

# SETON BRILLA CHARTER SCHOOL

**1956 JEROME AVENUE**

**BRONX, NEW YORK**

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## **Groundwater Treatment Design Report**

**BCP Site No.: C203152**  
**OER Project Number: 21TMP1325X**  
**E-Designation: E-442**

### **Prepared for:**

New York State Department of Environmental Conservation  
Division of Environmental Remediation, Remedial Bureau B  
625 Broadway, 12<sup>th</sup> Floor  
Albany, New York 12233

### **On Behalf Of:**

2-6 East Tremont Avenue LLC  
450 West 14<sup>th</sup> Street, 8<sup>th</sup> Floor  
New York, NY 10014

### **Prepared by:**



**AKRF, Inc.**  
440 Park Avenue South, 7<sup>th</sup> Floor  
New York, New York 10016  
212-696-0670

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**DECEMBER 2022**

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### CERTIFICATION

I, Rebecca Kinal, certify that I am currently a New York State registered Professional Engineer as defined in 6 New York Codes, Rules, and Regulations (NYCRR) Part 375, and that this Groundwater Treatment Design Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the Division of Environmental Remediation (DER) Technical Guidance for Site Investigation and Remediation (DER-10).

I certify that all information and statements in this certification are true. I understand that a false statement made herein is punishable as a Class “A” misdemeanor, pursuant to Section 210.45 of the Penal Law.



Rebecca Kinal, P.E.

December 19, 2022

NYS Professional Engineer #082046-1

Date

Signature/Stamp

## **1.0 INTRODUCTION**

This Groundwater Treatment Design Report has been prepared by AKRF, Inc. (AKRF) on behalf of 2-6 East Tremont Avenue LLC (the Volunteer) for the Seton Brilla Charter School redevelopment project, located at 1956 Jerome Avenue, Bronx, New York (the Site). This report summarizes the results of the Remedial Design Investigation (RDI) performed at the Site and provides additional detail regarding the Groundwater Treatment Program described in the New York State Department of Environmental Conservation (NYSDEC)-approved Brownfield Cleanup Program (BCP) Remedial Action Work Plan (RAWP) for the Seton Brilla Charter School (SBCS) project (BCP Site No. C203152), dated May 2022. The Site location is presented on Figure 1 and the layout of the Site is presented on Figure 2.



## 2.0 SITE DESCRIPTION AND HISTORY

### 2.1 Site Description and Surrounding Land Use

The Site is currently vacant but was formerly developed with a 20,600-gross-square-foot (gsf), two-story commercial building, which was most recently occupied by C.S. Brown (a hardware and plumbing supplies store), Kennedy Fried Chicken and Pizza, Wendy's Silhouette Nails Salon, Santana Tax Multiservice, and Renacer Barber Shop. The former Site building was demolished during the Spring of 2022.

The Site is bounded to the north by East Tremont Avenue, followed by a five-story multi-use residential-commercial building; to the east by the C.S. Brown retail hardware store, followed by Walton Avenue; to the south by several automobile repair facilities, followed by East 177<sup>th</sup> Street; and to the west by Jerome Avenue and the elevated Metropolitan Transit Authority (MTA) subway tracks, followed by automotive repair shops and a vacant commercial building. The surrounding area primarily consists of automotive, commercial, and transit uses, with some residential and institutional uses.

### 2.2 Site Geology, Hydrogeology, and Subsurface Characteristics

According to a survey prepared by Gallas Surveying Group dated October 1, 2021, the current elevation of the Site is between approximately 44.86 and 50.69 feet above the North American Vertical Datum of 1988 (NAVD88), which is an approximation of mean sea level. Ground surface at the Site is higher in the northern portion along East Tremont Avenue and lower in the central and southern portions of the Site along Jerome Avenue. Regional surface topography generally slopes south-southwest towards the Harlem River.

Based on AKRF's Phase II Investigation and Remedial Investigation (RI) conducted at the Site in May and July 2021, respectively, the stratigraphy of the Site consists of approximately nine feet of fill material from sidewalk grade across the Site, characterized by brown and gray sand and silt with gravel, brick, concrete, and wood. The fill material is generally underlain by brown and gray silt, sand, and trace gravel to approximately 20 feet below ground surface (bgs), the terminus of the deepest borings.

Based on Site-specific measurements, groundwater elevation across the Site ranges between 40.68 and 39.11 feet (NAVD88), or between 4.64 and 11.48 feet bgs, and flows in a north-northwest direction beneath the Site. Regional groundwater flow is from east/northeast to west/southwest, and appears to flow towards the Harlem River, which is approximately 0.75 miles west of the Site; however, actual groundwater flow can be affected by many factors, including geology, past filling activities, subsurface openings or obstructions such as basements or underground utilities, and other factors beyond the scope of this study. Groundwater in the Bronx is not used as a source of drinking water.

### 2.3 Petroleum Spill

During the Phase II Investigation and RI, photoionization detector (PID) readings up to 1,608 parts per million (ppm) were observed in four soil borings (RI-SB-01, RI-SB-07, RI-SB-09, and RI-SB-10) located in the southwest corner of the Site. Laboratory analytical results identified detections of volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs) indicative of petroleum contamination in three soil borings (RI-SB-01, RI-SB-07, and RI-SB-10) and in groundwater at three monitoring well locations (RI-TW-01, RI-MW-05, and RI-MW-06). The Phase II and RI soil and groundwater sample analytical results identified the VOCs benzene, toluene, ethylbenzene and xylenes (collectively referred to as BTEX), naphthalene, 1,2,4-

trimethylbenzene (124-TMB), and 1,3,5-trimethylbenzene (135-TMB) as the constituents of concern (COCs) for the groundwater treatment.

Based on the field observations and laboratory results for soil and groundwater, a petroleum spill was reported to the NYSDEC Spills Hotline (NYSDEC Spill No. 2103719). The locations of the soil borings and monitoring wells are presented on Figure 2.

### 3.0 REMEDIAL DESIGN INVESTIGATION

To aid in the design of the proposed remedial action at the Site, AKRF prepared an RDI Work Plan (RDIWP), which was included in Appendix D of the RAWP. The scope of work outlined in the RDIWP included the advancement of four soil borings with the collection and laboratory analysis of eight soil samples, and the installation of four groundwater monitoring wells with the collection and laboratory analysis of four groundwater samples. The soil boring and groundwater monitoring well locations are shown on Figure 2. Fixed station and roving monitoring for VOCs and particulates was performed throughout the implementation of the RDI, and the Community Air Monitoring Program (CAMP) results were included in Daily Status Reports, which were provided to NYSDEC each day. The Daily Status Reports are included as Appendix A.

#### 3.1 Soil Sampling

A Geoprobe® 6620DT track-mounted direct push-probe (DPP) drilling rig was used to advance the four soil borings (RDI-SB-16 through RDI-SB-19) at the locations shown on Figure 2. Soil borings were advanced to approximately 5 feet below the groundwater interface (approximately 10 feet bgs). Soil samples were collected continuously to assess soil quality across the Site. Soil cores from the drill rig were collected in 5-foot-long, 2-inch-diameter, stainless steel macrocore piston rod samplers fitted with dedicated internal acetate liners. Soil cores were inspected by AKRF field personnel for evidence of contamination (e.g., odors, staining), screened for the presence of VOCs with a PID equipped with a 10.6 electron volt (eV) lamp, and logged using the modified Burmister soil classification system. The PID was calibrated in accordance with manufacturer's recommendations prior to sampling. Soil boring logs are included as Appendix B.

Two soil samples from each soil boring were submitted for laboratory analysis. One soil sample was collected from 0 to 2 feet bgs, and a second soil sample was collected from the 2-foot interval exhibiting the highest level of field evidence of contamination (visual, olfactory, or an elevated PID reading). In the absence of contamination, the second sample was collected from the 2-foot interval immediately above the groundwater interface. Groundwater was encountered between approximately 5 and 7 feet bgs. All sampling equipment (e.g., drilling rods, casings, and probe rods) was either dedicated or decontaminated between each soil boring location.

Soil samples slated for laboratory analysis were labeled and placed in laboratory-supplied containers and shipped to a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified laboratory via courier with appropriate chain of custody documentation, in accordance with United States Environmental Protection Agency (EPA) protocols. All samples were analyzed for Target Compound List (TCL) VOCs by EPA Method 8260 using Category B deliverables. Procedures for soil sample collection quality assurance/quality control (QA/QC) were consistent with those described in the Quality Assurance Project Plan (QAPP) included in Appendix E of the RAWP.

Soil cuttings from the borings were containerized in properly labeled, Department of Transportation (DOT)-approved 55-gallon drums for future off-site disposal at a permitted facility. Disposable sampling equipment (including spoons, gloves, bags, paper towels, etc.) was double bagged and disposed in a facility trash dumpster as non-hazardous refuse.

#### 3.2 Monitoring Well Installation and Development

Using the Geoprobe® drill rig and hollow stem augers (HSA), the four soil borings were retrofitted with permanent groundwater monitoring wells (RDI-MW-10 through RDI-MW-13). The wells were screened across the groundwater table between 5 and 10 feet bgs. Monitoring well construction consisted of 2-inch-diameter polyvinyl chloride (PVC) with 10 feet of 0.020-inch slotted screen, and solid risers placed to ground surface. A No. 2 Morie sandpack was installed to

2 feet above the well screen. The annular space around the solid well risers in all wells was sealed with 1 foot of bentonite above the screen. The wells were completed with concrete to approximately 1-foot bgs and finished with a locking plug and a steel stickup with locking cap. The monitoring well locations are shown on Figure 2.

Following installation, the permanent wells were developed via pumping and surging to remove any accumulated fines and establish a hydraulic connection with the surrounding aquifer. Development continued until turbidity within the permanent well was less than 50 nephelometric turbidity units (NTUs). In the event that 50 NTUs could not be achieved, the wells were developed until at least three well volumes had been purged from the well. Well development logs are included as Appendix C.

Development and purge water was containerized in properly labeled, DOT-approved 55-gallon drums for future off-site disposal at a state-permitted facility.

### 3.3 Groundwater Sampling

In accordance with EPA low-flow sampling protocols, the permanent wells were sampled one week following their development. Prior to sampling, an electronic interface meter was used to measure water levels. The purge water was monitored for turbidity and water quality indicators (i.e., pH, dissolved oxygen, oxidation-reduction potential, temperature, and specific conductivity) with measurements collected approximately every five minutes. The criteria for stabilization was three successive readings within  $\pm 10\%$  for pH, temperature, and specific conductivity. Purge water was containerized in properly labeled, DOT-approved 55-gallon drums for off-site disposal at a permitted facility. Groundwater sampling logs are included in Appendix D.

Groundwater samples slated for laboratory analysis were placed in laboratory-supplied containers and shipped in accordance with appropriate EPA protocols to a NYSDOH ELAP-certified laboratory. The samples were analyzed for TCL VOCs by EPA Method 8260 using Category B deliverables. Procedures for groundwater sample collection QA/QC were consistent with those described in the QAPP included in Appendix E of the RAWP.

### 3.4 Quality Assurance / Quality Control (QA/QC)

Additional analyses were included for quality control measures, as required by the Category B sampling techniques. The QA/QC samples for soil and groundwater included one field blank, one trip blank, one matrix spike/matrix spike duplicate (MS/MSD), and one blind duplicate sample per media. The QA/QC samples were analyzed for VOCs by EPA Method 8260. The QAPP (included as Appendix E of the RAWP) describes the QA/QC protocols and procedures that were followed during implementation of the RDIWP. The Data Usability Summary Report (DUSR) is included in Appendix E.

### 3.5 Soil Analytical Results

Soil sample analytical results for VOCs were compared to the 6 New York Codes, Rules, and Regulations (NYCRR) Part 375 Restricted Residential Use Soil Cleanup Objectives (RRSCOs), Unrestricted Use Soil Cleanup Objectives (UUSCOs), and the Protection of Groundwater Soil Cleanup Objectives (PGWSCOs). Results are summarized in Table 1 and the laboratory reports are included in Appendix E.

Seven VOCs [1,2,4-TMB, 1,3,5-TMB, acetone (a common laboratory contaminant), 2-butanone, ethylbenzene, n-propylbenzene, and total xylenes) were detected above the PGWSCOs and/or UUSCOs at concentrations ranging from 0.002 ppm to 23 ppm in one or more of the samples. No VOCs were detected above their respective RRSCOs in the samples. The highest concentrations of petroleum-related VOCs were detected in sample RDI-SB-19\_8-10\_20220906, which is located

on the northeastern corner of the proposed Groundwater Treatment Area identified in Figures 2 and 3.

### 3.6 Groundwater Analytical Results

Groundwater sample analytical results for VOCs were compared to the NYSDEC Class GA Ambient Water Quality Standards and Guidance Values (AWQSGVs). Results are summarized in Table 2 and the laboratory reports are included in Appendix E.

Two VOCs, chloromethane (a.k.a. methylene chloride, which is a possible laboratory contaminant) in one sample and methyl tert butyl ether (MTBE) in all groundwater samples and the blind duplicate sample, were detected at concentrations above the AWQSGVs. MTBE was detected at concentrations between 15 micrograms per liter ( $\mu\text{g/L}$ ) and 22  $\mu\text{g/L}$ , above the AWQSGV of 10  $\mu\text{g/L}$ . MTBE was also detected in three of the soil samples, but at trace concentrations well below the soil cleanup objectives. The elevated concentrations of MTBE were detected in groundwater in the western portion of the Site, which suggests that MTBE contamination in groundwater at the Site may be related to historic Site uses.

### 3.7 Updated Site Conceptual Model

The affected media at the Site include soil, groundwater, and soil vapor. Soil/fill is contaminated with petroleum-related VOCs, polycyclic aromatic hydrocarbons (PAHs), which are a class of SVOCs associated with combustion engines and petroleum products, and metals; groundwater is contaminated with petroleum-related VOCs, PAHs, metals, and per- and polyfluoroalkyl substances (PFAS); and soil vapor is contaminated with petroleum-related VOCs and chlorinated VOCs.

Petroleum-related VOCs were detected at variable concentrations in soil/fill (from 2 feet bgs down to the groundwater table), groundwater, and sub-slab soil vapor samples in the western portion of the Site. The highest concentrations of petroleum-related VOCs in soil and groundwater were detected in the southwestern portion of the Site near the Jerome Avenue Site boundary. Shallow and deep soil/fill and groundwater in the western portion of the Site also contains PAHs, metals, and PFAS (groundwater only). Soil and groundwater contamination on the eastern portion of the Site is mainly limited to metals. The contamination appears to be related to a combination of fill materials and petroleum bulk storage and/or automobile-related uses in the western portion of the Site.

Based on the petroleum-like odors and elevated PID detections in soil, elevated petroleum-related VOC and SVOC concentrations in soil, and VOC and SVOC detections in groundwater detected during the RI, NYSDEC Spill No. 2103719 was assigned to the Site on July 19, 2021.

#### 4.0 BENCH SCALE STUDY

To address residual petroleum contamination in soil and groundwater at the Site, Sections 5.3 and 10.0 of the RAWP state that a groundwater treatment program must be implemented at the Site, which will include, but may not be limited to, *in-situ* chemical oxidation within the groundwater treatment area presented in Figure 3. To determine which chemical oxidant(s), and at what volume and concentration, would be most effective in treating the constituents of concern (COCs) at the Site, a bench scale study was performed by ISOTEC of Lawrenceville, NJ. Using soil and groundwater samples collected from within the groundwater treatment area by AKRF field personnel in May 2022, ISOTEC introduced different doses of Modified Fenton's Reagent® (MFR), including 2.5 grams per kilogram (g/kg), 7.5 g/mg, and 12.5 g/mg, to slurry mixes of soil and groundwater from the Site in a laboratory setting and measured the reduction in the COCs over time.

