



**NHDES Waste Management Division  
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**INITIAL SITE CHARACTERIZATION REPORT  
Former Epsom Circle Market  
1921 Dover Road  
Epsom, New Hampshire 03234**

**NHDES Site #: 199104001  
Project Type: LUST  
Project Number: 2862**

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Date of Report: June 30, 2023

**Wilcox & Barton, Inc. Project #SMNB0002**



# Wilcox & Barton INC.

CIVIL • ENVIRONMENTAL • GEOTECHNICAL

## INITIAL SITE CHARACTERIZATION REPORT

**FORMER EPSOM CIRCLE MARKET  
1921 DOVER ROAD  
EPSOM, NEW HAMPSHIRE**

**NHDES SITE #199104001  
PROJECT TYPE: LUST  
PROJECT #2862**

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June 30, 2023

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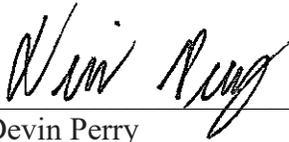
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## CERTIFICATION

The following personnel have prepared and/or reviewed this report for accuracy, content, and quality of presentation.

Document: Initial Site Characterization Report  
Former Epsom Circle Market, 1921 Dover Road, Epsom, New Hampshire  
NHDES Site #199104001, Project Type: LUST, Project #2862

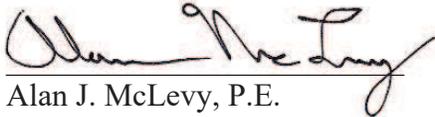
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## 1.0 INTRODUCTION

Wilcox & Barton, Inc. was retained by Rajipo 1921 LLC DBA Smoke N Barley to perform an Initial Site Characterization (ISC) for the Former Epsom Circle Market property at 1921 Dover Road in Epsom, New Hampshire (the site). The site location is presented on Figure 1 – *Site Location Map* and relevant site features are presented on Figure 2 – *Site Plan*.

This ISC Report was prepared in response to an October 27, 2022, *Request for Initial Site Characterization* letter from the New Hampshire Department of Environmental Services (NHDES). The ISC request was issued in response to a notification letter dated June 2, 2022, prepared by Wilcox & Barton, Inc. which reported benzene at concentrations above the NHDES Ambient Groundwater Quality Standard (AGQS) in two groundwater samples (GW-1 and GW-2) collected during underground storage tank (UST) closure activities in April 2022. ISC activities were performed in accordance with a Work Scope Authorization (WSA) approved by NHDES on March 6, 2023, and a WSA Change Order approved by NHDES on April 7, 2023. A copy of the NHDES request letter is provided in Appendix A.

## 2.0 GENERAL SITE INFORMATION

### 2.1 Property Description

The Epsom Circle Market property is a 1.5-acre parcel located within a primarily commercial area of Epsom, New Hampshire, and is identified by the Town of Epsom Assessor as Lot 29 on Tax Map U5. The site operates as Smoke N Barley convenience store and gas station, Ballet North dance studio, and a 24-hour ATM. Site buildings include two one-story buildings and a small one-story ATM building, all of which are heated with propane. Remaining portions of the property are improved by a dispenser canopy with two dispenser islands, asphalt-paved parking areas surrounding the buildings to the north and east, and landscaped areas to the south and west. One 12,000-gallon regular gasoline UST (Tank #8) and one 6,000-gallon premium gasoline UST (Tank #9) serving the dispenser islands are located northeast of the convenience store. The site is served by a dug drinking water well located north of the convenience store (inactive public water system [PWS] ID #0778090) and is connected to an on-site septic system located on the southern portion of the property. Relevant site features are depicted on Figure 2.

The property is bounded to the east, south, and west by commercial properties and to the north by Dover Road, beyond which are commercial properties. Local topography slopes down to the east towards the Suncook River, which is located approximately 650 feet east of the site.

### 2.2 Site Background

According to NHDES records, the property is listed as Site #199104001 and UST Facility #111376 for 9 registered USTs. The UST facility registration only includes two active USTs: one 12,000-gallon, double-walled, composite UST containing regular gasoline (Tank #8) and one 6,000-gallon, double-walled, composite UST containing premium gasoline (Tank #9). Both of the active USTs were installed in July 2022. Tank #8 and Tank #9 replaced a 10,000-gallon regular gasoline UST (Tank #6) and a 6,000-gallon premium gasoline UST (Tank #7), respectively, which were removed in April 2022. Details of the closure assessment and

associated piping are provided in an *Underground Storage Tank Closure Report* dated July 8, 2022, and prepared by Wilcox & Barton, Inc. No visual or olfactory evidence of petroleum contamination were observed in soil surrounding or beneath the former USTs or piping. Both tanks and piping were observed to be in good condition with no visible evidence of pitting or corrosion. Seven discrete soil samples (S-1 through S-7) were collected from the UST excavation, and six discrete soil samples (S-8 through S-13) were collected from along the piping runs and under the dispenser sumps. Groundwater was encountered in the UST excavation approximately 8 feet below ground surface (bgs). Two groundwater samples (GW-1 and GW-2) were collected from the water infiltrating the UST excavation.

The soil samples were submitted to Con-Test (a Pace Analytical Laboratory) for laboratory analysis of volatile organic compounds (VOCs) by U.S. Environmental Protection Agency (EPA) Method 8260 and total petroleum hydrocarbons as gasoline (TPH-GRO) by EPA Method 8015. Groundwater samples GW-1 and GW-2 were submitted to Con-Test for laboratory analysis of VOCs by EPA Method 8260. Benzene was detected at concentrations above AGQS in both groundwater samples. Several additional VOCs were detected at concentrations below AGQS in both groundwater samples. One or more VOCs were detected at concentrations well below NHDES Soil Remediation Standards (SRS) in samples S-4, S-6, S-7, and S-9. TPH-GRO was not detected at concentrations above laboratory reporting limits in any of the soil samples.

Wilcox & Barton, Inc. submitted a Release Notification to NHDES dated June 2, 2022, informing them of the presence of benzene at concentrations above AGQS identified during the April 2022 UST closure. In response, NHDES issued the *Request for Initial Site Characterization* letter on October 27, 2022, and assigned the site Leaking Underground Storage Tank (LUST) project #2862.

The site was first issued this LUST project number in 1989 due to an investigation which identified benzene at a concentration above the applicable NHDES standard in a groundwater sample collected from one site monitoring well. The well was located in the vicinity of the April 2022 GW-1 and GW-2 samples. Two wells had been installed in association with a real estate transaction. Subsequently, two additional wells were installed and several groundwater monitoring events were completed. Benzene was not detected again at concentrations above applicable NHDES standards; therefore, NHDES issued a Certificate of No Further Action for the project on August 9, 1999.

Two Initial Response Spill project numbers are also associated with the site:

- Spill project #7914 was issued due to an estimated 10- to 20-gallon release of gasoline which occurred on November 11, 1994, when a passenger drove off while fueling and the dispenser nozzle disconnected. Gasoline was released to the asphalt surface and reportedly a small amount reached a storm drain. The release was cleaned up by the Epsom Fire Department and NHDES closed out the project.
- Spill project #32478 was issued in response to a release which occurred on March 4, 2014, during a fuel delivery. A driver was filling a 10,000-gallon gasoline UST (Tank #6) when the fill port overflowed into the associated spill bucket, which overflowed and released gasoline to the surrounding asphalt parking lot and ran into the shoulder of

Dover Road. An estimated 28 gallons of gasoline were released. It is unclear what caused the spill as the UST was not full, but it was possible that the system overpressurized. Absorbent material was applied to the asphalt parking lot and a temporary boom was installed along the spill path. The spill bucket was pumped out, removed, and impacted soil was identified. A total of 3.18 tons of soil were excavated from above Tank #6. The excavation extended down to the top of the UST. One endpoint sample composited from soil from the four sidewalls of the excavation was submitted for laboratory analysis of VOCs, none of which were detected at concentrations above applicable standards. NHDES subsequently closed out the project.

### **3.0 SUBSURFACE INVESTIGATION**

In May 2023, Wilcox & Barton, Inc. oversaw the installation of three soil borings completed as monitoring wells and collected soil, groundwater, and drinking water samples for laboratory analysis, as described in the sections below. All activities were conducted in accordance with the Wilcox & Barton, Inc. Standard Operating Procedure documents included in Appendix B.

#### **3.1 Soil and Drinking Water Sampling and Analysis**

On May 5, 2023, New England Boring Contractors (NEBC) of Derry, New Hampshire, precleared the three proposed boring locations using a vactor truck. Locations were cleared down to a maximum depth of 5.5 feet bgs to confirm each location was clear of underground utilities prior to drilling. The vactor truck was emptied between each location and Wilcox & Barton, Inc. screened aliquots of soil from the pile for organic vapors using a photoionization detector (PID) prior to returning it to the respective location. PID readings did not exceed 0.4 parts per million by volume (ppmv) in aliquots of soil from any location during preclearing.

On May 10, 2023, NEBC advanced three soil borings using drive and wash drilling techniques with a GT8 truck-mounted drill rig. Soil borings B(MW)-1, B(MW)-2, and B(MW)-3 were advanced to depths ranging between 10 and 15 feet bgs and completed as monitoring wells. Two borings were installed in the vicinity of the UST system and one was installed at a downgradient location to assess the extent of petroleum-impacted soil and/or groundwater. Boring/monitoring well locations are depicted on Figure 2.

Soil samples were classified using a modified Burmister Soil Classification System. Soil primarily consisted of fine- to medium-grained sand with minor amounts of gravel and/or silt. Groundwater was observed at depths between approximately 4.5 and 5.5 feet bgs.

During soil boring advancement, soil samples were collected and screened for organic vapors using a PID. The PID was calibrated with isobutylene for the measurement of organic vapors as benzene on a ppmv basis. Readings did not exceed 0.4 ppmv in soil samples from any boring. Organic vapor readings and soil descriptions are presented on the soil boring logs in Appendix C.

One discrete soil sample was collected at the observed water table from each of the three soil borings and submitted to Con-Test under standard chain-of-custody protocol for analysis of VOCs by EPA Method 8260 and TPH-GRO by EPA Method 8015. Additionally, a drinking

water sample was collected from the on-site drinking water well (PWS ID #0778090) and submitted for analysis of VOCs by EPA Method 524.2

Acetone, a common laboratory contaminant, and naphthalene were detected at concentrations well below SRS in the sample collected from boring B(MW)-3 between 4.5 and 6 feet bgs. No VOCs were detected at concentrations above laboratory reporting limits in the samples collected from borings B(MW)-1 or B(MW)-2. TPH-GRO was detected at concentrations well below SRS in all three soil samples. Acetone was detected at a concentration well below AGQS in the drinking water sample. No other VOCs were detected at concentrations above laboratory limits (or AGQS) in the drinking water sample.

A summary of the soil analytical results are presented in Table 1 – *Soil Samples – Summary of Analytical Results* and drinking water analytical results are summarized in Table 2 – *Drinking Water Samples – Summary of Analytical Results*. A copy of the laboratory analytical report is presented in Appendix D.

### **3.2 Monitoring Well Installation and Surveying**

On May 10, 2023, monitoring wells MW-1, MW-2, and MW-3 were installed in soil borings B(MW)-1, B(MW)-2, and B(MW)-3, respectively. The monitoring wells were constructed of 2-inch-diameter, thread-coupled, schedule-40 polyvinyl chloride (PVC) materials, with 7.5-foot (MW-1 and MW-3) or 8.5-foot (MW-2) lengths of machine-slotted, 0.010-inch well screen placed across the observed water table. The annular space around the well screen was filled with clean silica sand and sealed with bentonite. The PVC well casings were extended to ground surface, capped, and finished with steel, traffic-rated, flush-mounted road boxes set in concrete pads. Monitoring well completion details are included on the boring logs in Appendix C.

Following installation, the monitoring wells were developed using polyethylene bailers until the wells were purged dry or until water appeared to have a consistent level of clarity. Recovery was observed to be moderate in each well.

Wilcox & Barton, Inc. surveyed the top-of-casing elevations of the new wells using an auto level relative to an arbitrary datum of 100.00 feet, established at a survey nail installed on a utility pole (labelled as #373 FP) located to the south of the ATM building.

### **3.3 Groundwater and Drinking Water Monitoring**

Wilcox & Barton, Inc. completed a groundwater monitoring event on May 24, 2023. During the monitoring event, the following activities were performed:

- Monitoring wells MW-1, MW-2, and MW-3 were gauged for depth to water and/or light non aqueous phase liquid (LNAPL) using an oil/water interface probe capable of measuring depth to product and/or water to the nearest 0.01 foot. The presence of LNAPL was additionally investigated by inserting a clean, clear, polyethylene bailer partway into the water column, retrieving it, and inspecting the contents. LNAPL was not detected or observed in any monitoring well. Depths to groundwater ranged from approximately 5 to 6 feet bgs during the monitoring event.

- Groundwater samples were collected from all three monitoring wells for analysis of VOCs using the standard purging and sample collection procedures described in the Wilcox & Barton, Inc. *Standard Operating Procedure FP-07 for Sampling Groundwater for VOCs*, a copy of which is included in Appendix B. A drinking water sample was also collected from the site drinking water well.
- The samples were transported under standard chain-of-custody documentation to Con-Test for analysis of VOCs by EPA Method 8260 (groundwater) or Method 524.2 (drinking water).

Well gauging data collected during the monitoring event are summarized in Table 3 – *Well Gauging and Piezometric Head Elevation Data*. Gauging data were combined with the existing survey data to create Figure 3 – *Piezometric Head Elevation Plan*. The elevation data depict groundwater flow to the east towards the Suncook River and consistent with local topography.

Chloroform was detected at a concentration below AGQS in the groundwater sample collected from well MW-1 and tetrachloroethylene (PCE) was detected at a concentration below AGQS in the sample collected from well MW-3. No other VOCs were detected at concentrations above laboratory reporting limits (or AGQS) in all three groundwater samples. Groundwater analytical results are summarized in Table 4 – *Groundwater Samples – Summary of Analytical Results*.

Acetone, a common laboratory contaminant, was detected at a concentration well below AGQS in the drinking water sample. No other VOCs were detected above laboratory reporting limits (or AGQS) in the sample. Analytical results are summarized in Table 2. A copy of the laboratory analytical report for this monitoring event is presented in Appendix D.

#### 4.0 POTENTIAL RECEPTORS

A sensitive receptor survey map depicting a 500-foot radius around the site was generated using the NHDES OneStop Data Mapper and is provided in Appendix E along with a list of contact information for properties within 500 feet.

In general, potential human receptors may include residents, workers, visitors, and trespassers. Environmental receptors may include flora and fauna within the affected area. Potential exposure points may include wellhead protection areas, water wells, surface waters, wetlands, buildings into which vapors can migrate through basement foundations or utility connections, locations of direct soil contact (e.g., playgrounds, gardens, construction trenches), and utility corridors. Routes through which human receptors may be exposed to contaminants include ingestion, inhalation, and dermal contact.

Potentially complete exposure pathways for receptors at the site include:

- Ingestion of Drinking Water – The site and surrounding properties are either confirmed or assumed to be served by private or public drinking water supply wells. Municipal water lines are not available in this area of Epsom, New Hampshire; therefore, it is assumed that properties without registered water supply wells are served by unregistered private water supply wells. An exposure pathway via drinking water ingestion is

potentially complete; however, sampling results from this ISC do not indicate VOCs in site monitoring wells or the site drinking water well at concentrations above AGQS.

- Inhalation of Vapors – Basements and sub-slab utility connections represent potential pathways for vapor-borne contaminants to enter structures. The site building does not have a basement, but nearby residential properties are assumed to have basements. Groundwater samples GW-1 and GW-2 collected from the April 2022 UST excavation are located more than 30 feet laterally from site buildings and buildings on abutting properties. Additionally, the concentrations of benzene measured in samples GW-1 and GW-2, though above AGQS, do not exceed the NHDES Risk Characterization and Management Policy GW-2 screening value of 2,900 micrograms per liter. Therefore, human exposure via inhalation does not appear to be a complete exposure pathway.
- Dermal Contact with Soil and Groundwater – Exposure via dermal contact appears to represent a potentially complete pathway (i.e., during construction at the site) if soil is disturbed; however, soil analytical data obtained during the April 2022 UST and piping closure and from recent drilling efforts do not indicate the presence of contaminants in soil at concentrations above SRS. Dermal contact with groundwater by utility workers is a potentially complete pathway in the immediate vicinity of where groundwater samples GW-1 and GW-2 were collected during the April 2022 UST and piping closure; however, groundwater analytical data obtained during the recent groundwater monitoring event does not indicate the presence of contaminants in groundwater at concentrations above AGQS.
- Environmental Receptors (Surface Water) – The nearest surface water body is the Suncook River, which is located approximately 650 feet east and downgradient of the site. The concentration of benzene in samples GW-1 and GW-2 collected during UST and piping removal in April 2022 exceeded AGQS. Laboratory analysis of a groundwater sample collected from monitoring well MW-2, which was installed immediately downgradient of where GW-1 and GW-2 were collected, did not indicate the presence of petroleum-related contaminants at concentrations above laboratory reporting limits (or AGQS). The pathway for impacts to surface water is potentially complete yet does not currently appear to exist.

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

Wilcox & Barton, Inc. completed this ISC to assess the extent of soil and groundwater contamination following the documented presence of benzene at concentrations above AGQS in groundwater samples GW-1 and GW-2 collected during UST removal activities in April 2022.

As part of the ISC, three soil borings were advanced and completed as monitoring wells and soil, drinking water, and groundwater samples were collected for laboratory analysis. No analytes were detected at concentrations above applicable standards in any collected samples.

The extent of petroleum-impacted groundwater appears to be limited to the area immediately within the footprint of the former USTs (Tank #6 and Tank #7) where groundwater samples GW-1 and GW-2 were collected. Based on the results of this investigation, Wilcox & Barton, Inc. recommends completing confirmatory groundwater sampling in the fall of 2023.

## TABLES

**TABLE 1**  
**Soil Samples - Summary of Analytical Results**  
Former Epsom Circle Market  
1921 Dover Road, Epsom, New Hampshire  
NHDES Site #199104001

Sample Identification Sample Date Depth (feet) / PID (ppmv)	NHDES Soil Remediation Standards (SRS) *	S-1 4/13/2022 8 / 2.7	S-2 4/13/2022 8 / 0.4	S-3 4/13/2022 8 / 0.3	S-4 4/13/2022 4 / 6.6	S-5 4/13/2022 8 / 3.5	S-6 4/13/2022 8 / 1.5	S-7 4/13/2022 8 / 1.4
<b>Volatile Organic Compounds (VOCs) by EPA Method 8260</b>								
Acetone	75	0.065 U	0.061 U	0.067 U	0.074 U	0.062 U	0.0064 J	0.0093 J
Benzene	0.3	0.0013 U	0.0012 U	0.0013 U	0.0015 U	0.0012 U	0.0013 U	0.0012 U
2-Butanone (MEK)	51	0.026 U	0.024 U	0.027 U	0.029 U	0.025 U	0.027 U	0.025 U
n-Butylbenzene	110	0.0013 U	0.0012 U	0.0013 U	0.0015 U	0.0012 U	0.0013 U	0.0012 U
sec-Butylbenzene	130	0.0013 U	0.0012 U	0.0013 U	0.0015 U	0.0012 U	0.0013 U	0.0012 U
tert-Butylbenzene	100	0.0013 U	0.0012 U	0.0013 U	0.0015 U	0.0012 U	0.0013 U	0.0012 U
Chloroform	3	0.0026 U	0.0024 U	0.0027 U	0.0029 U	0.0025 U	0.0027 U	0.0025 U
Ethylbenzene	120	0.0013 U	0.0012 U	0.0013 U	0.0014 J	0.0012 U	0.0013 U	0.0012 U
Isopropylbenzene (Cumene)	330	0.0013 U	0.0012 U	0.0013 U	0.0015 U	0.0012 U	0.0013 U	0.0012 U
Methyl tert-Butyl Ether (MTBE)	0.2	0.0026 U	0.0024 U	0.0027 U	0.00036 J	0.0025 U	0.0027 U	0.0025 U
Methyl Cyclohexane	NS	0.0013 U	0.0012 U	0.0013 U	0.0015 U	0.0012 U	0.0013 U	0.0012 U
Naphthalene**	28	0.0026 U	0.0024 U	0.0027 U	0.0029 U	0.0025 U	0.0027 U	0.0025 U
n-Propylbenzene	85	0.0013 U	0.0012 U	0.0013 U	0.0015 U	0.0012 U	0.0013 U	0.0012 U
Tetrachloroethylene (PCE)	2	0.0013 U	0.0012 U	0.0013 U	0.0015 U	0.0012 U	0.0013 U	0.0012 U
Toluene	100	0.0013 U	0.0012 U	0.0013 U	0.0026 U	0.0012 U	0.0013 U	0.0012 U
1,2,4-Trimethylbenzene	130	0.0013 U	0.0012 U	0.0013 U	0.00063 J	0.0012 U	0.0013 U	0.0012 U
1,3,5-Trimethylbenzene	96	0.0013 U	0.0012 U	0.0013 U	0.0015 U	0.0012 U	0.0013 U	0.0012 U
Total Xylenes	500	0.0039 U	0.0036 U	0.0040 U	0.0013 J	0.0037 U	0.0040 U	0.0037 U
<b>Total Petroleum Hydrocarbons (TPH) by EPA Method 8015</b>								
TPH (as Gasoline)	10,000	0.72 U	0.69 UB	0.73 UB	0.85 UB	0.85 UB	0.84 UB	0.78 UB

All detected and selected other analytes listed; all others were not detected.

Results in milligrams per kilogram (mg/kg) unless otherwise noted.

PID Photoionization Detector. Results in parts per million by volume (ppmv).

U Not detected at or above the indicated laboratory reporting limit.

J Estimated concentration.

UB Constituent detected in method blank; sample result <5x blank (<10x for common laboratory contaminants); result changed to non-detection.

NS No standard established.

**bold** Detected concentration exceeds SRS.

\* Env-Or 606.19, Table 600-2, SRS, effective June 1, 2015.

\*\* Standard per Risk Characterization and Management Policy Table B-2, revised September 2018.



**TABLE 1**  
**Soil Samples - Summary of Analytical Results**  
Former Epsom Circle Market  
1921 Dover Road, Epsom, New Hampshire  
NHDES Site #199104001

Sample Identification Sample Date Depth (feet) / PID (ppmv)	NHDES Soil Remediation Standards (SRS) *	S-8 4/15/2022 2.5 / 1.1	S-9 4/15/2022 3.5 / 1.7	S-10 4/15/2022 2.5 / 1.2	S-11 4/15/2022 2.5 / 1.3	S-12 4/15/2022 3.5 / 1.6	S-13 4/15/2022 2 / 1.7
<b>Volatile Organic Compounds (VOCs) by EPA Method 8260</b>							
Acetone	75	0.066 U	0.0081 J	0.073 U	0.069 U	0.067 U	0.059 U
Benzene	0.3	0.0013 U	0.0017 U	0.0015 U	0.0014 U	0.0013 U	0.0012 U
2-Butanone (MEK)	51	0.026 U	0.034 U	0.029 U	0.028 U	0.027 U	0.023 U
n-Butylbenzene	110	0.0013 U	0.0017 U	0.0015 U	0.0014 U	0.0013 U	0.0012 U
sec-Butylbenzene	130	0.0013 U	0.0017 U	0.0015 U	0.0014 U	0.0013 U	0.0012 U
tert-Butylbenzene	100	0.0013 U	0.0017 U	0.0015 U	0.0014 U	0.0013 U	0.0012 U
Chloroform	3	0.0026 U	0.0034 U	0.0029 U	0.0028 U	0.0027 U	0.0023 U
Ethylbenzene	120	0.0013 U	0.0017 U	0.0015 U	0.0014 U	0.0013 U	0.0012 U
Isopropylbenzene (Cumene)	330	0.0013 U	0.0017 U	0.0015 U	0.0014 U	0.0013 U	0.0012 U
Methyl tert-Butyl Ether (MTBE)	0.2	0.0026 U	0.0034 U	0.0029 U	0.0028 U	0.0027 U	0.0023 U
Methyl Cyclohexane	NS	0.0013 U	0.0017 U	0.0015 U	0.0014 U	0.0013 U	0.0012 U
Naphthalene**	28	0.0026 U	0.0034 U	0.0029 U	0.0028 U	0.0027 U	0.0023 U
n-Propylbenzene	85	0.0013 U	0.0017 U	0.0015 U	0.0014 U	0.0013 U	0.0012 U
Tetrachloroethylene (PCE)	2	0.0013 U	0.0017 U	0.0015 U	0.0014 U	0.0013 U	0.0012 U
Toluene	100	0.0013 U	0.0017 U	0.0015 U	0.0014 U	0.0013 U	0.0012 U
1,2,4-Trimethylbenzene	130	0.0013 U	0.0017 U	0.0015 U	0.0014 U	0.0013 U	0.0012 U
1,3,5-Trimethylbenzene	96	0.0013 U	0.0017 U	0.0015 U	0.0014 U	0.0013 U	0.0012 U
Total Xylenes	500	0.0039 U	0.0051 U	0.0044 U	0.0042 U	0.0040 U	0.0035 U
<b>Total Petroleum Hydrocarbons (TPH) by EPA Method 8015</b>							
TPH (as Gasoline)	10,000	0.73 UB	0.82 UB	0.76 UB	0.74 U	0.73 UB	0.74 UB

All detected and selected other analytes listed; all others were not detected.

Results in milligrams per kilogram (mg/kg) unless otherwise noted.

PID Photoionization Detector. Results in parts per million by volume (ppmv).

U Not detected at or above the indicated laboratory reporting limit.

J Estimated concentration.

UB Constituent detected in method blank; sample result <5x blank (<10x for common laboratory contaminants); result changed to non-detection.

NS No standard established.

**bold** Detected concentration exceeds SRS.

\* Env-Or 606.19, Table 600-2, SRS, effective June 1, 2015.

\*\* Standard per Risk Characterization and Management Policy Table B-2, revised September 2018.



**TABLE 1**  
**Soil Samples - Summary of Analytical Results**  
Former Epsom Circle Market  
1921 Dover Road, Epsom, New Hampshire  
NHDES Site #199104001

Sample Identification Sample Date Depth (feet) / PID (ppmv)	NHDES Soil Remediation Standards (SRS) *	B(MW)-1 5/10/2023 5-7 / 0.3	B(MW)-2 5/10/2023 5.5-7 / 0.4	B(MW)-3 5/10/2023 4.5-6 / 0.2
<b>Volatile Organic Compounds (VOCs) by EPA Method 8260</b>				
Acetone	75	0.078 U	0.079 U	0.0085 J
Benzene	0.3	0.0016 U	0.0016 U	0.0014 U
2-Butanone (MEK)	51	0.031 U	0.031 U	0.029 U
n-Butylbenzene	110	0.0016 U	0.0016 U	0.0014 U
sec-Butylbenzene	130	0.0016 U	0.0016 U	0.0014 U
tert-Butylbenzene	100	0.0016 U	0.0016 U	0.0014 U
Chloroform	3	0.0031 U	0.0031 U	0.0029 U
Ethylbenzene	120	0.0016 U	0.0016 U	0.0014 U
Isopropylbenzene (Cumene)	330	0.0016 U	0.0016 U	0.0014 U
Methyl tert-Butyl Ether (MTBE)	0.2	0.0031 U	0.0031 U	0.0029 U
Methyl Cyclohexane	NS	0.0016 U	0.0016 U	0.0014 U
Naphthalene**	28	0.0031 U	0.0031 U	0.0056
n-Propylbenzene	85	0.0016 U	0.0016 U	0.0014 U
Tetrachloroethylene (PCE)	2	0.0016 U	0.0016 U	0.0014 U
Toluene	100	0.0016 U	0.0016 U	0.0014 U
1,2,4-Trimethylbenzene	130	0.0016 U	0.0016 U	0.0014 U
1,3,5-Trimethylbenzene	96	0.0016 U	0.0016 U	0.0014 U
Total Xylenes	500	0.0047 U	0.0047 U	0.0043 U
<b>Total Petroleum Hydrocarbons (TPH) by EPA Method 8015</b>				
TPH (as Gasoline)	10,000	0.76 J	0.78 J	0.80 J

All detected and selected other analytes listed; all others were not detected.

Results in milligrams per kilogram (mg/kg) unless otherwise noted.

PID Photoionization Detector. Results in parts per million by volume (ppmv).

U Not detected at or above the indicated laboratory reporting limit.

J Estimated concentration.

UB Constituent detected in method blank; sample result <5x blank (<10x for common laboratory contaminants); result changed to non-detection.

NS No standard established.

**bold** Detected concentration exceeds SRS.

\* Env-Or 606.19, Table 600-2, SRS, effective June 1, 2015.

\*\* Standard per Risk Characterization and Management Policy Table B-2, revised September 2018.



**TABLE 2**  
**Drinking Water Samples - Summary of Analytical Results**  
Former Epsom Circle Market  
1921 Dover Road, Epsom, New Hampshire  
NHDES Site # 199104001

Sample Identification  Sample Date	Ambient Groundwater Quality Standards (AGQS) †	PWS ID #0778090	
		5/10/2023	5/24/2023
<b>Volatile Organic Compounds (VOCs) by EPA Method 524.2</b>			
Acetone	6,000	9.3 J	11
Benzene	5	0.50 U	0.50 U
2-Butanone (MEK)	4,000	5.0 U	5.0 U
n-Butylbenzene	260	0.50 U	0.50 U
sec-Butylbenzene	260	0.50 U	0.50 U
tert-Butylbenzene	260	0.50 U	0.50 U
Chloroform	70	0.50 U	0.50 U
Ethylbenzene	700	0.50 U	0.50 U
Isopropylbenzene (Cumene)	800	0.50 U	0.50 U
Methyl tert-Butyl Ether (MTBE)	13	0.50 U	0.50 U
Naphthalene	100	1.0 U	1.0 U
n-Propylbenzene	260	0.50 U	0.50 U
Tetrachloroethylene (PCE)	5	0.50 U	0.50 U
Toluene	1,000	0.50 U	0.50 U
1,2,4-Trimethylbenzene	330	0.50 U	0.50 U
1,3,5-Trimethylbenzene	330	0.50 U	0.50 U
Total Xylenes	10,000	1.5 U	1.5 U

Detected and selected other analytes listed; all others were not detected.

Results in micrograms per liter (µg/L) unless otherwise noted.

U Not detected at or above the listed laboratory reporting limit.

J Estimated concentration.

**bold shaded** Detected concentration exceeds AGQS.

† Env-Or 603.03, Table 600-1, AGQS, effective January 1, 2021.



**TABLE 3**  
**Well Gauging and Piezometric Head Elevation Data**  
Former Epsom Circle Market  
1921 Dover Road, Epsom, New Hampshire  
NHDES Site #199104001

Well Identification	Gauging Date	Top of Casing Elevation (ft)	Depth to Water* (ft)	LNAPL Thickness (ft)	Piezometric Head Elevation (ft)
MW-1	5/24/23	99.92	5.70	--	94.22
MW-2	5/24/23	98.94	5.68	--	93.26
MW-3	5/24/23	93.23	5.07	--	88.16

NOTE: Site surveyed on May 10, 2023. Top of casing elevations are referenced to an arbitrary benchmark set at a survey nail installed on the west side of Utility Pole #373 FP (assumed elevation 100.00 ft).

ft                      Feet.  
\*                        Depth from top of casing or designated measuring point.  
LNAPL                Light non-aqueous phase liquid.  
--                      No measurable LNAPL present.



**TABLE 4**  
**Groundwater Samples - Summary of Analytical Results**  
Former Epsom Circle Market  
1921 Dover Road, Epsom, New Hampshire  
NHDES Site #199104001

Sample Identification Sample Date	Ambient Groundwater Quality Standards (AGQS) †	GW-1 4/13/22	GW-2 4/13/22	MW-1 5/24/23	MW-2 5/24/23	MW-3 5/24/23
<b>Volatile Organic Compounds (VOCs) by EPA Method 8260</b>						
Acetone	6,000	5.1 J	4.4 J	50 U	50 U	50 U
Benzene	5	<b>25</b>	<b>12</b>	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	4,000	5.4 J	2.3 J	20 U	20 U	20 U
n-Butylbenzene	260	0.27 J	0.50 J	1.0 U	1.0 U	1.0 U
sec-Butylbenzene	260	1.0 U				
tert-Butylbenzene	260	1.0 U				
Chloroform	70	2.0 U	2.0 U	0.45 J	2.0 U	2.0 U
Ethylbenzene	700	20	5.8	1.0 U	1.0 U	1.0 U
Isopropylbenzene (Cumene)	800	0.67 J	0.39 J	1.0 U	1.0 U	1.0 U
Methyl tert-Butyl Ether (MTBE)	13	0.69 J	0.43 J	1.0 U	1.0 U	1.0 U
Methyl Cyclohexane	NS	0.55 J	0.49 J	1.0 U	1.0 U	1.0 U
Naphthalene	100	2.9	0.71 J	2.0 U	2.0 U	2.0 U
n-Propylbenzene	260	1.2	1.0	1.0 U	1.0 U	1.0 U
Tetrachloroethylene (PCE)	5	1.0 U	1.0 U	1.0 U	1.0 U	0.19 J
Toluene	1,000	190	45	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene	330	16	6.6	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene	330	3.6	2.2	1.0 U	1.0 U	1.0 U
Total Xylenes	10,000	104	28	3.0 U	3.0 U	3.0 U

Detected and selected other analytes listed; all others were not detected.

