



**EMDC** EASTERN MAINE  
DEVELOPMENT CORPORATION

**PHASE II ENVIRONMENTAL SITE ASSESSMENT REV 1  
BELFAST FIRE STATION  
273 MAIN STREET  
BELFAST, MAINE**



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November 22, 2023

Prepared for:  
Mr. Cole Averill  
Eastern Maine Development Corporation  
50 Harlow Street  
Bangor, Maine 04450

**CAMPBELL**  
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January 24, 2024

Mr. Cole Averill  
Eastern Maine Development Corporation  
50 Harlow Street  
Bangor, Maine 04450

Re: **Phase II Environmental Site Assessment REV 1**  
**Belfast Fire Station**  
**273 Main Street, Belfast, Maine 04915**

Dear Mr. Averill,

Campbell Environmental Group, Inc., (CEG) prepared this report for the Eastern Maine Development Corporation (EMDC) to document the results of the Phase II Environmental Site Assessment (ESA) conducted at the Belfast Fire Station located at 273 Main Street, Belfast, Maine. For the purpose of this Phase II ESA, the Subject Property boundary is not the entire 38.5-acre parcel identified by the City of Belfast as Tax Map 12, Lot 50 but an approximate 3.44-acre portion approximately 300 feet along Main Street and 500 feet perpendicular to Main Street (the southwestern portion of the lot).

The purpose of this report is to provide EMDC with data regarding environmental conditions at the Site. This work was conducted as part of EMDC's United States Environmental Protection Agency (USEPA) Brownfield contract.

The Phase I ESA identified the following recognized environmental conditions (REC) at the Site:

- CEG identified the storage of aqueous film forming foam (AFFF) surfactants at the facility potentially containing Per- and Polyfluorinated Substances (PFAS). Although no evidence of current releases of these AFFFs was documented, the use of these surfactants in and outside the facility historically could pose a risk to human health and the environment.
- Residual petroleum from two former and one current off-site gasoline stations could pose a vapor encroachment condition and any future building specifically constructed with a basement is susceptible to vapor intrusion without appropriate sampling or confirmatory data.
- The practice of stockpiling snow from nonpoint sources on-site creates a risk that contaminants may have leached to the ground surface.

- Although the holes in the concrete slab of the Fire Station building assist with drainage issues, the holes are providing a conduit for any potential contaminants to discharge to the subsurface below the building's slab. Also, the floor drains discharging to an intentional gravel pit acting as a dry well near the western drainage swale is a potential pathway for any contaminants on the floor to be released directly to the subsurface and indirectly to the western drainage swale.

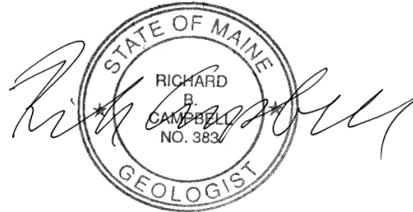
If you have any questions or comments, please do not hesitate to contact us. CEG appreciates working with you on this project.

Sincerely,



Danica Kay  
Senior Geologist

Enclosure



Rich Campbell  
Maine Certified Geologist  
President

## Table of Contents

<b>1.0</b>	<b>INTRODUCTION</b>	<b>1</b>
1.1	Purpose	1
<b>2.0</b>	<b>BACKGROUND</b>	<b>1</b>
2.1	Site Description	1
<b>2.2</b>	<b>Site and Vicinity Characteristics</b>	<b>2</b>
<b>2.3</b>	<b>Utilities and Other Improvements</b>	<b>2</b>
<b>2.4</b>	<b>Site Geology and Hydrogeology</b>	<b>3</b>
<b>2.5</b>	<b>Current Use of the Property</b>	<b>4</b>
<b>2.6</b>	<b>Historical Use Information on the Property</b>	<b>4</b>
<b>2.7</b>	<b>Adjacent Property Information and Historical Use</b>	<b>5</b>
<b>2.8</b>	<b>Sanborn Fire Insurance Maps and Town Directories</b>	<b>6</b>
2.9	Recognized Environmental Conditions (RECs)	8
<b>3.0</b>	<b>PHASE II ACTIVITIES</b>	<b>9</b>
3.1	Scope of Assessment	9
3.1.1	Chemical Testing Plan	9
3.1.2	Deviations from Work Plan	10
3.2	Field Exploration Methods, Sampling and Chemical Analyses	10
3.2.1	Field Screening Samples	10
3.2.2	Laboratory Analyzed Samples Collected	10
3.2.3	Soil Borings	11
3.2.4	Soil Screening and Analytical Sampling of Subsurface Soils	11
3.2.5	Soil Gas and Ambient Air Sampling	11
3.2.6	Shallow Subsurface Soil Sampling	12
<b>4.0</b>	<b>EVALUATION AND PRESENTATION OF RESULTS</b>	<b>12</b>
4.1	Data Quality Assessment Summary	12
4.1.1	Evaluation of Sampling Procedures	12
4.1.2	Quality Assurance Quality Control Samples	12
4.1.2.1	Absolute Resource Associates	14
4.1.2.2	Alpha Analytical Services	15
4.2	Analytical Data	15
4.2.1	Soil Screening Results	16
4.2.3	Ambient Air and Soil Gas Sample Results	17
<b>5.0</b>	<b>CONCEPTUAL MODEL</b>	<b>23</b>
5.1	Site Geology and Hydrology	23
5.1.1	Soils	23
5.2	Contaminants of Concern	23
5.3	Areas of Environmental Concern and Contaminant Assessment	23
5.4	Contaminant Exposure Routes and Fate & Transport	24
5.4.1	VOCs and VPH	24
5.4.2	SVOCs, EPH, and Metals	25
5.5	Contaminant Assessment	25
<b>6.0</b>	<b>CONCLUSIONS AND RECOMMENDATIONS</b>	<b>25</b>

## APPENDICES

### Appendix A - Figures

Figure 1 - Locus Map

Figure 2 – Sample Location Map

### Appendix B – Field Data

Soil Boring Logs

Soil Gas Sample Sheets

### Appendix C – Laboratory Reports

Absolute resource Associates

Alpha Analytical Reports

## EXECUTIVE SUMMARY

Campbell Environmental Group, Inc. (CEG) was retained by the Eastern Maine Development Corporation (EMDC) to perform a Phase II Environmental Site Assessment (ESA) at the Belfast Fire Station located at 273 Main Street, in Belfast, Maine (Site). The Phase I ESA, dated May 22, 2023, identified the following recognized environmental conditions (RECs) to be addressed by this Phase II ESA:

- CEG identified the storage of aqueous film forming foam (AFFF) surfactants at the facility potentially containing Per- and Polyfluorinated Substances (PFAS). Although no evidence of current releases of these AFFFs, the use of these surfactants in and outside the facility historically could pose a risk to human health and the environment.
- Residual petroleum from two former and one current off-site gasoline stations could pose a vapor encroachment condition and any future building specifically constructed with a basement is susceptible to vapor intrusion without appropriate sampling or confirmatory data.
- The practice of stockpiling snow from nonpoint sources on-site creates a risk that contaminants may have leached to the ground surface.
- Although the holes in the concrete slab of the Fire Station building assist with drainage issues, the holes are providing a conduit for any potential contaminants to discharge to the subsurface below the building's slab. Also, the floor drains discharging to an intentional gravel pit acting as a dry well near the western drainage swale is a potential pathway for any contaminants on the floor to be released directly to the subsurface and indirectly to the western drainage swale.

The Phase II ESA scope of work included the following:

- Attempted five geoprobe borings throughout the Subject Property for confirming the presence or absence of contaminants at each area of concern;
- Collected six surface soil samples at various locations for confirming the presence or absence of contaminants of concern at each area of concern (one or more of the following: PFAS, select metals, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs);
- Screened geoprobe boring soils for VOCs using a photoionization detector (PID) and headspace technique;
- Selected a minimum of one subsurface soil sample from each soil boring for laboratory analysis of extractable petroleum hydrocarbons (EPH) and volatile petroleum hydrocarbons (VPH)
- Collected soil gas samples from the sub-slab soil within the Fire Station Building and soil gas samples from the north and south of the Museum Building foundation for the analysis of VOCs;
- Conducted a location survey of the sample locations.

CEG proposed to install monitoring wells; however, the geoprobe equipment was unable to penetrate the dense silt material beyond 12 feet below grade surface and no groundwater was encountered.

Surface soil sample SS-1 and SS-1 Dup (duplicate) was located between an area confirmed by Belfast Public works personnel to be a floor drain discharge area of stone near the northwest corner of the Fire Station building and the western drainage swale. Surface soil samples SS-2, SS-3, and SS-4 were located immediately north of the Fire Station where CEG was informed that fire drills had been conducted. Surface soil samples SS-5, SS-6, and subsurface soil boring SB-4 were located further north beyond the Fire Station building where snow was stockpiled and left to melt on-site for many years. Sub-slab soil gas samples were collected below the Fire Station's concrete slab (SG-3 and SG-4) and soil gas samples collected adjacent to the north (SG-2) and south (SG-1) slab of the of the Museum building.

Surface soil samples SS-1, SS-1 Dup, SS-5, SS-6, and SB-4 were analyzed for VOCs, SVOCs, select metals and PFAS. No VOCs were detected above the corresponding reporting limits. Extremely low levels of SVOCs fluoranthene, pyrene, chrysene, benzo(b) fluoranthene, and benzo(g,h,i)perylene were detected below each corresponding Maine Department of Environmental Protection (MEDEP) Remedial Action Guidelines of Contaminated Sites, November 15, 2023 (RAGs) scenario. No metal exceeded a Commercial or Construction Worker RAG.

Subsurface soil samples from soil borings located throughout the site (SB-1, SB-2, SB-3, and SB-4A) were analyzed for EPH and VPH. No EPH compounds were detected above the reporting limit in any of the four soil samples analyzed. VPH C5-C8 aliphatics were detected at concentrations ranging from 4.2 milligram per kilogram (mg/kg) in sample SB-2 to 5.6 mg/kg in sample SB-3. The Commercial and Construction Worker scenario MEDEP RAG is 100,000 mg/kg.

Surface soil samples SS-1, SS-1 Dup, SS-2, SS-3, and SS-4 were analyzed for PFAS. PFAS compounds had some extremely low concentrations, well below corresponding RAGs.

The only VOC compound detected from soil gas samples that exceeded a corresponding Indoor Air RAG for samples collected by CEG was SG-4 and SG-4 Dup for the compound 1,3-butadiene. The concentrations of 1,3 butadiene were 8.25 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) and 6.86  $\mu\text{g}/\text{m}^3$ , respectively compared to the Commercial Indoor Air RAG of 4.1  $\mu\text{g}/\text{m}^3$ . Using the 33 percent attenuation factor, the 1,3-butadiene concentrations are converted to 2.7225  $\mu\text{g}/\text{m}^3$  and 2.2638  $\mu\text{g}/\text{m}^3$ , respectively which are both below the corresponding Commercial Indoor Air RAG of 4.1  $\mu\text{g}/\text{m}^3$ . Therefore, no vapor intrusion is anticipated.

No field screening or laboratory results collected during this Phase II ESA indicated any contaminants of concern that would adversely impact human health or the environment. CEG recommends that during any future excavation work, an on-site competent person be aware of any potential contaminants that may be encountered. Evidence of contamination may include but not be limited to soil staining and or odor. If evidence of a release is encountered, the appropriate parties shall be notified and proper actions shall be taken. An Environmental Media Management Plan (EMMP) is recommended for outlining these procedures.

## 1.0 INTRODUCTION

This Phase II Environmental Site Assessment (ESA) is for the Belfast Fire Station (Site), located at 273 Main Street, in Belfast, Maine (**Figure 1, Appendix A**). This Phase II ESA was conducted by Campbell Environmental Group, Inc. (CEG) as part of the Eastern Maine Development Corporation (EMDC) United States Environmental Protection Agency's (USEPA) Brownfield Community Wide Assessment Grant.

On May 22, 2023, CEG completed a Phase I ESA at the Site and identified four recognized environmental conditions (RECs), presented in **Section 2.6** of this report. On June 28, 2023, CEG completed a Site-Specific Quality Assurance Project Plan (QAPP) to investigate environmental conditions at the Site. The QAPP was developed based on the results of the Phase I ESA and approved by EMDC, Maine Department of Environmental Protection (MEDEP), and USEPA. Phase II ESA field work was completed by CEG personnel on August 8 and 11, 2023, in accordance with relevant MEDEP and USEPA requirements and guidance. This report describes the methods and results of the Phase II ESA.

### 1.1 Purpose

The purpose of this Phase II ESA was to further investigate potential environmental impacts associated with the RECs identified in the May 22, 2023 Phase I ESA. This Phase II ESA was conducted to identify potential constituents of concern in the soils, groundwater, and soil gas at the Site, evaluate the nature and distribution of these constituents, and determine if the site conditions pose a threat to human health and or the environment.

## 2.0 BACKGROUND

### 2.1 Site Description

The Subject Property is located at 273 Main Street in Belfast, Maine (**Figure 1, Appendix A**); however, the Subject Property is not the entire 38.5-acre parcel identified by the City of Belfast as Tax Map 12, Lot 50 but an approximate 3.44-acre portion approximately 300 feet along Main Street and 500 feet perpendicular to Main Street (the southwestern portion of the lot). Main Street has also been referenced as Belmont Avenue and U.S. Route 3.

According to tax assessor records, two buildings occupy the Subject Property. The Fire Station building is 8,520 square feet (60' by 110') and a second building which is referred to as the museum is 74' by 28'. An addition to the Fire Station consisted of the west garage bay was constructed in 2011. Paved parking is located between the buildings and Main Street. Behind the building is cleared and has been used as a location for snow removal for many years and fire safety training.

<b>Table 1</b>	
<b>Description</b>	<b>Subject Property</b>
<b>Property Address</b>	273 Main Street
<b>Map / Lot Number</b>	Southwest portion of 12/50
<b>Lot Size</b>	3.4-Acres
<b>Zoning</b>	Residential-2
<b>Current Property Use</b>	City Fire Station
<b>Date of Building Constructed</b>	1979 Museum building, 1987 Fire Station building and 2011 for Fire Station addition according to tax assessor records

## 2.2 Site and Vicinity Characteristics

The neighborhood is a mix of retail, restaurants, businesses, service stations, and a cemetery. The intersection of Route 3 and Route 1 is 300 feet west of the Subject Property. This intersection directs traffic to Downtown Belfast's waterfront or bypasses downtown and provides a commuter route (Route-1) south to Camden and north to Searsport.

The Subject Property is zoned Residential-2. The topography of the Subject Property is relatively flat with two 4-6 feet deep drainage swales on the east and west sides of the Fire Station building.

## 2.3 Utilities and Other Improvements

The Subject Property is serviced by public water from the Belfast Water District. The Belfast Water District uses groundwater as its water source. There are two gravel packed wells located in the Goose River Aquifer in Swanville and Belfast. These wells have been in production since the 1950's. In the 1950s, two wells were drilled into a sand and gravel aquifer on the east side of Belfast for additional water supply and in 1980, when the Water District discontinued using the Little River Reservoirs, these wells became the sole supply of pure, high-quality water for the district's 1,800+ customers. The Subject Property is serviced by public sewer. Although when CEG contacted the Belfast Wastewater Treatment Department, their staff was unable to verify the date of available public sewer to this portion of Main Street.

The Fire Station building is heated by #2 fuel oil. A propane aboveground storage tank fuels the outside generator. The museum building is not heated. Overhead electrical lines run along the north side of Main Street.

PROPERTY ASSESSMENT RECORD		CITY OF BELFAST	CARD	OF	CARDS
RESIDENTIAL	ROAD <i>MAIN STREET</i>		MAP		LOT
SEASONAL					
COMMERCIAL	OWNER <i>BELFAST, CITY OF</i>		<i>12</i>		<i>50</i>
INDUSTRIAL					
<i>GOVERNMENT</i> OWNER OF RECORD		OWNER OF RECORD			

**BUILDING DIAGRAM** SCALE: 1"=40'

*CEMETERY MAINTENANCE* SCALE: 1"=20'

Sketches of the building footprints filed with the Belfast Tax Assessor

## 2.4 Site Geology and Hydrogeology

Geological sensitivity maps prepared by the Maine Geological Survey including Bedrock Geology, Surficial Geology, Significant Sand and Gravel Aquifers, Fresh-Water Wetlands, and Groundwater Resource Maps were reviewed. **Table 2** summarizes the review of these maps.

<b>Table 2</b>		
<b>Site Geology and Hydrogeology</b>		
<b>Feature</b>	<b>Source</b>	<b>Description</b>
Nearest Water Body	Maine DOT 08-1997	An unnamed stream flows south to north approximately 80 feet east of the Fire Station building, Belfast Bay is 0.85 mile west of Subject Property
Surficial Geology	Surficial Geology of the Belfast Quadrangle Maine, Open File 14-13, 2014, Maine Geological Survey	Till comprised of poorly sorted clay, silt, sand, and gravel
Bedrock Geology	According to the Bedrock Geology of the Belfast Quadrangle Maine, Open File 12-37, 2012, Maine Geological Survey	Ordovician to Precambrian aged fine-grained intermediate to felsic metatuff of the Penobscot Formation, Gushee member.
Wetlands	National Wetland Inventory (NWI)	Nearest mapped wetland is approximately 500 feet south, southeast of Subject Property described as 5.45 acres of freshwater palustrine forested, broad-leaved deciduous, seasonally flooded/saturated wetland
Flood Zone	FEMA Flood Panel 23011C0526D	No flood zone within Subject Property boundaries
Public Drinking Water Source	MEDEP EGAD Database	1.5 miles southwest of Subject Property
Sand & Gravel Aquifer	MEDEP EGAD Database	1.36 miles southwest of Subject Property
FEMA-Federal Emergency Management Agency, FIRM-flood insurance rate map, GPM-gallons per minute		

## 2.5 Current Use of the Property

The Subject Property is currently operating as the City Fire Station. The museum building is used for storage and is not open to the public.

## 2.6 Historical Use Information on the Property

Megan Pinette, of the Belfast Historical Society, provided CEG with photographs and limited historical information. The City of Belfast acquired the property in 1973 for the purpose of constructing the fire station. According to tax assessor records, the museum building was constructed in 1979 and the Fire Station building in 1987. Ms. Pinette provided CEG with photographs of the Route 1 and Route 3 intersection prior to the construction of the Fire Station as shown below.

## 2.7 Adjacent Property Information and Historical Use

The Subject Property is bordered to the north and east by Grove Cemetery; to the south Main Street and across Main Street are a gasoline service station, Walgreens Pharmacy; and to the west is an Autozone parts and service center. Beyond the cemetery to the north is the Belfast High School and to the east is a residence. CEG has attempted to include any pertinent historical information obtained through the review of tax accessor records and code enforcement files. CEG did not encounter any reference to Viking Lumber; however, Fire Chief Richards indicated it occupied this location from 1949-1969.

Table 3 Adjacent Properties			
Map/Lot	Address	Owner	Use & Tax Card Information
005/116 012/44	281 Main Street	Autozone	1970 Built 1975 Webber Oil Co. 1990 Facility upgrades 11/1994 "Defunct" Seacoast Grocer 1997 Fuel tanks removed 2010 CN Brown Building demolished 2001 Autozone constructed
012/042 Split	15 Starrett Dr	Kliner Industries	Shopping Center: Sherwin-Williams Paint, Goodwill, China One Restaurant
012/042A	35 Starrett Drive	Atlantic Purchase, LLC	VIP Auto Parts
012/042B	23 Starrett Drive	RYFF1, LLC	Dunkin Donuts
012/040 Split	268 Main Street	B. Jaffe Belfast LLC	1989 CN Brown/Big Apple 2010 Big Apple demolished 2011 Walgreens Pharmacy
012/040A	26 Starrett Drive	Wicked Clean	1989 5 bay car wash
012/046	215 Main Street Formerly 5 Belmont Street	Barry Hanstein	1977 Residence w/ full basement 1990 Remodeled 2005 Leachfield replacement
012/039	262 Main Street	John Ware c/o Maritime	1962 Structure 1994 Gasoline Station (Maritime) 2002 Old structure demolished
013/012	25 Lions Way	Regional School Unit	High School
012/050	273 Main Street	City of Belfast	Cemetery

## 2.8 Sanborn Fire Insurance Maps and Town Directories

EDR reported Sanborn Fire Insurance Maps for a small portion east of the Subject Property that includes the Grove cemetery chapel and dwellings on the south side of Belmont Avenue for the years 1948, 1931, and 1923. In the 1965 Sanborn map the former dwellings are replaced with labeling as a filling station. This location correlates with the current Maritime service station.

23 Belmont Avenue, located west of the Route -1 overpass, was formerly a 300-car capacity Drive-In from the 1950's to the 1980's. Its current use is a shopping center with a street address of 1 Belmont Avenue.

Town directories were provided by EDR for the years 1992, 1995, 2005, 2010, 2014, 2017, and 2020. For the years 1992 and 1995, the directories did not list any Main Street numbers higher than 161 Main Street. The change in distinction between Belmont and Main Street occurred sometime in the late 1990's. CEG has created **Table 4** to demonstrate the listings of interest for the years EDR provided. It should also be noted that the Fire Station was listed only twice, once in 2020 at the current address and the other in 2005 under street address 281 which was also listed as Autozone.

<b>TABLE 4</b>								
<b>City Directory Listings</b>								
<b>Address</b>	<b>Directory Year</b>							
	<b>2020</b>	<b>2017</b>	<b>2014</b>	<b>2010</b>	<b>2005</b>	<b>2000</b>	<b>1995</b>	<b>1992</b>
<b>6 Belmont</b>	Dutch Chevrolet	Dutch Chevrolet	Dutch Chevrolet	Dutch Chevrolet	Dutch Chevrolet	NL	Randall Associates	Lawrence & Judith Cole
<b>21 Belmont</b>	Grove Cemetery	NL	NL	Grove Cemetery	NL	Grove Cemetery	Grove Cemetery	NL
<b>22 Belmont</b>	Circle K	Circle K/ Shell	Circle K/ Shell	Dead River	NL	NL		NL
<b>32 Belmont</b>	NL	NL	NL	NL	NL	NL	Maritime	NL
<b>273 Main St</b>	Fire Dept	NL	NL	NL	NL	NL	NL	NL
<b>281 Main St</b>	Autozone & Fire Dept	Autozone	Autozone	Autozone	Fire Dept	NL	NL	NL
<b>262 Main St</b>	Maritime	Maritime	Maritime	Maritime	Maritime	NL	NL	NL
<b>254 Main St</b>	NL	NL	Rite Aid	Rite Aid	Rite Aid	NL	NL	NL
<b>244 Main St</b>	NL	NL	NL	Quirk Chrysler	Kallis Ford	Kallis Ford	NL	NL
Notes: NL-Not Listed								

## 2.9 Recognized Environmental Conditions (RECs)

The following RECs have been identified by CEG through review of federal, state and local records, observations during the site reconnaissance, and interviews with knowledgeable persons.

- CEG identified the storage of aqueous film forming foam (AFFF) surfactants at the facility potentially containing Per- and Polyfluorinated Substances (PFAS). Although no evidence of current releases of these AFFFs, the use of these surfactants in and outside the facility historically could pose a risk to human health and the environment.
- Residual petroleum from two former and one current off-site gasoline stations could pose a vapor encroachment condition and any future building specifically constructed with a basement is susceptible to vapor intrusion without appropriate sampling or confirmatory data.
- The practice of stockpiling snow from nonpoint sources on-site creates a risk that contaminants may have leached to the ground surface.
- Although the holes in the concrete slab of the Fire Station building assist with drainage issues, the holes are providing a conduit for any potential contaminants to discharge to the subsurface below the building's slab. Also, the floor drains discharging to an intentional gravel pit acting as a dry well near the western drainage swale is a potential pathway for any contaminants on the floor to be released directly to the subsurface and indirectly to the western drainage swale.

<b>Table 3 Contaminants of Concern</b>	
<b>Recognized Environmental Condition (REC)</b>	<b>Contaminants of Concern (COCs)</b>
<b>REC #1-</b> CEG identified aqueous film forming foams (AFFF) surfactants present at the facility and suspect some use during training exercises with the potential of transforming to per- and polyfluorinated substances (PFAS) if released to the environment.	PFAS
<b>REC #2-</b> Residual petroleum from two former and one current gasoline station could pose a source for vapor intrusion of the current building or any future building especially one with a basement.	EPH, VPH
<b>REC #3-</b> The practice of stockpiling snow from nonpoint sources on-site creates a risk that contaminants may leach to the ground surface.	VOCs, SVOCs, and metals (RCRA 8 to also include Zinc and Copper)
<b>REC#4-</b> Holes in the concrete slab provide a conduit for any spills to discharge to the subsurface below the building's slab. According to Fire Chief Richards, the existing floor drains discharge to the western drainage swale.	PFAS, VOCs, VPH, EPH, RCRA 8 metals
EPH-extractable petroleum hydrocarbons, VPH-volatile petroleum hydrocarbons, VOCs-volatile organic compounds, PFAS-Per- and Polyfluorinated Substances, RCRA-Resource Conservation and Recovery Act (this 8 metal analysis includes arsenic, barium, cadmium, total chromium, lead, mercury, selenium, and silver)	

### 3.0 PHASE II ACTIVITIES

#### 3.1 Scope of Assessment

CEG proposed the following scope of work to investigate the identified areas of concern (AOCs):

- Prepared and submitted a work scope for your approval;
- Marked the Subject Property for Dig Safe;
- Attempted five geoprobe borings throughout the Subject Property for confirming the presence or absence of contaminants at each area of concern;
- Collected six surface soil samples at various locations for confirming the presence or absence of contaminants of concern at each area of concern;
- Screened geoprobe boring soils for VOCs using a PID and headspace technique;
- Selected a minimum of one soil sample from each soil boring for laboratory analysis of EPH and VPH
- Collected soil gas samples from the sub-slab soil within the Fire Station Building and soil gas samples from the north and south of the Museum Building foundation;
- Conducted a location survey of the sample locations; and
- Prepared this report summarizing the methods and results of the investigation.

##### 3.1.1 Chemical Testing Plan

CEG contracted Absolute Resource Associates (ARA), of Portsmouth, New Hampshire, to conduct off-site laboratory analysis of select soil, sediment, and groundwater samples collected as part of the Phase II ESA. Alpha Analytical (Alpha) was subcontracted to conduct the soil gas and ambient air samples for VOCs and soil analyses for PFAS.

Samples submitted to ARA and Alpha were analyzed for select COC using one or more of the following methods:

- VOCs in solid samples using USEPA Method 8260;
- Semi-volatile organic compounds (SVOCs) in solid samples using USEPA Method 8270C;
- Extractable petroleum hydrocarbons (EPH) in solid samples using MADEP -2004-1.1;
- Volatile petroleum hydrocarbons (VPH) in solid samples using MADEP 01-1.1;
- Select metals in solid samples using Method 6020A;
- VOC's in air and soil gas using EPA Method TO-15 by Alpha Analytical (acquired by Pace Analytical Services).

Each sample was labeled for laboratory identification. The sample labels included the site name, sample number, analysis requested, preservation/filtering information, time, date, and sampler's initials. Information concerning preservation methods, matrix, and sample location was also included on chain of custody forms. Chain of custody forms accompanied the samples to the off-site laboratory. Off-site

samples were stored on ice for delivery to the laboratory and were maintained at approximately 4 degrees Celsius (C) from time of sample collection until analysis. A complete set of the laboratory analytical data, including the chain of custodies is presented in **Appendix C**.

### 3.1.2 Deviations from Work Plan

Based on the surface water observed in both the east and west drainage swales, CEG presumed groundwater was relatively shallow; however, groundwater was not encountered in any of the five borings prior to boring refusal depths ranging from 7 feet below grade at soil boring SB-3 and 15 feet below surface grade at soil boring SB-4A. Therefore, no monitoring wells were installed and no groundwater samples were collected for analyses.

## 3.2 Field Exploration Methods, Sampling and Chemical Analyses

The following section presents a detailed description of the field investigation methods as well as the sampling and chemical analyses completed for the investigation.

### 3.2.1 Field Screening Samples

On-site screening consisted of VOCs using a photoionization detector (PID) with a 10.6 eV-lamp.

### 3.2.2 Laboratory Analyzed Samples Collected

Samples were collected at the following locations:

- A subsurface soil sample was collected from each soil boring (SB-1 through SB-4) for one or more of the following analyses: EPH (Method MAEP2004-1.1), VPH (MADEP 01-1.1), VOCs, SVOCs, and select metals: arsenic (As), barium (Ba), cadmium (Cd), total chromium (Cr), copper (Cu), lead (Pb), mercury (Hg), selenium (Se), silver (Ag), and zinc (Zn) using method 6020;
- Two sub-slab gas samples were collected under the concrete slab of the Fire Station Building and were analyzed for VOCs using Method TO-15;
- Two soil gas samples were collected at the north and south end of the museum building and were analyzed for VOCs using Method TO-15;
- An ambient air sample was collected in the Fire Station Building during the collection of sub slab sample SG-3 and another ambient air sample was collected outside the museum building during the sample collection of SG-1;
- One surface soil sample and a duplicate (SS-1) was collected in the vicinity of the floor drain sump and analyzed for VOCs, SVOCs, and select metals; and
- Five surface soil samples (SS-2 through SS-6) were collected from behind the fire station building where fire exercises were performed that could potentially release PFAS compounds to the ground surface. These samples were analyzed for PFAS using EPA Method 537.1 Isotope Dilution.

### 3.2.3 Soil Borings

CEG supervised the completion of five soil borings (SB-1, SB-2, SB-3, SB-4A, and SB-4B) using direct push drilling techniques in accordance with standard operating procedure (SOP) #009. Continuous soil sampling using acetate liners were collected. A CEG geologist logged the soil samples based on soil type, color, moisture, texture, and distinguishing characteristics in accordance with SOP# 002.

One subsurface soil sample from each of the four borings (SB-1 through SB-4) was selected for laboratory analyses based on one or more of the following: photoionization detector (PID) readings, the water table elevation; distinctive soil horizons; soil staining (visual observation); olfactory evidence of potential contamination; or proximity to the suspected sources of constituents of concern in each area.

### 3.2.4 Soil Screening and Analytical Sampling of Subsurface Soils

On-sight soil screening consisted of VOCs using a 10.6 eV-lamp PID in accordance with the headspace technique as described in the MEDEP *Compendium of Field Testing of Soil Samples for Gasoline and Fuel Oil*, MEDEP SOP # TS-004.

### 3.2.5 Soil Gas and Ambient Air Sampling

Current and historical sources of VOCs that could potentially adversely impact interior air quality through vapor intrusion includes one existing gasoline service station across from Main Street, a former gasoline station across Main Street, and a former gasoline station adjacent to the Subject Property's western property boundary. Two sub slab samples were collected below the foundation of the fire station building and two soil gas samples collected near the edge of the museum foundation for the analysis of VOCs.

Soil gas sampling was conducted in accordance with the MEDEP SOP#026. Sub-slab soil gas sampling point was drilled using a hammer drill to approximately 18 inches below grade. A stainless steel perforated rod was inserted, backfilled with sand, and sealed with bentonite. Tubing was placed at the top of the stainless-steel probe and connected to two 1-liter volume summa canisters using a "T" fitting provided by Alpha for collecting a simultaneous duplicate sample. The summa canisters consisted of a regulator preset to a flow rate less than 200-milliliters per minute. Carbon dioxide (CO<sub>2</sub>) and oxygen (O<sub>2</sub>) were monitored in the ambient air and the soil gas prior to connecting to the summa canisters. The soil gas samples were collected in the same manner with the exception of drilling through concrete. The sub-slab and soil gas samples were collected on different days due to a severe thunderstorm that occurred on August 10, 2023 following the collection of the sub-slab samples. CEG was concerned the amount of flooding caused by the rain would have impeded the collection of VOCs and moisture has a tendency to affect the accuracy of field instruments.

Ambient air sampling was conducted during the collection of sub-slab SG-3 in the fire station building and during the collection of SG-1 at the south end of the museum building. CEG followed the procedures outlined in the *MEDEP Bureau of Remediation Draft Indoor Air Sample Protocol with Indoor Air Sample Information Collection Form*, dated August 2, 2009.

### 3.2.6 Surface Soil Sampling

A total of six surface soil samples were collected and analyzed for COC specific to each location. The depth of each sample was approximately 6-8 inches below grade. Samples SS-1 was in the vicinity between the floor drain discharge and the westerly drainage swale. The other five samples were located behind the fire station building where fire-fighting drills were known to occur.

## 4.0 EVALUATION AND PRESENTATION OF RESULTS

The following subsections summarize the analytical results and site conditions.

### 4.1 Data Quality Assessment Summary

This subsection provides a summary of results from the QA/QC program. The primary purpose of the QA/QC program is to meet the data quality objectives for the soil and groundwater sampling program as outlined in the QAPP. QA/QC samples collected in the field include trip blanks and field duplicate samples. The QA/QC program also requires the review and evaluation of field sampling procedures.

#### 4.1.1 Evaluation of Sampling Procedures

CEG evaluated sampling procedures and field data in conjunction with the review of project analytical data. CEG reviewed;

- Documentation of field equipment calibration activities;
- Field data for technical credibility versus the sample site setting;
- Field sample data and chain-of-custody records; and
- Sample handling and preservation procedures.

Field sampling activities were conducted according to CEGs Generic QAPP and the site-specific QAPP. Field screening equipment was calibrated according to the respective manufactures SOPs and field data was reviewed by CEG personnel. ARA and Alpha documented acceptable sample receipt condition including the presence of trip blanks and signed chain of custodies. Additionally, the laboratories indicated that samples were received in acceptable condition, at 2 degrees Celsius, on ice, and in accordance with sample handling, preservation, and integrity guidelines. Chain of custody seals were not used for analytical samples submitted to the laboratories during this project because all sample coolers were transferred directly from CEG sampling personnel to laboratory personnel.

#### 4.1.2 Quality Assurance Quality Control Samples

QA/QC samples collected in the field included trip blanks and field duplicate samples. Additionally, laboratory method blanks, laboratory control samples, and laboratory control sample duplicates were analyzed. All QA/QC results are included in each corresponding laboratory report in **Appendix C**.

Duplicate field samples for the purpose of field QA/QC were collected for **SS-1** for VOCs, SVOCs, select metals, and PFAS. A duplicate sample for the soil gas/sub-slab sample was taken at sample location **SG-4** located in the Fire Station Building.

The relative percent difference (RPD) should be less than 50% for soil and soil gas. RPDs greater than 50 are colored red and in bold type and include: the PFAS sample SS-1 compound PFBA at concentrations below the reporting limit in soil samples SS-1 and SS-1 Dup; three detected SVOCs; and the VOC compound in sub slab sample SG-4 and SG-4 Dup for tetrahydrofuran. The RPDs greater than 50% in the soil samples are likely due to the heterogeneity of the soil. The reason for the tetrahydrofuran RPD greater than 50% in the sub-slab sample is not known.

Table 3 Relative Percent Difference for Duplicate Samples			
Compound	Sample Identification		RPD
<b>PFAS</b>			
PFBA	J 0.029	J 0.056	<b>63.53</b>
<b>Metals</b>			
	<b>SS-1</b>	<b>SS-1 Dup</b>	
Arsenic	10	10	0
Barium	28	35	22.22
Cadmium	< 0.60	< 0.59	NA
Chromium	20	25	22.22
Copper	17	19	11.11
Lead	14	14	0
Mercury	< 0.21	< 0.21	NA
Selenium	< 0.60	< 0.59	NA
Silver	<3.0	< 3.0	NA
Zinc	58	72	21.54
<b>SVOCs</b>			
	<b>SS-1</b>	<b>SS-1 DUP</b>	<b>RPD</b>
Benzo(b)Fluoranthene	0.061	0.11	<b>57.31</b>
Benzo (g,h,i)	0.067	0.094	33.54
Chrysene	0.078	0.11	34.04
Fluoranthene	0.098	0.260	<b>90.5</b>
Pyrene	0.11	0.25	<b>77.78</b>
<b>VOCs</b>			
	<b>SG-1</b>	<b>SG-1 DUP</b>	<b>RPD</b>
1,2,4-trimethylbenzene	1.31	1.47	11.51
1,3-butadiene	8.25	6.86	18.40
2,2,4-trimethylpentane	346	295	15.91
Acetone	907	796	13.04
Benzene	6.29	5.24	18.21
Carbon disulfide	17	14	19.35
heptane	48.8	41.4	16.41
hexane	104	84.9	20.22
chloromethane	1.5	1.51	0.66
cyclohexane	23.8	19.2	21.40

<b>Table 3</b>			
<b>Relative Percent Difference for Duplicate Samples</b>			
dichlorodifluoromethane	3.31	3.10	6.55
Ethyle benzene	3.18	2.93	8.18
styrene	1.49	1.17	24.06
tetrahydrofuran	13.9	25	<b>57.07</b>
toluene	13.9	11.9	15.50
xylene	14.2	12.9	9.59
p/m-xylene	10.3	9.3	10.20
o-xylene	3.93	3.65	7.39
2-butanone(MEK)	56	90.2	46.79
U-less than, J-estimated			

4.1.2.1 Absolute Resource Associates

**Absolute Resource Associates Laboratory Report 43001**

VPH: Sample 66563-009 (**Trip Blank**) had detections for m&p-xylene and naphthalene. These detections are the result of carryover from a previous sample.

**Surrogate Recoveries**

VPH: Sample 66563-009 (**Trip Blank**) had a recovery for 2,5-dibromotoluene as Aromatic that was outside acceptance criteria. No additional sample remained for re-analysis.

VPH: BLK2302538 had a recovery for 2,5-dibromotoluene as Aromatic that was outside acceptance criteria.

**Laboratory Control Sample Results**

VOC: The LCS2302416 did not meet the acceptance criteria for dichlorodifluoromethane. Since <10% of the compounds were outside of the acceptance criteria, reanalysis is not required.

VOC: The MLCS/D16588 did not meet the acceptance criteria for vinyl chloride. Since <10% of the compounds were outside of the acceptance criteria, reanalysis is not required.

VOC: The MLCS16606 did not meet the acceptance criteria for four analytes. The MLCSD16606 did not meet the acceptance criteria for three analytes. Since <10% of the compounds were outside of the acceptance criteria, reanalysis is not required.

SVOC: The LCS16615 did not meet the acceptance criteria for five analytes. Since <10% of the compounds were outside of the acceptance criteria, reanalysis is not required.

## Matrix Spike/Matrix Spike Duplicate/Duplicate Results

SVOC: The matrix spike for 66563-008 (**SS-1 Dup**) did not meet the acceptance criteria for several compounds. Compounds that exhibited recoveries outside the acceptance criteria have been qualified with an "M." Matrix interference suspected.

### 4.1.2.2 Alpha Analytical Services

Laboratory Report L2346817

L2346817-01D: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

L2346817-06D: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

L2346817-06D2: The sample was re-analyzed on dilution in order to quantitate the results within the calibration range. The result(s) should be considered estimated, and are qualified with an E flag, for any compound(s) that exceeded the calibration range in the initial analysis. The re-analysis was performed only for the compound(s) that exceeded the calibration range.

L2346817-07D: The sample was re-analyzed on dilution in order to quantitate the results within the calibration range. The result(s) should be considered estimated, and are qualified with an E flag, for any compound(s) that exceeded the calibration range in the initial analysis. The re-analysis was performed only for the compound(s) that exceeded the calibration range.

Laboratory Report L2346005

Perfluorinated Alkyl Acids by Isotope Dilution

L2346005-03, -04, -06, and WG1814494-1: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details. The WG1814494-2 LCS recovery, associated with L2346005-01 through -05, is above the acceptance criteria for perfluorononanesulfonic acid (pfns) (130%); however, the associated samples are non-detect to the reporting limit for this target analyte. The results of the original analysis are reported.

## 4.2 Analytical Data

Analytical results for soil and soil gas samples have been evaluated based on a comparison to applicable regulatory standards. The media concentrations are compared to the state criteria and are summarized below in **Table 4**.

<b>TABLE 4</b>	
<b>State Criteria for Evaluating Data</b>	
<b>Media</b>	<b>Criteria for Evaluation</b>
Boring Samples and soil samples	<ul style="list-style-type: none"> <li>Compare data with background concentrations (SB-1);</li> <li>Compare EPH, VPH, VOCs, SVOCs, and metals data with Table 4 Maine RAGs for the Soil Exposure Pathway, by Exposure Scenario (Commercial Worker &amp; Construction Worker Scenarios)</li> </ul>
Soil Gas	<ul style="list-style-type: none"> <li>Adjust soil gas results using OSWER attenuation factor of 0.30 and compare air and adjusted soil gas with <b>Table 5</b> Maine RAGs for Indoor Air Exposure Pathway, by Exposure Scenario (Indoor Air Commercial)</li> </ul>
MEDEP = Maine Department of Environmental Protection, RAGs = Remedial Action Guidelines for Contaminated Sites, November 15, 2023, OSWER- Office of Solid Waste and Emergency Response	

Remedial Action Guidelines (RAGs) are risk-based criteria designed to assess the potential threat specific constituents may pose to sensitive receptors. The regulatory guidelines presented in the RAGs do not include all compounds analyzed using the laboratory methods specified for this Phase II ESA. The compounds that do not have corresponding regulatory guidelines may have insufficient risk assessment data for determining a detrimental environmental or health risk. All compounds have the potential to be regulated by the MEDEP or EPA if a risk to human health or the environment is a concern. Concentrations of multiple compounds, with or without a guideline, can be interpreted as a cumulative risk to sensitive receptors. All laboratory reports have been included in **Appendix C** of this report.

#### 4.2.1 Soil Screening Results

CEG screened soils from each 5 foot interval acetate liner sampler per boring, if sufficient recovery was achieved. The VOC screening results ranged from 0.2 parts per million to a high of 0.5 ppm.

#### 4.2.2 Soil Sampling Results

##### Volatile Organic Compounds

No VOCs were detected above the corresponding reporting limits for any of the soil samples analyzed (SS-1, SS-1 Dup, SS-5, SS-6, and SB-4).

##### Semi-volatile Organic Compounds

Extremely low levels of fluoranthene, pyrene, chrysene, benzo(b) fluoranthene, and benzo(g,h,i)perylene were detected in soil samples SS-1, SS-1 Dup, SS-5, and SS-6 but not SB-4A. No detected concentration exceeded a corresponding Commercial or Construction Worker RAG scenario.

##### Metals

Soil samples SS-1, SS-1 Dup, SS-4, SS-5 and SS-6 were analyzed for select metals. No metal exceeded a Commercial or Construction Worker RAG.

### Extractable Petroleum Hydrocarbons (EPH)

Soil samples SB-1, SB-2, SB-3, and SB-4A were analyzed for EPH. No EPH compounds were detected above the reporting limit in any of the four soil samples analyzed.

### Volatile Petroleum Hydrocarbons (VPH)

Soil samples SB-1, SB-2, SB-3, and SB-4A were analyzed for VPH. C5-C8 aliphatics at concentrations ranging from 4.2 mg/kg in sample SB-2 to 5.6 mg/kg in sample SB-3. The Commercial and Construction Worker RAG is 100,000 mg/kg.