The results of the laboratory testing indicate that 7.5 g/kg of MFR would reduce the contaminant mass in the groundwater treatment area by approximately 96%. Therefore, the groundwater treatment program at the Site will include excavation of petroleum-contaminated soil/fill from within the groundwater treatment area followed by the application, by mechanical mixing, of MFR to chemically oxidize the residual petroleum contamination within the saturated zone. The results of the bench scale study are summarized in the report included as Appendix F.

## 5.0 GROUNDWATER TREATMENT

During implementation of the RAWP, petroleum-contaminated soil within the treatment area will be excavated up to 5 feet below the groundwater interface (up to approximately 11 feet bgs) to the extent possible and will be excavated to the lateral extent of petroleum contamination. Based on the results of the Phase II, RI, and RDI, the groundwater treatment area is expected to be approximately 1,200 square feet (an approximate area of 20 feet by 60 feet), but the full extent will be determined by AKRF personnel in the field using visual and olfactory observations, and screening with a PID. Due to the location of the groundwater treatment area in the southwest corner of the Site, adjacent to the Jerome Avenue sidewalk to the west and an off-site building to the south, the excavation will be performed using the following three techniques, which are presented on Figure 3: 1) removal of soil by drilling 32 permanent, 16-inch-diameter caissons along the southern Site boundary; 2) excavation of soil within ten timber-sheeted pits along the western Site boundary, each of which will be approximately 7-feet by 7-feet in length; and, 3) excavation of soil using a 1:1 slope within the interior of the groundwater treatment area.

Following excavation, MFR will be applied to the open portion of the groundwater treatment area (i.e., the timber-sheeted pits and sloped excavation) and mechanically mixed using the excavator to a depth of approximately 5 feet below the bottom of the excavation to address remaining contamination at/below the groundwater interface. MFR will also be injected into the subsurface in a small area (approximately 100 square feet) in the southwest corner of the Site, as shown on Figure 3, where excavation is not possible due to structural concerns. The injections will be performed using ISOTEC's injection equipment, consisting of an air compressor, diaphragm pumps, mixers, chemical resistant tanks, direct push technology (DPT) drill rig, injection screens and well heads equipped with vent lines and control valves. Injection points will be installed using the DPT drill rods to advance injection screens to the target treatment interval (between approximately 5 and 11 feet bgs). The oxidant will be delivered into the injection point using the diaphragm pumps under moderate pressures (0-40 pounds per square inch [psi]) to distribute the oxidant into the subsurface to directly breakdown the BTEX and other contaminants. A design flow rate of 1 to 4 gallons per minute has been assumed; however, the actual injection flow rates will be determined by the injection pressure and the soil/aquifer characteristics, as well as the MFR reaction rate with contaminants in the subsurface. Field decisions regarding the injection volumes and flow rates will be based on the subsurface intake rates, radial effects noted during injection and any potential leakage of oxidant to the ground surface around monitoring well seals and injection points. If it becomes impossible to inject the proposed volume, reagent concentrations may be increased, or the number of injection points may be increased while reducing the volume injected per point.

MFR consists of stabilized hydrogen peroxide ( $H_2O_2$ ) as oxidant and a proprietary chelated iron catalyst (Cat-4260), which is a circum-neutral pH organometallic complex (chelated iron) with high mobility within the subsurface. This specific formulation of MFR is designed to enhance in situ treatment of contaminants using Fenton's chemistry while mitigating some of the drawbacks of conventional Fenton's reagent (e.g. acidic pH and low mobility). Additional information regarding MFR is presented on the fact sheet included in Appendix G.

The quantity of MFR to be applied during groundwater remediation is based upon the optimal dosage of 7.5 g/kg identified in the bench scale study (Appendix F). The estimated volume of saturated soil within the groundwater treatment area is approximately 220 cubic yards, or approximately 300,300 kilograms. Therefore, approximately 2,268,000 grams (or approximately 4,990 pounds) of MFR will be required to treat the contaminant mass in the excavation area. In addition, approximately 1,250 pounds of MFR will be injected into the subsurface in the southwest corner of the Site. Backup calculations are summarized on Table 3.

The specified quantity of MFR will be mixed with residual soil in the excavation area below the water table and across the smear zone (an interval up to approximately 5 feet), or injected into the subsurface where

excavation is not possible. Once remediation is complete, the timber-sheeted pits and sloped excavation areas will then be backfilled with clean backfill material to grade in accordance with the RAWP. The permanent caissons, which will be incorporated into the foundation of the new building, will be backfilled with concrete to the surface.

Fixed station and roving monitoring for VOCs and particulates will be performed throughout the implementation of the groundwater treatment program, and the CAMP results will be included in Daily Status Reports, which will be provided to NYSDEC each day.

As described in the RAWP, three groundwater monitoring wells will be installed at the Site following treatment, and groundwater samples will be collected and analyzed for VOCs to assess the effectiveness of the remedy. The groundwater treatment program details and results will be included in the Final Engineering Report.



## FIGURES



Service Layer Credits: USGS The National Map: 3d Elevation Program, Data Refreshed July, 2020



440 Park Avenue South, New York, NY 10016

**1956 Jerome Avenue**  
Bronx, New York

**SITE LOCATION**

DATE	<b>9/20/2021</b>
PROJECT NO.	<b>210024</b>
FIGURE	<b>1</b>

© 2021 AKRF. W:\Projects\210024 - 1956 JEROME AVENUE\Technical\GIS and Graphics\AR\RAWP\210024 Figure 2 Site Layout and Sample Locations.mxd 10/25/2021 3:14:47 PM iszaltus



**LEGEND**

- PROJECT SITE BOUNDARY
- LOT BOUNDARY AND TAX LOT NUMBER
- 2853** BLOCK NUMBER
- FORMER BUILDING PARTIAL CELLAR
- APPROXIMATE GROUNDWATER TREATMENT AREA
- PHASE II OR RI SOIL BORING (2021)
- PHASE II, RI, OR RDI SOIL BORING/MONITORING WELL
- PHASE II OR RI SOIL BORING/SOIL VAPOR POINT (2021)
- PHASE II OR RI SOIL VAPOR POINT (2021)
- REMEDIAL DESIGN INVESTIGATION (RDI) SOIL BORING/MONITORING WELL



Map Source:  
NYC DCP (NYC Dept. of City Planning) GIS database

**AKRF**  
440 Park Avenue South, New York, NY 10016

**1956 Jerome Avenue**  
Bronx, New York

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






**SITE LAYOUT AND RDI SAMPLE LOCATIONS**

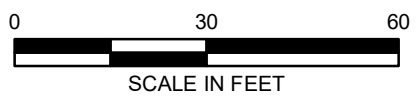
DATE	<b>10/7/2022</b>
PROJECT NO.	<b>210024</b>
FIGURE	<b>2</b>

©2022 AKRF W:\AP\projects\210024 - 1956 JEROME AVENUE\Technical\GIS and Graphics\SAR\Groundwater\Treatment Area.mxd8/11/2022 5:06:11 PM iszalus



**LEGEND**

-  PROJECT SITE BOUNDARY
-  LOT BOUNDARY AND TAX LOT NUMBER
- 2853** BLOCK NUMBER
-  APPROXIMATE EXTENT OF GROUNDWATER TREATMENT AREA
-  SOURCE REMOVAL VIA CAISSON INSTALLATION
-  SOURCE REMOVAL VIA SLOPED EXCAVATION
-  SOURCE REMOVAL VIA TIMBER SUPPORTED EXCAVATION
-  INJECTION USING DIRECT PUSH DRILLING RIG
-  RI SOIL BORING/MONITORING WELL (JULY 2021)
-  PROPOSED GROUNDWATER MONITORING WELL LOCATIONS



Map Source:  
NYC DCP (NYC Dept. of City Planning) GIS database



440 Park Avenue South, New York, NY 10016

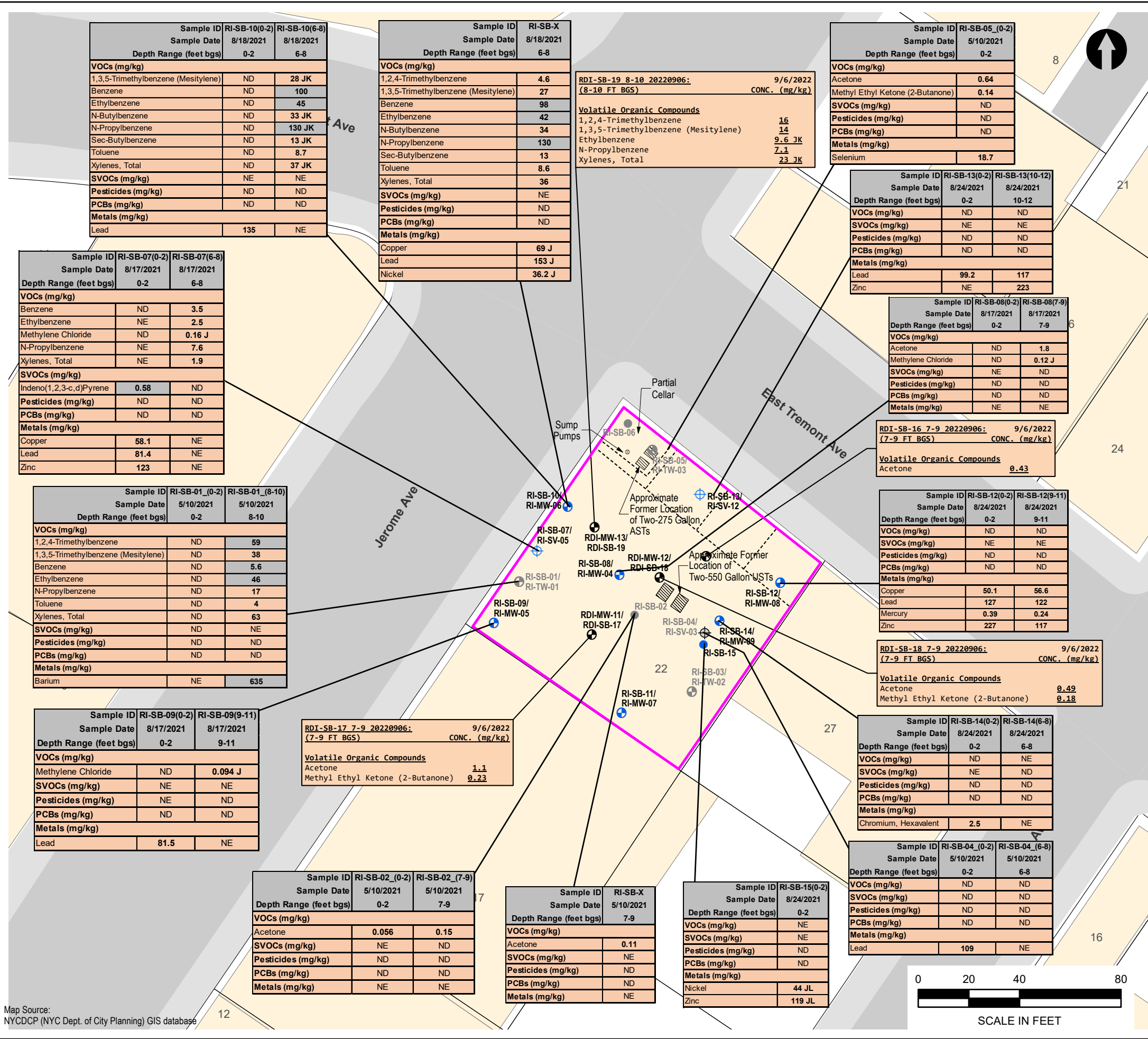
**1956 Jerome Avenue**  
Bronx, New York

**GROUNDWATER TREATMENT AREA**

DATE	<b>12/14/2022</b>
PROJECT NO.	<b>210024</b>
FIGURE	<b>3</b>



©2022 AKRF W:\Projects\210024 - 1956 JEROME AVENUE Technical GIS and Graphics\SAR\Groundwater Treatment\ISO210024 Figure 4 Soil Sample Concentrations Above NYSDEC UUSCOs, PGWSCOs, RRSCOs.mxd 11/4/2022 3:14:15 PM iszalus



**LEGEND**

- PROJECT SITE BOUNDARY
- 22 LOT BOUNDARY AND TAX LOT NUMBER
- 2853** BLOCK NUMBER
- BUILDING
- INTERIOR BUILDING LINES
- PHASE II SOIL BORING (MAY 2021)
- ⊕ PHASE II SOIL BORING/SOIL VAPOR POINT (MAY 2021)
- ⊕ PHASE II SOIL BORING/TEMPORARY WELL (MAY 2021)
- RI SOIL BORING (JULY 2021)
- ⊕ RI SOIL BORING/MONITORING WELL (JULY 2021)
- ⊕ RI SOIL BORING/SOIL VAPOR POINT (JULY 2021)
- ⊕ RDI SOIL BORING/MONITORING WELL

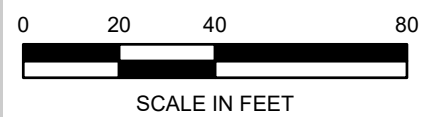
**Part 375 Soil Cleanup Objectives (SCOs):** SCOs listed in the New York State Department of Environmental Conservation (NYSDEC) "Part 375" Regulations (6 NYCRR Part 375).  
**Exceedances of Part 375 Unrestricted Use SCOs (UUSCOs) are highlighted in bold font.**  
**Exceedances of Part 375 Restricted Residential (RRSCOs) are shaded in gray.**  
**Exceedances of NYSDEC Protected Groundwater Soil Cleanup Objectives (PGWSCOs) are presented in underlined font.**

mg/kg: milligrams per kilogram = parts per million (ppm)

J: The concentration given is an estimated value.  
 D: Analyte concentration obtained from dilution.  
 K: Reported concentration value is proportional to dilution factor and may be exaggerated  
 L: Sample result is estimated and biased low.  
 ND: Not Detected  
 NE: Concentration did not exceed standards.