Results in micrograms per liter (µg/L) unless otherwise noted.

U Not detected at or above the listed laboratory reporting limit.

J Estimated concentration.

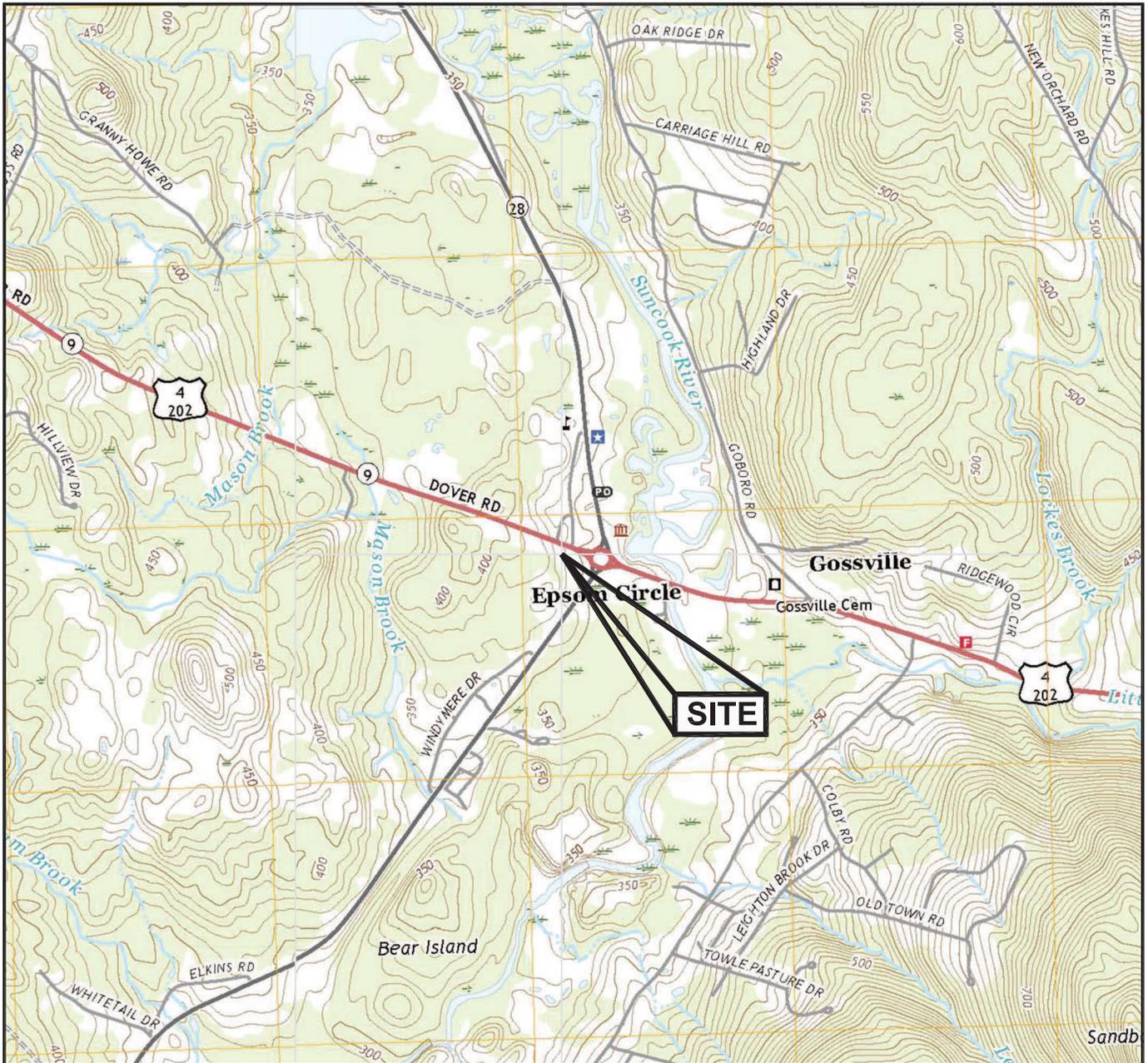
NS No standard established.

**bold** Detected concentration exceeds AGQS.

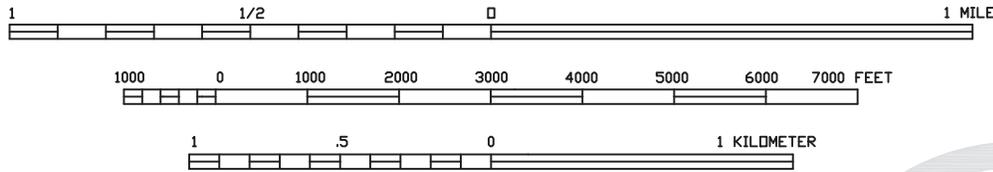
† Table 600-1 of Part Env-Or 603.03, AGQS, effective January 1, 2021.



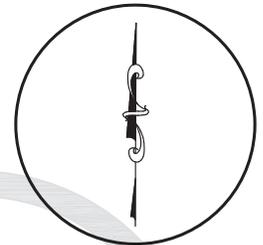
## FIGURES



SCALE: 1:24,000



CONTOUR INTERVAL 10 FEET  
NORTH AMERICAN VERTICAL DATUM OF 1988

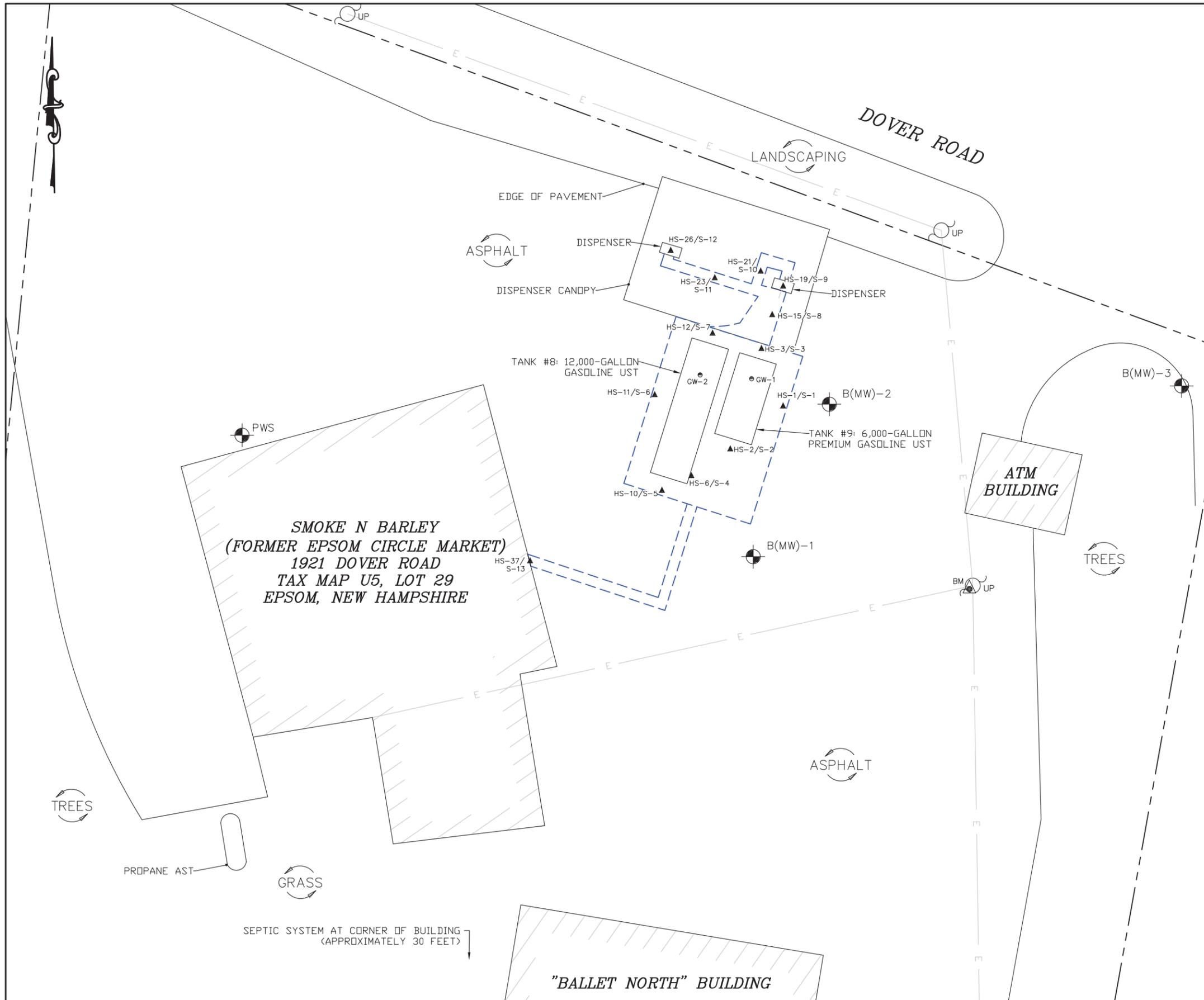


DATE May 4, 2022	SCALE As shown	FILE SMNB0002_Site Location Map
APPROVED BY MBA	DRAWN BY MMN	REVISED June 5, 2023
CLIENT Rajipo 1921 LLC DBA Smoke N Barley	JOB NUMBER SMNB0002	
LOCATION Former Epsom Circle Market 1921 Dover Road Epsom, New Hampshire NHDES Site #199104001	MAP SOURCE Gossville, NH and Suncook, NH USGS QUADS 2021	

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**SITE LOCATION MAP**

*Figure 1*



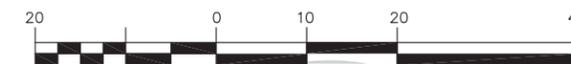
## LEGEND

- AST/UST ABOVEGROUND STORAGE TANK/  
UNDERGROUND STORAGE TANK
- APPROXIMATE EXTENT OF APRIL 2022  
UST UPGRADE EXCAVATION
- APPROXIMATE PROPERTY LINE
- ▲ HS-6/S-1 SOIL HEADSPACE SCREENING (HS)  
LOCATION/ DISCRETE LABORATORY  
ANALYTICAL SOIL SAMPLE COLLECTED  
DURING APRIL 2022 UST UPGRADES
- GW-1 LOCATION OF GROUNDWATER  
SAMPLE COLLECTED FOR  
LABORATORY ANALYSIS DURING  
APRIL 2022 UST UPGRADES
- ▲ BM BENCHMARK (ASSUMED 100.00 FT)
- PWS PRIVATE WATER SUPPLY WELL -  
INACTIVE PUBLIC WATER SYSTEM  
(PWS) #0778090
- B(MW)-2 SOIL BORING/MONITORING WELL
- UP UTILITY POLE
- E OVERHEAD ELECTRICAL LINE

## NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. PLAN BASED ON WILCOX & BARTON, INC. SITE VISITS,  
TOWN OF EPSOM GIS INFORMATION, AND AERIAL IMAGERY.
3. THIS PLAN IS NOT A PROFESSIONAL SURVEY AND IS  
NOT INTENDED FOR SURVEY PURPOSES.

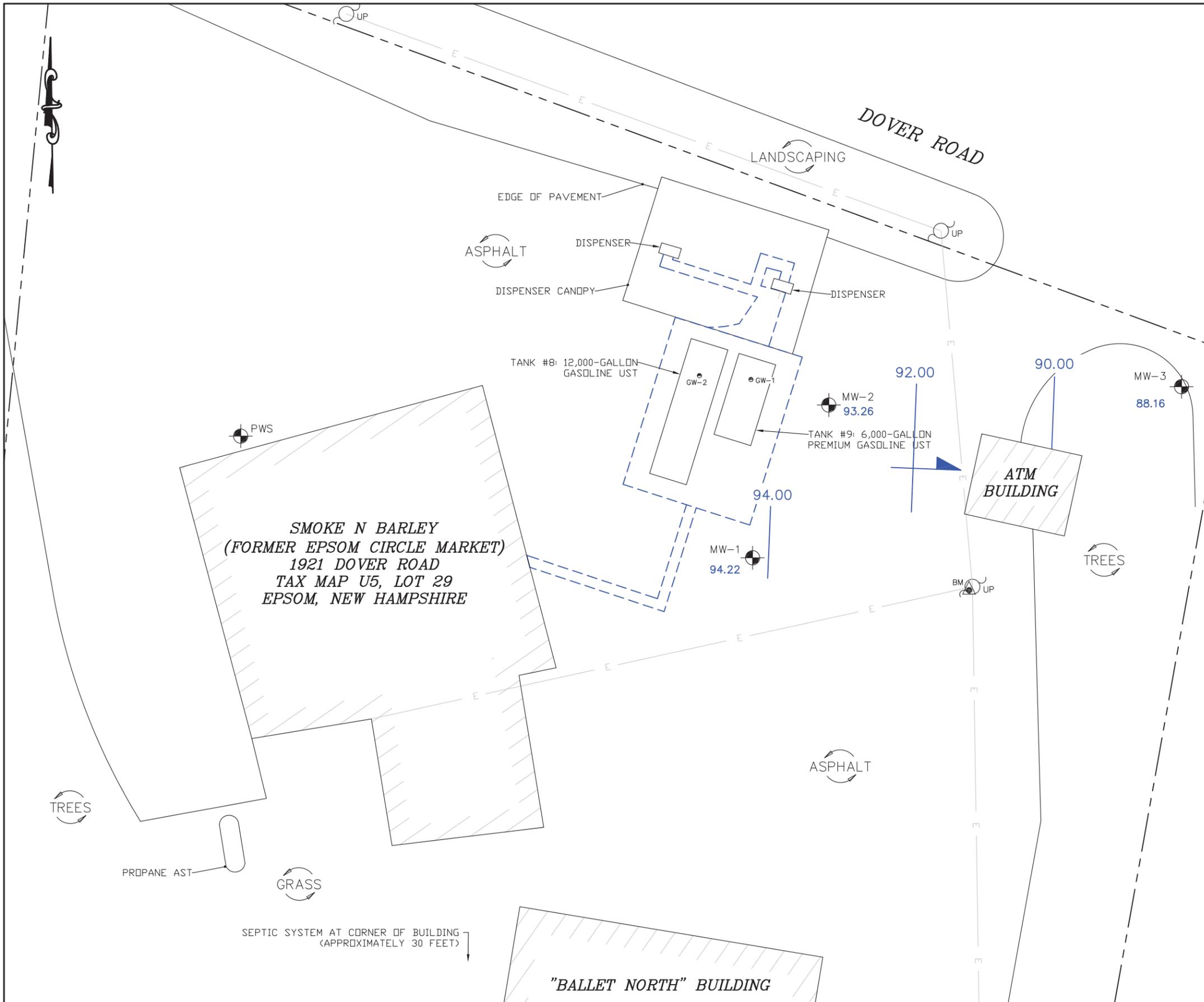
### GRAPHIC SCALE



( IN FEET )  
1 inch = 20 feet

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TITLE		
<b>SITE PLAN</b>		
DATE	SCALE	FILE
May 4, 2022	GRAPHIC	SMNB0002_Site Plan
APPROVED BY	DRAWN BY	REVISED
MBA	MMN	June 5, 2023
CLIENT	Rajipo 1921 LLC DBA Smoke N Barley	JOB NUMBER SMNB002
LOCATION	Former Epsom Circle Market 1921 Dover Road Epsom, New Hampshire NHDES Site #19104001	DRAWING NUMBER <b>FIGURE 2</b>



## LEGEND

- AST/UST ABOVEGROUND STORAGE TANK/  
UNDERGROUND STORAGE TANK
- APPROXIMATE EXTENT OF APRIL 2022  
UST UPGRADE EXCAVATION
- APPROXIMATE PROPERTY LINE
- GW-1 LOCATION OF GROUNDWATER  
SAMPLE COLLECTED FOR  
LABORATORY ANALYSIS DURING  
APRIL 2022 UST UPGRADES
- ▲<sup>BM</sup> BENCHMARK (ASSUMED 100.00 FT)
- PWS PRIVATE WATER SUPPLY WELL -  
INACTIVE PUBLIC WATER SYSTEM  
(PWS) #0778090
- MW-2 MONITORING WELL WITH PIEZOMETRIC  
HEAD ELEVATION RELATIVE TO  
BENCHMARK  
93.26
- 94.00 GROUNDWATER ELEVATION CONTOUR
- ▶ GROUNDWATER FLOW DIRECTION
- <sup>UP</sup> UTILITY POLE
- E OVERHEAD ELECTRICAL LINE

## NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. PLAN BASED ON WILCOX & BARTON, INC. SITE VISITS, TOWN OF EPSOM GIS INFORMATION, AND AERIAL IMAGERY.
3. THIS PLAN IS NOT A PROFESSIONAL SURVEY AND IS NOT INTENDED FOR SURVEY PURPOSES.

### GRAPHIC SCALE



( IN FEET )  
1 inch = 20 feet

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### TITLE

**PIEZOMETRIC HEAD  
ELEVATION PLAN**

Gauging Date: May 24, 2023

DATE	SCALE	FILE
May 4, 2022	GRAPHIC	SMNB0002_Site Plan

APPROVED BY	DRAWN BY	REVISED
MBA	MMN	June 5, 2023

CLIENT	Rajipo 1921 LLC DBA Smoke N Barley	JOB NUMBER	SMNB002
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LOCATION	Former Epsom Circle Market 1921 Dover Road Epsom, New Hampshire NHDES Site #19104001	DRAWING NUMBER	<b>FIGURE 3</b>
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**APPENDIX A**  
**NHDES Correspondence**



The State of New Hampshire  
**Department of Environmental Services**



**Robert R. Scott, Commissioner**

E-MAIL ONLY

October 27, 2022

[Vipulkumar Patel](#)

Smoke + Barley  
1921 Dover Road  
Epsom, New Hampshire 03234

**REQUEST FOR INITIAL SITE CHARACTERIZATION**

**Subject Site:**           **Epsom – Epsom Circle Market, 1921 Dover Road**  
DES Site #199104001 LUST Project #2862

**Notification of Groundwater Quality Violation**, prepared by Wilcox & Barton, Inc., dated June 2, 2022 (Activity #305775)

Dear Vipulkumar Patel:

On June 3, 2022, the New Hampshire Department of Environmental Services (NHDES) received notification from Wilcox & Barton, Inc. stating that a discharge of oil, as defined in New Hampshire Code of Administrative Rules Env-Or 600 Contaminated Site Management, occurred at the subject site. A discharge of oil to the groundwater was confirmed by the presence of benzene in groundwater samples GW-1 and GW-2 collected on April 13, 2022 during the closure of two petroleum underground storage tanks.

Vipulkumar Patel is a *strictly liable party*, under New Hampshire State Law, RSA Chapter 146-a:3-a., with respect to this discharge. Under this State Law, any person who, without regard to fault, directly or indirectly, causes or suffers the discharge of oil into, or onto any surface water or groundwater of the state, or in a land area where oil will ultimately seep into any surface water or groundwater of the state in violation of this chapter, or rules adopted under this chapter, shall be strictly liable for costs directly or indirectly resulting from the violation. A Notice of Strict Liability is enclosed with this letter. As a responsible party, Vipulkumar Patel must take all steps necessary to stop and contain the discharge, remove the free product, conduct any requested studies, and remediate the remaining soil and groundwater contamination to state standards.

NHDES has determined that Vipulkumar Patel is a responsible party with respect to this discharge and requires that you complete an Initial Site Characterization. The Initial Site Characterization is necessary to assess impact to soil and groundwater and identify potential human and environmental receptors. The requirements of the Initial Site Characterization are detailed in Env-Or 605.08 through 605.09. These rules are available on our website at <https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/env-or-600.pdf>.

[www.des.nh.gov](http://www.des.nh.gov)

PO Box 95, 29 Hazen Drive, Concord, NH 03302-0095

Telephone: (603) 271-3899    Fax: (603) 271-2181    TDD Access: Relay NH 1-800-735-2964

The Initial Site Characterization report is due within 90 days of receipt of this letter. NHDES will provide guidance on the need for further investigation, remediation or closure of this project after review of the Initial Site Characterization report.

### **Facility Compliance and Cost Reimbursement**

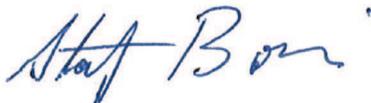
The New Hampshire Petroleum Reimbursement Fund Program (Fund) provides financial assistance to qualified owners of petroleum storage facilities who incur costs for investigation and cleanup of contamination from the release of petroleum products. To qualify for Fund coverage, the facility must be in compliance with all applicable state and federal rules for petroleum storage facilities.

A review of our files indicates that eligibility has not yet been determined for this facility. To secure eligibility, Vipulkumar Patel must submit a cover letter, a Request for Reimbursement Authorization Form, information concerning private insurance coverage, and certification of tank compliance. Copies of the cover letter format and form are attached. Prompt submittal of eligibility documentation will facilitate claims processing and reimbursement. If you have questions regarding Fund eligibility, please contact Jennifer Marts, P.G., Petroleum Fund Management Section Supervisor at 603 271-2570 or by e-mail at [Jennifer.A.Marts@des.nh.gov](mailto:Jennifer.A.Marts@des.nh.gov).

To receive reimbursement from the Fund, all work must be pre-approved and conducted in accordance with New Hampshire Code of Administrative Rules Odb-400. Please direct your consultant to submit a detailed work scope and budget for the Initial Site Characterization to NHDES for approval; a figure depicting the proposed boring locations must be included. The budget must be prepared using the [N.H. Petroleum Reimbursement Fund Program Unit-Based Costs](#) as revised February 1, 2022. The work scope and budget is due within 30 days of receipt of this letter. For additional assistance on the Fund reimbursement process and compliance status of your facility, please contact the Petroleum Fund Management Section Supervisor as cited above.

Please do not hesitate to contact me if you have any questions regarding this letter.

Sincerely,



Stanley Bonis, P.G.  
Oil Remediation and Compliance Bureau  
Tel: (603) 271-5569  
Email: [stanley.p.bonis@des.nh.gov](mailto:stanley.p.bonis@des.nh.gov)

Enclosure:      Notice of Strict Liability  
                    Request for Reimbursement Authorization  
                    Example Cover Letter for Request for Reimbursement Authorization

ec:      Margaret Bastien, P.E., ORCB  
            [Russ Barton](#), Wilcox & Barton, Inc.  
            Epsom Health Officer

Route/ec: Renée Strondak, P.G, ORCB

**NOTICE OF STRICT LIABILITY FOR OIL DISCHARGE – RSA 146-A  
REQUEST FOR INSURANCE COVERAGE DETERMINATION**



**A. OIL STORAGE FACILITY/PROPERTY, ON-SITE SPILL, OR UNKNOWN SOURCE**

Type (check one): Motor Fuel AST (“LAST”)  Motor Fuel UST (“LUST”)  Fuel Oil AST (“FUEL”)   
 On-Premise-Use Fuel Oil (“OPUF”)  Motor Oil (“MOST”)  On-Site Spill  Unknown Source

**B. FACILITY AND/OR PROPERTY, OR LOCATION INFORMATION**

(1) Facility and/or property, or location name	(1) Smoke and Barley (Former Epsom Circle Market)
(2) Address	(2) 1921 Dover Road
(3) Town	(3) Epsom
(4) NHDES facility registration/permit number, if applicable	(4) 0111376
(5) NHDES site number and project number (TBD)	(5) 199104001 LUST 2862
(6) Date of discovery	(6) April 2, 1991

**C. OWNER/RESPONSIBLE PARTY INFORMATION**

(1) Owner/Responsible Party name	(1) Vipulkumar Patel
(2) Mailing address	(2) 1921 Dover Road Epsom, NH 03234
(3) Day/Evening phone	(3) 603-736-4854

**D. NOTICE OF STRICT LIABILITY & STATEMENT OF INSURANCE REQUIREMENTS**

*The New Hampshire Department of Environmental Services (NHDES) has determined that as of the date listed in B(6), the person(s) or entity listed in C(1) is strictly liable under New Hampshire RSA 146-A:3-a for cleanup of the oil discharge discovered at the location listed in B(1) through B(3). NHDES has or will issue specific instructions for performing cleanup, and requires that insurance coverage information be provided. A state fund, which is designed to be excess coverage to any private insurance, may be available for cleanup cost reimbursement if private insurance is unavailable or insufficient. Pursuant to Insurance Department Bulletin INS No. 11-009-AB, upon receipt of this Notice, the private insurer must make a coverage determination as to whether or not the State’s claim in strict liability for damages to waters of the State is covered by the policy. Coverage determination notification to the insured must comply with the guidelines outlined in New Hampshire Code of Administrative Rules, Part Ins 1002.*

*Staff Boni*

27 October 2022

NHDES Representative & Date Signed

**SEE INFORMATION AND GENERAL INSTRUCTIONS ON PAGE 2**

## E. INFORMATION AND GENERAL INSTRUCTIONS

- New Hampshire's Oil Pollution Control statute (RSA 146-A) gives NHDES primary jurisdiction over oil spill cleanup operations. Responsible parties must perform the cleanup to the Department's satisfaction and be consistent with the Department's directives. RSA 146-A:4, I; see also RSA 146-A:7. The law also authorizes NHDES to perform cleanup, but the liable parties will be billed for those services, which must be paid in order to obtain a release from the State that cleanup work is complete.
- Under New Hampshire law (RSA 146-A:3-a), any person who causes or suffers a discharge of oil into or onto any surface water or groundwater, or in a land area where oil will ultimately impact water, is **strictly liable** for cleanup. Petroleum storage tank facility owners, and owners of land where such facilities are or were located, need to understand that they are legally liable even if they were not negligent in the operation of a facility.
- NHDES expects private insurance companies to pay cleanup costs that are covered under the insurance policy. Once NHDES has issued a Notice of Strict Liability, the party determined to be strictly liable is responsible for seeking a **coverage determination** from each private insurance company that has issued a policy on the property or oil storage facility. Coverage determinations from insurance agents interpreting policies are not acceptable. The coverage determination must be from the insurance company or an authorized adjuster, based on a claim filed by the insured. If there is no private insurance, the owner or company officer must supply NHDES with a notarized letter stating this fact.
- The New Hampshire Petroleum Reimbursement Fund Program oil spill cleanup funds, available under RSA 146-D, RSA 146-E and RSA 146-F, provide excess insurance coverage. Private insurance for cleanup costs and/or third-party damages must be exhausted before the State funds are available. The initial request for reimbursement authorization under the State funds must include documents to demonstrate there is no private insurance coverage.
- When water contamination becomes known during a cleanup initially financed by State funds, but it is later determined that there is coverage under a private insurance policy, NHDES expects the insurance company to assume the cost of any water quality assessment that is necessary. Costs excluded from coverage under private insurance may be covered by the State excess insurance funds, provided all eligibility requirements are met.
- The N.H. Department of Insurance (DOI) has issued Bulletin INS No. 11-009-AB to insurance companies regarding the process for handling insurance claims relating to oil discharges, where NHDES has issued a Notice of Strict Liability. The Bulletin directs insurers to issue coverage decisions (i.e., denial or payment of a claim) in accordance with DOI rules, Ins 1002 ([http://www.gencourt.state.nh.us/rules/state\\_agencies/ins1000.html](http://www.gencourt.state.nh.us/rules/state_agencies/ins1000.html)). The Bulletin advises insurers they must give the insured written notice of the reason for denial in whole or in part of any claim; under Ins 1002.06(a), this includes notice of the applicable policy provision upon which denial is based. The Bulletin also encourages insurers to make their oil discharge coverage decisions consistent with the approach outlined in this notice.
- If a private insurer (1) is non-responsive to a request for a coverage determination, (2) states that the policy does not cover the State's strict liability claim, or (3) will not certify that such coverage is not available under its policy, State fund coverage may still be provided. However, the State reserves its right to take legal action against the insurer to recover costs.
- NHDES personnel will complete the Notice of Strict Liability form as soon as possible after an oil discharge is reported and initially investigated, and water impacts are found. The owner/responsible party should provide a copy of both sides of the completed form to their insurance company to request a coverage determination. The owner/responsible party should report the results of the coverage determination to NHDES immediately. The findings of the coverage determination must be included with the owner's request for State excess insurance fund coverage.

If you have questions, email [Jennifer.Marts@des.nh.gov](mailto:Jennifer.Marts@des.nh.gov) or call (603) 271-2570.

## **APPENDIX B**

### **Wilcox & Barton, Inc. Standard Operating Procedures**

## STANDARD OPERATING PROCEDURE

<b>Title:</b> PID / Jar-Headspace Screening Protocol for Organic Vapors in Soil	<b>No:</b> FP-01	
<b>Approved:</b> A. McLevy	<b>Original Date:</b> 10/15/13	<b>Revised:</b> 8/26/22

### Purpose:

To screen environmental media in the field for organic vapors via analysis of headspace.

### Introduction:

A photoionization detector (PID) is a portable field meter used to detect the presence of volatile organic compounds in air. The meter responds to compounds that have ionization potentials equal to or less than the energy of the ionization source (lamp). The meter does not differentiate between compounds, and the meter response varies for different compounds. The meter readings are provided in parts-per-million by volume (ppmv) and are quantitative but non-specific.

A PID may be used to assess contamination in environmental media via measurement of organic vapors that volatilize (evaporate) from the sample into the headspace of the container holding the sample. This screening procedure does not provide a true determination of compound concentration. However, the PID is useful for screening to determine the presence or absence and relative degree of contamination by volatile organic compounds. The PID is calibrated to an isobutylene standard (100 ppmv) and a response factor (RF) may be applied during or after calibration to equate the isobutylene response to the contaminant of interest. The RF used is recorded in the field notes for each screening event. Generally, the RF should be set at 1.0 unless otherwise specified by the project manager for project specific purposes. Additional direction concerning RFs is provided below.

### Equipment/Materials:

1. ION Science TIGER equipped with a 10.6 eV lamp, or
2. Mini RAE 2000 or 3000 equipped with a 10.6 eV lamp, or
3. Mini RAE Lite equipped with a 10.6 eV lamp, or
4. Other PID as approved by the Project Manager or Technical Lead.
5. Isobutylene calibration gas, 1-liter Tedlar bag, and connecting tubing and valve
6. Glass jars (250 ml to 500 ml)
7. Aluminum foil
8. Polyethylene Whirl-Pak bags (18 oz)

### Procedure:

The following procedure is used to screen media for the presence of organic vapors with a PID using the jar-headspace method:

1. The meter is calibrated to an isobutylene standard using an RF of 1.0 (alternatively the instrument-specific RF for the contaminant of concern can be used prior to screening for project specific purposes if specified by the project manager – see Response Factor Notes below for additional guidance).
2. Calibration is to be performed in a fresh air environment at a temperature similar to the ambient temperature where the unit will be used and close to the sample temperature where possible. A

dedicated 1-liter Tedlar bag is kept with each Wilcox & Barton, Inc. PID meter. Calibration readings are taken from the Tedlar bag after filling with isobutylene. The Tedlar bag should be completely emptied prior to filling, then filled with enough isobutylene to accommodate at least one minute of flow. PID flow rates are generally in the range of 0.2 to 0.5 liters per minute.

3. A clean glass jar is half filled with the sample to be screened. The top of the jar is covered with a sheet of aluminum foil and the cap is screwed on.
4. Alternatively, a Whirl-Pak™ bag (or equivalent) is half filled with the sample to be screened. The bag is closed and flipped over three times and the closure tabs are twisted together to ensure a tight seal.
5. Headspace gasses over the sample are allowed to equilibrate for approximately 10 minutes at ambient air temperature. If ambient temperature is below freezing, headspace development can be performed inside a heated vehicle or space.
6. The jar or bag is vigorously shaken for 15 seconds at the beginning and the end of the equilibration period.
7. Jars: The screw cap is carefully removed and the probe of the PID meter is inserted through the foil. Bags: The bag is punctured with the probe of the PID meter.
8. The maximum meter reading is recorded. Maximum response should occur between 2 and 5 seconds. Erratic meter response may occur at high organic vapor concentrations or conditions of elevated headspace moisture. Erratic meter response should be noted in the field logs.

Response Factor Notes

The table below provides instrument-specific RFs for contaminants commonly encountered at Wilcox & Barton, Inc. project sites. RFs for additional contaminants are available in tables provided by PID manufacturers.