#### 4.2.3 Ambient Air and Soil Gas Sample Results

An ambient air sample was collected from the interior of the fire station building (Fire Station Amb) and outside of the museum (Museum Amb) for the purpose of comparing background concentrations with sub-slab and soil gas samples. The ambient air sample inside the fire station had no VOC compounds exceeding a Commercial Indoor Air RAG and the ambient air outside the museum building had no VOC compound concentrations exceeding an Ambient Air RAG at the time of the sampling. The results of the ambient air quality of the interior of the fire station building (Fire Station Amb) indicates some VOCs such as toluene, ethyl benzene, and xylene are present at relatively higher concentrations in the ambient air than corresponding concentrations in the sub slab samples SG-3 and SG-4. The result of the ambient air outside the museum indicates MEK as the only compound slightly higher than corresponding MEK concentrations in the soil gas samples. Following the collection of soil gas SG-2, CEG discovered someone at the fire station had used spray paint outside the easterly garage bay of the fire station building. Based on material data sheets for general spray paints, common hazardous properties of spray paint may include but not be limited to toluene, hexane, ethyl benzene, acetone, and xylene.

The only VOC compound detected that exceeded a corresponding Indoor Air RAG for samples collected by CEG (SG-1, SG-2, SG-3, SG-4, and SG-4 Dup) was SG-4 and SG-4 Dup for the compound 1,3-butadiene. The concentrations of 1,3 butadiene were 8.25 ug/m<sup>3</sup> and 6.86 ug/m<sup>3</sup>, respectively compared to the Commercial Indoor Air RAG of 4.1 ug/m<sup>3</sup>. Using the 33 percent attenuation factor, the 1,3-butadiene concentrations are converted to 2.7225 ug/m<sup>3</sup> and 2.2638 ug/m<sup>3</sup>, respectively which are both below the corresponding Commercial Indoor Air RAG of 4.1 ug/m<sup>3</sup>. Therefore, no vapor intrusion is anticipated.

Absolute Resource Associates, LLC								
Semi-Volatile Organic Compound Analysis in milligrams/kilogram (mg/kg)								
CAS	Chemical	MEDEP RAGS		Sample Identifications				
		Commercial Worker	Construction Worker	SS-1 (6"-8")	SS-1 (6"-8") Dup	SS-5 (6"-8")	SS-6 (6"-8")	SB-4 (10"-15)
<b>SVOCs (SW3546/8270D)</b>								
56-55-3	Benzo(a)anthracene	280	1,700	< 0.061	0.096	0.065	< 0.053	< 0.059
50-32-8	Benzo(a)pyrene	29	9.9	< 0.061	0.110	0.120	0.070	< 0.059
205-99-2	Benzo(b)fluoranthene	290	1,700	0.061	0.110	0.100	0.071	< 0.059
191-24-2	Benzo(g,h,i)perylene	23000	72,000	0.067	0.094	0.170	0.068	< 0.059
207-08-9	Benzo(k)fluoranthene	2900	17,000	< 0.061	0.098	0.100	0.059	< 0.059
85-68-7	Butyl Benzyl Phthalate	17000	99,000	< 0.61	< 0.60	< 0.51	4.000	< 0.59
218-01-9	Chrysene	29000	100,000	0.078	0.110	0.078	0.067	< 0.059
206-44-0	Fluoranthene	41000	24,000	0.098	0.260	0.110	0.100	< 0.059
193-39-5	Indeno(1,2,3)pyrene	290	1,700	< 0.061	0.070	0.110	< 0.053	< 0.059
129-00-0	Pyrene	31000	72,000	0.110	0.250	0.110	0.100	< 0.059
Notes: NC=Not Calculated, NA=Not Analyzed by Laboratory Green Font indicates applicable project specific exposure pathway, NR - Not Regulated, Red Font indicates concentration of compound exceeds one or more RAG scenarios RAGs- Maine Department of Environmental Protection Remedial Action Guidelines for Contaminated Sites November 15, 2023								

Absolute Resource Associates, LLC							
Volatile Petroleum Hydrocarbon Analysis in milligram/kilogram (mg/kg)							
CAS	Chemical	MEDEP RAG		Sample Identification			
		Commercial Worker	Construction Worker	SB-1 (5'-10')	SB-2 (10'-15')	SB-3 (5'-10')	SB-4 (10'-15')
<b>MA VPH 2004-1.1</b>							
71-43-2	Benzene	75	240	< 0.088	< 0.082	< 0.091	< 0.089
100-41-4	Ethylbenzene	380	470	< 0.088	< 0.082	< 0.091	< 0.089
1634-04-4	Methyl tert-Butyl Ether (MTBE)	3,000	8,300	< 0.088	< 0.082	< 0.091	< 0.089
91-20-3	Naphthalene	120	130	< 0.22	< 0.20	< 0.23	< 0.22
DEP2068	M & P Xylenes	NR	NR	< 0.088	< 0.082	< 0.091	< 0.089
95-47-6	O Xylene	NR	NR	< 0.088	< 0.082	< 0.091	< 0.089
1330-20-7	Total Xylenes	260	260	< 0.088	< 0.082	< 0.091	< 0.089
108-88-3	Toluene	810	820	< 0.088	< 0.082	< 0.091	< 0.089
DEP2038	C5-C8 Aliphatics	11,000	430	4.70	4.20	5.60	< 4.5
DEP2039	C9-C12 Aliphatics	14,000	2,300	< 4.4	< 4.1	< 4.5	< 4.5
DEP2040	C9-C10 Aromatics	3,500	2,600	< 4.4	< 4.1	< 4.5	< 4.5
Notes: NC=Not Calculated, NA=Not Analyzed by Laboratory Green Font indicates applicable project specific exposure pathway, NR - Not Regulated, Red Font indicates concentration of compound exceeds one or more RAG scenarios RAGs- Maine Department of Environmental Protection Remedial Action Guidelines for Contaminated Sites November 15, 2023							

ALPHA ANALYTICAL										
Volatile Organic compounds by Method TO-15 in micrograms per cubic meter (ug/m <sup>3</sup> )										
CAS #	Chemical Compound	Ambient	Commercial ug/m <sup>3</sup>	Ambient Museum	SG-1	SG-2	Fire Station	SG-3	SG-4	SG-4 Dup
71-55-6	1,1,1-Trichloroethane	5,000	22,000	< 1.09	< 3.90	< 1.09	< 1.09	< 5.46	< 1.09	< 1.09
79-34-5	1,1,2,2-tetrachloroethane	0.17	2.1	< 1.37	< 4.90	< 1.37	< 1.37	< 6.87	< 1.37	< 1.37
79-00-5	1,1,2-trichloroethane	0.2	0.88	< 1.09	< 3.90	< 1.09	< 1.09	< 5.46	< 1.09	< 1.09
75-34-3	1,1-dichloroethane	6.3	77	< 0.809	< 2.89	< 0.809	< 0.809	< 4.05	< 0.809	< 0.809
75-35-4	1,1-dichloroethene	200	880	< 0.793	< 2.83	< 0.793	< 0.793	< 3.96	< 0.793	< 0.793
120-82-1	1,2,4-trichlorobenzene	2	8.8	< 1.48	< 5.30	< 1.48	< 1.48	< 7.42	< 1.48	< 1.48
95-63-6	1,2,4-trimethylbenzene	60	260	< 0.983	< 3.51	< 0.983	12.1	< 4.92	1.31	1.47
95-50-1	1,2-dichlorobenzene	200	880	< 1.20	< 4.29	< 1.20	< 1.20	< 6.01	< 1.20	< 1.20
107-06-2	1,2-dichloroethane	0.39	4.7	< 0.809	< 2.89	< 0.809	< 0.809	< 4.05	< 0.809	< 0.809
78-87-5	1,2-dichloropropane	2.7	18	< 0.924	< 3.30	< 0.924	< 0.924	< 4.62	< 0.924	< 0.924
108-67-8	1,3,5-trimethylbenzene	60	260	< 0.983	< 3.51	< 0.983	3.37	< 4.92	< 0.983	< 0.983
106-99-0	1,3-butadiene	0.33	4.1	< 0.442	2.12	2.79	< 0.442	< 2.21	8.25	6.86
106-46-7	1,4-dichlorobenzene	0.90	11	< 1.20	< 4.29	< 1.20	< 1.20	< 6.01	< 1.20	< 1.20
123-91-1	1,4-dioxane	2	25	< 0.721	< 2.57	< 0.721	< 0.721	< 3.60	1.42	< 0.721
78-93-3	2-butanone(MEK)	5,000	22,000	52.8	41.9	23.70	33.3	8.26	56.0	90.2
540-84-1	2,2,4-trimethylpentane	NA	NA	< 0.934	< 3.33	< 0.934	21.6	2,220.00	346	295
108-10-1	4-methyl-2-pentanone (MIBK)	3,000	13,000	< 2.05	< 7.29	2.19	< 2.05	34.30	< 2.05	< 2.05
67-64-1	acetone	NA	NA	29.2	86.7	102	32.3	135	907	796
71-43-2	benzene	1.3	16	< 0.639	2.37	2.93	3.96	5.97	6.29	5.24
100-44-7	benzyl chloride	0.2	2.5	< 1.04	< 3.70	< 1.04	< 1.04	< 5.18	< 1.04	< 1.04
75-27-4	bromodichloromethane	0.27	3.3	< 1.34	< 4.78	< 0.721	< 1.34	< 6.70	< 1.34	< 1.34
75-25-2	bromoform	9.1	110	< 2.07	< 7.38	< 2.07	< 2.07	< 10.3	< 2.07	< 2.07
74-83-9	bromomethane	5	22	< 0.777	< 2.77	< 0.777	< 0.777	< 3.88	< 0.777	< 0.777
75-15-0	carbon disulfide	700	3,100	< 0.623	< 2.22	1.05	< 0.623	< 3.11	17	14.0
56-23-5	carbon tetrachloride	1.7	20	< 1.26	< 4.49	< 1.26	< 1.26	< 6.29	< 1.26	< 1.26
108-90-7	chlorobenzene	50	220	< 0.921	< 3.29	< 0.921	< 0.921	< 4.61	< 0.921	< 0.921
67-66-3	chloroform	0.44	5.3	< 0.977	< 3.49	2.97	< 0.977	< 4.88	< 0.977	< 0.977
74-87-3	chloromethane	90	390	0.921	< 1.47	< 0.413	0.871	< 2.07	1.5	1.51
110-82-7	cyclohexane	6,000	26,000	< 0.688	9.88	3.75	30.8	65.1	23.8	19.20
75-71-8	dichlorodifluoromethane	100	440	2.24	< 3.53	2.28	2.27	60.8	3.31	3.10
100-41-4	ethyl benzene	4	49	< 0.869	< 3.10	< 0.869	8.51	< 4.34	3.18	2.93
142-82-5	heptane	NA	NA	< 0.820	4.59	2.69	9.38	58.6	48.8	41.4
87-68-3	hexachlorobutadiene	0.46	5.6	< 2.13	< 7.62	< 2.13	2.13	< 10.7	< 2.13	< 2.13
110-54-3	hexane	700	3,100	40.9	1,320	E 430	22.2	257	104	84.9
75-09-2	methylene chloride	600	2,600	< 1.74	< 6.18	< 1.74	< 1.74	< 8.69	< 1.74	< 1.74
1634-04-4	MTBE	39	470	< 0.721	< 2.57	< 0.721	< 0.721	< 3.61	< 0.721	< 0.721
91-20-3	naphthalene	0.29	3.6	< 1.05	< 3.74	< 1.05	< 1.05	< 5.24	3.26	< 1.05
100-42-5	styrene	1,000	4,400	< 0.852	< 3.04	0.962	< 0.852	< 4.26	1.49	1.17
127-18-4	tetrachloroethene	39	180	< 1.36	< 4.84	< 1.36	< 1.36	< 6.78	< 1.36	< 1.36
109-99-9	tetrahydrofuran	2,000	8,800	14.0	14.5	3.01	12.9	< 7.37	13.9	25.0
108-88-3	toluene	5,000	22,000	< 0.754	7.69	3.40	36.5	9.80	13.9	11.9
156-60-5	trans-1,2-dichloroethene	40	180	< 0.793	< 2.83	< 0.793	< 0.793	< 3.96	< 0.793	< 0.793
156-59-2	cis-1,2-dichloroethene	40	180	< 0.793	< 2.83	< 0.793	< 0.793	15.5	< 0.793	< 0.793
79-01-6	trichloroethene	2	8.8	< 1.07	< 3.84	< 1.07	< 1.07	< 5.37	< 1.07	< 1.07
75-69-4	trichlorofluoromethane	NA	NA	1.16	< 4.01	1.14	< 1.112	< 5.62	< 1.12	< 1.12
1330-20-7	xylene	100	440	< 0.869	< 3.10	2.88	44.7	< 4.34	14.2	12.9
106-42-3/108-38-3	p/m-xylene	NA	NA	< 1.74	< 6.21	2.01	31.8	< 8.69	10.30	9.30
95-47-6	o-xylene	NA	NA	< 0.869	< 3.10	0.873	12.9	< 4.34	3.93	3.65
108-05-4	vinyl acetate	200	880	< 3.52	< 12.6	< 3.52	< 3.52	< 17.6	< 3.52	< 3.52
593-60-2	vinyl bromide	0.67	8.20	< 0.874	< 3.12	< 0.874	< 0.874	< 4.37	< 0.874	< 0.874
75-01-4	vinyl chloride	1.1	28	< 0.511	< 1.83	< 0.511	< 0.511	3.48	< 0.511	< 0.511
1.3	Reporting Limit exceeds corresponding Remedial Action Guideline									
8.25	Concentration exceeds corresponding RAG									
RAG	Remedial Action Guideline per MEDEP Remedial Action Guidelines for Contaminated Sites, November 15, 2023									

Absolute Resource Associates, LLC Metal Analyses in miligram per kilogram (mg/kg)								
CAS	Chemical	MEDEP RAG		Sample Identification				
		Commercial Worker	Construction Worker	SS-1 (6"-8")	SS-1 (6"-8") Dup	SS-4 (6"-8")	SS-5 (6"-8")	SS-6 (6"-8")
<b>Metals SW3051A6020A</b>								
7440-43-9	Cadmium (Diet)	140	42	< 0.60	< 0.59	< 0.59	< 0.49	< 0.55
7440-38-2	Arsenic	41	54	10	10	13	7	10
7440-39-3	Barium	100,000	20,000	28	35	65	16	27
16065-83-1	Chromium(III), Insoluble Salts	100,000	27,000	Total 20	Total 25	Total 45	Total 17	Total 26
18540-29-9	Chromium(VI)	89	46	Total 20	Total 25	Total 45	Total 17	Total 26
7782-49-2	Selenium	8,000	1,700	< 6.0	< 5.9	< 5.9	< 4.9	< 5.5
7440-22-4	Silver	8,000	1,700	< 3.0	< 3.0	< 3.0	< 2.5	< 2.8
7440-50-8	Copper	64,000	14,000	17	19	25	12	15
7439-92-1	Lead	440	460	14	14	15	8	16
7439-97-6	Mercury (elemental)	3.1	3.1	< 0.21	< 0.21	< 0.18	< 0.16	< 0.14
7440-66-6	Zinc and Compounds	100,000	100,000	58	72	58	32	50
Notes: NC=Not Calculated, NA=Not Analyzed by Laboratory Green Font indicates applicable project specific exposure pathway, NR - Not Regulated, Red Font indicates concentration of compound exceeds one or more RAG scenarios RAGs- Maine Department of Environmental Protection Remedial Action Guidelines for Contaminated Sites November 15, 2023								

Alpha Analytical										
PFAS Analysis in nanograms per gram (ng/g)										
CAS #	Chemical	MEDEP RAG			Sample Identification					
		Commercial Worker	Construction Worker	Rural Developed	SS-1 (6"-8")	SS-1 (6"-8") Dup	SS-2 (6"-8")	SS-3 (6"-8")	SS-4 (6"-8")	Eq Blank
<b>PFAS - USEPA Method 537.1</b>										
375-22-4	Perfluorobutanoic Acid (PFBA)	1,600,000	2,000,000	0.43	J 0.029	J 0.056	< 0.510	J 0.169	J 0.077	< 1.73
2706-90-3	Perfluoropentanoic Acid (PFPeA)	NR	NR	NR	J 0.062	< 0.795	< 0.510	J 0.312	< 0.496	< 1.73
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	340,000	230,000	NA	< 0.297	< 0.398	< 0.255	< 0.256	< 0.248	< 1.73
307-24-4	Perfluorohexanoic Acid (PFHxA)	560,000	130,000	1.50	< 0.297	< 0.795	< 0.510	J 0.094	< 0.496	< 1.73
375-85-9	Perfluoroheptanoic Acid (PFHpA)	NR	NR	NR	< 0.297	< 0.398	< 0.255	J 0.122	< 0.248	< 1.73
335-67-1	Perfluorooctanoic Acid (PFOA)	3,400	770	2.20	J 0.058	< 0.398	< 0.255	< 0.256	< 0.248	< 1.73
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	2,200	510	0.55	< 0.297	< 0.398	< 0.255	J 0.143	0.49	< 1.73
335-76-2	Perfluorodecanoic Acid (PFDA)	NR	NR	NR	< 0.297	< 0.398	< 0.255	< 0.256	JF 0.087	< 1.73
307-55-1	Perfluorododecanoic Acid (PFDoA)	NR	NR	NR	< 0.595	< 0.795	< 0.510	< 0.513	JF 0.080	< 1.73
376-06-7	Perfluorotetradecanoic Acid (PFTA)	NR	NR	NR	< 0.595	< 0.795	< 0.510	< 0.513	J 0.058	< 1.73
Notes: J- Estimated due to concentration below the reporting limit										
NR - Not Regulated										
Remedial Action Guidelines - Maine Department of Environmental Protection (MEDEP) Remedial Action Guidelines (RAGs) for Contaminated Sites, November 15, 2023 (Table 4)										

## 5.0 CONCEPTUAL MODEL

### 5.1 Site Geology and Hydrology

#### 5.1.1 Soils

Soils encountered during the subsurface investigation were primarily silt with little sand and gravel from 7-15 feet below surface grade. No groundwater was encountered. The soil was dense.

### 5.2 Contaminants of Concern

Based on historical information, the following COCs were anticipated:

- PFAS in shallow surface soils north of the Fire Station where fire-fighting practices were known to have occurred;
- VPH, EPH, from current and historical off-site gasoline service stations
- VOCs, SVOCs, and select metals from non-point sources from snow stockpiles;
- VOCs that could impact indoor air quality through vapor intrusion

### 5.3 Areas of Environmental Concern and Contaminant Assessment

The following sections discuss screening and laboratory results for contaminants of concern specific to each of the four designated Areas of Concern that correlate with the Recognized Environmental Conditions (RECs) identified in the Phase I ESA.

**REC #1-** Aqueous film forming foams (AFFF) surfactants present at the facility and suspect some use during training exercises with the potential of transforming to per- and polyfluorinated substances (PFAS) if released to the environment.

Surface soil samples (SS-1, SS-2, SS-3, SS-4) were collected to determine impacts from AFFF.

**REC #2-** Residual petroleum from two former and one current gasoline station could pose a source for vapor intrusion of the current building or any future building especially one with a basement.

Sub-slab soil gas samples, soil gas samples, and ambient air samples for VOCs were collected to determine any potential vapor intrusion into the on-site buildings.

**REC #3-** The practice of stockpiling snow from nonpoint sources on-site creates a risk that contaminants may leach to the ground surface.

Surface soil samples SS-5 and SS-6 and subsurface soil from boring SB-4 were collected to determine any impacts non-point source contaminants may have had on-site.

**REC#4-** Holes in the concrete slab provide a conduit for any spills to discharge to the subsurface below the building's slab.

Conversely to potential off-site contaminants impacting soil gas below the building slab, any spills of hazardous substances in the Fire Station building could impact subsurface soils through these openings in the concrete slab and migrate.

#### **5.4 Contaminant Exposure Routes and Fate & Transport**

There are several mechanisms by which contaminants may migrate at the Site. These transport mechanisms include air, groundwater, and surface runoff. Contaminant migration into air can occur by volatilization of contaminants or dust generation. Migration into groundwater can occur by percolating surface water or groundwater through waste materials or contaminated soils, which enters the groundwater in a dissolved-phase. If the contaminant has a specific gravity less than 1.0 (the specific gravity of water), associated liquid-phase product will float on the groundwater surface. Conversely, if the specific gravity of the contaminant is greater than 1.0 (such as with chlorinated solvents), associated liquid-phase product will sink to the bottom of the groundwater column. Liquid-phase product is a continued source of dissolved-phase contamination. Once dissolved-phase contamination enters the groundwater, it will move with the groundwater in the direction of flow. Groundwater flow has been determined to be in a northeasterly direction toward Stillwater River.

Once a contaminant has entered the groundwater, the rate of contaminant movement is influenced by many factors. These factors include physical and chemical properties of the contaminant and the aquifer. In general, once a contaminant reaches the groundwater, the contaminant will move as the groundwater moves through the process of advection (travel in the direction of groundwater flow) and dispersion (spreading vertically and horizontally).

##### **5.4.1 VOCs and VPH**

VOCs are typically volatile and soluble. Once released to the environment these compounds are expected to volatilize into the atmosphere, infiltrate into the soil, and dissolve into surface and groundwater. Upon entering the soil, the VOCs are expected to adsorb to the soil in the unsaturated zone and volatilize into the soil pore space. VOCs may also dissolve in rainwater, percolate through the soil column, and enter the groundwater. Some VOCs, such as toluene and xylene, have a greater persistence than other VOCs, and are, therefore, expected to remain in the soil profile for a longer duration. Once in solution, dissolved-phase VOCs will become mobile and migrate with the groundwater. Processes that naturally reduce VOC concentrations include volatilization, biodegradation, and dilution. Collectively, these processes are known as natural attenuation and given favorable conditions, can reduce the concentrations of VOCs over time.

#### 5.4.2 SVOCs, EPH, and Metals

The fate and transport metals and SVOCs in the environment are similar. In general, these constituents tend to have very low solubility and mobility and will, therefore, tend to stay adsorbed to the soil particles and not migrate substantially into the water column. Metal solubility is affected by environmental factors including soil pH and soil temperature. The solubility of SVOCs is affected by their molecular weights. As a result, it is likely that some metals and SVOCs will mobilize more readily.

### 5.5 Contaminant Assessment

The identified COCs in soils and soil gas do not appear to pose a threat to human health or the environment based on analytical comparisons with corresponding RAGs and the lack of human exposure. To pose a vapor risk requires five components: 1) a source, 2) a pathway between the source, 3) a building susceptible to vapor intrusion, 4) vapors in the building; and 5) building occupants when the vapor forming chemical(s) is (are) present indoors. Based on the soil gas sampling result data there is no VOC concentration analyzed by the TO-15 method that would pose a vapor intrusion risk to indoor air quality. Detected PFAS, VOCs, SVOCs, and metal concentrations in soil did not exceed the site's RAG scenarios. If the expected site use is modified, a re-evaluation of detected concentrations compared with an alternate scenario may be warranted. Continued use of the Fire Station should include measures to seal the intentionally drilled holes aimed to drain rainwater and snow melt from vehicles inside the building. Unless these openings are sealed, they will act as conduits for contaminants being transferred from outside in and from inside to the subsurface.

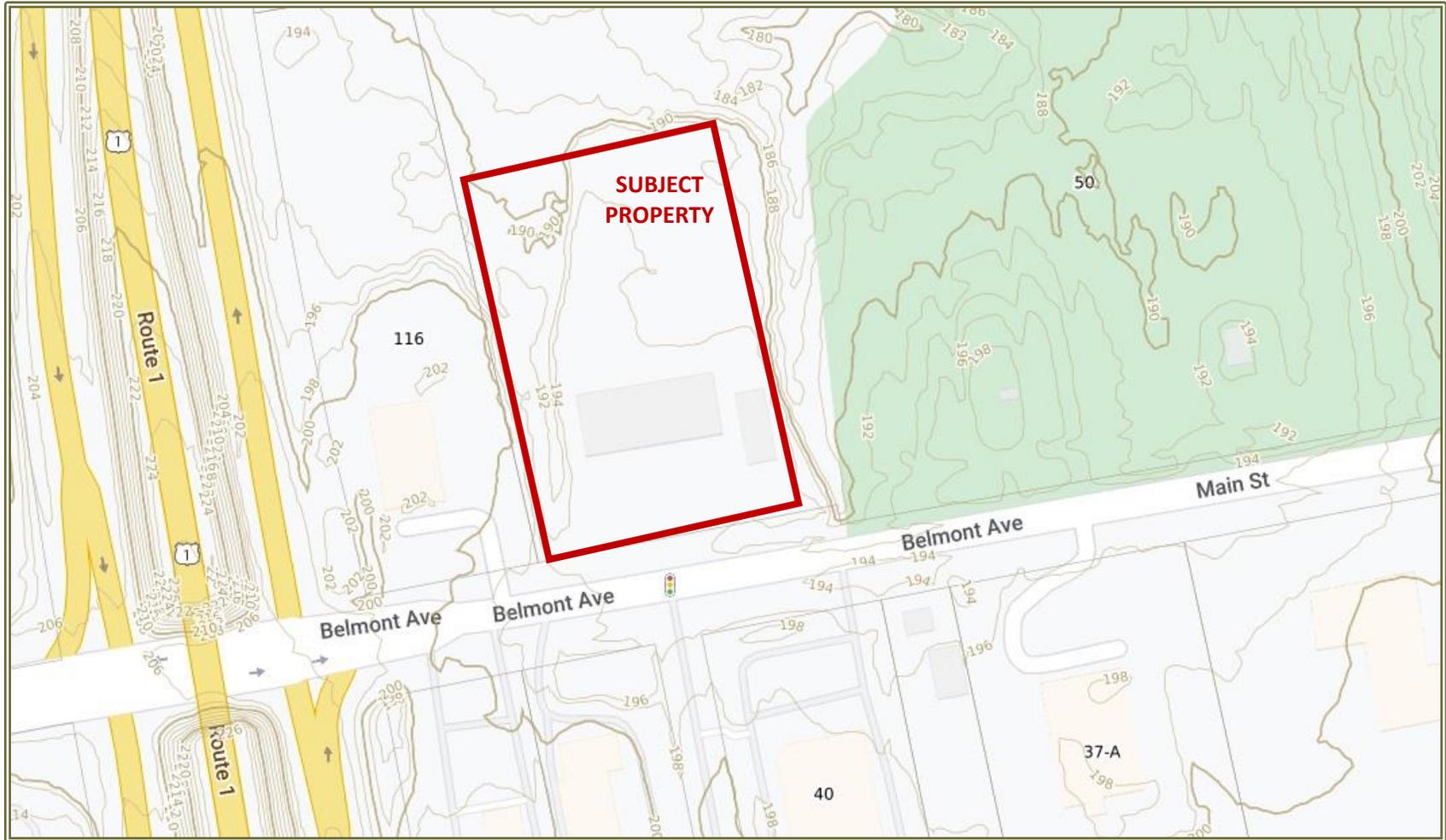
### 6.0 CONCLUSIONS AND RECOMMENDATIONS

No field screening or laboratory results collected during this Phase II ESA indicated any contaminants of concern that would adversely impact human health or the environment. CEG recommends that during any future excavation work, an on-site competent person be aware of any potential contaminants that may be encountered. Evidence of contamination may include but not be limited to soil staining and or odor. If evidence of a release is encountered, the appropriate parties shall be notified and proper actions shall be taken. An Environmental Media Management Plan (EMMP) is recommended for outlining these procedures. The RAG defines an EMMP as "*property owner obligation and procedures to ensure owners, contractors, employees, or other persons engaged in site disturbance activities appropriately manage impacted groundwater, soil, air, and other media to prevent human health and environmental impacts.*"

## **APPENDIX A**

### **Figures**

**FIGURE 1**  
Topographic Locus Map  
Belfast Fire Station  
273 Main Street, Belfast, Maine

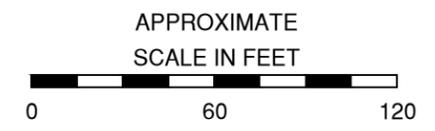




**LEGEND**

-  - APPROXIMATE LOCATION OF WATER SUPPLY WELL
-  - SURFACE SOIL SAMPLE
-  - SOIL GAS SAMPLE

MAP SOURCE: 1] TAX ASSESSOR MAP  
2] FIELD SURVEY & GPS



CLIENT: EASTERN MAINE DEVELOPMENT CORPORATION (EMDC)

LOCATION: 273 MAIN STREET BELFAST, MAINE

PM: DK	DETAILED: DK	PROJECT NO.: 0123-427-00
REV. NO.:	DRAWING DATE: 05/18/23	ACAD FILE: EMDC BELFAST

**FIGURE 2  
SAMPLE  
LOCATIONS**

 **CAMPBELL ENVIRONMENTAL GROUP**  
173 GRAY ROAD  
FALMOUTH, MAINE 04105  
(207) 253-1990

## **APPENDIX B**

### **Field Data**

**WELL IDENTIFICATION: SB-1**

<b>Project:</b>	Belfast Fire Station	<b>Driller:</b>	
<b>Location:</b>	Belfast, ME	<b>Drilling Company:</b>	Environmental Projects, Inc.
<b>Project No.:</b>	0123-427	<b>Drilling Meth:</b>	Geoprobe
<b>Date:</b>	8/8/2023	<b>Screen Length:</b>	NA
<b>Logged By:</b>	KH	<b>Casing Length:</b>	NA

NA=Not Available/Not Applicable

**Key:**

						
Filter Sand	Bentonite	Silt	Sand	Gravel	Screen	Casing

Depth (feet)	Well Construction	Sample No.	% Rec.	VOCs (ppm)	Fuel Oil	Soils/Lithology	Depth (feet)	
0							0	
1						7" Brown LOAM, moist	1	
2						14" Brown-gray mottled clayey SILT, moist	2	
3			SB-1 (0-5)	35%	0.4	NA		3
4								4
5								5
6							8" as above, moist	6
7							7" Brown SILT, some rock fragments	7
8			SB-1 (5-10)	25%	0.3	NA	REFUSAL @ 7.5 feet bgs	8
9							No Well Set	9
10								10
11								11
12								12
13								13
14								14
15								15
16								16
17								17
18								18
19								19
20								20
21								21
22								22
23								23
24								24
25								25
26								26
27								27
28							28	

**WELL IDENTIFICATION: SB-2**

<b>Project:</b>	Belfast Fire Station	<b>Driller:</b>	
<b>Location:</b>	Belfast, ME	<b>Drilling Company:</b>	Environmental Projects, Inc.
<b>Project No.:</b>	0123-427	<b>Drilling Meth:</b>	Geoprobe
<b>Date:</b>	8/8/2023	<b>Screen Length:</b>	NA
<b>Logged By:</b>	KH	<b>Casing Length:</b>	NA

NA=Not Available/Not Applicable

**Key:**

						
Filter Sand	Bentonite	Silt	Sand	Gravel	Screen	Casing

Depth (feet)	Well Construction	Sample No.	% Rec.	VOCs (ppm)	Fuel Oil	Soils/Lithology	Depth (feet)	
0							0	
1						12" Brown LOAM, moist	1	
2						2" ASHPHALT	2	
3		SB-2 (0-5)	33%	0.2	NA	6" Brown-gray mottled clayey SILT	3	
4							4	
5							5	
6							14" as above, moist	6
7		SB-2 (5-10)	33%	0.3	NA	6" Gray SILT, some fine sand, moist	7	
8								8
9								9
10								10
11							20" as above, moist, rock fragments in tip	11
12		SB-2 (10-15)	33%	0.3	NA	REFUSAL @ 12 feet bgs No Well Set	12	
13								13
14								14
15								15
16								16
17								17
18								18
19								19
20								20
21								21
22								22
23								23
24								24
25								25
26								26
27								27
28							28	

**WELL IDENTIFICATION: SB-3**

<b>Project:</b>	Belfast Fire Station	<b>Driller:</b>	
<b>Location:</b>	Belfast, ME	<b>Drilling Company:</b>	Environmental Projects, Inc.
<b>Project No.:</b>	0123-427	<b>Drilling Meth:</b>	Geoprobe
<b>Date:</b>	8/8/2023	<b>Screen Length:</b>	NA
<b>Logged By:</b>	KH	<b>Casing Length:</b>	NA

NA=Not Available/Not Applicable

**Key:**

						
Filter Sand	Bentonite	Silt	Sand	Gravel	Screen	Casing

Depth (feet)	Well Construction	Sample No.	% Rec.	VOCs (ppm)	Fuel Oil	Soils/Lithology	Depth (feet)	
0							0	
1						31" Brown silty LOAM, moist	1	
2							2	
3			SB-3 (0-5)	52%	0.3	NA		3
4								4
5								5
6							26" Brown SILT, some rock fragments and gravel, moist	6
7							REFUSAL @ 7 feet bgs	7
8			SB-3 (5-10)	43%	0.3	NA	No Well Set	8
9								9
10								10
11								11
12								12
13								13
14								14
15								15
16								16
17								17
18								18
19								19
20								20
21								21
22								22
23								23
24								24
25								25
26								26
27								27
28							28	

**WELL IDENTIFICATION: SB-4a**

<b>Project:</b>	Belfast Fire Station	<b>Driller:</b>	
<b>Location:</b>	Belfast, ME	<b>Drilling Company:</b>	Environmental Projects, Inc.
<b>Project No.:</b>	0123-427	<b>Drilling Meth:</b>	Geoprobe
<b>Date:</b>	8/8/2023	<b>Screen Length:</b>	NA
<b>Logged By:</b>	KH	<b>Casing Length:</b>	NA

NA=Not Available/Not Applicable

**Key:**

						
Filter Sand	Bentonite	Silt	Sand	Gravel	Screen	Casing

Depth (feet)	Well Construction	Sample No.	% Rec.	VOCs (ppm)	Fuel Oil	Soils/Lithology	Depth (feet)	
0							0	
1						6" Brown silty LOAM, moist	1	
2						22" Brown silty F. SAND, very moist	2	
3		SB-4a (0-5)	47%	0.5	NA		3	
4							4	
5							5	
6							30" Gray-brown mottled clayey SILT, some f. sand, moist	6
7							7	
8		SB-4a (5-10)	50%	0.3	NA		8	
9							9	
10							10	
11							44" Brown silty CLAY, moist, rock fragments in tip	11
12							12	
13		SB-4a (10-15)	73%	0.5	NA		13	
14							REFUSAL @ 15 feet bgs	14
15						15		
16						No Well Set	16	
17							17	
18							18	
19							19	
20							20	
21							21	
22							22	
23							23	
24							24	
25							25	
26							26	
27							27	
28							28	

**WELL IDENTIFICATION: SB-4b**

<b>Project:</b>	Belfast Fire Station	<b>Driller:</b>	
<b>Location:</b>	Belfast, ME	<b>Drilling Company:</b>	Environmental Projects, Inc.
<b>Project No.:</b>	0123-427	<b>Drilling Meth:</b>	Geoprobe
<b>Date:</b>	8/8/2023	<b>Screen Length:</b>	NA
<b>Logged By:</b>	KH	<b>Casing Length:</b>	NA

NA=Not Available/Not Applicable

**Key:**

						
Filter Sand	Bentonite	Silt	Sand	Gravel	Screen	Casing

Depth (feet)	Well Construction	Sample No.	% Rec.	VOCs (ppm)	Fuel Oil	Soils/Lithology	Depth (feet)	
0							0	
1						10" Brown silty LOAM, some sand and gravel, moist	1	
2							2	
3			SB-4b (0-5)	17%	0.4	NA		3
4								4
5								5
6							9" Gray-brown mottled clayey SILT, trace rock, moist	6
7								7
8			SB-4b (5-10)	50%	0.5	NA		8
9								9
10								10
11							10" Brown SILT, some f. sand, moist	11
12							REFUSAL @ 11 feet bgs No Well Set	12
13			SB-4b (10-15)	73%	0.5	NA		13
14								14
15								15
16								16
17								17
18								18
19								19
20								20
21								21
22								22
23								23
24								24
25								25
26								26
27								27
28							28	

## Indoor Air/SubSlab Sampling Field Sheet

Site Name:	Belfast Fire Station	<b>Sample Location Sketch</b>	
Town:	Belfast		
Date:	8/11/2023		
Sample ID:	SG-1		
Project Manager:	Rich Campbell		
Sampling Personnel:	Danica Kay		
Collection Device:	Summa Can		
Sample Type:	SubSlab		
Sampling Location:	Museum South Side		
Foundation Floor Type:	Concrete		
Foundation Wall Type:	(Concrete) (Block) (Stone) (Brick) (Slab on Grade)		
Sump Hole:	(Yes) <b>(No)</b>		
Penetrations in Floor:	(Sewer) (Water) (Gas) (Cracks) (Drains)		
Penetrations in Wall:	(Sewer) (Water) (Gas) (Electric) (Cracks)		
Suspected COCs:	<b>(Petroleum)</b> <b>(Solvents)</b>		
Canister ID:	403		
Flow Control ID:	689		
O <sub>2</sub> Ambient:	20.9		
CO <sub>2</sub> Ambient:	250		
Pre-Sample O <sub>2</sub> :	20.9		
Pre-Sample CO <sub>2</sub> :	850		
Pre-Sample PID:	1,475 ppb		
Sample Initiation Time:	9:20 AM		
Initial Vacuum:	-28.88		
Sample End Time:	9:31 AM		
Final Vacuum:	-4.97		
Post Sample O <sub>2</sub> :	20.90%		
Post Sample CO <sub>2</sub> :	5,200+		
Post-Sample PID:	1		
<b>Notes:</b>			

## Indoor Air/SubSlab Sampling Field Sheet

Site Name:	Belfast Fire Station	<b>Sample Location Sketch</b>				
Town:	Belfast					
Date:	8/11/2023					
Sample ID:	SG-2					
Project Manager:	Rich Campbell					
Sampling Personnel:	Danica Kay					
Collection Device:	Summa Can					
Sample Type:	Soil Gas					
Sampling Location:	North end of Museum					
Foundation Floor Type:	Concrete					
Foundation Wall Type:	(Concrete) (Block) (Stone) (Brick) (Slab on Grade)					
Sump Hole:	(Yes) <b>(No)</b>					
Penetrations in Floor:	(Sewer) (Water) (Gas) (Cracks) (Drains)					
Penetrations in Wall:	(Sewer) (Water) (Gas) (Electric) (Cracks)					
Suspected COCs:	<b>(Petroleum)</b> <b>(Solvents)</b>					
Canister ID:	109					
Flow Control ID:	685					
O <sub>2</sub> Ambient:	20.9					
CO <sub>2</sub> Ambient:	250					
Pre-Sample O <sub>2</sub> :	20.9					
Pre-Sample CO <sub>2</sub> :	4100					
Pre-Sample PID:	4,350 ppb					
Sample Initiation Time:	9:48 AM					
Initial Vacuum:	-29.34					
Sample End Time:	9:59 AM					
Final Vacuum:	-4.92					
Post Sample O <sub>2</sub> :	20.7					
Post Sample CO <sub>2</sub> :	3400					
Pre-Sample PID:	752 ppb					

## Indoor Air/SubSlab Sampling Field Sheet

Site Name:	Belfast Fire Station	<b>Sample Location Sketch</b>
Town:	Belfast	
Date:	8/8/2023	
Sample ID:	SG-3	
Project Manager:	Rich Campbell	
Sampling Personnel:	Danica Kay	
Collection Device:	Summa Can	
Sample Type:	SubSlab	
Sampling Location:	East end of Fire Station	
Foundation Floor Type:	Concrete Slab	
Foundation Wall Type:	(Concrete) (Block) (Stone) (Brick) (Slab on Grade)	
Sump Hole:	(Yes) <b>(No)</b>	
Penetrations in Floor:	<b>(Sewer) (Water)</b> (Gas) (Cracks) (Drains)	
Penetrations in Wall:	(Sewer) (Water) (Gas) (Electric) (Cracks)	
Suspected COCs:	<b>(Petroleum) (Solvents)</b>	
Canister ID:	2798	
Flow Control ID:	672	
O <sub>2</sub> Ambient:	20.90%	
CO <sub>2</sub> Ambient:	0	
Pre-Sample O <sub>2</sub> :	12.80%	
Pre-Sample CO <sub>2</sub> :	0	
Pre-Sample PID:	81 ppb	
Sample Initiation Time:	11:02 AM	
Initial Vacuum:	-28.8	
Sample End Time:	11:14 AM	
Final Vacuum:	-4.7	
Post Sample O <sub>2</sub> :	17.20%	
Post Sample CO <sub>2</sub> :	NA	
Post-Sample PID:	175 ppb	
<b>Notes:</b>		
		

## Indoor Air/SubSlab Sampling Field Sheet

Site Name:	Belfast Fire Station	<b>Sample Location Sketch</b>
Town:	Belfast	
Date:	8/8/2023	
Sample ID:	SG-4	
Project Manager:	Rich Campbell	
Sampling Personnel:	Danica Kay	
Collection Device:	Summa Can	
Sample Type:	SubSlab	
Sampling Location:	West side of Fire Station	
Foundation Floor Type:	Concrete Slab	
Foundation Wall Type:	(Concrete) (Block) (Stone) (Brick) (Slab on Grade)	
Sump Hole:	(Yes) (No)	
Penetrations in Floor:	<b>(Sewer) (Water)</b> (Gas) (Cracks) <b>(Drains)</b>	
Penetrations in Wall:	(Sewer) (Water) (Gas) (Electric) <b>(Cracks)</b>	
Suspected COCs:	<b>(Petroleum)</b> (Solvents)	
Canister ID:	537	
Flow Control ID:	704	
O <sub>2</sub> Ambient:	0.21	
CO <sub>2</sub> Ambient:	0	
Pre-Sample O <sub>2</sub> :	0.21	
Pre-Sample CO <sub>2</sub> :	0	
Pre-Sample PID:	1091 ppb	
Sample Initiation Time:	11:51 AM	
Initial Vacuum:	-29.43	
Sample End Time:	12:02 PM	
Final Vacuum:	-29.43	
Post Sample O <sub>2</sub> :		
Post Sample CO <sub>2</sub> :		
<b>Notes:</b>		

**APPENDIX C**  
**Laboratory Data**

# Laboratory Report



**Absolute Resource** *associates*

124 Heritage Avenue Portsmouth NH 03801

Danica Kay  
Campbell Environmental Group  
173 Gray Road  
Falmouth, ME 04105

PO Number: None  
Job ID: 66563  
Date Received: 8/11/23

Project: EMDC/Belfast

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below. The reported results apply to the sample(s) in the condition as received at the time the laboratory took custody. This report shall not be reproduced except in full, without written approval of the laboratory. The liability of ARA is limited to the cost of the requested analyses, unless otherwise agreed upon in writing.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,  
Absolute Resource Associates

A handwritten signature in black ink, appearing to read 'Willie Stone', written over a light blue rectangular background.