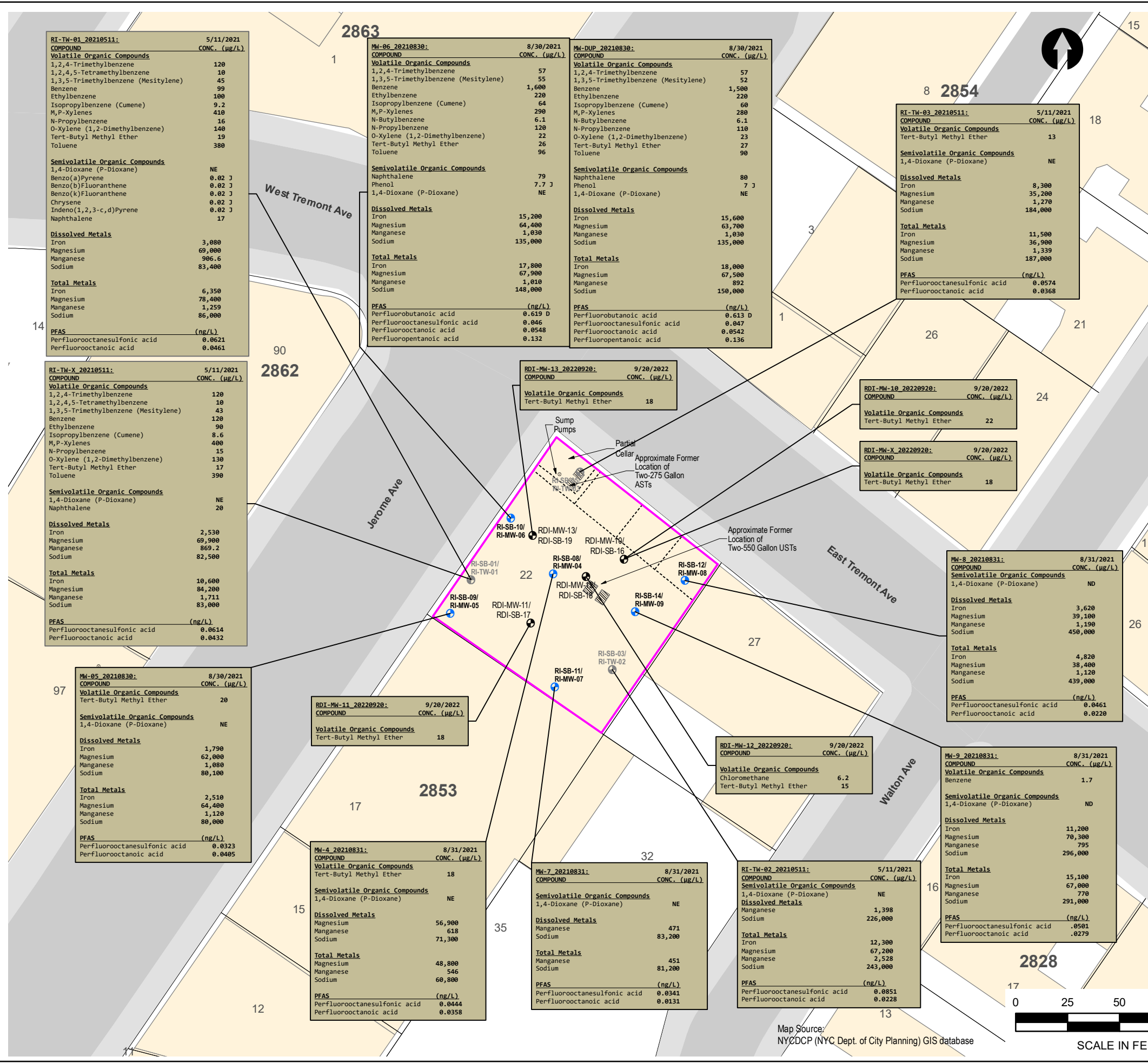
RI-SB-X\_20210510 is a blind duplicate of sample RI-SB-02\_(7-9)\_20210510  
 RI-SB-X\_20210818 is a blind duplicate of sample RI-SB-10(6-8)\_20210818

Analyte/Compound	PART 375 PROTECTION OF GROUNDWATER		PART 375 RESTRICTED RESIDENTIAL		PART 375 UNRESTRICTED	
	mg/kg		mg/kg		mg/kg	
<b>Volatile Organic Compounds</b>						
1,2,4-Trimethylbenzene	3.6		52		3.6	
1,3,5-Trimethylbenzene (Mesitylene)	8.4		52		8.4	
Acetone	0.05		100		0.05	
Benzene	0.06		4.8		0.06	
Ethylbenzene	1		41		1	
Methyl Ethyl Ketone (2-Butanone)	0.12		100		0.12	
Methylene Chloride	0.05		100		0.05	
N-Butylbenzene	12		100		12	
N-Propylbenzene	3.9		100		3.9	
Sec-Butylbenzene	11		100		11	
Toluene	0.7		100		0.7	
Xylenes, Total	1.6		100		0.26	
<b>Semivolatile Organic Compounds</b>						
Indeno(1,2,3-c,d)Pyrene	8.2		0.5		0.5	
<b>Metals</b>						
Barium	820		400		350	
Chromium, Hexavalent	19		110		1	
Copper	1720		270		50	
Lead	450		400		63	
Mercury	0.73		0.81		0.18	
Nickel	130		310		30	
Selenium	4		180		3.9	
Zinc	2,480		10,000		109	



Sample ID	RI-SB-02_(0-2)	RI-SB-02_(7-9)
Depth Range (feet bgs)	0-2	7-9
<b>VOCs (mg/kg)</b>		
Acetone	0.056	0.15
<b>SVOCs (mg/kg)</b>		
Pesticides (mg/kg)	NE	ND
<b>PCBs (mg/kg)</b>		
Metals (mg/kg)	NE	NE

Map Source: NYCDPC (NYC Dept. of City Planning) GIS database



**LEGEND**

- PROJECT SITE BOUNDARY
- 22 LOT BOUNDARY AND TAX LOT NUMBER
- 2853** BLOCK NUMBER
- BUILDING
- INTERIORBLDGLINES
- PHASE II SOIL BORING/MONITORING WELL (MAY 2021)
- RI SOIL BORING/MONITORING WELL (JULY 2021)
- RDI SOIL BORING/MONITORING WELL

**NYSDEC TOGS Class GA Ambient Water Quality Standard and Guidance Values (AWQSGVs) and/or Screening Levels:**  
 New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) (1.1.1):

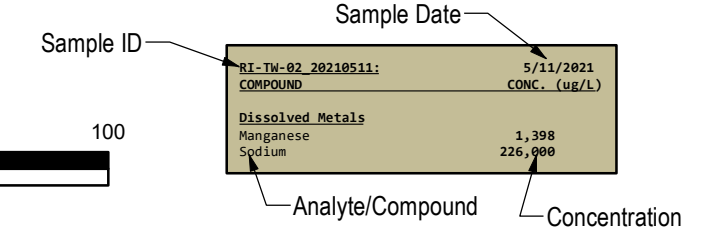
µg/L: micrograms per Liter = parts per billion (ppb)  
 ng/L :1 nanogram per Liter =1,000 parts per trillion (ppt)

- PFOA:** Perfluorooctanoic acid
- PFOS:** Perfluorooctanesulfonic acid
- PFHeA:** Perfluoropentanoic acid
- PFBA:** Perfluorobutanoic acid
- PFAS:** Per- and polyfluoroalkyl substances
- Exceedances of NYSDEC AWQSGVs and Exceedances of NYSDEC Screening Values are shown in bold font.**

J: The concentration given is an estimated value.  
 D: Indicates an identified compound in an analysis that has been diluted. This flag alerts the data user to any differences between the concentrations reported in the two analyses.

RI-TW-X\_20210511 is a blind duplicate of sample RI-TW-01\_20210511  
 MW-DUP\_20210830 is a blind duplicate of sample MW-06\_20210830  
 RDI-MW-X\_20220920 is a blind duplicate of sample RDI-MW-10\_20220920

	NYSDEC AWQSGVs	NYSDEC PFAS Screening Levels
	µg/l	Groundwater ng/l
<b>Volatile Organic Compounds</b>		
1,2,4-Trimethylbenzene	5	
1,3,5-Trimethylbenzene (Mesitylene)	5	
Benzene	1	
Chloromethane	5	
Ethylbenzene	5	
Isopropylbenzene (Cumene)	5	
Naphthalene	10	
N-Butylbenzene	5	
N-Propylbenzene	5	
O-Xylene (1,2-Dimethylbenzene)	5	
Tert-Butyl Methyl Ether (MTBE)	10	
Toluene	5	
Xylenes, M,P	5	
<b>Semivolatile Organic Compounds</b>		
Phenol	1	
<b>Metals</b>		
Iron	300	
Magnesium	35,000	
Manganese	300	
Sodium	20,000	
<b>PFAS</b>		
Perfluorobutanoic acid		100
Perfluorooctanesulfonic acid (PFOS)		10
Perfluorooctanoic acid (PFOA)		10
Perfluoropentanoic acid		100



## TABLES

Table 1  
 Seton Brilla Charter School  
 1956 Jerome Avenue, Bronx, New York  
 Groundwater Treatment Design Report  
 Soil Analytical Results of Volatile Organic Compounds (VOCs)

Compound	AKRF Sample ID Laboratory Sample ID Date Sampled Dilution Factor			LDI-SB-16_0-2_20220906	LDI-SB-DUP-01_20220906	LDI-SB-16_7-9_20220906	LDI-SB-17_0-2_20220906	LDI-SB-17_7-9_20220906
	Unit			L2248090-01	L2248090-09	L2248090-02	L2248090-03	L2248090-04
	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022
			1	1	1	1	1	1
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
			CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1,2-Tetrachloroethane	NS	NS	NS	0.00048 U	0.00051 U	0.0024 U	0.00043 U	0.0028 U
1,1,1-Trichloroethane	0.68	100	0.68	0.00048 U	0.00051 U	0.0024 U	0.00043 U	0.0028 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	0.00048 U	0.00051 U	0.0024 U	0.00043 U	0.0028 U
1,1,2-Trichloroethane	NS	NS	NS	0.00095 U	0.001 U	0.0049 U	0.00087 U	0.0056 U
1,1-Dichloroethane	0.27	26	0.27	0.00095 U	0.001 U	0.0049 U	0.00087 U	0.0056 U
1,1-Dichloroethene	0.33	100	0.33	0.00095 UJ	0.001 UJ	0.0049 UJ	0.00087 UJ	0.0056 UJ
1,1-Dichloropropene	NS	NS	NS	0.00048 U	0.00051 U	0.0024 U	0.00043 U	0.0028 U
1,2,3-Trichlorobenzene	NS	NS	NS	0.0019 U	0.002 U	0.0098 U	0.0017 UJ	0.011 U
1,2,3-Trichloropropane	NS	NS	NS	0.0019 U	0.002 U	0.0098 U	0.0017 U	0.011 U
1,2,4,5-Tetramethylbenzene	NS	NS	NS	0.0019 U	0.002 U	0.0098 U	0.0017 UJ	0.011 U
1,2,4-Trichlorobenzene	NS	NS	NS	0.0019 U	0.002 U	0.0098 U	0.0017 UJ	0.011 U
1,2,4-Trimethylbenzene	3.6	52	3.6	0.0019 U	0.002 U	0.0098 U	0.0017 UJ	0.011 U
1,2-Dibromo-3-Chloropropane	NS	NS	NS	0.0028 U	0.0031 U	0.015 U	0.0026 U	0.017 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	NS	0.00095 U	0.001 U	0.0049 U	0.00087 UJ	0.0056 U
1,2-Dichlorobenzene	1.1	100	1.1	0.0019 U	0.002 U	0.0098 U	0.0017 UJ	0.011 U
1,2-Dichloroethane	0.02	3.1	0.02	0.00095 U	0.001 U	0.0049 U	0.00087 UJ	0.0056 U
1,2-Dichloropropane	NS	NS	NS	0.00095 U	0.001 U	0.0049 U	0.00087 U	0.0056 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	8.4	0.0019 U	0.002 U	0.0098 U	0.0017 UJ	0.011 U
1,3-Dichlorobenzene	2.4	49	2.4	0.0019 U	0.002 U	0.0098 U	0.0017 UJ	0.011 U
1,3-Dichloropropane	NS	NS	NS	0.0019 U	0.002 U	0.0098 U	0.0017 U	0.011 U
1,4-Dichlorobenzene	1.8	13	1.8	0.0019 U	0.002 U	0.0098 U	0.0017 UJ	0.011 U
1,4-Diethyl Benzene	NS	NS	NS	0.0019 U	0.002 U	0.0098 U	0.0017 UJ	0.011 U
2,2-Dichloropropane	NS	NS	NS	0.0019 U	0.002 U	0.0098 U	0.0017 U	0.011 U
2-Chlorotoluene	NS	NS	NS	0.0019 U	0.002 U	0.0098 U	0.0017 UJ	0.011 U
2-Hexanone	NS	NS	NS	0.0095 U	0.01 U	0.049 U	0.0087 U	0.056 U
4-Chlorotoluene	NS	NS	NS	0.0019 U	0.002 U	0.0098 U	0.0017 UJ	0.011 U
4-Ethyltoluene	NS	NS	NS	0.0019 U	0.002 U	0.0098 U	0.0017 UJ	0.011 U
Acetone	0.05	100	0.05	0.0095 U	0.01 U	0.049 U	0.0087 U	0.056 U
Acrylonitrile	NS	NS	NS	0.0038 U	0.0041 U	0.02 U	0.0035 U	0.022 U
Benzene	0.06	4.8	0.06	0.00048 U	0.00051 U	0.0024 U	0.00043 U	0.0028 U
Bromobenzene	NS	NS	NS	0.0019 U	0.002 U	0.0098 U	0.0017 UJ	0.011 U
Bromochloromethane	NS	NS	NS	0.0019 UJ	0.002 UJ	0.0098 UJ	0.0017 UJ	0.011 UJ
Bromodichloromethane	NS	NS	NS	0.00048 U	0.00051 U	0.0024 U	0.00043 U	0.0028 U
Bromoform	NS	NS	NS	0.0038 U	0.0041 U	0.02 U	0.0035 U	0.022 U
Bromomethane	NS	NS	NS	0.0019 U	0.002 U	0.0098 U	0.0017 U	0.011 U
Carbon Disulfide	NS	NS	NS	0.0095 U	0.01 U	0.049 U	0.0087 U	0.056 U
Carbon Tetrachloride	0.76	2.4	0.76	0.00095 U	0.001 U	0.0049 U	0.00087 U	0.0056 U
Chlorobenzene	1.1	100	1.1	0.00048 U	0.00051 U	0.0024 U	0.00043 UJ	0.0028 U
Chloroethane	NS	NS	NS	0.0019 U	0.002 U	0.0098 U	0.0017 U	0.011 U
Chloroform	0.37	49	0.37	0.0014 UJ	0.0015 UJ	0.0073 UJ	0.0013 UJ	0.0084 UJ
Chloromethane	NS	NS	NS	0.0038 U	0.0041 U	0.02 U	0.0035 U	0.022 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.00095 U	0.001 U	0.0049 U	0.00087 UJ	0.0056 U
Cis-1,3-Dichloropropene	NS	NS	NS	0.00048 U	0.00051 U	0.0024 U	0.00043 UJ	0.0028 U
Cymene	NS	NS	NS	0.00095 U	0.001 U	0.0049 U	0.00087 UJ	0.0056 U
Dibromochloromethane	NS	NS	NS	0.00095 U	0.001 U	0.0049 U	0.00087 U	0.0056 U
Dibromomethane	NS	NS	NS	0.0019 UJ	0.002 UJ	0.0098 UJ	0.0017 UJ	0.011 UJ
Dichlorodifluoromethane	NS	NS	NS	0.0095 UJ	0.01 UJ	0.049 UJ	0.0087 UJ	0.056 UJ
Dichloroethylenes	NS	NS	NS	0.00095 U	0.001 U	0.0049 U	0.00087 UJ	0.0056 U
Diethyl Ether (Ethyl Ether)	NS	NS	NS	0.0019 U	0.002 U	0.0098 U	0.0017 U	0.011 U
Ethylbenzene	1	41	1	0.002	0.0023	0.0049	0.00087 UJ	0.0056 U
Isopropylbenzene (Cumene)	NS	NS	NS	0.00095 U	0.001 U	0.0049 U	0.00087 UJ	0.0056 U
M,P-Xylenes	NS	NS	NS	0.011	0.012	0.0098 U	0.0017 UJ	0.011 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.12	0.0095 U	0.01 U	0.091	0.0087 U	0.23
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	NS	0.0095 U	0.01 U	0.049 U	0.0087 U	0.056 U
Methylene Chloride	0.05	100	0.05	0.0048 U	0.0051 U	0.024 U	0.0043 U	0.028 U
N-Butylbenzene	12	100	12	0.00095 U	0.001 U	0.0049 U	0.00087 UJ	0.0056 U
N-Propylbenzene	3.9	100	3.9	0.00095 U	0.001 U	0.0049 U	0.00087 UJ	0.0056 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	NS	0.0035	0.0049	0.0049 U	0.00087 UJ	0.0056 U
Sec-Butylbenzene	11	100	11	0.00095 U	0.001 U	0.0049 U	0.00087 UJ	0.0056 U
Styrene	NS	NS	NS	0.00095 U	0.001 U	0.0049 U	0.00087 UJ	0.0056 U
T-Butylbenzene	5.9	100	5.9	0.0019 U	0.002 U	0.0098 U	0.0017 UJ	0.011 U
Tert-Butyl Methyl Ether	0.93	100	0.93	0.0019 U	0.002 U	0.0063 J	0.0017 U	0.0023 J
Tetrachloroethylene (PCE)	1.3	19	1.3	0.00048 U	0.00051 U	0.0024 U	0.00043 U	0.0028 U
Toluene	0.7	100	0.7	0.00095 U	0.001 U	0.0049 U	0.00087 U	0.0056 U
Total, 1,3-Dichloropropene (Cis And Trans)	NS	NS	NS	0.00048 U	0.00051 U	0.0024 U	0.00043 UJ	0.0028 U
Trans-1,2-Dichloroethene	0.19	100	0.19	0.0014 U	0.0015 U	0.0073 U	0.0013 U	0.0084 U
Trans-1,3-Dichloropropene	NS	NS	NS	0.00095 U	0.001 U	0.0049 U	0.00087 UJ	0.0056 U
Trans-1,4-Dichloro-2-Butene	NS	NS	NS	0.0048 U	0.0051 U	0.024 U	0.0043 U	0.028 U
Trichloroethylene (TCE)	0.47	21	0.47	0.00048 U	0.00051 U	0.0024 U	0.00043 U	0.0028 U
Trichlorofluoromethane	NS	NS	NS	0.0038 UJ	0.0041 UJ	0.02 UJ	0.0035 UJ	0.022 UJ
Vinyl Acetate	NS	NS	NS	0.0095 U	0.01 U	0.049 U	0.0087 UJ	0.056 U
Vinyl Chloride	0.02	0.9	0.02	0.00095 U	0.001 U	0.0049 U	0.00087 U	0.0056 U
Xylenes, Total	0.26	100	1.6	0.015	0.017	0.0049 U	0.00087 UJ	0.0056 U



