation Codes:

I = Iced  
H = HCL  
M = Methanol  
N = Nitric Acid  
S = Sulfuric Acid  
B = Sodium Bisulfate  
X = Sodium Hydroxide  
T = Sodium Thiosulfate  
O = Other (please define)

Field Blank received for PFAS is not needed per client.

-RLF 1/9/23

Relinquished by: (signature)

Date/Time:

1/15/23 0825

Client Comments:

CT Brownfield

Received by: (signature)

Date/Time:

Relinquished by: (signature)

Date/Time:

1/16/23 0852

Received by: (signature)

Date/Time:

1/16/23 0852

Relinquished by: (signature)

Date/Time:

1/16/23 1530

Received by: (signature)

Date/Time:

1/16/23 1530

Relinquished by: (signature)

Date/Time:

1/16/23 1530

Received by: (signature)

Date/Time:

Lab Comments:

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

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

**Pace**  
PEOPLE ADVANCING SCIENCE  
Doc# 277 Rev 6 July 2022

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 WSS

Received By m Date 1/6/23 Time 1530

How were the samples received? In Cooler T No Cooler \_\_\_\_\_ On Ice T No Ice \_\_\_\_\_

Direct From Sample \_\_\_\_\_ Ambient \_\_\_\_\_ Melted Ice \_\_\_\_\_

Were samples within Temperature? Within 2-6°C By Gun # S Actual Temp 2.6, 0.0,  
By Blank # \_\_\_\_\_ Actual Temp - \_\_\_\_\_

Was Custody Seal In tact? N/A Were Samples Tampered with? N/A

Was COC Relinquished? + 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 Client? T Analysis? T Sampler Name? T  
pertinent Information? Project? T ID's? T Collection Dates/Times? T

Are Sample labels filled out and legible? F

Are there Lab to Filters? F Who was notified? \_\_\_\_\_

Are there Rushes? F Who was notified? \_\_\_\_\_

Are there Short Holds? F Who was notified? \_\_\_\_\_

Samples are received within holding time? T Is there enough Volume? T

Is there Headspace where applicable? I MS/MSD? F

Proper Media/Containers Used? T splitting samples required N/A

Were trip blanks received? F On COC? T

Do All Samples Have the proper pH? N/A Acid T Base N/A

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	

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:

Received Field Blanks not on COC

## APPENDIX E

### Asbestos Laboratory Analytical Results



# EMSL Analytical, Inc.

165 Gracey Avenue Meriden, CT 06451  
Tel/Fax: (203) 284-5948 / (203) 284-5978  
<http://www.EMSL.com> / [wallingfordlab@emsl.com](mailto:wallingfordlab@emsl.com)