Willie Stone  
Authorized Signature

Date of Approval: 8/28/2023  
Total number of pages: 75

## Absolute Resource Associates Certifications

New Hampshire 1732  
Maine NH902

Massachusetts M-NH902

## Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SS-1	Solid	8/8/2023 8:55	66563-001	Acid & Base/Neutral Extractables in solids by 8270 Arsenic in solids by 6020 Barium in solids by 6020 Cadmium in solids by 6020 Chromium in solids by 6020 Combo: RCRA 8 Metals Copper in solids by 6020 Lead in solids by 6020 Mercury in solids by 7471 Selenium in solids by 6020 Silver in solids by 6020 Solids Digestion for ICPMS Analysis VOCs in solids by 8260 Zinc in solids by 6020
SS-5	Solid	8/8/2023 9:15	66563-002	Acid & Base/Neutral Extractables in solids by 8270 Arsenic in solids by 6020 Barium in solids by 6020 Cadmium in solids by 6020 Chromium in solids by 6020 Combo: RCRA 8 Metals Copper in solids by 6020 Lead in solids by 6020 Mercury in solids by 7471 Selenium in solids by 6020 Silver in solids by 6020 Solids Digestion for ICPMS Analysis VOCs in solids by 8260 Zinc in solids by 6020
SS-6	Solid	8/8/2023 9:20	66563-003	Acid & Base/Neutral Extractables in solids by 8270 Arsenic in solids by 6020 Barium in solids by 6020 Cadmium in solids by 6020 Chromium in solids by 6020 Combo: RCRA 8 Metals Copper in solids by 6020 Lead in solids by 6020 Mercury in solids by 7471 Selenium in solids by 6020 Silver in solids by 6020 Solids Digestion for ICPMS Analysis VOCs in solids by 8260 Zinc in solids by 6020
SB-1	Solid	8/8/2023 10:41	66563-004	EPH in solids by MADEP Method VPH in solids by MA DEP Method

## Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SB-2	Solid	8/8/2023 11:18	66563-005	EPH in solids by MADEP Method VPH in solids by MA DEP Method
SB-3	Solid	8/8/2023 10:15	66563-006	EPH in solids by MADEP Method VPH in solids by MA DEP Method
SB-4	Solid	8/8/2023 9:15	66563-007	Acid & Base/Neutral Extractables in solids by 8270 Arsenic in solids by 6020 Barium in solids by 6020 Cadmium in solids by 6020 Chromium in solids by 6020 Combo: RCRA 8 Metals Copper in solids by 6020 EPH in solids by MADEP Method Lead in solids by 6020 Mercury in solids by 7471 Selenium in solids by 6020 Silver in solids by 6020 Solids Digestion for ICPMS Analysis VOCs in solids by 8260 VPH in solids by MA DEP Method Zinc in solids by 6020
SS-1 Dup	Solid	8/8/2023 8:55	66563-008	Acid & Base/Neutral Extractables in solids by 8270 Arsenic in solids by 6020 Barium in solids by 6020 Cadmium in solids by 6020 Chromium in solids by 6020 Combo: RCRA 8 Metals Copper in solids by 6020 Lead in solids by 6020 Mercury in solids by 7471 Selenium in solids by 6020 Silver in solids by 6020 Solids Digestion for ICPMS Analysis VOCs in solids by 8260 Zinc in solids by 6020
Trip Blank	Water	8/8/2023 0:00	66563-009	VOCs in water by 8260 VPH in water by MA DEP Method

Project ID: EMDC/Belfast

Job ID: 66563

Sample#: 66563-001

Sample ID: SS-1

Matrix: Solid

Percent Dry: 78.9% Results expressed on a dry weight basis.

Sampled: 8/8/23 8:55

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
dichlorodifluoromethane	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
chloromethane	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
vinyl chloride	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
bromomethane	< 0.24	0.24	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
chloroethane	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
trichlorofluoromethane	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
diethyl ether	< 0.49	0.49	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
acetone	< 2.4	2.4	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
1,1-dichloroethene	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
methylene chloride	< 0.24	0.24	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
carbon disulfide	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
methyl t-butyl ether (MTBE)	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
trans-1,2-dichloroethene	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
1,1-dichloroethane	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
2-butanone (MEK)	< 0.29	0.29	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
2,2-dichloropropane	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
cis-1,2-dichloroethene	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
chloroform	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
bromochloromethane	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
tetrahydrofuran (THF)	< 0.49	0.49	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
1,1,1-trichloroethane	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
1,1-dichloropropene	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
carbon tetrachloride	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
1,2-dichloroethane	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
benzene	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
trichloroethene	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
1,2-dichloropropane	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
bromodichloromethane	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
dibromomethane	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
4-methyl-2-pentanone (MIBK)	< 0.44	0.44	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
cis-1,3-dichloropropene	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
toluene	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
trans-1,3-dichloropropene	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
2-hexanone	< 0.49	0.49	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
1,1,2-trichloroethane	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
1,3-dichloropropane	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
tetrachloroethene	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
dibromochloromethane	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
1,2-dibromoethane (EDB)	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
chlorobenzene	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
1,1,1,2-tetrachloroethane	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
ethylbenzene	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
m&p-xylenes	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D

Project ID: EMDC/Belfast

Job ID: 66563

Sample#: 66563-001

Sample ID: SS-1

Matrix: Solid

Percent Dry: 78.9% Results expressed on a dry weight basis.

Sampled: 8/8/23 8:55

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
o-xylene	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
xylene (total)	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
styrene	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
bromoform	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
isopropylbenzene	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
1,1,2,2-tetrachloroethane	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
1,2,3-trichloropropane	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
n-propylbenzene	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
bromobenzene	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
1,3,5-trimethylbenzene	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
2-chlorotoluene	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
4-chlorotoluene	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
tert-butylbenzene	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
1,2,4-trimethylbenzene	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
sec-butylbenzene	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
1,3-dichlorobenzene	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
4-isopropyltoluene	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
1,4-dichlorobenzene	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
1,2-dichlorobenzene	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
n-butylbenzene	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
1,2-dibromo-3-chloropropane (DBCP)	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
1,2,4-trichlorobenzene	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
hexachlorobutadiene	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
naphthalene	< 0.24	0.24	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
1,2,3-trichlorobenzene	< 0.097	0.097	ug/g	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
<b>Surrogate Recovery</b>		<b>Limits</b>								
dibromofluoromethane SUR	<b>93</b>	78-114	%	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
toluene-D8 SUR	<b>104</b>	88-110	%	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
4-bromofluorobenzene SUR	<b>97</b>	86-115	%	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D
a,a,a-trifluorotoluene SUR	<b>92</b>	70-130	%	1	LMM	8/11/23	16588	8/15/23	13:03	SW5035A8260D

Project ID: EMDC/Belfast

Job ID: 66563

Sample#: 66563-002

Sample ID: SS-5

Matrix: Solid

Percent Dry: 94.1% Results expressed on a dry weight basis.

Sampled: 8/8/23 9:15

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
dichlorodifluoromethane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
chloromethane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
vinyl chloride	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
bromomethane	< 0.20	0.20	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
chloroethane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
trichlorofluoromethane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
diethyl ether	< 0.41	0.41	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
acetone	< 2.0	2.0	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
1,1-dichloroethene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
methylene chloride	< 0.20	0.20	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
carbon disulfide	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
methyl t-butyl ether (MTBE)	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
trans-1,2-dichloroethene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
1,1-dichloroethane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
2-butanone (MEK)	< 0.24	0.24	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
2,2-dichloropropane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
cis-1,2-dichloroethene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
chloroform	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
bromochloromethane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
tetrahydrofuran (THF)	< 0.41	0.41	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
1,1,1-trichloroethane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
1,1-dichloropropene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
carbon tetrachloride	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
1,2-dichloroethane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
benzene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
trichloroethene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
1,2-dichloropropane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
bromodichloromethane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
dibromomethane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
4-methyl-2-pentanone (MIBK)	< 0.37	0.37	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
cis-1,3-dichloropropene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
toluene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
trans-1,3-dichloropropene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
2-hexanone	< 0.41	0.41	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
1,1,2-trichloroethane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
1,3-dichloropropane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
tetrachloroethene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
dibromochloromethane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
1,2-dibromoethane (EDB)	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
chlorobenzene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
1,1,1,2-tetrachloroethane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
ethylbenzene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
m&p-xylenes	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D

Project ID: EMDC/Belfast

Job ID: 66563

Sample#: 66563-002

Sample ID: SS-5

Matrix: Solid

Percent Dry: 94.1% Results expressed on a dry weight basis.

Sampled: 8/8/23 9:15

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
o-xylene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
xylene (total)	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
styrene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
bromoform	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
isopropylbenzene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
1,1,2,2-tetrachloroethane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
1,2,3-trichloropropane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
n-propylbenzene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
bromobenzene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
1,3,5-trimethylbenzene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
2-chlorotoluene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
4-chlorotoluene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
tert-butylbenzene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
1,2,4-trimethylbenzene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
sec-butylbenzene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
1,3-dichlorobenzene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
4-isopropyltoluene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
1,4-dichlorobenzene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
1,2-dichlorobenzene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
n-butylbenzene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
1,2-dibromo-3-chloropropane (DBCP)	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
1,2,4-trichlorobenzene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
hexachlorobutadiene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
naphthalene	< 0.20	0.20	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
1,2,3-trichlorobenzene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
<b>Surrogate Recovery</b>		<b>Limits</b>								
dibromofluoromethane SUR	<b>93</b>	78-114	%	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
toluene-D8 SUR	<b>103</b>	88-110	%	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
4-bromofluorobenzene SUR	<b>96</b>	86-115	%	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D
a,a,a-trifluorotoluene SUR	<b>101</b>	70-130	%	1	LMM	8/15/23	16606	8/15/23	13:28	SW5035A8260D

Project ID: EMDC/Belfast

Job ID: 66563

Sample#: 66563-003

Sample ID: SS-6

Matrix: Solid

Percent Dry: 88.7% Results expressed on a dry weight basis.

Sampled: 8/8/23 9:20

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
dichlorodifluoromethane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
chloromethane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
vinyl chloride	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
bromomethane	< 0.20	0.20	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
chloroethane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
trichlorofluoromethane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
diethyl ether	< 0.41	0.41	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
acetone	< 2.0	2.0	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
1,1-dichloroethene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
methylene chloride	< 0.20	0.20	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
carbon disulfide	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
methyl t-butyl ether (MTBE)	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
trans-1,2-dichloroethene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
1,1-dichloroethane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
2-butanone (MEK)	< 0.24	0.24	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
2,2-dichloropropane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
cis-1,2-dichloroethene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
chloroform	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
bromochloromethane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
tetrahydrofuran (THF)	< 0.41	0.41	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
1,1,1-trichloroethane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
1,1-dichloropropene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
carbon tetrachloride	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
1,2-dichloroethane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
benzene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
trichloroethene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
1,2-dichloropropane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
bromodichloromethane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
dibromomethane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
4-methyl-2-pentanone (MIBK)	< 0.37	0.37	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
cis-1,3-dichloropropene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
toluene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
trans-1,3-dichloropropene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
2-hexanone	< 0.41	0.41	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
1,1,2-trichloroethane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
1,3-dichloropropane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
tetrachloroethene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
dibromochloromethane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
1,2-dibromoethane (EDB)	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
chlorobenzene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
1,1,1,2-tetrachloroethane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
ethylbenzene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
m&p-xylenes	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D

Project ID: EMDC/Belfast

Job ID: 66563

Sample#: 66563-003

Sample ID: SS-6

Matrix: Solid

Percent Dry: 88.7% Results expressed on a dry weight basis.

Sampled: 8/8/23 9:20

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
o-xylene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
xylene (total)	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
styrene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
bromoform	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
isopropylbenzene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
1,1,2,2-tetrachloroethane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
1,2,3-trichloropropane	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
n-propylbenzene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
bromobenzene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
1,3,5-trimethylbenzene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
2-chlorotoluene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
4-chlorotoluene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
tert-butylbenzene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
1,2,4-trimethylbenzene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
sec-butylbenzene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
1,3-dichlorobenzene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
4-isopropyltoluene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
1,4-dichlorobenzene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
1,2-dichlorobenzene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
n-butylbenzene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
1,2-dibromo-3-chloropropane (DBCP)	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
1,2,4-trichlorobenzene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
hexachlorobutadiene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
naphthalene	< 0.20	0.20	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
1,2,3-trichlorobenzene	< 0.081	0.081	ug/g	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
<b>Surrogate Recovery</b>		<b>Limits</b>								
dibromofluoromethane SUR	<b>92</b>	78-114	%	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
toluene-D8 SUR	<b>104</b>	88-110	%	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
4-bromofluorobenzene SUR	<b>95</b>	86-115	%	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D
a,a,a-trifluorotoluene SUR	<b>109</b>	70-130	%	1	LMM	8/15/23	16606	8/15/23	13:53	SW5035A8260D

Project ID: EMDC/Belfast

Job ID: 66563

Sample#: 66563-007

Sample ID: SB-4

Matrix: Solid

Percent Dry: 79.4% Results expressed on a dry weight basis.

Sampled: 8/8/23 9:15

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
dichlorodifluoromethane	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
chloromethane	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
vinyl chloride	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
bromomethane	< 0.22	0.22	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
chloroethane	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
trichlorofluoromethane	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
diethyl ether	< 0.45	0.45	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
acetone	< 2.2	2.2	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
1,1-dichloroethene	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
methylene chloride	< 0.22	0.22	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
carbon disulfide	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
methyl t-butyl ether (MTBE)	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
trans-1,2-dichloroethene	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
1,1-dichloroethane	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
2-butanone (MEK)	< 0.27	0.27	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
2,2-dichloropropane	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
cis-1,2-dichloroethene	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
chloroform	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
bromochloromethane	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
tetrahydrofuran (THF)	< 0.45	0.45	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
1,1,1-trichloroethane	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
1,1-dichloropropene	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
carbon tetrachloride	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
1,2-dichloroethane	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
benzene	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
trichloroethene	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
1,2-dichloropropane	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
bromodichloromethane	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
dibromomethane	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
4-methyl-2-pentanone (MIBK)	< 0.40	0.40	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
cis-1,3-dichloropropene	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
toluene	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
trans-1,3-dichloropropene	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
2-hexanone	< 0.45	0.45	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
1,1,2-trichloroethane	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
1,3-dichloropropane	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
tetrachloroethene	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
dibromochloromethane	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
1,2-dibromoethane (EDB)	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
chlorobenzene	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
1,1,1,2-tetrachloroethane	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
ethylbenzene	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
m&p-xylenes	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D

Project ID: EMDC/Belfast

Job ID: 66563

Sample#: 66563-007

Sample ID: SB-4

Matrix: Solid

Percent Dry: 79.4% Results expressed on a dry weight basis.

Sampled: 8/8/23 9:15

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
o-xylene	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
xylene (total)	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
styrene	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
bromoform	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
isopropylbenzene	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
1,1,2,2-tetrachloroethane	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
1,2,3-trichloropropane	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
n-propylbenzene	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
bromobenzene	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
1,3,5-trimethylbenzene	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
2-chlorotoluene	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
4-chlorotoluene	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
tert-butylbenzene	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
1,2,4-trimethylbenzene	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
sec-butylbenzene	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
1,3-dichlorobenzene	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
4-isopropyltoluene	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
1,4-dichlorobenzene	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
1,2-dichlorobenzene	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
n-butylbenzene	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
1,2-dibromo-3-chloropropane (DBCP)	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
1,2,4-trichlorobenzene	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
hexachlorobutadiene	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
naphthalene	< 0.22	0.22	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
1,2,3-trichlorobenzene	< 0.089	0.089	ug/g	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
<b>Surrogate Recovery</b>		<b>Limits</b>								
dibromofluoromethane SUR	<b>91</b>	78-114	%	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
toluene-D8 SUR	<b>99</b>	88-110	%	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
4-bromofluorobenzene SUR	<b>92</b>	86-115	%	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D
a,a,a-trifluorotoluene SUR	<b>90</b>	70-130	%	1	LMM	8/11/23	16588	8/18/23	17:57	SW5035A8260D

Project ID: EMDC/Belfast

Job ID: 66563

Sample#: 66563-008

Sample ID: SS-1 Dup

Matrix: Solid

Percent Dry: 78.3% Results expressed on a dry weight basis.

Sampled: 8/8/23 8:55

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
dichlorodifluoromethane	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
chloromethane	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
vinyl chloride	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
bromomethane	< 0.23	0.23	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
chloroethane	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
trichlorofluoromethane	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
diethyl ether	< 0.47	0.47	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
acetone	< 2.3	2.3	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
1,1-dichloroethene	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
methylene chloride	< 0.23	0.23	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
carbon disulfide	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
methyl t-butyl ether (MTBE)	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
trans-1,2-dichloroethene	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
1,1-dichloroethane	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
2-butanone (MEK)	< 0.28	0.28	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
2,2-dichloropropane	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
cis-1,2-dichloroethene	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
chloroform	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
bromochloromethane	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
tetrahydrofuran (THF)	< 0.47	0.47	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
1,1,1-trichloroethane	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
1,1-dichloropropene	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
carbon tetrachloride	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
1,2-dichloroethane	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
benzene	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
trichloroethene	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
1,2-dichloropropane	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
bromodichloromethane	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
dibromomethane	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
4-methyl-2-pentanone (MIBK)	< 0.42	0.42	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
cis-1,3-dichloropropene	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
toluene	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
trans-1,3-dichloropropene	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
2-hexanone	< 0.47	0.47	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
1,1,2-trichloroethane	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
1,3-dichloropropane	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
tetrachloroethene	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
dibromochloromethane	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
1,2-dibromoethane (EDB)	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
chlorobenzene	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
1,1,1,2-tetrachloroethane	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
ethylbenzene	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
m&p-xylenes	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D

Project ID: EMDC/Belfast

Job ID: 66563

Sample#: 66563-008

Sample ID: SS-1 Dup

Matrix: Solid

Percent Dry: 78.3% Results expressed on a dry weight basis.

Sampled: 8/8/23 8:55

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
o-xylene	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
xylene (total)	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
styrene	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
bromoform	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
isopropylbenzene	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
1,1,2,2-tetrachloroethane	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
1,2,3-trichloropropane	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
n-propylbenzene	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
bromobenzene	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
1,3,5-trimethylbenzene	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
2-chlorotoluene	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
4-chlorotoluene	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
tert-butylbenzene	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
1,2,4-trimethylbenzene	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
sec-butylbenzene	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
1,3-dichlorobenzene	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
4-isopropyltoluene	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
1,4-dichlorobenzene	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
1,2-dichlorobenzene	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
n-butylbenzene	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
1,2-dibromo-3-chloropropane (DBCP)	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
1,2,4-trichlorobenzene	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
hexachlorobutadiene	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
naphthalene	< 0.23	0.23	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
1,2,3-trichlorobenzene	< 0.094	0.094	ug/g	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
<b>Surrogate Recovery</b>		<b>Limits</b>								
dibromofluoromethane SUR	<b>91</b>	78-114	%	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
toluene-D8 SUR	<b>103</b>	88-110	%	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
4-bromofluorobenzene SUR	<b>95</b>	86-115	%	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D
a,a,a-trifluorotoluene SUR	<b>103</b>	70-130	%	1	LMM	8/15/23	16606	8/15/23	14:19	SW5035A8260D

Project ID: EMDC/Belfast

Job ID: 66563

Sample#: 66563-009

Sample ID: Trip Blank

Matrix: Water

Sampled: 8/8/23 0:00

Parameter	Result	Reporting		Instr Dil'n		Prep Date	Analysis			Reference
		Limit	Units	Factor	Analyst		Batch	Date	Time	
dichlorodifluoromethane	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
chloromethane	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
vinyl chloride	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
bromomethane	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
chloroethane	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
trichlorofluoromethane	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
diethyl ether	< 5	5	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
acetone	< 50	50	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
1,1-dichloroethene	< 1	1	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
methylene chloride	< 5	5	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
carbon disulfide	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
trans-1,2-dichloroethene	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
1,1-dichloroethane	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
2-butanone (MEK)	< 10	10	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
2,2-dichloropropane	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
cis-1,2-dichloroethene	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
chloroform	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
bromochloromethane	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
tetrahydrofuran (THF)	< 10	10	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
1,1,1-trichloroethane	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
1,1-dichloropropene	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
carbon tetrachloride	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
1,2-dichloroethane	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
benzene	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
trichloroethene	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
1,2-dichloropropane	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
bromodichloromethane	< 1	1	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
dibromomethane	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
4-methyl-2-pentanone (MIBK)	< 10	10	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
cis-1,3-dichloropropene	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
toluene	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
trans-1,3-dichloropropene	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
2-hexanone	< 10	10	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
1,1,2-trichloroethane	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
1,3-dichloropropane	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
tetrachloroethene	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
dibromochloromethane	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
chlorobenzene	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
1,1,1,2-tetrachloroethane	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
ethylbenzene	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
m&p-xylenes	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	

Project ID: EMDC/Belfast

Job ID: 66563

Sample#: 66563-009

Sample ID: Trip Blank

Matrix: Water

Sampled: 8/8/23 0:00

Parameter	Reporting		Instr Dil'n		Analyst	Prep Date	Analysis			Reference
	Result	Limit	Units	Factor			Batch	Date	Time	
o-xylene	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
xylene (total)	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
styrene	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
bromoform	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
isopropylbenzene	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
1,1,2,2-tetrachloroethane	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
1,2,3-trichloropropane	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
n-propylbenzene	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
bromobenzene	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
2-chlorotoluene	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
4-chlorotoluene	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
tert-butylbenzene	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
sec-butylbenzene	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
1,3-dichlorobenzene	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
4-isopropyltoluene	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
1,4-dichlorobenzene	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
1,2-dichlorobenzene	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
n-butylbenzene	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
1,2-dibromo-3-chloropropane (DBCP)	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
1,2,4-trichlorobenzene	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
hexachlorobutadiene	< 0.5	0.5	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
naphthalene	< 5	5	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
1,2,3-trichlorobenzene	< 2	2	ug/L	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
<b>Surrogate Recovery</b>		<b>Limits</b>								
dibromofluoromethane SUR	<b>102</b>	78-114	%	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
toluene-D8 SUR	<b>104</b>	88-110	%	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	
4-bromofluorobenzene SUR	<b>95</b>	86-115	%	1	LMM	2302416	8/15/23	11:46	SW5030C8260D	

Project ID: EMDC/Belfast

Job ID: 66563

Sample#: 66563-004

Sample ID: SB-1

Matrix: Solid Percent Dry: 84.8% Results expressed on a dry weight basis.

Samples prepared in methanol at a ratio of 0.6 mL MeOH/g soil.

Received on ice at 2°C, in satisfactory condition.

Sampled: 8/8/23 10:41

Parameter	Reporting		Units	Instr Dil'n	Prep		Analysis			Reference
	Result	Limit			Analyst	Date	Batch	Date	Time	
Unadjusted C5-C8 Aliphatics	4.7	4.4	ug/g	1	SFP	8/11/23	16600	8/15/23	0:37	MA VPH
Unadjusted C9-C12 Aliphatics	< 4.4	4.4	ug/g	1	SFP	8/11/23	16600	8/15/23	0:37	MA VPH
methyl t-butyl ether (MTBE)	< 0.088	0.088	ug/g	1	SFP	8/11/23	16600	8/15/23	0:37	MA VPH
benzene	< 0.088	0.088	ug/g	1	SFP	8/11/23	16600	8/15/23	0:37	MA VPH
toluene	< 0.088	0.088	ug/g	1	SFP	8/11/23	16600	8/15/23	0:37	MA VPH
ethylbenzene	< 0.088	0.088	ug/g	1	SFP	8/11/23	16600	8/15/23	0:37	MA VPH
m&p-xylenes	< 0.088	0.088	ug/g	1	SFP	8/11/23	16600	8/15/23	0:37	MA VPH
o-xylene	< 0.088	0.088	ug/g	1	SFP	8/11/23	16600	8/15/23	0:37	MA VPH
xylenes (total)	< 0.088	0.088	ug/g	1	SFP	8/11/23	16600	8/15/23	0:37	MA VPH
naphthalene	< 0.22	0.22	ug/g	1	SFP	8/11/23	16600	8/15/23	0:37	MA VPH
C5-C8 Aliphatics	4.7	4.4	ug/g	1	SFP	8/11/23	16600	8/15/23	0:37	MA VPH
C9-C12 Aliphatics	< 4.4	4.4	ug/g	1	SFP	8/11/23	16600	8/15/23	0:37	MA VPH
C9-C10 Aromatics	< 4.4	4.4	ug/g	1	SFP	8/11/23	16600	8/15/23	0:37	MA VPH
<b>Surrogate Recovery</b>		<b>Limits</b>								
2,5-dibromotoluene as Aromatic SUR	73	70-130	%	1	SFP	8/11/23	16600	8/15/23	0:37	MA VPH
2,5-dibromotoluene as Aliphatic SUR	94	70-130	%	1	SFP	8/11/23	16600	8/15/23	0:37	MA VPH
a,a,a-trifluorotoluene SUR	97	70-130	%	1	SFP	8/11/23	16600	8/15/23	0:37	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.

C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: EMDC/Belfast

Job ID: 66563

Sample#: 66563-005

Sample ID: SB-2

Matrix: Solid Percent Dry: 85.7% Results expressed on a dry weight basis.

Samples prepared in methanol at a ratio of 0.56 mL MeOH/g soil.

Received on ice at 2°C, in satisfactory condition.

Sampled: 8/8/23 11:18

Parameter	Reporting		Units	Instr Dil'n	Prep	Analysis				
	Result	Limit				Analyst	Date	Batch	Date	Time
Unadjusted C5-C8 Aliphatics	4.2	4.1	ug/g	1	SFP	8/11/23	16600	8/14/23	22:21	MA VPH
Unadjusted C9-C12 Aliphatics	< 4.1	4.1	ug/g	1	SFP	8/11/23	16600	8/14/23	22:21	MA VPH
methyl t-butyl ether (MTBE)	< 0.082	0.082	ug/g	1	SFP	8/11/23	16600	8/14/23	22:21	MA VPH
benzene	< 0.082	0.082	ug/g	1	SFP	8/11/23	16600	8/14/23	22:21	MA VPH
toluene	< 0.082	0.082	ug/g	1	SFP	8/11/23	16600	8/14/23	22:21	MA VPH
ethylbenzene	< 0.082	0.082	ug/g	1	SFP	8/11/23	16600	8/14/23	22:21	MA VPH
m&p-xylenes	< 0.082	0.082	ug/g	1	SFP	8/11/23	16600	8/14/23	22:21	MA VPH
o-xylene	< 0.082	0.082	ug/g	1	SFP	8/11/23	16600	8/14/23	22:21	MA VPH
xylenes (total)	< 0.082	0.082	ug/g	1	SFP	8/11/23	16600	8/14/23	22:21	MA VPH
naphthalene	< 0.20	0.20	ug/g	1	SFP	8/11/23	16600	8/14/23	22:21	MA VPH
C5-C8 Aliphatics	4.2	4.1	ug/g	1	SFP	8/11/23	16600	8/14/23	22:21	MA VPH
C9-C12 Aliphatics	< 4.1	4.1	ug/g	1	SFP	8/11/23	16600	8/14/23	22:21	MA VPH
C9-C10 Aromatics	< 4.1	4.1	ug/g	1	SFP	8/11/23	16600	8/14/23	22:21	MA VPH
<b>Surrogate Recovery</b>	<b>Limits</b>									
2,5-dibromotoluene as Aromatic SUR	70	70-130	%	1	SFP	8/11/23	16600	8/14/23	22:21	MA VPH
2,5-dibromotoluene as Aliphatic SUR	90	70-130	%	1	SFP	8/11/23	16600	8/14/23	22:21	MA VPH
a,a,a-trifluorotoluene SUR	84	70-130	%	1	SFP	8/11/23	16600	8/14/23	22:21	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.

C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: EMDC/Belfast

Job ID: 66563

Sample#: 66563-006

Sample ID: SB-3

Matrix: Solid Percent Dry: 87.1% Results expressed on a dry weight basis.

Samples prepared in methanol at a ratio of 0.66 mL MeOH/g soil.

Received on ice at 2°C, in satisfactory condition.

Sampled: 8/8/23 10:15

Parameter	Reporting		Units	Instr Dil'n	Prep	Analysis				
	Result	Limit				Analyst	Date	Batch	Date	Time
Unadjusted C5-C8 Aliphatics	5.6	4.5	ug/g	1	SFP	8/11/23	16600	8/14/23	23:29	MA VPH
Unadjusted C9-C12 Aliphatics	< 4.5	4.5	ug/g	1	SFP	8/11/23	16600	8/14/23	23:29	MA VPH
methyl t-butyl ether (MTBE)	< 0.091	0.091	ug/g	1	SFP	8/11/23	16600	8/14/23	23:29	MA VPH
benzene	< 0.091	0.091	ug/g	1	SFP	8/11/23	16600	8/14/23	23:29	MA VPH
toluene	< 0.091	0.091	ug/g	1	SFP	8/11/23	16600	8/14/23	23:29	MA VPH
ethylbenzene	< 0.091	0.091	ug/g	1	SFP	8/11/23	16600	8/14/23	23:29	MA VPH
m&p-xylenes	< 0.091	0.091	ug/g	1	SFP	8/11/23	16600	8/14/23	23:29	MA VPH
o-xylene	< 0.091	0.091	ug/g	1	SFP	8/11/23	16600	8/14/23	23:29	MA VPH
xylenes (total)	< 0.091	0.091	ug/g	1	SFP	8/11/23	16600	8/14/23	23:29	MA VPH
naphthalene	< 0.23	0.23	ug/g	1	SFP	8/11/23	16600	8/14/23	23:29	MA VPH
C5-C8 Aliphatics	5.6	4.5	ug/g	1	SFP	8/11/23	16600	8/14/23	23:29	MA VPH
C9-C12 Aliphatics	< 4.5	4.5	ug/g	1	SFP	8/11/23	16600	8/14/23	23:29	MA VPH
C9-C10 Aromatics	< 4.5	4.5	ug/g	1	SFP	8/11/23	16600	8/14/23	23:29	MA VPH
<b>Surrogate Recovery</b>		<b>Limits</b>								
2,5-dibromotoluene as Aromatic SUR	79	70-130	%	1	SFP	8/11/23	16600	8/14/23	23:29	MA VPH
2,5-dibromotoluene as Aliphatic SUR	101	70-130	%	1	SFP	8/11/23	16600	8/14/23	23:29	MA VPH
a,a,a-trifluorotoluene SUR	96	70-130	%	1	SFP	8/11/23	16600	8/14/23	23:29	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.

C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: EMDC/Belfast

Job ID: 66563

Sample#: 66563-007

Sample ID: SB-4

Matrix: Solid Percent Dry: 79.4% Results expressed on a dry weight basis.

Samples prepared in methanol at a ratio of 0.5 mL MeOH/g soil.

Received on ice at 2°C, in satisfactory condition.

Sampled: 8/8/23 9:15

Parameter	Reporting		Units	Instr Dil'n	Prep	Analysis				
	Result	Limit				Analyst	Date	Batch	Date	Time
Unadjusted C5-C8 Aliphatics	< 4.5	4.5	ug/g	1	SFP	8/11/23	16600	8/14/23	21:12	MA VPH
Unadjusted C9-C12 Aliphatics	< 4.5	4.5	ug/g	1	SFP	8/11/23	16600	8/14/23	21:12	MA VPH
methyl t-butyl ether (MTBE)	< 0.089	0.089	ug/g	1	SFP	8/11/23	16600	8/14/23	21:12	MA VPH
benzene	< 0.089	0.089	ug/g	1	SFP	8/11/23	16600	8/14/23	21:12	MA VPH
toluene	< 0.089	0.089	ug/g	1	SFP	8/11/23	16600	8/14/23	21:12	MA VPH
ethylbenzene	< 0.089	0.089	ug/g	1	SFP	8/11/23	16600	8/14/23	21:12	MA VPH
m&p-xylenes	< 0.089	0.089	ug/g	1	SFP	8/11/23	16600	8/14/23	21:12	MA VPH
o-xylene	< 0.089	0.089	ug/g	1	SFP	8/11/23	16600	8/14/23	21:12	MA VPH
xylenes (total)	< 0.089	0.089	ug/g	1	SFP	8/11/23	16600	8/14/23	21:12	MA VPH
naphthalene	< 0.22	0.22	ug/g	1	SFP	8/11/23	16600	8/14/23	21:12	MA VPH
C5-C8 Aliphatics	< 4.5	4.5	ug/g	1	SFP	8/11/23	16600	8/14/23	21:12	MA VPH
C9-C12 Aliphatics	< 4.5	4.5	ug/g	1	SFP	8/11/23	16600	8/14/23	21:12	MA VPH
C9-C10 Aromatics	< 4.5	4.5	ug/g	1	SFP	8/11/23	16600	8/14/23	21:12	MA VPH
<b>Surrogate Recovery</b>		<b>Limits</b>								
2,5-dibromotoluene as Aromatic SUR	<b>73</b>	70-130	%	1	SFP	8/11/23	16600	8/14/23	21:12	MA VPH
2,5-dibromotoluene as Aliphatic SUR	<b>92</b>	70-130	%	1	SFP	8/11/23	16600	8/14/23	21:12	MA VPH
a,a,a-trifluorotoluene SUR	<b>80</b>	70-130	%	1	SFP	8/11/23	16600	8/14/23	21:12	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.

C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: EMDC/Belfast

Job ID: 66563

Sample#: 66563-009

Sample ID: Trip Blank

Matrix: Water

Received on ice at 2°C, in satisfactory condition.

Sampled: 8/8/23 0:00

Parameter	Reporting		Instr Dil'n		Analyst	Prep Date	Analysis			Reference
	Result	Limit	Units	Factor			Batch	Date	Time	
Unadjusted C5-C8 Aliphatics	< 100	100	ug/L	1	SFP	2302538	8/21/23	16:03	MA VPH	
Unadjusted C9-C12 Aliphatics	< 100	100	ug/L	1	SFP	2302538	8/21/23	16:03	MA VPH	
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	SFP	2302538	8/21/23	16:03	MA VPH	
benzene	< 1	1	ug/L	1	SFP	2302538	8/21/23	16:03	MA VPH	
toluene	< 2	2	ug/L	1	SFP	2302538	8/21/23	16:03	MA VPH	
ethylbenzene	< 2	2	ug/L	1	SFP	2302538	8/21/23	16:03	MA VPH	
m&p-xylenes	<b>3B</b>	2	ug/L	1	SFP	2302538	8/21/23	16:03	MA VPH	
o-xylene	< 2	2	ug/L	1	SFP	2302538	8/21/23	16:03	MA VPH	
xylenes (total)	<b>3B</b>	2	ug/L	1	SFP	2302538	8/21/23	16:03	MA VPH	
naphthalene	<b>6B</b>	5	ug/L	1	SFP	2302538	8/21/23	16:03	MA VPH	
C5-C8 Aliphatics	< 100	100	ug/L	1	SFP	2302538	8/21/23	16:03	MA VPH	
C9-C12 Aliphatics	< 100	100	ug/L	1	SFP	2302538	8/21/23	16:03	MA VPH	
C9-C10 Aromatics	< 100	100	ug/L	1	SFP	2302538	8/21/23	16:03	MA VPH	
<b>Surrogate Recovery</b>		<b>Limits</b>								
2,5-dibromotoluene as Aromatic SUR	<b>64*</b>	70-130	%	1	SFP	2302538	8/21/23	16:03	MA VPH	
* This surrogate showed recovery outside the acceptance limits. No additional sample remained for re-analysis.										
2,5-dibromotoluene as Aliphatic SUR	<b>81</b>	70-130	%	1	SFP	2302538	8/21/23	16:03	MA VPH	

**B = The reported concentration is due to carryover from the previous analysis.**

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.

C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: EMDC/Belfast

Job ID: 66563

Sample#: 66563-001

Sample ID: SS-1

Matrix: Solid

Percent Dry: 78.9% Results expressed on a dry weight basis.

Sampled: 8/8/23 8:55

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		Reference
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
N-nitrosodimethylamine	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
pyridine	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
aniline	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
phenol	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
2-chlorophenol	< 0.61	0.61	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
bis(2-chloroethyl)ether	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
1,3-dichlorobenzene	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
1,4-dichlorobenzene	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
1,2-dichlorobenzene	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
benzyl alcohol	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
2-methylphenol	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
2,2'-oxybis(1-chloropropane)	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
hexachloroethane	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
N-nitroso-di-N-propylamine	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
4-methylphenol	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
nitrobenzene	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
isophorone	< 0.61	0.61	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
2-nitrophenol	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
2,4-dimethylphenol	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
bis(2-chloroethoxy)methane	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
2,4-dichlorophenol	< 0.61	0.61	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
1,2,4-trichlorobenzene	< 0.61	0.61	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
naphthalene	< 0.061	0.061	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
benzoic acid	< 6.1	6.1	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
4-chloroaniline	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
hexachlorobutadiene	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
4-chloro-3-methylphenol	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
2-methylnaphthalene	< 0.061	0.061	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
hexachlorocyclopentadiene	< 1.2	1.2	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
2,4,6-trichlorophenol	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
2,4,5-trichlorophenol	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
2-chloronaphthalene	< 0.61	0.61	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
2-nitroaniline	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
acenaphthylene	< 0.061	0.061	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
dimethylphthalate	< 0.61	0.61	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
2,6-dinitrotoluene	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
2,4-dinitrotoluene	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
acenaphthene	< 0.061	0.061	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
3-nitroaniline	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
2,4-dinitrophenol	< 6.1	6.1	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
dibenzofuran	< 0.061	0.061	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
4-nitrophenol	< 1.2	1.2	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
fluorene	< 0.061	0.061	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E

Project ID: EMDC/Belfast

Job ID: 66563

Sample#: 66563-001

Sample ID: SS-1

Matrix: Solid

Percent Dry: 78.9% Results expressed on a dry weight basis.

Sampled: 8/8/23 8:55

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
diethyl phthalate	< 0.61	0.61	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
4-chlorophenyl phenyl ether	< 0.61	0.61	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
4-nitroaniline	< 0.61	0.61	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
4,6-dinitro-2-methylphenol	< 2.4	2.4	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
azobenzene	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
N-nitrosodiphenylamine	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
4-bromophenyl phenyl ether	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
hexachlorobenzene	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
pentachlorophenol	< 1.2	1.2	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
phenanthrene	< 0.061	0.061	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
anthracene	< 0.061	0.061	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
carbazole	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
di-n-butylphthalate	< 0.61	0.61	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
fluoranthene	<b>0.098</b>	0.061	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
benzidine	< 3.6	3.6	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
pyrene	<b>0.11</b>	0.061	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
butyl benzyl phthalate	< 0.61	0.61	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
benzo(a)anthracene	< 0.061	0.061	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
chrysene	<b>0.078</b>	0.061	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
3,3'-dichlorobenzidine	< 3.6	3.6	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
bis(2-ethylhexyl)phthalate	< 0.61	0.61	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
di-n-octyl phthalate	< 0.61	0.61	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
benzo(b)fluoranthene	<b>0.061</b>	0.061	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
benzo(k)fluoranthene	< 0.061	0.061	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
benzo(a)pyrene	< 0.061	0.061	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
indeno(1,2,3-cd)pyrene	< 0.061	0.061	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
dibenzo(a,h)anthracene	< 0.061	0.061	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
benzo(g,h,i)perylene	<b>0.067</b>	0.061	ug/g	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
<b>Surrogate Recovery</b>		<b>Limits</b>								
2-fluorophenol SUR	<b>61</b>	21-100	%	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
phenol-D5 SUR	<b>64</b>	10-102	%	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
2,4,6-tribromophenol SUR	<b>55</b>	10-123	%	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
nitrobenzene-D5 SUR	<b>52</b>	35-114	%	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
2-fluorobiphenyl SUR	<b>57</b>	43-116	%	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E
p-terphenyl-D14 SUR	<b>57</b>	33-141	%	1	CL	8/15/23	16615	8/16/23	19:08	SW3546/8270E

Project ID: EMDC/Belfast

Job ID: 66563

Sample#: 66563-002

Sample ID: SS-5

Matrix: Solid

Percent Dry: 94.1% Results expressed on a dry weight basis.

Sampled: 8/8/23 9:15

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		Reference
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
N-nitrosodimethylamine	< 0.20	0.20	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
pyridine	< 0.20	0.20	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
aniline	< 0.20	0.20	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
phenol	< 0.20	0.20	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
2-chlorophenol	< 0.51	0.51	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
bis(2-chloroethyl)ether	< 0.20	0.20	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
1,3-dichlorobenzene	< 0.20	0.20	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
1,4-dichlorobenzene	< 0.20	0.20	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
1,2-dichlorobenzene	< 0.20	0.20	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
benzyl alcohol	< 0.20	0.20	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
2-methylphenol	< 0.20	0.20	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
2,2'-oxybis(1-chloropropane)	< 0.20	0.20	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
hexachloroethane	< 0.20	0.20	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
N-nitroso-di-N-propylamine	< 0.20	0.20	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
4-methylphenol	< 0.20	0.20	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
nitrobenzene	< 0.20	0.20	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
isophorone	< 0.51	0.51	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
2-nitrophenol	< 0.20	0.20	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
2,4-dimethylphenol	< 0.20	0.20	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
bis(2-chloroethoxy)methane	< 0.20	0.20	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
2,4-dichlorophenol	< 0.51	0.51	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
1,2,4-trichlorobenzene	< 0.51	0.51	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
naphthalene	< 0.051	0.051	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
benzoic acid	< 5.1	5.1	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
4-chloroaniline	< 0.20	0.20	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
hexachlorobutadiene	< 0.20	0.20	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
4-chloro-3-methylphenol	< 0.20	0.20	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
2-methylnaphthalene	< 0.051	0.051	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
hexachlorocyclopentadiene	< 1.0	1.0	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
2,4,6-trichlorophenol	< 0.20	0.20	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
2,4,5-trichlorophenol	< 0.20	0.20	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
2-chloronaphthalene	< 0.51	0.51	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
2-nitroaniline	< 0.20	0.20	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
acenaphthylene	< 0.051	0.051	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
dimethylphthalate	< 0.51	0.51	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
2,6-dinitrotoluene	< 0.20	0.20	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
2,4-dinitrotoluene	< 0.20	0.20	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
acenaphthene	< 0.051	0.051	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
3-nitroaniline	< 0.20	0.20	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
2,4-dinitrophenol	< 5.1	5.1	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
dibenzofuran	< 0.051	0.051	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
4-nitrophenol	< 1.0	1.0	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
fluorene	< 0.051	0.051	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E

Project ID: EMDC/Belfast

Job ID: 66563

Sample#: 66563-002

Sample ID: SS-5

Matrix: Solid

Percent Dry: 94.1% Results expressed on a dry weight basis.

Sampled: 8/8/23 9:15

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
diethyl phthalate	< 0.51	0.51	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
4-chlorophenyl phenyl ether	< 0.51	0.51	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
4-nitroaniline	< 0.51	0.51	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
4,6-dinitro-2-methylphenol	< 2.0	2.0	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
azobenzene	< 0.20	0.20	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
N-nitrosodiphenylamine	< 0.20	0.20	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
4-bromophenyl phenyl ether	< 0.20	0.20	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
hexachlorobenzene	< 0.20	0.20	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
pentachlorophenol	< 1.0	1.0	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
phenanthrene	< 0.051	0.051	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
anthracene	< 0.051	0.051	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
carbazole	< 0.20	0.20	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
di-n-butylphthalate	< 0.51	0.51	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
fluoranthene	<b>0.11</b>	0.051	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
benzidine	< 3.0	3.0	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
pyrene	<b>0.11</b>	0.051	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
butyl benzyl phthalate	< 0.51	0.51	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
benzo(a)anthracene	<b>0.065</b>	0.051	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
chrysene	<b>0.078</b>	0.051	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
3,3'-dichlorobenzidine	< 3.0	3.0	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
bis(2-ethylhexyl)phthalate	< 0.51	0.51	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
di-n-octyl phthalate	< 0.51	0.51	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
benzo(b)fluoranthene	<b>0.10</b>	0.051	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
benzo(k)fluoranthene	<b>0.10</b>	0.051	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
benzo(a)pyrene	<b>0.12</b>	0.051	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
indeno(1,2,3-cd)pyrene	<b>0.11</b>	0.051	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
dibenzo(a,h)anthracene	< 0.051	0.051	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
benzo(g,h,i)perylene	<b>0.17</b>	0.051	ug/g	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
<b>Surrogate Recovery</b>		<b>Limits</b>								
2-fluorophenol SUR	<b>40</b>	21-100	%	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
phenol-D5 SUR	<b>44</b>	10-102	%	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
2,4,6-tribromophenol SUR	<b>49</b>	10-123	%	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
nitrobenzene-D5 SUR	<b>44</b>	35-114	%	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
2-fluorobiphenyl SUR	<b>52</b>	43-116	%	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E
p-terphenyl-D14 SUR	<b>60</b>	33-141	%	1	CL	8/15/23	16615	8/16/23	19:38	SW3546/8270E

Project ID: EMDC/Belfast

Job ID: 66563

Sample#: 66563-003

Sample ID: SS-6

Matrix: Solid

Percent Dry: 88.7% Results expressed on a dry weight basis.