Table 1  
Seton Brilla Charter School  
1956 Jerome Avenue, Bronx, New York  
Groundwater Treatment Design Report  
Soil Analytical Results of Volatile Organic Compounds (VOCs)

Compound	AKRF Sample ID Laboratory Sample ID Date Sampled Dilution Factor Unit			RDI-SB-18_0-2_20220906 L2248090-05 9/06/2022 1 mg/kg	RDI-SB-18_7-9_20220906 L2248090-06 9/06/2022 1 mg/kg	RDI-SB-19_0-2_20220906 L2248090-07 9/06/2022 1 mg/kg	RDI-SB-19_8-10_20220906 L2248090-08 9/06/2022 1 mg/kg
	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1,2-Tetrachloroethane	NS	NS	NS	0.00057 U	0.0024 U	0.0005 U	0.029 U
1,1,1-Trichloroethane	0.68	100	0.68	0.00057 U	0.0024 U	0.0005 U	0.029 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	0.00057 U	0.0024 U	0.0005 U	0.029 U
1,1,2-Trichloroethane	NS	NS	NS	0.0011 U	0.0048 U	0.001 U	0.058 U
1,1-Dichloroethane	0.27	26	0.27	0.0011 U	0.0048 U	0.001 U	0.058 U
1,1-Dichloroethene	0.33	100	0.33	0.0011 UJ	0.0048 U	0.001 UJ	0.058 U
1,1-Dichloropropene	NS	NS	NS	0.00057 U	0.0024 U	0.0005 U	0.029 U
1,2,3-Trichlorobenzene	NS	NS	NS	0.0023 U	0.0096 U	0.002 U	0.12 U
1,2,3-Trichloropropane	NS	NS	NS	0.0023 U	0.0096 U	0.002 U	0.12 U
1,2,4,5-Tetramethylbenzene	NS	NS	NS	0.0023 U	0.0096 U	0.002 U	4.9
1,2,4-Trichlorobenzene	NS	NS	NS	0.0023 U	0.0096 U	0.002 U	0.12 U
1,2,4-Trimethylbenzene	3.6	52	3.6	0.0023 U	0.0096 U	0.002 U	16
1,2-Dibromo-3-Chloropropane	NS	NS	NS	0.0034 U	0.014 U	0.003 U	0.17 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	NS	0.0011 U	0.0048 U	0.001 U	0.058 U
1,2-Dichlorobenzene	1.1	100	1.1	0.0023 U	0.0096 U	0.002 U	0.12 U
1,2-Dichloroethane	0.02	3.1	0.02	0.0011 U	0.0048 U	0.001 U	0.058 U
1,2-Dichloropropane	NS	NS	NS	0.0011 U	0.0048 U	0.001 U	0.058 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	8.4	0.0023 U	0.0096 U	0.002 U	14
1,3-Dichlorobenzene	2.4	49	2.4	0.0023 U	0.0096 U	0.002 U	0.12 U
1,3-Dichloropropane	NS	NS	NS	0.0023 U	0.0096 U	0.002 U	0.12 U
1,4-Dichlorobenzene	1.8	13	1.8	0.0023 U	0.0096 U	0.002 U	0.12 U
1,4-Diethyl Benzene	NS	NS	NS	0.0023 U	0.0096 U	0.002 U	1.7
2,2-Dichloropropane	NS	NS	NS	0.0023 U	0.0096 U	0.002 U	0.12 U
2-Chlorotoluene	NS	NS	NS	0.0023 U	0.0096 U	0.002 U	0.12 U
2-Hexanone	NS	NS	NS	0.011 U	0.048 U	0.01 U	0.58 U
4-Chlorotoluene	NS	NS	NS	0.0023 U	0.0096 U	0.002 U	0.12 U
4-Ethyltoluene	NS	NS	NS	0.0023 U	0.0096 U	0.002 U	9.7
Acetone	0.05	100	0.05	0.011 U	0.49	0.01 U	0.58 U
Acrylonitrile	NS	NS	NS	0.0045 U	0.019 U	0.004 U	0.23 U
Benzene	0.06	4.8	0.06	0.00057 U	0.0025	0.0005 U	0.029 U
Bromobenzene	NS	NS	NS	0.0023 U	0.0096 U	0.002 U	0.12 U
Bromochloromethane	NS	NS	NS	0.0023 UJ	0.0096 U	0.002 UJ	0.12 U
Bromodichloromethane	NS	NS	NS	0.00057 U	0.0024 U	0.0005 U	0.029 U
Bromoform	NS	NS	NS	0.0045 U	0.019 U	0.004 U	0.23 U
Bromomethane	NS	NS	NS	0.0023 U	0.0096 U	0.002 U	0.12 U
Carbon Disulfide	NS	NS	NS	0.011 U	0.048 U	0.01 U	0.58 U
Carbon Tetrachloride	0.76	2.4	0.76	0.0011 U	0.0048 U	0.001 U	0.058 U
Chlorobenzene	1.1	100	1.1	0.00057 U	0.0024 U	0.0005 U	0.029 U
Chloroethane	NS	NS	NS	0.0023 U	0.0096 U	0.002 U	0.12 U
Chloroform	0.37	49	0.37	0.0017 UJ	0.0072 U	0.0015 UJ	0.086 U
Chloromethane	NS	NS	NS	0.0045 U	0.019 U	0.004 U	0.23 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.0011 U	0.0048 U	0.001 U	0.058 U
Cis-1,3-Dichloropropene	NS	NS	NS	0.00057 U	0.0024 U	0.0005 U	0.029 U
Cymene	NS	NS	NS	0.0011 U	0.0048 U	0.001 U	1.6
Dibromochloromethane	NS	NS	NS	0.0011 U	0.0048 U	0.001 U	0.058 U
Dibromomethane	NS	NS	NS	0.0023 UJ	0.0096 U	0.002 UJ	0.12 U
Dichlorodifluoromethane	NS	NS	NS	0.011 UJ	0.048 U	0.01 UJ	0.58 U
Dichloroethylenes	NS	NS	NS	0.0011 U	0.0048 U	0.001 U	0.058 U
Diethyl Ether (Ethyl Ether)	NS	NS	NS	0.0023 U	0.0096 U	0.002 U	0.12 U
Ethylbenzene	1	41	1	0.0011 U	0.0048 U	0.001 U	9.6 JK
Isopropylbenzene (Cumene)	NS	NS	NS	0.0011 U	0.0048 U	0.001 U	3.6
M,P-Xylenes	NS	NS	NS	0.0023 U	0.0096 U	0.002 U	22 JK
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.12	0.011 U	0.18	0.01 U	0.58 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	NS	0.011 U	0.048 U	0.01 U	0.58 U
Methylene Chloride	0.05	100	0.05	0.00057 U	0.024 U	0.0005 U	0.29 U
N-Butylbenzene	12	100	12	0.0011 U	0.0048 U	0.001 U	2.2
N-Propylbenzene	3.9	100	3.9	0.0011 U	0.0048 U	0.001 U	7.1
O-Xylene (1,2-Dimethylbenzene)	NS	NS	NS	0.0011 U	0.0048 U	0.001 U	0.8 JK
Sec-Butylbenzene	11	100	11	0.0011 U	0.0048 U	0.001 U	1.2
Styrene	NS	NS	NS	0.0011 U	0.0048 U	0.001 U	0.058 U
T-Butylbenzene	5.9	100	5.9	0.0023 U	0.0096 U	0.002 U	0.13
Tert-Butyl Methyl Ether	0.93	100	0.93	0.0023 U	0.019	0.002 U	0.12 U
Tetrachloroethylene (PCE)	1.3	19	1.3	0.00057 U	0.0024 U	0.0005 U	0.029 U
Toluene	0.7	100	0.7	0.0011 U	0.0048 U	0.001 U	0.093 JK
Total, 1,3-Dichloropropene (Cis And Trans)	NS	NS	NS	0.00057 U	0.0024 U	0.0005 U	0.029 U
Trans-1,2-Dichloroethene	0.19	100	0.19	0.0017 U	0.0072 U	0.0015 U	0.086 U
Trans-1,3-Dichloropropene	NS	NS	NS	0.0011 U	0.0048 U	0.001 U	0.058 U
Trans-1,4-Dichloro-2-Butene	NS	NS	NS	0.0057 U	0.024 UJ	0.005 U	0.29 UJ
Trichloroethylene (TCE)	0.47	21	0.47	0.00057 U	0.0024 U	0.0005 U	0.029 U
Trichlorofluoromethane	NS	NS	NS	0.0045 UJ	0.019 UJ	0.004 UJ	0.23 UJ
Vinyl Acetate	NS	NS	NS	0.011 U	0.048 UJ	0.01 U	0.58 UJ
Vinyl Chloride	0.02	0.9	0.02	0.0011 U	0.0048 U	0.001 U	0.058 U
Xylenes, Total	0.26	100	1.6	0.0011 U	0.0048 U	0.001 U	23 JK

Table 2  
Seton Brilla Charter School  
1956 Jerome Avenue, Bronx, New York  
Groundwater Treatment Design Report  
Groundwater Analytical Results of Volatile Organic Compounds (VOCs)

AKRF Sample ID	RDI-MW-10_20220920	RDI-MW-X_20220920	RDI-MW-11_20220920	RDI-MW-12_20220920	RDI-MW-13_20220920
Laboratory Sample ID	L2251399-01	L2251399-02	L2251399-03	L2251399-04	L2251399-05
Date Sampled	9/20/2022	9/20/2022	9/20/2022	9/20/2022	9/20/2022
Unit	µg/L	µg/L	µg/L	µg/L	µg/L
Dilution Factor	1	1	1	1	1
Compound	AWQSGV	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1,2-Tetrachloroethane	5	2.5 U	2.5 U	2.5 U	2.5 U
1,1,1-Trichloroethane	5	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-Tetrachloroethane	5	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	1	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ
1,1-Dichloropropene	5	2.5 U	2.5 U	2.5 U	2.5 U
1,2,3-Trichlorobenzene	5	2.5 U	2.5 U	2.5 U	2.5 U
1,2,3-Trichloropropane	0.04	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4,5-Tetramethylbenzene	5	0.7 J	1.3 J	2 U	2 U
1,2,4-Trichlorobenzene	5	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trimethylbenzene	5	2.4 J	3.7	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	0.0006	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	5	2.1 J	3.2	2.5 U	2.5 U
1,3-Dichlorobenzene	3	2.5 U	2.5 U	2.5 U	2.5 U
1,3-Dichloropropane	5	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Diethyl Benzene	NS	2.1	3.4	2 U	2 U
2,2-Dichloropropane	5	2.5 UJ	2.5 U	2.5 U	2.5 U
2-Chlorotoluene	5	2.5 U	2.5 U	2.5 U	2.5 U
2-Hexanone	50	5 U	5 UJ	5 UJ	5 UJ
4-Chlorotoluene	5	2.5 U	2.5 U	2.5 U	2.5 U
4-Ethyltoluene	NS	1.2 J	2	2 U	2 U
Acetone	50	5 U	5 UJ	5 UJ	5 UJ
Acrylonitrile	5	5 U	5 U	5 U	5 U
Benzene	1	0.5 U	0.5 U	0.5 U	0.5 U
Bromobenzene	5	2.5 U	2.5 U	2.5 U	2.5 U
Bromochloromethane	5	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	0.5 U	0.5 U	0.5 U	0.5 U
Bromofom	50	2 U	2 U	2 U	2 U
Bromomethane	5	2.5 U	2.5 UJ	2.5 UJ	2.5 UJ
Carbon Disulfide	60	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	2.5 U	2.5 UJ	2.5 UJ	2.5 UJ
Chloroform	7	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	5	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	NS	0.5 U	0.5 U	0.5 U	0.5 U
Cymene	5	2.5 U	2.5 U	2.5 U	2.5 U
Dibromochloromethane	50	0.5 U	0.5 U	0.5 U	0.5 U
Dibromomethane	5	5 U	5 U	5 U	5 U
Dichlorodifluoromethane	5	5 U	5 U	5 U	5 U
Dichloroethylenes	NS	2.5 U	2.5 U	2.5 U	2.5 U
Diethyl Ether (Ethyl Ether)	NS	2.5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene (Cumene)	5	2.5 U	0.86 J	2.5 U	2.5 U
M,P-Xylenes	5	2.5 U	0.77 J	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	5 UJ	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	5 U	5 U	5 U	5 U
Methylene Chloride	5	2.5 U	2.5 U	2.5 U	2.5 U
N-Butylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U
N-Propylbenzene	5	1.3 J	2 J	2.5 U	2.5 U
O-Xylene (1,2-Dimethylbenzene)	5	2.5 U	2.5 U	2.5 U	2.5 U
Sec-Butylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U
Styrene	5	2.5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U
Tert-Butyl Methyl Ether	10	22	18	15	18
Tetrachloroethylene (PCE)	5	0.35 J	0.25 J	0.5 U	0.5 U
Toluene	5	2.5 U	2.5 U	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	2.5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	NS	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,4-Dichloro-2-Butene	5	2.5 U	2.5 UJ	2.5 UJ	2.5 UJ
Trichloroethylene (TCE)	5	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl Acetate	NS	5 U	5 U	5 U	5 U
Vinyl Chloride	2	1 U	1 U	1 U	1 U
Xylenes, Total	NS	2.5 U	0.77 J	2.5 U	2.5 U

Tables 1-2  
Seton Brilla Charter School  
1956 Jerome Avenue, Bronx, New York  
Groundwater Treatment Design Report  
Notes

**DEFINITIONS**

**J** : The concentration given is an estimated value.

**K** : Reported concentration value is proportional to dilution factor and may be exaggerated

**NS** : No standard.

**U** : Indicates that the compound was analyzed for, but not detected.

**mg/kg** : milligrams per kilogram

**µg/L** : micrograms per liter

**STANDARDS**

**Part 375 Soil Cleanup Objectives** : Soil Cleanup Objectives listed in New York State Department of Environmental Conservation (NYSDEC) "Part 375" Regulations [6 New York Codes, Rules and Regulations (NYCRR) Part 375].