<b>Unit-Specific Response Factors for Common Contaminants (10.6 eV Lamp)</b>			
	<b>Benzene</b>	<b>Tetrachloroethylene</b>	<b>Trichloroethylene</b>
ION Science TIGER	0.50	0.60	0.60
Mini RAE 3000	0.47	0.57	0.54
Mini RAE Lite	0.47	0.57	0.54
Mini RAE 2000	0.53	0.57	0.54

Example 1. At underground storage tank closures in Massachusetts, screening values must be recorded “as benzene” for comparison to the 72-hour notification requirement [see 310 CMR 40.0313 (2)]. Therefore, the RF must be set to the appropriate value from the table above during calibration. Alternatively, if the instrument is calibrated using isobutylene and the RF is set to 1.0, field readings must be multiplied by the RF in the table above for comparison to the notification requirement. Indicate the RF and show calculations in the field notes. Report adjusted readings “as benzene.”

Example 2. At a site where there is no specific contaminant of interest, but screening is being performed as part of a general site investigation, calibrate the instrument using isobutylene and an RF of 1.0. Indicate the RF and the calibration gas concentration in the field notes. Report adjusted readings “as isobutylene.”

Example 3. At a chlorinated solvent site where tetrachloroethylene (PCE) is the primary contaminant of concern, set the RF to the appropriate value from the table above during instrument calibration. Alternatively, if the instrument is calibrated using isobutylene and the RF is set to 1.0, field readings must be multiplied by the RF in the table above for comparison to the notification requirement. Indicate the RF and show calculations in the field notes. Report adjusted readings “as PCE.”

Additional Considerations:

For soil screening at sites in Massachusetts, MassDEP Interim Remediation Waste Management Policy for Petroleum Contaminated Sites, #WSC-94-400, specifies the use of jars, but the MCP allows alternate procedures when technically justified (see 310 CMR 40.0017). It is the position of Wilcox & Barton, Inc. that the use of a polyethylene bag is an acceptable alternative to a glass jar. This position is supported by EPA (see EPA 510-B-97-0001 Chapter VI - Field Methods for the Analysis of Petroleum Hydrocarbons) and various other states. Field personnel must consult with both the Project Manager and the LSP before using the bag technique at any Massachusetts site. Further, the user should be aware that alternate techniques may affect data usability and that additional justification for use of a polyethylene bag may be requested by MassDEP. For identifying reportable conditions, making risk-based decisions, and soil sampling at 21J Reimbursement in Massachusetts, the jar technique must be used.

## STANDARD OPERATING PROCEDURE

<b>Title:</b>	Sampling Groundwater for Volatile Organic Compounds (VOCs), Volatile Petroleum Hydrocarbons (VPH), and Extractable Petroleum Hydrocarbons (EPH)	<b>No:</b>	<b>FP-07</b>
<b>Approved:</b>	R. Rooks	<b>Original Date:</b>	7/6/2010
		<b>Revised:</b>	3/30/2017

### Purpose:

To ensure that accurate, legally defensible, and representative data is collected when collecting groundwater samples for VOC, VPH, and EPH analyses.

### Equipment/Materials:

1. Water-level indicator or oil/water interface probe
2. Peristaltic pump and power source
3. YSI Multi-Probe System
4. Bailers (based on project and site conditions)
5. Sample tubing (based on project, site conditions, and contaminants of concern)
6. Pre-cleaned, laboratory-supplied sampling containers
7. Coolers/packing materials/wet ice
8. Field log book or project check list

### Procedure:

Groundwater samples may be collected using conventional (standard) techniques or via low-flow techniques depending upon project objectives and data needs. Users are responsible for selecting the appropriate technique and adhering to the protocols outlined below.

### **STANDARD PURGING AND SAMPLE COLLECTION:**

1. Measure depth to static water level and depth to bottom of well.
2. Calculate standing water volume in the well.
3. Using a new or decontaminated bailer, purge either: (1) five well volumes of water from the well, (2) until the well is dry, or (3) until pH, specific conductance and temperature readings stabilize.
4. Transfer the sample directly from the bailer into the appropriate sample container(s).
  - a) VPH and VOC samples – three pre-cleaned, pre-preserved 40-milliliter VOA vials with Teflon septa caps.
  - b) EPH samples - two pre-cleaned 1-liter amber bottles equipped with Teflon-lined screw caps.
5. Pre-preserved sample containers provided by the laboratory are to be used whenever possible. Care must be taken to ensure that the preservative (hydrochloric acid) is not

spilled during filling of containers. Sample pH of  $<2$  must be maintained, and can be accomplished by adding 3 to 4 drops of HCl to a 40-ml VOA vial when needed.

6. After filling vials for VOC or VPH samples, invert each vial and tap to liberate potential air bubbles. Inspect to ensure no air bubbles are in the vial.
7. Place samples on ice immediately. Keep refrigerated until delivery to laboratory under chain-of-custody. Samples must be maintained at a temperature of less than  $6^{\circ}\text{C}$  but not frozen.

### **LOW FLOW PURGING AND SAMPLE COLLECTION (Less than 25 ft to water):**

1. Measure depth to static water level and depth to bottom of well.
2. Determine desired sample intake depth based on well construction log and carefully install decontaminated or new/unused sampling tubing and foot valve assembly, minimizing disturbance of the water column:
  - a) Set the intake near the top of the well screen for surficial groundwater monitoring wells; or
  - b) Set the intake at the center of the screened interval for vertical delineation groundwater monitoring wells.
3. Attach the sampling tubing to clean, unused peristaltic pump tubing using appropriately sized vacuum fittings (male-male hose barb connection or similar fitting).
4. Attach the discharge of the pump to a calibrated flow-through meter capable of measuring, at a minimum, pH, temperature, and specific conductance, and at least one additional parameter such as oxidation-reduction potential, dissolved oxygen, and/or turbidity.
5. Initiate pumping at the lowest possible flow rate and monitor water level drawdown in the well while gradually increasing flow rate. Set the flow rate at the point just before water level drawdown occurs (generally less than 0.5 liter per minute or 0.12 gallons per minute).
6. Observe and record field parameters and water level drawdown initially at 5 to 15 minute intervals. Once stabilization appears to be approaching, increase the observation frequency to every 3 to 5 minutes. Purging is complete when three successive measurements meet the following minimum criteria:
  - $\text{pH} \pm 0.1$
  - Specific Conductivity  $\pm 3\%$
  - Dissolved Oxygen  $\pm 10\%$

If additional parameters are considered, recommended stabilized tolerances are:

- Reduction-Oxidation Potential  $\pm 10 \text{ mV}$
  - Turbidity  $\pm 10\%$
7. Disconnect the flow-through field parameter meter and collect the sample from the pump discharge tubing.

8. Fill the sample containers directly from the pump discharge tubing, following the same procedures outline in steps 4 through 7 of Standard Purging and Sample Collection above.

### **DECONTAMINATION:**

Use of disposable sampling equipment is preferred. However, if any item of equipment will be introduced into more than one well in a sampling round, the wells should be gauged and/or sampled in order of increasing contamination (*i.e.* wells anticipated to be less contaminated will be sampled first). After use in each well, the equipment will be decontaminated using, at a minimum, the following sequence:

1. Rinse with clean water
2. Wash with Alconox (laboratory detergent) and clean water solution
3. Three rinses with clean water
4. Rinse with distilled water

Similar decontamination procedures should be followed for all equipment introduced into the well, including water level meters, interface probes, and intake tubing. Bailers exposed to free product will not be re-used to sample for dissolved volatile constituents.

## STANDARD OPERATING PROCEDURE

<b>Title:</b>	Soil Logging and Description	<b>No:</b>	FP-14
<b>Approved:</b>	R. Rooks	<b>Original Date:</b>	9/7/12
		<b>Revised:</b>	4/1/17

Purpose:

To ensure that soils observed during field work are classified in a uniform, accurate, and legally-defensible manner using a modified form of the Burmister System of soil classification.

Introduction:

Soil classification is based upon visual observation and simple manual tests that can be conducted in the field. Wilcox & Barton, Inc. uses a modified form of the Burmister System of soil classification to describe soil samples during surface and subsurface investigation activities. The modified system allows for rapid evaluation of soil type in the field to produce a description that is easy to understand and reproduce for both geological and engineering applications. A proper modified Burmister soil description includes the following eight components, listed in this exact order:

1	2	3	4	5	6	7	8
Density or consistency	Apparent color	MAJOR component	Proportional adjective	Minor Component	Other adjective	Apparent moisture	Origin

Observations are recorded in a bound field notebook or on a soil logging template created specifically for this purpose. Soil should be described to a level of detail that matches the use and intent of the data. For example, if one-inch layers within a stratified deposit are repeated, then the entire unit can be described as alternating layers of material. If, however, a small layer is significant in terms of site hydrogeology, such as a potential contaminant pathway or confining layer, it must be described as such on the appropriate scale.

The Burmister classification was developed based on gradational characteristics of cohesionless soils and the plasticity behavior characteristics for cohesive soils. The term "cohesionless" normally applies to materials larger than and including silt-sized particles; however, some silt materials exhibit "apparent cohesion" and may therefore be described as cohesive. For samples in which both cohesionless and cohesive soils are present, the density or consistency descriptor should apply to the major soil component.

Equipment/Materials:

1. Equipment typically used during subsurface investigations that allow for visual inspection of the soil (excavator or backhoe; drill rig; hand auger; shovel).
2. Field log or field data sheet

Procedure:

Soil classification is based upon visual observation and simple manual tests that can be conducted in the field. Wilcox & Barton, Inc. uses a modified form of the Burmister System of soil classification to describe soil samples during surface and subsurface investigation activities. The modified system allows for rapid evaluation of soil type in the field to produce a description that is easy to understand and reproduce for both geological and engineering applications. A proper modified Burmister soil description includes the following eight components, listed in this exact order:

1	2	3	4	5	6	7	8
Density or consistency	Apparent color	MAJOR component	Proportional adjective	Minor Component	Other adjective	Apparent moisture	Origin

Observations are recorded in a bound field notebook or on a soil logging template created specifically for this purpose. Soil should be described to a level of detail that matches the use and intent of the data. For example, if one-inch layers within a stratified deposit are repeated, then the entire unit can be described as alternating layers of material. If, however, a small layer is significant in terms of site hydrogeology, such as a potential contaminant pathway or confining layer, it must be described as such on the appropriate scale.

The Burmister classification was developed based on gradational characteristics of cohesionless soils and the plasticity behavior characteristics for cohesive soils. The term "cohesionless" normally applies to materials larger than and including silt-sized particles; however, some silt materials exhibit "apparent cohesion" and may therefore be described as cohesive. For samples in which both cohesionless and cohesive soils are present, the density or consistency descriptor should apply to the major soil component.

**1. Density or Consistency**

The density or consistency of a soil material always refers to its in-place, undisturbed condition. This terminology is a measure of soil density or strength and can be evaluated for both cohesive and cohesionless soils.

Density or consistency is typically based on the number of blows required to advance a split spoon sampler in accordance with ASTM D-1586 specifications for the Standard Penetration Test. The summation of the blows necessary to drive the second and third 6-inch increments of penetration during sample recovery is called the Standard Penetration Number (N-value). The N-value is then compared to the ranges below to determine the density or consistency:

<b>Non-Cohesive Soils</b>	
N-value	Density Description
0-4	Very loose
4-10	Loose
10-30	Medium dense
30-50	Dense
>50	Very dense

<b>Cohesive Soils</b>	
N-value	Density Description
0-2	Very soft
2-4	Soft
4-8	Medium stiff
8-15	Stiff
15-30	Very stiff
>30	Hard

When collecting samples by hand or by Direct Push methods without N-value information, an estimate of density may be made based on the judgment of the individual collecting the sample. A note should be included on the sample log indicating that the recorded density is estimated.

**2. Apparent Color**

Colors are described using basic colors or combinations of colors such as “dark gray”, “gray-brown”, “reddish-brown” or “brown and tan”. Since color interpretation is subjective, the intent is to note the general identifying color of the major constituent to best designate a particular stratum or soil condition. Color charts may be used if necessary to better judge subtle changes in color. The color should be described shortly after collection while the material is still in its natural field moisture condition because color shade is subject to change during drying.

**3. MAJOR Component**

The first step in soil type classification is to identify the major constituent of the soil and to estimate, on a visual basis, the relative percent of its composition. The major component is recorded in capital letters. An estimate of the relative percent composition should be made, and should generally be greater than 30 to 50 % in order for the component to be predominant (see also Field References at the end of the document). Identification of the MAJOR (and minor) components is made according to particle size in accordance with the Unified Soil Classification System (USCS) classifications:

Particle Size			
	millimeters	inches	Sieve size
Boulder	>300	>12	--
Cobble	75 to 300	3 to 12	--
Gravel	4.75 to 75	3/16 to 3	No. 4 to No. 3
Coarse SAND	2.0 to 4.75	0.08 to 3/16	No. 10 to No. 4
Medium SAND	0.43 to 2.0	0.02 to 0.08	No. 40 to No. 10
Fine SAND	0.08 to 0.43	0.003 to 0.02	No. 200 to No. 40
SILT and CLAY	<0.075	<0.003	< No. 200

Because boulders, cobbles and some gravel are not recovered in a split spoon, percentages cannot be accurately determined from the standard penetration test. Instead, the possible presence of these constituents may be evaluated based on drilling behavior (*i.e.*, grinding or “jumping” of the drill bit or refusal of the split-spoon) or by observation of soil cuttings and noted on the boring log. The possible presence of these larger particles should be included under the sample description portion of the log. A description of the manner in which large particle presence was identified (*e.g.*, based on drill stem behavior) should be included in the general notes. If gravel, cobbles and boulders are observed during other investigations such as test pit excavation, the proportions may be listed in percentages or, because of potential difficulty in estimating volumetric proportions of larger particles based on visual examination, it is acceptable to simply reference their presence. When boulders are observed, a note should be made regarding their relative size.

For cohesive soil, a second descriptive adjective should be used that further defines the character of the fine particles (those passing a No. 200 sieve). These descriptions are based upon simple field tests conducted on representative samples of the material. The most effective field test is for plasticity, which is the resistance of the soil to crumbling at decreasing water contents. Soil is rolled between the hands into the smallest possible thread until the thread breaks apart. At the

point where the thread breaks, the diameter is noted and compared to the associated descriptions below.

Description	Smallest Rolled Diameter (inches)	Overall Plasticity
SILT	based on texture, not roll diameter	Nonplastic
Clayey SILT	1/4	Slight
SILT & CLAY	1/8	Low
CLAY & SILT	1/16	Medium
Silty CLAY	1/32	High
CLAY	1/64	Very high

#### 4. Proportional Adjective

The minor soil constituent types are identified along with the corresponding percent composition of the sample. The soil type is identified based upon particle size as described above. The proportions of the minor components are described with an adjective based upon the visually estimated percentage (see Field References) of the minor components as presented below:

Percent Composition	Descriptive Adjective
1-10	Trace
10-20	Little
20-35	Some
35-50	And

Minor constituents are recorded following the major constituent in order of decreasing proportion and the first letter in each minor constituent is capitalized. For example:

- A sample consisting of 40% fine sand, 25% medium sand, 20% coarse sand and 15% gravel would be described as **fine SAND, some medium to coarse Sand, little Gravel.**
- A sample consisting of 50% fine sand, 30% medium sand and 20% clayey silt would be described as **fine SAND, some medium Sand, some Clayey Silt.**
- A sample consisting of 60% clay and silt, 30% coarse sand and 10% gravel could be described as **CLAY & SILT, some coarse Sand, trace Gravel.**

#### 5. Minor Component

The minor component is identified in the same manner as the MAJOR component based on particle size.

#### 6. Other Adjective(s) and Descriptions

Following the description of the minor components, other useful information can be reported such as descriptions of soil structure (*e.g.*, angular grains, cemented, blocky), formation characteristics (*e.g.*, stratified, mottled, lenses, clasts), and other characteristics observed (*e.g.*, organic matter, debris, cobbles and boulders). The descriptions should be brief and pertinent to the investigation. Odors and visible staining should be noted. Whenever an odor is noted, a description of the strength and type should be provided (*e.g.*, strong, mild, gasoline-like, diesel-like, sewage, sulfur).

## 7. Apparent Moisture

Following the soil description, an estimate of the moisture content should be selected based on the following conditions. When saturated soil is noted, the logs should reflect that the apparent depth of the water table has been reached.

Description	Condition
Dry	No apparent moisture, soil can be blown away (no adhesion).
Damp	Color change noted, soil cannot be blown away (some adhesion).
Moist	Moisture apparent, soil can be packed.
Wet	Free moisture apparent, water can be squeezed or shaken from the sample, water observed in the sample container.

## 8. Soil Origin

As a final, general description of the soil, a note may be added that indicates a known geologic soil formation. This may include referencing the material as Fill, Glacial Till, Glacial Outwash, Peat, Lacustrine Deposit, etc.

In addition to the general geologic description, the USCS symbol may also be required for certain projects. The USCS symbol should be capitalized and correspond to the Modified Burmister description given to the soil. A USCS Classification Chart is provided in the Field References below.

## **APPENDIX C**

### **Soil Boring Logs and Monitoring Well Completion Details**



# WILCOX & BARTON, INC.

## SOIL BORING LOG BORING NO: B(MW)-1

PROJECT: 1921 Dover Road, Epsom, New Hampshire  
 CLIENT: Rajipo 1921 LLC  
 BORING CONTRACTOR: New England Boring Contractors

SHEET NO.: 1 of 1  
 JOB NO.: SMNB0002  
 TOC ELEVATION: 99.92

DATE	TIME	WATER DEPTH	REFERENCE	TYPE	CASING	SAMPLE	CORE	TUBE	DATE STARTED: 5/10/2023
5/10/2023		5.27 feet	Top of Casing	DIAMETER	Steel/D+W	SS			DATE FINISHED: 5/10/2023
				WEIGHT	4.25 inch				DRILLER: Ken, Rich, Mark
				FALL	130 pound				INSPECTOR: D. Perry
					30 inch				DRILL RIG: Gtech Drill GT8

WELL CONSTRUCTION		DEPTH (ft)	SAMPLE			CLASSIFICATION	PID (ppm) RF = 1.0
			NO.	RECOVERY (ft)	BLOWS PER 0.5 FOOT		
Road box (Flush-mounted)	Concrete	1				0-5.25 ft bgs: Pre-clear with vac truck. Tannish brown, fine to medium SAND and GRAVEL.	0.0-0.2
2-inch PVC Riser (2.5 ft bgs-gs)	Filter Sand (1.5-0.5 ft bgs)	2					
Filter Sand (15-2 ft bgs)	Bentonite (2-1.5 ft bgs)	3					
2-inch PVC Screen (10-2.5 ft bgs)		4					
		5					
	Apparent Groundwater	6	S-1	0.75 / 2	7 1 1	5-5.25 ft bgs: BACKFILL. 5-7 ft bgs: Very loose, tannish brown, fine to medium SAND, trace Gravel. Wet. Laboratory sample B(MW)-1 (5-7) collected.	0.3
		8	S-2	0.5 / 2	2 2 3 4	7-9 ft bgs: Loose, tannish brown, fine to medium SAND, trace Gravel.	0.2
		10	S-3	1.0 / 2	13 44 42 32	9-11 ft bgs: Very dense, tannish brown, fine SAND and GRAVEL, black mica-rich rock throughout.	0.3
		12	S-4	2.0 / 2	65 56 80	11-11.75: Very dense, tannish brown, fine to medium SAND.	0.3
		13			100 for 4"	11.75-12.8 ft bgs: Very dense, tannish brown, fine SAND, some Silt, intermittent rusty coloring. D+W 12.8-13 ft bgs.	0.3
		14	S-5	1.0 / 2	20 22 28 20	13-15 ft bgs: Dense, tannish brown, fine SAND and SILT, some Fractured rock.	0.3
		15				Boring terminated at 15 ft bgs. Well set at 10 ft bgs.	
		16					
		17					
		18					
		19					
		20					
		21					
		22					
		23					
		24					
		25					
		26					
		27					
		28					
		29					
		30					
		31					
		32					
		33					

D+W = drive and wash.  
 SS = split spoon.  
 ft (a/b)gs = feet (above/below) ground surface.  
 PID = Photoionization detector, measuring organic vapors in parts per million (ppm) by volume.  
 RF = Response factor.



# WILCOX & BARTON, INC.

## SOIL BORING LOG BORING NO: B(MW)-2

PROJECT: 1921 Dover Road, Epsom, New Hampshire  
 CLIENT: Rajipo 1921 LLC  
 BORING CONTRACTOR: New England Boring Contractors

SHEET NO.: 1 of 1  
 JOB NO.: SMNB0002  
 TOC ELEVATION: 98.94

GROUNDWATER MEASUREMENTS:				CASING	SAMPLE	CORE	TUBE	DATE STARTED: 5/10/2023
DATE	TIME	WATER DEPTH	REFERENCE	TYPE	Steel/D+W	SS		DATE FINISHED: 5/10/2023
5/10/2023		5.21 feet	Top of Casing	DIAMETER	4.25 inch			DRILLER: Ken, Rich, Mark
				WEIGHT	130 pound			INSPECTOR: D. Perry
				FALL	30 inch			DRILL RIG: Gtech Drill GT8

WELL CONSTRUCTION		DEPTH (ft)	SAMPLE			CLASSIFICATION	PID (ppm) RF = 1.0
			NO.	RECOVERY (ft)	BLOWS PER 0.5 FOOT		
Road box (Flush-mounted)	Concrete	—				0-5.5 ft bgs: Pre-clear with vac truck. Tannish brown, fine to medium SAND, trace Gravel.	0.1-0.4
	Filter Sand (1.5-0.5 ft bgs)	1					
2-inch PVC Riser (2.5 ft bgs-gs)	Bentonite (2-1.5 ft bgs)	2					
		3					
Filter Sand (11-2.5 ft bgs)		4					
		5					
	Apparent Groundwater	6	S-1	1.25 / 2	2 1 3	5-5.5 ft bgs: BACKFILL. 5.5-7 ft bgs: Loose, tannish brown, fine SAND, some Gravel. Wet. Laboratory sample B(MW)-2 (5.5-7) collected.	0.4
		7			2		
		8	S-2	1.0 / 2	14 33 49	7-9 ft bgs: Very dense, tannish brown, fine to medium SAND, some black fractured mica rich Rock. Wet.	0.2
		9			48		
		10	S-3	1.75 / 2	52 56 75	9-11 ft bgs: Very dense, black, fractured mica rich ROCK, some tannish brown fine Sand. Wet.	0.1
		11			90		
		12				Boring terminated and well set at 11 ft bgs.	
		13					
		14					
		15					
		16					
		17					
		18					
		19					
		20					
		21					
		22					
		23					
		24					
		25					
		26					
		27					
		28					
		29					
		30					
		31					
		32					
		33					

D+W = drive and wash.  
 SS = split spoon.  
 ft (a/b)gs = feet (above/below) ground surface.  
 PID = Photoionization detector, measuring organic vapors in parts per million (ppm) by volume.  
 RF = Response factor.



# WILCOX & BARTON, INC.

## SOIL BORING LOG BORING NO: B(MW)-3

PROJECT: 1921 Dover Road, Epsom, New Hampshire  
 CLIENT: Rajipo 1921 LLC  
 BORING CONTRACTOR: New England Boring Contractors

SHEET NO. : 1 of 1  
 JOB NO.: SMNB0002  
 TOC ELEVATION: 93.23

GROUNDWATER MEASUREMENTS:				CASING	SAMPLE	CORE	TUBE	DATE STARTED: 5/10/2023
DATE	TIME	WATER DEPTH	REFERENCE	TYPE	Steel/D+W	SS		DATE FINISHED: 5/10/2023
5/10/2023		4.46 feet	Top of Casing	DIAMETER	4.25 inch			DRILLER: Ken, Rich, Mark
				WEIGHT	130 pound			INSPECTOR: D. Perry
				FALL	30 inch			DRILL RIG: Gtech Drill GT8

WELL CONSTRUCTION		DEPTH (ft)	SAMPLE			CLASSIFICATION	PID (ppm) RF = 1.0
			NO.	RECOVERY (ft)	BLOWS PER 0.5 FOOT		
Road box (Flush-mounted)	Concrete	—				0-5.5 ft bgs: Pre-clear with vac truck. Tannish brown, fine to medium SAND and GRAVEL.	0.2-0.4
	Filter Sand (1.5-0.5 ft bgs)	1					
2-inch PVC Riser (2.5 ft bgs-gs)	Bentonite (2-1.5 ft bgs)	2					
		3					
Filter Sand (10-2 ft bgs)		4			4	4-5.5 ft bgs: BACKFILL.	0.2
2-inch PVC Screen (10-2.5 ft bgs)	Apparent Groundwater	5	S-1	0.75 / 2	8		
		6			12	5.5-6 ft bgs: Medium dense, tannish brown, fine to medium SAND and GRAVEL. Wet at 4.75 ft bgs. Laboratory sample B(MW)-3 (4.5-6) collected.	0.1
		7	S-2	0.5 / 2	20		
		8			35	6-8 ft bgs: Dense, tannish gray, fine SAND and SILT, trace Gravel. Wet.	
		9	S-3	0.5 / 2	30	8-10 ft bgs: Medium dense, tannish brown, fine to medium SAND, trace Gravel. Wet.	0.1
		10			17		
		11			24	Boring terminated and well set at 10 ft bgs.	
		12			8		
		13			9		
		14			10		
		15			10		
		16					
		17					
		18					
		19					
		20					
		21					
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		27					
		28					
		29					
		30					
		31					
		32					
		33					

D+W = drive and wash.  
 SS = split spoon.  
 ft (a/b)gs = feet (above/below) ground surface.  
 PID = Photoionization detector, measuring organic vapors in parts per million (ppm) by volume.  
 RF = Response factor.

## **APPENDIX D**

### **Laboratory Analytical Reports**



May 19, 2023

Madeleine Arold  
Wilcox & Barton  
1115 Route 100B, Suite 200  
Moretown, VT 05660

Project Location: 1921 Dover Rd, Epsom, NH  
Client Job Number:  
Project Number: SMNB0002  
Laboratory Work Order Number: 23E1686

Enclosed are results of analyses for samples as received by the laboratory on May 11, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kaitlyn A. Feliciano  
Project Manager

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

 Wilcox & Barton  
 1115 Route 100B, Suite 200  
 Moretown, VT 05660  
 ATTN: Madeleine Arold

REPORT DATE: 5/19/2023

PURCHASE ORDER NUMBER:

PROJECT NUMBER: SMNB0002

**ANALYTICAL SUMMARY**

WORK ORDER NUMBER: 23E1686

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

PROJECT LOCATION: 1921 Dover Rd, Epsom, NH

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
B(MW)-1 (5-7)	23E1686-01	Soil		SM 2540G SW-846 8015C SW-846 8260D	
B(MW)-2 (5.5-7)	23E1686-02	Soil		SM 2540G SW-846 8015C SW-846 8260D	
B(MW)-3 (4.5-6)	23E1686-03	Soil		SM 2540G SW-846 8015C SW-846 8260D	
PWSID#0778090	23E1686-04	Drinking Water		EPA 524.2	

#### CASE NARRATIVE SUMMARY

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

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**EPA 524.2****Qualifications:****L-01**

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

**Analyte & Samples(s) Qualified:****1,1,2-Trichloro-1,2,2-trifluoroethane**

B340083-BS1

**1,2,3-Trichloropropane**

B340083-BS1

**Methyl tert-Butyl Ether (MTBE)**

B340083-BS1

**trans-1,2-Dichloroethylene**

B340083-BS1

**SM 2540G****Qualifications:****H-06**

Sample was extracted past the recommended holding time.

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

23E1686-01[B(MW)-1 (5-7)], 23E1686-02[B(MW)-2 (5.5-7)], 23E1686-03[B(MW)-3 (4.5-6)]

**SW-846 8260D****Qualifications:****L-02**

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

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

B340108-BS1, B340108-BSD1

**Chloroethane**

B340108-BS1, B340108-BSD1

**V-05**

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

**Analyte & Samples(s) Qualified:****tert-Butyl Alcohol (TBA)**

23E1686-01[B(MW)-1 (5-7)], 23E1686-02[B(MW)-2 (5.5-7)], 23E1686-03[B(MW)-3 (4.5-6)], B340108-BLK1, B340108-BS1, B340108-BSD1, S087389-CCV1

**V-20**

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

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

B340108-BS1, B340108-BSD1, S087389-CCV1

**Chloroethane**

B340108-BS1, B340108-BSD1, S087389-CCV1

**V-35**

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

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

B340108-BS1, B340108-BSD1, S087389-CCV1

**Dichlorodifluoromethane (Freon 12)**

B340108-BS1, B340108-BSD1, S087389-CCV1

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**SW-846 8015C**

Gasoline Range Organics (2-Methylpentane through 1,2,4-Trimethylbenzene) is quantitated against a calibration made with an unleaded gasoline composite standard.