Sampled: 8/8/23 9:20

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		Reference
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
N-nitrosodimethylamine	< 0.21	0.21	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
pyridine	< 0.21	0.21	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
aniline	< 0.21	0.21	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
phenol	< 0.21	0.21	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
2-chlorophenol	< 0.53	0.53	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
bis(2-chloroethyl)ether	< 0.21	0.21	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
1,3-dichlorobenzene	< 0.21	0.21	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
1,4-dichlorobenzene	< 0.21	0.21	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
1,2-dichlorobenzene	< 0.21	0.21	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
benzyl alcohol	< 0.21	0.21	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
2-methylphenol	< 0.21	0.21	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
2,2'-oxybis(1-chloropropane)	< 0.21	0.21	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
hexachloroethane	< 0.21	0.21	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
N-nitroso-di-N-propylamine	< 0.21	0.21	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
4-methylphenol	< 0.21	0.21	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
nitrobenzene	< 0.21	0.21	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
isophorone	< 0.53	0.53	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
2-nitrophenol	< 0.21	0.21	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
2,4-dimethylphenol	< 0.21	0.21	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
bis(2-chloroethoxy)methane	< 0.21	0.21	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
2,4-dichlorophenol	< 0.53	0.53	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
1,2,4-trichlorobenzene	< 0.53	0.53	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
naphthalene	< 0.053	0.053	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
benzoic acid	< 5.3	5.3	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
4-chloroaniline	< 0.21	0.21	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
hexachlorobutadiene	< 0.21	0.21	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
4-chloro-3-methylphenol	< 0.21	0.21	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
2-methylnaphthalene	< 0.053	0.053	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
hexachlorocyclopentadiene	< 1.1	1.1	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
2,4,6-trichlorophenol	< 0.21	0.21	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
2,4,5-trichlorophenol	< 0.21	0.21	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
2-chloronaphthalene	< 0.53	0.53	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
2-nitroaniline	< 0.21	0.21	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
acenaphthylene	< 0.053	0.053	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
dimethylphthalate	< 0.53	0.53	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
2,6-dinitrotoluene	< 0.21	0.21	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
2,4-dinitrotoluene	< 0.21	0.21	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
acenaphthene	< 0.053	0.053	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
3-nitroaniline	< 0.21	0.21	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
2,4-dinitrophenol	< 5.3	5.3	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
dibenzofuran	< 0.053	0.053	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
4-nitrophenol	< 1.1	1.1	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
fluorene	< 0.053	0.053	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E

Project ID: EMDC/Belfast

Job ID: 66563

Sample#: 66563-003

Sample ID: SS-6

Matrix: Solid

Percent Dry: 88.7% Results expressed on a dry weight basis.

Sampled: 8/8/23 9:20

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
diethyl phthalate	< 0.53	0.53	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
4-chlorophenyl phenyl ether	< 0.53	0.53	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
4-nitroaniline	< 0.53	0.53	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
4,6-dinitro-2-methylphenol	< 2.1	2.1	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
azobenzene	< 0.21	0.21	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
N-nitrosodiphenylamine	< 0.21	0.21	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
4-bromophenyl phenyl ether	< 0.21	0.21	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
hexachlorobenzene	< 0.21	0.21	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
pentachlorophenol	< 1.1	1.1	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
phenanthrene	< 0.053	0.053	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
anthracene	< 0.053	0.053	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
carbazole	< 0.21	0.21	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
di-n-butylphthalate	<b>2.6</b>	0.53	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
fluoranthene	<b>0.10</b>	0.053	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
benzidine	< 3.2	3.2	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
pyrene	<b>0.10</b>	0.053	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
butyl benzyl phthalate	<b>4.0</b>	0.53	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
benzo(a)anthracene	< 0.053	0.053	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
chrysene	<b>0.067</b>	0.053	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
3,3'-dichlorobenzidine	< 3.2	3.2	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
bis(2-ethylhexyl)phthalate	< 0.53	0.53	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
di-n-octyl phthalate	< 0.53	0.53	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
benzo(b)fluoranthene	<b>0.071</b>	0.053	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
benzo(k)fluoranthene	<b>0.059</b>	0.053	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
benzo(a)pyrene	<b>0.070</b>	0.053	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
indeno(1,2,3-cd)pyrene	< 0.053	0.053	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
dibenzo(a,h)anthracene	< 0.053	0.053	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
benzo(g,h,i)perylene	<b>0.068</b>	0.053	ug/g	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
<b>Surrogate Recovery</b>		<b>Limits</b>								
2-fluorophenol SUR	<b>45</b>	21-100	%	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
phenol-D5 SUR	<b>48</b>	10-102	%	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
2,4,6-tribromophenol SUR	<b>58</b>	10-123	%	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
nitrobenzene-D5 SUR	<b>43</b>	35-114	%	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
2-fluorobiphenyl SUR	<b>52</b>	43-116	%	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E
p-terphenyl-D14 SUR	<b>60</b>	33-141	%	1	CL	8/15/23	16615	8/16/23	20:08	SW3546/8270E

Project ID: EMDC/Belfast

Job ID: 66563

Sample#: 66563-007

Sample ID: SB-4

Matrix: Solid

Percent Dry: 79.4% Results expressed on a dry weight basis.

Sampled: 8/8/23 9:15

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		Reference
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
N-nitrosodimethylamine	< 0.23	0.23	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
pyridine	< 0.23	0.23	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
aniline	< 0.23	0.23	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
phenol	< 0.23	0.23	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
2-chlorophenol	< 0.59	0.59	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
bis(2-chloroethyl)ether	< 0.23	0.23	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
1,3-dichlorobenzene	< 0.23	0.23	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
1,4-dichlorobenzene	< 0.23	0.23	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
1,2-dichlorobenzene	< 0.23	0.23	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
benzyl alcohol	< 0.23	0.23	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
2-methylphenol	< 0.23	0.23	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
2,2'-oxybis(1-chloropropane)	< 0.23	0.23	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
hexachloroethane	< 0.23	0.23	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
N-nitroso-di-N-propylamine	< 0.23	0.23	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
4-methylphenol	< 0.23	0.23	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
nitrobenzene	< 0.23	0.23	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
isophorone	< 0.59	0.59	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
2-nitrophenol	< 0.23	0.23	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
2,4-dimethylphenol	< 0.23	0.23	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
bis(2-chloroethoxy)methane	< 0.23	0.23	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
2,4-dichlorophenol	< 0.59	0.59	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
1,2,4-trichlorobenzene	< 0.59	0.59	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
naphthalene	< 0.059	0.059	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
benzoic acid	< 5.9	5.9	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
4-chloroaniline	< 0.23	0.23	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
hexachlorobutadiene	< 0.23	0.23	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
4-chloro-3-methylphenol	< 0.23	0.23	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
2-methylnaphthalene	< 0.059	0.059	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
hexachlorocyclopentadiene	< 1.2	1.2	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
2,4,6-trichlorophenol	< 0.23	0.23	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
2,4,5-trichlorophenol	< 0.23	0.23	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
2-chloronaphthalene	< 0.59	0.59	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
2-nitroaniline	< 0.23	0.23	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
acenaphthylene	< 0.059	0.059	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
dimethylphthalate	< 0.59	0.59	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
2,6-dinitrotoluene	< 0.23	0.23	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
2,4-dinitrotoluene	< 0.23	0.23	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
acenaphthene	< 0.059	0.059	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
3-nitroaniline	< 0.23	0.23	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
2,4-dinitrophenol	< 5.9	5.9	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
dibenzofuran	< 0.059	0.059	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
4-nitrophenol	< 1.2	1.2	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
fluorene	< 0.059	0.059	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E

Project ID: EMDC/Belfast

Job ID: 66563

Sample#: 66563-007

Sample ID: SB-4

Matrix: Solid

Percent Dry: 79.4% Results expressed on a dry weight basis.

Sampled: 8/8/23 9:15

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
diethyl phthalate	< 0.59	0.59	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
4-chlorophenyl phenyl ether	< 0.59	0.59	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
4-nitroaniline	< 0.59	0.59	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
4,6-dinitro-2-methylphenol	< 2.3	2.3	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
azobenzene	< 0.23	0.23	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
N-nitrosodiphenylamine	< 0.23	0.23	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
4-bromophenyl phenyl ether	< 0.23	0.23	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
hexachlorobenzene	< 0.23	0.23	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
pentachlorophenol	< 1.2	1.2	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
phenanthrene	< 0.059	0.059	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
anthracene	< 0.059	0.059	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
carbazole	< 0.23	0.23	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
di-n-butylphthalate	< 0.59	0.59	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
fluoranthene	< 0.059	0.059	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
benzidine	< 3.5	3.5	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
pyrene	< 0.059	0.059	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
butyl benzyl phthalate	< 0.59	0.59	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
benzo(a)anthracene	< 0.059	0.059	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
chrysene	< 0.059	0.059	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
3,3'-dichlorobenzidine	< 3.5	3.5	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
bis(2-ethylhexyl)phthalate	< 0.59	0.59	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
di-n-octyl phthalate	< 0.59	0.59	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
benzo(b)fluoranthene	< 0.059	0.059	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
benzo(k)fluoranthene	< 0.059	0.059	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
benzo(a)pyrene	< 0.059	0.059	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
indeno(1,2,3-cd)pyrene	< 0.059	0.059	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
dibenzo(a,h)anthracene	< 0.059	0.059	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
benzo(g,h,i)perylene	< 0.059	0.059	ug/g	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
<b>Surrogate Recovery</b>		<b>Limits</b>								
2-fluorophenol SUR	<b>47</b>	21-100	%	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
phenol-D5 SUR	<b>49</b>	10-102	%	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
2,4,6-tribromophenol SUR	<b>55</b>	10-123	%	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
nitrobenzene-D5 SUR	<b>47</b>	35-114	%	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
2-fluorobiphenyl SUR	<b>51</b>	43-116	%	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E
p-terphenyl-D14 SUR	<b>77</b>	33-141	%	1	CL	8/15/23	16615	8/16/23	18:38	SW3546/8270E

Project ID: EMDC/Belfast

Job ID: 66563

Sample#: 66563-008

Sample ID: SS-1 Dup

Matrix: Solid

Percent Dry: 78.3% Results expressed on a dry weight basis.

Sampled: 8/8/23 8:55

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
N-nitrosodimethylamine	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
pyridine	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
aniline	< 0.24M	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
phenol	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
2-chlorophenol	< 0.60	0.60	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
bis(2-chloroethyl)ether	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
1,3-dichlorobenzene	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
1,4-dichlorobenzene	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
1,2-dichlorobenzene	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
benzyl alcohol	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
2-methylphenol	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
2,2'-oxybis(1-chloropropane)	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
hexachloroethane	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
N-nitroso-di-N-propylamine	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
4-methylphenol	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
nitrobenzene	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
isophorone	< 0.60	0.60	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
2-nitrophenol	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
2,4-dimethylphenol	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
bis(2-chloroethoxy)methane	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
2,4-dichlorophenol	< 0.60	0.60	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
1,2,4-trichlorobenzene	< 0.60	0.60	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
naphthalene	< 0.060	0.060	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
benzoic acid	< 6.0	6.0	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
4-chloroaniline	< 0.24M	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
hexachlorobutadiene	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
4-chloro-3-methylphenol	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
2-methylnaphthalene	< 0.060	0.060	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
hexachlorocyclopentadiene	< 1.2M	1.2	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
2,4,6-trichlorophenol	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
2,4,5-trichlorophenol	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
2-chloronaphthalene	< 0.60	0.60	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
2-nitroaniline	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
acenaphthylene	< 0.060	0.060	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
dimethylphthalate	< 0.60	0.60	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
2,6-dinitrotoluene	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
2,4-dinitrotoluene	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
acenaphthene	< 0.060	0.060	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
3-nitroaniline	< 0.24M	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
2,4-dinitrophenol	< 6.0	6.0	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
dibenzofuran	< 0.060	0.060	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
4-nitrophenol	< 1.2	1.2	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
fluorene	< 0.060	0.060	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E

Project ID: EMDC/Belfast

Job ID: 66563

Sample#: 66563-008

Sample ID: SS-1 Dup

Matrix: Solid

Percent Dry: 78.3% Results expressed on a dry weight basis.

Sampled: 8/8/23 8:55

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
diethyl phthalate	< 0.60	0.60	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
4-chlorophenyl phenyl ether	< 0.60	0.60	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
4-nitroaniline	< 0.60M	0.60	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
4,6-dinitro-2-methylphenol	< 2.4M	2.4	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
azobenzene	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
N-nitrosodiphenylamine	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
4-bromophenyl phenyl ether	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
hexachlorobenzene	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
pentachlorophenol	< 1.2	1.2	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
phenanthrene	< 0.060	0.060	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
anthracene	< 0.060	0.060	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
carbazole	< 0.24	0.24	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
di-n-butylphthalate	< 0.60	0.60	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
fluoranthene	<b>0.26</b>	0.060	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
benzidine	< 3.6M	3.6	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
pyrene	<b>0.25</b>	0.060	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
butyl benzyl phthalate	< 0.60	0.60	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
benzo(a)anthracene	<b>0.096</b>	0.060	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
chrysene	<b>0.11</b>	0.060	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
3,3'-dichlorobenzidine	< 3.6M	3.6	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
bis(2-ethylhexyl)phthalate	< 0.60	0.60	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
di-n-octyl phthalate	< 0.60	0.60	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
benzo(b)fluoranthene	<b>0.11</b>	0.060	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
benzo(k)fluoranthene	<b>0.098</b>	0.060	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
benzo(a)pyrene	<b>0.11</b>	0.060	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
indeno(1,2,3-cd)pyrene	<b>0.070</b>	0.060	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
dibenzo(a,h)anthracene	< 0.060	0.060	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
benzo(g,h,i)perylene	<b>0.094</b>	0.060	ug/g	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
<b>Surrogate Recovery</b>		<b>Limits</b>								
2-fluorophenol SUR	<b>50</b>	21-100	%	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
phenol-D5 SUR	<b>53</b>	10-102	%	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
2,4,6-tribromophenol SUR	<b>61</b>	10-123	%	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
nitrobenzene-D5 SUR	<b>51</b>	35-114	%	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
2-fluorobiphenyl SUR	<b>59</b>	43-116	%	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E
p-terphenyl-D14 SUR	<b>64</b>	33-141	%	1	CL	8/15/23	16615	8/16/23	20:38	SW3546/8270E

**M = The percent recovery in the matrix spike was outside acceptance criteria.**

Project ID: EMDC/Belfast

Job ID: 66563

Sample#: 66563-004

Sample ID: SB-1

Matrix: Solid

Percent Dry: 84.8% Results expressed on a dry weight basis.

Sampled: 8/8/23 10:41

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
naphthalene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	17:46	MA EPH
2-methylnaphthalene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	17:46	MA EPH
phenanthrene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	17:46	MA EPH
acenaphthene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	17:46	MA EPH
acenaphthylene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	17:46	MA EPH
fluorene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	17:46	MA EPH
anthracene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	17:46	MA EPH
fluoranthene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	17:46	MA EPH
pyrene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	17:46	MA EPH
benzo(a)anthracene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	17:46	MA EPH
chrysene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	17:46	MA EPH
benzo(b)fluoranthene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	17:46	MA EPH
benzo(k)fluoranthene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	17:46	MA EPH
benzo(a)pyrene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	17:46	MA EPH
indeno(1,2,3-cd)pyrene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	17:46	MA EPH
dibenzo(a,h)anthracene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	17:46	MA EPH
benzo(g,h,i)perylene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	17:46	MA EPH
Unadjusted C11-C22 Aromatics	< 23	23	ug/g	1	DBV	8/15/23	16614	8/18/23	3:04	MA EPH
C9-C18 Aliphatics	< 23	23	ug/g	1	DBV	8/15/23	16614	8/18/23	3:04	MA EPH
C19-C36 Aliphatics	< 23	23	ug/g	1	DBV	8/15/23	16614	8/18/23	3:04	MA EPH
C11-C22 Aromatics	< 23	23	ug/g	1	DBV	8/15/23	16614	8/18/23	3:04	MA EPH
<b>Surrogate Recovery</b>		<b>Limits</b>								
1-chloro-octadecane SUR	<b>67</b>	40-140	%	1	DBV	8/15/23	16614	8/18/23	3:04	MA EPH
o-terphenyl SUR	<b>71</b>	40-140	%	1	DBV	8/15/23	16614	8/18/23	3:04	MA EPH
2-fluorobiphenyl SUR	<b>84</b>	40-140	%	1	DBV	8/15/23	16614	8/18/23	3:04	MA EPH
2-bromonaphthalene SUR	<b>45</b>	40-140	%	1	DBV	8/15/23	16614	8/18/23	3:04	MA EPH

Project ID: EMDC/Belfast

Job ID: 66563

Sample#: 66563-005

Sample ID: SB-2

Matrix: Solid

Percent Dry: 85.7% Results expressed on a dry weight basis.

Sampled: 8/8/23 11:18

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	Reference
naphthalene	< 0.22	0.22	ug/g	1	CL	8/15/23	16614	8/21/23	18:16	MA EPH
2-methylnaphthalene	< 0.22	0.22	ug/g	1	CL	8/15/23	16614	8/21/23	18:16	MA EPH
phenanthrene	< 0.22	0.22	ug/g	1	CL	8/15/23	16614	8/21/23	18:16	MA EPH
acenaphthene	< 0.22	0.22	ug/g	1	CL	8/15/23	16614	8/21/23	18:16	MA EPH
acenaphthylene	< 0.22	0.22	ug/g	1	CL	8/15/23	16614	8/21/23	18:16	MA EPH
fluorene	< 0.22	0.22	ug/g	1	CL	8/15/23	16614	8/21/23	18:16	MA EPH
anthracene	< 0.22	0.22	ug/g	1	CL	8/15/23	16614	8/21/23	18:16	MA EPH
fluoranthene	< 0.22	0.22	ug/g	1	CL	8/15/23	16614	8/21/23	18:16	MA EPH
pyrene	< 0.22	0.22	ug/g	1	CL	8/15/23	16614	8/21/23	18:16	MA EPH
benzo(a)anthracene	< 0.22	0.22	ug/g	1	CL	8/15/23	16614	8/21/23	18:16	MA EPH
chrysene	< 0.22	0.22	ug/g	1	CL	8/15/23	16614	8/21/23	18:16	MA EPH
benzo(b)fluoranthene	< 0.22	0.22	ug/g	1	CL	8/15/23	16614	8/21/23	18:16	MA EPH
benzo(k)fluoranthene	< 0.22	0.22	ug/g	1	CL	8/15/23	16614	8/21/23	18:16	MA EPH
benzo(a)pyrene	< 0.22	0.22	ug/g	1	CL	8/15/23	16614	8/21/23	18:16	MA EPH
indeno(1,2,3-cd)pyrene	< 0.22	0.22	ug/g	1	CL	8/15/23	16614	8/21/23	18:16	MA EPH
dibenzo(a,h)anthracene	< 0.22	0.22	ug/g	1	CL	8/15/23	16614	8/21/23	18:16	MA EPH
benzo(g,h,i)perylene	< 0.22	0.22	ug/g	1	CL	8/15/23	16614	8/21/23	18:16	MA EPH
Unadjusted C11-C22 Aromatics	< 22	22	ug/g	1	DBV	8/15/23	16614	8/18/23	3:38	MA EPH
C9-C18 Aliphatics	< 22	22	ug/g	1	DBV	8/15/23	16614	8/18/23	3:38	MA EPH
C19-C36 Aliphatics	< 22	22	ug/g	1	DBV	8/15/23	16614	8/18/23	3:38	MA EPH
C11-C22 Aromatics	< 22	22	ug/g	1	DBV	8/15/23	16614	8/18/23	3:38	MA EPH
<b>Surrogate Recovery</b>		<b>Limits</b>								
1-chloro-octadecane SUR	<b>63</b>	40-140	%	1	DBV	8/15/23	16614	8/18/23	3:38	MA EPH
o-terphenyl SUR	<b>82</b>	40-140	%	1	DBV	8/15/23	16614	8/18/23	3:38	MA EPH
2-fluorobiphenyl SUR	<b>90</b>	40-140	%	1	DBV	8/15/23	16614	8/18/23	3:38	MA EPH
2-bromonaphthalene SUR	<b>46</b>	40-140	%	1	DBV	8/15/23	16614	8/18/23	3:38	MA EPH

Project ID: EMDC/Belfast

Job ID: 66563

Sample#: 66563-006

Sample ID: SB-3

Matrix: Solid

Percent Dry: 87.1% Results expressed on a dry weight basis.

Sampled: 8/8/23 10:15

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	Reference
naphthalene	< 0.21	0.21	ug/g	1	CL	8/15/23	16614	8/21/23	18:46	MA EPH
2-methylnaphthalene	< 0.21	0.21	ug/g	1	CL	8/15/23	16614	8/21/23	18:46	MA EPH
phenanthrene	< 0.21	0.21	ug/g	1	CL	8/15/23	16614	8/21/23	18:46	MA EPH
acenaphthene	< 0.21	0.21	ug/g	1	CL	8/15/23	16614	8/21/23	18:46	MA EPH
acenaphthylene	< 0.21	0.21	ug/g	1	CL	8/15/23	16614	8/21/23	18:46	MA EPH
fluorene	< 0.21	0.21	ug/g	1	CL	8/15/23	16614	8/21/23	18:46	MA EPH
anthracene	< 0.21	0.21	ug/g	1	CL	8/15/23	16614	8/21/23	18:46	MA EPH
fluoranthene	< 0.21	0.21	ug/g	1	CL	8/15/23	16614	8/21/23	18:46	MA EPH
pyrene	< 0.21	0.21	ug/g	1	CL	8/15/23	16614	8/21/23	18:46	MA EPH
benzo(a)anthracene	< 0.21	0.21	ug/g	1	CL	8/15/23	16614	8/21/23	18:46	MA EPH
chrysene	< 0.21	0.21	ug/g	1	CL	8/15/23	16614	8/21/23	18:46	MA EPH
benzo(b)fluoranthene	< 0.21	0.21	ug/g	1	CL	8/15/23	16614	8/21/23	18:46	MA EPH
benzo(k)fluoranthene	< 0.21	0.21	ug/g	1	CL	8/15/23	16614	8/21/23	18:46	MA EPH
benzo(a)pyrene	< 0.21	0.21	ug/g	1	CL	8/15/23	16614	8/21/23	18:46	MA EPH
indeno(1,2,3-cd)pyrene	< 0.21	0.21	ug/g	1	CL	8/15/23	16614	8/21/23	18:46	MA EPH
dibenzo(a,h)anthracene	< 0.21	0.21	ug/g	1	CL	8/15/23	16614	8/21/23	18:46	MA EPH
benzo(g,h,i)perylene	< 0.21	0.21	ug/g	1	CL	8/15/23	16614	8/21/23	18:46	MA EPH
Unadjusted C11-C22 Aromatics	< 21	21	ug/g	1	DBV	8/15/23	16614	8/18/23	4:12	MA EPH
C9-C18 Aliphatics	< 21	21	ug/g	1	DBV	8/15/23	16614	8/18/23	4:12	MA EPH
C19-C36 Aliphatics	< 21	21	ug/g	1	DBV	8/15/23	16614	8/18/23	4:12	MA EPH
C11-C22 Aromatics	< 21	21	ug/g	1	DBV	8/15/23	16614	8/18/23	4:12	MA EPH
<b>Surrogate Recovery</b>		<b>Limits</b>								
1-chloro-octadecane SUR	<b>62</b>	40-140	%	1	DBV	8/15/23	16614	8/18/23	4:12	MA EPH
o-terphenyl SUR	<b>76</b>	40-140	%	1	DBV	8/15/23	16614	8/18/23	4:12	MA EPH
2-fluorobiphenyl SUR	<b>83</b>	40-140	%	1	DBV	8/15/23	16614	8/18/23	4:12	MA EPH
2-bromonaphthalene SUR	<b>80</b>	40-140	%	1	DBV	8/15/23	16614	8/18/23	4:12	MA EPH

Project ID: EMDC/Belfast

Job ID: 66563

Sample#: 66563-007

Sample ID: SB-4

Matrix: Solid

Percent Dry: 79.4% Results expressed on a dry weight basis.

Sampled: 8/8/23 9:15

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
naphthalene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	19:16	MA EPH
2-methylnaphthalene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	19:16	MA EPH
phenanthrene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	19:16	MA EPH
acenaphthene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	19:16	MA EPH
acenaphthylene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	19:16	MA EPH
fluorene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	19:16	MA EPH
anthracene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	19:16	MA EPH
fluoranthene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	19:16	MA EPH
pyrene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	19:16	MA EPH
benzo(a)anthracene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	19:16	MA EPH
chrysene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	19:16	MA EPH
benzo(b)fluoranthene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	19:16	MA EPH
benzo(k)fluoranthene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	19:16	MA EPH
benzo(a)pyrene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	19:16	MA EPH
indeno(1,2,3-cd)pyrene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	19:16	MA EPH
dibenzo(a,h)anthracene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	19:16	MA EPH
benzo(g,h,i)perylene	< 0.23	0.23	ug/g	1	CL	8/15/23	16614	8/21/23	19:16	MA EPH
Unadjusted C11-C22 Aromatics	< 23	23	ug/g	1	DBV	8/15/23	16614	8/18/23	4:46	MA EPH
C9-C18 Aliphatics	< 23	23	ug/g	1	DBV	8/15/23	16614	8/18/23	4:46	MA EPH
C19-C36 Aliphatics	< 23	23	ug/g	1	DBV	8/15/23	16614	8/18/23	4:46	MA EPH
C11-C22 Aromatics	< 23	23	ug/g	1	DBV	8/15/23	16614	8/18/23	4:46	MA EPH
<b>Surrogate Recovery</b>		<b>Limits</b>								
1-chloro-octadecane SUR	<b>58</b>	40-140	%	1	DBV	8/15/23	16614	8/18/23	4:46	MA EPH
o-terphenyl SUR	<b>69</b>	40-140	%	1	DBV	8/15/23	16614	8/18/23	4:46	MA EPH
2-fluorobiphenyl SUR	<b>86</b>	40-140	%	1	DBV	8/15/23	16614	8/18/23	4:46	MA EPH
2-bromonaphthalene SUR	<b>64</b>	40-140	%	1	DBV	8/15/23	16614	8/18/23	4:46	MA EPH

Project ID: EMDC/Belfast

Job ID: 66563

Sample#: 66563-001

Sample ID: SS-1

Matrix: Solid

Percent Dry: 78.9% Results expressed on a dry weight basis.

Sampled: 8/8/23 8:55

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
Arsenic	9.7	3.0	ug/g	5	AGN	8/16/23	16613	8/16/23	19:59	SW3051A6020A
Barium	28	6.0	ug/g	5	AGN	8/16/23	16613	8/16/23	19:59	SW3051A6020A
Cadmium	< 0.60	0.60	ug/g	5	AGN	8/16/23	16613	8/16/23	19:59	SW3051A6020A
Chromium	20	6.0	ug/g	5	AGN	8/16/23	16613	8/16/23	19:59	SW3051A6020A
Copper	17	6.0	ug/g	5	AGN	8/16/23	16613	8/16/23	19:59	SW3051A6020A
Lead	14	3.0	ug/g	5	AGN	8/16/23	16613	8/16/23	19:59	SW3051A6020A
Mercury	< 0.21	0.21	ug/g	1	EEB	8/18/23	16631	8/18/23	14:07	SW7471B
Selenium	< 6.0	6.0	ug/g	5	AGN	8/16/23	16613	8/16/23	19:59	SW3051A6020A
Silver	< 3.0	3.0	ug/g	5	AGN	8/16/23	16613	8/16/23	19:59	SW3051A6020A
Zinc	58	6.0	ug/g	5	AGN	8/16/23	16613	8/16/23	19:59	SW3051A6020A

Sample#: 66563-002

Sample ID: SS-5

Matrix: Solid

Percent Dry: 94.1% Results expressed on a dry weight basis.

Sampled: 8/8/23 9:15

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
Arsenic	6.5	2.5	ug/g	5	AGN	8/16/23	16613	8/16/23	20:09	SW3051A6020A
Barium	16	4.9	ug/g	5	AGN	8/16/23	16613	8/16/23	20:09	SW3051A6020A
Cadmium	< 0.49	0.49	ug/g	5	AGN	8/16/23	16613	8/16/23	20:09	SW3051A6020A
Chromium	17	4.9	ug/g	5	AGN	8/16/23	16613	8/16/23	20:09	SW3051A6020A
Copper	12	4.9	ug/g	5	AGN	8/16/23	16613	8/16/23	20:09	SW3051A6020A
Lead	8.0	2.5	ug/g	5	AGN	8/16/23	16613	8/16/23	20:09	SW3051A6020A
Mercury	< 0.16	0.16	ug/g	1	EEB	8/18/23	16631	8/18/23	14:16	SW7471B
Selenium	< 4.9	4.9	ug/g	5	AGN	8/16/23	16613	8/16/23	20:09	SW3051A6020A
Silver	< 2.5	2.5	ug/g	5	AGN	8/16/23	16613	8/16/23	20:09	SW3051A6020A
Zinc	32	4.9	ug/g	5	AGN	8/16/23	16613	8/16/23	20:09	SW3051A6020A

Sample#: 66563-003

Sample ID: SS-6

Matrix: Solid

Percent Dry: 88.7% Results expressed on a dry weight basis.

Sampled: 8/8/23 9:20

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
Arsenic	10	2.8	ug/g	5	AGN	8/16/23	16613	8/16/23	20:19	SW3051A6020A
Barium	27	5.5	ug/g	5	AGN	8/16/23	16613	8/16/23	20:19	SW3051A6020A
Cadmium	< 0.55	0.55	ug/g	5	AGN	8/16/23	16613	8/16/23	20:19	SW3051A6020A
Chromium	26	5.5	ug/g	5	AGN	8/16/23	16613	8/16/23	20:19	SW3051A6020A
Copper	15	5.5	ug/g	5	AGN	8/16/23	16613	8/16/23	20:19	SW3051A6020A
Lead	16	2.8	ug/g	5	AGN	8/16/23	16613	8/16/23	20:19	SW3051A6020A
Mercury	< 0.14	0.14	ug/g	1	EEB	8/18/23	16631	8/18/23	14:18	SW7471B
Selenium	< 5.5	5.5	ug/g	5	AGN	8/16/23	16613	8/16/23	20:19	SW3051A6020A
Silver	< 2.8	2.8	ug/g	5	AGN	8/16/23	16613	8/16/23	20:19	SW3051A6020A
Zinc	50	5.5	ug/g	5	AGN	8/16/23	16613	8/16/23	20:19	SW3051A6020A

Project ID: EMDC/Belfast

Job ID: 66563

Sample#: 66563-007

Sample ID: SB-4

Matrix: Solid

Percent Dry: 79.4% Results expressed on a dry weight basis.

Sampled: 8/8/23 9:15

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
Arsenic	13	3.0	ug/g	5	AGN	8/16/23	16613	8/16/23	20:28	SW3051A6020A
Barium	65	5.9	ug/g	5	AGN	8/16/23	16613	8/16/23	20:28	SW3051A6020A
Cadmium	< 0.59	0.59	ug/g	5	AGN	8/16/23	16613	8/16/23	20:28	SW3051A6020A
Chromium	45	5.9	ug/g	5	AGN	8/16/23	16613	8/16/23	20:28	SW3051A6020A
Copper	25	5.9	ug/g	5	AGN	8/16/23	16613	8/16/23	20:28	SW3051A6020A
Lead	15	3.0	ug/g	5	AGN	8/16/23	16613	8/16/23	20:28	SW3051A6020A
Mercury	< 0.18	0.18	ug/g	1	EEB	8/18/23	16631	8/18/23	14:19	SW7471B
Selenium	< 5.9	5.9	ug/g	5	AGN	8/16/23	16613	8/16/23	20:28	SW3051A6020A
Silver	< 3.0	3.0	ug/g	5	AGN	8/16/23	16613	8/16/23	20:28	SW3051A6020A
Zinc	58	5.9	ug/g	5	AGN	8/16/23	16613	8/16/23	20:28	SW3051A6020A

Sample#: 66563-008

Sample ID: SS-1 Dup

Matrix: Solid

Percent Dry: 78.3% Results expressed on a dry weight basis.

Sampled: 8/8/23 8:55

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
Arsenic	9.8	3.0	ug/g	5	AGN	8/16/23	16613	8/16/23	21:37	SW3051A6020A
Barium	35	5.9	ug/g	5	AGN	8/16/23	16613	8/16/23	21:37	SW3051A6020A
Cadmium	< 0.59	0.59	ug/g	5	AGN	8/16/23	16613	8/16/23	21:37	SW3051A6020A
Chromium	25	5.9	ug/g	5	AGN	8/16/23	16613	8/16/23	21:37	SW3051A6020A
Copper	19	5.9	ug/g	5	AGN	8/16/23	16613	8/16/23	21:37	SW3051A6020A
Lead	14	3.0	ug/g	5	AGN	8/16/23	16613	8/16/23	21:37	SW3051A6020A
Mercury	< 0.21	0.21	ug/g	1	EEB	8/18/23	16631	8/18/23	14:21	SW7471B
Selenium	< 5.9	5.9	ug/g	5	AGN	8/16/23	16613	8/16/23	21:37	SW3051A6020A
Silver	< 3.0	3.0	ug/g	5	AGN	8/16/23	16613	8/16/23	21:37	SW3051A6020A
Zinc	72	5.9	ug/g	5	AGN	8/16/23	16613	8/16/23	21:37	SW3051A6020A

# Quality Control Report



124 Heritage Avenue Unit 16  
Portsmouth, NH 03801  
[www.absoluteresourceassociates.com](http://www.absoluteresourceassociates.com)



**Case Narrative**

**Lab # 66563**

**Sample Receiving and Chain of Custody Discrepancies**

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Samples were received in acceptable condition, between 0 and 6 degrees C, on ice, and in accordance with sample handling, preservation and integrity guidelines.

**Calibration**

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No exceptions noted.

**Method Blank**

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VPH: Sample 66563-009 (Trip Blank) had detections for m&p-xylene and naphthalene. These detections are the result of carryover from a previous sample.

**Surrogate Recoveries**

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VPH: Sample 66563-009 had a recovery for 2,5-dibromotoluene as Aromatic that was outside acceptance criteria. No additional sample remained for re-analysis.

VPH: BLK2302538 had a recovery for 2,5-dibromotoluene as Aromatic that was outside acceptance criteria.

**Laboratory Control Sample Results**

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No exceptions noted.

VOC: The LCS2302416 did not meet the acceptance criteria for dichlorodifluoromethane. Since <10% of the compounds were outside of the acceptance criteria, reanalysis is not required.

VOC: The MLCS/D16588 did not meet the acceptance criteria for vinyl chloride. Since <10% of the compounds were outside of the acceptance criteria, reanalysis is not required.

VOC: The MLCS16606 did not meet the acceptance criteria for four analytes. The MLCSD16606 did not meet the acceptance criteria for three analytes. Since <10% of the compounds were outside of the acceptance criteria, reanalysis is not required.

SVOC: The LCS16615 did not meet the acceptance criteria for five analytes. Since <10% of the compounds were outside of the acceptance criteria, reanalysis is not required.

**Matrix Spike/Matrix Spike Duplicate/Duplicate Results**

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Not requested for this project.

SVOC: The matrix spike for 66563-008 did not meet the acceptance criteria for several compounds. Compounds that exhibited recoveries outside the acceptance criteria have been qualified with an "M." Matrix interference suspected.

**Other**

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Reporting Limits: Dilutions performed during the analysis are noted on the result pages.

No other exceptions noted.

## GLOSSARY

%R	Percent Recovery
BLK	Blank (Method Blank, Preparation Blank)
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CRM	Certified Reference Material (associated with solid Metals samples)
CRMD	Certified Reference Material Duplicate (associated with solid Metals samples)
Dil'n	Dilution
DL	Detection Limit
DUP	Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection
LOQ	Limit of Quantitation
MB	Methanol Blank (associated with solid VOC samples)
MLCS	Methanol Laboratory Control Sample (associated with solid VOC samples)
MLCSD	Methanol Laboratory Control Sample Duplicate (associated with solid VOC samples)
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PB	Preparation Blank
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference
SUR	Surrogate



124 Heritage Avenue Unit 16  
Portsmouth, NH 03801

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- QC Report -

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit	
MA VPH	MB16600	Unadjusted C5-C8 Aliphatics	<	5.0	ug/g						
		Unadjusted C9-C12 Aliphatics	<	5.0	ug/g						
		methyl t-butyl ether (MTBE)	<	0.10	ug/g						
		benzene	<	0.10	ug/g						
		toluene	<	0.10	ug/g						
		ethylbenzene	<	0.10	ug/g						
		m&p-xylenes	<	0.10	ug/g						
		o-xylene	<	0.10	ug/g						
		naphthalene	<	0.25	ug/g						
		C5-C8 Aliphatics	<	5.0	ug/g						
		C9-C12 Aliphatics	<	5.0	ug/g						
		C9-C10 Aromatics	<	5.0	ug/g						
		2,5-dibromotoluene as Aromatic SUR		87	%				70	130	
		2,5-dibromotoluene as Aliphatic SUR		107	%				70	130	
		a,a,a-trifluorotoluene SUR		89	%				70	130	
MA VPH	MLCS16600	Unadjusted C5-C8 Aliphatics		11	ug/g	15	75	70	130		
		Unadjusted C9-C12 Aliphatics		13	ug/g	15	90	70	130		
		methyl t-butyl ether (MTBE)		4.0	ug/g	5	80	70	130		
		benzene		4.0	ug/g	5	79	70	130		
		toluene		3.9	ug/g	5	78	70	130		
		ethylbenzene		3.9	ug/g	5	78	70	130		
		m&p-xylenes		7.6	ug/g	10	76	70	130		
		o-xylene		3.7	ug/g	5	74	70	130		
		naphthalene		4.4	ug/g	5	87	70	130		
		C5-C8 Aliphatics	<	5.0	ug/g				70	130	
		C9-C12 Aliphatics	<	5.0	ug/g				70	130	
		C9-C10 Aromatics	<	5.0	ug/g	5	73	70	130		
		2,5-dibromotoluene as Aromatic SUR		83	%				70	130	
		2,5-dibromotoluene as Aliphatic SUR		99	%				70	130	
		a,a,a-trifluorotoluene SUR		83	%				70	130	
MA VPH	MLCSD16600	Unadjusted C5-C8 Aliphatics		11	ug/g	15	77	70	130	2	25
		Unadjusted C9-C12 Aliphatics		12	ug/g	15	78	70	130	14	25
		methyl t-butyl ether (MTBE)		4.1	ug/g	5	82	70	130	3	25
		benzene		4.1	ug/g	5	81	70	130	2	25
		toluene		4.0	ug/g	5	81	70	130	3	25
		ethylbenzene		4.0	ug/g	5	79	70	130	2	25
		m&p-xylenes		7.7	ug/g	10	77	70	130	2	25
		o-xylene		3.8	ug/g	5	76	70	130	2	25
		naphthalene		4.2	ug/g	5	84	70	130	4	25
		C5-C8 Aliphatics	<	5.0	ug/g				70	130	
		C9-C12 Aliphatics	<	5.0	ug/g				70	130	
		C9-C10 Aromatics	<	5.0	ug/g	5	73	70	130	1	25
		2,5-dibromotoluene as Aromatic SUR		70	%				70	130	
		2,5-dibromotoluene as Aliphatic SUR		88	%				70	130	
		a,a,a-trifluorotoluene SUR		81	%				70	130	

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit		
MA VPH	BLK2302538	Unadjusted C5-C8 Aliphatics	<	100	ug/L							
		Unadjusted C9-C12 Aliphatics	<	100	ug/L							
		methyl t-butyl ether (MTBE)	<	2	ug/L							
		benzene	<	1	ug/L							
		toluene	<	2	ug/L							
		ethylbenzene	<	2	ug/L							
		m&p-xylenes	<	2	ug/L							
		o-xylene	<	2	ug/L							
		naphthalene	<	5	ug/L							
		C5-C8 Aliphatics	<	100	ug/L							
		C9-C12 Aliphatics	<	100	ug/L							
		C9-C10 Aromatics	<	100	ug/L							
		2,5-dibromotoluene as Aromatic SUR		68	%			*	70	130		
		2,5-dibromotoluene as Aliphatic SUR		85	%				70	130		
MA VPH	LCS2302538	Unadjusted C5-C8 Aliphatics		360	ug/L	300	120	70	130			
		Unadjusted C9-C12 Aliphatics		290	ug/L	300	98	70	130			
		methyl t-butyl ether (MTBE)		95	ug/L	100	95	70	130			
		benzene		94	ug/L	100	94	70	130			
		toluene		92	ug/L	100	92	70	130			
		ethylbenzene		90	ug/L	100	90	70	130			
		m&p-xylenes		180	ug/L	200	88	70	130			
		o-xylene		88	ug/L	100	88	70	130			
		naphthalene		87	ug/L	100	87	70	130			
		C5-C8 Aliphatics	<	100	ug/L				70	130		
		C9-C12 Aliphatics	<	100	ug/L				70	130		
		C9-C10 Aromatics	<	100	ug/L	100	82		70	130		
		2,5-dibromotoluene as Aromatic SUR		81	%				70	130		
		2,5-dibromotoluene as Aliphatic SUR		99	%				70	130		
MA VPH	LCSD2302538	Unadjusted C5-C8 Aliphatics		340	ug/L	300	112	70	130	7	25	
		Unadjusted C9-C12 Aliphatics		270	ug/L	300	90	70	130	8	25	
		methyl t-butyl ether (MTBE)		91	ug/L	100	91	70	130	5	25	
		benzene		90	ug/L	100	90	70	130	4	25	
		toluene		88	ug/L	100	88	70	130	4	25	
		ethylbenzene		86	ug/L	100	86	70	130	4	25	
		m&p-xylenes		170	ug/L	200	85	70	130	5	25	
		o-xylene		85	ug/L	100	85	70	130	4	25	
		naphthalene		86	ug/L	100	86	70	130	2	25	
		C5-C8 Aliphatics	<	100	ug/L				70	130		25
		C9-C12 Aliphatics	<	100	ug/L				70	130		25
		C9-C10 Aromatics	<	100	ug/L	100	80		70	130	3	25
		2,5-dibromotoluene as Aromatic SUR		75	%				70	130		
		2,5-dibromotoluene as Aliphatic SUR		95	%				70	130		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5030C8260D	BLK2302416	dichlorodifluoromethane		<	2	ug/L				
		chloromethane		<	2	ug/L				
		vinyl chloride		<	2	ug/L				
		bromomethane		<	2	ug/L				
		chloroethane		<	2	ug/L				
		trichlorofluoromethane		<	2	ug/L				
		diethyl ether		<	2	ug/L				
		acetone		<	10	ug/L				
		1,1-dichloroethene		<	1	ug/L				
		methylene chloride		<	2	ug/L				
		carbon disulfide		<	2	ug/L				
		methyl t-butyl ether (MTBE)		<	2	ug/L				
		trans-1,2-dichloroethene		<	2	ug/L				
		1,1-dichloroethane		<	2	ug/L				
		2-butanone (MEK)		<	10	ug/L				
		2,2-dichloropropane		<	2	ug/L				
		cis-1,2-dichloroethene		<	2	ug/L				
		chloroform		<	2	ug/L				
		bromochloromethane		<	2	ug/L				
		tetrahydrofuran (THF)		<	2	ug/L				
		1,1,1-trichloroethane		<	2	ug/L				
		1,1-dichloropropene		<	2	ug/L				
		carbon tetrachloride		<	2	ug/L				
		1,2-dichloroethane		<	2	ug/L				
		benzene		<	2	ug/L				
		trichloroethene		<	2	ug/L				
		1,2-dichloropropane		<	2	ug/L				
		bromodichloromethane		<	0.6	ug/L				
		dibromomethane		<	2	ug/L				
		4-methyl-2-pentanone (MIBK)		<	10	ug/L				
		cis-1,3-dichloropropene		<	2	ug/L				
		toluene		<	2	ug/L				
		trans-1,3-dichloropropene		<	2	ug/L				
		2-hexanone		<	10	ug/L				
		1,1,2-trichloroethane		<	2	ug/L				
		1,3-dichloropropane		<	2	ug/L				
		tetrachloroethene		<	2	ug/L				
		dibromochloromethane		<	2	ug/L				
		1,2-dibromoethane (EDB)		<	2	ug/L				
		chlorobenzene		<	2	ug/L				
		1,1,1,2-tetrachloroethane		<	2	ug/L				
		ethylbenzene		<	2	ug/L				
		m&p-xylenes		<	2	ug/L				
		o-xylene		<	2	ug/L				
		styrene		<	2	ug/L				
		bromoform		<	2	ug/L				
		isopropylbenzene		<	2	ug/L				
		1,1,2,2-tetrachloroethane		<	2	ug/L				
		1,2,3-trichloropropane		<	2	ug/L				