**Exceedances of Part 375 Unrestricted Use Soil Cleanup Objectives (UUSCOs) are highlighted in bold font.**

**Exceedances of Part 375 Restricted Residential Soil Cleanup Objectives (RRSCO) are highlighted in gray shading.**

**Exceedances of Part 375 Protection of Groundwater Soil Cleanup Objectives (PGWSCO) are highlighted with an underline.**

**NYSDEC Class GA AWQSGVs** : New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (1.1.1): Class GA Ambient Water Quality Standards and Guidance Values (AWQSGVs).

**Exceedances of NYSDEC Class GA AWQSGVs are highlighted in bold font.**

**DUPLICATES**

RDI-SB-DUP-01\_20220906 is a blind duplicate of sample RDI-SB-16\_0-2\_20220906

RDI-MW-X\_20220920 is a blind duplicate of sample RDI-MW-10\_20220920

**Table 3**  
**Modified Fentons Reagent Calculations**  
 Seton Brilla Charter School  
 1956 Jerome Avenue, Bronx, New York

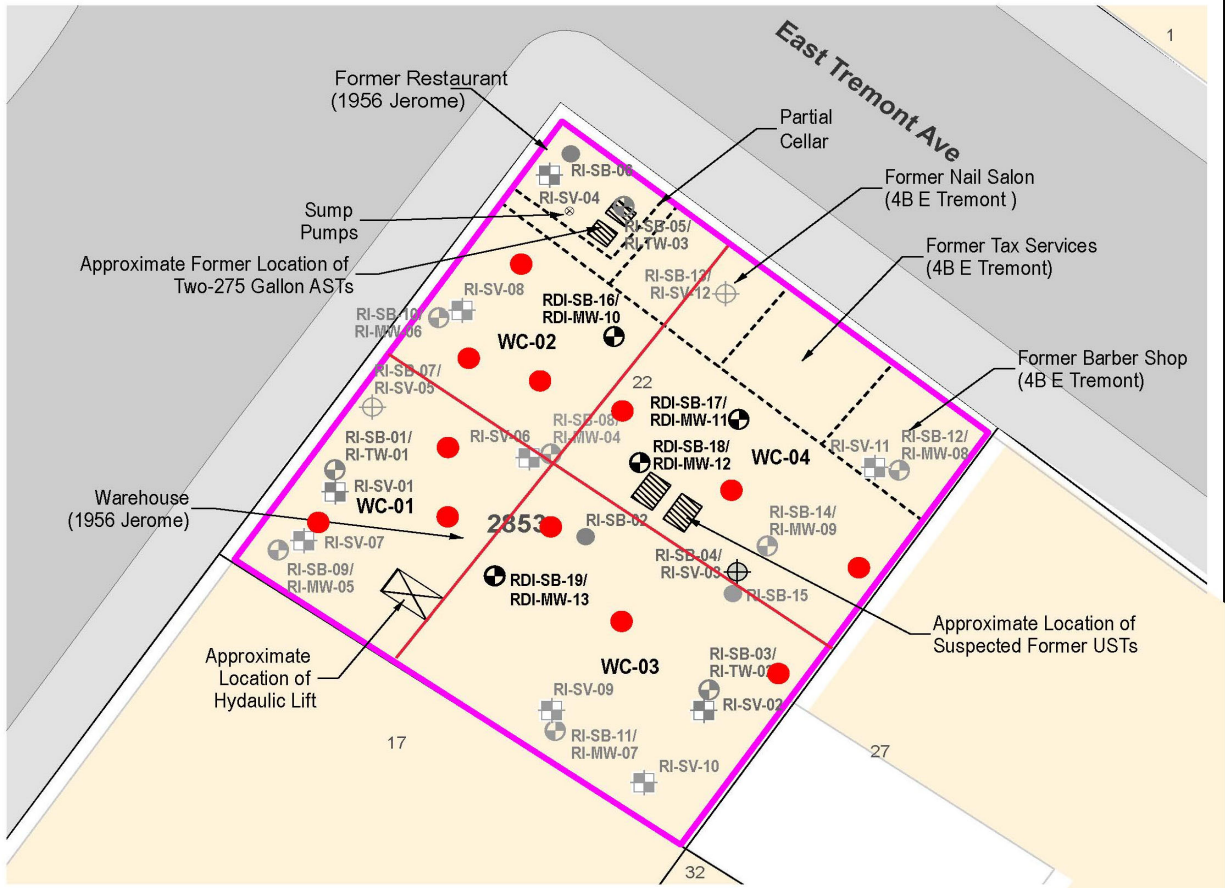
Modified Fentons Reagent Calculations								
Description	Value	Units	Value	Units	Value	Units	Value	Units
<b>Excavation Area</b>								
Treatment Area	1200	SF						
Treatment Thickness	5	ft						
Treatment Volume	6000	CF =	222	CY				
Treatment Volume Soil Weight	222	CY x	1.5	tons/CY =	333	tons =	302,333	KG
Optimal dose of MFR as determined by the Benchscale Study	7.5	G/KG x						
MFR Mass Calculations	7.5	G/KG x	302,333	KG x	2,268,000	G MFR	2268	kg of MFR
MFR Required					2268	kg of MFR x	<b>4,990</b>	<b>lb of MFR</b>
<b>Injection Area</b>								
Treatment Area	100	SF						
Treatment Thickness	15	ft						
Treatment Volume	1500	CF =	56	CY				
Treatment Volume Soil Weight	56	CY x	1.5	tons/CY =	83	tons =	75,583	KG
Optimal dose of MFR as determined by the Benchscale Study	7.5	G/KG x						
MFR Mass Calculations	7.5	G/KG x	75,583	KG x	567,000	G MFR	567	kg of MFR
MFR Required					567	kg of MFR x	<b>1,250</b>	<b>lb of MFR</b>

**Notes:**  
 SF = square feet  
 ft = feet  
 CF = cubic feet  
 CY = cubic yards  
 KG = kilograms  
 G = grams  
 G/KG = grams per kilogram  
 lb = pounds  
 MFR = Modified Fentons Reagent®










**APPENDIX A**  
**DAILY STATUS REPORTS**

<b>Daily Activity Report</b>						
Seton Brilla Charter School						
1956 Jerome Avenue, Bronx, NY						
BCP No. C203152						
General Site Information						
Date:	Tuesday, September 6, 2022					
Weather:	Rainy, 73-75°F					
Wind Direction/Speed:	ESE @ 5-7 mph					
AKRF Personnel on Site:	C. Bearden and J. Kelleher-Ferguson					
AKRF Equipment on Site:	Mini RAE 3000 Photoionization Detector [(PID) x1]					
Visitors:	None.					
Contractor Information						
Contracting Company	Main Personnel				Equipment	
Eastern Environmental Solutions, Inc.	Jay Slavin				Geoprobe 6610DT Drilling Rig	
Description and Location of Work Activities Performed						
<p>1) Collected RDI soil samples RDI-SB-16_0-2_20220906, RDI-SB-16_7-9_20220906, RDI-SB-17_0-2_20220906, RDI-SB-17_7-9_20220906, RDI-SB-18_0-2_20220906, RDI-SB-18_7-9_20220906, RDI-SB-19_0-2_20220906, and RDI-SB-19_8-10_20220906 from soil borings RDI-SB-16, RDI-SB-17, RDI-SB-18 and RDI-SB-19.</p> <p>2) Collected waste characterization grab (G) and composite (C) soil samples WC-01_4-5G_20220906, WC-01_0-5C_20220906, WC-01_9-10G_20220906, WC-01_5-10C_20220906, WC-04_3-4G_20220906, WC-04_0-4C_20220906, WC-04_7-8G_20220906, and WC-04_4-8C_20220906 from waste characterization grids WC-01 and WC-04.</p> <p>3) Installed monitoring wells RDI-MW-10, RDI-MW-11, RDI-MW-12, and RDI-MW-13 within soil borings RDI-SB-16, RDI-SB-17, RDI-SB-18 and RDI-SB-19, respectively.</p>						
Site Soil Disposal Tracking Information						
Destination Facility	Daily Trucks	Total Trucks	Daily Approx. Cubic Yds	Total Approx. Cubic Yds	Total Site Loads	Total Approximate Cubic Yards
N/A	-	-	0	0	0	0
N/A	-	-	0	0		
N/A	-	-	0	0		
N/A	-	-	0	0		
N/A	-	-	0	0		
CAMP Air Monitoring Results						
CAMP Station	UPWIND				DOWNWIND	
Odors:	None.				None.	
VOC Action Level Exceedance(s):	None.				None.	
Particulate Action Level Exceedance(s):	None.				None.	
Maximum VOC Level (ppm):	N/A				N/A	
Maximum Particulate Level (mg/m <sup>3</sup> ):	N/A				N/A	
Note: Air monitoring was not completed due to heavy precipitation throughout the day.						
Additional Information						
Planned Work Activity for Following Day/Week:	Continue waste characterization sampling and development of monitoring wells.					
Comments:	None.					

Site Map



**LEGEND**

-  PROJECT SITE BOUNDARY
-  LOT BOUNDARY AND TAX LOT NUMBER
- 2853** BLOCK NUMBER
-  APPROXIMATE LOCATION OF HYDRAULIC LIFT
- UST UNDERGROUND STORAGE TANK
- AST ABOVEGROUND STORAGE TANK
- INTERIOR BUILDING LINES
-  PHASE II OR RI SOIL BORING (2021)
-  PHASE II OR RI SOIL BORING/MONITORING WELL (2021)
-  PHASE II OR RI SOIL BORING/SOIL VAPOR POINT (2021)
-  PHASE II OR RI SOIL VAPOR POINT (2021)
-  PROPOSED SOIL BORING/MONITORING WELL
-  SOIL PRE-CHARACTERIZATION BORING LOCATION



Map Source:  
NYDCDP (NYC Dept. of City Planning) GIS database

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440 Park Avenue South, New York, NY 10016

**1956 Jerome Avenue**  
Bronx, New York

**SITE LAYOUT AND PROPOSED  
SAMPLE LOCATIONS**

DATE  
**11/3/2021**

PROJECT NO.  
**210024**

FIGURE  
**2**

**Upwind CAMP Station Data**

N/A

**Downwind CAMP Station Data**

N/A



Site Photographs

Photograph 1 - Eastern advancing soil boring RDI-SB-18.



Photograph 2 - Monitoring well installation at RDI-MW-10.



Photograph 3 - Eastern advancing soil boring in WC-01.





## Daily Activity Report

Seton Brilla Charter School  
 1956 Jerome Avenue, Bronx, NY  
 BCP No. C203152

### General Site Information

Date:	Wednesday, September 7, 2022
Weather:	Cloudy, 73-75°F
Wind Direction/Speed:	ENE @ 6-8 mph
AKRF Personnel on Site:	B. Quinn and J. Kelleher-Ferguson
AKRF Equipment on Site:	Mini RAE 3000 Photoionization Detector [(PID) x1], 2 Fixed Air Monitoring Stations [DustTrak Aerosol Monitors (x2) & MiniRAE 3000 PIDs (x2)], 1 Roving Set [MiniRAE 3000], Waterra Water Pump, Horiba Water Quality Monitor, Honda EU2000i Gasoline Powered Generator.
Visitors:	NYC Department of Buildings Inspector

### Contractor Information

Contracting Company	Main Personnel	Equipment
Eastern Environmental Solutions, Inc.	Jay Slavin	Geoprobe 6610DT Drilling Rig

### Description and Location of Work Activities Performed

- Collected waste characterization grab (G) and composite (C) soil samples WC-02\_4-5G\_20220907, WC-02\_0-5C\_20220907, WC-02\_9-10G\_20220907, WC-02\_5-10C\_20220907, WC-03\_3-4G\_20220907, WC-03\_0-4C\_20220907, WC-03\_7-8G\_20220907, and WC-03\_4-8C\_20220907 from waste characterization grids WC-02 and WC-03.
- Developed wells: RDI-MW-10, RDI-MW-11, RDI-MW-12, and RDI-MW-13.

### Site Soil Disposal Tracking Information

Destination Facility	Daily Trucks	Total Trucks	Daily Approx. Cubic Yds	Total Approx. Cubic Yds	Total Site Loads	Total Approximate Cubic Yards
N/A	-	-	0	0	0	0
N/A	-	-	0	0		
N/A	-	-	0	0		
N/A	-	-	0	0		
N/A	-	-	0	0		

### CAMP Air Monitoring Results

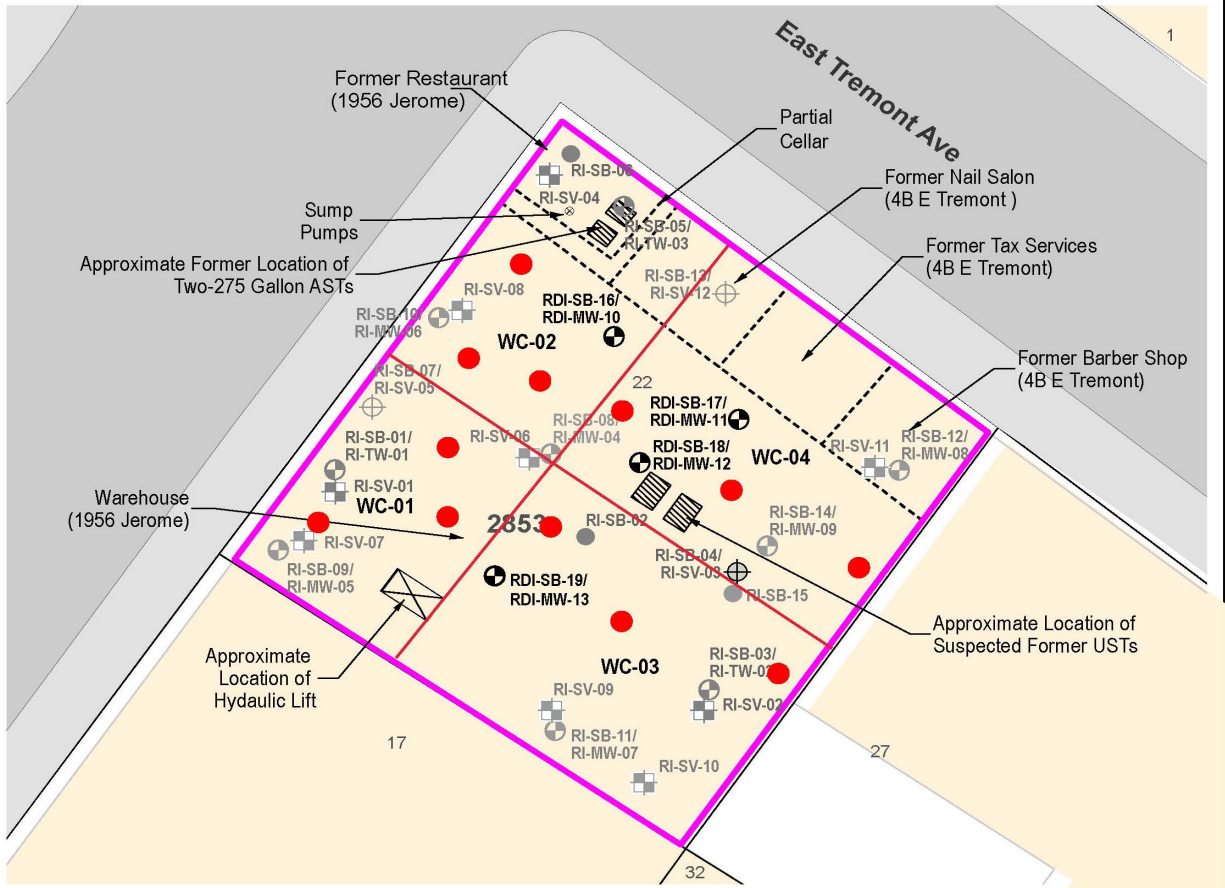
CAMP Station	UPWIND	DOWNWIND
Odors:	None.	None.
VOC Action Level Exceedance(s):	None.	None.
Particulate Action Level Exceedance(s):	None.	None.
Maximum VOC Level (ppm):	0.068	0.155
Maximum Particulate Level (mg/m <sup>3</sup> ):	0.014	0.047

Note: Two CAMP stations were set up in the northeast and southeast corners of the site based upon the wind direction.