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

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



Meghan E. Kelley  
Reporting Specialist

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

Project Location: 1921 Dover Rd, Epsom, NH

Sample Description:

Work Order: 23E1686

Date Received: 5/11/2023

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

Sampled: 5/10/2023 07:35

Sample ID: 23E1686-01

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.078	0.0071	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
Acrylonitrile	ND	0.0047	0.00070	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00078	0.00054	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
Benzene	ND	0.0016	0.00046	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
Bromobenzene	ND	0.0016	0.00036	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
Bromochloromethane	ND	0.0016	0.00061	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
Bromodichloromethane	ND	0.0016	0.00041	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
Bromoform	ND	0.0016	0.00048	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
Bromomethane	ND	0.0078	0.0014	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
2-Butanone (MEK)	ND	0.031	0.0049	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
tert-Butyl Alcohol (TBA)	ND	0.078	0.031	mg/Kg dry	1	V-05, U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
n-Butylbenzene	ND	0.0016	0.00051	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
sec-Butylbenzene	ND	0.0016	0.00074	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
tert-Butylbenzene	ND	0.0016	0.00067	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00078	0.00062	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
Carbon Disulfide	ND	0.0078	0.0063	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
Carbon Tetrachloride	ND	0.0016	0.00062	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
Chlorobenzene	ND	0.0016	0.00044	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
Chlorodibromomethane	ND	0.00078	0.00050	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
Chloroethane	ND	0.016	0.00087	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
Chloroform	ND	0.0031	0.00049	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
Chloromethane	ND	0.0078	0.00078	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
2-Chlorotoluene	ND	0.0016	0.00040	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
4-Chlorotoluene	ND	0.0016	0.00035	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0016	0.00062	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
1,2-Dibromoethane (EDB)	ND	0.00078	0.00060	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
Dibromomethane	ND	0.0016	0.00054	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
1,2-Dichlorobenzene	ND	0.0016	0.00042	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
1,3-Dichlorobenzene	ND	0.0016	0.00043	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
1,4-Dichlorobenzene	ND	0.0016	0.00047	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
trans-1,4-Dichloro-2-butene	ND	0.0031	0.00049	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.016	0.00081	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
1,1-Dichloroethane	ND	0.0016	0.00054	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
1,2-Dichloroethane	ND	0.0016	0.00052	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
1,1-Dichloroethylene	ND	0.0031	0.00064	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
cis-1,2-Dichloroethylene	ND	0.0016	0.00050	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
trans-1,2-Dichloroethylene	ND	0.0016	0.00057	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
1,2-Dichloropropane	ND	0.0016	0.00049	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
1,3-Dichloropropane	ND	0.00078	0.00039	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
2,2-Dichloropropane	ND	0.0016	0.00061	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
1,1-Dichloropropene	ND	0.0016	0.00070	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
cis-1,3-Dichloropropene	ND	0.00078	0.00044	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
trans-1,3-Dichloropropene	ND	0.00078	0.00048	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
Diethyl Ether	ND	0.016	0.00064	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF

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Project Location: 1921 Dover Rd, Epsom, NH

Sample Description:

Work Order: 23E1686

Date Received: 5/11/2023

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

Sampled: 5/10/2023 07:35

Sample ID: 23E1686-01

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.00078	0.00053	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
1,4-Dioxane	ND	0.078	0.036	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
Ethylbenzene	ND	0.0016	0.00047	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
Hexachlorobutadiene	ND	0.0016	0.00066	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
2-Hexanone (MBK)	ND	0.016	0.0039	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
Isopropylbenzene (Cumene)	ND	0.0016	0.00049	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0016	0.00048	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
Methyl Acetate	ND	0.0016	0.0011	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0031	0.00053	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
Methyl Cyclohexane	ND	0.0016	0.00061	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
Methylene Chloride	ND	0.016	0.00075	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.016	0.0035	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
Naphthalene	ND	0.0031	0.00056	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
n-Propylbenzene	ND	0.0016	0.00038	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
Styrene	ND	0.0016	0.00039	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
1,1,1,2-Tetrachloroethane	ND	0.0016	0.00042	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
1,1,2,2-Tetrachloroethane	ND	0.00078	0.00043	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
Tetrachloroethylene	ND	0.0016	0.00066	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
Tetrahydrofuran	ND	0.0078	0.0028	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
Toluene	ND	0.0016	0.00053	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
1,2,3-Trichlorobenzene	ND	0.0016	0.00044	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
1,2,4-Trichlorobenzene	ND	0.0016	0.00048	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
1,3,5-Trichlorobenzene	ND	0.0016	0.00045	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
1,1,1-Trichloroethane	ND	0.0016	0.00060	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
1,1,2-Trichloroethane	ND	0.0016	0.00042	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
Trichloroethylene	ND	0.0016	0.00063	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0078	0.00059	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
1,2,3-Trichloropropane	ND	0.0016	0.00069	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0078	0.00067	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
1,2,4-Trimethylbenzene	ND	0.0016	0.00060	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
1,3,5-Trimethylbenzene	ND	0.0016	0.00046	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
Vinyl Chloride	ND	0.0078	0.00058	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
m+p Xylene	ND	0.0031	0.0011	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF
o-Xylene	ND	0.0016	0.00044	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 12:47	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	102	70-130	5/12/23 12:47
Toluene-d8	96.8	70-130	5/12/23 12:47
4-Bromofluorobenzene	96.0	70-130	5/12/23 12:47

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Project Location: 1921 Dover Rd, Epson, NH

Sample Description:

Work Order: 23E1686

Date Received: 5/11/2023

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

Sampled: 5/10/2023 07:35

Sample ID: 23E1686-01

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	DL	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Gasoline Range Organics (GRO)	0.76	1.0	0.70	mg/Kg dry	1	J	SW-846 8015C	5/12/23	5/13/23 8:00	EEH
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1-Chloro-3-fluorobenzene	96.4		70-130						5/13/23 8:00	

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Project Location: 1921 Dover Rd, Epson, NH

Sample Description:

Work Order: 23E1686

Date Received: 5/11/2023

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

Sampled: 5/10/2023 07:35

Sample ID: 23E1686-01

Sample Matrix: Soil

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

Analyte	Results	RL	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	79.2		% Wt	1	H-06	SM 2540G	5/18/23	5/18/23 9:44	ATP

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Project Location: 1921 Dover Rd, Epsom, NH

Sample Description:

Work Order: 23E1686

Date Received: 5/11/2023

Field Sample #: B(MW)-2 (5.5-7)

Sampled: 5/10/2023 09:35

Sample ID: 23E1686-02

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.079	0.0071	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
Acrylonitrile	ND	0.0047	0.00070	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00079	0.00054	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
Benzene	ND	0.0016	0.00046	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
Bromobenzene	ND	0.0016	0.00036	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
Bromochloromethane	ND	0.0016	0.00062	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
Bromodichloromethane	ND	0.0016	0.00041	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
Bromoform	ND	0.0016	0.00048	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
Bromomethane	ND	0.0079	0.0014	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
2-Butanone (MEK)	ND	0.031	0.0049	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
tert-Butyl Alcohol (TBA)	ND	0.079	0.031	mg/Kg dry	1	V-05, U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
n-Butylbenzene	ND	0.0016	0.00051	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
sec-Butylbenzene	ND	0.0016	0.00075	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
tert-Butylbenzene	ND	0.0016	0.00068	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00079	0.00062	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
Carbon Disulfide	ND	0.0079	0.0063	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
Carbon Tetrachloride	ND	0.0016	0.00062	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
Chlorobenzene	ND	0.0016	0.00044	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
Chlorodibromomethane	ND	0.00079	0.00050	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
Chloroethane	ND	0.016	0.00087	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
Chloroform	ND	0.0031	0.00049	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
Chloromethane	ND	0.0079	0.00078	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
2-Chlorotoluene	ND	0.0016	0.00040	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
4-Chlorotoluene	ND	0.0016	0.00035	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0016	0.00062	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
1,2-Dibromoethane (EDB)	ND	0.00079	0.00060	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
Dibromomethane	ND	0.0016	0.00054	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
1,2-Dichlorobenzene	ND	0.0016	0.00042	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
1,3-Dichlorobenzene	ND	0.0016	0.00043	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
1,4-Dichlorobenzene	ND	0.0016	0.00048	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
trans-1,4-Dichloro-2-butene	ND	0.0031	0.00049	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.016	0.00081	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
1,1-Dichloroethane	ND	0.0016	0.00054	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
1,2-Dichloroethane	ND	0.0016	0.00053	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
1,1-Dichloroethylene	ND	0.0031	0.00065	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
cis-1,2-Dichloroethylene	ND	0.0016	0.00050	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
trans-1,2-Dichloroethylene	ND	0.0016	0.00057	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
1,2-Dichloropropane	ND	0.0016	0.00049	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
1,3-Dichloropropane	ND	0.00079	0.00039	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
2,2-Dichloropropane	ND	0.0016	0.00061	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
1,1-Dichloropropene	ND	0.0016	0.00070	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
cis-1,3-Dichloropropene	ND	0.00079	0.00044	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
trans-1,3-Dichloropropene	ND	0.00079	0.00048	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
Diethyl Ether	ND	0.016	0.00065	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF

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

Project Location: 1921 Dover Rd, Epsom, NH

Sample Description:

Work Order: 23E1686

Date Received: 5/11/2023

Field Sample #: B(MW)-2 (5.5-7)

Sampled: 5/10/2023 09:35

Sample ID: 23E1686-02

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.00079	0.00054	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
1,4-Dioxane	ND	0.079	0.036	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
Ethylbenzene	ND	0.0016	0.00047	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
Hexachlorobutadiene	ND	0.0016	0.00066	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
2-Hexanone (MBK)	ND	0.016	0.0040	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
Isopropylbenzene (Cumene)	ND	0.0016	0.00049	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0016	0.00049	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
Methyl Acetate	ND	0.0016	0.0011	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0031	0.00053	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
Methyl Cyclohexane	ND	0.0016	0.00061	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
Methylene Chloride	ND	0.016	0.00076	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.016	0.0035	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
Naphthalene	ND	0.0031	0.00057	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
n-Propylbenzene	ND	0.0016	0.00038	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
Styrene	ND	0.0016	0.00039	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
1,1,1,2-Tetrachloroethane	ND	0.0016	0.00042	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
1,1,2,2-Tetrachloroethane	ND	0.00079	0.00043	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
Tetrachloroethylene	ND	0.0016	0.00066	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
Tetrahydrofuran	ND	0.0079	0.0028	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
Toluene	ND	0.0016	0.00053	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
1,2,3-Trichlorobenzene	ND	0.0016	0.00045	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
1,2,4-Trichlorobenzene	ND	0.0016	0.00048	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
1,3,5-Trichlorobenzene	ND	0.0016	0.00045	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
1,1,1-Trichloroethane	ND	0.0016	0.00060	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
1,1,2-Trichloroethane	ND	0.0016	0.00042	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
Trichloroethylene	ND	0.0016	0.00063	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0079	0.00059	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
1,2,3-Trichloropropane	ND	0.0016	0.00070	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0079	0.00068	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
1,2,4-Trimethylbenzene	ND	0.0016	0.00060	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
1,3,5-Trimethylbenzene	ND	0.0016	0.00046	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
Vinyl Chloride	ND	0.0079	0.00058	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
m+p Xylene	ND	0.0031	0.0011	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF
o-Xylene	ND	0.0016	0.00044	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:12	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	105	70-130	5/12/23 13:12
Toluene-d8	98.6	70-130	5/12/23 13:12
4-Bromofluorobenzene	96.2	70-130	5/12/23 13:12

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

Project Location: 1921 Dover Rd, Epson, NH

Sample Description:

Work Order: 23E1686

Date Received: 5/11/2023

Field Sample #: B(MW)-2 (5.5-7)

Sampled: 5/10/2023 09:35

Sample ID: 23E1686-02

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	DL	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Gasoline Range Organics (GRO)	0.78	1.0	0.69	mg/Kg dry	1	J	SW-846 8015C	5/12/23	5/13/23 7:01	EEH
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1-Chloro-3-fluorobenzene	98.8		70-130				5/13/23 7:01			

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Project Location: 1921 Dover Rd, Epson, NH

Sample Description:

Work Order: 23E1686

Date Received: 5/11/2023

Field Sample #: B(MW)-2 (5.5-7)

Sampled: 5/10/2023 09:35

Sample ID: 23E1686-02

Sample Matrix: Soil

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

Analyte	Results	RL	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	80.9		% Wt	1	H-06	SM 2540G	5/18/23	5/18/23 9:44	ATP

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Project Location: 1921 Dover Rd, Epsom, NH

Sample Description:

Work Order: 23E1686

Date Received: 5/11/2023

Field Sample #: B(MW)-3 (4.5-6)

Sampled: 5/10/2023 11:30

Sample ID: 23E1686-03

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	0.0085	0.072	0.0065	mg/Kg dry	1	J	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
Acrylonitrile	ND	0.0043	0.00064	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00072	0.00049	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
Benzene	ND	0.0014	0.00042	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
Bromobenzene	ND	0.0014	0.00033	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
Bromochloromethane	ND	0.0014	0.00056	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
Bromodichloromethane	ND	0.0014	0.00037	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
Bromoform	ND	0.0014	0.00044	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
Bromomethane	ND	0.0072	0.0012	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
2-Butanone (MEK)	ND	0.029	0.0045	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
tert-Butyl Alcohol (TBA)	ND	0.072	0.028	mg/Kg dry	1	V-05, U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
n-Butylbenzene	ND	0.0014	0.00047	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
sec-Butylbenzene	ND	0.0014	0.00068	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
tert-Butylbenzene	ND	0.0014	0.00062	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00072	0.00056	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
Carbon Disulfide	ND	0.0072	0.0057	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
Carbon Tetrachloride	ND	0.0014	0.00056	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
Chlorobenzene	ND	0.0014	0.00040	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
Chlorodibromomethane	ND	0.00072	0.00045	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
Chloroethane	ND	0.014	0.00079	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
Chloroform	ND	0.0029	0.00045	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
Chloromethane	ND	0.0072	0.00071	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
2-Chlorotoluene	ND	0.0014	0.00036	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
4-Chlorotoluene	ND	0.0014	0.00032	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0014	0.00057	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
1,2-Dibromoethane (EDB)	ND	0.00072	0.00055	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
Dibromomethane	ND	0.0014	0.00050	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
1,2-Dichlorobenzene	ND	0.0014	0.00038	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
1,3-Dichlorobenzene	ND	0.0014	0.00040	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
1,4-Dichlorobenzene	ND	0.0014	0.00043	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
trans-1,4-Dichloro-2-butene	ND	0.0029	0.00044	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.014	0.00074	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
1,1-Dichloroethane	ND	0.0014	0.00049	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
1,2-Dichloroethane	ND	0.0014	0.00048	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
1,1-Dichloroethylene	ND	0.0029	0.00059	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
cis-1,2-Dichloroethylene	ND	0.0014	0.00046	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
trans-1,2-Dichloroethylene	ND	0.0014	0.00052	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
1,2-Dichloropropane	ND	0.0014	0.00045	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
1,3-Dichloropropane	ND	0.00072	0.00035	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
2,2-Dichloropropane	ND	0.0014	0.00056	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
1,1-Dichloropropene	ND	0.0014	0.00064	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
cis-1,3-Dichloropropene	ND	0.00072	0.00040	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
trans-1,3-Dichloropropene	ND	0.00072	0.00044	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
Diethyl Ether	ND	0.014	0.00059	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF

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Project Location: 1921 Dover Rd, Epsom, NH

Sample Description:

Work Order: 23E1686

Date Received: 5/11/2023

Field Sample #: B(MW)-3 (4.5-6)

Sampled: 5/10/2023 11:30

Sample ID: 23E1686-03

Sample Matrix: Soil

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.00072	0.00049	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
1,4-Dioxane	ND	0.072	0.033	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
Ethylbenzene	ND	0.0014	0.00043	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
Hexachlorobutadiene	ND	0.0014	0.00060	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
2-Hexanone (MBK)	ND	0.014	0.0036	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
Isopropylbenzene (Cumene)	ND	0.0014	0.00045	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0014	0.00044	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
Methyl Acetate	ND	0.0014	0.0010	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0029	0.00048	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
Methyl Cyclohexane	ND	0.0014	0.00056	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
Methylene Chloride	ND	0.014	0.00069	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.014	0.0032	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
Naphthalene	0.0056	0.0029	0.00052	mg/Kg dry	1		SW-846 8260D	5/12/23	5/12/23 13:38	MFF
n-Propylbenzene	ND	0.0014	0.00035	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
Styrene	ND	0.0014	0.00035	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
1,1,1,2-Tetrachloroethane	ND	0.0014	0.00039	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
1,1,2,2-Tetrachloroethane	ND	0.00072	0.00040	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
Tetrachloroethylene	ND	0.0014	0.00060	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
Tetrahydrofuran	ND	0.0072	0.0026	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
Toluene	ND	0.0014	0.00049	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
1,2,3-Trichlorobenzene	ND	0.0014	0.00041	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
1,2,4-Trichlorobenzene	ND	0.0014	0.00043	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
1,3,5-Trichlorobenzene	ND	0.0014	0.00041	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
1,1,1-Trichloroethane	ND	0.0014	0.00055	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
1,1,2-Trichloroethane	ND	0.0014	0.00038	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
Trichloroethylene	ND	0.0014	0.00058	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0072	0.00053	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
1,2,3-Trichloropropane	ND	0.0014	0.00063	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0072	0.00062	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
1,2,4-Trimethylbenzene	ND	0.0014	0.00055	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
1,3,5-Trimethylbenzene	ND	0.0014	0.00042	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
Vinyl Chloride	ND	0.0072	0.00053	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
m+p Xylene	ND	0.0029	0.0010	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF
o-Xylene	ND	0.0014	0.00040	mg/Kg dry	1	U	SW-846 8260D	5/12/23	5/12/23 13:38	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	103	70-130	5/12/23 13:38
Toluene-d8	99.2	70-130	5/12/23 13:38
4-Bromofluorobenzene	95.8	70-130	5/12/23 13:38

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

Project Location: 1921 Dover Rd, Epson, NH

Sample Description:

Work Order: 23E1686

Date Received: 5/11/2023

Field Sample #: B(MW)-3 (4.5-6)

Sampled: 5/10/2023 11:30

Sample ID: 23E1686-03

Sample Matrix: Soil

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	DL	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Gasoline Range Organics (GRO)	0.80	0.97	0.66	mg/Kg dry	1	J	SW-846 8015C	5/12/23	5/13/23 7:31	EEH
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1-Chloro-3-fluorobenzene	105		70-130				5/13/23 7:31			

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

Project Location: 1921 Dover Rd, Epson, NH

Sample Description:

Work Order: 23E1686

Date Received: 5/11/2023

Field Sample #: B(MW)-3 (4.5-6)

Sampled: 5/10/2023 11:30

Sample ID: 23E1686-03

Sample Matrix: Soil

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

Analyte	Results	RL	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	80.7		% Wt	1	H-06	SM 2540G	5/18/23	5/18/23 9:44	ATP

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

Project Location: 1921 Dover Rd, Epsom, NH

Sample Description:

Work Order: 23E1686

Date Received: 5/11/2023

Field Sample #: PWSID#0778090

Sampled: 5/10/2023 08:45

Sample ID: 23E1686-04

Sample Matrix: Drinking Water

**Drinking Water Organics EPA 500 Series Methods**

Analyte	Results	RL	MCL/SMCL			Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
			DL	MA	ORSG							
Acetone	9.3	10	1.5			µg/L	1	J	EPA 524.2	5/12/23	5/12/23 13:15	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.26			µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
Benzene	ND	0.50	0.13	5		µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
Bromobenzene	ND	0.50	0.13			µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
Bromochloromethane	ND	0.50	0.18			µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
Bromodichloromethane	ND	0.50	0.12			µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
Bromoform	ND	0.50	0.17			µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
Bromomethane	ND	0.50	0.38			µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
2-Butanone (MEK)	ND	5.0	1.6			µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
tert-Butyl Alcohol (TBA)	ND	5.0	2.2			µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
n-Butylbenzene	ND	0.50	0.21			µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
sec-Butylbenzene	ND	0.50	0.15			µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
tert-Butylbenzene	ND	0.50	0.15			µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15			µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
Carbon Disulfide	ND	5.0	1.8			µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
Carbon Tetrachloride	ND	0.50	0.13	5		µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
Chlorobenzene	ND	0.50	0.13	100		µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
Chloroethane	ND	0.50	0.19			µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
Chloroform	ND	0.50	0.12			µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
Chloromethane	ND	0.50	0.26			µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
2-Chlorotoluene	ND	0.50	0.13			µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
4-Chlorotoluene	ND	0.50	0.14			µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
Dibromochloromethane	ND	0.50	0.13			µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	0.40			µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.14			µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
Dibromomethane	ND	0.50	0.13			µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
1,2-Dichlorobenzene	ND	0.50	0.14	600		µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
1,3-Dichlorobenzene	ND	0.50	0.13			µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
1,4-Dichlorobenzene	ND	0.50	0.14	75		µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.50	0.21			µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
1,1-Dichloroethane	ND	0.50	0.15			µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
1,2-Dichloroethane	ND	0.50	0.12	5		µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
1,1-Dichloroethylene	ND	0.50	0.13	7		µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
cis-1,2-Dichloroethylene	ND	0.50	0.13	70		µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
trans-1,2-Dichloroethylene	ND	0.50	0.17	100		µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
1,2-Dichloropropane	ND	0.50	0.12	5		µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
1,3-Dichloropropane	ND	0.50	0.13			µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
2,2-Dichloropropane	ND	0.50	0.19			µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
1,1-Dichloropropene	ND	0.50	0.14			µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
cis-1,3-Dichloropropene	ND	0.50	0.17			µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
trans-1,3-Dichloropropene	ND	0.50	0.19			µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
1,3-Dichloropropene (total)	ND	1.0	0.31			µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
Diethyl Ether	ND	0.50	0.13			µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF
Diisopropyl Ether (DIPE)	ND	0.50	0.13			µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF

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

Project Location: 1921 Dover Rd, Epsom, NH

Sample Description:

Work Order: 23E1686

Date Received: 5/11/2023

Field Sample #: PWSID#0778090

Sampled: 5/10/2023 08:45

Sample ID: 23E1686-04

Sample Matrix: Drinking Water

**Drinking Water Organics EPA 500 Series Methods**

Analyte	Results	RL	MCL/SMCL			Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
			DL	MA	ORSG							
Ethylbenzene	ND	0.50	0.13	700	µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF	
Hexachlorobutadiene	ND	0.50	0.34		µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF	
2-Hexanone (MBK)	ND	5.0	1.5		µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF	
Isopropylbenzene (Cumene)	ND	0.50	0.12		µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF	
p-Isopropyltoluene (p-Cymene)	ND	0.50	0.19		µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF	
Methyl tert-Butyl Ether (MTBE)	ND	0.50	0.13		µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF	
Methylene Chloride	ND	0.50	0.13	5	µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF	
4-Methyl-2-pentanone (MIBK)	ND	5.0	1.5		µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF	
Naphthalene	ND	1.0	0.44		µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF	
n-Propylbenzene	ND	0.50	0.14		µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF	
Styrene	ND	0.50	0.14	100	µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF	
1,1,1,2-Tetrachloroethane	ND	0.50	0.16		µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF	
1,1,2,2-Tetrachloroethane	ND	0.50	0.16		µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF	
Tetrachloroethylene	ND	0.50	0.14	5	µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF	
Tetrahydrofuran	ND	2.0	0.40		µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF	
Toluene	ND	0.50	0.16	1000	µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF	
1,2,3-Trichlorobenzene	ND	0.50	0.34		µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF	
1,2,4-Trichlorobenzene	ND	0.50	0.35	70	µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF	
1,3,5-Trichlorobenzene	ND	0.50	0.29		µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF	
1,1,1-Trichloroethane	ND	0.50	0.19	200	µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF	
1,1,2-Trichloroethane	ND	0.50	0.15	5	µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF	
Trichloroethylene	ND	0.50	0.10	5	µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF	
Trichlorofluoromethane (Freon 11)	ND	0.50	0.16		µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF	
1,2,3-Trichloropropane	ND	0.50	0.13		µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.50	0.23		µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF	
1,2,4-Trimethylbenzene	ND	0.50	0.23		µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF	
1,3,5-Trimethylbenzene	ND	0.50	0.16		µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF	
Vinyl Chloride	ND	0.50	0.19	2	µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF	
m&p-Xylene	ND	1.0	0.30		µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF	
o-Xylene	ND	0.50	0.16		µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF	
Xylenes (total)	ND	1.5	0.98	10000	µg/L	1	U	EPA 524.2	5/12/23	5/12/23 13:15	MFF	

Surrogates	% Recovery	Recovery Limits	Flag/Qual
4-Bromofluorobenzene	83.8	80-120	5/12/23 13:15
1,2-Dichlorobenzene-d4	105	80-120	5/12/23 13:15

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

**Sample Extraction Data**
**Prep Method: EPA 524.2-EPA 524.2**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23E1686-04 [PWSID#0778090]	B340083	5	5.00	05/12/23

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

Lab Number [Field ID]	Batch	Date
23E1686-01 [B(MW)-1 (5-7)]	B340649	05/18/23
23E1686-02 [B(MW)-2 (5.5-7)]	B340649	05/18/23
23E1686-03 [B(MW)-3 (4.5-6)]	B340649	05/18/23

**Prep Method: SW-846 5035/5030B-SW-846 8015C**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23E1686-01 [B(MW)-1 (5-7)]	B340099	8.31	6.73	05/12/23
23E1686-02 [B(MW)-2 (5.5-7)]	B340099	8.00	6.53	05/12/23
23E1686-03 [B(MW)-3 (4.5-6)]	B340099	8.47	6.63	05/12/23

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

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23E1686-01 [B(MW)-1 (5-7)]	B340108	8.05	10.0	05/12/23
23E1686-02 [B(MW)-2 (5.5-7)]	B340108	7.85	10.0	05/12/23
23E1686-03 [B(MW)-3 (4.5-6)]	B340108	8.64	10.0	05/12/23

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

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

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B340108 - SW-846 5035**
**Blank (B340108-BLK1)**

Prepared &amp; Analyzed: 05/12/23

Acetone	ND	0.10	0.0091	mg/Kg wet							U
Acrylonitrile	ND	0.0060	0.0008	mg/Kg wet							U
tert-Amyl Methyl Ether (TAME)	ND	0.0010	0.0006	mg/Kg wet							U
Benzene	ND	0.0020	0.0005	mg/Kg wet							U
Bromobenzene	ND	0.0020	0.0004	mg/Kg wet							U
Bromochloromethane	ND	0.0020	0.0007	mg/Kg wet							U
Bromodichloromethane	ND	0.0020	0.0005	mg/Kg wet							U
Bromoform	ND	0.0020	0.0006	mg/Kg wet							U
Bromomethane	ND	0.010	0.0017	mg/Kg wet							U
2-Butanone (MEK)	ND	0.040	0.0063	mg/Kg wet							U
tert-Butyl Alcohol (TBA)	ND	0.10	0.040	mg/Kg wet							V-05, U
n-Butylbenzene	ND	0.0020	0.0006	mg/Kg wet							U
sec-Butylbenzene	ND	0.0020	0.0009	mg/Kg wet							U
tert-Butylbenzene	ND	0.0020	0.0008	mg/Kg wet							U
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	0.0007	mg/Kg wet							U
Carbon Disulfide	ND	0.010	0.0080	mg/Kg wet							U
Carbon Tetrachloride	ND	0.0020	0.0007	mg/Kg wet							U
Chlorobenzene	ND	0.0020	0.0005	mg/Kg wet							U
Chlorodibromomethane	ND	0.0010	0.0006	mg/Kg wet							U
Chloroethane	ND	0.020	0.0011	mg/Kg wet							U
Chloroform	ND	0.0040	0.0006	mg/Kg wet							U
Chloromethane	ND	0.010	0.0009	mg/Kg wet							U
2-Chlorotoluene	ND	0.0020	0.0005	mg/Kg wet							U
4-Chlorotoluene	ND	0.0020	0.0004	mg/Kg wet							U
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	0.0007	mg/Kg wet							U
1,2-Dibromoethane (EDB)	ND	0.0010	0.0007	mg/Kg wet							U
Dibromomethane	ND	0.0020	0.0006	mg/Kg wet							U
1,2-Dichlorobenzene	ND	0.0020	0.0005	mg/Kg wet							U
1,3-Dichlorobenzene	ND	0.0020	0.0005	mg/Kg wet							U
1,4-Dichlorobenzene	ND	0.0020	0.0006	mg/Kg wet							U

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

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

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B340108 - SW-846 5035</b>											
<b>Blank (B340108-BLK1)</b>						Prepared & Analyzed: 05/12/23					
trans-1,4-Dichloro-2-butene	ND	0.0040	0.0006	mg/Kg							U
				wet							
Dichlorodifluoromethane (Freon 12)	ND	0.020	0.0010	mg/Kg							U
				wet							
1,1-Dichloroethane	ND	0.0020	0.0006	mg/Kg							U
				wet							
1,2-Dichloroethane	ND	0.0020	0.0006	mg/Kg							U
				wet							
1,1-Dichloroethylene	ND	0.0040	0.0008	mg/Kg							U
				wet							
cis-1,2-Dichloroethylene	ND	0.0020	0.0006	mg/Kg							U
				wet							
trans-1,2-Dichloroethylene	ND	0.0020	0.0007	mg/Kg							U
				wet							
1,2-Dichloropropane	ND	0.0020	0.0006	mg/Kg							U
				wet							
1,3-Dichloropropane	ND	0.0010	0.0004	mg/Kg							U
				wet							
2,2-Dichloropropane	ND	0.0020	0.0007	mg/Kg							U
				wet							
1,1-Dichloropropene	ND	0.0020	0.0008	mg/Kg							U
				wet							
cis-1,3-Dichloropropene	ND	0.0010	0.0005	mg/Kg							U
				wet							
trans-1,3-Dichloropropene	ND	0.0010	0.0006	mg/Kg							U
				wet							
Diethyl Ether	ND	0.020	0.0008	mg/Kg							U
				wet							
Diisopropyl Ether (DIPE)	ND	0.0010	0.0006	mg/Kg							U
				wet							
1,4-Dioxane	ND	0.10	0.046	mg/Kg							U
				wet							
Ethylbenzene	ND	0.0020	0.0006	mg/Kg							U
				wet							
Hexachlorobutadiene	ND	0.0020	0.0008	mg/Kg							U
				wet							
2-Hexanone (MBK)	ND	0.020	0.0050	mg/Kg							U
				wet							
Isopropylbenzene (Cumene)	ND	0.0020	0.0006	mg/Kg							U
				wet							
p-Isopropyltoluene (p-Cymene)	ND	0.0020	0.0006	mg/Kg							U
				wet							
Methyl Acetate	ND	0.0020	0.0014	mg/Kg							U
				wet							
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	0.0006	mg/Kg							U
				wet							
Methyl Cyclohexane	ND	0.0020	0.0007	mg/Kg							U
				wet							
Methylene Chloride	ND	0.020	0.0009	mg/Kg							U
				wet							
4-Methyl-2-pentanone (MIBK)	ND	0.020	0.0044	mg/Kg							U
				wet							
Naphthalene	ND	0.0040	0.0007	mg/Kg							U
				wet							
n-Propylbenzene	ND	0.0020	0.0004	mg/Kg							U
				wet							
Styrene	ND	0.0020	0.0004	mg/Kg							U
				wet							
1,1,1,2-Tetrachloroethane	ND	0.0020	0.0005	mg/Kg							U
				wet							

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

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B340108 - SW-846 5035</b>											
<b>Blank (B340108-BLK1)</b>						Prepared & Analyzed: 05/12/23					
1,1,2,2-Tetrachloroethane	ND	0.0010	0.0005	mg/Kg wet							U
Tetrachloroethylene	ND	0.0020	0.0008	mg/Kg wet							U
Tetrahydrofuran	ND	0.010	0.0036	mg/Kg wet							U
Toluene	ND	0.0020	0.0006	mg/Kg wet							U
1,2,3-Trichlorobenzene	ND	0.0020	0.0005	mg/Kg wet							U
1,2,4-Trichlorobenzene	ND	0.0020	0.0006	mg/Kg wet							U
1,3,5-Trichlorobenzene	ND	0.0020	0.0005	mg/Kg wet							U
1,1,1-Trichloroethane	ND	0.0020	0.0007	mg/Kg wet							U
1,1,2-Trichloroethane	ND	0.0020	0.0005	mg/Kg wet							U
Trichloroethylene	ND	0.0020	0.0008	mg/Kg wet							U
Trichlorofluoromethane (Freon 11)	ND	0.010	0.0007	mg/Kg wet							U
1,2,3-Trichloropropane	ND	0.0020	0.0008	mg/Kg wet							U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.010	0.0008	mg/Kg wet							U
1,2,4-Trimethylbenzene	ND	0.0020	0.0007	mg/Kg wet							U
1,3,5-Trimethylbenzene	ND	0.0020	0.0005	mg/Kg wet							U
Vinyl Chloride	ND	0.010	0.0007	mg/Kg wet							U
m+p Xylene	ND	0.0040	0.0014	mg/Kg wet							U
o-Xylene	ND	0.0020	0.0005	mg/Kg wet							U
Surrogate: 1,2-Dichloroethane-d4	0.0496			mg/Kg wet	0.0500		99.2	70-130			
Surrogate: Toluene-d8	0.0503			mg/Kg wet	0.0500		101	70-130			
Surrogate: 4-Bromofluorobenzene	0.0491			mg/Kg wet	0.0500		98.2	70-130			
<b>LCS (B340108-BS1)</b>						Prepared & Analyzed: 05/12/23					
Acetone	0.186	0.10	0.0091	mg/Kg wet	0.200		92.9	70-160			†
Acrylonitrile	0.0207	0.0060	0.0008	mg/Kg wet	0.0200		103	70-130			
tert-Amyl Methyl Ether (TAME)	0.0188	0.0010	0.0006	mg/Kg wet	0.0200		94.0	70-130			
Benzene	0.0220	0.0020	0.0005	mg/Kg wet	0.0200		110	70-130			
Bromobenzene	0.0239	0.0020	0.0004	mg/Kg wet	0.0200		119	70-130			
Bromochloromethane	0.0217	0.0020	0.0007	mg/Kg wet	0.0200		108	70-130			
Bromodichloromethane	0.0210	0.0020	0.0005	mg/Kg wet	0.0200		105	70-130			
Bromoform	0.0210	0.0020	0.0006	mg/Kg wet	0.0200		105	70-130			

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

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B340108 - SW-846 5035</b>											
<b>LCS (B340108-BS1)</b>											
						Prepared & Analyzed: 05/12/23					
Bromomethane	0.0301	0.010	0.0017	mg/Kg wet	0.0200		151 *	40-130			L-02, V-20 †
2-Butanone (MEK)	0.203	0.040	0.0063	mg/Kg wet	0.200		102	70-160			†
tert-Butyl Alcohol (TBA)	0.149	0.10	0.040	mg/Kg wet	0.200		74.7	40-130			V-05 †
n-Butylbenzene	0.0207	0.0020	0.0006	mg/Kg wet	0.0200		104	70-130			
sec-Butylbenzene	0.0202	0.0020	0.0009	mg/Kg wet	0.0200		101	70-130			
tert-Butylbenzene	0.0201	0.0020	0.0008	mg/Kg wet	0.0200		101	70-160			†
tert-Butyl Ethyl Ether (TBEE)	0.0192	0.0010	0.0007	mg/Kg wet	0.0200		95.9	70-130			
Carbon Disulfide	0.228	0.010	0.0080	mg/Kg wet	0.200		114	70-130			V-35
Carbon Tetrachloride	0.0195	0.0020	0.0007	mg/Kg wet	0.0200		97.5	70-130			
Chlorobenzene	0.0221	0.0020	0.0005	mg/Kg wet	0.0200		111	70-130			
Chlorodibromomethane	0.0203	0.0010	0.0006	mg/Kg wet	0.0200		101	70-130			
Chloroethane	0.0337	0.020	0.0011	mg/Kg wet	0.0200		168 *	70-130			L-02, V-20
Chloroform	0.0211	0.0040	0.0006	mg/Kg wet	0.0200		106	70-130			
Chloromethane	0.0180	0.010	0.0009	mg/Kg wet	0.0200		90.0	70-130			
2-Chlorotoluene	0.0219	0.0020	0.0005	mg/Kg wet	0.0200		110	70-130			
4-Chlorotoluene	0.0224	0.0020	0.0004	mg/Kg wet	0.0200		112	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	0.0162	0.0020	0.0007	mg/Kg wet	0.0200		81.2	70-130			
1,2-Dibromoethane (EDB)	0.0212	0.0010	0.0007	mg/Kg wet	0.0200		106	70-130			
Dibromomethane	0.0216	0.0020	0.0006	mg/Kg wet	0.0200		108	70-130			
1,2-Dichlorobenzene	0.0211	0.0020	0.0005	mg/Kg wet	0.0200		105	70-130			
1,3-Dichlorobenzene	0.0202	0.0020	0.0005	mg/Kg wet	0.0200		101	70-130			
1,4-Dichlorobenzene	0.0203	0.0020	0.0006	mg/Kg wet	0.0200		102	70-130			
trans-1,4-Dichloro-2-butene	0.0185	0.0040	0.0006	mg/Kg wet	0.0200		92.4	70-130			
Dichlorodifluoromethane (Freon 12)	0.0218	0.020	0.0010	mg/Kg wet	0.0200		109	40-160			V-35 †
1,1-Dichloroethane	0.0213	0.0020	0.0006	mg/Kg wet	0.0200		107	70-130			
1,2-Dichloroethane	0.0202	0.0020	0.0006	mg/Kg wet	0.0200		101	70-130			
1,1-Dichloroethylene	0.0215	0.0040	0.0008	mg/Kg wet	0.0200		108	70-130			
cis-1,2-Dichloroethylene	0.0210	0.0020	0.0006	mg/Kg wet	0.0200		105	70-130			
trans-1,2-Dichloroethylene	0.0208	0.0020	0.0007	mg/Kg wet	0.0200		104	70-130			
1,2-Dichloropropane	0.0221	0.0020	0.0006	mg/Kg wet	0.0200		111	70-130			