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5030C8260D	BLK2302416	n-propylbenzene		<	2	ug/L				
		bromobenzene		<	2	ug/L				
		1,3,5-trimethylbenzene		<	2	ug/L				
		2-chlorotoluene		<	2	ug/L				
		4-chlorotoluene		<	2	ug/L				
		tert-butylbenzene		<	2	ug/L				
		1,2,4-trimethylbenzene		<	2	ug/L				
		sec-butylbenzene		<	2	ug/L				
		1,3-dichlorobenzene		<	2	ug/L				
		4-isopropyltoluene		<	2	ug/L				
		1,4-dichlorobenzene		<	2	ug/L				
		1,2-dichlorobenzene		<	2	ug/L				
		n-butylbenzene		<	2	ug/L				
		1,2-dibromo-3-chloropropane (DBCP)		<	2	ug/L				
		1,2,4-trichlorobenzene		<	2	ug/L				
		hexachlorobutadiene		<	0.5	ug/L				
		naphthalene		<	2	ug/L				
		1,2,3-trichlorobenzene		<	2	ug/L				
		dibromofluoromethane SUR			100	%		78	114	
		toluene-D8 SUR			104	%		88	110	
		4-bromofluorobenzene SUR			95	%		86	115	

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5030C8260D	LCS2302416	dichlorodifluoromethane		14	ug/L	20	68 *	70	130	
		chloromethane		16	ug/L	20	79	70	130	
		vinyl chloride		16	ug/L	20	80	70	130	
		bromomethane		19	ug/L	20	94	70	130	
		chloroethane		19	ug/L	20	93	70	130	
		trichlorofluoromethane		17	ug/L	20	87	70	130	
		diethyl ether		18	ug/L	20	90	70	130	
		acetone		22	ug/L	20	111	70	130	
		1,1-dichloroethene		16	ug/L	20	78	70	130	
		methylene chloride		16	ug/L	20	78	70	130	
		carbon disulfide		17	ug/L	20	85	70	130	
		methyl t-butyl ether (MTBE)		20	ug/L	20	98	70	130	
		trans-1,2-dichloroethene		16	ug/L	20	79	70	130	
		1,1-dichloroethane		18	ug/L	20	91	70	130	
		2-butanone (MEK)		21	ug/L	20	103	70	130	
		2,2-dichloropropane		18	ug/L	20	88	70	130	
		cis-1,2-dichloroethene		18	ug/L	20	92	70	130	
		chloroform		18	ug/L	20	89	70	130	
		bromochloromethane		18	ug/L	20	92	70	130	
		tetrahydrofuran (THF)		19	ug/L	20	97	70	130	
		1,1,1-trichloroethane		18	ug/L	20	88	70	130	
		1,1-dichloropropene		17	ug/L	20	86	70	130	
		carbon tetrachloride		18	ug/L	20	88	70	130	
		1,2-dichloroethane		20	ug/L	20	98	70	130	
		benzene		17	ug/L	20	87	70	130	
		trichloroethene		17	ug/L	20	87	70	130	
		1,2-dichloropropane		20	ug/L	20	98	70	130	
		bromodichloromethane		20	ug/L	20	101	70	130	
		dibromomethane		20	ug/L	20	98	70	130	
		4-methyl-2-pentanone (MIBK)		21	ug/L	20	106	70	130	
		cis-1,3-dichloropropene		21	ug/L	20	103	70	130	
		toluene		19	ug/L	20	94	70	130	
		trans-1,3-dichloropropene		19	ug/L	20	94	70	130	
		2-hexanone		22	ug/L	20	109	70	130	
		1,1,2-trichloroethane		23	ug/L	20	116	70	130	
		1,3-dichloropropane		22	ug/L	20	111	70	130	
		tetrachloroethene		18	ug/L	20	88	70	130	
		dibromochloromethane		18	ug/L	20	89	70	130	
		1,2-dibromoethane (EDB)		20	ug/L	20	102	70	130	
		chlorobenzene		19	ug/L	20	94	70	130	
		1,1,1,2-tetrachloroethane		21	ug/L	20	104	70	130	
		ethylbenzene		21	ug/L	20	104	70	130	
		m&p-xylenes		42	ug/L	40	104	70	130	
		o-xylene		21	ug/L	20	107	70	130	
		styrene		22	ug/L	20	110	70	130	
		bromoform		17	ug/L	20	84	70	130	
		isopropylbenzene		21	ug/L	20	103	70	130	
		1,1,2,2-tetrachloroethane		24	ug/L	20	118	70	130	
		1,2,3-trichloropropane		25	ug/L	20	127	70	130	

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5030C8260D	LCS2302416	n-propylbenzene		24	ug/L	20	122	70	130	
		bromobenzene		21	ug/L	20	106	70	130	
		1,3,5-trimethylbenzene		23	ug/L	20	115	70	130	
		2-chlorotoluene		25	ug/L	20	124	70	130	
		4-chlorotoluene		24	ug/L	20	120	70	130	
		tert-butylbenzene		23	ug/L	20	116	70	130	
		1,2,4-trimethylbenzene		23	ug/L	20	113	70	130	
		sec-butylbenzene		23	ug/L	20	114	70	130	
		1,3-dichlorobenzene		22	ug/L	20	108	70	130	
		4-isopropyltoluene		21	ug/L	20	107	70	130	
		1,4-dichlorobenzene		22	ug/L	20	111	70	130	
		1,2-dichlorobenzene		21	ug/L	20	107	70	130	
		n-butylbenzene		22	ug/L	20	109	70	130	
		1,2-dibromo-3-chloropropane (DBCP)		24	ug/L	20	121	70	130	
		1,2,4-trichlorobenzene		18	ug/L	20	90	70	130	
		hexachlorobutadiene		17	ug/L	20	83	70	130	
		naphthalene		22	ug/L	20	109	70	130	
		1,2,3-trichlorobenzene		19	ug/L	20	93	70	130	
		dibromofluoromethane SUR		99	%			78	114	
		toluene-D8 SUR		102	%			88	110	
		4-bromofluorobenzene SUR		96	%			86	115	

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5030C8260D	LCSD2302416	dichlorodifluoromethane		14	ug/L	20	71	70 130	5	20
		chloromethane		16	ug/L	20	80	70 130	1	20
		vinyl chloride		17	ug/L	20	83	70 130	3	20
		bromomethane		19	ug/L	20	95	70 130	1	20
		chloroethane		19	ug/L	20	93	70 130	0	20
		trichlorofluoromethane		18	ug/L	20	89	70 130	2	20
		diethyl ether		18	ug/L	20	90	70 130	0	20
		acetone		22	ug/L	20	111	70 130	0	20
		1,1-dichloroethene		16	ug/L	20	80	70 130	2	20
		methylene chloride		15	ug/L	20	76	70 130	3	20
		carbon disulfide		17	ug/L	20	87	70 130	2	20
		methyl t-butyl ether (MTBE)		19	ug/L	20	97	70 130	1	20
		trans-1,2-dichloroethene		16	ug/L	20	81	70 130	2	20
		1,1-dichloroethane		18	ug/L	20	90	70 130	1	20
		2-butanone (MEK)		20	ug/L	20	100	70 130	3	20
		2,2-dichloropropane		18	ug/L	20	89	70 130	1	20
		cis-1,2-dichloroethene		18	ug/L	20	91	70 130	0	20
		chloroform		18	ug/L	20	90	70 130	1	20
		bromochloromethane		18	ug/L	20	90	70 130	2	20
		tetrahydrofuran (THF)		19	ug/L	20	95	70 130	2	20
		1,1,1-trichloroethane		18	ug/L	20	90	70 130	2	20
		1,1-dichloropropene		18	ug/L	20	88	70 130	3	20
		carbon tetrachloride		18	ug/L	20	89	70 130	1	20
		1,2-dichloroethane		20	ug/L	20	98	70 130	0	20
		benzene		18	ug/L	20	89	70 130	1	20
		trichloroethene		18	ug/L	20	89	70 130	2	20
		1,2-dichloropropane		20	ug/L	20	98	70 130	1	20
		bromodichloromethane		20	ug/L	20	101	70 130	1	20
		dibromomethane		20	ug/L	20	98	70 130	1	20
		4-methyl-2-pentanone (MIBK)		21	ug/L	20	103	70 130	2	20
		cis-1,3-dichloropropene		20	ug/L	20	102	70 130	0	20
		toluene		19	ug/L	20	93	70 130	1	20
		trans-1,3-dichloropropene		19	ug/L	20	93	70 130	1	20
		2-hexanone		22	ug/L	20	108	70 130	1	20
		1,1,2-trichloroethane		23	ug/L	20	114	70 130	2	20
		1,3-dichloropropane		22	ug/L	20	110	70 130	0	20
		tetrachloroethene		18	ug/L	20	92	70 130	4	20
		dibromochloromethane		18	ug/L	20	91	70 130	2	20
		1,2-dibromoethane (EDB)		21	ug/L	20	103	70 130	2	20
		chlorobenzene		19	ug/L	20	97	70 130	3	20
		1,1,1,2-tetrachloroethane		22	ug/L	20	108	70 130	3	20
		ethylbenzene		22	ug/L	20	108	70 130	3	20
		m&p-xylenes		43	ug/L	40	106	70 130	2	20
		o-xylene		22	ug/L	20	110	70 130	3	20
		styrene		23	ug/L	20	114	70 130	4	20
		bromoform		17	ug/L	20	86	70 130	3	20
		isopropylbenzene		21	ug/L	20	107	70 130	4	20
		1,1,2,2-tetrachloroethane		23	ug/L	20	116	70 130	1	20
		1,2,3-trichloropropane		24	ug/L	20	122	70 130	4	20

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit	
SW5030C8260D	LCSD2302416	n-propylbenzene		25	ug/L	20	125	70 130	2	20	
		bromobenzene		22	ug/L	20	108	70 130	2	20	
		1,3,5-trimethylbenzene		23	ug/L	20	115	70 130	0	20	
		2-chlorotoluene		23	ug/L	20	117	70 130	6	20	
		4-chlorotoluene		25	ug/L	20	126	70 130	5	20	
		tert-butylbenzene		22	ug/L	20	110	70 130	5	20	
		1,2,4-trimethylbenzene		22	ug/L	20	112	70 130	0	20	
		sec-butylbenzene		23	ug/L	20	117	70 130	2	20	
		1,3-dichlorobenzene		22	ug/L	20	108	70 130	0	20	
		4-isopropyltoluene		22	ug/L	20	109	70 130	2	20	
		1,4-dichlorobenzene		22	ug/L	20	110	70 130	2	20	
		1,2-dichlorobenzene		21	ug/L	20	107	70 130	0	20	
		n-butylbenzene		22	ug/L	20	110	70 130	1	20	
		1,2-dibromo-3-chloropropane (DBCP)		24	ug/L	20	119	70 130	2	20	
		1,2,4-trichlorobenzene		18	ug/L	20	90	70 130	0	20	
		hexachlorobutadiene		17	ug/L	20	87	70 130	5	20	
		naphthalene		21	ug/L	20	107	70 130	2	20	
		1,2,3-trichlorobenzene		19	ug/L	20	93	70 130	0	20	
		dibromofluoromethane SUR		97	%				78 114		
		toluene-D8 SUR		100	%				88 110		
		4-bromofluorobenzene SUR		97	%				86 115		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5035A8260D	MB16588	dichlorodifluoromethane		<	0.10	ug/g				
		chloromethane		<	0.10	ug/g				
		vinyl chloride		<	0.10	ug/g				
		bromomethane		<	0.25	ug/g				
		chloroethane		<	0.10	ug/g				
		trichlorofluoromethane		<	0.10	ug/g				
		diethyl ether		<	0.50	ug/g				
		acetone		<	2.5	ug/g				
		1,1-dichloroethene		<	0.10	ug/g				
		methylene chloride		<	0.25	ug/g				
		carbon disulfide		<	0.10	ug/g				
		methyl t-butyl ether (MTBE)		<	0.10	ug/g				
		trans-1,2-dichloroethene		<	0.10	ug/g				
		1,1-dichloroethane		<	0.10	ug/g				
		2-butanone (MEK)		<	0.30	ug/g				
		2,2-dichloropropane		<	0.10	ug/g				
		cis-1,2-dichloroethene		<	0.10	ug/g				
		chloroform		<	0.10	ug/g				
		bromochloromethane		<	0.10	ug/g				
		tetrahydrofuran (THF)		<	0.50	ug/g				
		1,1,1-trichloroethane		<	0.10	ug/g				
		1,1-dichloropropene		<	0.10	ug/g				
		carbon tetrachloride		<	0.10	ug/g				
		1,2-dichloroethane		<	0.10	ug/g				
		benzene		<	0.10	ug/g				
		trichloroethene		<	0.10	ug/g				
		1,2-dichloropropane		<	0.10	ug/g				
		bromodichloromethane		<	0.10	ug/g				
		dibromomethane		<	0.10	ug/g				
		4-methyl-2-pentanone (MIBK)		<	0.45	ug/g				
		cis-1,3-dichloropropene		<	0.10	ug/g				
		toluene		<	0.10	ug/g				
		trans-1,3-dichloropropene		<	0.10	ug/g				
		2-hexanone		<	0.50	ug/g				
		1,1,2-trichloroethane		<	0.10	ug/g				
		1,3-dichloropropane		<	0.10	ug/g				
		tetrachloroethene		<	0.10	ug/g				
		dibromochloromethane		<	0.10	ug/g				
		1,2-dibromoethane (EDB)		<	0.10	ug/g				
		chlorobenzene		<	0.10	ug/g				
		1,1,1,2-tetrachloroethane		<	0.10	ug/g				
		ethylbenzene		<	0.10	ug/g				
		m&p-xylenes		<	0.10	ug/g				
		o-xylene		<	0.10	ug/g				
		styrene		<	0.10	ug/g				
		bromoform		<	0.10	ug/g				
		isopropylbenzene		<	0.10	ug/g				
		1,1,2,2-tetrachloroethane		<	0.10	ug/g				
		1,2,3-trichloropropane		<	0.10	ug/g				

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5035A8260D	MB16588	n-propylbenzene		<	0.10	ug/g				
		bromobenzene		<	0.10	ug/g				
		1,3,5-trimethylbenzene		<	0.10	ug/g				
		2-chlorotoluene		<	0.10	ug/g				
		4-chlorotoluene		<	0.10	ug/g				
		tert-butylbenzene		<	0.10	ug/g				
		1,2,4-trimethylbenzene		<	0.10	ug/g				
		sec-butylbenzene		<	0.10	ug/g				
		1,3-dichlorobenzene		<	0.10	ug/g				
		4-isopropyltoluene		<	0.10	ug/g				
		1,4-dichlorobenzene		<	0.10	ug/g				
		1,2-dichlorobenzene		<	0.10	ug/g				
		n-butylbenzene		<	0.10	ug/g				
		1,2-dibromo-3-chloropropane (DBCP)		<	0.10	ug/g				
		1,2,4-trichlorobenzene		<	0.10	ug/g				
		hexachlorobutadiene		<	0.10	ug/g				
		naphthalene		<	0.25	ug/g				
		1,2,3-trichlorobenzene		<	0.10	ug/g				
		dibromofluoromethane SUR			93	%		78	114	
		toluene-D8 SUR			103	%		88	110	
		4-bromofluorobenzene SUR			93	%		86	115	
		a,a,a-trifluorotoluene SUR			99	%		70	130	

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5035A8260D	MLCS16588	dichlorodifluoromethane		0.81	ug/g	1	81	70	130	
		chloromethane		0.94	ug/g	1	94	70	130	
		vinyl chloride		0.61	ug/g	1	61	70	130	*
		bromomethane		0.72	ug/g	1	72	70	130	
		chloroethane		0.84	ug/g	1	84	70	130	
		trichlorofluoromethane		0.97	ug/g	1	97	70	130	
		diethyl ether		1.1	ug/g	1	111	70	130	
		acetone	<	2.5	ug/g	1	123	70	130	
		1,1-dichloroethene		1.2	ug/g	1	116	70	130	
		methylene chloride		1.0	ug/g	1	101	70	130	
		carbon disulfide		0.87	ug/g	1	87	70	130	
		methyl t-butyl ether (MTBE)		1.1	ug/g	1	114	70	130	
		trans-1,2-dichloroethene		1.1	ug/g	1	108	70	130	
		1,1-dichloroethane		1.2	ug/g	1	116	70	130	
		2-butanone (MEK)		1.0	ug/g	1	102	70	130	
		2,2-dichloropropane		0.93	ug/g	1	93	70	130	
		cis-1,2-dichloroethene		1.1	ug/g	1	111	70	130	
		chloroform		1.0	ug/g	1	105	70	130	
		bromochloromethane		1.0	ug/g	1	103	70	130	
		tetrahydrofuran (THF)		1.1	ug/g	1	112	70	130	
		1,1,1-trichloroethane		1.1	ug/g	1	110	70	130	
		1,1-dichloropropene		1.1	ug/g	1	112	70	130	
		carbon tetrachloride		1.1	ug/g	1	106	70	130	
		1,2-dichloroethane		1.2	ug/g	1	116	70	130	
		benzene		1.1	ug/g	1	109	70	130	
		trichloroethene		1.1	ug/g	1	108	70	130	
		1,2-dichloropropane		1.1	ug/g	1	114	70	130	
		bromodichloromethane		1.1	ug/g	1	107	70	130	
		dibromomethane		1.1	ug/g	1	110	70	130	
		4-methyl-2-pentanone (MIBK)		1.1	ug/g	1	110	70	130	
		cis-1,3-dichloropropene		1.1	ug/g	1	108	70	130	
		toluene		1.1	ug/g	1	110	70	130	
		trans-1,3-dichloropropene		0.98	ug/g	1	98	70	130	
		2-hexanone		0.96	ug/g	1	96	70	130	
		1,1,2-trichloroethane		1.0	ug/g	1	102	70	130	
		1,3-dichloropropane		1.1	ug/g	1	109	70	130	
		tetrachloroethene		0.94	ug/g	1	94	70	130	
		dibromochloromethane		0.82	ug/g	1	82	70	130	
		1,2-dibromoethane (EDB)		0.99	ug/g	1	99	70	130	
		chlorobenzene		0.97	ug/g	1	97	70	130	
		1,1,1,2-tetrachloroethane		0.98	ug/g	1	98	70	130	
		ethylbenzene		1.1	ug/g	1	108	70	130	
		m&p-xylenes		2.1	ug/g	2	106	70	130	
		o-xylene		1.1	ug/g	1	109	70	130	
		styrene		1.1	ug/g	1	109	70	130	
		bromoform		0.71	ug/g	1	71	70	130	
		isopropylbenzene		1.1	ug/g	1	105	70	130	
		1,1,2,2-tetrachloroethane		1.1	ug/g	1	105	70	130	
		1,2,3-trichloropropane		1.1	ug/g	1	111	70	130	

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5035A8260D	MLCS16588	n-propylbenzene		1.2	ug/g	1	123	70	130	
		bromobenzene		1.0	ug/g	1	103	70	130	
		1,3,5-trimethylbenzene		1.2	ug/g	1	115	70	130	
		2-chlorotoluene		1.2	ug/g	1	122	70	130	
		4-chlorotoluene		1.2	ug/g	1	117	70	130	
		tert-butylbenzene		1.1	ug/g	1	114	70	130	
		1,2,4-trimethylbenzene		1.1	ug/g	1	111	70	130	
		sec-butylbenzene		1.2	ug/g	1	116	70	130	
		1,3-dichlorobenzene		1.0	ug/g	1	104	70	130	
		4-isopropyltoluene		1.1	ug/g	1	107	70	130	
		1,4-dichlorobenzene		1.1	ug/g	1	105	70	130	
		1,2-dichlorobenzene		1.0	ug/g	1	101	70	130	
		n-butylbenzene		1.1	ug/g	1	109	70	130	
		1,2-dibromo-3-chloropropane (DBCP)		1.0	ug/g	1	104	70	130	
		1,2,4-trichlorobenzene		0.86	ug/g	1	86	70	130	
		hexachlorobutadiene		0.85	ug/g	1	85	70	130	
		naphthalene		1.0	ug/g	1	103	70	130	
		1,2,3-trichlorobenzene		0.88	ug/g	1	88	70	130	
		dibromofluoromethane SUR		95	%			78	114	
		toluene-D8 SUR		104	%			88	110	
4-bromofluorobenzene SUR		94	%			86	115			
a,a,a-trifluorotoluene SUR		102	%			70	130			

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5035A8260D	MLCSD16588	dichlorodifluoromethane		0.75	ug/g	1	75	70 130	7	30
		chloromethane		0.94	ug/g	1	94	70 130	0	30
		vinyl chloride		0.61	ug/g	1	61 *	70 130	0	30
		bromomethane		0.76	ug/g	1	76	70 130	5	30
		chloroethane		0.85	ug/g	1	85	70 130	1	30
		trichlorofluoromethane		0.94	ug/g	1	94	70 130	2	30
		diethyl ether		1.1	ug/g	1	107	70 130	4	30
		acetone	<	2.5	ug/g	1	130	70 130	5	30
		1,1-dichloroethene		1.1	ug/g	1	113	70 130	2	30
		methylene chloride		1.00	ug/g	1	100	70 130	1	30
		carbon disulfide		0.87	ug/g	1	87	70 130	0	30
		methyl t-butyl ether (MTBE)		1.2	ug/g	1	118	70 130	4	30
		trans-1,2-dichloroethene		1.1	ug/g	1	107	70 130	1	30
		1,1-dichloroethane		1.1	ug/g	1	115	70 130	1	30
		2-butanone (MEK)		1.1	ug/g	1	105	70 130	3	30
		2,2-dichloropropane		0.90	ug/g	1	90	70 130	3	30
		cis-1,2-dichloroethene		1.1	ug/g	1	113	70 130	2	30
		chloroform		1.0	ug/g	1	102	70 130	2	30
		bromochloromethane		1.0	ug/g	1	104	70 130	1	30
		tetrahydrofuran (THF)		1.1	ug/g	1	110	70 130	2	30
		1,1,1-trichloroethane		1.1	ug/g	1	107	70 130	3	30
		1,1-dichloropropene		1.1	ug/g	1	110	70 130	2	30
		carbon tetrachloride		1.1	ug/g	1	106	70 130	1	30
		1,2-dichloroethane		1.2	ug/g	1	118	70 130	1	30
		benzene		1.1	ug/g	1	109	70 130	1	30
		trichloroethene		1.0	ug/g	1	104	70 130	3	30
		1,2-dichloropropane		1.1	ug/g	1	114	70 130	1	30
		bromodichloromethane		1.1	ug/g	1	107	70 130	0	30
		dibromomethane		1.1	ug/g	1	109	70 130	1	30
		4-methyl-2-pentanone (MIBK)		1.2	ug/g	1	117	70 130	6	30
		cis-1,3-dichloropropene		1.1	ug/g	1	109	70 130	1	30
		toluene		1.1	ug/g	1	108	70 130	1	30
		trans-1,3-dichloropropene		0.97	ug/g	1	97	70 130	1	30
		2-hexanone		1.2	ug/g	1	119	70 130	22	30
		1,1,2-trichloroethane		1.2	ug/g	1	122	70 130	18	30
		1,3-dichloropropane		1.1	ug/g	1	111	70 130	2	30
		tetrachloroethene		0.94	ug/g	1	94	70 130	0	30
		dibromochloromethane		0.81	ug/g	1	81	70 130	0	30
		1,2-dibromoethane (EDB)		1.0	ug/g	1	100	70 130	1	30
		chlorobenzene		0.96	ug/g	1	96	70 130	1	30
		1,1,1,2-tetrachloroethane		1.00	ug/g	1	100	70 130	1	30
		ethylbenzene		1.1	ug/g	1	108	70 130	0	30
		m&p-xylenes		2.1	ug/g	2	106	70 130	0	30
		o-xylene		1.1	ug/g	1	109	70 130	0	30
		styrene		1.1	ug/g	1	109	70 130	0	30
		bromoform		0.71	ug/g	1	71	70 130	1	30
		isopropylbenzene		1.0	ug/g	1	105	70 130	0	30
		1,1,1,2-tetrachloroethane		1.1	ug/g	1	107	70 130	2	30
		1,2,3-trichloropropane		1.2	ug/g	1	119	70 130	7	30

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5035A8260D	MLCSD16588	n-propylbenzene		1.2	ug/g	1	123	70 130	0	30
		bromobenzene		1.0	ug/g	1	103	70 130	0	30
		1,3,5-trimethylbenzene		1.1	ug/g	1	115	70 130	0	30
		2-chlorotoluene		1.2	ug/g	1	117	70 130	5	30
		4-chlorotoluene		1.2	ug/g	1	125	70 130	7	30
		tert-butylbenzene		1.1	ug/g	1	111	70 130	2	30
		1,2,4-trimethylbenzene		1.1	ug/g	1	111	70 130	0	30
		sec-butylbenzene		1.1	ug/g	1	115	70 130	1	30
		1,3-dichlorobenzene		1.0	ug/g	1	103	70 130	1	30
		4-isopropyltoluene		1.1	ug/g	1	107	70 130	0	30
		1,4-dichlorobenzene		1.1	ug/g	1	105	70 130	0	30
		1,2-dichlorobenzene		1.0	ug/g	1	102	70 130	1	30
		n-butylbenzene		1.1	ug/g	1	109	70 130	1	30
		1,2-dibromo-3-chloropropane (DBCP)		1.0	ug/g	1	104	70 130	0	30
		1,2,4-trichlorobenzene		0.87	ug/g	1	87	70 130	1	30
		hexachlorobutadiene		0.84	ug/g	1	84	70 130	2	30
		naphthalene		1.0	ug/g	1	103	70 130	0	30
		1,2,3-trichlorobenzene		0.90	ug/g	1	90	70 130	2	30
		dibromofluoromethane SUR		97	%			78 114		
		toluene-D8 SUR		105	%			88 110		
		4-bromofluorobenzene SUR		96	%			86 115		
		a,a,a-trifluorotoluene SUR		97	%			70 130		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5035A8260D	MB16606	dichlorodifluoromethane		<	0.10	ug/g				
		chloromethane		<	0.10	ug/g				
		vinyl chloride		<	0.10	ug/g				
		bromomethane		<	0.25	ug/g				
		chloroethane		<	0.10	ug/g				
		trichlorofluoromethane		<	0.10	ug/g				
		diethyl ether		<	0.50	ug/g				
		acetone		<	2.5	ug/g				
		1,1-dichloroethene		<	0.10	ug/g				
		methylene chloride		<	0.25	ug/g				
		carbon disulfide		<	0.10	ug/g				
		methyl t-butyl ether (MTBE)		<	0.10	ug/g				
		trans-1,2-dichloroethene		<	0.10	ug/g				
		1,1-dichloroethane		<	0.10	ug/g				
		2-butanone (MEK)		<	0.30	ug/g				
		2,2-dichloropropane		<	0.10	ug/g				
		cis-1,2-dichloroethene		<	0.10	ug/g				
		chloroform		<	0.10	ug/g				
		bromochloromethane		<	0.10	ug/g				
		tetrahydrofuran (THF)		<	0.50	ug/g				
		1,1,1-trichloroethane		<	0.10	ug/g				
		1,1-dichloropropene		<	0.10	ug/g				
		carbon tetrachloride		<	0.10	ug/g				
		1,2-dichloroethane		<	0.10	ug/g				
		benzene		<	0.10	ug/g				
		trichloroethene		<	0.10	ug/g				
		1,2-dichloropropane		<	0.10	ug/g				
		bromodichloromethane		<	0.10	ug/g				
		dibromomethane		<	0.10	ug/g				
		4-methyl-2-pentanone (MIBK)		<	0.45	ug/g				
		cis-1,3-dichloropropene		<	0.10	ug/g				
		toluene		<	0.10	ug/g				
		trans-1,3-dichloropropene		<	0.10	ug/g				
		2-hexanone		<	0.50	ug/g				
		1,1,2-trichloroethane		<	0.10	ug/g				
		1,3-dichloropropane		<	0.10	ug/g				
		tetrachloroethene		<	0.10	ug/g				
		dibromochloromethane		<	0.10	ug/g				
		1,2-dibromoethane (EDB)		<	0.10	ug/g				
		chlorobenzene		<	0.10	ug/g				
		1,1,1,2-tetrachloroethane		<	0.10	ug/g				
		ethylbenzene		<	0.10	ug/g				
		m&p-xylenes		<	0.10	ug/g				
		o-xylene		<	0.10	ug/g				
		styrene		<	0.10	ug/g				
		bromoform		<	0.10	ug/g				
		isopropylbenzene		<	0.10	ug/g				
		1,1,2,2-tetrachloroethane		<	0.10	ug/g				
		1,2,3-trichloropropane		<	0.10	ug/g				

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5035A8260D	MB16606	n-propylbenzene		<	0.10	ug/g				
		bromobenzene		<	0.10	ug/g				
		1,3,5-trimethylbenzene		<	0.10	ug/g				
		2-chlorotoluene		<	0.10	ug/g				
		4-chlorotoluene		<	0.10	ug/g				
		tert-butylbenzene		<	0.10	ug/g				
		1,2,4-trimethylbenzene		<	0.10	ug/g				
		sec-butylbenzene		<	0.10	ug/g				
		1,3-dichlorobenzene		<	0.10	ug/g				
		4-isopropyltoluene		<	0.10	ug/g				
		1,4-dichlorobenzene		<	0.10	ug/g				
		1,2-dichlorobenzene		<	0.10	ug/g				
		n-butylbenzene		<	0.10	ug/g				
		1,2-dibromo-3-chloropropane (DBCP)		<	0.10	ug/g				
		1,2,4-trichlorobenzene		<	0.10	ug/g				
		hexachlorobutadiene		<	0.10	ug/g				
		naphthalene		<	0.25	ug/g				
		1,2,3-trichlorobenzene		<	0.10	ug/g				
		dibromofluoromethane SUR			93	%		78	114	
		toluene-D8 SUR			104	%		88	110	
		4-bromofluorobenzene SUR			96	%		86	115	
		a,a,a-trifluorotoluene SUR			103	%		70	130	

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5035A8260D	MLCS16606	dichlorodifluoromethane		0.67	ug/g	1	67 *	70	130	
		chloromethane		0.80	ug/g	1	80	70	130	
		vinyl chloride		0.58	ug/g	1	58 *	70	130	
		bromomethane		0.73	ug/g	1	73	70	130	
		chloroethane		0.74	ug/g	1	74	70	130	
		trichlorofluoromethane		0.84	ug/g	1	84	70	130	
		diethyl ether		1.0	ug/g	1	104	70	130	
		acetone	<	2.5	ug/g	1	110	70	130	
		1,1-dichloroethene		1.1	ug/g	1	108	70	130	
		methylene chloride		0.97	ug/g	1	97	70	130	
		carbon disulfide		0.80	ug/g	1	80	70	130	
		methyl t-butyl ether (MTBE)		1.1	ug/g	1	111	70	130	
		trans-1,2-dichloroethene		1.0	ug/g	1	103	70	130	
		1,1-dichloroethane		1.1	ug/g	1	110	70	130	
		2-butanone (MEK)		0.96	ug/g	1	96	70	130	
		2,2-dichloropropane		1.1	ug/g	1	106	70	130	
		cis-1,2-dichloroethene		1.1	ug/g	1	109	70	130	
		chloroform		1.0	ug/g	1	100	70	130	
		bromochloromethane		1.0	ug/g	1	104	70	130	
		tetrahydrofuran (THF)		1.0	ug/g	1	104	70	130	
		1,1,1-trichloroethane		1.0	ug/g	1	105	70	130	
		1,1-dichloropropene		1.1	ug/g	1	107	70	130	
		carbon tetrachloride		1.0	ug/g	1	103	70	130	
		1,2-dichloroethane		1.1	ug/g	1	113	70	130	
		benzene		1.1	ug/g	1	105	70	130	
		trichloroethene		1.0	ug/g	1	101	70	130	
		1,2-dichloropropane		1.1	ug/g	1	109	70	130	
		bromodichloromethane		1.1	ug/g	1	105	70	130	
		dibromomethane		1.1	ug/g	1	108	70	130	
		4-methyl-2-pentanone (MIBK)		1.0	ug/g	1	104	70	130	
		cis-1,3-dichloropropene		1.1	ug/g	1	111	70	130	
		toluene		1.0	ug/g	1	105	70	130	
		trans-1,3-dichloropropene		1.00	ug/g	1	100	70	130	
		2-hexanone		1.1	ug/g	1	106	70	130	
		1,1,2-trichloroethane		1.2	ug/g	1	119	70	130	
		1,3-dichloropropane		1.2	ug/g	1	116	70	130	
		tetrachloroethene		1.00	ug/g	1	100	70	130	
		dibromochloromethane		0.89	ug/g	1	89	70	130	
		1,2-dibromoethane (EDB)		1.1	ug/g	1	108	70	130	
		chlorobenzene		1.0	ug/g	1	103	70	130	
		1,1,1,2-tetrachloroethane		1.1	ug/g	1	109	70	130	
		ethylbenzene		1.1	ug/g	1	114	70	130	
		m&p-xylenes		2.2	ug/g	2	112	70	130	
		o-xylene		1.1	ug/g	1	114	70	130	
		styrene		1.2	ug/g	1	118	70	130	
		bromoform		0.78	ug/g	1	78	70	130	
		isopropylbenzene		1.1	ug/g	1	111	70	130	
		1,1,2,2-tetrachloroethane		1.1	ug/g	1	114	70	130	
		1,2,3-trichloropropane		1.2	ug/g	1	121	70	130	

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5035A8260D	MLCS16606	n-propylbenzene		1.3	ug/g	1	131 *	70	130	
		bromobenzene		1.1	ug/g	1	109	70	130	
		1,3,5-trimethylbenzene		1.2	ug/g	1	121	70	130	
		2-chlorotoluene		1.2	ug/g	1	123	70	130	
		4-chlorotoluene		1.3	ug/g	1	131 *	70	130	
		tert-butylbenzene		1.2	ug/g	1	119	70	130	
		1,2,4-trimethylbenzene		1.2	ug/g	1	117	70	130	
		sec-butylbenzene		1.2	ug/g	1	120	70	130	
		1,3-dichlorobenzene		1.1	ug/g	1	112	70	130	
		4-isopropyltoluene		1.1	ug/g	1	114	70	130	
		1,4-dichlorobenzene		1.1	ug/g	1	114	70	130	
		1,2-dichlorobenzene		1.1	ug/g	1	109	70	130	
		n-butylbenzene		1.2	ug/g	1	117	70	130	
		1,2-dibromo-3-chloropropane (DBCP)		1.1	ug/g	1	112	70	130	
		1,2,4-trichlorobenzene		0.94	ug/g	1	94	70	130	
		hexachlorobutadiene		0.90	ug/g	1	90	70	130	
		naphthalene		1.1	ug/g	1	109	70	130	
		1,2,3-trichlorobenzene		0.96	ug/g	1	96	70	130	
		dibromofluoromethane SUR		94	%			78	114	
		toluene-D8 SUR		99	%			88	110	
4-bromofluorobenzene SUR		93	%			86	115			
a,a,a-trifluorotoluene SUR		94	%			70	130			

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5035A8260D	MLCSD16606	dichlorodifluoromethane		0.63	ug/g	1	63 *	70 130	7	30
		chloromethane		0.81	ug/g	1	81	70 130	1	30
		vinyl chloride		0.53	ug/g	1	53 *	70 130	10	30
		bromomethane		0.69	ug/g	1	69 *	70 130	6	30
		chloroethane		0.75	ug/g	1	75	70 130	1	30
		trichlorofluoromethane		0.82	ug/g	1	82	70 130	3	30
		diethyl ether		0.97	ug/g	1	97	70 130	6	30
		acetone	<	2.5	ug/g	1	110	70 130	0	30
		1,1-dichloroethene		1.0	ug/g	1	103	70 130	5	30
		methylene chloride		0.91	ug/g	1	91	70 130	7	30
		carbon disulfide		0.75	ug/g	1	75	70 130	7	30
		methyl t-butyl ether (MTBE)		1.1	ug/g	1	106	70 130	5	30
		trans-1,2-dichloroethene		0.99	ug/g	1	99	70 130	4	30
		1,1-dichloroethane		1.1	ug/g	1	106	70 130	4	30
		2-butanone (MEK)		0.97	ug/g	1	97	70 130	1	30
		2,2-dichloropropane		1.00	ug/g	1	100	70 130	6	30
		cis-1,2-dichloroethene		1.0	ug/g	1	102	70 130	7	30
		chloroform		0.96	ug/g	1	96	70 130	4	30
		bromochloromethane		0.97	ug/g	1	97	70 130	7	30
		tetrahydrofuran (THF)		1.0	ug/g	1	103	70 130	1	30
		1,1,1-trichloroethane		1.00	ug/g	1	100	70 130	5	30
		1,1-dichloropropene		1.0	ug/g	1	101	70 130	6	30
		carbon tetrachloride		0.97	ug/g	1	97	70 130	6	30
		1,2-dichloroethane		1.1	ug/g	1	107	70 130	5	30
		benzene		1.0	ug/g	1	101	70 130	4	30
		trichloroethene		1.0	ug/g	1	103	70 130	2	30
		1,2-dichloropropane		1.1	ug/g	1	105	70 130	3	30
		bromodichloromethane		1.0	ug/g	1	101	70 130	4	30
		dibromomethane		1.0	ug/g	1	101	70 130	6	30
		4-methyl-2-pentanone (MIBK)		1.0	ug/g	1	105	70 130	1	30
		cis-1,3-dichloropropene		1.0	ug/g	1	105	70 130	6	30
		toluene		1.0	ug/g	1	100	70 130	4	30
		trans-1,3-dichloropropene		0.93	ug/g	1	93	70 130	7	30
		2-hexanone		1.1	ug/g	1	112	70 130	5	30
		1,1,2-trichloroethane		1.1	ug/g	1	112	70 130	5	30
		1,3-dichloropropane		1.1	ug/g	1	112	70 130	4	30
		tetrachloroethene		0.96	ug/g	1	96	70 130	4	30
		dibromochloromethane		0.85	ug/g	1	85	70 130	5	30
		1,2-dibromoethane (EDB)		1.0	ug/g	1	103	70 130	5	30
		chlorobenzene		0.98	ug/g	1	98	70 130	5	30
		1,1,1,2-tetrachloroethane		1.0	ug/g	1	101	70 130	7	30
		ethylbenzene		1.1	ug/g	1	111	70 130	3	30
		m&p-xylenes		2.2	ug/g	2	108	70 130	4	30
		o-xylene		1.1	ug/g	1	110	70 130	4	30
		styrene		1.1	ug/g	1	112	70 130	5	30
		bromoform		0.76	ug/g	1	76	70 130	2	30
		isopropylbenzene		1.1	ug/g	1	107	70 130	4	30
		1,1,1,2-tetrachloroethane		1.1	ug/g	1	114	70 130	0	30
		1,2,3-trichloropropane		1.2	ug/g	1	120	70 130	1	30

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5035A8260D	MLCSD16606	n-propylbenzene		1.3	ug/g	1	129	70 130	1	30
		bromobenzene		1.1	ug/g	1	109	70 130	0	30
		1,3,5-trimethylbenzene		1.2	ug/g	1	120	70 130	1	30
		2-chlorotoluene		1.2	ug/g	1	122	70 130	1	30
		4-chlorotoluene		1.3	ug/g	1	129	70 130	2	30
		tert-butylbenzene		1.2	ug/g	1	118	70 130	1	30
		1,2,4-trimethylbenzene		1.2	ug/g	1	116	70 130	1	30
		sec-butylbenzene		1.2	ug/g	1	118	70 130	2	30
		1,3-dichlorobenzene		1.1	ug/g	1	109	70 130	3	30
		4-isopropyltoluene		1.1	ug/g	1	112	70 130	2	30
		1,4-dichlorobenzene		1.1	ug/g	1	112	70 130	2	30
		1,2-dichlorobenzene		1.1	ug/g	1	106	70 130	2	30
		n-butylbenzene		1.1	ug/g	1	114	70 130	3	30
		1,2-dibromo-3-chloropropane (DBCP)		1.1	ug/g	1	112	70 130	0	30
		1,2,4-trichlorobenzene		0.90	ug/g	1	90	70 130	4	30
		hexachlorobutadiene		0.86	ug/g	1	86	70 130	4	30
		naphthalene		1.1	ug/g	1	108	70 130	1	30
		1,2,3-trichlorobenzene		0.94	ug/g	1	94	70 130	2	30
		dibromofluoromethane SUR		93	%			78 114		
		toluene-D8 SUR		99	%			88 110		
		4-bromofluorobenzene SUR		94	%			86 115		
		a,a,a-trifluorotoluene SUR		88	%			70 130		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
MA EPH	BLK16614	naphthalene		<	0.20	ug/g				
		2-methylnaphthalene		<	0.20	ug/g				
		phenanthrene		<	0.20	ug/g				
		acenaphthene		<	0.20	ug/g				
		acenaphthylene		<	0.20	ug/g				
		fluorene		<	0.20	ug/g				
		anthracene		<	0.20	ug/g				
		fluoranthene		<	0.20	ug/g				
		pyrene		<	0.20	ug/g				
		benzo(a)anthracene		<	0.20	ug/g				
		chrysene		<	0.20	ug/g				
		benzo(b)fluoranthene		<	0.20	ug/g				
		benzo(k)fluoranthene		<	0.20	ug/g				
		benzo(a)pyrene		<	0.20	ug/g				
		indeno(1,2,3-cd)pyrene		<	0.20	ug/g				
		dibenzo(a,h)anthracene		<	0.20	ug/g				
		benzo(g,h,i)perylene		<	0.20	ug/g				
		Unadjusted C11-C22 Aromatics		<	20	ug/g				
		C9-C18 Aliphatics		<	20	ug/g				
		C19-C36 Aliphatics		<	20	ug/g				
		C11-C22 Aromatics		<	20	ug/g				
		1-chloro-octadecane SUR			59	%		40	140	
		o-terphenyl SUR			69	%		40	140	
		2-fluorobiphenyl SUR			86	%		40	140	
		2-bromonaphthalene SUR			77	%		40	140	