### Additional Information

Planned Work Activity for Following Day/Week:	Development of monitoring wells.
Comments:	The designations of WC-03 and WC-04 were switched to account for an error when doing the waste class soil sampling.

Site Map



LEGEND

- PROJECT SITE BOUNDARY
- LOT BOUNDARY AND TAX LOT NUMBER
- 2853** BLOCK NUMBER
- APPROXIMATE LOCATION OF HYDRAULIC LIFT
- UST UNDERGROUND STORAGE TANK
- AST ABOVEGROUND STORAGE TANK
- INTERIOR BUILDING LINES
- PHASE II OR RI SOIL BORING (2021)
- PHASE II OR RI SOIL BORING/MONITORING WELL (2021)
- PHASE II OR RI SOIL BORING/SOIL VAPOR POINT (2021)
- PHASE II OR RI SOIL VAPOR POINT (2021)
- PROPOSED SOIL BORING/MONITORING WELL
- SOIL PRE-CHARACTERIZATION BORING LOCATION



Map Source:  
NYDCDP (NYC Dept. of City Planning) GIS database

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440 Park Avenue South, New York, NY 10016

**1956 Jerome Avenue**  
Bronx, New York

---

**SITE LAYOUT AND PROPOSED  
SAMPLE LOCATIONS**

DATE	<b>11/3/2021</b>
PROJECT NO.	<b>210024</b>
FIGURE	<b>2</b>

### Upwind CAMP Station Data

09/07/2022 0:00:55 – 09/08/2022 0:00:00  
(GMT-05:00) Eastern Time (US & Canada)



Mass Conc. Total mg/m <sup>3</sup> AVG 15m mg/m <sup>3</sup> DustTrak-8530 R6232(C)			VOC ppm AVG 15m ppm miniRAE 3000 R6232(A)		
MIN	AVG	MAX	MIN	AVG	MAX
0.0083	0.0134	0.0297	0	0.0138	0.0677

**Name** AKRF UPWIND  
(FA03923)  
**S/N** 0B442642  
**Description** FA03923  
**Location** 1946 Jerome Ave, The Bronx, NY 10453, USA

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### Downwind CAMP Station Data

Wed, 7th of Sep 2022, 0:00:00 – 14:25:06  
(GMT-05:00) Eastern Time (US & Canada)



Mass Conc. Total mg/m <sup>3</sup> AVG 15m mg/m <sup>3</sup> DustTrak-8530 R6232(C)			VOC ppm AVG 15m ppm miniRAE 3000 R6232(A)		
MIN	AVG	MAX	MIN	AVG	MAX
0.008	0.015	0.0469	0	0	0.1549

**Name** AKRF DOWNWIND  
(FA03503)  
**S/N** 0B380404  
**Description** FA03503  
**Location** Jerome Ave/W Tremont Av, The Bronx, NY 10453, USA

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Site Photographs

Photograph 1 - AKRF using a PID to detect the presence of VOCs during the waste class characterization.



Photograph 2 - Using a Waterra pump at MW-10 to develop the well with the waste water being pumped into a 55 gallon waste drum.



Photograph 3 - Using a Horiba to gauge different properties of the water coming out of the wells.





# Daily Activity Report

Seton Brilla Charter School  
 1956 Jerome Avenue, Bronx, NY  
 BCP No. C203152

## General Site Information

Date:	Thursday, September 8, 2022
Weather:	Sunny, 68-73°F
Wind Direction/Speed:	SSW @ 6-8 mph
AKRF Personnel on Site:	J. Kelleher-Ferguson
AKRF Equipment on Site:	Mini RAE 3000 Photoionization Detector [(PID) x1], Waterra Water Pump, Horiba Water Quality Monitor, Honda EU2000i Gasoline Powered Generator.
Visitors:	Site surveyor

## Contractor Information

Contracting Company	Main Personnel	Equipment
-	-	-

## Description and Location of Work Activities Performed

1) Developed wells: RDI-MW-12 and RDI-MW-13.

## Site Soil Disposal Tracking Information

Destination Facility	Daily Trucks	Total Trucks	Daily Approx. Cubic Yds	Total Approx. Cubic Yds	Total Site Loads	Total Approximate Cubic Yards
N/A	-	-	0	0	0	0
N/A	-	-	0	0		
N/A	-	-	0	0		
N/A	-	-	0	0		
N/A	-	-	0	0		

## CAMP Air Monitoring Results

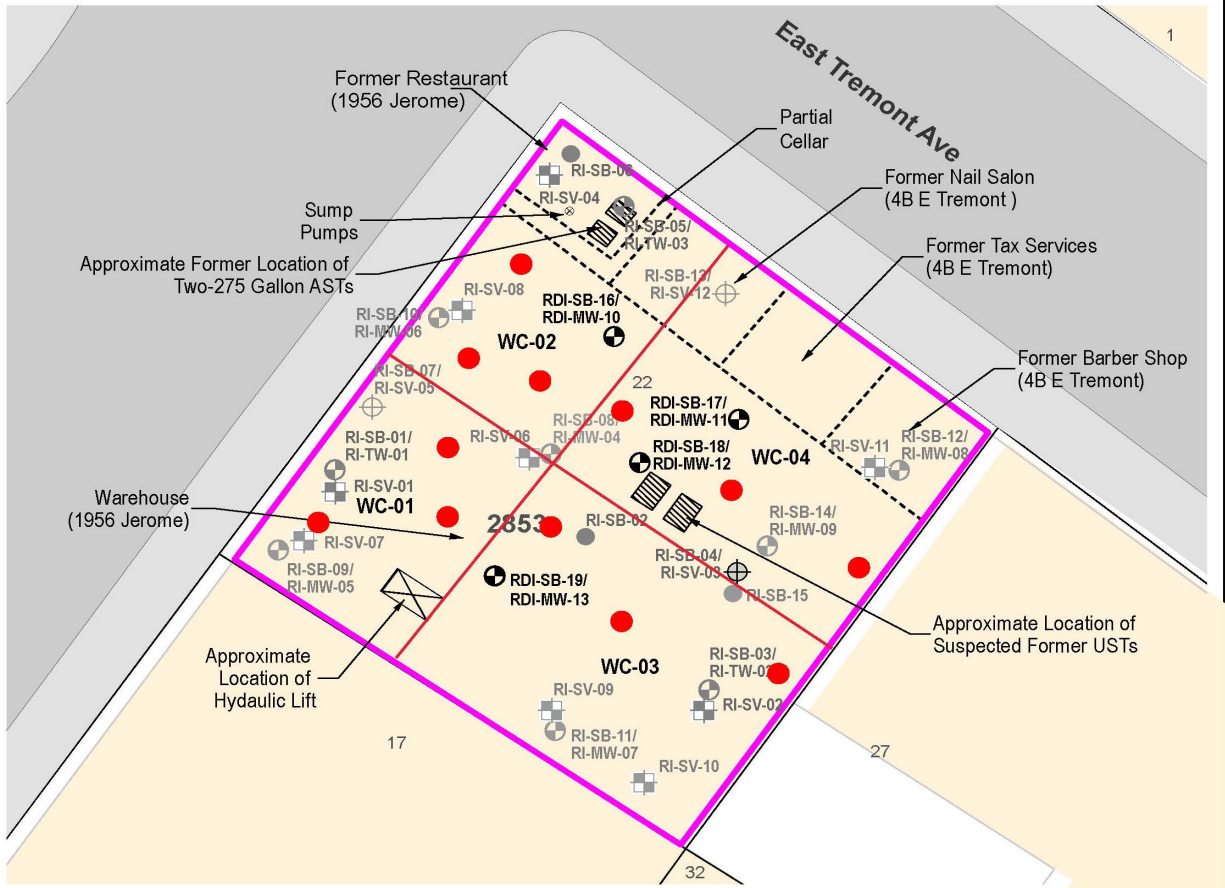
CAMP Station	UPWIND	DOWNWIND
Odors:	None.	None.
VOC Action Level Exceedance(s):	None.	None.
Particulate Action Level Exceedance(s):	None.	None.
Maximum VOC Level (ppm):	N/A	N/A
Maximum Particulate Level (mg/m <sup>3</sup> ):	N/A	N/A

Note: Air monitoring was not performed as no soil disturbing activities were conducted at the Site.











## Additional Information

Planned Work Activity for Following Day/Week:	None.
Comments:	

Site Map



**LEGEND**

-  PROJECT SITE BOUNDARY
-  LOT BOUNDARY AND TAX LOT NUMBER
-  BLOCK NUMBER
-  APPROXIMATE LOCATION OF HYDRAULIC LIFT
- UST UNDERGROUND STORAGE TANK
- AST ABOVEGROUND STORAGE TANK
- INTERIOR BUILDING LINES
-  PHASE II OR RI SOIL BORING (2021)
-  PHASE II OR RI SOIL BORING/MONITORING WELL (2021)
-  PHASE II OR RI SOIL BORING/SOIL VAPOR POINT (2021)
-  PHASE II OR RI SOIL VAPOR POINT (2021)
-  PROPOSED SOIL BORING/MONITORING WELL
-  SOIL PRE-CHARACTERIZATION BORING LOCATION



Map Source:  
NYDCDP (NYC Dept. of City Planning) GIS database

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**AKRF**  
440 Park Avenue South, New York, NY 10016

**1956 Jerome Avenue**  
Bronx, New York

**SITE LAYOUT AND PROPOSED SAMPLE LOCATIONS**

DATE	<b>11/3/2021</b>
PROJECT NO.	<b>210024</b>
FIGURE	<b>2</b>

**Upwind CAMP Station Data**

N/A

**Downwind CAMP Station Data**

N/A



Site Photographs

Photograph 1 - The waterra pump set up at RDI-MW-12 to develop the well.




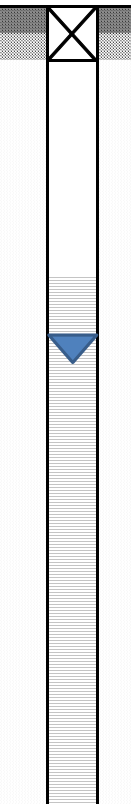

Photograph 2 - The waterra pump set up at RDI-MW-13 .


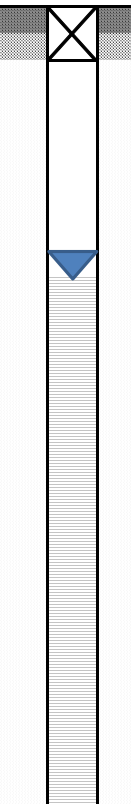




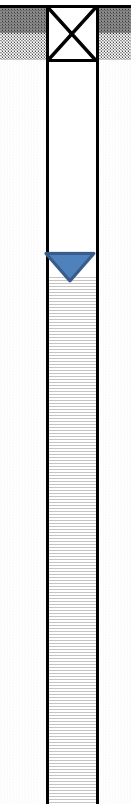
Photograph 3 - Using a Horiba to gauge groundwater quality.




**APPENDIX B**  
**SOIL BORING LOGS**

SOIL BORING AND WELL INSTALLATION LOG		Seton Brilla Charter School 1956 Jerome Avenue, Bronx, NY		Groundwater Monitoring Well ID: <b>RDI-MW-10</b>		Soil Boring ID: <b>RDI-SB-16</b>			
		AKRF Project Number: 210024		Sheet 1 of 1					
 440 Park Avenue South, 7 <sup>th</sup> Floor New York, NY 10016		Drilling Method:	Geoprobe Direct Push	Drilling					
		Sampling Method:	Direct Push Probe	Start Time: 8:00		Finish Time: 8:08			
		Driller:	Eastern Environmental	Date: 9/6/2022					
		Weather:	73-75°F, Rain						
		Logged by:	C. Bearden, AKRF						
Depth (feet)	Well Construction	Surface Condition: Concrete	Recovery (Inches)	Soil Boring Log	Color	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1		Stainless steel stick-up well cover, locking j-plug, and concrete seal: grade to 0.5' below grade.	48	Top 4": Grey SAND, some Gravel, little Concrete (FILL)	ND	Moist	ND	ND	RDI-SB-16_0-2_20220906
2		Bentonite chips: 0.5' to 1' below grade		Bottom 44": Brown SAND, trace Silt, Gravel, Brick (FILL).	ND	Moist	ND	ND	
3		2" diameter PVC well casing: 0' - 15' below grade.	48	Top 14": Brown SAND, trace Silt, Gravel (FIL	ND	Moist	ND	ND	RDI-SB-16_7-9_20220906
4				Next 10": Dark brown SILT, trace Sand, Roots	ND	Moist	ND	ND	
5				Bottom 24": Greyish-brown SAND, little Silt, trace Gravel	ND	Wet	ND	ND	
6		No. 2 morie sandpack filter: 1' to 15' below grade	42	Greyish-brown SILT, some Sand	ND	Wet	ND	ND	
7									
8		0.020-inch slotted PVC well screen: 5' to 15' below grade							
9			End cap & bottom of screen: 15' bgs						
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
<b>Notes:</b>  Groundwater Depth Indicator Groundwater measured at 6.7 feet below grade in RDI-MW-10 on September 20, 2022. Groundwater monitoring well installed to 15 feet below grade.			Soil samples analyzed for VOCs. Groundwater encountered at approximately 9.5 feet below grade during soil boring installation. End of soil boring at 10 feet below grade.						
PID = photoionization detector			NAPL = non-aqueous phase liquid			ND = not detected			
Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.									


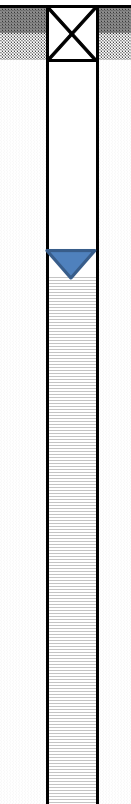

SOIL BORING AND WELL INSTALLATION LOG		Seton Brilla Charter School 1956 Jerome Avenue, Bronx, NY		Groundwater Monitoring Well ID: RDI-MW-11		Soil Boring ID: RDI-SB-17					
		AKRF Project Number: 210024		Sheet 1 of 1							
 440 Park Avenue South, 7 <sup>th</sup> Floor New York, NY 10016		Drilling Method:	Geoprobe Direct Push	Drilling							
		Sampling Method:	Direct Push Probe	Start Time: 8:25		Finish Time: 8:35					
		Driller:	Eastern Environmental	Date: 9/6/2022							
		Weather:	73-75°F, Rain								
		Logged by:	C. Bearden, AKRF								
Depth (feet)	Well Construction	Surface Condition: Concrete	Recovery (Inches)	Soil Boring Log	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis		
1		Stainless steel stick-up well cover, locking j-plug, and concrete seal: grade to 0.5' below grade.  Bentonite chips: 0.5' to 1' below grade  2" diameter PVC well casing: 0' - 15' below grade.  No. 2 morie sandpack filter: 1' to 15' below grade  0.020-inch slotted PVC well screen: 5' to 15' below grade  End cap & bottom of screen: 15' bgs	48	Top 6": Grey SAND, little Gravel, trace Silt, Concrete (FILL)	ND	Moist	ND	ND	RDI-SB-17_0-2_20220906		
2				Bottom 42": Brown SAND, little Silt, trace Gravel (FILL)	ND	Moist	ND	ND			
3			48	Top 12": Brown SAND, little Silt, trace Gravel	ND	Moist	ND	ND	RDI-SB-17_7-9_20220906		
4				Next 12": Grey SAND, some Silt, trace Gravel	ND	Moist	ND	ND			
5				Next 8": Dark brown SILT, trace Sand, Roots	ND	Moist	ND	ND			
6			48	Bottom 16": Grey SAND, some Silt	ND	Wet	ND	ND	RDI-SB-17_7-9_20220906		
7				Grey SAND, some Silt	ND	Wet	ND	ND			
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
Notes:  Groundwater Depth Indicator Groundwater measured at 5.0 feet below grade in RI-MW-11 on September 20, 2022. Groundwater monitoring well installed to 15 feet below grade.				Soil samples analyzed for VOCs. Groundwater encountered at approximately 9.5 feet below grade during soil boring installation. End of soil boring at 10 feet below grade.							
PID = photoionization detector			NAPL = non-aqueous phase liquid			ND = not detected					
Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.											