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

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B340108 - SW-846 5035</b>											
<b>LCS (B340108-BS1)</b>											
Prepared & Analyzed: 05/12/23											
1,3-Dichloropropane	0.0220	0.0010	0.0004	mg/Kg wet	0.0200		110	70-130			
2,2-Dichloropropane	0.0186	0.0020	0.0007	mg/Kg wet	0.0200		92.8	70-130			
1,1-Dichloropropene	0.0214	0.0020	0.0008	mg/Kg wet	0.0200		107	70-130			
cis-1,3-Dichloropropene	0.0198	0.0010	0.0005	mg/Kg wet	0.0200		99.1	70-130			
trans-1,3-Dichloropropene	0.0193	0.0010	0.0006	mg/Kg wet	0.0200		96.5	70-130			
Diethyl Ether	0.0224	0.020	0.0008	mg/Kg wet	0.0200		112	70-130			
Diisopropyl Ether (DIPE)	0.0202	0.0010	0.0006	mg/Kg wet	0.0200		101	70-130			
1,4-Dioxane	0.187	0.10	0.046	mg/Kg wet	0.200		93.6	40-160			†
Ethylbenzene	0.0221	0.0020	0.0006	mg/Kg wet	0.0200		110	70-130			
Hexachlorobutadiene	0.0188	0.0020	0.0008	mg/Kg wet	0.0200		93.8	70-160			
2-Hexanone (MBK)	0.196	0.020	0.0050	mg/Kg wet	0.200		97.8	70-160			†
Isopropylbenzene (Cumene)	0.0213	0.0020	0.0006	mg/Kg wet	0.0200		106	70-130			
p-Isopropyltoluene (p-Cymene)	0.0201	0.0020	0.0006	mg/Kg wet	0.0200		100	70-130			
Methyl Acetate	0.0210	0.0020	0.0014	mg/Kg wet	0.0200		105	70-130			
Methyl tert-Butyl Ether (MTBE)	0.0193	0.0040	0.0006	mg/Kg wet	0.0200		96.3	70-130			
Methyl Cyclohexane	0.0198	0.0020	0.0007	mg/Kg wet	0.0200		99.0	70-130			
Methylene Chloride	0.0204	0.020	0.0009	mg/Kg wet	0.0200		102	40-160			†
4-Methyl-2-pentanone (MIBK)	0.200	0.020	0.0044	mg/Kg wet	0.200		100	70-160			†
Naphthalene	0.0201	0.0040	0.0007	mg/Kg wet	0.0200		100	40-130			†
n-Propylbenzene	0.0223	0.0020	0.0004	mg/Kg wet	0.0200		112	70-130			
Styrene	0.0228	0.0020	0.0004	mg/Kg wet	0.0200		114	70-130			
1,1,1,2-Tetrachloroethane	0.0220	0.0020	0.0005	mg/Kg wet	0.0200		110	70-130			
1,1,2,2-Tetrachloroethane	0.0234	0.0010	0.0005	mg/Kg wet	0.0200		117	70-130			
Tetrachloroethylene	0.0206	0.0020	0.0008	mg/Kg wet	0.0200		103	70-130			
Tetrahydrofuran	0.0183	0.010	0.0036	mg/Kg wet	0.0200		91.5	70-130			
Toluene	0.0205	0.0020	0.0006	mg/Kg wet	0.0200		103	70-130			
1,2,3-Trichlorobenzene	0.0203	0.0020	0.0005	mg/Kg wet	0.0200		102	70-130			
1,2,4-Trichlorobenzene	0.0193	0.0020	0.0006	mg/Kg wet	0.0200		96.4	70-130			
1,3,5-Trichlorobenzene	0.0193	0.0020	0.0005	mg/Kg wet	0.0200		96.6	70-130			
1,1,1-Trichloroethane	0.0204	0.0020	0.0007	mg/Kg wet	0.0200		102	70-130			

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

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B340108 - SW-846 5035</b>											
<b>LCS (B340108-BS1)</b>						Prepared & Analyzed: 05/12/23					
1,1,2-Trichloroethane	0.0214	0.0020	0.0005	mg/Kg wet	0.0200		107	70-130			
Trichloroethylene	0.0207	0.0020	0.0008	mg/Kg wet	0.0200		103	70-130			
Trichlorofluoromethane (Freon 11)	0.0237	0.010	0.0007	mg/Kg wet	0.0200		119	70-130			
1,2,3-Trichloropropane	0.0215	0.0020	0.0008	mg/Kg wet	0.0200		108	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0215	0.010	0.0008	mg/Kg wet	0.0200		107	70-130			
1,2,4-Trimethylbenzene	0.0203	0.0020	0.0007	mg/Kg wet	0.0200		102	70-130			
1,3,5-Trimethylbenzene	0.0216	0.0020	0.0005	mg/Kg wet	0.0200		108	70-130			
Vinyl Chloride	0.0224	0.010	0.0007	mg/Kg wet	0.0200		112	40-130			†
m+p Xylene	0.0452	0.0040	0.0014	mg/Kg wet	0.0400		113	70-130			
o-Xylene	0.0225	0.0020	0.0005	mg/Kg wet	0.0200		112	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0477			mg/Kg wet	0.0500		95.3	70-130			
Surrogate: Toluene-d8	0.0510			mg/Kg wet	0.0500		102	70-130			
Surrogate: 4-Bromofluorobenzene	0.0496			mg/Kg wet	0.0500		99.2	70-130			
<b>LCS Dup (B340108-BSD1)</b>						Prepared & Analyzed: 05/12/23					
Acetone	0.194	0.10	0.0091	mg/Kg wet	0.200		96.8	70-160	4.09	25	†
Acrylonitrile	0.0203	0.0060	0.0008	mg/Kg wet	0.0200		102	70-130	1.76	25	
tert-Amyl Methyl Ether (TAME)	0.0183	0.0010	0.0006	mg/Kg wet	0.0200		91.7	70-130	2.48	25	
Benzene	0.0209	0.0020	0.0005	mg/Kg wet	0.0200		104	70-130	4.95	25	
Bromobenzene	0.0235	0.0020	0.0004	mg/Kg wet	0.0200		117	70-130	1.77	25	
Bromochloromethane	0.0214	0.0020	0.0007	mg/Kg wet	0.0200		107	70-130	1.21	25	
Bromodichloromethane	0.0207	0.0020	0.0005	mg/Kg wet	0.0200		103	70-130	1.82	25	
Bromoform	0.0212	0.0020	0.0006	mg/Kg wet	0.0200		106	70-130	0.569	25	
<b>Bromomethane</b>	0.0293	0.010	0.0017	mg/Kg wet	0.0200		<b>147</b> *	40-130	2.62	25	L-02, V-20 †
2-Butanone (MEK)	0.208	0.040	0.0063	mg/Kg wet	0.200		104	70-160	2.59	25	†
tert-Butyl Alcohol (TBA)	0.155	0.10	0.040	mg/Kg wet	0.200		77.5	40-130	3.70	25	V-05 †
n-Butylbenzene	0.0196	0.0020	0.0006	mg/Kg wet	0.0200		98.0	70-130	5.46	25	
sec-Butylbenzene	0.0192	0.0020	0.0009	mg/Kg wet	0.0200		96.0	70-130	5.18	25	
tert-Butylbenzene	0.0191	0.0020	0.0008	mg/Kg wet	0.0200		95.6	70-160	5.20	25	†
tert-Butyl Ethyl Ether (TBEE)	0.0188	0.0010	0.0007	mg/Kg wet	0.0200		93.8	70-130	2.21	25	
Carbon Disulfide	0.217	0.010	0.0080	mg/Kg wet	0.200		108	70-130	5.34	25	V-35

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

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B340108 - SW-846 5035**
**LCS Dup (B340108-BSD1)**

Prepared &amp; Analyzed: 05/12/23

Carbon Tetrachloride	0.0186	0.0020	0.0007	mg/Kg wet	0.0200		93.1	70-130	4.62	25	
Chlorobenzene	0.0219	0.0020	0.0005	mg/Kg wet	0.0200		110	70-130	0.817	25	
Chlorodibromomethane	0.0204	0.0010	0.0006	mg/Kg wet	0.0200		102	70-130	0.786	25	
<b>Chloroethane</b>	0.0330	0.020	0.0011	mg/Kg wet	0.0200		<b>165</b> *	70-130	2.04	25	L-02, V-20
Chloroform	0.0206	0.0040	0.0006	mg/Kg wet	0.0200		103	70-130	2.50	25	
Chloromethane	0.0175	0.010	0.0009	mg/Kg wet	0.0200		87.5	70-130	2.82	25	
2-Chlorotoluene	0.0210	0.0020	0.0005	mg/Kg wet	0.0200		105	70-130	4.38	25	
4-Chlorotoluene	0.0214	0.0020	0.0004	mg/Kg wet	0.0200		107	70-130	4.75	25	
1,2-Dibromo-3-chloropropane (DBCP)	0.0165	0.0020	0.0007	mg/Kg wet	0.0200		82.6	70-130	1.71	25	
1,2-Dibromoethane (EDB)	0.0205	0.0010	0.0007	mg/Kg wet	0.0200		103	70-130	3.26	25	
Dibromomethane	0.0220	0.0020	0.0006	mg/Kg wet	0.0200		110	70-130	1.93	25	
1,2-Dichlorobenzene	0.0207	0.0020	0.0005	mg/Kg wet	0.0200		104	70-130	1.72	25	
1,3-Dichlorobenzene	0.0196	0.0020	0.0005	mg/Kg wet	0.0200		98.1	70-130	2.91	25	
1,4-Dichlorobenzene	0.0196	0.0020	0.0006	mg/Kg wet	0.0200		98.2	70-130	3.40	25	
trans-1,4-Dichloro-2-butene	0.0184	0.0040	0.0006	mg/Kg wet	0.0200		92.2	70-130	0.217	25	
Dichlorodifluoromethane (Freon 12)	0.0203	0.020	0.0010	mg/Kg wet	0.0200		102	40-160	6.75	25	V-35 †
1,1-Dichloroethane	0.0204	0.0020	0.0006	mg/Kg wet	0.0200		102	70-130	4.50	25	
1,2-Dichloroethane	0.0199	0.0020	0.0006	mg/Kg wet	0.0200		99.3	70-130	1.90	25	
1,1-Dichloroethylene	0.0204	0.0040	0.0008	mg/Kg wet	0.0200		102	70-130	5.25	25	
cis-1,2-Dichloroethylene	0.0203	0.0020	0.0006	mg/Kg wet	0.0200		102	70-130	3.48	25	
trans-1,2-Dichloroethylene	0.0198	0.0020	0.0007	mg/Kg wet	0.0200		99.0	70-130	5.12	25	
1,2-Dichloropropane	0.0214	0.0020	0.0006	mg/Kg wet	0.0200		107	70-130	3.22	25	
1,3-Dichloropropane	0.0220	0.0010	0.0004	mg/Kg wet	0.0200		110	70-130	0.182	25	
2,2-Dichloropropane	0.0176	0.0020	0.0007	mg/Kg wet	0.0200		87.9	70-130	5.42	25	
1,1-Dichloropropene	0.0200	0.0020	0.0008	mg/Kg wet	0.0200		99.9	70-130	6.77	25	
cis-1,3-Dichloropropene	0.0195	0.0010	0.0005	mg/Kg wet	0.0200		97.7	70-130	1.42	25	
trans-1,3-Dichloropropene	0.0189	0.0010	0.0006	mg/Kg wet	0.0200		94.5	70-130	2.09	25	
Diethyl Ether	0.0216	0.020	0.0008	mg/Kg wet	0.0200		108	70-130	3.73	25	
Diisopropyl Ether (DIPE)	0.0207	0.0010	0.0006	mg/Kg wet	0.0200		103	70-130	2.25	25	
1,4-Dioxane	0.185	0.10	0.046	mg/Kg wet	0.200		92.7	40-160	1.04	50	† ‡

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

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B340108 - SW-846 5035</b>											
<b>LCS Dup (B340108-BSD1)</b>						Prepared & Analyzed: 05/12/23					
Ethylbenzene	0.0212	0.0020	0.0006	mg/Kg wet	0.0200		106	70-130	4.07	25	
Hexachlorobutadiene	0.0180	0.0020	0.0008	mg/Kg wet	0.0200		89.9	70-160	4.25	25	
2-Hexanone (MBK)	0.199	0.020	0.0050	mg/Kg wet	0.200		99.6	70-160	1.79	25	†
Isopropylbenzene (Cumene)	0.0206	0.0020	0.0006	mg/Kg wet	0.0200		103	70-130	3.44	25	
p-Isopropyltoluene (p-Cymene)	0.0192	0.0020	0.0006	mg/Kg wet	0.0200		95.9	70-130	4.58	25	
Methyl Acetate	0.0224	0.0020	0.0014	mg/Kg wet	0.0200		112	70-130	6.26	25	
Methyl tert-Butyl Ether (MTBE)	0.0188	0.0040	0.0006	mg/Kg wet	0.0200		94.1	70-130	2.31	25	
Methyl Cyclohexane	0.0188	0.0020	0.0007	mg/Kg wet	0.0200		93.8	70-130	5.39	25	
Methylene Chloride	0.0198	0.020	0.0009	mg/Kg wet	0.0200		99.1	40-160	2.98	25	J †
4-Methyl-2-pentanone (MIBK)	0.203	0.020	0.0044	mg/Kg wet	0.200		101	70-160	1.13	25	†
Naphthalene	0.0200	0.0040	0.0007	mg/Kg wet	0.0200		99.9	40-130	0.400	25	†
n-Propylbenzene	0.0213	0.0020	0.0004	mg/Kg wet	0.0200		107	70-130	4.49	25	
Styrene	0.0220	0.0020	0.0004	mg/Kg wet	0.0200		110	70-130	3.75	25	
1,1,1,2-Tetrachloroethane	0.0213	0.0020	0.0005	mg/Kg wet	0.0200		106	70-130	3.24	25	
1,1,2,2-Tetrachloroethane	0.0233	0.0010	0.0005	mg/Kg wet	0.0200		116	70-130	0.428	25	
Tetrachloroethylene	0.0196	0.0020	0.0008	mg/Kg wet	0.0200		97.8	70-130	5.37	25	
Tetrahydrofuran	0.0190	0.010	0.0036	mg/Kg wet	0.0200		95.2	70-130	3.96	25	
Toluene	0.0195	0.0020	0.0006	mg/Kg wet	0.0200		97.5	70-130	5.19	25	
1,2,3-Trichlorobenzene	0.0189	0.0020	0.0005	mg/Kg wet	0.0200		94.5	70-130	7.14	25	
1,2,4-Trichlorobenzene	0.0184	0.0020	0.0006	mg/Kg wet	0.0200		91.8	70-130	4.89	25	
1,3,5-Trichlorobenzene	0.0184	0.0020	0.0005	mg/Kg wet	0.0200		92.2	70-130	4.66	25	
1,1,1-Trichloroethane	0.0195	0.0020	0.0007	mg/Kg wet	0.0200		97.5	70-130	4.51	25	
1,1,2-Trichloroethane	0.0209	0.0020	0.0005	mg/Kg wet	0.0200		104	70-130	2.74	25	
Trichloroethylene	0.0199	0.0020	0.0008	mg/Kg wet	0.0200		99.5	70-130	3.84	25	
Trichlorofluoromethane (Freon 11)	0.0229	0.010	0.0007	mg/Kg wet	0.0200		114	70-130	3.69	25	
1,2,3-Trichloropropane	0.0212	0.0020	0.0008	mg/Kg wet	0.0200		106	70-130	1.31	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0200	0.010	0.0008	mg/Kg wet	0.0200		99.9	70-130	7.24	25	
1,2,4-Trimethylbenzene	0.0194	0.0020	0.0007	mg/Kg wet	0.0200		97.2	70-130	4.52	25	
1,3,5-Trimethylbenzene	0.0206	0.0020	0.0005	mg/Kg wet	0.0200		103	70-130	4.65	25	
Vinyl Chloride	0.0216	0.010	0.0007	mg/Kg wet	0.0200		108	40-130	3.73	25	†

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

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B340108 - SW-846 5035**
**LCS Dup (B340108-BSD1)**

Prepared &amp; Analyzed: 05/12/23

m+p Xylene	0.0437	0.0040	0.0014	mg/Kg wet	0.0400		109	70-130	3.37	25	
o-Xylene	0.0218	0.0020	0.0005	mg/Kg wet	0.0200		109	70-130	2.89	25	
Surrogate: 1,2-Dichloroethane-d4	0.0476			mg/Kg wet	0.0500		95.1	70-130			
Surrogate: Toluene-d8	0.0500			mg/Kg wet	0.0500		100	70-130			
Surrogate: 4-Bromofluorobenzene	0.0496			mg/Kg wet	0.0500		99.1	70-130			

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

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B340099 - SW-846 5035/5030B**
**Blank (B340099-BLK1)**

Prepared: 05/12/23 Analyzed: 05/13/23

Gasoline Range Organics (GRO)	0.86	1.0	0.68	mg/Kg wet							J
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Surrogate: 1-Chloro-3-fluorobenzene

15.0

µg/L

15.0

99.9

70-130

**LCS (B340099-BS1)**

Prepared: 05/12/23 Analyzed: 05/13/23

Gasoline Range Organics (GRO)	20.6	1.0	0.68	mg/Kg wet	25.0		82.5	80-120			
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Surrogate: 1-Chloro-3-fluorobenzene

15.6

µg/L

15.0

104

70-130

**LCS Dup (B340099-BSD1)**

Prepared: 05/12/23 Analyzed: 05/13/23

Gasoline Range Organics (GRO)	20.1	1.0	0.68	mg/Kg wet	25.0		80.5	80-120	2.55	30	
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Surrogate: 1-Chloro-3-fluorobenzene

17.0

µg/L

15.0

114

70-130

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**QUALITY CONTROL**
**Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control**

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B340649 - % Solids**
**Duplicate (B340649-DUP2)**
**Source: 23E1686-03**

Prepared &amp; Analyzed: 05/18/23

% Solids	81.0			% Wt		80.7			0.316	10	
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**QUALITY CONTROL**
**Drinking Water Organics EPA 500 Series Methods - Quality Control**

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B340083 - EPA 524.2**
**Blank (B340083-BLK1)**

Prepared &amp; Analyzed: 05/12/23

Acetone	ND	10	1.5	µg/L							U
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.26	µg/L							U
Benzene	ND	0.50	0.13	µg/L							U
Bromobenzene	ND	0.50	0.13	µg/L							U
Bromochloromethane	ND	0.50	0.18	µg/L							U
Bromodichloromethane	ND	0.50	0.12	µg/L							U
Bromoform	ND	0.50	0.17	µg/L							U
Bromomethane	ND	0.50	0.38	µg/L							U
2-Butanone (MEK)	ND	5.0	1.6	µg/L							U
tert-Butyl Alcohol (TBA)	ND	5.0	2.2	µg/L							U
n-Butylbenzene	ND	0.50	0.21	µg/L							U
sec-Butylbenzene	ND	0.50	0.15	µg/L							U
tert-Butylbenzene	ND	0.50	0.15	µg/L							U
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L							U
Carbon Disulfide	ND	5.0	1.8	µg/L							U
Carbon Tetrachloride	ND	0.50	0.13	µg/L							U
Chlorobenzene	ND	0.50	0.13	µg/L							U
Chloroethane	ND	0.50	0.19	µg/L							U
Chloroform	ND	0.50	0.12	µg/L							U
Chloromethane	ND	0.50	0.26	µg/L							U
2-Chlorotoluene	ND	0.50	0.13	µg/L							U
4-Chlorotoluene	ND	0.50	0.14	µg/L							U
Dibromochloromethane	ND	0.50	0.13	µg/L							U
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	0.40	µg/L							U
1,2-Dibromoethane (EDB)	ND	0.50	0.14	µg/L							U
Dibromomethane	ND	0.50	0.13	µg/L							U
1,2-Dichlorobenzene	ND	0.50	0.14	µg/L							U
1,3-Dichlorobenzene	ND	0.50	0.13	µg/L							U
1,4-Dichlorobenzene	ND	0.50	0.14	µg/L							U
Dichlorodifluoromethane (Freon 12)	ND	0.50	0.21	µg/L							U
1,1-Dichloroethane	ND	0.50	0.15	µg/L							U
1,2-Dichloroethane	ND	0.50	0.12	µg/L							U
1,1-Dichloroethylene	ND	0.50	0.13	µg/L							U
cis-1,2-Dichloroethylene	ND	0.50	0.13	µg/L							U
trans-1,2-Dichloroethylene	ND	0.50	0.17	µg/L							U
1,2-Dichloropropane	ND	0.50	0.12	µg/L							U
1,3-Dichloropropane	ND	0.50	0.13	µg/L							U
2,2-Dichloropropane	ND	0.50	0.19	µg/L							U
1,1-Dichloropropene	ND	0.50	0.14	µg/L							U
cis-1,3-Dichloropropene	ND	0.50	0.17	µg/L							U
trans-1,3-Dichloropropene	ND	0.50	0.19	µg/L							U
Diethyl Ether	ND	0.50	0.13	µg/L							U
Diisopropyl Ether (DIPE)	ND	0.50	0.13	µg/L							U
Ethylbenzene	ND	0.50	0.13	µg/L							U
Hexachlorobutadiene	ND	0.50	0.34	µg/L							U
2-Hexanone (MBK)	ND	5.0	1.5	µg/L							U
Isopropylbenzene (Cumene)	ND	0.50	0.12	µg/L							U
p-Isopropyltoluene (p-Cymene)	ND	0.50	0.19	µg/L							U
Methyl tert-Butyl Ether (MTBE)	ND	0.50	0.13	µg/L							U
Methylene Chloride	ND	0.50	0.13	µg/L							U

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**QUALITY CONTROL**
**Drinking Water Organics EPA 500 Series Methods - Quality Control**

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B340083 - EPA 524.2**
**Blank (B340083-BLK1)**

Prepared &amp; Analyzed: 05/12/23

4-Methyl-2-pentanone (MIBK)	ND	5.0	1.5	µg/L							U
Naphthalene	ND	1.0	0.44	µg/L							U
n-Propylbenzene	ND	0.50	0.14	µg/L							U
Styrene	ND	0.50	0.14	µg/L							U
1,1,1,2-Tetrachloroethane	ND	0.50	0.16	µg/L							U
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L							U
Tetrachloroethylene	ND	0.50	0.14	µg/L							U
Tetrahydrofuran	ND	2.0	0.40	µg/L							U
Toluene	ND	0.50	0.16	µg/L							U
1,2,3-Trichlorobenzene	ND	0.50	0.34	µg/L							U
1,2,4-Trichlorobenzene	ND	0.50	0.35	µg/L							U
1,3,5-Trichlorobenzene	ND	0.50	0.29	µg/L							U
1,1,1-Trichloroethane	ND	0.50	0.19	µg/L							U
1,1,2-Trichloroethane	ND	0.50	0.15	µg/L							U
Trichloroethylene	ND	0.50	0.10	µg/L							U
Trichlorofluoromethane (Freon 11)	ND	0.50	0.16	µg/L							U
1,2,3-Trichloropropane	ND	0.50	0.13	µg/L							U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.50	0.23	µg/L							U
1,2,4-Trimethylbenzene	ND	0.50	0.23	µg/L							U
1,3,5-Trimethylbenzene	ND	0.50	0.16	µg/L							U
Vinyl Chloride	ND	0.50	0.19	µg/L							U
m&p-Xylene	ND	1.0	0.30	µg/L							U
o-Xylene	ND	0.50	0.16	µg/L							U
Xylenes (total)	ND	1.5	0.98	µg/L							U
Surrogate: 4-Bromofluorobenzene	22.4			µg/L	25.0		89.4	80-120			
Surrogate: 1,2-Dichlorobenzene-d4	25.8			µg/L	25.0		103	80-120			

**LCS (B340083-BS1)**

Prepared &amp; Analyzed: 05/12/23

Acetone	98	10	1.5	µg/L	100		97.7	70-130			
tert-Amyl Methyl Ether (TAME)	9.7	0.50	0.26	µg/L	10.0		96.8	70-130			
Benzene	10	0.50	0.13	µg/L	10.0		104	70-130			
Bromobenzene	11	0.50	0.13	µg/L	10.0		109	70-130			
Bromochloromethane	9.9	0.50	0.18	µg/L	10.0		99.2	70-130			
Bromodichloromethane	10	0.50	0.12	µg/L	10.0		104	70-130			
Bromoform	9.4	0.50	0.17	µg/L	10.0		94.1	70-130			
Bromomethane	12	0.50	0.38	µg/L	10.0		122	70-130			
2-Butanone (MEK)	94	5.0	1.6	µg/L	100		94.4	70-130			
tert-Butyl Alcohol (TBA)	120	5.0	2.2	µg/L	100		115	70-130			
n-Butylbenzene	12	0.50	0.21	µg/L	10.0		118	70-130			
sec-Butylbenzene	11	0.50	0.15	µg/L	10.0		108	70-130			
tert-Butylbenzene	10	0.50	0.15	µg/L	10.0		103	70-130			
tert-Butyl Ethyl Ether (TBEE)	9.6	0.50	0.15	µg/L	10.0		95.9	70-130			
Carbon Disulfide	120	5.0	1.8	µg/L	100		117	70-130			
Carbon Tetrachloride	10	0.50	0.13	µg/L	10.0		105	70-130			
Chlorobenzene	11	0.50	0.13	µg/L	10.0		112	70-130			
Chloroethane	10	0.50	0.19	µg/L	10.0		103	70-130			
Chloroform	10	0.50	0.12	µg/L	10.0		103	70-130			
Chloromethane	12	0.50	0.26	µg/L	10.0		124	70-130			
2-Chlorotoluene	11	0.50	0.13	µg/L	10.0		111	70-130			

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**QUALITY CONTROL**
**Drinking Water Organics EPA 500 Series Methods - Quality Control**

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B340083 - EPA 524.2**
**LCS (B340083-BS1)**

Prepared &amp; Analyzed: 05/12/23

4-Chlorotoluene	11	0.50	0.14	µg/L	10.0		110	70-130			
Dibromochloromethane	10	0.50	0.13	µg/L	10.0		104	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	11	2.0	0.40	µg/L	10.0		110	70-130			
1,2-Dibromoethane (EDB)	11	0.50	0.14	µg/L	10.0		108	70-130			
Dibromomethane	12	0.50	0.13	µg/L	10.0		118	70-130			
1,2-Dichlorobenzene	11	0.50	0.14	µg/L	10.0		114	70-130			
1,3-Dichlorobenzene	12	0.50	0.13	µg/L	10.0		115	70-130			
1,4-Dichlorobenzene	12	0.50	0.14	µg/L	10.0		116	70-130			
Dichlorodifluoromethane (Freon 12)	11	0.50	0.21	µg/L	10.0		114	70-130			
1,1-Dichloroethane	11	0.50	0.15	µg/L	10.0		114	70-130			
1,2-Dichloroethane	10	0.50	0.12	µg/L	10.0		104	70-130			
1,1-Dichloroethylene	11	0.50	0.13	µg/L	10.0		106	70-130			
cis-1,2-Dichloroethylene	9.8	0.50	0.13	µg/L	10.0		97.7	70-130			
<b>trans-1,2-Dichloroethylene</b>	14	0.50	0.17	µg/L	10.0		<b>138</b>	* 70-130			L-01
1,2-Dichloropropane	11	0.50	0.12	µg/L	10.0		112	70-130			
1,3-Dichloropropane	11	0.50	0.13	µg/L	10.0		110	70-130			
2,2-Dichloropropane	10	0.50	0.19	µg/L	10.0		104	70-130			
1,1-Dichloropropene	11	0.50	0.14	µg/L	10.0		110	70-130			
cis-1,3-Dichloropropene	10	0.50	0.17	µg/L	10.0		104	70-130			
trans-1,3-Dichloropropene	9.7	0.50	0.19	µg/L	10.0		97.3	70-130			
Diethyl Ether	11	0.50	0.13	µg/L	10.0		107	70-130			
Diisopropyl Ether (DIPE)	9.4	0.50	0.13	µg/L	10.0		94.0	70-130			
Ethylbenzene	11	0.50	0.13	µg/L	10.0		114	70-130			
Hexachlorobutadiene	13	0.50	0.34	µg/L	10.0		126	70-130			
2-Hexanone (MBK)	95	5.0	1.5	µg/L	100		95.4	70-130			
Isopropylbenzene (Cumene)	11	0.50	0.12	µg/L	10.0		107	70-130			
p-Isopropyltoluene (p-Cymene)	10	0.50	0.19	µg/L	10.0		105	70-130			
<b>Methyl tert-Butyl Ether (MTBE)</b>	14	0.50	0.13	µg/L	10.0		<b>140</b>	* 70-130			L-01
Methylene Chloride	12	0.50	0.13	µg/L	10.0		121	70-130			
4-Methyl-2-pentanone (MIBK)	100	5.0	1.5	µg/L	100		102	70-130			
Naphthalene	11	1.0	0.44	µg/L	10.0		107	70-130			
n-Propylbenzene	11	0.50	0.14	µg/L	10.0		114	70-130			
Styrene	11	0.50	0.14	µg/L	10.0		110	70-130			
1,1,1,2-Tetrachloroethane	11	0.50	0.16	µg/L	10.0		106	70-130			
1,1,2,2-Tetrachloroethane	11	0.50	0.16	µg/L	10.0		111	70-130			
Tetrachloroethylene	12	0.50	0.14	µg/L	10.0		117	70-130			
Tetrahydrofuran	11	2.0	0.40	µg/L	10.0		114	70-130			
Toluene	11	0.50	0.16	µg/L	10.0		112	70-130			
1,2,3-Trichlorobenzene	11	0.50	0.34	µg/L	10.0		112	70-130			
1,2,4-Trichlorobenzene	11	0.50	0.35	µg/L	10.0		114	70-130			
1,3,5-Trichlorobenzene	12	0.50	0.29	µg/L	10.0		124	70-130			
1,1,1-Trichloroethane	10	0.50	0.19	µg/L	10.0		105	70-130			
1,1,2-Trichloroethane	11	0.50	0.15	µg/L	10.0		113	70-130			
Trichloroethylene	11	0.50	0.10	µg/L	10.0		115	70-130			
Trichlorofluoromethane (Freon 11)	11	0.50	0.16	µg/L	10.0		113	70-130			
<b>1,2,3-Trichloropropane</b>	13	0.50	0.13	µg/L	10.0		<b>133</b>	* 70-130			L-01
<b>1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)</b>	14	0.50	0.23	µg/L	10.0		<b>136</b>	* 70-130			L-01
1,2,4-Trimethylbenzene	11	0.50	0.23	µg/L	10.0		111	70-130			
1,3,5-Trimethylbenzene	11	0.50	0.16	µg/L	10.0		109	70-130			

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**QUALITY CONTROL**
**Drinking Water Organics EPA 500 Series Methods - Quality Control**

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B340083 - EPA 524.2**
**LCS (B340083-BS1)**

Prepared &amp; Analyzed: 05/12/23

Vinyl Chloride	12	0.50	0.19	µg/L	10.0		120	70-130			
m&p-Xylene	23	1.0	0.30	µg/L	20.0		117	70-130			
o-Xylene	11	0.50	0.16	µg/L	10.0		114	70-130			
Xylenes (total)	35	1.5	0.98	µg/L	30.0		116	0-200			
Surrogate: 4-Bromofluorobenzene	23.7			µg/L	25.0		94.8	80-120			
Surrogate: 1,2-Dichlorobenzene-d4	27.9			µg/L	25.0		111	80-120			

**FLAG/QUALIFIER SUMMARY**

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit
DL	Method Detection Limit
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
H-06	Sample was extracted past the recommended holding time.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
L-01	Laboratory fortified blank/laboratory control sample recovery outside of control limits. Data validation is not affected since all results are "not detected" for all samples in this batch for this compound and bias is on the high side.
L-02	Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.
U	Analyte included in the analysis, but not detected
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-20	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.
V-35	Initial calibration verification (ICV) did not meet method specifications and was biased on the high side for this compound. Reported result is estimated.