**EMSL Order:** 242206042

**Customer ID:** WESA77

**Customer PO:**

**Project ID:**

**Attention:** Lewis Tamaccio  
Weston & Sampson Engineers Inc.  
712 Brook Street, Suite 103  
Rocky Hill, CT 06067

**Phone:** (860) 513-1473

**Fax:** (860) 513-1473

**Received Date:** 12/19/2022 3:00 PM

**Analysis Date:** 12/27/2022

**Collected Date:** 12/19/2022

**Project:** HYDEVILLE MILL-ENG20-0144

**Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E  
Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy**

Sample	Description	Appearance	% Fibrous	Non-Asbestos	Asbestos
				% Non-Fibrous	% Type
DP-1-A-01A 242206042-0001	Debris pile - red asphalt shingle	White/Red/Black Fibrous Homogeneous	20% Cellulose	5% Quartz 75% Non-fibrous (Other)	None Detected
DP-1-A-02A 242206042-0002	Debris pile - silver/black roofing	Black/Silver Fibrous Homogeneous	20% Glass	78% Non-fibrous (Other)	2% Chrysotile
DP-3-A-03 242206042-0003 <i>This is a composite result of both vinyl and backing layer</i>	Debris pile - tan/grey linoleum	Tan/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
DP-3-A-04 242206042-0004	Debris pile - black weather strip	Brown/Black Fibrous Homogeneous	75% Cellulose	25% Non-fibrous (Other)	None Detected
DP-3-A-05 242206042-0005	Debris pile - white insulation paper	Tan/White Fibrous Homogeneous	85% Cellulose	15% Non-fibrous (Other)	None Detected
DP-3-A-06 242206042-0006	Debris pile - brown fiber board	Brown Fibrous Homogeneous	85% Cellulose	15% Non-fibrous (Other)	None Detected
DP-2-A-07A 242206042-0007	Debris pile - green asphalt shingle	White/Black/Green Fibrous Homogeneous	15% Glass	5% Quartz 80% Non-fibrous (Other)	None Detected
DP-2-A-08A 242206042-0008	Debris pile - brown asphalt shingle	Tan/Black Fibrous Homogeneous	15% Glass	5% Quartz 80% Non-fibrous (Other)	None Detected
DP-2-A-08B 242206042-0009	Debris pile - brown asphalt shingle	Red/Black Fibrous Homogeneous	15% Glass	5% Quartz 80% Non-fibrous (Other)	None Detected
DP-2-A-09 242206042-0010	Debris pile - black weatherproofing	Brown/Black Non-Fibrous Homogeneous	3% Cellulose	97% Non-fibrous (Other)	None Detected
DP-2-A-10A 242206042-0011	Debris pile - black fiberboard insulation	Brown/Black Fibrous Homogeneous	85% Cellulose	15% Non-fibrous (Other)	None Detected
DP-2-A-10B 242206042-0012	Debris pile - black fiberboard insulation	Brown Fibrous Homogeneous	85% Cellulose	15% Non-fibrous (Other)	None Detected
A-11 242206042-0013	Exterior - grey mortar to brick	Gray Non-Fibrous Homogeneous		10% Quartz 90% Non-fibrous (Other)	None Detected
DP-3A-01B 242206042-0014	Debris pile - red asphalt shingle	Red/Black Fibrous Homogeneous	15% Cellulose	5% Quartz 80% Non-fibrous (Other)	None Detected
DP-2A-02B 242206042-0015	Debris pile - silver/black roofing				Positive Stop (Not Analyzed)
DP-1-A-07B 242206042-0016	Debris pile - green asphalt shingle	Gray/Green Fibrous Homogeneous	15% Glass	5% Quartz 80% Non-fibrous (Other)	None Detected

Initial report from: 12/27/2022 14:18:39



# EMSL Analytical, Inc.

165 Gracey Avenue Meriden, CT 06451

Tel/Fax: (203) 284-5948 / (203) 284-5978

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

EMSL Order: 242206042

Customer ID: WESA77

Customer PO:

Project ID:

## Analyst(s)

Shannon Halloran (4)

Sara Poppa (11)

Danny Sandhu, Asbestos 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. Meriden, CT NVLAP Lab Code 200700-0,

Initial report from: 12/27/2022 14:18:39

ASB\_PLM\_0008\_0001 - 1.78 Printed: 12/27/2022 2:18 PM

Page 2 of 2

## APPENDIX F

### Lead Laboratory Analytical Results



## EMSL Analytical, Inc.

528 Mineola Avenue, Carle Place, NY 11514

Phone/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com>

[carleplacelab@emsl.com](mailto:carleplacelab@emsl.com)

EMSL Order:	062225781
CustomerID:	WESA77
CustomerPO:	
ProjectID:	

Attn: **Lewis Tamaccio**  
**Weston & Sampson Engineers Inc.**  
**712 Brook Street, Suite 103**  
**Rocky Hill, CT 06067**

Phone: (860) 513-1473  
Fax: (860) 513-1473  
Received: 12/20/2022 11:48 AM  
Collected: 12/19/2022

Project: **Hydeville Mill- ENG20-0144**

### Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)\*

<i>Client Sample Description</i>	<i>Lab ID</i>	<i>Collected</i>	<i>Analyzed</i>	<i>Lead Concentration</i>
DP*1-L-01	062225781-0001	12/19/2022	12/21/2022	21 % wt
	Site: Debris Pile #1			
	Desc: White Paint			
DP*1-L-02	062225781-0002	12/19/2022	12/21/2022	<0.0080 % wt
	Site: Debris Pile #3			
	Desc: White Paint			
L-03	062225781-0003	12/19/2022	12/21/2022	8.3 % wt
	Site: Building Trim			
	Desc: Green Paint			

James Han, Chemistry 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.

\* Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.008% wt based on the minimum sample weight per our SOP. "<" (less than) result signifies the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY AIHA LAP, LLC-ELLAP Accredited #102344, CT PH-0249, CA ELAP 2339

Initial report from 12/21/2022 18:41:34