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
MA EPH	LCS16614	naphthalene		3.7	ug/g	6	62	40	140	
		2-methylnaphthalene		3.8	ug/g	6	63	40	140	
		phenanthrene		4.5	ug/g	6	75	40	140	
		acenaphthene		4.2	ug/g	6	70	40	140	
		acenaphthylene		4.3	ug/g	6	72	40	140	
		fluorene		3.9	ug/g	6	65	40	140	
		anthracene		4.4	ug/g	6	73	40	140	
		fluoranthene		4.1	ug/g	6	68	40	140	
		pyrene		5.0	ug/g	6	83	40	140	
		benzo(a)anthracene		4.0	ug/g	6	66	40	140	
		chrysene		4.1	ug/g	6	69	40	140	
		benzo(b)fluoranthene		3.9	ug/g	6	65	40	140	
		benzo(k)fluoranthene		4.0	ug/g	6	67	40	140	
		benzo(a)pyrene		4.2	ug/g	6	69	40	140	
		indeno(1,2,3-cd)pyrene		4.1	ug/g	6	68	40	140	
		dibenzo(a,h)anthracene		4.1	ug/g	6	69	40	140	
		benzo(g,h,i)perylene		4.5	ug/g	6	76	40	140	
		Unadjusted C11-C22 Aromatics		90	ug/g	102	88	40	140	
		C9-C18 Aliphatics		20	ug/g	36	56	40	140	
		C19-C36 Aliphatics		37	ug/g	48	78	40	140	
		C11-C22 Aromatics	<	20	ug/g			40	140	
		1-chloro-octadecane SUR		63	%			40	140	
		o-terphenyl SUR		73	%			40	140	
		2-fluorobiphenyl SUR		85	%			40	140	
		2-bromonaphthalene SUR		91	%			40	140	

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit	
MA EPH	LCSD16614	naphthalene		3.9	ug/g	6	64	40	140	4	25
		2-methylnaphthalene		4.0	ug/g	6	66	40	140	6	25
		phenanthrene		4.3	ug/g	6	72	40	140	4	25
		acenaphthene		4.2	ug/g	6	70	40	140	0	25
		acenaphthylene		4.3	ug/g	6	71	40	140	1	25
		fluorene		3.8	ug/g	6	63	40	140	3	25
		anthracene		4.2	ug/g	6	70	40	140	5	25
		fluoranthene		3.7	ug/g	6	62	40	140	9	25
		pyrene		5.0	ug/g	6	83	40	140	1	25
		benzo(a)anthracene		3.5	ug/g	6	59	40	140	12	25
		chrysene		3.7	ug/g	6	61	40	140	11	25
		benzo(b)fluoranthene		3.6	ug/g	6	60	40	140	8	25
		benzo(k)fluoranthene		3.5	ug/g	6	59	40	140	14	25
		benzo(a)pyrene		3.7	ug/g	6	62	40	140	11	25
		indeno(1,2,3-cd)pyrene		3.6	ug/g	6	60	40	140	13	25
		dibenzo(a,h)anthracene		3.6	ug/g	6	60	40	140	13	25
		benzo(g,h,i)perylene		4.0	ug/g	6	66	40	140	13	25
		Unadjusted C11-C22 Aromatics		81	ug/g	102	79	40	140	11	25
		C9-C18 Aliphatics	<	20	ug/g	36	52	40	140	8	25
		C19-C36 Aliphatics		34	ug/g	48	70	40	140	10	25
		C11-C22 Aromatics	<	20	ug/g			40	140		25
		1-chloro-octadecane SUR		57	%			40	140		
		o-terphenyl SUR		62	%			40	140		
		2-fluorobiphenyl SUR		86	%			40	140		
		2-bromonaphthalene SUR		91	%			40	140		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW3546/8270E	BLK16615	pyridine		<	0.20	ug/g				
		N-nitrosodimethylamine		<	0.20	ug/g				
		aniline		<	0.20	ug/g				
		phenol		<	0.20	ug/g				
		2-chlorophenol		<	0.50	ug/g				
		bis(2-chloroethyl)ether		<	0.20	ug/g				
		1,3-dichlorobenzene		<	0.20	ug/g				
		1,4-dichlorobenzene		<	0.20	ug/g				
		1,2-dichlorobenzene		<	0.20	ug/g				
		benzyl alcohol		<	0.20	ug/g				
		2-methylphenol		<	0.20	ug/g				
		2,2'-oxybis(1-chloropropane)		<	0.20	ug/g				
		hexachloroethane		<	0.20	ug/g				
		N-nitroso-di-N-propylamine		<	0.20	ug/g				
		4-methylphenol		<	0.20	ug/g				
		nitrobenzene		<	0.20	ug/g				
		isophorone		<	0.50	ug/g				
		2-nitrophenol		<	0.20	ug/g				
		2,4-dimethylphenol		<	0.20	ug/g				
		bis(2-chloroethoxy)methane		<	0.20	ug/g				
		2,4-dichlorophenol		<	0.50	ug/g				
		1,2,4-trichlorobenzene		<	0.50	ug/g				
		naphthalene		<	0.050	ug/g				
		benzoic acid		<	5.0	ug/g				
		4-chloroaniline		<	0.20	ug/g				
		hexachlorobutadiene		<	0.20	ug/g				
		4-chloro-3-methylphenol		<	0.20	ug/g				
		2-methylnaphthalene		<	0.050	ug/g				
		hexachlorocyclopentadiene		<	1.0	ug/g				
		2,4,6-trichlorophenol		<	0.20	ug/g				
		2,4,5-trichlorophenol		<	0.20	ug/g				
		2-chloronaphthalene		<	0.50	ug/g				
		2-nitroaniline		<	0.20	ug/g				
		acenaphthylene		<	0.050	ug/g				
		dimethylphthalate		<	0.50	ug/g				
		2,6-dinitrotoluene		<	0.20	ug/g				
		2,4-dinitrotoluene		<	0.20	ug/g				
		acenaphthene		<	0.050	ug/g				
		3-nitroaniline		<	0.20	ug/g				
		2,4-dinitrophenol		<	5.0	ug/g				
		dibenzofuran		<	0.050	ug/g				
		4-nitrophenol		<	1.0	ug/g				
		fluorene		<	0.050	ug/g				
		diethyl phthalate		<	0.50	ug/g				
		4-chlorophenyl phenyl ether		<	0.50	ug/g				
		4-nitroaniline		<	0.50	ug/g				
		4,6-dinitro-2-methylphenol		<	2.0	ug/g				
		azobenzene		<	0.20	ug/g				
		N-nitrosodiphenylamine		<	0.20	ug/g				

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW3546/8270E	BLK16615	4-bromophenyl phenyl ether		<	0.20	ug/g				
		hexachlorobenzene		<	0.20	ug/g				
		pentachlorophenol		<	1.0	ug/g				
		phenanthrene		<	0.050	ug/g				
		anthracene		<	0.050	ug/g				
		carbazole		<	0.20	ug/g				
		di-n-butylphthalate		<	0.50	ug/g				
		fluoranthene		<	0.050	ug/g				
		benzidine		<	3.0	ug/g				
		pyrene		<	0.050	ug/g				
		butyl benzyl phthalate		<	0.50	ug/g				
		benzo(a)anthracene		<	0.050	ug/g				
		chrysene		<	0.050	ug/g				
		3,3'-dichlorobenzidine		<	3.0	ug/g				
		bis(2-ethylhexyl)phthalate		<	0.50	ug/g				
		di-n-octyl phthalate		<	0.50	ug/g				
		benzo(b)fluoranthene		<	0.050	ug/g				
		benzo(k)fluoranthene		<	0.050	ug/g				
		benzo(a)pyrene		<	0.050	ug/g				
		indeno(1,2,3-cd)pyrene		<	0.050	ug/g				
		dibenzo(a,h)anthracene		<	0.050	ug/g				
		benzo(g,h,i)perylene		<	0.050	ug/g				
		2-fluorophenol SUR			55	%		21	100	
		phenol-D5 SUR			59	%		10	102	
		2,4,6-tribromophenol SUR			53	%		10	123	
		nitrobenzene-D5 SUR			57	%		35	114	
		2-fluorobiphenyl SUR			63	%		43	116	
		p-terphenyl-D14 SUR			92	%		33	141	

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW3546/8270E	DUP16615	pyridine	66563-008	<	0.25	ug/g				30
		N-nitrosodimethylamine	66563-008	<	0.25	ug/g				30
		aniline	66563-008	<	0.25	ug/g				30
		phenol	66563-008	<	0.25	ug/g				30
		2-chlorophenol	66563-008	<	0.62	ug/g				30
		bis(2-chloroethyl)ether	66563-008	<	0.25	ug/g				30
		1,3-dichlorobenzene	66563-008	<	0.25	ug/g				30
		1,4-dichlorobenzene	66563-008	<	0.25	ug/g				30
		1,2-dichlorobenzene	66563-008	<	0.25	ug/g				30
		benzyl alcohol	66563-008	<	0.25	ug/g				30
		2-methylphenol	66563-008	<	0.25	ug/g				30
		2,2'-oxybis(1-chloropropane)	66563-008	<	0.25	ug/g				30
		hexachloroethane	66563-008	<	0.25	ug/g				30
		N-nitroso-di-N-propylamine	66563-008	<	0.25	ug/g				30
		4-methylphenol	66563-008	<	0.25	ug/g				30
		nitrobenzene	66563-008	<	0.25	ug/g				30
		isophorone	66563-008	<	0.62	ug/g				30
		2-nitrophenol	66563-008	<	0.25	ug/g				30
		2,4-dimethylphenol	66563-008	<	0.25	ug/g				30
		bis(2-chloroethoxy)methane	66563-008	<	0.25	ug/g				30
		2,4-dichlorophenol	66563-008	<	0.62	ug/g				30
		1,2,4-trichlorobenzene	66563-008	<	0.62	ug/g				30
		naphthalene	66563-008	<	0.062	ug/g				30
		benzoic acid	66563-008	<	6.2	ug/g				30
		4-chloroaniline	66563-008	<	0.25	ug/g				30
		hexachlorobutadiene	66563-008	<	0.25	ug/g				30
		4-chloro-3-methylphenol	66563-008	<	0.25	ug/g				30
		2-methylnaphthalene	66563-008	<	0.062	ug/g				30
		hexachlorocyclopentadiene	66563-008	<	1.2	ug/g				30
		2,4,6-trichlorophenol	66563-008	<	0.25	ug/g				30
		2,4,5-trichlorophenol	66563-008	<	0.25	ug/g				30
		2-chloronaphthalene	66563-008	<	0.62	ug/g				30
		2-nitroaniline	66563-008	<	0.25	ug/g				30
		acenaphthylene	66563-008	<	0.062	ug/g				30
		dimethylphthalate	66563-008	<	0.62	ug/g				30
		2,6-dinitrotoluene	66563-008	<	0.25	ug/g				30
		2,4-dinitrotoluene	66563-008	<	0.25	ug/g				30
		acenaphthene	66563-008	<	0.062	ug/g				30
		3-nitroaniline	66563-008	<	0.25	ug/g				30
		2,4-dinitrophenol	66563-008	<	6.2	ug/g				30
		dibenzofuran	66563-008	<	0.062	ug/g				30
		4-nitrophenol	66563-008	<	1.2	ug/g				30
		fluorene	66563-008	<	0.062	ug/g				30
		diethyl phthalate	66563-008	<	0.62	ug/g				30
		4-chlorophenyl phenyl ether	66563-008	<	0.62	ug/g				30
		4-nitroaniline	66563-008	<	0.62	ug/g				30
		4,6-dinitro-2-methylphenol	66563-008	<	2.5	ug/g				30
		azobenzene	66563-008	<	0.25	ug/g				30
		N-nitrosodiphenylamine	66563-008	<	0.25	ug/g				30

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW3546/8270E	DUP16615	4-bromophenyl phenyl ether	66563-008	<	0.25	ug/g				30
		hexachlorobenzene	66563-008	<	0.25	ug/g				30
		pentachlorophenol	66563-008	<	1.2	ug/g				30
		phenanthrene	66563-008		0.081	ug/g			38	30
		anthracene	66563-008	<	0.062	ug/g				30
		carbazole	66563-008	<	0.25	ug/g				30
		di-n-butylphthalate	66563-008	<	0.62	ug/g				30
		fluoranthene	66563-008		0.18	ug/g			35	30
		benzidine	66563-008	<	3.7	ug/g				30
		pyrene	66563-008		0.20	ug/g			24	30
		butyl benzyl phthalate	66563-008	<	0.62	ug/g				30
		benzo(a)anthracene	66563-008		0.089	ug/g			7	30
		chrysene	66563-008		0.12	ug/g			4	30
		3,3'-dichlorobenzidine	66563-008	<	3.7	ug/g				30
		bis(2-ethylhexyl)phthalate	66563-008	<	0.62	ug/g				30
		di-n-octyl phthalate	66563-008	<	0.62	ug/g				30
		benzo(b)fluoranthene	66563-008		0.12	ug/g			8	30
		benzo(k)fluoranthene	66563-008		0.098	ug/g			0	30
		benzo(a)pyrene	66563-008		0.12	ug/g			5	30
		indeno(1,2,3-cd)pyrene	66563-008		0.088	ug/g			24	30
		dibenzo(a,h)anthracene	66563-008	<	0.062	ug/g				30
		benzo(g,h,i)perylene	66563-008		0.13	ug/g			35	30
		2-fluorophenol SUR	66563-008		59	%		21	100	
		phenol-D5 SUR	66563-008		61	%		10	102	
		2,4,6-tribromophenol SUR	66563-008		73	%		10	123	
		nitrobenzene-D5 SUR	66563-008		59	%		35	114	
		2-fluorobiphenyl SUR	66563-008		65	%		43	116	
		p-terphenyl-D14 SUR	66563-008		74	%		33	141	

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW3546/8270E	LCS16615	pyridine		1.6	ug/g	4	41	30	130	
		N-nitrosodimethylamine		2.3	ug/g	4	57	40	140	
		aniline		0.80	ug/g	4	20 *	40	140	
		phenol		2.2	ug/g	4	56	30	130	
		2-chlorophenol		2.1	ug/g	4	52	30	130	
		bis(2-chloroethyl)ether		2.4	ug/g	4	59	40	140	
		1,3-dichlorobenzene		2.1	ug/g	4	53	40	140	
		1,4-dichlorobenzene		2.1	ug/g	4	53	40	140	
		1,2-dichlorobenzene		2.2	ug/g	4	54	40	140	
		benzyl alcohol		2.1	ug/g	4	53	30	130	
		2-methylphenol		2.1	ug/g	4	54	30	130	
		2,2'-oxybis(1-chloropropane)		3.0	ug/g	4	74	40	140	
		hexachloroethane		2.1	ug/g	4	53	40	140	
		N-nitroso-di-N-propylamine		2.3	ug/g	4	58	40	140	
		4-methylphenol		4.6	ug/g	8	57	30	130	
		nitrobenzene		2.4	ug/g	4	59	40	140	
		isophorone		2.6	ug/g	4	66	40	140	
		2-nitrophenol		2.0	ug/g	4	50	30	130	
		2,4-dimethylphenol		1.7	ug/g	4	41	30	130	
		bis(2-chloroethoxy)methane		2.3	ug/g	4	58	40	140	
		2,4-dichlorophenol		2.1	ug/g	4	51	30	130	
		1,2,4-trichlorobenzene		2.2	ug/g	4	55	40	140	
		naphthalene		2.3	ug/g	4	58	40	140	
		benzoic acid	<	5.0	ug/g	8	11 *	30	130	
		4-chloroaniline		1.6	ug/g	4	39 *	40	140	
		hexachlorobutadiene		2.2	ug/g	4	56	40	140	
		4-chloro-3-methylphenol		2.3	ug/g	4	57	30	130	
		2-methylnaphthalene		2.2	ug/g	4	55	40	140	
		hexachlorocyclopentadiene		1.7	ug/g	4	43	40	140	
		2,4,6-trichlorophenol		2.1	ug/g	4	51	30	130	
		2,4,5-trichlorophenol		2.1	ug/g	4	53	30	130	
		2-chloronaphthalene		2.3	ug/g	4	57	40	140	
		2-nitroaniline		2.4	ug/g	4	60	40	140	
		acenaphthylene		2.4	ug/g	4	60	40	140	
		dimethylphthalate		2.5	ug/g	4	63	40	140	
		2,6-dinitrotoluene		2.7	ug/g	4	67	40	140	
		2,4-dinitrotoluene		2.6	ug/g	4	65	40	140	
		acenaphthene		2.3	ug/g	4	57	40	140	
		3-nitroaniline		2.3	ug/g	4	56	40	140	
		2,4-dinitrophenol	<	5.0	ug/g	4	9 *	30	130	
		dibenzofuran		2.3	ug/g	4	58	40	140	
		4-nitrophenol		1.7	ug/g	4	42	30	130	
		fluorene		2.4	ug/g	4	60	40	140	
		diethyl phthalate		2.5	ug/g	4	63	40	140	
		4-chlorophenyl phenyl ether		2.4	ug/g	4	60	40	140	
		4-nitroaniline		2.3	ug/g	4	57	40	140	
		4,6-dinitro-2-methylphenol	<	2.0	ug/g	4	21 *	30	130	
		azobenzene		2.7	ug/g	4	67	40	140	
		N-nitrosodiphenylamine		2.8	ug/g	4	69	40	140	

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW3546/8270E	LCS16615	4-bromophenyl phenyl ether		2.5	ug/g	4	63	40	140	
		hexachlorobenzene		2.5	ug/g	4	63	40	140	
		pentachlorophenol		1.4	ug/g	4	35	30	130	
		phenanthrene		2.6	ug/g	4	66	40	140	
		anthracene		2.5	ug/g	4	63	40	140	
		carbazole		2.7	ug/g	4	67	40	140	
		di-n-butylphthalate		2.6	ug/g	4	65	40	140	
		fluoranthene		2.6	ug/g	4	65	40	140	
		benzidine	<	3.0	ug/g	4	41	40	140	
		pyrene		2.8	ug/g	4	70	40	140	
		butyl benzyl phthalate		2.6	ug/g	4	66	40	140	
		benzo(a)anthracene		2.3	ug/g	4	57	40	140	
		chrysene		2.4	ug/g	4	59	40	140	
		3,3'-dichlorobenzidine	<	3.0	ug/g	4	50	40	140	
		bis(2-ethylhexyl)phthalate		2.7	ug/g	4	68	40	140	
		di-n-octyl phthalate		2.6	ug/g	4	65	40	140	
		benzo(b)fluoranthene		2.6	ug/g	4	66	40	140	
		benzo(k)fluoranthene		2.7	ug/g	4	68	40	140	
		benzo(a)pyrene		2.4	ug/g	4	60	40	140	
		indeno(1,2,3-cd)pyrene		2.6	ug/g	4	65	40	140	
		dibenzo(a,h)anthracene		2.6	ug/g	4	64	40	140	
		benzo(g,h,i)perylene		2.9	ug/g	4	73	40	140	
		2-fluorophenol SUR		56	%			21	100	
		phenol-D5 SUR		58	%			10	102	
		2,4,6-tribromophenol SUR		67	%			10	123	
		nitrobenzene-D5 SUR		59	%			35	114	
		2-fluorobiphenyl SUR		60	%			43	116	
		p-terphenyl-D14 SUR		74	%			33	141	

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW3546/8270E	MS16615	pyridine	66563-008	1.7	ug/g	5.01	33	30	130	
		N-nitrosodimethylamine	66563-008	2.2	ug/g	5.01	45	40	140	
		aniline	66563-008	0.40	ug/g	5.01	8 *	40	140	
		phenol	66563-008	2.5	ug/g	5.01	50	30	130	
		2-chlorophenol	66563-008	2.3	ug/g	5.01	46	30	130	
		bis(2-chloroethyl)ether	66563-008	2.7	ug/g	5.01	54	40	140	
		1,3-dichlorobenzene	66563-008	2.2	ug/g	5.01	44	40	140	
		1,4-dichlorobenzene	66563-008	2.2	ug/g	5.01	44	40	140	
		1,2-dichlorobenzene	66563-008	2.3	ug/g	5.01	47	40	140	
		benzyl alcohol	66563-008	1.7	ug/g	5.01	34	30	130	
		2-methylphenol	66563-008	2.3	ug/g	5.01	47	30	130	
		2,2'-oxybis(1-chloropropane)	66563-008	3.3	ug/g	5.01	65	40	140	
		hexachloroethane	66563-008	2.0	ug/g	5.01	40	40	140	
		N-nitroso-di-N-propylamine	66563-008	2.7	ug/g	5.01	53	40	140	
		4-methylphenol	66563-008	5.1	ug/g	10.0	50	30	130	
		nitrobenzene	66563-008	2.6	ug/g	5.01	52	40	140	
		isophorone	66563-008	3.1	ug/g	5.01	62	40	140	
		2-nitrophenol	66563-008	2.0	ug/g	5.01	40	30	130	
		2,4-dimethylphenol	66563-008	1.8	ug/g	5.01	36	30	130	
		bis(2-chloroethoxy)methane	66563-008	2.7	ug/g	5.01	54	40	140	
		2,4-dichlorophenol	66563-008	2.5	ug/g	5.01	50	30	130	
		1,2,4-trichlorobenzene	66563-008	2.4	ug/g	5.01	48	40	140	
		naphthalene	66563-008	2.6	ug/g	5.01	51	40	140	
		benzoic acid	66563-008	< 6.3	ug/g	10.0	43	30	130	
		4-chloroaniline	66563-008	1.1	ug/g	5.01	21 *	40	140	
		hexachlorobutadiene	66563-008	2.5	ug/g	5.01	50	40	140	
		4-chloro-3-methylphenol	66563-008	2.7	ug/g	5.01	54	30	130	
		2-methylnaphthalene	66563-008	2.4	ug/g	5.01	49	40	140	
		hexachlorocyclopentadiene	66563-008	< 1.3	ug/g	5.01	7 *	40	140	
		2,4,6-trichlorophenol	66563-008	2.5	ug/g	5.01	50	30	130	
		2,4,5-trichlorophenol	66563-008	2.6	ug/g	5.01	52	30	130	
		2-chloronaphthalene	66563-008	2.6	ug/g	5.01	51	40	140	
		2-nitroaniline	66563-008	3.0	ug/g	5.01	59	40	140	
		acenaphthylene	66563-008	2.6	ug/g	5.01	52	40	140	
		dimethylphthalate	66563-008	2.9	ug/g	5.01	57	40	140	
		2,6-dinitrotoluene	66563-008	2.8	ug/g	5.01	57	40	140	
		2,4-dinitrotoluene	66563-008	2.6	ug/g	5.01	53	40	140	
		acenaphthene	66563-008	2.5	ug/g	5.01	50	40	140	
		3-nitroaniline	66563-008	1.9	ug/g	5.01	38 *	40	140	
		2,4-dinitrophenol	66563-008	< 6.3	ug/g	5.01	14 *	30	130	
		dibenzofuran	66563-008	2.6	ug/g	5.01	52	40	140	
		4-nitrophenol	66563-008	2.5	ug/g	5.01	49	30	130	
		fluorene	66563-008	2.6	ug/g	5.01	51	40	140	
		diethyl phthalate	66563-008	2.9	ug/g	5.01	57	40	140	
		4-chlorophenyl phenyl ether	66563-008	2.6	ug/g	5.01	52	40	140	
		4-nitroaniline	66563-008	2.0	ug/g	5.01	39 *	40	140	
		4,6-dinitro-2-methylphenol	66563-008	< 2.5	ug/g	5.01	16 *	30	130	
		azobenzene	66563-008	3.0	ug/g	5.01	59	40	140	
		N-nitrosodiphenylamine	66563-008	3.0	ug/g	5.01	60	40	140	

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW3546/8270E	MS16615	4-bromophenyl phenyl ether	66563-008	2.7	ug/g	5.01	55	40	140	
		hexachlorobenzene	66563-008	2.4	ug/g	5.01	48	40	140	
		pentachlorophenol	66563-008	2.4	ug/g	5.01	47	30	130	
		phenanthrene	66563-008	2.8	ug/g	5.01	55	40	140	
		anthracene	66563-008	2.6	ug/g	5.01	52	40	140	
		carbazole	66563-008	2.8	ug/g	5.01	56	40	140	
		di-n-butylphthalate	66563-008	3.0	ug/g	5.01	60	40	140	
		fluoranthene	66563-008	2.8	ug/g	5.01	50	40	140	
		benzidine	66563-008	< 3.8	ug/g	5.01	0 *	40	140	
		pyrene	66563-008	2.8	ug/g	5.01	52	40	140	
		butyl benzyl phthalate	66563-008	3.0	ug/g	5.01	59	40	140	
		benzo(a)anthracene	66563-008	2.4	ug/g	5.01	47	40	140	
		chrysene	66563-008	2.5	ug/g	5.01	48	40	140	
		3,3'-dichlorobenzidine	66563-008	< 3.8	ug/g	5.01	18 *	40	140	
		bis(2-ethylhexyl)phthalate	66563-008	3.0	ug/g	5.01	59	40	140	
		di-n-octyl phthalate	66563-008	2.5	ug/g	5.01	50	40	140	
		benzo(b)fluoranthene	66563-008	2.6	ug/g	5.01	49	40	140	
		benzo(k)fluoranthene	66563-008	2.4	ug/g	5.01	47	40	140	
		benzo(a)pyrene	66563-008	2.4	ug/g	5.01	45	40	140	
		indeno(1,2,3-cd)pyrene	66563-008	2.7	ug/g	5.01	53	40	140	
		dibenzo(a,h)anthracene	66563-008	2.7	ug/g	5.01	53	40	140	
		benzo(g,h,i)perylene	66563-008	3.0	ug/g	5.01	58	40	140	
		2-fluorophenol SUR	66563-008	48	%			21	100	
		phenol-D5 SUR	66563-008	53	%			10	102	
		2,4,6-tribromophenol SUR	66563-008	59	%			10	123	
		nitrobenzene-D5 SUR	66563-008	52	%			35	114	
		2-fluorobiphenyl SUR	66563-008	56	%			43	116	
		p-terphenyl-D14 SUR	66563-008	57	%			33	141	

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit	
SW3051A6020A	BLK16613	Silver		<	2.5	ug/g					
		Arsenic		<	2.5	ug/g					
		Barium		<	5.0	ug/g					
		Cadmium		<	0.50	ug/g					
		Chromium		<	5.0	ug/g					
		Copper		<	5.0	ug/g					
		Lead		<	2.5	ug/g					
		Selenium		<	5.0	ug/g					
		Zinc		<	5.0	ug/g					
SW3051A6020A	CRM16613	Silver		61.8	ug/g	78.8		50	91.3		
		Arsenic		237	ug/g	316		192	356		
		Barium		246	ug/g	310		205	342		
		Cadmium		36.2	ug/g	50.1		33.1	55.1		
		Chromium		168	ug/g	224		136	253		
		Copper		170	ug/g	237		151	261		
		Lead		79.4	ug/g	103		60.6	114		
		Selenium		120	ug/g	171		96.3	190		
		Zinc		539	ug/g	815		492	913		
SW3051A6020A	CRMD16613	Silver		63.5	ug/g	78.8		50	91.3	3	20
		Arsenic		235	ug/g	316		192	356	1	20
		Barium		257	ug/g	310		205	342	4	20
		Cadmium		41.7	ug/g	50.1		33.1	55.1	14	20
		Chromium		168	ug/g	224		136	253	0	20
		Copper		170	ug/g	237		151	261	0	20
		Lead		83.4	ug/g	103		60.6	114	5	20
		Selenium		120	ug/g	171		96.3	190	0	20
		Zinc		542	ug/g	815		492	913	0	20
SW3051A6020A	DUP16613	Silver	66560-001	<	2.7	ug/g					20
		Arsenic	66560-001		20	ug/g			29		20
		Barium	66560-001		48	ug/g			8		20
		Cadmium	66560-001	<	0.54	ug/g					20
		Chromium	66560-001		30	ug/g				33	20
		Lead	66560-001		6.9	ug/g				13	20
		Selenium	66560-001	<	27	ug/g					20
SW3051A6020A	MS16613	Silver	66560-001		140	ug/g	142	96	75	125	
		Arsenic	66560-001		310	ug/g	284	99	75	125	
		Barium	66560-001		340	ug/g	284	104	75	125	
		Cadmium	66560-001		270	ug/g	284	96	75	125	
		Chromium	66560-001		310	ug/g	284	96	75	125	
		Lead	66560-001		300	ug/g	284	101	75	125	
		Selenium	66560-001		260	ug/g	284	91	75	125	

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW7471B	BLK16631	Mercury		< 0.14	ug/g					
SW7471B	CRM16631	Mercury		< 0.148	ug/g	0.221		0.0908 0.351		
SW7471B	CRMD16631	Mercury		0.150	ug/g	0.221		0.0908 0.351	8	35
SW7471B	DUP16631	Mercury	66486-017	1.1	ug/g				6	35
SW7471B	MS16631	Mercury	66486-017	1.5	ug/g	0.34	120	80 120		

## AROMATIC HYDROCARBON BREAKTHROUGH CALCULATION

Method: MADEP EPH 2019 Rev 2.1

	Ics16614	Acceptance	Date of Analysis
	Aliphatic Breakthrough	Criteria	
	(%)		
naphthalene	0.0%	<5.0%	8/17/2023
2-methylnaphthalene	0.0%	<5.0%	8/17/2023

	Icsd16614	Acceptance	Date of Analysis
	Aliphatic Breakthrough	Criteria	
	(%)		
naphthalene	0.0%	<5.0%	8/17/2023
2-methylnaphthalene	0.0%	<5.0%	8/17/2023



# Sample Receipt Condition Report

# 66563

**Absolute Resource Associates**
**Job Number:**

Samples Received from: -UPS -FedEx -USPS -Lab Courier -Client Drop-off -\_\_\_\_\_

Custody Seals - present & intact: -Yes -No -N/A CoC signed: -Yes -No

Receipt Temp: 0 °C Samples on ice? -Yes -No -N/A Sampled < 24 hrs ago? -Yes -No

PFAS-only real ice? -Yes -No -N/A Any signs of freezing? -Yes -No

Comments:

Preservation / Analysis	Bottle Size/Type & Quantity						Check pH for ALL applicable* samples and document:
HCl	40mL(G) <b>2</b>	250mL(P)		500mL(P)		1L(G)	
HNO <sub>3</sub>	125mL(P)	250mL(P)		500mL(P)			
H <sub>2</sub> SO <sub>4</sub>	40mL(G)	60mL(P)		125mL(P)		250mL(P)	500mL(P)
NaOH	125mL(P)	250mL(P)					
(NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub>	60mL(P)	125mL(P)		250mL(P)			
ZnAc-NaOH	125mL(P)	250mL(P)					
Trizma	125mL(P)	250mL(P)					
NH <sub>4</sub> Ac	125mL(P)	250mL(P)					
Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	40mL(G)	120mL(P)					
MeOH	20mL(G)	40mL(G) <b>9</b>					
None (solid)	2oz(G)	4oz(G) <b>8</b>	8oz(G)	Syringe	<b>5</b>		
None (water)	40ml (G)	60mL(P)	125mL(P)	250mL(P)		500mL(P)	
						1L(G)	1L(P)
Mold	Cassette	Bulk		Plate		Tape Lift	
Asbestos	Cassette	Bulk					
Lead	Cassette	Bulk		Wipe			

\*pH ✓by analyst: VOC, PFAS, TOC, O&G  
Residual Cl not present:  
ABN625 \_\_\_\_\_ Pest608 \_\_\_\_\_  
Bacteria ResCl ✓by analyst

PC Dry applicable **Y** ~~NA~~ ~~SS~~

Login Review	Yes	No	NA	Comments
Proper lab sample containers/enough volume/correct preservative?		X		01, 02, 03, 08 no syringe s
Analyses marked on COC match bottles received?	X			no time on SS-1/SS-1 dup container
VOC & TOC Water-no headspace?	X			
VOC Solid-MeOH covers solid, no leaks, Prep Expiration OK?	X			
PFAS: ARA bottles & samples/FRB same Lot#? QC rec'd, if req'd?			X	Lot ID#: _____
Bacteria bottles provided by ARA?			X	
Samples within holding time?	X			
Immediate tests communicated in writing: NO <sub>3</sub> , NO <sub>2</sub> , o-PO <sub>4</sub> , pH, BOD, Coliform/E. coli (P/A or MPN), Enterococci, Color Surfactants, Turbidity, Odor, CrVI, Ferrous Iron, Dissolved Oxygen, Unpres 624			X	
Date, time & ID on samples match CoC?	X			no time on SS-1/SS-1 dup container
Rushes communicated to analyst in writing?			X	
Subcontracted samples sent to sub lab?			X	Date Prep'd: _____ Date sent: _____
Pesticides EPA 608 pH5-9?			X	
Compliance samples have no discrepancies/require no flags?			X	(Or must be rejected)
Log-in Supervisor notified immediately of following items:			X	Discrepancies, compliance samples (NHDES, MADEP, DoD etc.) or uncommon requests.

 Inspected and Received By: S. @

 Date/Time: 8/11/23 16:18

Peer Review Checklist			
<input type="checkbox"/> Client ID/Project Manager	<input type="checkbox"/> On Ice, Temperature OK?	<input type="checkbox"/> Sample IDs	<input type="checkbox"/> Analyses in Correctly
<input type="checkbox"/> Project Name	<input type="checkbox"/> PO# (if provided)	<input type="checkbox"/> Matrix	-references
<input type="checkbox"/> TAT/rushes communicated	<input type="checkbox"/> Sub samples sent? Shipping Charge?	<input type="checkbox"/> Date/Time collected	-wastewater methods
<input type="checkbox"/> Received Date/Time	<input type="checkbox"/> Issues noted above communicated?	<input type="checkbox"/> Short HT's communicated	<input type="checkbox"/> Notes from CoC in LIMS
Reviewed By: _____		Date: _____	

Notes: (continue on back as needed)

Initials	Date	What was sent?
Uploaded / PDF _____	_____	Report / Data / EDD / Invoice
Uploaded / PDF _____	_____	Report / Data / EDD / Invoice
Uploaded / PDF _____	_____	Report / Data / EDD / Invoice



## ANALYTICAL REPORT

Lab Number:	L2346005
Client:	Campbell Environmental Group 173 Gray Road Falmouth, ME 04105
ATTN:	Danica Kay
Phone:	(207) 253-1990
Project Name:	EMDC/BELFAST
Project Number:	0123-427-001/403
Report Date:	08/17/23

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Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0825), DoD (L2474), FL (E87814), IL (200081), IN (C-MA-04), KY (KY98046), LA (85084), ME (MA00030), MD (350), MI (99110), NJ (MA015), NY (11627), NC (685), OH (CL106), OR (MA-0262), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #525-23-107-88708), USFWS (Permit #206964).

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508-822-9300 (Fax) 508-822-3288 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2346005-01	SS-1	SOIL	273 MAIN ST., BELFAST	08/08/23 08:55	08/09/23
L2346005-02	SS-2	SOIL	273 MAIN ST., BELFAST	08/08/23 09:00	08/09/23
L2346005-03	SS-3	SOIL	273 MAIN ST., BELFAST	08/08/23 09:05	08/09/23
L2346005-04	SS-4	SOIL	273 MAIN ST., BELFAST	08/08/23 09:10	08/09/23
L2346005-05	SS-1 DUP	SOIL	273 MAIN ST., BELFAST	08/08/23 08:55	08/09/23
L2346005-06	EQ BLK 080823	WATER	273 MAIN ST., BELFAST	08/08/23 15:00	08/09/23

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

**HOLD POLICY** - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

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**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

### Case Narrative (continued)

#### Report Submission

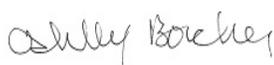
All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

#### Perfluorinated Alkyl Acids by Isotope Dilution

L2346005-03, -04, -06, and WG1814494-1: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details. The WG1814494-2 LCS recovery, associated with L2346005-01 through -05, is above the acceptance criteria for perfluorononanesulfonic acid (pfns) (130%); however, the associated samples are non-detect to the RL for this target analyte. The results of the original analysis are reported.

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. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Ashley Boucher

Title: Technical Director/Representative

Date: 08/17/23

# ORGANICS

# SEMIVOLATILES

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

**SAMPLE RESULTS**

**Lab ID:** L2346005-01  
**Client ID:** SS-1  
**Sample Location:** 273 MAIN ST., BELFAST

**Date Collected:** 08/08/23 08:55  
**Date Received:** 08/09/23  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 134,LCMSMS-ID  
**Analytical Date:** 08/14/23 12:43  
**Analyst:** PS  
**Percent Solids:** 77%

**Extraction Method:** ALPHA 23528  
**Extraction Date:** 08/10/23 16:40

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	0.029	J	ng/g	0.595	0.027	1
Perfluoropentanoic Acid (PFPeA)	0.062	J	ng/g	0.595	0.055	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	0.297	0.046	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/g	1.19	0.077	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/g	0.595	0.062	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/g	1.19	0.099	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/g	0.297	0.054	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/g	0.297	0.072	1
Perfluorooctanoic Acid (PFOA)	0.058	J	ng/g	0.297	0.050	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	0.595	0.214	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	0.595	0.162	1
Perfluorononanoic Acid (PFNA)	ND		ng/g	0.297	0.089	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/g	0.297	0.155	1
Perfluorodecanoic Acid (PFDA)	ND		ng/g	0.297	0.080	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	0.595	0.341	1
Perfluoronanesulfonic Acid (PFNS)	ND		ng/g	1.19	0.356	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	0.595	0.240	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/g	0.595	0.056	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/g	0.595	0.182	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/g	0.595	0.116	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/g	0.595	0.100	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/g	0.595	0.083	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/g	0.595	0.243	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/g	0.595	0.064	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/g	2.97	2.01	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/g	1.19	0.049	1
Perfluorohexadecanoic Acid (PFHxDA)	ND		ng/g	2.97	0.143	1

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

**SAMPLE RESULTS**

Lab ID: L2346005-01  
 Client ID: SS-1  
 Sample Location: 273 MAIN ST., BELFAST

Date Collected: 08/08/23 08:55  
 Date Received: 08/09/23  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorooctadecanoic Acid (PFODA)	ND		ng/g	2.97	0.203	1
PFAS, Total (6)	0.058	J	ng/g	0.297	0.050	1

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	88		61-135
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	97		58-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	97		74-139
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	112		14-167
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	76		66-128
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	80		71-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	90		78-139
Perfluoro[13C8]Octanoic Acid (M8PFOA)	91		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	149		20-154
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	84		72-140
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	88		79-136
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	88		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	152		19-175
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	57		31-134
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	93		61-155
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	6		5-117
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	63		34-137
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	91		54-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	86		24-159
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	63		10-203
Perfluoro[13C2]Hexadecanoic Acid (M2PFHxDA)	75		10-145

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

**SAMPLE RESULTS**

**Lab ID:** L2346005-02  
**Client ID:** SS-2  
**Sample Location:** 273 MAIN ST., BELFAST

**Date Collected:** 08/08/23 09:00  
**Date Received:** 08/09/23  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 134,LCMSMS-ID  
**Analytical Date:** 08/14/23 12:59  
**Analyst:** PS  
**Percent Solids:** 95%

**Extraction Method:** ALPHA 23528  
**Extraction Date:** 08/10/23 16:40

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	ND		ng/g	0.510	0.023	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/g	0.510	0.047	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	0.255	0.040	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/g	1.02	0.066	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/g	0.510	0.054	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/g	1.02	0.085	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/g	0.255	0.046	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/g	0.255	0.062	1
Perfluorooctanoic Acid (PFOA)	ND		ng/g	0.255	0.043	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	0.510	0.183	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	0.510	0.139	1
Perfluorononanoic Acid (PFNA)	ND		ng/g	0.255	0.077	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/g	0.255	0.133	1
Perfluorodecanoic Acid (PFDA)	ND		ng/g	0.255	0.068	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	0.510	0.293	1
Perfluoronanesulfonic Acid (PFNS)	ND		ng/g	1.02	0.305	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	0.510	0.206	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/g	0.510	0.048	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/g	0.510	0.156	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/g	0.510	0.100	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/g	0.510	0.086	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/g	0.510	0.071	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/g	0.510	0.209	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/g	0.510	0.055	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/g	2.55	1.72	1
4,8-Dioxo-3h-Perfluorononanoic Acid (ADONA)	ND		ng/g	1.02	0.042	1
Perfluorohexadecanoic Acid (PFHxDA)	ND		ng/g	2.55	0.122	1

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

**SAMPLE RESULTS**

Lab ID: L2346005-02  
 Client ID: SS-2  
 Sample Location: 273 MAIN ST., BELFAST

Date Collected: 08/08/23 09:00  
 Date Received: 08/09/23  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorooctadecanoic Acid (PFODA)	ND		ng/g	2.55	0.174	1
PFAS, Total (6)	ND		ng/g	0.255	0.043	1

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	93		61-135
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	101		58-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	100		74-139
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	121		14-167
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	85		66-128
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	88		71-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	92		78-139
Perfluoro[13C8]Octanoic Acid (M8PFOA)	99		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	141		20-154
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	89		72-140
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	93		79-136
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	94		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	162		19-175
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	68		31-134
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	102		61-155
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	7		5-117
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	69		34-137
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	99		54-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	97		24-159
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	72		10-203
Perfluoro[13C2]Hexadecanoic Acid (M2PFHxDA)	86		10-145

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

**SAMPLE RESULTS**

**Lab ID:** L2346005-03  
**Client ID:** SS-3  
**Sample Location:** 273 MAIN ST., BELFAST

**Date Collected:** 08/08/23 09:05  
**Date Received:** 08/09/23  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 134,LCMSMS-ID  
**Analytical Date:** 08/14/23 13:16  
**Analyst:** PS  
**Percent Solids:** 95%

**Extraction Method:** ALPHA 23528  
**Extraction Date:** 08/10/23 16:40

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	0.169	J	ng/g	0.513	0.023	1
Perfluoropentanoic Acid (PFPeA)	0.312	J	ng/g	0.513	0.047	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	0.256	0.040	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/g	1.03	0.066	1
Perfluorohexanoic Acid (PFHxA)	0.094	J	ng/g	0.513	0.054	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/g	1.03	0.086	1
Perfluoroheptanoic Acid (PFHpA)	0.122	J	ng/g	0.256	0.046	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/g	0.256	0.062	1
Perfluorooctanoic Acid (PFOA)	ND		ng/g	0.256	0.043	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	0.513	0.184	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	0.513	0.140	1
Perfluorononanoic Acid (PFNA)	ND		ng/g	0.256	0.077	1
Perfluorooctanesulfonic Acid (PFOS)	0.143	J	ng/g	0.256	0.133	1
Perfluorodecanoic Acid (PFDA)	ND		ng/g	0.256	0.069	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	0.513	0.294	1
Perfluoronanesulfonic Acid (PFNS)	ND		ng/g	1.03	0.307	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	0.513	0.207	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/g	0.513	0.048	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/g	0.513	0.157	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/g	0.513	0.100	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/g	0.513	0.087	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/g	0.513	0.072	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/g	0.513	0.210	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/g	0.513	0.055	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/g	2.56	1.73	1
4,8-Dioxo-3h-Perfluorononanoic Acid (ADONA)	ND		ng/g	1.03	0.042	1
Perfluorohexadecanoic Acid (PFHxDA)	ND		ng/g	2.56	0.123	1