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

Analyte	Certifications
<i>EPA 524.2 in Drinking Water</i>	
Benzene	CT,MA,NH,NY,RI,ME,VA,VT-DW
Bromobenzene	CT,MA,NH,NY,RI,VT-DW
Bromochloromethane	CT,MA,NH,NY,RI,VT-DW
Bromodichloromethane	MA,NH,NY,RI,ME,VA,VT-DW
Bromoform	NH,NY,RI,ME,VT-DW
Bromomethane	CT,MA,NH,NY,RI,VT-DW
n-Butylbenzene	CT,MA,NH,NY,RI,VT-DW
sec-Butylbenzene	CT,MA,NH,NY,RI,VT-DW
tert-Butylbenzene	CT,MA,NH,NY,RI,VT-DW
Carbon Tetrachloride	CT,MA,NH,NY,RI,ME,VA,VT-DW
Chlorobenzene	CT,MA,NH,NY,RI,ME,VA,VT-DW
Chloroethane	CT,MA,NH,NY,RI,VT-DW
Chloroform	MA,NH,NY,RI,ME,VA,VT-DW
Chloromethane	CT,MA,NH,NY,RI,VT-DW
2-Chlorotoluene	CT,MA,NH,NY,RI,VT-DW
4-Chlorotoluene	CT,MA,NH,NY,RI,VT-DW
Dibromochloromethane	MA,NH,NY,RI,ME,VA,VT-DW
Dibromomethane	CT,MA,NH,NY,RI,VT-DW
1,2-Dichlorobenzene	CT,MA,NH,NY,RI,ME,VA,VT-DW
1,3-Dichlorobenzene	CT,MA,NH,NY,RI,VT-DW
1,4-Dichlorobenzene	CT,MA,NH,NY,RI,ME,VA,VT-DW
Dichlorodifluoromethane (Freon 12)	CT,MA,NH,NY,RI,VT-DW
1,1-Dichloroethane	CT,MA,NH,NY,RI,VT-DW
1,2-Dichloroethane	CT,MA,NH,NY,RI,ME,VA,VT-DW
1,1-Dichloroethylene	CT,MA,NH,NY,RI,ME,VA,VT-DW
cis-1,2-Dichloroethylene	CT,MA,NH,NY,RI,ME,VA,VT-DW
trans-1,2-Dichloroethylene	CT,MA,NH,NY,RI,ME,VA,VT-DW
1,2-Dichloropropane	CT,MA,NH,NY,RI,ME,VA,VT-DW
1,3-Dichloropropane	CT,MA,NH,NY,RI,VT-DW
2,2-Dichloropropane	CT,MA,NH,NY,RI,VT-DW
1,1-Dichloropropene	CT,MA,NH,NY,RI,VT-DW
cis-1,3-Dichloropropene	CT,MA,NH,NY,RI,VT-DW
trans-1,3-Dichloropropene	CT,MA,NH,NY,RI,VT-DW
1,3-Dichloropropene (total)	CT,MA
Ethylbenzene	CT,MA,NH,NY,RI,ME,VA,VT-DW
Hexachlorobutadiene	CT,MA,NH,NY,RI,VT-DW
Isopropylbenzene (Cumene)	CT,MA,NH,NY,RI,VT-DW
p-Isopropyltoluene (p-Cymene)	CT,MA,NH,NY,RI,VT-DW
Methyl tert-Butyl Ether (MTBE)	CT,MA,NH,NY,RI,ME,VT-DW
Methylene Chloride	CT,MA,NH,NY,RI,ME,VA,VT-DW
Naphthalene	NY
n-Propylbenzene	NY,VT-DW
Styrene	CT,MA,NH,NY,RI,ME,VA,VT-DW
1,1,1,2-Tetrachloroethane	CT,MA,NH,NY,RI,VT-DW
1,1,2,2-Tetrachloroethane	CT,MA,NH,NY,RI,VT-DW
Tetrachloroethylene	CT,MA,NH,NY,RI,ME,VA,VT-DW
Toluene	CT,MA,NH,NY,RI,ME,VA,VT-DW

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

Analyte	Certifications
<b><i>EPA 524.2 in Drinking Water</i></b>	
1,2,3-Trichlorobenzene	CT,MA,NH,NY,RI,VT-DW
1,2,4-Trichlorobenzene	CT,MA,NH,NY,RI,ME,VA,VT-DW
1,1,1-Trichloroethane	CT,MA,NH,NY,RI,ME,VA,VT-DW
1,1,2-Trichloroethane	CT,MA,NH,NY,RI,ME,VA,VT-DW
Trichloroethylene	CT,MA,NH,NY,RI,ME,VA,VT-DW
Trichlorofluoromethane (Freon 11)	CT,MA,NH,NY,RI,VT-DW
1,2,3-Trichloropropane	CT,MA,NH,NY,RI,VT-DW
1,2,4-Trimethylbenzene	CT,MA,NH,NY,RI,VT-DW
1,3,5-Trimethylbenzene	CT,MA,NH,NY,RI,VT-DW
Vinyl Chloride	CT,MA,NH,NY,RI,ME,VA,VT-DW
m&p-Xylene	VA
o-Xylene	VA
Xylenes (total)	CT,MA,NH,NY,RI,ME,VA,VT-DW
<b><i>SW-846 8015C in Soil</i></b>	
Gasoline Range Organics (GRO)	NY,VA,NH,NC
<b><i>SW-846 8260D in Soil</i></b>	
Acetone	CT,NH,NY,ME,VA
Acrylonitrile	CT,NH,NY,ME,VA
Benzene	CT,NH,NY,ME,VA
Bromobenzene	NH,NY,ME,VA
Bromochloromethane	NH,NY,ME,VA
Bromodichloromethane	CT,NH,NY,ME,VA
Bromoform	CT,NH,NY,ME,VA
Bromomethane	CT,NH,NY,ME,VA
2-Butanone (MEK)	CT,NH,NY,ME,VA
tert-Butyl Alcohol (TBA)	NY,ME
n-Butylbenzene	CT,NH,NY,ME,VA
sec-Butylbenzene	CT,NH,NY,ME,VA
tert-Butylbenzene	CT,NH,NY,ME,VA
Carbon Disulfide	CT,NH,NY,ME,VA
Carbon Tetrachloride	CT,NH,NY,ME,VA
Chlorobenzene	CT,NH,NY,ME,VA
Chlorodibromomethane	CT,NH,NY,ME,VA
Chloroethane	CT,NH,NY,ME,VA
Chloroform	CT,NH,NY,ME,VA
Chloromethane	CT,NH,NY,ME,VA
2-Chlorotoluene	CT,NH,NY,ME,VA
4-Chlorotoluene	CT,NH,NY,ME,VA
1,2-Dibromo-3-chloropropane (DBCP)	NY,ME
1,2-Dibromoethane (EDB)	NH,NY
Dibromomethane	NH,NY,ME,VA
1,2-Dichlorobenzene	CT,NH,NY,ME,VA
1,3-Dichlorobenzene	CT,NH,NY,ME,VA
1,4-Dichlorobenzene	CT,NH,NY,ME,VA
trans-1,4-Dichloro-2-butene	NY,ME
Dichlorodifluoromethane (Freon 12)	NH,NY,ME,VA

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

Analyte	Certifications
<i>SW-846 8260D in Soil</i>	
1,1-Dichloroethane	CT,NH,NY,ME,VA
1,2-Dichloroethane	CT,NH,NY,ME,VA
1,1-Dichloroethylene	CT,NH,NY,ME,VA
cis-1,2-Dichloroethylene	CT,NH,NY,ME,VA
trans-1,2-Dichloroethylene	CT,NH,NY,ME,VA
1,2-Dichloropropane	CT,NH,NY,ME,VA
1,3-Dichloropropane	NH,NY,ME,VA
2,2-Dichloropropane	NH,NY,ME,VA
1,1-Dichloropropene	NH,NY,ME,VA
cis-1,3-Dichloropropene	CT,NH,NY,ME,VA
trans-1,3-Dichloropropene	CT,NH,NY,ME,VA
Diethyl Ether	ME
1,4-Dioxane	NY,ME
Ethylbenzene	CT,NH,NY,ME,VA
Hexachlorobutadiene	NH,NY,ME,VA
2-Hexanone (MBK)	CT,NH,NY,ME,VA
Isopropylbenzene (Cumene)	CT,NH,NY,ME,VA
p-Isopropyltoluene (p-Cymene)	NH,NY
Methyl Acetate	NY,ME
Methyl tert-Butyl Ether (MTBE)	NY,ME,VA
Methyl Cyclohexane	NY
Methylene Chloride	CT,NH,NY,ME,VA
4-Methyl-2-pentanone (MIBK)	CT,NH,NY,ME,VA
Naphthalene	NH,NY,ME,VA
n-Propylbenzene	NH,NY,ME
Styrene	CT,NH,NY,ME,VA
1,1,1,2-Tetrachloroethane	CT,NH,NY,ME,VA
1,1,2,2-Tetrachloroethane	CT,NH,NY,ME,VA
Tetrachloroethylene	CT,NH,NY,ME,VA
Toluene	CT,NH,NY,ME,VA
1,2,3-Trichlorobenzene	NY,ME
1,2,4-Trichlorobenzene	NH,NY,ME,VA
1,3,5-Trichlorobenzene	ME
1,1,1-Trichloroethane	CT,NH,NY,ME,VA
1,1,2-Trichloroethane	CT,NH,NY,ME,VA
Trichloroethylene	CT,NH,NY,ME,VA
Trichlorofluoromethane (Freon 11)	CT,NH,NY,ME,VA
1,2,3-Trichloropropane	NH,NY,ME,VA
1,2,4-Trimethylbenzene	CT,NH,NY,ME,VA
1,3,5-Trimethylbenzene	CT,NH,NY,ME,VA
Vinyl Chloride	CT,NH,NY,ME,VA
m+p Xylene	CT,NH,NY,ME,VA
o-Xylene	CT,NH,NY,ME,VA
Xylenes (total)	NH,NY,ME

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

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

Code	Description	Number	Expires
MA	Massachusetts DEP	M-MA100	06/30/2024
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2024
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2024
RI	Rhode Island Department of Health	LAO00373	12/30/2023
NC	North Carolina Div. of Water Quality	652	12/31/2023
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2023
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2023



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

# Log In Back-Sheet

Login Sample Receipt Checklist – (Rejection Criteria Listing  
 – Using Acceptance Policy) Any False statement will be  
 brought to the attention of the Client – True or False



Client WILCOX & BARTON, INC.  
 Project SMN B0002  
 MCP/RCP Required N/A  
 Deliverable Package Req. N/A  
 Location 1921 Dover Rd, Epsom, NH  
 PWSID# (When Applicable) N/A<sup>AAM</sup> 0778090  
 Arrival Method:  
 Courier  Fed Ex  Walk In  Other   
 Received By / Date / Time EGR / 5-11-23 / 1510  
 Back-Sheet By / Date / Time AAM / 5-11-23 / 1602  
 Temperature Method Temp Gun # 3  
 Temp  < 6°C Actual Temperature 2.1°C  
 Rush Samples: Yes /  No Notify  
 Short Hold: Yes /  No Notify

	True	False
Received on Ice	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Received in Cooler	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Custody Seal: DATE TIME	<input type="checkbox"/>	<input checked="" type="checkbox"/>
COC Relinquished	<input checked="" type="checkbox"/>	<input type="checkbox"/>
COC/Samples Labels Agree	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Samples in Good Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Samples Received within Holding Time	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Is there enough Volume	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Proper Media/Container Used	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Splitting Samples Required	<input type="checkbox"/>	<input checked="" type="checkbox"/>
MS/MSD	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Trip Blanks	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Lab to Filters	<input type="checkbox"/>	<input checked="" type="checkbox"/>
COC Legible	<input checked="" type="checkbox"/>	<input type="checkbox"/>
COC Included: (Check all included)		
Client <input checked="" type="checkbox"/>	Analysis <input checked="" type="checkbox"/>	Sampler Name <input checked="" type="checkbox"/>
Project <input checked="" type="checkbox"/>	IDs <input checked="" type="checkbox"/>	Collection Date/Time <input checked="" type="checkbox"/>
All Samples Proper pH:	N/A <input type="checkbox"/>	<input type="checkbox"/>

**Notes regarding Samples/COC outside of SOP:**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Container (Circle when applicable)	UnP	HCl	HNO3	H2SO4	NaOH	Trizma	NaS2O3	Other Preservative	
1L Amber Plastic									
500 mL Amber Plastic									
250 mL Amber Plastic									
Other Amber Clear Plastic									
16oz Amber Clear									
8oz <del>Amber</del> Clear	3								
4oz Amber Clear									
2oz Amber Clear									
Col/Bacteria									
Flashpoint									
Plastic Bag									
SOC Kit									
Perchlorate									
Encore									
Frozen									
	Proper Headspace	UnP	HCl	MeOH	Bisulfate	DI	Thiosulfate	Sulfuric	Other
Vials			3	6	4				

June 2, 2023

Madeleine Arold  
Wilcox & Barton  
1115 Route 100B, Suite 200  
Moretown, VT 05660

Project Location: 1921 Dover Rd, Epsom, NH  
Client Job Number:  
Project Number: SMNB0002  
Laboratory Work Order Number: 23E3639

Enclosed are results of analyses for samples as received by the laboratory on May 25, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kaitlyn A. Feliciano  
Project Manager

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

Wilcox & Barton  
1115 Route 100B, Suite 200  
Moretown, VT 05660  
ATTN: Madeleine Arold

REPORT DATE: 6/2/2023

PURCHASE ORDER NUMBER:

PROJECT NUMBER: SMNB0002

**ANALYTICAL SUMMARY**

---

WORK ORDER NUMBER: 23E3639

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

PROJECT LOCATION: 1921 Dover Rd, Epsom, NH

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-1	23E3639-01	Ground Water		SW-846 8260D	
MW-2	23E3639-02	Ground Water		SW-846 8260D	
MW-3	23E3639-03	Ground Water		SW-846 8260D	
PWSID #0778090	23E3639-04	Drinking Water		EPA 524.2	

**CASE NARRATIVE SUMMARY**

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

**SW-846 8260D**

**Qualifications:**

**V-05**  
Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

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

**1,1-Dichloroethylene**  
23E3639-01[MW-1], 23E3639-02[MW-2], 23E3639-03[MW-3], B341783-BLK1, B341783-BS1, B341783-BSD1, S088364-CCV1

**Carbon Disulfide**  
23E3639-01[MW-1], 23E3639-02[MW-2], 23E3639-03[MW-3], B341783-BLK1, B341783-BS1, B341783-BSD1, S088364-CCV1

**Dichlorodifluoromethane (Freon 12)**  
23E3639-01[MW-1], 23E3639-02[MW-2], 23E3639-03[MW-3], B341783-BLK1, B341783-BS1, B341783-BSD1, S088364-CCV1

**tert-Butyl Alcohol (TBA)**  
23E3639-01[MW-1], 23E3639-02[MW-2], 23E3639-03[MW-3], B341783-BLK1, B341783-BS1, B341783-BSD1, S088364-CCV1

**Trichlorofluoromethane (Freon 11)**  
23E3639-01[MW-1], 23E3639-02[MW-2], 23E3639-03[MW-3], B341783-BLK1, B341783-BS1, B341783-BSD1, S088364-CCV1

**V-34**  
Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.

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

**Chloromethane**  
23E3639-01[MW-1], 23E3639-02[MW-2], 23E3639-03[MW-3], B341783-BLK1, B341783-BS1, B341783-BSD1, S088364-CCV1

**Dichlorodifluoromethane (Freon 12)**  
23E3639-01[MW-1], 23E3639-02[MW-2], 23E3639-03[MW-3], B341783-BLK1, B341783-BS1, B341783-BSD1, S088364-CCV1

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



Meghan E. Kelley  
Reporting Specialist

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

Project Location: 1921 Dover Rd, Epsom, NH

Sample Description:

Work Order: 23E3639

Date Received: 5/25/2023

Field Sample #: MW-1

Sampled: 5/24/2023 09:05

Sample ID: 23E3639-01

Sample Matrix: Ground Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
Acrylonitrile	ND	5.0	0.47	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.13	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
Benzene	ND	1.0	0.18	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
Bromochloromethane	ND	1.0	0.28	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
Bromodichloromethane	ND	0.50	0.16	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
Bromoform	ND	1.0	0.41	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
Bromomethane	ND	2.0	1.3	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
2-Butanone (MEK)	ND	20	1.7	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
tert-Butyl Alcohol (TBA)	ND	20	4.3	µg/L	1	V-05, U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
n-Butylbenzene	ND	1.0	0.15	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
sec-Butylbenzene	ND	1.0	0.13	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
tert-Butylbenzene	ND	1.0	0.14	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
Carbon Disulfide	ND	5.0	1.6	µg/L	1	V-05, U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
Chlorodibromomethane	ND	0.50	0.20	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
Chloroethane	ND	2.0	0.34	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
Chloroform	0.45	2.0	0.14	µg/L	1	J	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
Chloromethane	ND	2.0	0.50	µg/L	1	V-34, U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
2-Chlorotoluene	ND	1.0	0.15	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
4-Chlorotoluene	ND	1.0	0.15	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
Dibromomethane	ND	1.0	0.32	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	1.5	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1	V-05, V-34, U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1	V-05, U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.14	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
1,3-Dichloropropane	ND	0.50	0.12	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
2,2-Dichloropropane	ND	1.0	0.35	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
Diethyl Ether	ND	2.0	0.14	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH

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

Project Location: 1921 Dover Rd, Epsom, NH

Sample Description:

Work Order: 23E3639

Date Received: 5/25/2023

Sampled: 5/24/2023 09:05

Field Sample #: MW-1

Sample ID: 23E3639-01

Sample Matrix: Ground Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.20	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
1,4-Dioxane	ND	50	18	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
Ethylbenzene	ND	1.0	0.22	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
Hexachlorobutadiene	ND	0.60	0.47	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
2-Hexanone (MBK)	ND	10	1.2	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.13	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
Methyl Acetate	ND	1.0	0.61	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
Methylene Chloride	ND	5.0	0.18	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
Naphthalene	ND	2.0	0.38	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
n-Propylbenzene	ND	1.0	0.12	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
Styrene	ND	1.0	0.15	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.16	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
Tetrachloroethylene	ND	1.0	0.17	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
Tetrahydrofuran	ND	10	0.49	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
Toluene	ND	1.0	0.22	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
Trichloroethylene	ND	1.0	0.17	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1	V-05, U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.15	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
Vinyl Chloride	ND	2.0	0.24	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
m+p Xylene	ND	2.0	0.49	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
o-Xylene	ND	1.0	0.24	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 16:33	EEH
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		104	70-130					5/31/23	16:33	
Toluene-d8		102	70-130					5/31/23	16:33	
4-Bromofluorobenzene		98.9	70-130					5/31/23	16:33	

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

Project Location: 1921 Dover Rd, Epsom, NH

Sample Description:

Work Order: 23E3639

Date Received: 5/25/2023

Field Sample #: MW-2

Sampled: 5/24/2023 09:10

Sample ID: 23E3639-02

Sample Matrix: Ground Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
Acrylonitrile	ND	5.0	0.47	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.13	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
Benzene	ND	1.0	0.18	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
Bromochloromethane	ND	1.0	0.28	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
Bromodichloromethane	ND	0.50	0.16	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
Bromoform	ND	1.0	0.41	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
Bromomethane	ND	2.0	1.3	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
2-Butanone (MEK)	ND	20	1.7	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
tert-Butyl Alcohol (TBA)	ND	20	4.3	µg/L	1	V-05, U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
n-Butylbenzene	ND	1.0	0.15	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
sec-Butylbenzene	ND	1.0	0.13	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
tert-Butylbenzene	ND	1.0	0.14	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
Carbon Disulfide	ND	5.0	1.6	µg/L	1	V-05, U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
Chlorodibromomethane	ND	0.50	0.20	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
Chloroethane	ND	2.0	0.34	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
Chloroform	ND	2.0	0.14	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
Chloromethane	ND	2.0	0.50	µg/L	1	V-34, U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
2-Chlorotoluene	ND	1.0	0.15	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
4-Chlorotoluene	ND	1.0	0.15	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
Dibromomethane	ND	1.0	0.32	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	1.5	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1	V-05, V-34, U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1	V-05, U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.14	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
1,3-Dichloropropane	ND	0.50	0.12	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
2,2-Dichloropropane	ND	1.0	0.35	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
Diethyl Ether	ND	2.0	0.14	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH

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

Project Location: 1921 Dover Rd, Epsom, NH

Sample Description:

Work Order: 23E3639

Date Received: 5/25/2023

Field Sample #: MW-2

Sampled: 5/24/2023 09:10

Sample ID: 23E3639-02

Sample Matrix: Ground Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.20	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
1,4-Dioxane	ND	50	18	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
Ethylbenzene	ND	1.0	0.22	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
Hexachlorobutadiene	ND	0.60	0.47	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
2-Hexanone (MBK)	ND	10	1.2	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.13	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
Methyl Acetate	ND	1.0	0.61	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
Methylene Chloride	ND	5.0	0.18	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
Naphthalene	ND	2.0	0.38	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
n-Propylbenzene	ND	1.0	0.12	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
Styrene	ND	1.0	0.15	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.16	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
Tetrachloroethylene	ND	1.0	0.17	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
Tetrahydrofuran	ND	10	0.49	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
Toluene	ND	1.0	0.22	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
Trichloroethylene	ND	1.0	0.17	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1	V-05, U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.15	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
Vinyl Chloride	ND	2.0	0.24	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
m+p Xylene	ND	2.0	0.49	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
o-Xylene	ND	1.0	0.24	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:01	EEH
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		103	70-130					5/31/23	17:01	
Toluene-d8		103	70-130					5/31/23	17:01	
4-Bromofluorobenzene		97.0	70-130					5/31/23	17:01	

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

Project Location: 1921 Dover Rd, Epsom, NH

Sample Description:

Work Order: 23E3639

Date Received: 5/25/2023

Field Sample #: MW-3

Sampled: 5/24/2023 09:15

Sample ID: 23E3639-03

Sample Matrix: Ground Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
Acrylonitrile	ND	5.0	0.47	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.13	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
Benzene	ND	1.0	0.18	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
Bromochloromethane	ND	1.0	0.28	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
Bromodichloromethane	ND	0.50	0.16	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
Bromoform	ND	1.0	0.41	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
Bromomethane	ND	2.0	1.3	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
2-Butanone (MEK)	ND	20	1.7	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
tert-Butyl Alcohol (TBA)	ND	20	4.3	µg/L	1	V-05, U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
n-Butylbenzene	ND	1.0	0.15	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
sec-Butylbenzene	ND	1.0	0.13	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
tert-Butylbenzene	ND	1.0	0.14	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
Carbon Disulfide	ND	5.0	1.6	µg/L	1	V-05, U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
Chlorodibromomethane	ND	0.50	0.20	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
Chloroethane	ND	2.0	0.34	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
Chloroform	ND	2.0	0.14	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
Chloromethane	ND	2.0	0.50	µg/L	1	V-34, U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
2-Chlorotoluene	ND	1.0	0.15	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
4-Chlorotoluene	ND	1.0	0.15	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
Dibromomethane	ND	1.0	0.32	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	1.5	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1	V-05, V-34, U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1	V-05, U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.14	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
1,3-Dichloropropane	ND	0.50	0.12	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
2,2-Dichloropropane	ND	1.0	0.35	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
Diethyl Ether	ND	2.0	0.14	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH

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

Project Location: 1921 Dover Rd, Epsom, NH

Sample Description:

Work Order: 23E3639

Date Received: 5/25/2023

Field Sample #: MW-3

Sampled: 5/24/2023 09:15

Sample ID: 23E3639-03

Sample Matrix: Ground Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.20	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
1,4-Dioxane	ND	50	18	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
Ethylbenzene	ND	1.0	0.22	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
Hexachlorobutadiene	ND	0.60	0.47	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
2-Hexanone (MBK)	ND	10	1.2	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.13	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
Methyl Acetate	ND	1.0	0.61	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
Methylene Chloride	ND	5.0	0.18	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
Naphthalene	ND	2.0	0.38	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
n-Propylbenzene	ND	1.0	0.12	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
Styrene	ND	1.0	0.15	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.16	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
Tetrachloroethylene	0.19	1.0	0.17	µg/L	1	J	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
Tetrahydrofuran	ND	10	0.49	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
Toluene	ND	1.0	0.22	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
Trichloroethylene	ND	1.0	0.17	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1	V-05, U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.15	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
Vinyl Chloride	ND	2.0	0.24	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
m+p Xylene	ND	2.0	0.49	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
o-Xylene	ND	1.0	0.24	µg/L	1	U	SW-846 8260D	5/31/23	5/31/23 17:28	EEH
Surrogates		% Recovery	Recovery Limits			Flag/Qual				
1,2-Dichloroethane-d4		103	70-130						5/31/23 17:28	
Toluene-d8		102	70-130						5/31/23 17:28	
4-Bromofluorobenzene		96.8	70-130						5/31/23 17:28	

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

Project Location: 1921 Dover Rd, Epsom, NH

Sample Description:

Work Order: 23E3639

Date Received: 5/25/2023

Field Sample #: PWSID #0778090

Sampled: 5/24/2023 09:25

Sample ID: 23E3639-04

Sample Matrix: Drinking Water

**Drinking Water Organics EPA 500 Series Methods**

Analyte	Results	RL	MCL/SMCL		Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
			DL	MA ORSG							
Acetone	11	10	1.5		µg/L	1		EPA 524.2	5/29/23	5/30/23 12:58	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.26		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
Benzene	ND	0.50	0.13	5	µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
Bromobenzene	ND	0.50	0.13		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
Bromochloromethane	ND	0.50	0.18		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
Bromodichloromethane	ND	0.50	0.12		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
Bromoform	ND	0.50	0.17		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
Bromomethane	ND	0.50	0.38		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
2-Butanone (MEK)	ND	5.0	1.6		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
tert-Butyl Alcohol (TBA)	ND	5.0	2.2		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
n-Butylbenzene	ND	0.50	0.21		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
sec-Butylbenzene	ND	0.50	0.15		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
tert-Butylbenzene	ND	0.50	0.15		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
Carbon Disulfide	ND	5.0	1.8		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
Carbon Tetrachloride	ND	0.50	0.13	5	µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
Chlorobenzene	ND	0.50	0.13	100	µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
Chloroethane	ND	0.50	0.19		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
Chloroform	ND	0.50	0.12		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
Chloromethane	ND	0.50	0.26		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
2-Chlorotoluene	ND	0.50	0.13		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
4-Chlorotoluene	ND	0.50	0.14		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
Dibromochloromethane	ND	0.50	0.13		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	0.40		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.14		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
Dibromomethane	ND	0.50	0.13		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
1,2-Dichlorobenzene	ND	0.50	0.14	600	µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
1,3-Dichlorobenzene	ND	0.50	0.13		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
1,4-Dichlorobenzene	ND	0.50	0.14	75	µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.50	0.21		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
1,1-Dichloroethane	ND	0.50	0.15		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
1,2-Dichloroethane	ND	0.50	0.12	5	µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
1,1-Dichloroethylene	ND	0.50	0.13	7	µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
cis-1,2-Dichloroethylene	ND	0.50	0.13	70	µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
trans-1,2-Dichloroethylene	ND	0.50	0.17	100	µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
1,2-Dichloropropane	ND	0.50	0.12	5	µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
1,3-Dichloropropane	ND	0.50	0.13		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
2,2-Dichloropropane	ND	0.50	0.19		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
1,1-Dichloropropene	ND	0.50	0.14		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
cis-1,3-Dichloropropene	ND	0.50	0.17		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
trans-1,3-Dichloropropene	ND	0.50	0.19		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
1,3-Dichloropropene (total)	ND	1.0	0.31		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
Diethyl Ether	ND	0.50	0.13		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF
Diisopropyl Ether (DIPE)	ND	0.50	0.13		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF

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

Project Location: 1921 Dover Rd, Epsom, NH

Sample Description:

Work Order: 23E3639

Date Received: 5/25/2023

Field Sample #: PWSID #0778090

Sampled: 5/24/2023 09:25

Sample ID: 23E3639-04

Sample Matrix: Drinking Water

**Drinking Water Organics EPA 500 Series Methods**

Analyte	Results	RL	MCL/SMCL			Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
			DL	MA	ORSG							
Ethylbenzene	ND	0.50	0.13	700	µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF	
Hexachlorobutadiene	ND	0.50	0.34		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF	
2-Hexanone (MBK)	ND	5.0	1.5		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF	
Isopropylbenzene (Cumene)	ND	0.50	0.12		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF	
p-Isopropyltoluene (p-Cymene)	ND	0.50	0.19		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF	
Methyl tert-Butyl Ether (MTBE)	ND	0.50	0.13		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF	
Methylene Chloride	ND	0.50	0.13	5	µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF	
4-Methyl-2-pentanone (MIBK)	ND	5.0	1.5		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF	
Naphthalene	ND	1.0	0.44		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF	
n-Propylbenzene	ND	0.50	0.14		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF	
Styrene	ND	0.50	0.14	100	µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF	
1,1,1,2-Tetrachloroethane	ND	0.50	0.16		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF	
1,1,2,2-Tetrachloroethane	ND	0.50	0.16		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF	
Tetrachloroethylene	ND	0.50	0.14	5	µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF	
Tetrahydrofuran	ND	2.0	0.40		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF	
Toluene	ND	0.50	0.16	1000	µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF	
1,2,3-Trichlorobenzene	ND	0.50	0.34		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF	
1,2,4-Trichlorobenzene	ND	0.50	0.35	70	µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF	
1,3,5-Trichlorobenzene	ND	0.50	0.29		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF	
1,1,1-Trichloroethane	ND	0.50	0.19	200	µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF	
1,1,2-Trichloroethane	ND	0.50	0.15	5	µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF	
Trichloroethylene	ND	0.50	0.10	5	µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF	
Trichlorofluoromethane (Freon 11)	ND	0.50	0.16		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF	
1,2,3-Trichloropropane	ND	0.50	0.13		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.50	0.23		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF	
1,2,4-Trimethylbenzene	ND	0.50	0.23		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF	
1,3,5-Trimethylbenzene	ND	0.50	0.16		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF	
Vinyl Chloride	ND	0.50	0.19	2	µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF	
m&p-Xylene	ND	1.0	0.30		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF	
o-Xylene	ND	0.50	0.16		µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF	
Xylenes (total)	ND	1.5	0.98	10000	µg/L	1	U	EPA 524.2	5/29/23	5/30/23 12:58	MFF	

Surrogates	% Recovery	Recovery Limits	Flag/Qual
4-Bromofluorobenzene	91.2	80-120	5/30/23 12:58
1,2-Dichlorobenzene-d4	90.4	80-120	5/30/23 12:58

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**Sample Extraction Data****Prep Method: EPA 524.2-EPA 524.2**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23E3639-04 [PWSID #0778090]	B341618	5	5.00	05/29/23

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23E3639-01 [MW-1]	B341783	5	5.00	05/31/23
23E3639-02 [MW-2]	B341783	5	5.00	05/31/23
23E3639-03 [MW-3]	B341783	5	5.00	05/31/23

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

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B341783 - SW-846 5030B**
**Blank (B341783-BLK1)**