SOIL BORING AND WELL INSTALLATION LOG		Seton Brilla Charter School 1956 Jerome Avenue, Bronx, NY		Groundwater Monitoring Well ID: RDI-MW-12		Soil Boring ID: RDI-SB-18				
		AKRF Project Number: 210024		Sheet 1 of 1						
 440 Park Avenue South, 7 <sup>th</sup> Floor New York, NY 10016		Drilling Method:	Geoprobe Direct Push	Drilling						
		Sampling Method:	Direct Push Probe	Start Time: 9:20		Finish Time: 9:30				
		Driller:	Eastern Environmental	Date: 9/6/2022						
		Weather:	73-75°F, Rain							
		Logged by:	C. Bearden, AKRF							
Depth (feet)	Well Construction	Surface Condition: Concrete	Recovery (Inches)	Soil Boring Log	Color	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis	
1		Stainless steel stick-up well cover, locking j-plug, and concrete seal: grade to 0.5' below grade.	36	Top 4": CONCRETE	ND	Moist	ND	ND	RDI-SB-18_0-2_20220906	
2		Bentonite chips: 0.5' to 1' below grade		Next 8": Greyish-brown SAND, little Silt, trace Gravel, Concrete (FILL)	ND	Moist	ND	ND		
3		2" diameter PVC well casing: 0' - 15' below grade.		Bottom 24": Brown SAND, little Silt (FILL)	ND	Moist	ND	ND		
4		No. 2 morie sandpack filter: 1' to 15' below grade	0.020-inch slotted PVC well screen: 5' to 15' below grade	60	Top 24": Brown SAND, little Silt, trace Gravel (FILL)	ND	Wet	ND	ND	RDI-SB-18_7-9_20220906
5					Next 10": Dark brown SILT, trace Wood, Sand, Roots	ND	Moist	ND	ND	
6					Bottom 26": Grey SAND, some Silt	ND	Wet	ND	ND	
7		End cap & bottom of screen: 15' bgs		48	Grey SAND, some Silt	ND	Wet	ND	ND	RDI-SB-18_7-9_20220906
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

Notes:  Groundwater Depth Indicator  
 Groundwater measured at 5.0 feet below grade in RDI-MW-12 on September 20, 2022.  
 Groundwater monitoring well installed to 15 feet below grade.

Soil samples analyzed for VOCs.  
 Groundwater encountered at approximately 7.5 feet below grade during soil boring installation.  
 End of soil boring at 10 feet below grade.

PID = photoionization detector      NAPL = non-aqueous phase liquid      ND = not detected  
 Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING AND WELL INSTALLATION LOG		Seton Brilla Charter School 1956 Jerome Avenue, Bronx, NY		Groundwater Monitoring Well ID: RDI-MW-13		Soil Boring ID: RDI-SB-19					
		AKRF Project Number: 210024		Sheet 1 of 1							
 440 Park Avenue South, 7 <sup>th</sup> Floor New York, NY 10016		Drilling Method:	Geoprobe Direct Push	Drilling							
		Sampling Method:	Direct Push Probe	Start Time: 9:20		Finish Time: 9:30					
		Driller:	Eastern Environmental	Date: 9/6/2022							
		Weather:	73-75°F, Rain								
		Logged by:	C. Bearden, AKRF								
Depth (feet)	Well Construction	Surface Condition: Concrete	Recovery (Inches)	Soil Boring Log	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis		
1		Stainless steel stick-up well cover, locking j-plug, and concrete seal: grade to 0.5' below grade.	36	Top 18": Greyish-brown SAND, little Silt, Gravel (FILL)	Slight Petro-Like	Moist	0.0	ND	RDI-SB-19_0-2_20220906		
2		Bentonite chips: 0.5' to 1' below grade		Bottom 18": Brown SAND, little Silt, trace Gravel (FILL)	Slight Petro-Like	Moist	5.7	ND			
3		2" diameter PVC well casing: 0' - 15' below grade.	No. 2 morie sandpack filter: 1' to 15' below grade	60	Top 36": Brown SAND, little Silt, trace Gravel (FILL)	Slight Petro-Like	Wet	0.0	ND	RDI-SB-19_8-10_20220906	
4					Next 4": Dark brown SILT, trace Sand, Roots	Slight Petro-Like	Moist	8.7	ND		
5					Bottom 20": Grey SAND, little Silt, trace Gravel	Petro-Like	Wet	242.3	Slight Sheen 9-10'		
6			0.020-inch slotted PVC well screen: 5' to 15' below grade	36	Grey SILT, some Sand	ND	Wet	ND	ND	RDI-SB-18_7-9_20220906	
7											
8											
9											
10			End cap & bottom of screen: 15' bgs								
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
Notes:  Groundwater Depth Indicator Groundwater measured at 5.0 feet below grade in RDI-MW-13 on September 20, 2022. Groundwater monitoring well installed to 15 feet below grade.			Soil samples analyzed for VOCs. Groundwater encountered at approximately 9 feet below grade during soil boring installation. End of soil boring at 10 feet below grade.								
PID = photoionization detector			NAPL = non-aqueous phase liquid			ND = not detected					
Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.											

**APPENDIX C**  
**WELL DEVELOPMENT LOGS**



## Well Development Log

<b>Job Name:</b> Seton Brilla Charter School	<b>Client:</b> 2-6 East Tremont Avenue LLC	<b>Well No: RDI-MW-10</b>
<b>Project Location:</b> 1956 Jerome Avenue, Bronx, NY	<b>Sampled By:</b> J. Kelleher-Ferguson	
<b>Job No:</b> 210024	<b>Time:</b> NA Non Samples Taken	
<b>Date:</b> 9/7/2022		

<b>Total Depth:</b> 15.32 ft.	<b>Well Diameter:</b> 2 in.	<b>Well Volume (V) = Br 2 h (cf)</b> B = pi (approx. 3.14) r = monitoring well radius in ft. h = height of the water column in ft. cf = conversion factor = 7.48 gal/ft <sup>3</sup>
<b>Depth to Water:</b> 5.15 ft.	<b>Well Volume*:</b> 0.2 gal.	
<b>Water Column (WC):</b> 10.17 ft.		

Time	Pump Rate	Turbidity (NTU)	Temperature (°C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Comments (note color or odors)
11:45	~600 mL	>1000	20.72	1.45	10.01	7.18	-96	Cloudy with petroleum-like odors
11:50	~600 mL	>1000	21.11	1.48	8.44	7.19	-107	
11:55	~600 mL	>1000	19.4	1.47	8.8	7.35	-83	
12:00	~600 mL	>1000	18.89	1.46	8.72	7.14	-207	
12:05	~600 mL	>1000	18.77	1.47	8.34	7.11	-151	
12:10	~600 mL	>1000	19.41	1.43	8.32	7.17	-113	
12:15	~600 mL	>1000	18.98	1.42	8.52	7.2	-100	
12:20	~600 mL	>1000	21.54	1.44	9.23	7.33	-40	
12:25	~600 mL	>1000	21.22	1.41	7.75	7.29	-45	
12:30	~600 mL	>1000	20.91	1.39	7.19	7.11	-50	
12:55	~600 mL	>1000	20.01	1.32	7.55	7.12	-27	
13:00	~600 mL	>1000	19.62	1.43	8.53	7.31	-45	Development suspended after removal of more than 3 well volumes due to low recharge in the well. While still elevated, turbidity was substantially reduced during development

<b>Total Volume Purged:</b> 2 gallons	For Surge Method: Purge until water quality parameters are stable (within 10%) for three successive readings, and turbidity is less than 50 NTU for three successive readings. For Bailer Method: Purge a minimum of three well volumes and water appears clear in the bailer. <b>Started developing the well with a 2' submersible whale pump at 11:00. Pumped out ~3-4 gallons. Stopped pumping after 2 hours well did not stabilize.</b>
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## Well Development Log

<b>Job Name:</b> Seton Brilla Charter School	<b>Client:</b> 2-6 East Tremont Avenue LLC	<b>Well No: RDI-MW-11</b>
<b>Project Location:</b> 1956 Jerome Avenue, Bronx, NY	<b>Sampled By:</b> J. Kelleher-Ferguson	
<b>Job No:</b> 210024	<b>Time:</b> NA Non Samples Taken	
<b>Date:</b> 9/7/2022		

<b>Total Depth:</b> 15.15 ft.	<b>Well Diameter:</b> 2 in.	<b>Well Volume (V) = Br 2 h (cf)</b> B = pi (approx. 3.14) r = monitoring well radius in ft. h = height of the water column in ft. cf = conversion factor = 7.48 gal/ft <sup>3</sup>
<b>Depth to Water:</b> 4.9 ft.	<b>Well Volume*:</b> 0.2 gal.	
<b>Water Column (WC):</b> 10.25 ft.		

Time	Pump Rate	Turbidity (NTU)	Temperature (°C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Comments (note color or odors)
13:00	~600 mL	>1000	21.42	1.27	12.96	7.55	-12	Cloudy with no odor/sheen
13:05	~600 mL	>1000	21.01	1.45	12.01	7.32	-65	
13:10	~600 mL	>1000	19.43	1.3	8.96	7.28	-55	
13:15	~600 mL	>1000	19.85	1.27	7.9	7.57	-87	
13:20	~600 mL	>1000	19.42	1.27	8.29	7.6	-119	
13:25	~600 mL	>1000	18.99	1.45	10.55	7.12	-201	
13:35	~600 mL	>1000	19.12	1.36	8.3	7.22	-156	
13:40	~600 mL	>1000	19.03	1.3	7.9	7.35	-93	
13:45	~600 mL	>1000	18.45	1.55	7.77	7.45	-52	
13:50	~600 mL	>1000	18.97	1.21	7.55	7.11	-48	
13:55	~600 mL	>1000	18.03	1.11	7.03	7.19	-43	
14:00	~600 mL	>1000	19.22	1.12	6.99	7.09	-50	
14:05	~600 mL	>1000	18.55	1.31	7.53	7.12	-41	
14:10	~600 mL	>1000	19.88	1.28	8.11	7.41	-45	Development suspended after removal of more than 3 well volumes due to low recharge in the well. While still elevated, turbidity was substantially reduced during development.
14:15	~600 mL	>1000	20.5	1.31	7.53	7.35	-59	
14:20	~600 mL	>1000	19.36	1.03	8.01	7.11	-105	
14:25	~600 mL	>1000	20.77	0.99	7.74	7.23	-103	
14:30	~600 mL	>1000	21.6	0.58	7.35	7.1	-105	

Total Volume Purged: 5 gallons	<p><small>For Surge Method:</small> Purge until water quality parameters are stable (within 10%) for three successive readings, and turbidity is less than 50 NTU for three successive readings.</p> <p><small>For Bailer Method:</small> Purge a minimum of three well volumes and water appears clear in the bailer.</p> <p><b>Started developing the well with a 2' submersible whale pump at 12:30. Pumped out ~3-4 gallons. Stopped pumping after 2 hours well did not stabilize.</b></p>
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## Well Development Log

<b>Job Name:</b> Seton Brilla Charter School				<b>Client:</b> 2-6 East Tremont Avenue LLC			<b>Well No: RDI-MW-12</b>	
<b>Project Location:</b> 1956 Jerome Avenue, Bronx, NY				<b>Sampled By:</b> J. Kelleher-Ferguson				
<b>Job No:</b> 210024				<b>Time:</b> NA Non Samples Taken				
<b>Date:</b> 9/8/2022								
<b>Total Depth:</b>		15.15	ft.	<b>Well Diameter:</b>		2 in.		<b>Well Volume (V) = Br 2 h (cf)</b> B = pi (approx. 3.14) r = monitoring well radius in ft. h = height of the water column in ft. cf = conversion factor = 7.48 gal/ft <sup>3</sup>
<b>Depth to Water:</b>		4.9	ft.	<b>Well Volume*:</b>		0.2 gal.		
<b>Water Column (WC):</b>		10.25	ft.					
Time	Pump Rate	Turbidity (NTU)	Temperature (°C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Comments (note color or odors)
6:45	~600 mL	>1000	19.52	2.12	8.48	7.24	-115	Cloudy with no odor/sheen
6:50	~600 mL	>1000	20.31	2.05	8.32	7.31	-120	
6:55	~600 mL	>1000	19.58	1.93	8.54	7.2	-93	
7:00	~600 mL	>1000	18.99	1.21	7.99	7.11	-103	
7:05	~600 mL	>1000	20.11	1.31	8.03	7.2	-105	
7:10	~600 mL	>1000	19.99	1.02	7.99	7.17	-99	
7:15	~600 mL	>1000	18.22	1.72	7.94	7.23	-111	
7:20	~600 mL	>1000	19.12	1.31	7.55	7.17	-101	
7:25	~600 mL	>1000	18.51	1.23	8.01	7.15	-59	
7:30	~600 mL	>1000	18.45	1.33	8.08	7.19	-201	
7:35	~600 mL	>1000	18.14	1.44	7.91	7.16	-38	
7:40	~600 mL	>1000	18.39	1.36	7.95	7.11	-57	
7:45	~600 mL	>1000	19.89	1.2	8.03	7.01	-63	
7:50	~600 mL	>1000	20.1	1.11	7.95	7.19	-109	
7:55	~600 mL	>1000	19.01	1.38	7.38	7.25	-75	
8:00	~600 mL	>1000	18.63	1.41	8.2	7.2	-61	
8:05	~600 mL	>1000	18.49	1.34	8.42	7.1	-320	
8:10	~600 mL	>1000	18.55	1.6	7.56	7.15	-119	
8:15	~600 mL	>1000	18.92	1.31	8.03	7.13	-49	
8:20	~600 mL	>1000	19.09	1.56	7.94	7.31	-115	
8:25	~600 mL	>1000	18.54	1.31	8.15	7.09	-90	Development suspended after removal of more than 3 well volumes due to low recharge in the well. While still elevated, turbidity was substantially reduced during development.
8:30	~600 mL	>1000	20.31	1.27	8.36	7.21	-83	
8:35	~600 mL	>1000	19.05	1.12	8.24	7.16	-106	
8:40	~600 mL	>1000	18.99	1.3	7.98	7.15	-90	
8:45	~600 mL	>1000	19.09	1.33	8.1	7.19	-201	
<b>Total Volume Purged:</b> 6 gallons				For Surge Method: Purge until water quality parameters are stable (within 10%) for three successive readings, and turbidity is less than 50 NTU for three successive readings. For Bailer Method: Purge a minimum of three well volumes and water appears clear in the bailer. <b>Stopped pumping after 2 hours well did not stabilize.</b>				