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

**SAMPLE RESULTS**

**Lab ID:** L2346005-03  
**Client ID:** SS-3  
**Sample Location:** 273 MAIN ST., BELFAST

**Date Collected:** 08/08/23 09:05  
**Date Received:** 08/09/23  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorooctadecanoic Acid (PFODA)	ND		ng/g	2.56	0.175	1
PFAS, Total (6)	0.265	J	ng/g	0.256	0.043	1

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	94		61-135
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	101		58-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	100		74-139
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	126		14-167
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	81		66-128
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	84		71-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	94		78-139
Perfluoro[13C8]Octanoic Acid (M8PFOA)	94		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	166	Q	20-154
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	89		72-140
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	90		79-136
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	94		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	173		19-175
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	68		31-134
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	105		61-155
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	73		5-117
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	80		34-137
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	96		54-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	93		24-159
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	61		10-203
Perfluoro[13C2]Hexadecanoic Acid (M2PFHxDA)	88		10-145

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

**SAMPLE RESULTS**

**Lab ID:** L2346005-04  
**Client ID:** SS-4  
**Sample Location:** 273 MAIN ST., BELFAST

**Date Collected:** 08/08/23 09:10  
**Date Received:** 08/09/23  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 134,LCMSMS-ID  
**Analytical Date:** 08/14/23 13:32  
**Analyst:** PS  
**Percent Solids:** 98%

**Extraction Method:** ALPHA 23528  
**Extraction Date:** 08/10/23 16:40

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	0.077	J	ng/g	0.496	0.023	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/g	0.496	0.046	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	0.248	0.039	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/g	0.993	0.064	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/g	0.496	0.052	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/g	0.993	0.083	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/g	0.248	0.045	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/g	0.248	0.060	1
Perfluorooctanoic Acid (PFOA)	ND		ng/g	0.248	0.042	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	0.496	0.178	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	0.496	0.136	1
Perfluorononanoic Acid (PFNA)	ND		ng/g	0.248	0.075	1
Perfluorooctanesulfonic Acid (PFOS)	0.490		ng/g	0.248	0.129	1
Perfluorodecanoic Acid (PFDA)	0.087	JF	ng/g	0.248	0.067	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	0.496	0.285	1
Perfluoronanesulfonic Acid (PFNS)	ND		ng/g	0.993	0.297	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	0.496	0.200	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/g	0.496	0.047	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/g	0.496	0.152	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/g	0.496	0.097	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/g	0.496	0.084	1
Perfluorododecanoic Acid (PFDoA)	0.080	JF	ng/g	0.496	0.070	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/g	0.496	0.203	1
Perfluorotetradecanoic Acid (PFTA)	0.058	J	ng/g	0.496	0.054	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/g	2.48	1.68	1
4,8-Dioxo-3h-Perfluorononanoic Acid (ADONA)	ND		ng/g	0.993	0.041	1
Perfluorohexadecanoic Acid (PFHxDA)	ND		ng/g	2.48	0.119	1

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

**SAMPLE RESULTS**

**Lab ID:** L2346005-04  
**Client ID:** SS-4  
**Sample Location:** 273 MAIN ST., BELFAST

**Date Collected:** 08/08/23 09:10  
**Date Received:** 08/09/23  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorooctadecanoic Acid (PFODA)	ND		ng/g	2.48	0.170	1
PFAS, Total (6)	0.577	J	ng/g	0.248	0.042	1

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	95		61-135
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	102		58-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	106		74-139
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	130		14-167
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	82		66-128
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	87		71-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	101		78-139
Perfluoro[13C8]Octanoic Acid (M8PFOA)	95		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	152		20-154
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	88		72-140
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	93		79-136
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	93		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	177	Q	19-175
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	64		31-134
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	106		61-155
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	35		5-117
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	77		34-137
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	102		54-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	93		24-159
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	60		10-203
Perfluoro[13C2]Hexadecanoic Acid (M2PFHxDA)	90		10-145

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

**SAMPLE RESULTS**

**Lab ID:** L2346005-05  
**Client ID:** SS-1 DUP  
**Sample Location:** 273 MAIN ST., BELFAST

**Date Collected:** 08/08/23 08:55  
**Date Received:** 08/09/23  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 134,LCMSMS-ID  
**Analytical Date:** 08/14/23 13:49  
**Analyst:** PS  
**Percent Solids:** 58%

**Extraction Method:** ALPHA 23528  
**Extraction Date:** 08/10/23 16:40

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	0.056	J	ng/g	0.795	0.036	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/g	0.795	0.073	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	0.398	0.062	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/g	1.59	0.103	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/g	0.795	0.084	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/g	1.59	0.133	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/g	0.398	0.072	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/g	0.398	0.096	1
Perfluorooctanoic Acid (PFOA)	ND		ng/g	0.398	0.067	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	0.795	0.286	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	0.795	0.217	1
Perfluorononanoic Acid (PFNA)	ND		ng/g	0.398	0.119	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/g	0.398	0.207	1
Perfluorodecanoic Acid (PFDA)	ND		ng/g	0.398	0.106	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	0.795	0.456	1
Perfluoronanesulfonic Acid (PFNS)	ND		ng/g	1.59	0.476	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	0.795	0.320	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/g	0.795	0.074	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/g	0.795	0.243	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/g	0.795	0.156	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/g	0.795	0.134	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/g	0.795	0.111	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/g	0.795	0.325	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/g	0.795	0.086	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/g	3.98	2.69	1
4,8-Dioxo-3h-Perfluorononanoic Acid (ADONA)	ND		ng/g	1.59	0.066	1
Perfluorohexadecanoic Acid (PFHxDA)	ND		ng/g	3.98	0.191	1

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

**SAMPLE RESULTS**

**Lab ID:** L2346005-05  
**Client ID:** SS-1 DUP  
**Sample Location:** 273 MAIN ST., BELFAST

**Date Collected:** 08/08/23 08:55  
**Date Received:** 08/09/23  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorooctadecanoic Acid (PFODA)	ND		ng/g	3.98	0.272	1
PFAS, Total (6)	ND		ng/g	0.398	0.067	1

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	89		61-135
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	95		58-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	100		74-139
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	124		14-167
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	80		66-128
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	85		71-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	92		78-139
Perfluoro[13C8]Octanoic Acid (M8PFOA)	93		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	153		20-154
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	85		72-140
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	87		79-136
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	87		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	162		19-175
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	61		31-134
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	98		61-155
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	8		5-117
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	68		34-137
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	95		54-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	91		24-159
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	76		10-203
Perfluoro[13C2]Hexadecanoic Acid (M2PFHxDA)	85		10-145

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

**SAMPLE RESULTS**

**Lab ID:** L2346005-06  
**Client ID:** EQ BLK 080823  
**Sample Location:** 273 MAIN ST., BELFAST

**Date Collected:** 08/08/23 15:00  
**Date Received:** 08/09/23  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 134,LCMSMS-ID  
**Analytical Date:** 08/15/23 10:48  
**Analyst:** AC

**Extraction Method:** ALPHA 23528  
**Extraction Date:** 08/14/23 00:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	1.73	0.353	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.73	0.343	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.73	0.206	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.73	0.392	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.73	0.284	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.73	0.212	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.73	0.195	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.73	0.326	1
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.73	0.204	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.73	1.15	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.73	0.596	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.73	0.270	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.73	0.437	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.73	0.263	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.73	1.05	1
Perfluoronanesulfonic Acid (PFNS)	ND		ng/l	1.73	0.970	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.73	0.561	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.73	0.225	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.73	0.849	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.73	0.502	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.73	0.696	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.73	0.322	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.73	0.283	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.73	0.215	1
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	17.3	12.3	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	1.73	0.291	1
Perfluorohexadecanoic Acid (PFHxDA)	ND		ng/l	3.46	1.07	1

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

**SAMPLE RESULTS**

Lab ID: L2346005-06  
 Client ID: EQ BLK 080823  
 Sample Location: 273 MAIN ST., BELFAST

Date Collected: 08/08/23 15:00  
 Date Received: 08/09/23  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorooctadecanoic Acid (PFODA)	ND		ng/l	3.46	0.994	1
PFAS, Total (6)	ND		ng/l	1.73	0.195	1

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	106		58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	110		62-163
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	116		70-131
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	<b>147</b>	Q	12-142
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	96		57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	98		60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	106		71-134
Perfluoro[13C8]Octanoic Acid (M8PFOA)	103		62-129
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	<b>149</b>	Q	14-147
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	93		59-139
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	100		69-131
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	95		62-124
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	132		10-162
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	57		24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	97		55-137
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	34		5-112
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	66		27-126
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	93		48-131
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	77		22-136
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	77		10-165
Perfluoro[13C2]Hexadecanoic Acid (M2PFHxDA)	78		10-206

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 134,LCMSMS-ID  
**Analytical Date:** 08/14/23 12:09  
**Analyst:** PS

**Extraction Method:** ALPHA 23528  
**Extraction Date:** 08/10/23 16:40

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-05 Batch: WG1814494-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/g	0.500	0.023
Perfluoropentanoic Acid (PFPeA)	ND		ng/g	0.500	0.046
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	0.250	0.039
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/g	1.00	0.065
Perfluorohexanoic Acid (PFHxA)	ND		ng/g	0.500	0.053
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/g	1.00	0.084
Perfluoroheptanoic Acid (PFHpA)	ND		ng/g	0.250	0.045
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/g	0.250	0.061
Perfluorooctanoic Acid (PFOA)	ND		ng/g	0.250	0.042
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	0.500	0.180
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	0.500	0.136
Perfluorononanoic Acid (PFNA)	ND		ng/g	0.250	0.075
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/g	0.250	0.130
Perfluorodecanoic Acid (PFDA)	ND		ng/g	0.250	0.067
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	0.500	0.287
Perfluorononanesulfonic Acid (PFNS)	ND		ng/g	1.00	0.299
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	0.500	0.202
Perfluoroundecanoic Acid (PFUnA)	ND		ng/g	0.500	0.047
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/g	0.500	0.153
Perfluorooctanesulfonamide (FOSA)	ND		ng/g	0.500	0.098
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/g	0.500	0.085
Perfluorododecanoic Acid (PFDoA)	ND		ng/g	0.500	0.070
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/g	0.500	0.204
Perfluorotetradecanoic Acid (PFTA)	ND		ng/g	0.500	0.054
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/g	2.50	1.69
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/g	1.00	0.041

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 134,LCMSMS-ID  
**Analytical Date:** 08/14/23 12:09  
**Analyst:** PS

**Extraction Method:** ALPHA 23528  
**Extraction Date:** 08/10/23 16:40

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-05 Batch: WG1814494-1					
Perfluorohexadecanoic Acid (PFHxDA)	ND		ng/g	2.50	0.120
Perfluorooctadecanoic Acid (PFODA)	ND		ng/g	2.50	0.171
PFAS, Total (6)	ND		ng/g	0.250	0.042

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	98		61-135
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	109		58-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	106		74-139
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	122		14-167
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	89		66-128
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	92		71-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	101		78-139
Perfluoro[13C8]Octanoic Acid (M8PFOA)	100		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	<b>169</b>	Q	20-154
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	92		72-140
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	96		79-136
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	94		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	174		19-175
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	66		31-134
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	98		61-155
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	57		5-117
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	72		34-137
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	102		54-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	94		24-159
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	68		10-203
Perfluoro[13C2]Hexadecanoic Acid (M2PFHxDA)	86		10-145

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

### Method Blank Analysis Batch Quality Control

Analytical Method: 134,LCMSMS-ID  
Analytical Date: 08/15/23 09:58  
Analyst: AC

Extraction Method: ALPHA 23528  
Extraction Date: 08/14/23 00:30

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 06 Batch: WG1815402-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	0.408
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	0.396
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	0.238
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	2.00	0.452
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	2.00	0.328
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	2.00	0.245
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	0.225
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	0.376
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.00	0.236
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.00	1.33
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.688
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.312
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.504
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.304
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	1.21
Perfluorononanesulfonic Acid (PFNS)	ND		ng/l	2.00	1.12
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	1.35	J	ng/l	2.00	0.648
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.260
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.00	0.980
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.00	0.580
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	1.22	J	ng/l	2.00	0.804
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.372
Perfluorotridecanoic Acid (PFTrDA)	0.412	JF	ng/l	2.00	0.327
Perfluorotetradecanoic Acid (PFTA)	0.316	J	ng/l	2.00	0.248
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND		ng/l	20.0	14.2
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	2.00	0.336

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 134,LCMSMS-ID  
Analytical Date: 08/15/23 09:58  
Analyst: AC

Extraction Method: ALPHA 23528  
Extraction Date: 08/14/23 00:30

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 06 Batch: WG1815402-1					
Perfluorohexadecanoic Acid (PFHxDA)	ND		ng/l	4.00	1.24
Perfluorooctadecanoic Acid (PFODA)	ND		ng/l	4.00	1.15
PFAS, Total (6)	ND		ng/l	2.00	0.225

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 134,LCMSMS-ID  
Analytical Date: 08/15/23 09:58  
Analyst: AC

Extraction Method: ALPHA 23528  
Extraction Date: 08/14/23 00:30

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 06 Batch: WG1815402-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	87		58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	94		62-163
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	95		70-131
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	121		12-142
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	80		57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	82		60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	89		71-134
Perfluoro[13C8]Octanoic Acid (M8PFOA)	88		62-129
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	124		14-147
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	81		59-139
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	81		69-131
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	83		62-124
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	125		10-162
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	52		24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	75		55-137
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	25		5-112
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	50		27-126
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	72		48-131
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	66		22-136
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	68		10-165
Perfluoro[13C2]Hexadecanoic Acid (M2PFHxDA)	70		10-206
1H,1H,2H,2H-Perfluorododecane Sulfonate (M2D4-10:2FTS)	89		50-150

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-05 Batch: WG1814494-2								
Perfluorobutanoic Acid (PFBA)	107		-		71-135	-		30
Perfluoropentanoic Acid (PFPeA)	110		-		69-132	-		30
Perfluorobutanesulfonic Acid (PFBS)	101		-		72-128	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	123		-		62-145	-		30
Perfluorohexanoic Acid (PFHxA)	108		-		70-132	-		30
Perfluoropentanesulfonic Acid (PFPeS)	108		-		73-123	-		30
Perfluoroheptanoic Acid (PFHpA)	107		-		71-131	-		30
Perfluorohexanesulfonic Acid (PFHxS)	108		-		67-130	-		30
Perfluorooctanoic Acid (PFOA)	105		-		69-133	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	129		-		64-140	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	119		-		70-132	-		30
Perfluorononanoic Acid (PFNA)	114		-		72-129	-		30
Perfluorooctanesulfonic Acid (PFOS)	106		-		68-136	-		30
Perfluorodecanoic Acid (PFDA)	117		-		69-133	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	126		-		65-137	-		30
Perfluorononanesulfonic Acid (PFNS)	130	Q	-		69-125	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	122		-		63-144	-		30
Perfluoroundecanoic Acid (PFUnA)	112		-		64-136	-		30
Perfluorodecanesulfonic Acid (PFDS)	127		-		59-134	-		30
Perfluorooctanesulfonamide (FOSA)	112		-		67-137	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	102		-		61-139	-		30
Perfluorododecanoic Acid (PFDoA)	110		-		69-135	-		30

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-05 Batch: WG1814494-2								
Perfluorotridecanoic Acid (PFTrDA)	122		-		66-139	-		30
Perfluorotetradecanoic Acid (PFTA)	106		-		69-133	-		30
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	81		-		41-165	-		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	95		-		61-135	-		30
Perfluorohexadecanoic Acid (PFHxDA)	97		-		18-191	-		30
Perfluorooctadecanoic Acid (PFODA)	68		-		10-123	-		30

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

Parameter	LCS		LCSD		%Recovery		RPD	RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	Qual		Limits	
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-05 Batch: WG1814494-2									

Surrogate (Extracted Internal Standard)	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
Perfluoro[13C4]Butanoic Acid (MPFBA)	94				61-135
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	102				58-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	101				74-139
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	130				14-167
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	81				66-128
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	85				71-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	95				78-139
Perfluoro[13C8]Octanoic Acid (M8PFOA)	94				75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	152				20-154
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	85				72-140
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	90				79-136
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	86				75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	162				19-175
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	64				31-134
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	100				61-155
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	58				5-117
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	72				34-137
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	95				54-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	86				24-159
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	66				10-203
Perfluoro[13C2]Hexadecanoic Acid (M2PFHxDA)	86				10-145

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

Parameter	LCS	Qual	LCSD	Qual	%Recovery	RPD	Qual	RPD
	%Recovery		%Recovery		Limits			Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 06 Batch: WG1815402-2								
Perfluorobutanoic Acid (PFBA)	92		-		67-148	-		30
Perfluoropentanoic Acid (PFPeA)	93		-		63-161	-		30
Perfluorobutanesulfonic Acid (PFBS)	89		-		65-157	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	111		-		37-219	-		30
Perfluorohexanoic Acid (PFHxA)	93		-		69-168	-		30
Perfluoropentanesulfonic Acid (PFPeS)	94		-		52-156	-		30
Perfluoroheptanoic Acid (PFHpA)	92		-		58-159	-		30
Perfluorohexanesulfonic Acid (PFHxS)	99		-		69-177	-		30
Perfluorooctanoic Acid (PFOA)	89		-		63-159	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	109		-		49-187	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	101		-		61-179	-		30
Perfluorononanoic Acid (PFNA)	98		-		68-171	-		30
Perfluorooctanesulfonic Acid (PFOS)	94		-		52-151	-		30
Perfluorodecanoic Acid (PFDA)	92		-		63-171	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	114		-		56-173	-		30
Perfluorononanesulfonic Acid (PFNS)	107		-		48-150	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	102		-		60-166	-		30
Perfluoroundecanoic Acid (PFUnA)	94		-		60-153	-		30
Perfluorodecanesulfonic Acid (PFDS)	105		-		38-156	-		30
Perfluorooctanesulfonamide (FOSA)	95		-		46-170	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	96		-		45-170	-		30
Perfluorododecanoic Acid (PFDoA)	93		-		67-153	-		30

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 06 Batch: WG1815402-2								
Perfluorotridecanoic Acid (PFTrDA)	114		-		48-158	-		30
Perfluorotetradecanoic Acid (PFTA)	94		-		59-182	-		30
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	87		-		57-162	-		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	82		-		69-143	-		30
Perfluorohexadecanoic Acid (PFHxDA)	84		-		40-167	-		30
Perfluorooctadecanoic Acid (PFODA)	32		-		10-119	-		30

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

Parameter	LCS		LCSD		%Recovery		RPD	RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	Qual		Limits	
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 06 Batch: WG1815402-2									

Surrogate (Extracted Internal Standard)	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
Perfluoro[13C4]Butanoic Acid (MPFBA)	100				58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	106				62-163
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	109				70-131
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	135				12-142
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	88				57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	91				60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	98				71-134
Perfluoro[13C8]Octanoic Acid (M8PFOA)	98				62-129
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	134				14-147
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	90				59-139
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	96				69-131
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	94				62-124
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	145				10-162
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	60				24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	90				55-137
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	20				5-112
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	60				27-126
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	84				48-131
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	79				22-136
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	78				10-165
Perfluoro[13C2]Hexadecanoic Acid (M2PFHxDA)	79				10-206
1H,1H,2H,2H-Perfluorododecane Sulfonate (M2D4-10:2FTS)	106				50-150

## Matrix Spike Analysis

### Batch Quality Control

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1814494-3 QC Sample: L2346028-01 Client ID: MS Sample												
Perfluorobutanoic Acid (PFBA)	ND	5.2	5.52	106		-	-		71-135	-		30
Perfluoropentanoic Acid (PFPeA)	0.057J	5.2	5.82	111		-	-		69-132	-		30
Perfluorobutanesulfonic Acid (PFBS)	ND	4.62	4.74	103		-	-		72-128	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	4.88	6.10	125		-	-		62-145	-		30
Perfluorohexanoic Acid (PFHxA)	0.324J	5.2	6.00	109		-	-		70-132	-		30
Perfluoropentanesulfonic Acid (PFPeS)	0.110J	4.9	5.83	117		-	-		73-123	-		30
Perfluoroheptanoic Acid (PFHpA)	ND	5.2	5.64	108		-	-		71-131	-		30
Perfluorohexanesulfonic Acid (PFHxS)	3.78	4.75	10.7	146	Q	-	-		67-130	-		30
Perfluorooctanoic Acid (PFOA)	0.139J	5.2	5.64	106		-	-		69-133	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	4.95	6.02	122		-	-		64-140	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	1.43	4.96	10.3	179	Q	-	-		70-132	-		30
Perfluorononanoic Acid (PFNA)	1.26	5.2	7.34	117		-	-		72-129	-		30
Perfluorooctanesulfonic Acid (PFOS)	294E	4.82	260E	0	Q	-	-		68-136	-		30
Perfluorodecanoic Acid (PFDA)	0.077JF	5.2	5.74	109		-	-		69-133	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	4.99	6.38	128		-	-		65-137	-		30
Perfluorononanesulfonic Acid (PFNS)	ND	5	9.56	191	Q	-	-		69-125	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	5.2	5.38	103		-	-		63-144	-		30
Perfluoroundecanoic Acid (PFUnA)	0.207J	5.2	5.60	104		-	-		64-136	-		30
Perfluorodecanesulfonic Acid (PFDS)	ND	5.02	9.60	191	Q	-	-		59-134	-		30
Perfluorooctanesulfonamide (FOSA)	ND	5.2	6.08F	117		-	-		67-137	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	5.2	5.74	110		-	-		61-139	-		30
Perfluorododecanoic Acid (PFDoA)	ND	5.2	5.85	113		-	-		69-135	-		30

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1814494-3 QC Sample: L2346028-01 Client ID: MS Sample												
Perfluorotridecanoic Acid (PFTrDA)	ND	5.2	7.04	135		-	-		66-139	-		30
Perfluorotetradecanoic Acid (PFTA)	ND	5.2	5.80	112		-	-		69-133	-		30

<i>Surrogate (Extracted Internal Standard)</i>	<i>MS % Recovery</i>	<i>Qualifier</i>	<i>MSD % Recovery</i>	<i>Qualifier</i>	<i>Acceptance Criteria</i>
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	249	Q			19-175
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	200	Q			14-167
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	250	Q			20-154
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	51				34-137
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	55				31-134
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUOA)	98				61-155
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	88				75-130
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	78				66-128
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	82				71-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	133				78-139
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	92				54-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	59				24-159
Perfluoro[13C4]Butanoic Acid (MPFBA)	91				61-135
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	98				58-150
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	58				5-117
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	92				79-136
Perfluoro[13C8]Octanoic Acid (M8PFOA)	91				75-130
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	73				72-140
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	153	Q			74-139

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 06 QC Batch ID: WG1815402-3 QC Sample: L2346435-01 Client ID: MS Sample												
Perfluorobutanoic Acid (PFBA)	ND	39.7	35.3	89		-	-		67-148	-		30
Perfluoropentanoic Acid (PFPeA)	ND	39.7	37.2	94		-	-		63-161	-		30
Perfluorobutanesulfonic Acid (PFBS)	ND	35.3	30.3	86		-	-		65-157	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	37.3	35.8	96		-	-		37-219	-		30
Perfluorohexanoic Acid (PFHxA)	ND	39.7	36.0	91		-	-		69-168	-		30
Perfluoropentanesulfonic Acid (PFPeS)	ND	37.4	35.6	95		-	-		52-156	-		30
Perfluoroheptanoic Acid (PFHpA)	ND	39.7	36.4	92		-	-		58-159	-		30
Perfluorohexanesulfonic Acid (PFHxS)	ND	36.3	35.1	97		-	-		69-177	-		30
Perfluorooctanoic Acid (PFOA)	ND	39.7	35.8	90		-	-		63-159	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	37.8	39.6	105		-	-		49-187	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	37.9	37.0	98		-	-		61-179	-		30
Perfluorononanoic Acid (PFNA)	ND	39.7	38.3	96		-	-		68-171	-		30
Perfluorooctanesulfonic Acid (PFOS)	ND	36.9	34.3	93		-	-		52-151	-		30
Perfluorodecanoic Acid (PFDA)	ND	39.7	34.5	87		-	-		63-171	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	38.2	44.5	117		-	-		56-173	-		30
Perfluorononanesulfonic Acid (PFNS)	ND	38.2	38.8	101		-	-		48-150	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	39.7	35.5	89		-	-		60-166	-		30
Perfluoroundecanoic Acid (PFUnA)	ND	39.7	36.0	91		-	-		60-153	-		30
Perfluorodecanesulfonic Acid (PFDS)	ND	38.4	39.8	104		-	-		38-156	-		30
Perfluorooctanesulfonamide (FOSA)	ND	39.7	38.9F	98		-	-		46-170	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	39.7	34.8	88		-	-		45-170	-		30
Perfluorododecanoic Acid (PFDoA)	ND	39.7	35.3	89		-	-		67-153	-		30

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 06 QC Batch ID: WG1815402-3 QC Sample: L2346435-01 Client ID: MS Sample												
Perfluorotridecanoic Acid (PFTTrDA)	ND	39.7	46.8	118		-	-		48-158	-		30
Perfluorotetradecanoic Acid (PFTTA)	ND	39.7	37.7	95		-	-		59-182	-		30
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND	387	312	80		-	-		57-162	-		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND	37.6	31.4	84		-	-		69-143	-		30
Perfluorohexadecanoic Acid (PFHxDA)	ND	39.7	33.9	85		-	-		40-167	-		30
Perfluorooctadecanoic Acid (PFODA)	ND	39.7	11.4	29		-	-		10-119	-		30

<i>Surrogate (Extracted Internal Standard)</i>	<i>MS % Recovery</i>	<i>Qualifier</i>	<i>MSD % Recovery</i>	<i>Qualifier</i>	<i>Acceptance Criteria</i>
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	124				10-162
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	144	Q			12-142
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	138				14-147
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	75				10-165
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	62				27-126
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	64				24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	91				55-137
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	96				62-124
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	92				57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	94				60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	99				71-134
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	97				48-131
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	79				22-136
Perfluoro[13C2]Hexadecanoic Acid (M2PFHxDA)	79				10-206

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 06 QC Batch ID: WG1815402-3 QC Sample: L2346435-01 Client ID: MS Sample												

<i>Surrogate (Extracted Internal Standard)</i>	<i>MS</i>		<i>MSD</i>		<i>Acceptance Criteria</i>
	<i>% Recovery</i>	<i>Qualifier</i>	<i>% Recovery</i>	<i>Qualifier</i>	
Perfluoro[13C4]Butanoic Acid (MPFBA)	101				58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	104				62-163
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	15				5-112
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	99				69-131
Perfluoro[13C8]Octanoic Acid (M8PFOA)	101				62-129
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	94				59-139
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	110				70-131

## Lab Duplicate Analysis

### Batch Quality Control

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1814494-4 QC Sample: L2346028-02 Client ID: DUP Sample						
Perfluorobutanoic Acid (PFBA)	0.040J	0.045J	ng/g	NC		30
Perfluoropentanoic Acid (PFPeA)	0.177J	0.194J	ng/g	NC		30
Perfluorobutanesulfonic Acid (PFBS)	ND	ND	ng/g	NC		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	ND	ng/g	NC		30
Perfluorohexanoic Acid (PFHxA)	0.114J	0.127J	ng/g	NC		30
Perfluoropentanesulfonic Acid (PFPeS)	ND	ND	ng/g	NC		30
Perfluoroheptanoic Acid (PFHpA)	0.061J	0.067J	ng/g	NC		30
Perfluorohexanesulfonic Acid (PFHxS)	0.223JF	0.359F	ng/g	NC		30
Perfluorooctanoic Acid (PFOA)	ND	0.051J	ng/g	NC		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	ND	ng/g	NC		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	ND	ng/g	NC		30
Perfluorononanoic Acid (PFNA)	ND	ND	ng/g	NC		30
Perfluorooctanesulfonic Acid (PFOS)	1.30	1.34	ng/g	3		30
Perfluorodecanoic Acid (PFDA)	0.163J	0.157J	ng/g	NC		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	ND	ng/g	NC		30
Perfluorononanesulfonic Acid (PFNS)	ND	ND	ng/g	NC		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	ND	ng/g	NC		30
Perfluoroundecanoic Acid (PFUnA)	0.391J	0.394J	ng/g	NC		30
Perfluorodecanesulfonic Acid (PFDS)	ND	ND	ng/g	NC		30
Perfluorooctanesulfonamide (FOSA)	ND	ND	ng/g	NC		30

## Lab Duplicate Analysis

### Batch Quality Control

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1814494-4 QC Sample: L2346028-02 Client ID: DUP Sample						
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	ND	ng/g	NC		30
Perfluorododecanoic Acid (PFDoA)	0.356J	0.364J	ng/g	NC		30
Perfluorotridecanoic Acid (PFTTrDA)	0.733	0.751	ng/g	2		30
Perfluorotetradecanoic Acid (PFTA)	0.205J	0.168J	ng/g	NC		30

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	90		92		61-135
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	98		101		58-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	103		102		74-139
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	129		129		14-167
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	77		80		66-128
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	83		85		71-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	93		97		78-139
Perfluoro[13C8]Octanoic Acid (M8PFOA)	94		95		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	<b>166</b>	Q	<b>162</b>	Q	20-154
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	82		88		72-140
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	90		92		79-136
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	89		91		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	<b>171</b>		<b>176</b>	Q	19-175
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	49		49		31-134
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	101		93		61-155
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	62		61		5-117
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	56		55		34-137
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	95		92		54-150

## Lab Duplicate Analysis

Batch Quality Control

Project Name: EMDC/BELFAST

Project Number: 0123-427-001/403

Lab Number: L2346005

Report Date: 08/17/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1814494-4 QC Sample: L2346028-02 Client ID: DUP Sample						

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	85		89		24-159

## Lab Duplicate Analysis

### Batch Quality Control

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 06 QC Batch ID: WG1815402-4 QC Sample: L2346492-01 Client ID: DUP Sample						
Perfluorobutanoic Acid (PFBA)	1.69J	1.80J	ng/l	NC		30
Perfluoropentanoic Acid (PFPeA)	0.757J	0.767J	ng/l	NC		30
Perfluorobutanesulfonic Acid (PFBS)	ND	ND	ng/l	NC		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	ND	ng/l	NC		30
Perfluorohexanoic Acid (PFHxA)	0.522J	0.583J	ng/l	NC		30
Perfluoropentanesulfonic Acid (PFPeS)	ND	ND	ng/l	NC		30
Perfluoroheptanoic Acid (PFHpA)	0.589J	0.697J	ng/l	NC		30
Perfluorohexanesulfonic Acid (PFHxS)	ND	ND	ng/l	NC		30
Perfluorooctanoic Acid (PFOA)	0.768J	0.737J	ng/l	NC		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	ND	ng/l	NC		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	ND	ng/l	NC		30
Perfluorononanoic Acid (PFNA)	0.435J	0.363J	ng/l	NC		30
Perfluorooctanesulfonic Acid (PFOS)	ND	ND	ng/l	NC		30
Perfluorodecanoic Acid (PFDA)	ND	ND	ng/l	NC		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	ND	ng/l	NC		30
Perfluorononanesulfonic Acid (PFNS)	ND	ND	ng/l	NC		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	ND	ng/l	NC		30
Perfluoroundecanoic Acid (PFUnA)	ND	ND	ng/l	NC		30
Perfluorodecanesulfonic Acid (PFDS)	ND	ND	ng/l	NC		30
Perfluorooctanesulfonamide (FOSA)	ND	ND	ng/l	NC		30

## Lab Duplicate Analysis

### Batch Quality Control

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 06 QC Batch ID: WG1815402-4 QC Sample: L2346492-01 Client ID: DUP Sample						
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	ND	ng/l	NC		30
Perfluorododecanoic Acid (PFDoA)	ND	ND	ng/l	NC		30
Perfluorotridecanoic Acid (PFTTrDA)	ND	ND	ng/l	NC		30
Perfluorotetradecanoic Acid (PFTA)	ND	ND	ng/l	NC		30
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	ND	ND	ng/l	NC		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND	ND	ng/l	NC		30
Perfluorohexadecanoic Acid (PFHxDA)	ND	ND	ng/l	NC		30
Perfluorooctadecanoic Acid (PFODA)	ND	ND	ng/l	NC		30

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	95		92		58-132
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	90		87		62-163
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	98		94		70-131
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	<b>175</b>	Q	<b>172</b>	Q	12-142
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	79		73		57-129
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	88		80		60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	101		98		71-134
Perfluoro[13C8]Octanoic Acid (M8PFOA)	95		89		62-129
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	<b>154</b>	Q	<b>154</b>	Q	14-147
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	90		83		59-139
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	95		92		69-131
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	90		86		62-124
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	129		127		10-162

## Lab Duplicate Analysis

### Batch Quality Control

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 06 QC Batch ID: WG1815402-4 QC Sample: L2346492-01 Client ID: DUP Sample						

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	48		47		24-116
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	83		81		55-137
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	31		21		5-112
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	48		52		27-126
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	84		75		48-131
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	77		73		22-136
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-13C3-Propanoic Acid (M3HFPO-DA)	80		65		10-165
Perfluoro[13C2]Hexadecanoic Acid (M2PFHxDA)	91		75		10-206

# **INORGANICS & MISCELLANEOUS**

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

**SAMPLE RESULTS**

**Lab ID:** L2346005-01  
**Client ID:** SS-1  
**Sample Location:** 273 MAIN ST., BELFAST

**Date Collected:** 08/08/23 08:55  
**Date Received:** 08/09/23  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Mansfield Lab</b>										
Solids, Total	77.3		%	0.100	0.100	1	-	08/11/23 16:20	121,2540G	CLF



**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

**SAMPLE RESULTS**

**Lab ID:** L2346005-02  
**Client ID:** SS-2  
**Sample Location:** 273 MAIN ST., BELFAST

**Date Collected:** 08/08/23 09:00  
**Date Received:** 08/09/23  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Mansfield Lab</b>										
Solids, Total	94.7		%	0.100	0.100	1	-	08/11/23 16:20	121,2540G	CLF



**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

**SAMPLE RESULTS**

**Lab ID:** L2346005-03  
**Client ID:** SS-3  
**Sample Location:** 273 MAIN ST., BELFAST

**Date Collected:** 08/08/23 09:05  
**Date Received:** 08/09/23  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Mansfield Lab</b>										
Solids, Total	94.6		%	0.100	0.100	1	-	08/11/23 16:20	121,2540G	CLF



**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

**SAMPLE RESULTS**

**Lab ID:** L2346005-04  
**Client ID:** SS-4  
**Sample Location:** 273 MAIN ST., BELFAST

**Date Collected:** 08/08/23 09:10  
**Date Received:** 08/09/23  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Mansfield Lab</b>										
Solids, Total	98.0		%	0.100	0.100	1	-	08/11/23 16:20	121,2540G	CLF



**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

**SAMPLE RESULTS**

**Lab ID:** L2346005-05  
**Client ID:** SS-1 DUP  
**Sample Location:** 273 MAIN ST., BELFAST

**Date Collected:** 08/08/23 08:55  
**Date Received:** 08/09/23  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Mansfield Lab</b>										
Solids, Total	57.8		%	0.100	0.100	1	-	08/11/23 16:20	121,2540G	CLF



**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

**Method Blank Analysis**  
**Batch Quality Control**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab for sample(s): 01-05 Batch: WG1814945-1										
Solids, Total	99.9		%	0.100	0.100	1	-	08/11/23 16:20	121,2540G	CLF

**Lab Duplicate Analysis**  
*Batch Quality Control***Project Name:** EMDC/BELFAST**Project Number:** 0123-427-001/403**Lab Number:** L2346005**Report Date:** 08/17/23

<b>Parameter</b>	<b>Native Sample</b>	<b>Duplicate Sample</b>	<b>Units</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
General Chemistry - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1814945-2 QC Sample: L2346005-04 Client ID: SS-4						
Solids, Total	98.0	97.6	%	0		10

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005

**Report Date:** 08/17/23

### Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

#### Cooler Information

**Cooler**                      **Custody Seal**  
A                                      Absent

#### Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2346005-01A	Plastic 8oz unpreserved	A	NA		5.2	Y	Absent		A2-ME-537ISOTOPE-28+(14)
L2346005-01B	Plastic 2oz unpreserved for TS	A	NA		5.2	Y	Absent		A2-ME-TS(7)
L2346005-02A	Plastic 8oz unpreserved	A	NA		5.2	Y	Absent		A2-ME-537ISOTOPE-28+(14)
L2346005-02B	Plastic 2oz unpreserved for TS	A	NA		5.2	Y	Absent		A2-ME-TS(7)
L2346005-03A	Plastic 8oz unpreserved	A	NA		5.2	Y	Absent		A2-ME-537ISOTOPE-28+(14)
L2346005-03B	Plastic 2oz unpreserved for TS	A	NA		5.2	Y	Absent		A2-ME-TS(7)
L2346005-04A	Plastic 8oz unpreserved	A	NA		5.2	Y	Absent		A2-ME-537ISOTOPE-28+(14)
L2346005-04B	Plastic 2oz unpreserved for TS	A	NA		5.2	Y	Absent		A2-ME-TS(7)
L2346005-05A	Plastic 8oz unpreserved	A	NA		5.2	Y	Absent		A2-ME-537ISOTOPE-28+(14)
L2346005-05B	Plastic 2oz unpreserved for TS	A	NA		5.2	Y	Absent		A2-ME-TS(7)
L2346005-06A	Plastic 250ml unpreserved	A	NA		5.2	Y	Absent		A2-ME-537ISOTOPE-28+(14)
L2346005-06B	Plastic 250ml unpreserved	A	NA		5.2	Y	Absent		A2-ME-537ISOTOPE-28+(14)

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

Serial\_No:08172311:56  
**Lab Number:** L2346005  
**Report Date:** 08/17/23

### PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
<b>PERFLUOROALKYL CARBOXYLIC ACIDS (PFCAs)</b>		
Perfluorooctadecanoic Acid	PFODA	16517-11-6
Perfluorohexadecanoic Acid	PFHxDA	67905-19-5
Perfluorotetradecanoic Acid	PFTA/PFTeDA	376-06-7
Perfluorotridecanoic Acid	PFTrDA	72629-94-8
Perfluorododecanoic Acid	PFDoA	307-55-1
Perfluoroundecanoic Acid	PFUnA	2058-94-8
Perfluorodecanoic Acid	PFDA	335-76-2
Perfluorononanoic Acid	PFNA	375-95-1
Perfluorooctanoic Acid	PFOA	335-67-1
Perfluoroheptanoic Acid	PFHpA	375-85-9
Perfluorohexanoic Acid	PFHxA	307-24-4
Perfluoropentanoic Acid	PFPeA	2706-90-3
Perfluorobutanoic Acid	PFBA	375-22-4
<b>PERFLUOROALKYL SULFONIC ACIDS (PFSAs)</b>		
Perfluorododecanesulfonic Acid	PFDoDS/PFDoS	79780-39-5
Perfluorodecanesulfonic Acid	PFDS	335-77-3
Perfluorononanesulfonic Acid	PFNS	68259-12-1
Perfluorooctanesulfonic Acid	PFOS	1763-23-1
Perfluoroheptanesulfonic Acid	PFHpS	375-92-8
Perfluorohexanesulfonic Acid	PFHxS	355-46-4
Perfluoropentanesulfonic Acid	PFPeS	2706-91-4
Perfluorobutanesulfonic Acid	PFBS	375-73-5
Perfluoropropanesulfonic Acid	PFPrS	423-41-6
<b>FLUOROTELOMERS</b>		
1H,1H,2H,2H-Perfluorododecanesulfonic Acid	10:2FTS	120226-60-0
1H,1H,2H,2H-Perfluorodecanesulfonic Acid	8:2FTS	39108-34-4
1H,1H,2H,2H-Perfluorooctanesulfonic Acid	6:2FTS	27619-97-2
1H,1H,2H,2H-Perfluorohexanesulfonic Acid	4:2FTS	757124-72-4
<b>PERFLUOROALKANE SULFONAMIDES (FASAs)</b>		
Perfluorooctanesulfonamide	FOSA/PFOSA	754-91-6
N-Ethyl Perfluorooctane Sulfonamide	NEtFOSA	4151-50-2
N-Methyl Perfluorooctane Sulfonamide	NMeFOSA	31506-32-8
<b>PERFLUOROALKANE SULFONYL SUBSTANCES</b>		
N-Ethyl Perfluorooctanesulfonamido Ethanol	NEtFOSE	1691-99-2
N-Methyl Perfluorooctanesulfonamido Ethanol	NMeFOSE	24448-09-7
N-Ethyl Perfluorooctanesulfonamidoacetic Acid	NEtFOSAA	2991-50-6
N-Methyl Perfluorooctanesulfonamidoacetic Acid	NMeFOSAA	2355-31-9
<b>PER- and POLYFLUOROALKYL ETHER CARBOXYLIC ACIDS</b>		
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid	HFPO-DA	13252-13-6
4,8-Dioxa-3h-Perfluorononanoic Acid	ADONA	919005-14-4
<b>CHLORO-PERFLUOROALKYL SULFONIC ACIDS</b>		
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid	11Cl-PF3OUdS	763051-92-9
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid	9Cl-PF3ONS	756426-58-1
<b>PERFLUOROETHER SULFONIC ACIDS (PFESAs)</b>		
Perfluoro(2-Ethoxyethane)Sulfonic Acid	PFEEA	113507-82-7
<b>PERFLUOROETHER/POLYETHER CARBOXYLIC ACIDS (PFPCAs)</b>		
Perfluoro-3-Methoxypropanoic Acid	PFMPA	377-73-1
Perfluoro-4-Methoxybutanoic Acid	PFMBA	863090-89-5
Nonafluoro-3,6-Dioxaheptanoic Acid	NFDHA	151772-58-6

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

Serial\_No:08172311:56  
**Lab Number:** L2346005  
**Report Date:** 08/17/23

### PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
FLUOROTELOMER CARBOXYLIC ACIDS (FTCAs)		
3-Perfluoroheptyl Propanoic Acid	7:3FTCA	812-70-4
2H,2H,3H,3H-Perfluorooctanoic Acid	5:3FTCA	914637-49-3
3-Perfluoropropyl Propanoic Acid	3:3FTCA	356-02-5

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

## GLOSSARY

### Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)  Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

### Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

### Terms

**Analytical Method:** Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

**Chlordane:** The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

**Difference:** With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

**Final pH:** As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

**Frozen Date/Time:** With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

**Gasoline Range Organics (GRO):** Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

**Initial pH:** As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

**PAH Total:** With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

**PFAS Total:** With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

**Total:** With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

### Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

#### Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346005  
**Report Date:** 08/17/23

## REFERENCES

- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.
- 134 Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS) using Isotope Dilution. Alpha SOP 23528.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



## Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

### Westborough Facility

**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene

**EPA 625.1:** alpha-Terpineol

**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

### Mansfield Facility

**SM 2540D:** TSS.

**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

**Biological Tissue Matrix:** EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

### Westborough Facility:

#### Drinking Water

**EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

**EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**

**EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

**Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

#### Non-Potable Water

**SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

**SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

**EPA 624.1:** Volatile Halocarbons & Aromatics,

**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).

**Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

### Mansfield Facility:

#### Drinking Water

**EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.

**EPA 522, EPA 537.1.**

#### Non-Potable Water

**EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

**EPA 245.1** Hg.

**SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



# CHAIN OF CUSTODY

PAGE 1 OF 1

WESTBORO, MA  
TEL: 508-898-9220  
FAX: 508-898-9193

MANSFIELD, MA  
TEL: 508-822-9300  
FAX: 508-822-3288

Date Rec'd in Lab: 8/9/23

Report Information - Data Deliverables

FAX  EMAIL

ADEX  Add'l Deliverables

ALPHA Job #: L2346005

Billing Information

Same as Client info PO #:

Client Information

Client: Campbell Environmental

Address: 173 Gray Rd  
Barnstable, MA 01905

Phone: 207-253-1990

Fax:

Email: dkaye@campbellenvironmental.com

These samples have been previously analyzed by Alpha

Project Information

Project Name: EMDC/BelFast

Project Location: 273 Main St. BelFast

Project #: 0123-427-001/4p3

Project Manager: R Campbell

ALPHA Quote #:

Turn-Around Time

Standard  RUSH (only confirmed if pre-approved!)