Prepared &amp; Analyzed: 05/31/23

Acetone	ND	50	2.0	µg/L							U
Acrylonitrile	ND	5.0	0.47	µg/L							U
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.13	µg/L							U
Benzene	ND	1.0	0.18	µg/L							U
Bromobenzene	ND	1.0	0.15	µg/L							U
Bromochloromethane	ND	1.0	0.28	µg/L							U
Bromodichloromethane	ND	0.50	0.16	µg/L							U
Bromoform	ND	1.0	0.41	µg/L							U
Bromomethane	ND	2.0	1.3	µg/L							U
2-Butanone (MEK)	ND	20	1.7	µg/L							U
tert-Butyl Alcohol (TBA)	ND	20	4.3	µg/L							V-05, U
n-Butylbenzene	ND	1.0	0.15	µg/L							U
sec-Butylbenzene	ND	1.0	0.13	µg/L							U
tert-Butylbenzene	ND	1.0	0.14	µg/L							U
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L							U
Carbon Disulfide	ND	5.0	1.6	µg/L							V-05, U
Carbon Tetrachloride	ND	5.0	0.16	µg/L							U
Chlorobenzene	ND	1.0	0.12	µg/L							U
Chlorodibromomethane	ND	0.50	0.20	µg/L							U
Chloroethane	ND	2.0	0.34	µg/L							U
Chloroform	ND	2.0	0.14	µg/L							U
Chloromethane	ND	2.0	0.50	µg/L							V-34, U
2-Chlorotoluene	ND	1.0	0.15	µg/L							U
4-Chlorotoluene	ND	1.0	0.15	µg/L							U
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L							U
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L							U
Dibromomethane	ND	1.0	0.32	µg/L							U
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L							U
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L							U
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L							U
trans-1,4-Dichloro-2-butene	ND	2.0	1.5	µg/L							U
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L							V-05, V-34, U
1,1-Dichloroethane	ND	1.0	0.14	µg/L							U
1,2-Dichloroethane	ND	1.0	0.30	µg/L							U
1,1-Dichloroethylene	ND	1.0	0.14	µg/L							V-05, U
cis-1,2-Dichloroethylene	ND	1.0	0.14	µg/L							U
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L							U
1,2-Dichloropropane	ND	1.0	0.19	µg/L							U
1,3-Dichloropropane	ND	0.50	0.12	µg/L							U
2,2-Dichloropropane	ND	1.0	0.35	µg/L							U
1,1-Dichloropropene	ND	2.0	0.15	µg/L							U
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L							U
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L							U
Diethyl Ether	ND	2.0	0.14	µg/L							U
Diisopropyl Ether (DIPE)	ND	0.50	0.20	µg/L							U
1,4-Dioxane	ND	50	18	µg/L							U
Ethylbenzene	ND	1.0	0.22	µg/L							U
Hexachlorobutadiene	ND	0.60	0.47	µg/L							U
2-Hexanone (MBK)	ND	10	1.2	µg/L							U
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L							U

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

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B341783 - SW-846 5030B**
**Blank (B341783-BLK1)**

Prepared &amp; Analyzed: 05/31/23

p-Isopropyltoluene (p-Cymene)	ND	1.0	0.13	µg/L							U
Methyl Acetate	ND	1.0	0.61	µg/L							U
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L							U
Methyl Cyclohexane	ND	1.0	0.16	µg/L							U
Methylene Chloride	ND	5.0	0.18	µg/L							U
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L							U
Naphthalene	ND	2.0	0.38	µg/L							U
n-Propylbenzene	ND	1.0	0.12	µg/L							U
Styrene	ND	1.0	0.15	µg/L							U
1,1,1,2-Tetrachloroethane	ND	1.0	0.16	µg/L							U
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L							U
Tetrachloroethylene	ND	1.0	0.17	µg/L							U
Tetrahydrofuran	ND	10	0.49	µg/L							U
Toluene	ND	1.0	0.22	µg/L							U
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L							U
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L							U
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L							U
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L							U
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L							U
Trichloroethylene	ND	1.0	0.17	µg/L							U
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L							V-05, U
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L							U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L							U
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L							U
1,3,5-Trimethylbenzene	ND	1.0	0.15	µg/L							U
Vinyl Chloride	ND	2.0	0.24	µg/L							U
m+p Xylene	ND	2.0	0.49	µg/L							U
o-Xylene	ND	1.0	0.24	µg/L							U
Surrogate: 1,2-Dichloroethane-d4	25.6			µg/L	25.0		102	70-130			
Surrogate: Toluene-d8	25.4			µg/L	25.0		102	70-130			
Surrogate: 4-Bromofluorobenzene	24.4			µg/L	25.0		97.6	70-130			

**LCS (B341783-BS1)**

Prepared &amp; Analyzed: 05/31/23

Acetone	93.7	50	2.0	µg/L	100		93.7	70-160			†
Acrylonitrile	8.48	5.0	0.47	µg/L	10.0		84.8	70-130			
tert-Amyl Methyl Ether (TAME)	9.92	0.50	0.13	µg/L	10.0		99.2	70-130			
Benzene	10.8	1.0	0.18	µg/L	10.0		108	70-130			
Bromobenzene	10.5	1.0	0.15	µg/L	10.0		105	70-130			
Bromochloromethane	11.3	1.0	0.28	µg/L	10.0		113	70-130			
Bromodichloromethane	10.1	0.50	0.16	µg/L	10.0		101	70-130			
Bromoform	8.56	1.0	0.41	µg/L	10.0		85.6	70-130			
Bromomethane	8.94	2.0	1.3	µg/L	10.0		89.4	40-160			†
2-Butanone (MEK)	115	20	1.7	µg/L	100		115	40-160			†
tert-Butyl Alcohol (TBA)	82.4	20	4.3	µg/L	100		82.4	40-160		V-05	†
n-Butylbenzene	10.1	1.0	0.15	µg/L	10.0		101	70-130			
sec-Butylbenzene	9.90	1.0	0.13	µg/L	10.0		99.0	70-130			
tert-Butylbenzene	9.82	1.0	0.14	µg/L	10.0		98.2	70-130			
tert-Butyl Ethyl Ether (TBEE)	10.8	0.50	0.15	µg/L	10.0		108	70-130			
Carbon Disulfide	73.9	5.0	1.6	µg/L	100		73.9	70-130			V-05

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

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B341783 - SW-846 5030B**
**LCS (B341783-BS1)**

Prepared &amp; Analyzed: 05/31/23

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Carbon Tetrachloride	10.3	5.0	0.16	µg/L	10.0		103	70-130			
Chlorobenzene	9.89	1.0	0.12	µg/L	10.0		98.9	70-130			
Chlorodibromomethane	10.1	0.50	0.20	µg/L	10.0		101	70-130			
Chloroethane	9.60	2.0	0.34	µg/L	10.0		96.0	70-130			
Chloroform	11.2	2.0	0.14	µg/L	10.0		112	70-130			
Chloromethane	9.44	2.0	0.50	µg/L	10.0		94.4	40-160			V-34 †
2-Chlorotoluene	9.33	1.0	0.15	µg/L	10.0		93.3	70-130			
4-Chlorotoluene	10.1	1.0	0.15	µg/L	10.0		101	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	10.2	5.0	0.85	µg/L	10.0		102	70-130			
1,2-Dibromoethane (EDB)	10.5	0.50	0.16	µg/L	10.0		105	70-130			
Dibromomethane	10.5	1.0	0.32	µg/L	10.0		105	70-130			
1,2-Dichlorobenzene	10.1	1.0	0.13	µg/L	10.0		101	70-130			
1,3-Dichlorobenzene	10.1	1.0	0.14	µg/L	10.0		101	70-130			
1,4-Dichlorobenzene	9.91	1.0	0.13	µg/L	10.0		99.1	70-130			
trans-1,4-Dichloro-2-butene	8.47	2.0	1.5	µg/L	10.0		84.7	70-130			
Dichlorodifluoromethane (Freon 12)	7.79	2.0	0.16	µg/L	10.0		77.9	40-160			V-05, V-34 †
1,1-Dichloroethane	11.6	1.0	0.14	µg/L	10.0		116	70-130			
1,2-Dichloroethane	10.1	1.0	0.30	µg/L	10.0		101	70-130			
1,1-Dichloroethylene	7.45	1.0	0.14	µg/L	10.0		74.5	70-130			V-05
cis-1,2-Dichloroethylene	11.6	1.0	0.14	µg/L	10.0		116	70-130			
trans-1,2-Dichloroethylene	10.7	1.0	0.17	µg/L	10.0		107	70-130			
1,2-Dichloropropane	11.0	1.0	0.19	µg/L	10.0		110	70-130			
1,3-Dichloropropane	10.9	0.50	0.12	µg/L	10.0		109	70-130			
2,2-Dichloropropane	10.8	1.0	0.35	µg/L	10.0		108	40-130			†
1,1-Dichloropropene	10.6	2.0	0.15	µg/L	10.0		106	70-130			
cis-1,3-Dichloropropene	10.8	0.50	0.16	µg/L	10.0		108	70-130			
trans-1,3-Dichloropropene	10.8	0.50	0.14	µg/L	10.0		108	70-130			
Diethyl Ether	8.63	2.0	0.14	µg/L	10.0		86.3	70-130			
Diisopropyl Ether (DIPE)	11.6	0.50	0.20	µg/L	10.0		116	70-130			
1,4-Dioxane	111	50	18	µg/L	100		111	40-130			†
Ethylbenzene	10.0	1.0	0.22	µg/L	10.0		100	70-130			
Hexachlorobutadiene	10.7	0.60	0.47	µg/L	10.0		107	70-130			
2-Hexanone (MBK)	122	10	1.2	µg/L	100		122	70-160			†
Isopropylbenzene (Cumene)	9.65	1.0	0.15	µg/L	10.0		96.5	70-130			
p-Isopropyltoluene (p-Cymene)	9.77	1.0	0.13	µg/L	10.0		97.7	70-130			
Methyl Acetate	9.17	1.0	0.61	µg/L	10.0		91.7	70-130			
Methyl tert-Butyl Ether (MTBE)	10.5	1.0	0.17	µg/L	10.0		105	70-130			
Methyl Cyclohexane	9.30	1.0	0.16	µg/L	10.0		93.0	70-130			
Methylene Chloride	8.67	5.0	0.18	µg/L	10.0		86.7	70-130			
4-Methyl-2-pentanone (MIBK)	117	10	1.3	µg/L	100		117	70-160			†
Naphthalene	9.37	2.0	0.38	µg/L	10.0		93.7	40-130			†
n-Propylbenzene	9.89	1.0	0.12	µg/L	10.0		98.9	70-130			
Styrene	9.80	1.0	0.15	µg/L	10.0		98.0	70-130			
1,1,1,2-Tetrachloroethane	9.51	1.0	0.16	µg/L	10.0		95.1	70-130			
1,1,2,2-Tetrachloroethane	10.2	0.50	0.14	µg/L	10.0		102	70-130			
Tetrachloroethylene	10.4	1.0	0.17	µg/L	10.0		104	70-130			
Tetrahydrofuran	11.3	10	0.49	µg/L	10.0		113	70-130			
Toluene	10.4	1.0	0.22	µg/L	10.0		104	70-130			
1,2,3-Trichlorobenzene	9.95	5.0	0.34	µg/L	10.0		99.5	70-130			
1,2,4-Trichlorobenzene	9.66	1.0	0.30	µg/L	10.0		96.6	70-130			

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

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B341783 - SW-846 5030B**
**LCS (B341783-BS1)**

Prepared &amp; Analyzed: 05/31/23

1,3,5-Trichlorobenzene	9.30	1.0	0.21	µg/L	10.0		93.0	70-130			
1,1,1-Trichloroethane	10.8	1.0	0.15	µg/L	10.0		108	70-130			
1,1,2-Trichloroethane	10.5	1.0	0.19	µg/L	10.0		105	70-130			
Trichloroethylene	10.7	1.0	0.17	µg/L	10.0		107	70-130			
Trichlorofluoromethane (Freon 11)	7.33	2.0	0.15	µg/L	10.0		73.3	70-130			V-05
1,2,3-Trichloropropane	10.9	2.0	0.28	µg/L	10.0		109	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	8.37	1.0	0.21	µg/L	10.0		83.7	70-130			
1,2,4-Trimethylbenzene	9.90	1.0	0.20	µg/L	10.0		99.0	70-130			
1,3,5-Trimethylbenzene	9.65	1.0	0.15	µg/L	10.0		96.5	70-130			
Vinyl Chloride	8.14	2.0	0.24	µg/L	10.0		81.4	40-160			†
m+p Xylene	19.7	2.0	0.49	µg/L	20.0		98.5	70-130			
o-Xylene	10.1	1.0	0.24	µg/L	10.0		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	25.6			µg/L	25.0		103	70-130			
Surrogate: Toluene-d8	25.1			µg/L	25.0		100	70-130			
Surrogate: 4-Bromofluorobenzene	25.3			µg/L	25.0		101	70-130			

**LCS Dup (B341783-BS1)**

Prepared &amp; Analyzed: 05/31/23

Acetone	91.5	50	2.0	µg/L	100		91.5	70-160	2.39	25	†
Acrylonitrile	8.33	5.0	0.47	µg/L	10.0		83.3	70-130	1.78	25	
tert-Amyl Methyl Ether (TAME)	10.1	0.50	0.13	µg/L	10.0		101	70-130	1.60	25	
Benzene	10.8	1.0	0.18	µg/L	10.0		108	70-130	0.557	25	
Bromobenzene	10.8	1.0	0.15	µg/L	10.0		108	70-130	2.54	25	
Bromochloromethane	11.5	1.0	0.28	µg/L	10.0		115	70-130	1.58	25	
Bromodichloromethane	10.7	0.50	0.16	µg/L	10.0		107	70-130	5.58	25	
Bromoform	8.79	1.0	0.41	µg/L	10.0		87.9	70-130	2.65	25	
Bromomethane	9.24	2.0	1.3	µg/L	10.0		92.4	40-160	3.30	25	†
2-Butanone (MEK)	119	20	1.7	µg/L	100		119	40-160	2.79	25	†
tert-Butyl Alcohol (TBA)	80.5	20	4.3	µg/L	100		80.5	40-160	2.37	25	V-05 †
n-Butylbenzene	10.5	1.0	0.15	µg/L	10.0		105	70-130	3.20	25	
sec-Butylbenzene	10.3	1.0	0.13	µg/L	10.0		103	70-130	4.35	25	
tert-Butylbenzene	10.2	1.0	0.14	µg/L	10.0		102	70-130	3.40	25	
tert-Butyl Ethyl Ether (TBEE)	10.9	0.50	0.15	µg/L	10.0		109	70-130	1.20	25	
Carbon Disulfide	74.8	5.0	1.6	µg/L	100		74.8	70-130	1.16	25	V-05
Carbon Tetrachloride	10.6	5.0	0.16	µg/L	10.0		106	70-130	3.44	25	
Chlorobenzene	10.0	1.0	0.12	µg/L	10.0		100	70-130	1.60	25	
Chlorodibromomethane	10.1	0.50	0.20	µg/L	10.0		101	70-130	0.296	25	
Chloroethane	9.34	2.0	0.34	µg/L	10.0		93.4	70-130	2.75	25	
Chloroform	11.4	2.0	0.14	µg/L	10.0		114	70-130	1.42	25	
Chloromethane	9.88	2.0	0.50	µg/L	10.0		98.8	40-160	4.55	25	V-34 †
2-Chlorotoluene	9.37	1.0	0.15	µg/L	10.0		93.7	70-130	0.428	25	
4-Chlorotoluene	10.3	1.0	0.15	µg/L	10.0		103	70-130	1.86	25	
1,2-Dibromo-3-chloropropane (DBCP)	10.5	5.0	0.85	µg/L	10.0		105	70-130	3.28	25	
1,2-Dibromoethane (EDB)	10.6	0.50	0.16	µg/L	10.0		106	70-130	0.756	25	
Dibromomethane	10.7	1.0	0.32	µg/L	10.0		107	70-130	1.89	25	
1,2-Dichlorobenzene	10.4	1.0	0.13	µg/L	10.0		104	70-130	2.64	25	
1,3-Dichlorobenzene	10.2	1.0	0.14	µg/L	10.0		102	70-130	1.18	25	
1,4-Dichlorobenzene	10.1	1.0	0.13	µg/L	10.0		101	70-130	2.10	25	
trans-1,4-Dichloro-2-butene	8.38	2.0	1.5	µg/L	10.0		83.8	70-130	1.07	25	
Dichlorodifluoromethane (Freon 12)	7.76	2.0	0.16	µg/L	10.0		77.6	40-160	0.386	25	V-05, V-34 †

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

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

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B341783 - SW-846 5030B</b>											
<b>LCS Dup (B341783-BSD1)</b>											
						Prepared & Analyzed: 05/31/23					
1,1-Dichloroethane	11.8	1.0	0.14	µg/L	10.0		118	70-130	1.37	25	
1,2-Dichloroethane	10.1	1.0	0.30	µg/L	10.0		101	70-130	0.396	25	
1,1-Dichloroethylene	7.52	1.0	0.14	µg/L	10.0		75.2	70-130	0.935	25	V-05
cis-1,2-Dichloroethylene	11.2	1.0	0.14	µg/L	10.0		112	70-130	2.99	25	
trans-1,2-Dichloroethylene	10.7	1.0	0.17	µg/L	10.0		107	70-130	0.0934	25	
1,2-Dichloropropane	10.9	1.0	0.19	µg/L	10.0		109	70-130	0.548	25	
1,3-Dichloropropane	10.9	0.50	0.12	µg/L	10.0		109	70-130	0.275	25	
2,2-Dichloropropane	10.7	1.0	0.35	µg/L	10.0		107	40-130	0.559	25	†
1,1-Dichloropropene	10.8	2.0	0.15	µg/L	10.0		108	70-130	1.50	25	
cis-1,3-Dichloropropene	10.8	0.50	0.16	µg/L	10.0		108	70-130	0.557	25	
trans-1,3-Dichloropropene	10.6	0.50	0.14	µg/L	10.0		106	70-130	1.59	25	
Diethyl Ether	8.65	2.0	0.14	µg/L	10.0		86.5	70-130	0.231	25	
Diisopropyl Ether (DIPE)	11.4	0.50	0.20	µg/L	10.0		114	70-130	2.52	25	
1,4-Dioxane	111	50	18	µg/L	100		111	40-130	0.783	50	† ‡
Ethylbenzene	10.2	1.0	0.22	µg/L	10.0		102	70-130	1.19	25	
Hexachlorobutadiene	10.7	0.60	0.47	µg/L	10.0		107	70-130	0.0936	25	
2-Hexanone (MBK)	121	10	1.2	µg/L	100		121	70-160	0.894	25	†
Isopropylbenzene (Cumene)	10.0	1.0	0.15	µg/L	10.0		100	70-130	3.86	25	
p-Isopropyltoluene (p-Cymene)	10.2	1.0	0.13	µg/L	10.0		102	70-130	3.82	25	
Methyl Acetate	9.02	1.0	0.61	µg/L	10.0		90.2	70-130	1.65	25	
Methyl tert-Butyl Ether (MTBE)	10.4	1.0	0.17	µg/L	10.0		104	70-130	1.05	25	
Methyl Cyclohexane	9.52	1.0	0.16	µg/L	10.0		95.2	70-130	2.34	25	
Methylene Chloride	8.70	5.0	0.18	µg/L	10.0		87.0	70-130	0.345	25	
4-Methyl-2-pentanone (MIBK)	119	10	1.3	µg/L	100		119	70-160	1.77	25	†
Naphthalene	9.88	2.0	0.38	µg/L	10.0		98.8	40-130	5.30	25	†
n-Propylbenzene	10.1	1.0	0.12	µg/L	10.0		101	70-130	1.80	25	
Styrene	10.1	1.0	0.15	µg/L	10.0		101	70-130	2.82	25	
1,1,1,2-Tetrachloroethane	9.78	1.0	0.16	µg/L	10.0		97.8	70-130	2.80	25	
1,1,2,2-Tetrachloroethane	10.4	0.50	0.14	µg/L	10.0		104	70-130	2.04	25	
Tetrachloroethylene	10.4	1.0	0.17	µg/L	10.0		104	70-130	0.866	25	
Tetrahydrofuran	11.1	10	0.49	µg/L	10.0		111	70-130	1.88	25	
Toluene	10.8	1.0	0.22	µg/L	10.0		108	70-130	3.69	25	
1,2,3-Trichlorobenzene	10.2	5.0	0.34	µg/L	10.0		102	70-130	2.48	25	
1,2,4-Trichlorobenzene	9.95	1.0	0.30	µg/L	10.0		99.5	70-130	2.96	25	
1,3,5-Trichlorobenzene	9.49	1.0	0.21	µg/L	10.0		94.9	70-130	2.02	25	
1,1,1-Trichloroethane	10.9	1.0	0.15	µg/L	10.0		109	70-130	1.02	25	
1,1,2-Trichloroethane	11.1	1.0	0.19	µg/L	10.0		111	70-130	5.18	25	
Trichloroethylene	11.0	1.0	0.17	µg/L	10.0		110	70-130	2.03	25	
Trichlorofluoromethane (Freon 11)	7.44	2.0	0.15	µg/L	10.0		74.4	70-130	1.49	25	V-05
1,2,3-Trichloropropane	10.8	2.0	0.28	µg/L	10.0		108	70-130	0.554	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	8.31	1.0	0.21	µg/L	10.0		83.1	70-130	0.719	25	
1,2,4-Trimethylbenzene	10.0	1.0	0.20	µg/L	10.0		100	70-130	1.20	25	
1,3,5-Trimethylbenzene	9.78	1.0	0.15	µg/L	10.0		97.8	70-130	1.34	25	
Vinyl Chloride	8.46	2.0	0.24	µg/L	10.0		84.6	40-160	3.86	25	†
m+p Xylene	20.1	2.0	0.49	µg/L	20.0		100	70-130	1.86	25	
o-Xylene	10.3	1.0	0.24	µg/L	10.0		103	70-130	1.66	25	
Surrogate: 1,2-Dichloroethane-d4	25.5			µg/L	25.0		102	70-130			
Surrogate: Toluene-d8	25.2			µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	25.3			µg/L	25.0		101	70-130			

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

**QUALITY CONTROL**
**Drinking Water Organics EPA 500 Series Methods - Quality Control**

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B341618 - EPA 524.2**
**Blank (B341618-BLK1)**

Prepared: 05/29/23 Analyzed: 05/30/23

Acetone	ND	10	1.5	µg/L							U
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.26	µg/L							U
Benzene	ND	0.50	0.13	µg/L							U
Bromobenzene	ND	0.50	0.13	µg/L							U
Bromochloromethane	ND	0.50	0.18	µg/L							U
Bromodichloromethane	ND	0.50	0.12	µg/L							U
Bromoform	ND	0.50	0.17	µg/L							U
Bromomethane	ND	0.50	0.38	µg/L							U
2-Butanone (MEK)	ND	5.0	1.6	µg/L							U
tert-Butyl Alcohol (TBA)	ND	5.0	2.2	µg/L							U
n-Butylbenzene	ND	0.50	0.21	µg/L							U
sec-Butylbenzene	ND	0.50	0.15	µg/L							U
tert-Butylbenzene	ND	0.50	0.15	µg/L							U
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L							U
Carbon Disulfide	ND	5.0	1.8	µg/L							U
Carbon Tetrachloride	ND	0.50	0.13	µg/L							U
Chlorobenzene	ND	0.50	0.13	µg/L							U
Chloroethane	ND	0.50	0.19	µg/L							U
Chloroform	ND	0.50	0.12	µg/L							U
Chloromethane	ND	0.50	0.26	µg/L							U
2-Chlorotoluene	ND	0.50	0.13	µg/L							U
4-Chlorotoluene	ND	0.50	0.14	µg/L							U
Dibromochloromethane	ND	0.50	0.13	µg/L							U
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	0.40	µg/L							U
1,2-Dibromoethane (EDB)	ND	0.50	0.14	µg/L							U
Dibromomethane	ND	0.50	0.13	µg/L							U
1,2-Dichlorobenzene	ND	0.50	0.14	µg/L							U
1,3-Dichlorobenzene	ND	0.50	0.13	µg/L							U
1,4-Dichlorobenzene	ND	0.50	0.14	µg/L							U
Dichlorodifluoromethane (Freon 12)	ND	0.50	0.21	µg/L							U
1,1-Dichloroethane	ND	0.50	0.15	µg/L							U
1,2-Dichloroethane	ND	0.50	0.12	µg/L							U
1,1-Dichloroethylene	ND	0.50	0.13	µg/L							U
cis-1,2-Dichloroethylene	ND	0.50	0.13	µg/L							U
trans-1,2-Dichloroethylene	ND	0.50	0.17	µg/L							U
1,2-Dichloropropane	ND	0.50	0.12	µg/L							U
1,3-Dichloropropane	ND	0.50	0.13	µg/L							U
2,2-Dichloropropane	ND	0.50	0.19	µg/L							U
1,1-Dichloropropene	ND	0.50	0.14	µg/L							U
cis-1,3-Dichloropropene	ND	0.50	0.17	µg/L							U
trans-1,3-Dichloropropene	ND	0.50	0.19	µg/L							U
Diethyl Ether	ND	0.50	0.13	µg/L							U
Diisopropyl Ether (DIPE)	ND	0.50	0.13	µg/L							U
Ethylbenzene	ND	0.50	0.13	µg/L							U
Hexachlorobutadiene	ND	0.50	0.34	µg/L							U
2-Hexanone (MBK)	ND	5.0	1.5	µg/L							U
Isopropylbenzene (Cumene)	ND	0.50	0.12	µg/L							U
p-Isopropyltoluene (p-Cymene)	ND	0.50	0.19	µg/L							U
Methyl tert-Butyl Ether (MTBE)	ND	0.50	0.13	µg/L							U
Methylene Chloride	ND	0.50	0.13	µg/L							U

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

**QUALITY CONTROL**
**Drinking Water Organics EPA 500 Series Methods - Quality Control**

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B341618 - EPA 524.2**
**Blank (B341618-BLK1)**

Prepared: 05/29/23 Analyzed: 05/30/23

4-Methyl-2-pentanone (MIBK)	ND	5.0	1.5	µg/L							U
Naphthalene	ND	1.0	0.44	µg/L							U
n-Propylbenzene	ND	0.50	0.14	µg/L							U
Styrene	ND	0.50	0.14	µg/L							U
1,1,1,2-Tetrachloroethane	ND	0.50	0.16	µg/L							U
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L							U
Tetrachloroethylene	ND	0.50	0.14	µg/L							U
Tetrahydrofuran	ND	2.0	0.40	µg/L							U
Toluene	ND	0.50	0.16	µg/L							U
1,2,3-Trichlorobenzene	ND	0.50	0.34	µg/L							U
1,2,4-Trichlorobenzene	ND	0.50	0.35	µg/L							U
1,3,5-Trichlorobenzene	ND	0.50	0.29	µg/L							U
1,1,1-Trichloroethane	ND	0.50	0.19	µg/L							U
1,1,2-Trichloroethane	ND	0.50	0.15	µg/L							U
Trichloroethylene	ND	0.50	0.10	µg/L							U
Trichlorofluoromethane (Freon 11)	ND	0.50	0.16	µg/L							U
1,2,3-Trichloropropane	ND	0.50	0.13	µg/L							U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.50	0.23	µg/L							U
1,2,4-Trimethylbenzene	ND	0.50	0.23	µg/L							U
1,3,5-Trimethylbenzene	ND	0.50	0.16	µg/L							U
Vinyl Chloride	ND	0.50	0.19	µg/L							U
m&p-Xylene	ND	1.0	0.30	µg/L							U
o-Xylene	ND	0.50	0.16	µg/L							U
Xylenes (total)	ND	1.5	0.98	µg/L							U
Surrogate: 4-Bromofluorobenzene	23.0			µg/L	25.0		91.9	80-120			
Surrogate: 1,2-Dichlorobenzene-d4	22.6			µg/L	25.0		90.5	80-120			

**LCS (B341618-BS1)**

Prepared: 05/29/23 Analyzed: 05/30/23

Acetone	89	10	1.5	µg/L	100		88.7	70-130			
tert-Amyl Methyl Ether (TAME)	10	0.50	0.26	µg/L	10.0		102	70-130			
Benzene	9.7	0.50	0.13	µg/L	10.0		97.4	70-130			
Bromobenzene	9.6	0.50	0.13	µg/L	10.0		96.4	70-130			
Bromochloromethane	10	0.50	0.18	µg/L	10.0		100	70-130			
Bromodichloromethane	9.9	0.50	0.12	µg/L	10.0		99.3	70-130			
Bromoform	10	0.50	0.17	µg/L	10.0		99.7	70-130			
Bromomethane	11	0.50	0.38	µg/L	10.0		107	70-130			
2-Butanone (MEK)	91	5.0	1.6	µg/L	100		91.3	70-130			
tert-Butyl Alcohol (TBA)	95	5.0	2.2	µg/L	100		95.1	70-130			
n-Butylbenzene	10	0.50	0.21	µg/L	10.0		104	70-130			
sec-Butylbenzene	10	0.50	0.15	µg/L	10.0		104	70-130			
tert-Butylbenzene	10	0.50	0.15	µg/L	10.0		102	70-130			
tert-Butyl Ethyl Ether (TBEE)	9.7	0.50	0.15	µg/L	10.0		97.0	70-130			
Carbon Disulfide	100	5.0	1.8	µg/L	100		103	70-130			
Carbon Tetrachloride	11	0.50	0.13	µg/L	10.0		106	70-130			
Chlorobenzene	9.7	0.50	0.13	µg/L	10.0		97.3	70-130			
Chloroethane	9.5	0.50	0.19	µg/L	10.0		95.2	70-130			
Chloroform	9.4	0.50	0.12	µg/L	10.0		94.5	70-130			
Chloromethane	11	0.50	0.26	µg/L	10.0		106	70-130			
2-Chlorotoluene	9.8	0.50	0.13	µg/L	10.0		98.2	70-130			

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

**QUALITY CONTROL**
**Drinking Water Organics EPA 500 Series Methods - Quality Control**

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B341618 - EPA 524.2**
**LCS (B341618-BS1)**

Prepared: 05/29/23 Analyzed: 05/30/23

4-Chlorotoluene	10	0.50	0.14	µg/L	10.0		102	70-130			
Dibromochloromethane	9.9	0.50	0.13	µg/L	10.0		99.0	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	9.1	2.0	0.40	µg/L	10.0		91.2	70-130			
1,2-Dibromoethane (EDB)	10	0.50	0.14	µg/L	10.0		100	70-130			
Dibromomethane	10	0.50	0.13	µg/L	10.0		99.9	70-130			
1,2-Dichlorobenzene	9.9	0.50	0.14	µg/L	10.0		98.7	70-130			
1,3-Dichlorobenzene	10	0.50	0.13	µg/L	10.0		100	70-130			
1,4-Dichlorobenzene	9.7	0.50	0.14	µg/L	10.0		96.6	70-130			
Dichlorodifluoromethane (Freon 12)	10	0.50	0.21	µg/L	10.0		102	70-130			
1,1-Dichloroethane	9.7	0.50	0.15	µg/L	10.0		97.1	70-130			
1,2-Dichloroethane	9.8	0.50	0.12	µg/L	10.0		97.7	70-130			
1,1-Dichloroethylene	9.8	0.50	0.13	µg/L	10.0		98.4	70-130			
cis-1,2-Dichloroethylene	9.8	0.50	0.13	µg/L	10.0		97.6	70-130			
trans-1,2-Dichloroethylene	10	0.50	0.17	µg/L	10.0		101	70-130			
1,2-Dichloropropane	9.9	0.50	0.12	µg/L	10.0		99.2	70-130			
1,3-Dichloropropane	9.7	0.50	0.13	µg/L	10.0		96.8	70-130			
2,2-Dichloropropane	9.9	0.50	0.19	µg/L	10.0		98.9	70-130			
1,1-Dichloropropene	10	0.50	0.14	µg/L	10.0		104	70-130			
cis-1,3-Dichloropropene	10	0.50	0.17	µg/L	10.0		100	70-130			
trans-1,3-Dichloropropene	10	0.50	0.19	µg/L	10.0		102	70-130			
Diethyl Ether	9.8	0.50	0.13	µg/L	10.0		98.4	70-130			
Diisopropyl Ether (DIPE)	9.4	0.50	0.13	µg/L	10.0		94.2	70-130			
Ethylbenzene	10	0.50	0.13	µg/L	10.0		100	70-130			
Hexachlorobutadiene	11	0.50	0.34	µg/L	10.0		107	70-130			
2-Hexanone (MBK)	88	5.0	1.5	µg/L	100		88.4	70-130			
Isopropylbenzene (Cumene)	10	0.50	0.12	µg/L	10.0		104	70-130			
p-Isopropyltoluene (p-Cymene)	10	0.50	0.19	µg/L	10.0		104	70-130			
Methyl tert-Butyl Ether (MTBE)	9.7	0.50	0.13	µg/L	10.0		97.0	70-130			
Methylene Chloride	9.2	0.50	0.13	µg/L	10.0		91.7	70-130			
4-Methyl-2-pentanone (MIBK)	96	5.0	1.5	µg/L	100		95.8	70-130			
Naphthalene	9.9	1.0	0.44	µg/L	10.0		98.6	70-130			
n-Propylbenzene	10	0.50	0.14	µg/L	10.0		102	70-130			
Styrene	10	0.50	0.14	µg/L	10.0		102	70-130			
1,1,1,2-Tetrachloroethane	10	0.50	0.16	µg/L	10.0		99.6	70-130			
1,1,2,2-Tetrachloroethane	9.8	0.50	0.16	µg/L	10.0		98.5	70-130			
Tetrachloroethylene	11	0.50	0.14	µg/L	10.0		106	70-130			
Tetrahydrofuran	8.5	2.0	0.40	µg/L	10.0		85.4	70-130			
Toluene	9.9	0.50	0.16	µg/L	10.0		98.9	70-130			
1,2,3-Trichlorobenzene	10	0.50	0.34	µg/L	10.0		100	70-130			
1,2,4-Trichlorobenzene	10	0.50	0.35	µg/L	10.0		101	70-130			
1,3,5-Trichlorobenzene	9.8	0.50	0.29	µg/L	10.0		98.2	70-130			
1,1,1-Trichloroethane	10	0.50	0.19	µg/L	10.0		99.9	70-130			
1,1,2-Trichloroethane	9.6	0.50	0.15	µg/L	10.0		96.3	70-130			
Trichloroethylene	9.9	0.50	0.10	µg/L	10.0		99.2	70-130			
Trichlorofluoromethane (Freon 11)	9.9	0.50	0.16	µg/L	10.0		99.4	70-130			
1,2,3-Trichloropropane	11	0.50	0.13	µg/L	10.0		112	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10	0.50	0.23	µg/L	10.0		100	70-130			
1,2,4-Trimethylbenzene	10	0.50	0.23	µg/L	10.0		103	70-130			
1,3,5-Trimethylbenzene	11	0.50	0.16	µg/L	10.0		105	70-130			

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

**QUALITY CONTROL**
**Drinking Water Organics EPA 500 Series Methods - Quality Control**

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B341618 - EPA 524.2**
**LCS (B341618-BS1)**

Prepared: 05/29/23 Analyzed: 05/30/23

Vinyl Chloride	10	0.50	0.19	µg/L	10.0		103	70-130			
m&p-Xylene	21	1.0	0.30	µg/L	20.0		104	70-130			
o-Xylene	10	0.50	0.16	µg/L	10.0		99.6	70-130			
Xylenes (total)	31	1.5	0.98	µg/L	30.0		102	0-200			
Surrogate: 4-Bromofluorobenzene	24.7			µg/L	25.0		98.9	80-120			
Surrogate: 1,2-Dichlorobenzene-d4	24.3			µg/L	25.0		97.3	80-120			

**LCS Dup (B341618-BSD1)**

Prepared: 05/29/23 Analyzed: 05/30/23

Acetone	88	10	1.5	µg/L	100		87.8	70-130	1.04		
tert-Amyl Methyl Ether (TAME)	10	0.50	0.26	µg/L	10.0		99.7	70-130	1.79		
Benzene	10	0.50	0.13	µg/L	10.0		99.6	70-130	2.23		
Bromobenzene	10	0.50	0.13	µg/L	10.0		102	70-130	5.35		
Bromochloromethane	10	0.50	0.18	µg/L	10.0		99.6	70-130	0.900		
Bromodichloromethane	10	0.50	0.12	µg/L	10.0		104	70-130	4.33		
Bromoform	10	0.50	0.17	µg/L	10.0		100	70-130	0.300		
Bromomethane	11	0.50	0.38	µg/L	10.0		112	70-130	4.76		
2-Butanone (MEK)	89	5.0	1.6	µg/L	100		89.0	70-130	2.51		
tert-Butyl Alcohol (TBA)	94	5.0	2.2	µg/L	100		93.8	70-130	1.33		
n-Butylbenzene	11	0.50	0.21	µg/L	10.0		108	70-130	4.62		
sec-Butylbenzene	11	0.50	0.15	µg/L	10.0		109	70-130	4.89		
tert-Butylbenzene	11	0.50	0.15	µg/L	10.0		106	70-130	4.24		
tert-Butyl Ethyl Ether (TBEE)	9.9	0.50	0.15	µg/L	10.0		98.6	70-130	1.64		
Carbon Disulfide	110	5.0	1.8	µg/L	100		107	70-130	3.77		
Carbon Tetrachloride	11	0.50	0.13	µg/L	10.0		107	70-130	0.655		
Chlorobenzene	10	0.50	0.13	µg/L	10.0		101	70-130	3.43		
Chloroethane	9.6	0.50	0.19	µg/L	10.0		96.5	70-130	1.36		
Chloroform	9.8	0.50	0.12	µg/L	10.0		98.0	70-130	3.64		
Chloromethane	11	0.50	0.26	µg/L	10.0		108	70-130	1.97		
2-Chlorotoluene	10	0.50	0.13	µg/L	10.0		101	70-130	2.91		
4-Chlorotoluene	11	0.50	0.14	µg/L	10.0		106	70-130	3.64		
Dibromochloromethane	10	0.50	0.13	µg/L	10.0		102	70-130	2.89		
1,2-Dibromo-3-chloropropane (DBCP)	9.2	2.0	0.40	µg/L	10.0		92.4	70-130	1.31		
1,2-Dibromoethane (EDB)	10	0.50	0.14	µg/L	10.0		100	70-130	0.0997		
Dibromomethane	10	0.50	0.13	µg/L	10.0		100	70-130	0.499		
1,2-Dichlorobenzene	10	0.50	0.14	µg/L	10.0		102	70-130	3.19		
1,3-Dichlorobenzene	10	0.50	0.13	µg/L	10.0		104	70-130	3.91		
1,4-Dichlorobenzene	10	0.50	0.14	µg/L	10.0		100	70-130	3.56		
Dichlorodifluoromethane (Freon 12)	11	0.50	0.21	µg/L	10.0		108	70-130	5.24		
1,1-Dichloroethane	9.9	0.50	0.15	µg/L	10.0		99.2	70-130	2.14		
1,2-Dichloroethane	9.8	0.50	0.12	µg/L	10.0		98.3	70-130	0.612		
1,1-Dichloroethylene	10	0.50	0.13	µg/L	10.0		102	70-130	3.69		
cis-1,2-Dichloroethylene	10	0.50	0.13	µg/L	10.0		101	70-130	3.32		
trans-1,2-Dichloroethylene	11	0.50	0.17	µg/L	10.0		106	70-130	4.46		
1,2-Dichloropropane	10	0.50	0.12	µg/L	10.0		101	70-130	1.70		
1,3-Dichloropropane	9.9	0.50	0.13	µg/L	10.0		99.4	70-130	2.65		
2,2-Dichloropropane	10	0.50	0.19	µg/L	10.0		104	70-130	4.74		
1,1-Dichloropropene	10	0.50	0.14	µg/L	10.0		103	70-130	0.386		
cis-1,3-Dichloropropene	10	0.50	0.17	µg/L	10.0		102	70-130	1.98		
trans-1,3-Dichloropropene	10	0.50	0.19	µg/L	10.0		103	70-130	0.585		
Diethyl Ether	10	0.50	0.13	µg/L	10.0		101	70-130	2.71		

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

**QUALITY CONTROL**
**Drinking Water Organics EPA 500 Series Methods - Quality Control**

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B341618 - EPA 524.2**
**LCS Dup (B341618-BSD1)**

Prepared: 05/29/23 Analyzed: 05/30/23

Diisopropyl Ether (DIPE)	9.6	0.50	0.13	µg/L	10.0		96.0	70-130	1.89		
Ethylbenzene	11	0.50	0.13	µg/L	10.0		106	70-130	5.90		
Hexachlorobutadiene	11	0.50	0.34	µg/L	10.0		112	70-130	4.47		
2-Hexanone (MBK)	84	5.0	1.5	µg/L	100		84.2	70-130	4.82		
Isopropylbenzene (Cumene)	11	0.50	0.12	µg/L	10.0		107	70-130	3.51		
p-Isopropyltoluene (p-Cymene)	11	0.50	0.19	µg/L	10.0		109	70-130	4.89		
Methyl tert-Butyl Ether (MTBE)	9.7	0.50	0.13	µg/L	10.0		97.1	70-130	0.103		
Methylene Chloride	9.8	0.50	0.13	µg/L	10.0		97.6	70-130	6.23		
4-Methyl-2-pentanone (MIBK)	93	5.0	1.5	µg/L	100		92.6	70-130	3.43		
Naphthalene	9.7	1.0	0.44	µg/L	10.0		97.0	70-130	1.64		
n-Propylbenzene	11	0.50	0.14	µg/L	10.0		107	70-130	4.12		
Styrene	11	0.50	0.14	µg/L	10.0		106	70-130	4.03		
1,1,1,2-Tetrachloroethane	10	0.50	0.16	µg/L	10.0		104	70-130	4.51		
1,1,2,2-Tetrachloroethane	10	0.50	0.16	µg/L	10.0		99.6	70-130	1.11		
Tetrachloroethylene	11	0.50	0.14	µg/L	10.0		109	70-130	2.60		
Tetrahydrofuran	8.6	2.0	0.40	µg/L	10.0		85.8	70-130	0.467		
Toluene	10	0.50	0.16	µg/L	10.0		103	70-130	4.16		
1,2,3-Trichlorobenzene	10	0.50	0.34	µg/L	10.0		100	70-130	0.100		
1,2,4-Trichlorobenzene	10	0.50	0.35	µg/L	10.0		103	70-130	1.57		
1,3,5-Trichlorobenzene	10	0.50	0.29	µg/L	10.0		104	70-130	6.22		
1,1,1-Trichloroethane	10	0.50	0.19	µg/L	10.0		104	70-130	4.31		
1,1,2-Trichloroethane	9.8	0.50	0.15	µg/L	10.0		98.2	70-130	1.95		
Trichloroethylene	9.9	0.50	0.10	µg/L	10.0		99.2	70-130	0.00		
Trichlorofluoromethane (Freon 11)	10	0.50	0.16	µg/L	10.0		104	70-130	4.14		
1,2,3-Trichloropropane	11	0.50	0.13	µg/L	10.0		111	70-130	0.894		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10	0.50	0.23	µg/L	10.0		103	70-130	2.37		
1,2,4-Trimethylbenzene	11	0.50	0.23	µg/L	10.0		109	70-130	5.37		
1,3,5-Trimethylbenzene	11	0.50	0.16	µg/L	10.0		109	70-130	3.18		
Vinyl Chloride	10	0.50	0.19	µg/L	10.0		103	70-130	0.0969		
m&p-Xylene	22	1.0	0.30	µg/L	20.0		108	70-130	3.54		
o-Xylene	10	0.50	0.16	µg/L	10.0		104	70-130	4.23		
Xylenes (total)	32	1.5	0.98	µg/L	30.0		106	0-200	3.77		
Surrogate: 4-Bromofluorobenzene	25.4			µg/L	25.0		102	80-120			
Surrogate: 1,2-Dichlorobenzene-d4	24.9			µg/L	25.0		99.7	80-120			

**FLAG/QUALIFIER SUMMARY**

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit
DL	Method Detection Limit
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
U	Analyte included in the analysis, but not detected
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-34	Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.

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

Analyte	Certifications
<i>EPA 524.2 in Drinking Water</i>	
Benzene	CT,MA,NH,NY,RI,ME,VA,VT-DW
Benzene	CT,MA,NH,NY,RI,ME,VA,VT-DW
Bromobenzene	CT,MA,NH,NY,RI,VT-DW
Bromobenzene	CT,MA,NH,NY,RI,VT-DW
Bromochloromethane	CT,MA,NH,NY,RI,VT-DW
Bromochloromethane	CT,MA,NH,NY,RI,VT-DW
Bromodichloromethane	MA,NH,NY,RI,ME,VA,VT-DW
Bromodichloromethane	MA,NH,NY,RI,ME,VA,VT-DW
Bromoform	NH,NY,RI,ME,VT-DW
Bromoform	CT,MA,NH,NY,RI,ME,VT-DW
Bromomethane	CT,MA,NH,NY,RI,VT-DW
Bromomethane	CT,MA,NH,NY,RI,VT-DW
n-Butylbenzene	CT,MA,NH,NY,RI,VT-DW
n-Butylbenzene	CT,MA,NH,NY,RI,VT-DW
sec-Butylbenzene	CT,MA,NH,NY,RI,VT-DW
sec-Butylbenzene	CT,MA,NH,NY,RI,VT-DW
tert-Butylbenzene	CT,MA,NH,NY,RI,VT-DW
tert-Butylbenzene	CT,MA,NH,NY,RI,VT-DW
Carbon Tetrachloride	CT,MA,NH,NY,RI,ME,VA,VT-DW
Carbon Tetrachloride	CT,MA,NH,NY,RI,ME,VA,VT-DW
Chlorobenzene	CT,MA,NH,NY,RI,ME,VA,VT-DW
Chlorobenzene	CT,MA,NH,NY,RI,ME,VA,VT-DW
Chloroethane	CT,MA,NH,NY,RI,VT-DW
Chloroethane	CT,MA,NH,NY,RI,VT-DW
Chloroethane	CT,MA,NH,NY,RI,VT-DW
Chloroform	MA,NH,NY,RI,ME,VA,VT-DW
Chloroform	MA,NH,NY,RI,ME,VA,VT-DW
Chloromethane	CT,MA,NH,NY,RI,VT-DW
Chloromethane	CT,MA,NH,NY,RI,VT-DW
2-Chlorotoluene	CT,MA,NH,NY,RI,VT-DW
2-Chlorotoluene	CT,MA,NH,NY,RI,VT-DW
4-Chlorotoluene	CT,MA,NH,NY,RI,VT-DW
4-Chlorotoluene	CT,MA,NH,NY,RI,VT-DW
Dibromochloromethane	MA,NH,NY,RI,ME,VA,VT-DW
Dibromochloromethane	MA,NH,NY,RI,ME,VA,VT-DW
Dibromomethane	CT,MA,NH,NY,RI,VT-DW
Dibromomethane	CT,MA,NH,NY,RI,VT-DW
1,2-Dichlorobenzene	CT,MA,NH,NY,RI,ME,VA,VT-DW
1,2-Dichlorobenzene	CT,MA,NH,NY,RI,ME,VA,VT-DW
1,3-Dichlorobenzene	CT,MA,NH,NY,RI,VT-DW
1,3-Dichlorobenzene	CT,MA,NH,NY,RI,VT-DW
1,4-Dichlorobenzene	CT,MA,NH,NY,RI,ME,VA,VT-DW
1,4-Dichlorobenzene	CT,MA,NH,NY,RI,ME,VA,VT-DW
Dichlorodifluoromethane (Freon 12)	CT,MA,NH,NY,RI,VT-DW
Dichlorodifluoromethane (Freon 12)	CT,MA,NH,NY,RI,VT-DW
1,1-Dichloroethane	CT,MA,NH,NY,RI,VT-DW
1,1-Dichloroethane	CT,MA,NH,NY,RI,VT-DW
1,2-Dichloroethane	CT,MA,NH,NY,RI,ME,VA,VT-DW

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

Analyte	Certifications
<i>EPA 524.2 in Drinking Water</i>	
1,2-Dichloroethane	CT,MA,NH,NY,RI,ME,VA,VT-DW
1,1-Dichloroethylene	CT,MA,NH,NY,RI,ME,VA,VT-DW
1,1-Dichloroethylene	CT,MA,NH,NY,RI,ME,VA,VT-DW
cis-1,2-Dichloroethylene	CT,MA,NH,NY,RI,ME,VA,VT-DW
cis-1,2-Dichloroethylene	CT,MA,NH,NY,RI,ME,VA,VT-DW
trans-1,2-Dichloroethylene	CT,MA,NH,NY,RI,ME,VA,VT-DW
trans-1,2-Dichloroethylene	CT,MA,NH,NY,RI,ME,VA,VT-DW
1,2-Dichloropropane	CT,MA,NH,NY,RI,ME,VA,VT-DW
1,2-Dichloropropane	CT,MA,NH,NY,RI,ME,VA,VT-DW
1,3-Dichloropropane	CT,MA,NH,NY,RI,VT-DW
1,3-Dichloropropane	CT,MA,NH,NY,RI,VT-DW
2,2-Dichloropropane	CT,MA,NH,NY,RI,VT-DW
2,2-Dichloropropane	CT,MA,NH,NY,RI,VT-DW
1,1-Dichloropropene	CT,MA,NH,NY,RI,VT-DW
1,1-Dichloropropene	CT,MA,NH,NY,RI,VT-DW
cis-1,3-Dichloropropene	CT,MA,NH,NY,RI,VT-DW
cis-1,3-Dichloropropene	CT,MA,NH,NY,RI,VT-DW
trans-1,3-Dichloropropene	CT,MA,NH,NY,RI,VT-DW
trans-1,3-Dichloropropene	CT,MA,NH,NY,RI,VT-DW
1,3-Dichloropropene (total)	CT,MA
1,3-Dichloropropene (total)	CT,MA
Ethylbenzene	CT,MA,NH,NY,RI,ME,VA,VT-DW
Ethylbenzene	CT,MA,NH,NY,RI,ME,VA,VT-DW
Hexachlorobutadiene	CT,MA,NH,NY,RI,VT-DW
Hexachlorobutadiene	CT,MA,NH,NY,RI,VT-DW
Isopropylbenzene (Cumene)	CT,MA,NH,NY,RI,VT-DW
Isopropylbenzene (Cumene)	CT,MA,NH,NY,RI,VT-DW
p-Isopropyltoluene (p-Cymene)	CT,MA,NH,NY,RI,VT-DW
p-Isopropyltoluene (p-Cymene)	CT,MA,NH,NY,RI,VT-DW
Methyl tert-Butyl Ether (MTBE)	CT,MA,NH,NY,RI,ME,VT-DW
Methyl tert-Butyl Ether (MTBE)	CT,MA,NH,NY,RI,ME,VT-DW
Methylene Chloride	CT,MA,NH,NY,RI,ME,VA,VT-DW
Methylene Chloride	CT,MA,NH,NY,RI,ME,VA,VT-DW
Naphthalene	NY
Naphthalene	NY
n-Propylbenzene	CT,MA,NH,NY,RI,VT-DW
n-Propylbenzene	NY,VT-DW
Styrene	CT,MA,NH,NY,RI,ME,VA,VT-DW
Styrene	CT,MA,NH,NY,RI,ME,VA,VT-DW
1,1,1,2-Tetrachloroethane	CT,MA,NH,NY,RI,VT-DW
1,1,1,2-Tetrachloroethane	CT,MA,NH,NY,RI,VT-DW
1,1,2,2-Tetrachloroethane	CT,MA,NH,NY,RI,VT-DW
1,1,2,2-Tetrachloroethane	CT,MA,NH,NY,RI,VT-DW
Tetrachloroethylene	CT,MA,NH,NY,RI,ME,VA,VT-DW
Tetrachloroethylene	CT,MA,NH,NY,RI,ME,VA,VT-DW
Toluene	CT,MA,NH,NY,RI,ME,VA,VT-DW
Toluene	CT,MA,NH,NY,RI,ME,VA,VT-DW

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

Analyte	Certifications
<b><i>EPA 524.2 in Drinking Water</i></b>	
1,2,3-Trichlorobenzene	CT,MA,NH,NY,RI,VT-DW
1,2,3-Trichlorobenzene	CT,MA,NH,NY,RI,VT-DW
1,2,4-Trichlorobenzene	CT,MA,NH,NY,RI,ME,VA,VT-DW
1,2,4-Trichlorobenzene	CT,MA,NH,NY,RI,ME,VA,VT-DW
1,1,1-Trichloroethane	CT,MA,NH,NY,RI,ME,VA,VT-DW
1,1,1-Trichloroethane	CT,MA,NH,NY,RI,ME,VA,VT-DW
1,1,2-Trichloroethane	CT,MA,NH,NY,RI,ME,VA,VT-DW
1,1,2-Trichloroethane	CT,MA,NH,NY,RI,ME,VA,VT-DW
Trichloroethylene	CT,MA,NH,NY,RI,ME,VA,VT-DW
Trichloroethylene	CT,MA,NH,NY,RI,ME,VA,VT-DW
Trichlorofluoromethane (Freon 11)	CT,MA,NH,NY,RI,VT-DW
Trichlorofluoromethane (Freon 11)	CT,MA,NH,NY,RI,VT-DW
1,2,3-Trichloropropane	CT,MA,NH,NY,RI,VT-DW
1,2,3-Trichloropropane	CT,MA,NH,NY,RI,VT-DW
1,2,4-Trimethylbenzene	CT,MA,NH,NY,RI,VT-DW
1,2,4-Trimethylbenzene	CT,MA,NH,NY,RI,VT-DW
1,3,5-Trimethylbenzene	CT,MA,NH,NY,RI,VT-DW
1,3,5-Trimethylbenzene	CT,MA,NH,NY,RI,VT-DW
Vinyl Chloride	CT,MA,NH,NY,RI,ME,VA,VT-DW
Vinyl Chloride	CT,MA,NH,NY,RI,ME,VA,VT-DW
m&p-Xylene	VA
m&p-Xylene	VA
o-Xylene	VA
o-Xylene	VA
Xylenes (total)	CT,MA,NH,NY,RI,ME,VA,VT-DW
Xylenes (total)	CT,MA,NH,NY,RI,ME,VA,VT-DW
<b><i>SW-846 8260D in Water</i></b>	
Acetone	CT,ME,NH,VA,NY
Acrylonitrile	CT,ME,NH,VA,NY
tert-Amyl Methyl Ether (TAME)	ME,NH,VA,NY
Benzene	CT,ME,NH,VA,NY
Bromobenzene	ME,NY
Bromochloromethane	ME,NH,VA,NY
Bromodichloromethane	CT,ME,NH,VA,NY
Bromoform	CT,ME,NH,VA,NY
Bromomethane	CT,ME,NH,VA,NY
2-Butanone (MEK)	CT,ME,NH,VA,NY
tert-Butyl Alcohol (TBA)	ME,NH,VA,NY
n-Butylbenzene	ME,VA,NY
sec-Butylbenzene	ME,VA,NY
tert-Butylbenzene	ME,VA,NY
tert-Butyl Ethyl Ether (TBEE)	ME,NH,VA,NY
Carbon Disulfide	CT,ME,NH,VA,NY
Carbon Tetrachloride	CT,ME,NH,VA,NY
Chlorobenzene	CT,ME,NH,VA,NY
Chlorodibromomethane	CT,ME,NH,VA,NY

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

Analyte	Certifications
<i>SW-846 8260D in Water</i>	
Chloroethane	CT,ME,NH,VA,NY
Chloroform	CT,ME,NH,VA,NY
Chloromethane	CT,ME,NH,VA,NY
2-Chlorotoluene	ME,NH,VA,NY
4-Chlorotoluene	ME,NH,VA,NY
1,2-Dibromo-3-chloropropane (DBCP)	ME,NY
1,2-Dibromoethane (EDB)	ME,NY
Dibromomethane	ME,NH,VA,NY
1,2-Dichlorobenzene	CT,ME,NH,VA,NY
1,3-Dichlorobenzene	CT,ME,NH,VA,NY
1,4-Dichlorobenzene	CT,ME,NH,VA,NY
trans-1,4-Dichloro-2-butene	ME,NH,VA,NY
Dichlorodifluoromethane (Freon 12)	ME,NH,VA,NY
1,1-Dichloroethane	CT,ME,NH,VA,NY
1,2-Dichloroethane	CT,ME,NH,VA,NY
1,1-Dichloroethylene	CT,ME,NH,VA,NY
cis-1,2-Dichloroethylene	ME,NY
trans-1,2-Dichloroethylene	CT,ME,NH,VA,NY
1,2-Dichloropropane	CT,ME,NH,VA,NY
1,3-Dichloropropane	ME,VA,NY
2,2-Dichloropropane	ME,NH,VA,NY
1,1-Dichloropropene	ME,NH,VA,NY
cis-1,3-Dichloropropene	CT,ME,NH,VA,NY
trans-1,3-Dichloropropene	CT,ME,NH,VA,NY
Diethyl Ether	ME,NY
Diisopropyl Ether (DIPE)	ME,NH,VA,NY
1,4-Dioxane	ME,NY
Ethylbenzene	CT,ME,NH,VA,NY
Hexachlorobutadiene	CT,ME,NH,VA,NY
2-Hexanone (MBK)	CT,ME,NH,VA,NY
Isopropylbenzene (Cumene)	ME,VA,NY
p-Isopropyltoluene (p-Cymene)	CT,ME,NH,VA,NY
Methyl Acetate	ME,NY
Methyl tert-Butyl Ether (MTBE)	CT,ME,NH,VA,NY
Methyl Cyclohexane	NY
Methylene Chloride	CT,ME,NH,VA,NY
4-Methyl-2-pentanone (MIBK)	CT,ME,NH,VA,NY
Naphthalene	ME,NH,VA,NY
n-Propylbenzene	CT,ME,NH,VA,NY
Styrene	CT,ME,NH,VA,NY
1,1,1,2-Tetrachloroethane	CT,ME,NH,VA,NY
1,1,2,2-Tetrachloroethane	CT,ME,NH,VA,NY
Tetrachloroethylene	CT,ME,NH,VA,NY
Toluene	CT,ME,NH,VA,NY
1,2,3-Trichlorobenzene	ME,NH,VA,NY
1,2,4-Trichlorobenzene	CT,ME,NH,VA,NY
1,3,5-Trichlorobenzene	ME

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

Analyte	Certifications
<i>SW-846 8260D in Water</i>	
1,1,1-Trichloroethane	CT,ME,NH,VA,NY
1,1,2-Trichloroethane	CT,ME,NH,VA,NY
Trichloroethylene	CT,ME,NH,VA,NY
Trichlorofluoromethane (Freon 11)	CT,ME,NH,VA,NY
1,2,3-Trichloropropane	ME,NH,VA,NY
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	VA,NY
1,2,4-Trimethylbenzene	ME,VA,NY
1,3,5-Trimethylbenzene	ME,VA,NY
Vinyl Chloride	CT,ME,NH,VA,NY
m+p Xylene	CT,ME,NH,VA,NY
o-Xylene	CT,ME,NH,VA,NY
Xylenes (total)	ME,NY

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

Code	Description	Number	Expires
MA	Massachusetts DEP	M-MA100	06/30/2024
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2024
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2024
RI	Rhode Island Department of Health	LAO00373	12/30/2023
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2023
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2023

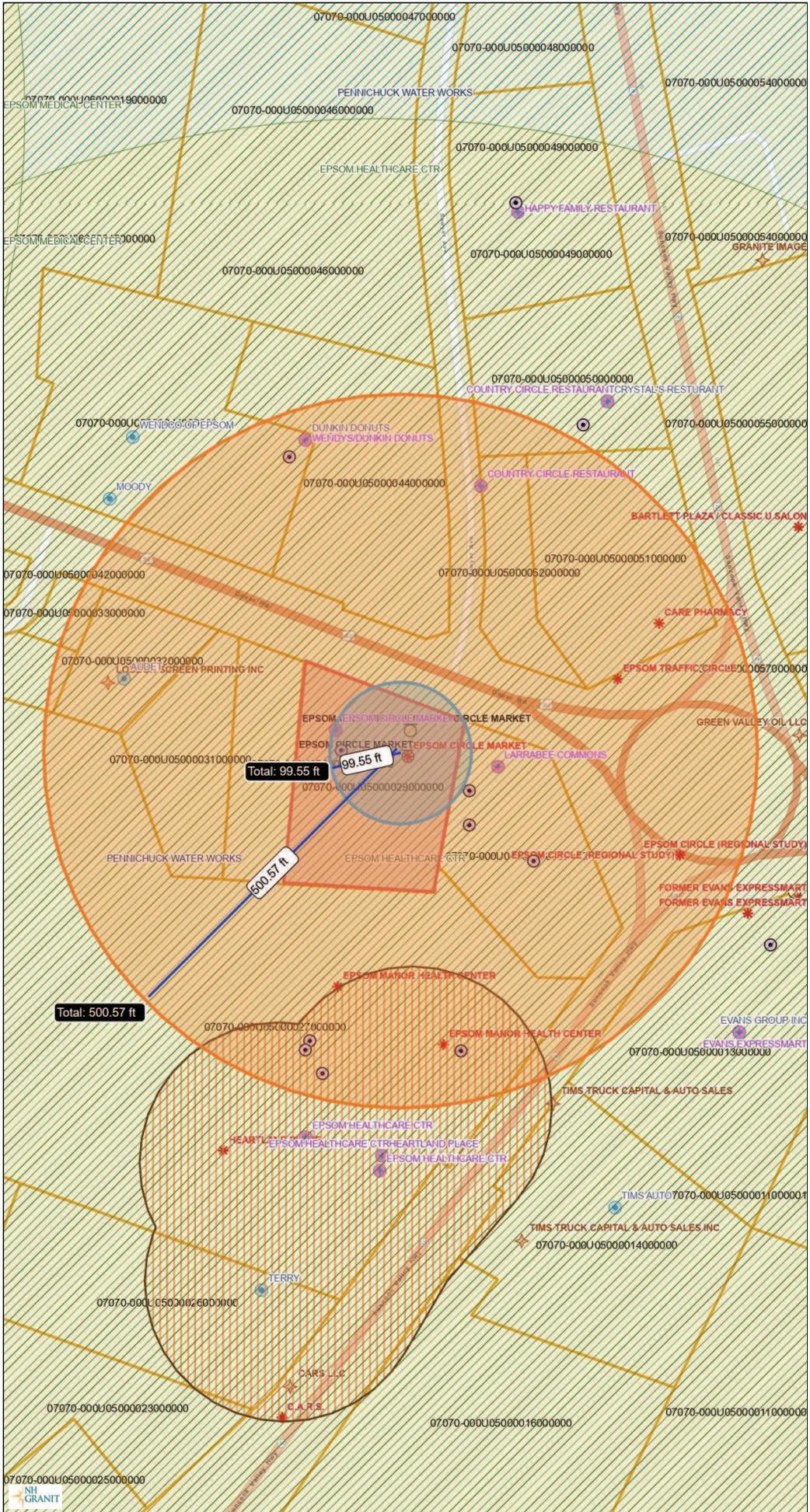




## **APPENDIX E**

### **Sensitive Receptor Survey**

# NHDES Site #199104001 500-Foot Receptor Map



- Legend**
- Wellhead Protection Areas
  - Public Water Supply Entirety
  - Water and Sewer Lines
  - Public Water Supply Wells
  - Registered Water Users
  - Source Water Protection Area
  - Water Supply Intake Protection Areas
  - Water Well Inventory
  - Aboveground Storage Tank S
  - Hazardous Waste Generators
  - Outstanding Resource Water Watersheds
  - Remediation Sites
  - Solid Waste Facilities
  - Underground Storage Tank S
  - Parcels
  - Additional Lines

Map Scale  
1: 1,624



© NH DES, <http://des.nh.gov>  
Map Generated: 6/5/2023

**Notes:**  
by Wilcox & Barton, Inc. 6/5/23. Red = Parcel boundary (site); Blue = 100-foot radius; Orange = 500-foot radius.

**Potential Human Receptor List - Abutters**

Epsom Circle Market

1921 Dover Road, Epsom, New Hampshire

NHDES Site #199104001

Property Identification (Map/ Lot/ Sub-Lot)	Property Address	Owner Name	Owner's Mailing Address* (if different from Property Address)	Property Use	Water Supply Well Located on Property?
U05/ 29	1921 Dover Road	Rajipo 1921 LLC	6 Williamsburg Avenue Gilford, NH 03249	Commercial	Yes Inactive PWS# 0778090
<b>Properties within 500 feet</b>					
U05/ 30	1925 Dover Road	4 Tomorrow, LLC	500 South Street Bow, NH 03304	Commercial	Assumed
U05/ 31	1929 Dover Road	James Alexander	102 Old Town Road, Ext.	Commercial	Assumed
U05/ 32	1933 Dover Road	Betty Ann Audet, Trustee Betty Ann Audet Trust		Residential	Yes WRB# 079.0111
U05/ 33	Brimstone Hill Road	Scooby Realty, LLC	135 Swamp Road	Residential	Assumed
U05/ 34	7 Brimstone Hill Road	Wendell Ellsworth		Residential	Assumed
U05/ 27	901 Suncook Valley Highway	901 Suncook LLC	2 Samsondale Avenue West Haverstraw, NY 10993	Commercial	Yes PWS# 0774010
U05/ 28	1911 Dover Road	Larrabee Commons	PO Box 400	Commercial	Yes PWS# 0778080
U05/ 13	910 Suncook Valley Highway	GSC-Epsom-RE, LLC	25 Springer Road Hooksett, NH 03106	Commercial	Yes WRB# 079.0222
U05/ 51	929 Suncook Valley Highway	AVL Epsom Attn: Craig Deachman Assoc.	162 Elm Street Manchester, NH 03101	Commercial	Assumed
U05/ 52	1912 Dover Road	Lawderdale LLC	1 Winter Street Rochester, NH 03867	Commercial	Assumed
U05/ 50	935 Suncook Valley Highway	935 Suncook Valley Highway, LLC	13 Greenview Drive Loudon, NH 03307	Commercial	Inactive PWS# 0778010
U05/ 44	1918 Dover Road	Cafua Realty Trust XLV, LLC	280 Merrimack Street Methuen, MA 01844	Commercial	Shared PWS# 0776040
U05/ 44/ 1	1932 Dover Road	Wendco of Epsom, Inc	4 Brimstone Hill Road	Commercial	Shared PWS# 0776040

**Bold** = Site property.

\* = All addresses are Epsom, New Hampshire 03234 unless noted.

Ownership information obtained from the Town of Epsom Assessor's Database on June 6, 2023.

Public water system (PWS) and water resource board (WRB) water supply information obtained from NHDES OneStop DataMapper on June 6, 2023. Properties without registered wells are assumed to utilize unregistered private water supply wells since municipal water lines are not available in this area of Epsom, New Hampshire.