Date Due: 08/23 Time:

Regulatory Requirements/Report Limits

State /Fed Program Criteria

Other Project Specific Requirements/Comments/Detection Limits:

ANALYSIS

PHAS Isotope Dilution

537.1 M

SAMPLE HANDLING

Filtration \_\_\_\_\_

Done

Not needed

Lab to do

Preservation

Lab to do

(Please specify below)

Sample Specific Comments

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials				
		Date	Time						
<u>6005-01</u>	<u>SS-1</u>	<u>8/8</u>	<u>8:55</u>	<u>S</u>	<u>[Signature]</u>	<u>X</u>			
<u>-02</u>	<u>SS-2</u>	<u>8/8</u>	<u>9:00</u>	<u>S</u>	<u>[Signature]</u>	<u>X</u>			
<u>-03</u>	<u>SS-3</u>	<u>8/8</u>	<u>9:05</u>	<u>S</u>	<u>[Signature]</u>	<u>X</u>			
<u>-04</u>	<u>SS-4</u>	<u>8/8</u>	<u>9:10</u>	<u>S</u>	<u>[Signature]</u>	<u>X</u>			
<u>-05</u>	<u>SS-1 Dup</u>	<u>8/8</u>	<u>8:55</u>	<u>S</u>	<u>[Signature]</u>	<u>X</u>			
<u>-06</u>	<u>Eq Blk 080823</u>	<u>8/8</u>	<u>15:00</u>	<u>A</u>	<u>[Signature]</u>	<u>X</u>			

Container Type

Preservative

Relinquished By: [Signature] Date/Time: 8/9/23 12:20

Received By: [Signature] Date/Time: 8/9/23 12:20

[Signature] AAL 8/9/23 15:00 [Signature] AAL 8/9/23 15:20

[Signature] AAL 8-9-23 19:45 [Signature] AAL 8/9/23 19:30

[Signature] AAL 8/9/23 20:50 [Signature] AAL 8/9/23 20:57

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.



## ANALYTICAL REPORT

Lab Number:	L2346817
Client:	Campbell Environmental Group 173 Gray Road Falmouth, ME 04105
ATTN:	Rich Campbell
Phone:	(207) 253-1990
Project Name:	EMDC/BELFAST
Project Number:	0123-427-001/403
Report Date:	08/30/23

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0825), DoD (L2474), FL (E87814), IL (200081), IN (C-MA-04), KY (KY98046), LA (85084), ME (MA00030), MD (350), MI (99110), NJ (MA015), NY (11627), NC (685), OH (CL106), OR (MA-0262), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #525-23-107-88708), USFWS (Permit #206964).

---

320 Forbes Boulevard, Mansfield, MA 02048-1806  
508-822-9300 (Fax) 508-822-3288 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2346817-01	SG-3	SOIL_VAPOR	273 MAIN ST. BELFAST	08/08/23 11:14	08/14/23
L2346817-02	SG-4	SOIL_VAPOR	273 MAIN ST. BELFAST	08/08/23 12:02	08/14/23
L2346817-03	SG-4 DUP	SOIL_VAPOR	273 MAIN ST. BELFAST	08/08/23 12:02	08/14/23
L2346817-04	FIRE STATION AMB	AIR	273 MAIN ST. BELFAST	08/08/23 11:10	08/14/23
L2346817-05	MUSEUM AMB	AIR	273 MAIN ST. BELFAST	08/11/23 09:31	08/14/23
L2346817-06	SG-1	SOIL_VAPOR	273 MAIN ST. BELFAST	08/11/23 09:31	08/14/23
L2346817-07	SG-2	SOIL_VAPOR	273 MAIN ST. BELFAST	08/11/23 09:59	08/14/23

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

**HOLD POLICY** - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

---

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

### Case Narrative (continued)

#### Volatile Organics in Air

Canisters were released from the laboratory on August 4, 2023. The canister certification results are provided as an addendum.

L2346817-01D: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

L2346817-06D: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

L2346817-06D2: The sample was re-analyzed on dilution in order to quantitate the results within the calibration range. The result(s) should be considered estimated, and are qualified with an E flag, for any compound(s) that exceeded the calibration range in the initial analysis. The re-analysis was performed only for the compound(s) that exceeded the calibration range.

L2346817-07D: The sample was re-analyzed on dilution in order to quantitate the results within the calibration range. The result(s) should be considered estimated, and are qualified with an E flag, for any compound(s) that exceeded the calibration range in the initial analysis. The re-analysis was performed only for the compound(s) that exceeded the calibration range.

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. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 08/30/23

**AIR**

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

### SAMPLE RESULTS

Lab ID: L2346817-01 D  
 Client ID: SG-3  
 Sample Location: 273 MAIN ST. BELFAST

Date Collected: 08/08/23 11:14  
 Date Received: 08/14/23  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 08/30/23 00:49  
 Analyst: RAY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Propylene	47.3	2.50	--	81.4	4.30	--		5
Dichlorodifluoromethane	12.3	1.00	--	60.8	4.94	--		5
Chloromethane	ND	1.00	--	ND	2.07	--		5
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	1.00	--	ND	6.99	--		5
Vinyl chloride	1.36	1.00	--	3.48	2.56	--		5
1,3-Butadiene	ND	1.00	--	ND	2.21	--		5
Bromomethane	ND	1.00	--	ND	3.88	--		5
Chloroethane	ND	1.00	--	ND	2.64	--		5
Ethyl Alcohol	25.9	25.0	--	48.8	47.1	--		5
Vinyl bromide	ND	1.00	--	ND	4.37	--		5
Acetone	56.8	5.00	--	135	11.9	--		5
Trichlorofluoromethane	ND	1.00	--	ND	5.62	--		5
iso-Propyl Alcohol	4.59	2.50	--	11.3	6.15	--		5
1,1-Dichloroethene	ND	1.00	--	ND	3.96	--		5
Methylene chloride	ND	2.50	--	ND	8.69	--		5
3-Chloropropene	ND	1.00	--	ND	3.13	--		5
Carbon disulfide	ND	1.00	--	ND	3.11	--		5
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.00	--	ND	7.66	--		5
trans-1,2-Dichloroethene	ND	1.00	--	ND	3.96	--		5
1,1-Dichloroethane	ND	1.00	--	ND	4.05	--		5
Methyl tert butyl ether	ND	1.00	--	ND	3.61	--		5
Vinyl acetate	ND	5.00	--	ND	17.6	--		5
2-Butanone	2.80	2.50	--	8.26	7.37	--		5



**Project Name:** EMDC/BELFAST**Lab Number:** L2346817**Project Number:** 0123-427-001/403**Report Date:** 08/30/23**SAMPLE RESULTS**

Lab ID: L2346817-01 D  
 Client ID: SG-3  
 Sample Location: 273 MAIN ST. BELFAST

Date Collected: 08/08/23 11:14  
 Date Received: 08/14/23  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
cis-1,2-Dichloroethene	3.92	1.00	--	15.5	3.96	--		5
Ethyl Acetate	ND	2.50	--	ND	9.01	--		5
Chloroform	ND	1.00	--	ND	4.88	--		5
Tetrahydrofuran	ND	2.50	--	ND	7.37	--		5
1,2-Dichloroethane	ND	1.00	--	ND	4.05	--		5
n-Hexane	72.9	1.00	--	257	3.52	--		5
1,1,1-Trichloroethane	ND	1.00	--	ND	5.46	--		5
Benzene	1.87	1.00	--	5.97	3.19	--		5
Carbon tetrachloride	ND	1.00	--	ND	6.29	--		5
Cyclohexane	18.9	1.00	--	65.1	3.44	--		5
1,2-Dichloropropane	ND	1.00	--	ND	4.62	--		5
Xylene (Total)	ND	1.00	--	ND	4.34	--		5
Bromodichloromethane	ND	1.00	--	ND	6.70	--		5
1,4-Dioxane	ND	1.00	--	ND	3.60	--		5
Trichloroethene	ND	1.00	--	ND	5.37	--		5
2,2,4-Trimethylpentane	476	1.00	--	2220	4.67	--		5
Heptane	14.3	1.00	--	58.6	4.10	--		5
cis-1,3-Dichloropropene	ND	1.00	--	ND	4.54	--		5
4-Methyl-2-pentanone	8.37	2.50	--	34.3	10.2	--		5
trans-1,3-Dichloropropene	ND	1.00	--	ND	4.54	--		5
1,1,2-Trichloroethane	ND	1.00	--	ND	5.46	--		5
1,2-Dichloroethene (total)	3.92	1.00	--	15.5	3.96	--		5
Toluene	2.60	1.00	--	9.80	3.77	--		5
2-Hexanone	ND	1.00	--	ND	4.10	--		5
1,3-Dichloropropene, Total	ND	1.00	--	ND	4.54	--		5
Dibromochloromethane	ND	1.00	--	ND	8.52	--		5



**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

### SAMPLE RESULTS

Lab ID: L2346817-01 D  
 Client ID: SG-3  
 Sample Location: 273 MAIN ST. BELFAST

Date Collected: 08/08/23 11:14  
 Date Received: 08/14/23  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
1,2-Dibromoethane	ND	1.00	--	ND	7.69	--		5
Tetrachloroethene	ND	1.00	--	ND	6.78	--		5
Chlorobenzene	ND	1.00	--	ND	4.61	--		5
Ethylbenzene	ND	1.00	--	ND	4.34	--		5
p/m-Xylene	ND	2.00	--	ND	8.69	--		5
Bromoform	ND	1.00	--	ND	10.3	--		5
Styrene	ND	1.00	--	ND	4.26	--		5
1,1,2,2-Tetrachloroethane	ND	1.00	--	ND	6.87	--		5
o-Xylene	ND	1.00	--	ND	4.34	--		5
4-Ethyltoluene	ND	1.00	--	ND	4.92	--		5
1,3,5-Trimethylbenzene	ND	1.00	--	ND	4.92	--		5
1,2,4-Trimethylbenzene	ND	1.00	--	ND	4.92	--		5
Benzyl chloride	ND	1.00	--	ND	5.18	--		5
1,3-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,4-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,2-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,2,4-Trichlorobenzene	ND	1.00	--	ND	7.42	--		5
Naphthalene	ND	1.00	--	ND	5.24	--		5
Hexachlorobutadiene	ND	1.00	--	ND	10.7	--		5

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	85		60-140
Bromochloromethane	78		60-140
chlorobenzene-d5	76		60-140



**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

### SAMPLE RESULTS

Lab ID: L2346817-02  
 Client ID: SG-4  
 Sample Location: 273 MAIN ST. BELFAST

Date Collected: 08/08/23 12:02  
 Date Received: 08/14/23  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 08/30/23 01:29  
 Analyst: RAY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Propylene	42.0	0.500	--	72.3	0.861	--		1
Dichlorodifluoromethane	0.670	0.200	--	3.31	0.989	--		1
Chloromethane	0.727	0.200	--	1.50	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	3.73	0.200	--	8.25	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	20.2	5.00	--	38.1	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	382	1.00	--	907	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	8.69	0.500	--	21.4	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	5.49	0.200	--	17.1	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	19.0	0.500	--	56.0	1.47	--		1



**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

### SAMPLE RESULTS

Lab ID: L2346817-02  
 Client ID: SG-4  
 Sample Location: 273 MAIN ST. BELFAST

Date Collected: 08/08/23 12:02  
 Date Received: 08/14/23  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	4.70	0.500	--	13.9	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	29.6	0.200	--	104	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	1.97	0.200	--	6.29	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	6.92	0.200	--	23.8	0.688	--		1
Xylene (Total)	3.27	0.200	--	14.2	0.869	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	0.393	0.200	--	1.42	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	74.1	0.200	--	346	0.934	--		1
Heptane	11.9	0.200	--	48.8	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,2-Dichloroethene (total)	ND	0.200	--	ND	0.793	--		1
Toluene	3.69	0.200	--	13.9	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
1,3-Dichloropropene, Total	ND	0.200	--	ND	0.908	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1



**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

### SAMPLE RESULTS

Lab ID: L2346817-02  
 Client ID: SG-4  
 Sample Location: 273 MAIN ST. BELFAST

Date Collected: 08/08/23 12:02  
 Date Received: 08/14/23  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.732	0.200	--	3.18	0.869	--		1
p/m-Xylene	2.37	0.400	--	10.3	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	0.349	0.200	--	1.49	0.852	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.904	0.200	--	3.93	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	0.267	0.200	--	1.31	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	0.622	0.200	--	3.26	1.05	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	87		60-140
Bromochloromethane	80		60-140
chlorobenzene-d5	79		60-140



**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

### SAMPLE RESULTS

Lab ID: L2346817-03  
 Client ID: SG-4 DUP  
 Sample Location: 273 MAIN ST. BELFAST

Date Collected: 08/08/23 12:02  
 Date Received: 08/14/23  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 08/30/23 02:09  
 Analyst: RAY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Propylene	34.3	0.500	--	59.0	0.861	--		1
Dichlorodifluoromethane	0.626	0.200	--	3.10	0.989	--		1
Chloromethane	0.733	0.200	--	1.51	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	3.10	0.200	--	6.86	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	15.4	5.00	--	29.0	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	335	1.00	--	796	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	7.19	0.500	--	17.7	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	4.48	0.200	--	14.0	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	30.6	0.500	--	90.2	1.47	--		1



**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

### SAMPLE RESULTS

Lab ID: L2346817-03  
 Client ID: SG-4 DUP  
 Sample Location: 273 MAIN ST. BELFAST

Date Collected: 08/08/23 12:02  
 Date Received: 08/14/23  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	8.49	0.500	--	25.0	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	24.1	0.200	--	84.9	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	1.64	0.200	--	5.24	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	5.58	0.200	--	19.2	0.688	--		1
Xylene (Total)	2.98	0.200	--	12.9	0.869	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	63.1	0.200	--	295	0.934	--		1
Heptane	10.1	0.200	--	41.4	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,2-Dichloroethene (total)	ND	0.200	--	ND	0.793	--		1
Toluene	3.15	0.200	--	11.9	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
1,3-Dichloropropene, Total	ND	0.200	--	ND	0.908	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1



**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

### SAMPLE RESULTS

Lab ID: L2346817-03  
 Client ID: SG-4 DUP  
 Sample Location: 273 MAIN ST. BELFAST

Date Collected: 08/08/23 12:02  
 Date Received: 08/14/23  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.674	0.200	--	2.93	0.869	--		1
p/m-Xylene	2.14	0.400	--	9.30	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	0.274	0.200	--	1.17	0.852	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.840	0.200	--	3.65	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	0.299	0.200	--	1.47	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	87		60-140
Bromochloromethane	78		60-140
chlorobenzene-d5	78		60-140



**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

### SAMPLE RESULTS

Lab ID: L2346817-04  
 Client ID: FIRE STATION AMB  
 Sample Location: 273 MAIN ST. BELFAST

Date Collected: 08/08/23 11:10  
 Date Received: 08/14/23  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15  
 Analytical Date: 08/29/23 18:55  
 Analyst: RAY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Propylene	ND	0.500	--	ND	0.861	--		1
Dichlorodifluoromethane	0.459	0.200	--	2.27	0.989	--		1
Chloromethane	0.422	0.200	--	0.871	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	26.5	5.00	--	49.9	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	13.6	1.00	--	32.3	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	11.3	0.500	--	33.3	1.47	--		1



**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

### SAMPLE RESULTS

Lab ID: L2346817-04  
 Client ID: FIRE STATION AMB  
 Sample Location: 273 MAIN ST. BELFAST

Date Collected: 08/08/23 11:10  
 Date Received: 08/14/23  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	4.39	0.500	--	12.9	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	6.29	0.200	--	22.2	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	1.24	0.200	--	3.96	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	8.96	0.200	--	30.8	0.688	--		1
Xylene (Total)	10.3	0.200	--	44.7	0.869	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	4.63	0.200	--	21.6	0.934	--		1
Heptane	2.29	0.200	--	9.38	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,2-Dichloroethene (total)	ND	0.200	--	ND	0.793	--		1
Toluene	9.69	0.200	--	36.5	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
1,3-Dichloropropene, Total	ND	0.200	--	ND	0.908	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1



**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

### SAMPLE RESULTS

Lab ID: L2346817-04  
 Client ID: FIRE STATION AMB  
 Sample Location: 273 MAIN ST. BELFAST

Date Collected: 08/08/23 11:10  
 Date Received: 08/14/23  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	1.96	0.200	--	8.51	0.869	--		1
p/m-Xylene	7.33	0.400	--	31.8	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	2.97	0.200	--	12.9	0.869	--		1
4-Ethyltoluene	0.620	0.200	--	3.05	0.983	--		1
1,3,5-Trimethylbenzene	0.686	0.200	--	3.37	0.983	--		1
1,2,4-Trimethylbenzene	2.46	0.200	--	12.1	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	100		60-140
Bromochloromethane	100		60-140
chlorobenzene-d5	101		60-140



**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

### SAMPLE RESULTS

Lab ID: L2346817-05  
 Client ID: MUSEUM AMB  
 Sample Location: 273 MAIN ST. BELFAST

Date Collected: 08/11/23 09:31  
 Date Received: 08/14/23  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15  
 Analytical Date: 08/29/23 19:35  
 Analyst: RAY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Propylene	ND	0.500	--	ND	0.861	--		1
Dichlorodifluoromethane	0.454	0.200	--	2.24	0.989	--		1
Chloromethane	0.446	0.200	--	0.921	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	12.3	1.00	--	29.2	2.38	--		1
Trichlorofluoromethane	0.207	0.200	--	1.16	1.12	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	17.9	0.500	--	52.8	1.47	--		1



**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

### SAMPLE RESULTS

Lab ID: L2346817-05  
 Client ID: MUSEUM AMB  
 Sample Location: 273 MAIN ST. BELFAST

Date Collected: 08/11/23 09:31  
 Date Received: 08/14/23  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	4.76	0.500	--	14.0	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	11.6	0.200	--	40.9	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
Xylene (Total)	ND	0.200	--	ND	0.869	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,2-Dichloroethene (total)	ND	0.200	--	ND	0.793	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
1,3-Dichloropropene, Total	ND	0.200	--	ND	0.908	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1



**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

### SAMPLE RESULTS

Lab ID: L2346817-05  
 Client ID: MUSEUM AMB  
 Sample Location: 273 MAIN ST. BELFAST

Date Collected: 08/11/23 09:31  
 Date Received: 08/14/23  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	98		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	99		60-140



**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

### SAMPLE RESULTS

Lab ID: L2346817-06 D  
 Client ID: SG-1  
 Sample Location: 273 MAIN ST. BELFAST

Date Collected: 08/11/23 09:31  
 Date Received: 08/14/23  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 08/30/23 02:46  
 Analyst: RAY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Propylene	7.08	1.78	--	12.2	3.06	--		3.571
Dichlorodifluoromethane	ND	0.714	--	ND	3.53	--		3.571
Chloromethane	ND	0.714	--	ND	1.47	--		3.571
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.714	--	ND	4.99	--		3.571
Vinyl chloride	ND	0.714	--	ND	1.83	--		3.571
1,3-Butadiene	0.960	0.714	--	2.12	1.58	--		3.571
Bromomethane	ND	0.714	--	ND	2.77	--		3.571
Chloroethane	ND	0.714	--	ND	1.88	--		3.571
Ethyl Alcohol	94.5	17.8	--	178	33.5	--		3.571
Vinyl bromide	ND	0.714	--	ND	3.12	--		3.571
Acetone	36.5	3.57	--	86.7	8.48	--		3.571
Trichlorofluoromethane	ND	0.714	--	ND	4.01	--		3.571
iso-Propyl Alcohol	8.23	1.78	--	20.2	4.38	--		3.571
1,1-Dichloroethene	ND	0.714	--	ND	2.83	--		3.571
Methylene chloride	ND	1.78	--	ND	6.18	--		3.571
3-Chloropropene	ND	0.714	--	ND	2.23	--		3.571
Carbon disulfide	ND	0.714	--	ND	2.22	--		3.571
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.714	--	ND	5.47	--		3.571
trans-1,2-Dichloroethene	ND	0.714	--	ND	2.83	--		3.571
1,1-Dichloroethane	ND	0.714	--	ND	2.89	--		3.571
Methyl tert butyl ether	ND	0.714	--	ND	2.57	--		3.571
Vinyl acetate	ND	3.57	--	ND	12.6	--		3.571
2-Butanone	14.2	1.78	--	41.9	5.25	--		3.571



**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

### SAMPLE RESULTS

Lab ID: L2346817-06 D  
 Client ID: SG-1  
 Sample Location: 273 MAIN ST. BELFAST

Date Collected: 08/11/23 09:31  
 Date Received: 08/14/23  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
cis-1,2-Dichloroethene	ND	0.714	--	ND	2.83	--		3.571
Ethyl Acetate	ND	1.78	--	ND	6.41	--		3.571
Chloroform	ND	0.714	--	ND	3.49	--		3.571
Tetrahydrofuran	4.90	1.78	--	14.5	5.25	--		3.571
1,2-Dichloroethane	ND	0.714	--	ND	2.89	--		3.571
n-Hexane	374	0.714	--	1320	2.52	--	E	3.571
1,1,1-Trichloroethane	ND	0.714	--	ND	3.90	--		3.571
Benzene	0.743	0.714	--	2.37	2.28	--		3.571
Carbon tetrachloride	ND	0.714	--	ND	4.49	--		3.571
Cyclohexane	2.87	0.714	--	9.88	2.46	--		3.571
1,2-Dichloropropane	ND	0.714	--	ND	3.30	--		3.571
Xylene (Total)	ND	0.714	--	ND	3.10	--		3.571
Bromodichloromethane	ND	0.714	--	ND	4.78	--		3.571
1,4-Dioxane	ND	0.714	--	ND	2.57	--		3.571
Trichloroethene	ND	0.714	--	ND	3.84	--		3.571
2,2,4-Trimethylpentane	ND	0.714	--	ND	3.33	--		3.571
Heptane	1.12	0.714	--	4.59	2.93	--		3.571
cis-1,3-Dichloropropene	ND	0.714	--	ND	3.24	--		3.571
4-Methyl-2-pentanone	ND	1.78	--	ND	7.29	--		3.571
trans-1,3-Dichloropropene	ND	0.714	--	ND	3.24	--		3.571
1,1,2-Trichloroethane	ND	0.714	--	ND	3.90	--		3.571
1,2-Dichloroethene (total)	ND	0.714	--	ND	2.83	--		3.571
Toluene	2.04	0.714	--	7.69	2.69	--		3.571
2-Hexanone	ND	0.714	--	ND	2.93	--		3.571
1,3-Dichloropropene, Total	ND	0.714	--	ND	3.24	--		3.571
Dibromochloromethane	ND	0.714	--	ND	6.08	--		3.571



**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

### SAMPLE RESULTS

Lab ID: L2346817-06 D  
 Client ID: SG-1  
 Sample Location: 273 MAIN ST. BELFAST

Date Collected: 08/11/23 09:31  
 Date Received: 08/14/23  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
1,2-Dibromoethane	ND	0.714	--	ND	5.49	--		3.571
Tetrachloroethene	ND	0.714	--	ND	4.84	--		3.571
Chlorobenzene	ND	0.714	--	ND	3.29	--		3.571
Ethylbenzene	ND	0.714	--	ND	3.10	--		3.571
p/m-Xylene	ND	1.43	--	ND	6.21	--		3.571
Bromoform	ND	0.714	--	ND	7.38	--		3.571
Styrene	ND	0.714	--	ND	3.04	--		3.571
1,1,2,2-Tetrachloroethane	ND	0.714	--	ND	4.90	--		3.571
o-Xylene	ND	0.714	--	ND	3.10	--		3.571
4-Ethyltoluene	ND	0.714	--	ND	3.51	--		3.571
1,3,5-Trimethylbenzene	ND	0.714	--	ND	3.51	--		3.571
1,2,4-Trimethylbenzene	ND	0.714	--	ND	3.51	--		3.571
Benzyl chloride	ND	0.714	--	ND	3.70	--		3.571
1,3-Dichlorobenzene	ND	0.714	--	ND	4.29	--		3.571
1,4-Dichlorobenzene	ND	0.714	--	ND	4.29	--		3.571
1,2-Dichlorobenzene	ND	0.714	--	ND	4.29	--		3.571
1,2,4-Trichlorobenzene	ND	0.714	--	ND	5.30	--		3.571
Naphthalene	ND	0.714	--	ND	3.74	--		3.571
Hexachlorobutadiene	ND	0.714	--	ND	7.62	--		3.571

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	84		60-140
Bromochloromethane	76		60-140
chlorobenzene-d5	74		60-140



**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

### SAMPLE RESULTS

Lab ID: L2346817-06 D2  
 Client ID: SG-1  
 Sample Location: 273 MAIN ST. BELFAST

Date Collected: 08/11/23 09:31  
 Date Received: 08/14/23  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 08/30/23 07:25  
 Analyst: RAY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
n-Hexane	373	1.43	--	1310	5.04	--		7.143

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	88		60-140
Bromochloromethane	82		60-140
chlorobenzene-d5	81		60-140



**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

### SAMPLE RESULTS

Lab ID: L2346817-07  
 Client ID: SG-2  
 Sample Location: 273 MAIN ST. BELFAST

Date Collected: 08/11/23 09:59  
 Date Received: 08/14/23  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 08/30/23 03:26  
 Analyst: RAY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Propylene	8.98	0.500	--	15.5	0.861	--		1
Dichlorodifluoromethane	0.461	0.200	--	2.28	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	1.26	0.200	--	2.79	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	33.0	5.00	--	62.2	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	43.0	1.00	--	102	2.38	--		1
Trichlorofluoromethane	0.202	0.200	--	1.14	1.12	--		1
iso-Propyl Alcohol	1.78	0.500	--	4.38	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	0.338	0.200	--	1.05	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	8.04	0.500	--	23.7	1.47	--		1



**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

### SAMPLE RESULTS

Lab ID: L2346817-07  
 Client ID: SG-2  
 Sample Location: 273 MAIN ST. BELFAST

Date Collected: 08/11/23 09:59  
 Date Received: 08/14/23  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.608	0.200	--	2.97	0.977	--		1
Tetrahydrofuran	1.02	0.500	--	3.01	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	122	0.200	--	430	0.705	--	E	1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.917	0.200	--	2.93	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	1.09	0.200	--	3.75	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Xylene (Total)	0.664	0.200	--	2.88	0.869	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.656	0.200	--	2.69	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	0.534	0.500	--	2.19	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,2-Dichloroethene (total)	ND	0.200	--	ND	0.793	--		1
Toluene	0.902	0.200	--	3.40	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
1,3-Dichloropropene, Total	ND	0.200	--	ND	0.908	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1



**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

### SAMPLE RESULTS

Lab ID: L2346817-07  
 Client ID: SG-2  
 Sample Location: 273 MAIN ST. BELFAST

Date Collected: 08/11/23 09:59  
 Date Received: 08/14/23  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.463	0.400	--	2.01	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	0.226	0.200	--	0.962	0.852	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.201	0.200	--	0.873	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	86		60-140
Bromochloromethane	78		60-140
chlorobenzene-d5	77		60-140



**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

### SAMPLE RESULTS

Lab ID: L2346817-07 D  
 Client ID: SG-2  
 Sample Location: 273 MAIN ST. BELFAST

Date Collected: 08/11/23 09:59  
 Date Received: 08/14/23  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 08/30/23 08:02  
 Analyst: RAY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
n-Hexane	132	0.500	--	465	1.76	--		2.5

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	91		60-140
Bromochloromethane	85		60-140
chlorobenzene-d5	85		60-140



**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15  
Analytical Date: 08/29/23 17:35

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-07 Batch: WG1821607-4								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15  
Analytical Date: 08/29/23 17:35

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-07 Batch: WG1821607-4								
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylene (Total)	ND	0.200	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Isopropyl Ether	ND	0.200	--	ND	0.836	--		1
Ethyl-Tert-Butyl-Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	0.200	--	ND	0.793	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,3-Dichloropropene, Total	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15  
Analytical Date: 08/29/23 17:35

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-07 Batch: WG1821607-4								
Cyclohexane	ND	0.200	--	ND	0.688	--		1
Tertiary-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl Acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15  
Analytical Date: 08/29/23 17:35

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-07 Batch: WG1821607-4								
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane (C9)	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
o-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
p-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane (C10)	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15  
Analytical Date: 08/29/23 17:35

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-07 Batch: WG1821607-4								
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane (C12)	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-07 Batch: WG1821607-3								
Chlorodifluoromethane	85		-		70-130	-		
Propylene	101		-		70-130	-		
Propane	84		-		70-130	-		
Dichlorodifluoromethane	89		-		70-130	-		
Chloromethane	80		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	99		-		70-130	-		
Methanol	92		-		70-130	-		
Vinyl chloride	101		-		70-130	-		
1,3-Butadiene	91		-		70-130	-		
Butane	85		-		70-130	-		
Bromomethane	98		-		70-130	-		
Chloroethane	99		-		70-130	-		
Ethyl Alcohol	90		-		40-160	-		
Dichlorofluoromethane	88		-		70-130	-		
Vinyl bromide	80		-		70-130	-		
Acrolein	85		-		60-113	-		
Acetone	89		-		40-160	-		
Acetonitrile	94		-		70-130	-		
Trichlorofluoromethane	97		-		70-130	-		
iso-Propyl Alcohol	78		-		40-160	-		
Acrylonitrile	104		-		70-130	-		
Pentane	75		-		70-130	-		
Ethyl ether	97		-		70-130	-		

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-07 Batch: WG1821607-3								
1,1-Dichloroethene	95		-		70-130	-		
tert-Butyl Alcohol	91		-		70-130	-		
Methylene chloride	98		-		70-130	-		
3-Chloropropene	88		-		70-130	-		
Carbon disulfide	97		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	93		-		70-130	-		
trans-1,2-Dichloroethene	91		-		70-130	-		
1,1-Dichloroethane	90		-		70-130	-		
Methyl tert butyl ether	81		-		70-130	-		
Vinyl acetate	76		-		70-130	-		
2-Butanone	81		-		70-130	-		
cis-1,2-Dichloroethene	98		-		70-130	-		
Ethyl Acetate	106		-		70-130	-		
Chloroform	99		-		70-130	-		
Tetrahydrofuran	79		-		70-130	-		
2,2-Dichloropropane	86		-		70-130	-		
1,2-Dichloroethane	80		-		70-130	-		
n-Hexane	104		-		70-130	-		
Isopropyl Ether	91		-		70-130	-		
Ethyl-Tert-Butyl-Ether	88		-		70-130	-		
1,2-Dichloroethene (total)	94		-			-		
1,2-Dichloroethene (total)	94		-			-		
1,1,1-Trichloroethane	82		-		70-130	-		

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-07 Batch: WG1821607-3								
1,1-Dichloropropene	95		-		70-130	-		
Benzene	98		-		70-130	-		
Carbon tetrachloride	93		-		70-130	-		
Cyclohexane	107		-		70-130	-		
Tertiary-Amyl Methyl Ether	85		-		70-130	-		
Dibromomethane	95		-		70-130	-		
1,2-Dichloropropane	94		-		70-130	-		
Bromodichloromethane	104		-		70-130	-		
1,4-Dioxane	97		-		70-130	-		
Trichloroethene	96		-		70-130	-		
2,2,4-Trimethylpentane	106		-		70-130	-		
Methyl Methacrylate	96		-		40-160	-		
Heptane	83		-		70-130	-		
cis-1,3-Dichloropropene	98		-		70-130	-		
4-Methyl-2-pentanone	85		-		70-130	-		
trans-1,3-Dichloropropene	93		-		70-130	-		
1,1,2-Trichloroethane	96		-		70-130	-		
Toluene	89		-		70-130	-		
1,3-Dichloropropane	90		-		70-130	-		
2-Hexanone	81		-		70-130	-		
Dibromochloromethane	103		-		70-130	-		
1,2-Dibromoethane	98		-		70-130	-		
Butyl Acetate	93		-		70-130	-		

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-07 Batch: WG1821607-3								
Octane	93		-		70-130	-		
Tetrachloroethene	91		-		70-130	-		
1,1,1,2-Tetrachloroethane	93		-		70-130	-		
Chlorobenzene	97		-		70-130	-		
Ethylbenzene	90		-		70-130	-		
p/m-Xylene	92		-		70-130	-		
Bromoform	108		-		70-130	-		
Styrene	96		-		70-130	-		
1,1,2,2-Tetrachloroethane	106		-		70-130	-		
o-Xylene	94		-		70-130	-		
1,2,3-Trichloropropane	96		-		70-130	-		
Nonane (C9)	83		-		70-130	-		
Isopropylbenzene	97		-		70-130	-		
Bromobenzene	97		-		70-130	-		
o-Chlorotoluene	92		-		70-130	-		
n-Propylbenzene	93		-		70-130	-		
p-Chlorotoluene	94		-		70-130	-		
4-Ethyltoluene	94		-		70-130	-		
1,3,5-Trimethylbenzene	93		-		70-130	-		
tert-Butylbenzene	92		-		70-130	-		
1,2,4-Trimethylbenzene	96		-		70-130	-		
Decane (C10)	99		-		70-130	-		
Benzyl chloride	101		-		70-130	-		

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-07 Batch: WG1821607-3								
1,3-Dichlorobenzene	97		-		70-130	-		
1,4-Dichlorobenzene	95		-		70-130	-		
sec-Butylbenzene	94		-		70-130	-		
p-Isopropyltoluene	86		-		70-130	-		
1,2-Dichlorobenzene	95		-		70-130	-		
n-Butylbenzene	94		-		70-130	-		
1,2-Dibromo-3-chloropropane	97		-		70-130	-		
Undecane	105		-		70-130	-		
Dodecane (C12)	102		-		70-130	-		
1,2,4-Trichlorobenzene	87		-		70-130	-		
Naphthalene	93		-		70-130	-		
1,2,3-Trichlorobenzene	91		-		70-130	-		
Hexachlorobutadiene	80		-		70-130	-		

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

**Canister and Flow Controller Information**

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2346817-01	SG-3	0672	SV200	08/04/23	431402		-	-	-	Pass	217	209	4
L2346817-01	SG-3	2798	2.7L Can	08/04/23	431402	L2343863-06	Pass	-29.7	-4.9	-	-	-	-
L2346817-02	SG-4	0704	SV200	08/04/23	431402		-	-	-	Pass	215	210	2
L2346817-02	SG-4	537	2.7L Can	08/04/23	431402	L2343863-06	Pass	-29.6	-4.6	-	-	-	-
L2346817-03	SG-4 DUP	0504	SV200	08/04/23	431402		-	-	-	Pass	215	212	1
L2346817-03	SG-4 DUP	388	2.7L Can	08/04/23	431402	L2343863-06	Pass	-29.6	-5.0	-	-	-	-
L2346817-04	FIRE STATION AMB	01466	Flow 1	08/04/23	431402		-	-	-	Pass	200	408	68
L2346817-04	FIRE STATION AMB	478	2.7L Can	08/04/23	431402	L2343863-06	Pass	-29.8	-5.1	-	-	-	-
L2346817-05	MUSEUM AMB	01638	Flow 1	08/04/23	431402		-	-	-	Pass	200	205	2
L2346817-05	MUSEUM AMB	2510	2.7L can	08/04/23	431402	L2343863-06	Pass	-29.8	-6.1	-	-	-	-
L2346817-06	SG-1	0689	SV200	08/04/23	431402		-	-	-	Pass	212	209	1
L2346817-06	SG-1	403	2.7L Can	08/04/23	431402	L2343863-06	Pass	-29.8	-5.7	-	-	-	-
L2346817-07	SG-2	0686	SV200	08/04/23	431402		-	-	-	Pass	216	212	2
L2346817-07	SG-2	109	2.7L Can	08/04/23	431402	L2343863-06	Pass	-29.7	-4.8	-	-	-	-



**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2343863  
**Report Date:** 08/30/23

### Air Canister Certification Results

Lab ID: L2343863-06  
 Client ID: CAN 3455 SHELF 19  
 Sample Location:

Date Collected: 07/31/23 14:00  
 Date Received: 07/31/23  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15  
 Analytical Date: 08/01/23 20:21  
 Analyst: RAY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2343863  
**Report Date:** 08/30/23

### Air Canister Certification Results

Lab ID: L2343863-06  
 Client ID: CAN 3455 SHELF 19  
 Sample Location:

Date Collected: 07/31/23 14:00  
 Date Received: 07/31/23  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2343863  
**Report Date:** 08/30/23

### Air Canister Certification Results

Lab ID: L2343863-06  
 Client ID: CAN 3455 SHELF 19  
 Sample Location:

Date Collected: 07/31/23 14:00  
 Date Received: 07/31/23  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1

**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2343863  
**Report Date:** 08/30/23

### Air Canister Certification Results

Lab ID: L2343863-06  
 Client ID: CAN 3455 SHELF 19  
 Sample Location:

Date Collected: 07/31/23 14:00  
 Date Received: 07/31/23  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2343863  
**Report Date:** 08/30/23

### Air Canister Certification Results

Lab ID: L2343863-06  
 Client ID: CAN 3455 SHELF 19  
 Sample Location:

Date Collected: 07/31/23 14:00  
 Date Received: 07/31/23  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	81		60-140
Bromochloromethane	84		60-140
chlorobenzene-d5	87		60-140



**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2343863  
**Report Date:** 08/30/23

### Air Canister Certification Results

Lab ID: L2343863-06  
 Client ID: CAN 3455 SHELF 19  
 Sample Location:

Date Collected: 07/31/23 14:00  
 Date Received: 07/31/23  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 08/01/23 20:21  
 Analyst: RAY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2343863  
**Report Date:** 08/30/23

### Air Canister Certification Results

Lab ID: L2343863-06  
 Client ID: CAN 3455 SHELF 19  
 Sample Location:

Date Collected: 07/31/23 14:00  
 Date Received: 07/31/23  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2343863  
**Report Date:** 08/30/23

### Air Canister Certification Results

Lab ID: L2343863-06  
 Client ID: CAN 3455 SHELF 19  
 Sample Location:

Date Collected: 07/31/23 14:00  
 Date Received: 07/31/23  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	79		60-140
bromochloromethane	82		60-140
chlorobenzene-d5	85		60-140

**Project Name:** EMDC/BELFAST**Lab Number:** L2346817**Project Number:** 0123-427-001/403**Report Date:** 08/30/23**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

**Cooler Information**

<b>Cooler</b>	<b>Custody Seal</b>
NA	Absent

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2346817-01A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2346817-02A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2346817-03A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2346817-04A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2346817-05A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2346817-06A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2346817-07A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

## GLOSSARY

### Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)  Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report



**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

### Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

### Terms

**Analytical Method:** Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

**Chlordane:** The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

**Difference:** With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

**Final pH:** As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

**Frozen Date/Time:** With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

**Gasoline Range Organics (GRO):** Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

**Initial pH:** As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

**PAH Total:** With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

**PFAS Total:** With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

**Total:** With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

### Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

#### **Data Qualifiers**

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

**Project Name:** EMDC/BELFAST  
**Project Number:** 0123-427-001/403

**Lab Number:** L2346817  
**Report Date:** 08/30/23

## REFERENCES

- 48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



## Certification Information

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The following analytes are not included in our Primary NELAP Scope of Accreditation:

### Westborough Facility

**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene

**EPA 625.1:** alpha-Terpineol

**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

### Mansfield Facility

**SM 2540D:** TSS.

**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

**Biological Tissue Matrix:** EPA 3050B

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The following analytes are included in our Massachusetts DEP Scope of Accreditation

### Westborough Facility:

#### Drinking Water

**EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

**EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**

**EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

**Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

#### Non-Potable Water

**SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

**SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

**EPA 624.1:** Volatile Halocarbons & Aromatics,

**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).

**Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

### Mansfield Facility:

#### Drinking Water

**EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.

**EPA 522, EPA 537.1.**

#### Non-Potable Water

**EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

**EPA 245.1** Hg.

**SM2340B**

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For a complete listing of analytes and methods, please contact your Alpha Project Manager.

# AIR ANALYSIS

Serial No: 08302316:12



CHAIN OF CUSTODY

320 Forbes Blvd, Mansfield, MA 02048  
TEL: 508-822-9300 FAX: 508-822-3288

PAGE \_\_\_\_\_ OF \_\_\_\_\_

Date Rec'd in Lab: 8-14-23

ALPHA Job #: L2346817

### Client Information

Client: Campbell Environmental  
Address: 173 Gray Rd  
Falmouth, ME 04105  
Phone: 207-253-1990

### Project Information

Project Name: ENDC/BelFast  
Project Location: 273 Main St. BelFast  
Project #: 0123-427-00/403  
Project Manager: R Campbell  
ALPHA Quote #:

### Report Information - Data Deliverables

FAX  
 ADEX  
Criteria Checker: \_\_\_\_\_  
(Default based on Regulatory Criteria Indicated)  
Other Formats: \_\_\_\_\_  
 EMAIL (standard pdf report)  
 Additional Deliverables: \_\_\_\_\_  
Report to: (if different than Project Manager)

### Billing Information

Same as Client info PO#:

### Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Fax:

Email: dkay@cegenvironmental.com

These samples have been previously analyzed by Alpha

Standard  RUSH (only confirmed if pre-approved)

Date Due: \_\_\_\_\_ Time: \_\_\_\_\_

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List:

### ANALYSIS

TO-15  
TO-15  
APH  
Fixed Gases  
Sulfides & Mercaptans by TO-15

### All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION					Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	TO-15	TO-15	APH	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
		End Date	Start Time	End Time	Initial Vacuum	Final Vacuum											
46817-01	SG-3	8/8	11:02	11:14	28.80	-4.70	A	B	2.7	2798	672	X					
-02	SG-4	8/8	11:51	12:02	29.43	-4.99	A	B	2.7	537	704	X					
-03	SG-4 Dup	8/8	11:51	12:02	28.54	-5.03	A	B	2.7	388	504	X					
-04	Fire Station Amb	8/8	11:02	11:10	27.47	-4.90	A	B	2.7	478	1466	X					
-05	Museum Amb	8/11	9:20	9:31	29.09	-4.90	A	B	2.7	2510	1638	X					
-06	SG-1	8/11	9:20	9:31	28.88	-4.97	A	B	2.7	403	689	X					
-07	SG-2	8/11	9:48	9:59	29.34	-4.92	A	B	2.7	109	685	X					

\*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)  
SV = Soil Vapor/Landfill Gas/SVE  
Other = Please Specify

Container Type

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By:

Date/Time

Received By:

Date/Time:

*[Handwritten signatures and dates]*  
Relinquished By: [Signature] 8/14/23 15:20  
Received By: [Signature] 8/14/23 15:20  
Relinquished By: [Signature] 8/14/23 20:30  
Received By: [Signature] 8/14/23 20:30