## Well Development Log

<b>Job Name:</b> Seton Brilla Charter School				<b>Client:</b> 2-6 East Tremont Avenue LLC			<b>Well No: RDI-MW-13</b>	
<b>Project Location:</b> 1956 Jerome Avenue, Bronx, NY				<b>Sampled By:</b> J. Kelleher-Ferguson				
<b>Job No:</b> 210024				<b>Time:</b> NA Non Samples Taken				
<b>Date:</b> 9/8/2022								
<b>Total Depth:</b> 14.6 ft.				<b>Well Diameter:</b> 2 in.			<b>Well Volume (V) = Br 2 h (cf)</b> B = pi (approx. 3.14) r = monitoring well radius in ft. h = height of the water column in ft. cf = conversion factor = 7.48 gal/ft <sup>3</sup>	
<b>Depth to Water:</b> 4.5 ft.				<b>Well Volume*:</b> 0.2 gal.				
<b>Water Column (WC):</b> 10.1 ft.								
Time	Pump Rate	Turbidity (NTU)	Temperature (°C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Comments (note color or odors)
8:50	~600 mL	>1000	19.09	1.33	8.1	7.32	-201	Cloudy with no odor/sheen
8:55	~600 mL	>1000	19.51	1.28	8.24	7.28	-105	
9:00	~600 mL	>1000	20.03	1.31	8.55	7.19	-112	
9:05	~600 mL	>1000	18.89	1.4	8.21	7.15	-98	
9:10	~600 mL	>1000	19.03	1.13	8.17	7.31	-136	
9:15	~600 mL	>1000	19.81	1.29	8.59	7.2	-109	
9:20	~600 mL	>1000	18.85	1.34	8.52	7.19	-251	
9:25	~600 mL	>1000	19.36	1.53	8.3	7.15	-109	
9:30	~600 mL	>1000	20.1	1.46	8.59	7.12	-230	
9:35	~600 mL	>1000	19.81	1.39	8.03	7.13	-300	
9:40	~600 mL	>1000	20.34	1.68	7.93	7.31	-305	
9:45	~600 mL	>1000	20.13	1.25	8.31	7.09	-205	
9:50	~600 mL	>1000	19.09	1.3	8.63	7.12	-108	
10:00	~600 mL	>1000	18.54	1.36	8.2	7.19	-135	
10:05	~600 mL	>1000	20.51	1.3	7.54	7.22	-203	
10:10	~600 mL	>1000	21.03	1.21	7.82	7.09	-107	
10:15	~600 mL	>1000	20.59	1.22	7.3	7.35	-129	
10:20	~600 mL	>1000	22.56	1.28	6.8	7.56	-126	
10:25	~600 mL	>1000	20.31	1.77	7.54	7.2	-83	
10:30	~600 mL	>1000	20.54	1.73	8.4	7.31	-103	Development suspended after removal of more than 3 well volumes due to low recharge in the well. While still elevated, turbidity was substantially reduced during development.
10:35	~600 mL	>1000	21.01	1.29	9.1	7.16	-11	
10:40	~600 mL	>1000	19.76	1.35	7.86	7.29	-131	
10:45	~600 mL	>1000	20	1.41	8.41	7.35	-120	
10:50	~600 mL	>1000	21.04	1.3	8.99	7.65	-110	
Total Volume Purged: 4 gallons			For Surge Method: Purge until water quality parameters are stable (within 10%) for three successive readings, and turbidity is less than 50 NTU for three successive readings. For Bailer Method: Purge a minimum of three well volumes and water appears clear in the bailer. <b>Stopped pumping after 2 hours well did not stabilize.</b>					

**APPENDIX D**  
**GROUNDWATER SAMPLING LOGS**



## Well Sampling Log

Site Name: Seton Brilla Charter School					Client: 2-6 East Tremont Avenue LLC				<b>Well No: RDI-MW-10</b>
Project Location: 1956 Jerome Ave, Bronx, NY					Sampled By: J. Kelleher-Ferguson				
Project No.: 210024									
Date: 9/20/22					Sampling Time: 900				
PID at surface: 73.7									
Total Depth: 14.6			ft. below top of casing		Water Column (WC): 7.9		feet		*= 0.163 * WC for 2" wells
Depth to Water: 6.7			ft. below top of casing		Well Volume*: 1.2877		gallons		*= 0.653 * WC for 4" wells
Depth to Product: NA			ft. below top of casing		Volume Purged: ~3		gallons		*= 1.469 * WC for 6" wells
Depth to top of screen: 9.6			ft. below top of casing		Well Diam.: 2		inches		Target maximum flow rate is 100 ml/min
Depth to bottom of screen: 14.6			ft. below top of casing		Purging Device (pump type): Monsoon				
Approx. Pump Intake:			ft. below top of casing						
Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (°C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
820	6.7	100	18.57	1.55	7.55	6.28	71	>1000	Petroleum like odor.
825	6.7	100	17.79	1.51	6.49	6.31	54	222	
830	6.7	100	17.72	1.51	6.92	6.32	45	148	
835	6.7	100	17.64	1.51	6.87	6.35	31	56.6	
840	6.7	100	17.65	1.5	6.85	6.35	27	49.7	
845	6.7	100	17.65	1.51	6.91	6.37	14	78.8	
850	6.7	100	17.63	1.52	6.92	6.38	12	31.7	
855	6.7	100	17.59	1.52	6.97	6.38	7	47.9	
900	6.7	100	17.55	1.52	7	6.38	5	27.1	
SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	
910	6.7	100	17.45	1.52	7.01	6.38	3	10.8	
<b>Stabilization Criteria:</b>				+/- 3 mS/cm	+/- 0.3 mg/L	+/- 0.1 pH units	+/- 10 mV	<50 NTU	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for: VOCs



## Well Sampling Log

Site Name: Seton Brilla Charter School					Client: 2-6 East Tremont Avenue LLC				<b>Well No: RDI-MW-11</b>
Project Location: 1956 Jerome Ave, Bronx, NY					Sampled By: J. Kelleher-Ferguson				
Project No.: 210024									
Date: 9/20/22					Sampling Time: 1050				
PID at surface:ND									
Total Depth:		14.9	ft. below top of casing		Water Column (WC):		10	feet	*= 0.163 * WC for 2" wells
Depth to Water:		5.0	ft. below top of casing		Well Volume*:		1.63	gallons	*= 0.653 * WC for 4" wells
Depth to Product:		NA	ft. below top of casing		Volume Purged:		~3	gallons	*= 1.469 * WC for 6" wells
Depth to top of screen:		9.9	ft. below top of casing		Well Diam.:		2	inches	Target maximum flow rate is 100 ml/min
Depth to bottom of screen:		14.9	ft. below top of casing		Purging Device (pump type): Monsoon				
Approx. Pump Intake:		ft. below top of casing							
Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (°C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
1025	4.9	100	18.37	1.41	6.71	6.37	62	442	
1030	4.9	100	18.18	1.41	6.54	6.37	40	191	
1035	4.9	100	18.21	1.41	6.54	6.37	40	94.9	
1040	4.9	100	18.26	1.41	6.52	6.36	41	28.2	
1045	4.9	100	18.31	1.41	6.54	6.36	41	16.7	
1050	4.9	100	18.28	1.41	6.54	6.36	41	13.1	
SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	
1055	4.9	100	18	1.41	6	6.33	60	20.7	
<b>Stabilization Criteria:</b>				+/- 3 mS/cm	+/- 0.3 mg/L	+/- 0.1 pH units	+/- 10 mV	<50 NTU	
Groundwater samples analyzed for: VOCs									



## Well Sampling Log

Site Name: Seton Brilla Charter School				Client: 2-6 East Tremont Avenue LLC				<b>Well No: RDI-MW-12</b>	
Project Location: 1956 Jerome Ave, Bronx, NY				Sampled By: J. Kelleher-Ferguson					
Project No.: 210024									
Date: 9/20/22				Sampling Time: 1400					
PID at surface: ND									
Total Depth:		14.8	ft. below top of casing	Water Column (WC):		9.7	feet	*= 0.163 * WC for 2" wells	
Depth to Water:		5.1	ft. below top of casing	Well Volume*:		1.5811	gallons	*= 0.653 * WC for 4" wells	
Depth to Product:		NA	ft. below top of casing	Volume Purged:		~3	gallons	*= 1.469 * WC for 6" wells	
Depth to top of screen:		9.8	ft. below top of casing	Well Diam.:		2	inches	Target maximum flow rate is 100 ml/min	
Depth to bottom of screen:		14.8	ft. below top of casing	Purging Device (pump type): Monsoon					
Approx. Pump Intake:			ft. below top of casing						
Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (°C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
925	5.1	100	17.84	1.4	6.09	6.35	72	>1000	
930	5.1	100	17.75	1.39	6.1	6.36	73	920	
935	5.1	100	17.65	1.39	6.16	6.36	63	551	
940	5.1	100	17.62	1.38	6.25	6.36	58	248	
945	5.1	100	17.56	1.38	6.34	6.37	53	152	
950	5.1	100	17.46	1.38	6.52	6.36	43	25.4	
955	5.1	100	17.45	1.38	6.61	6.36	43	13.6	
1000	5.1	100	17.45	1.38	6.63	6.36	42	12	
SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	
1005	5.1	100	17.53	1.38	6.5	6.31	53	49	
<b>Stabilization Criteria:</b>				+/- 3 mS/cm	+/- 0.3 mg/L	+/- 0.1 pH units	+/- 10 mV	<50 NTU	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.
Groundwater samples analyzed for: VOCs									



## Well Sampling Log

<b>Site Name:</b> Seton Brilla Charter School				<b>Client:</b> 2-6 East Tremont Avenue LLC				<b>Well No: RDI-MW-13</b>	
<b>Project Location:</b> 1956 Jerome Ave, Bronx, NY				<b>Sampled By:</b> J. Kelleher-Ferguson					
<b>Project No.:</b> 210024									
<b>Date:</b> 9/20/22				<b>Sampling Time:</b> 1240					
<b>PID at surface:</b> 0.5									
<b>Total Depth:</b>		13.6	ft. below top of casing	<b>Water Column (WC):</b>		8.7	feet	*= 0.163 * WC for 2" wells	
<b>Depth to Water:</b>		5.0	ft. below top of casing	<b>Well Volume*:</b>		1.4181	gallons	*= 0.653 * WC for 4" wells	
<b>Depth to Product:</b>		NA	ft. below top of casing	<b>Volume Purged:</b>		~3	gallons	*= 1.469 * WC for 6" wells	
<b>Depth to top of screen:</b>		8.6	ft. below top of casing	<b>Well Diam.:</b>		2	inches	Target maximum flow rate is 100 ml/min	
<b>Depth to bottom of screen:</b>		13.6	ft. below top of casing	<b>Purging Device (pump type):</b> Peristaltic					
<b>Approx. Pump Intake:</b>			ft. below top of casing						
Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (°C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
1220	4.9	100	21.35	1.3	4.52	6.31	97	117	
1225	4.9	100	19.68	1.34	5.8	6.29	86	30.9	
1230	4.9	100	19.58	1.34	6.07	6.25	84	27.1	
1235	4.9	100	19.46	1.34	6.21	6.23	82	18.8	
1240	4.9	100	19.38	1.35	6.27	6.22	81	14.4	
SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	
1245	4.9	100	19.37	1.37	6.07	6.19	69	11.7	
<b>Stabilization Criteria:</b>				+/- 3 mS/cm	+/- 0.3 mg/L	+/- 0.1 pH units	+/- 10 mV	<50 NTU	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for: VOCs



**APPENDIX E**  
**LABORATORY ANALYTICAL REPORTS**



## ANALYTICAL REPORT

Lab Number:	L2248090
Client:	AKRF, Inc. 440 Park Avenue South 7th Floor New York, NY 10016
ATTN:	Patrick Diggins
Phone:	(646) 388-9784
Project Name:	1956 JEROME AVE
Project Number:	210024
Report Date:	09/20/22

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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Eight Walkup Drive, Westborough, MA 01581-1019  
508-898-9220 (Fax) 508-898-9193 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** 1956 JEROME AVE  
**Project Number:** 210024

**Lab Number:** L2248090  
**Report Date:** 09/20/22

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2248090-01	RDI-SB-16_0-2_20220906	SOIL	BRONX NY	09/06/22 08:10	09/06/22
L2248090-02	RDI-SB-16_7-9_20220906	SOIL	BRONX NY	09/06/22 08:20	09/06/22
L2248090-03	RDI-SB-17_0-2_20220906	SOIL	BRONX NY	09/06/22 08:45	09/06/22
L2248090-04	RDI-SB-17_7-9_20220906	SOIL	BRONX NY	09/06/22 08:50	09/06/22
L2248090-05	RDI-SB-18_0-2_20220906	SOIL	BRONX NY	09/06/22 09:30	09/06/22
L2248090-06	RDI-SB-18_7-9_20220906	SOIL	BRONX NY	09/06/22 09:35	09/06/22
L2248090-07	RDI-SB-19_0-2_20220906	SOIL	BRONX NY	09/06/22 10:00	09/06/22
L2248090-08	RDI-SB-19_8-10_20220906	SOIL	BRONX NY	09/06/22 10:05	09/06/22
L2248090-09	RDI-SB-DUP-01_20220906	SOIL	BRONX NY	09/06/22 08:10	09/06/22

**Project Name:** 1956 JEROME AVE  
**Project Number:** 210024

**Lab Number:** L2248090  
**Report Date:** 09/20/22

### Case Narrative

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

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

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

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

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

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

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**Project Name:** 1956 JEROME AVE  
**Project Number:** 210024

**Lab Number:** L2248090  
**Report Date:** 09/20/22

### Case Narrative (continued)

#### Report Submission

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

#### Volatile Organics

L2248090-08: The surrogate recovery is outside the method acceptance criteria for dibromofluoromethane (46%) due to interference with the Internal Standard.

L2248090-08: The surrogate recovery is outside the acceptance criteria for toluene-d8 (185%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Caitlin Walukevich

Title: Technical Director/Representative

Date: 09/20/22

# ORGANICS

# VOLATILES

Project Name: 1956 JEROME AVE

Lab Number: L2248090

Project Number: 210024

Report Date: 09/20/22

## SAMPLE RESULTS

Lab ID: L2248090-01  
 Client ID: RDI-SB-16\_0-2\_20220906  
 Sample Location: BRONX NY

Date Collected: 09/06/22 08:10  
 Date Received: 09/06/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8260C  
 Analytical Date: 09/09/22 10:25  
 Analyst: NLK  
 Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	4.8	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.95	0.14	1
Chloroform	ND		ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.95	0.22	1
1,2-Dichloropropane	ND		ug/kg	0.95	0.12	1
Dibromochloromethane	ND		ug/kg	0.95	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.95	0.25	1
Tetrachloroethene	ND		ug/kg	0.48	0.19	1
Chlorobenzene	ND		ug/kg	0.48	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.8	0.66	1
1,2-Dichloroethane	ND		ug/kg	0.95	0.24	1
1,1,1-Trichloroethane	ND		ug/kg	0.48	0.16	1
Bromodichloromethane	ND		ug/kg	0.48	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.95	0.26	1
cis-1,3-Dichloropropene	ND		ug/kg	0.48	0.15	1
1,3-Dichloropropene, Total	ND		ug/kg	0.48	0.15	1
1,1-Dichloropropene	ND		ug/kg	0.48	0.15	1
Bromoform	ND		ug/kg	3.8	0.23	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.48	0.16	1
Benzene	ND		ug/kg	0.48	0.16	1
Toluene	ND		ug/kg	0.95	0.52	1
Ethylbenzene	2.0		ug/kg	0.95	0.13	1
Chloromethane	ND		ug/kg	3.8	0.89	1
Bromomethane	ND		ug/kg	1.9	0.55	1
Vinyl chloride	ND		ug/kg	0.95	0.32	1
Chloroethane	ND		ug/kg	1.9	0.43	1
1,1-Dichloroethene	ND		ug/kg	0.95	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1



Project Name: 1956 JEROME AVE

Lab Number: L2248090

Project Number: 210024

Report Date: 09/20/22

## SAMPLE RESULTS

Lab ID: L2248090-01  
 Client ID: RDI-SB-16\_0-2\_20220906  
 Sample Location: BRONX NY

Date Collected: 09/06/22 08:10  
 Date Received: 09/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.48	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	1.9	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.9	0.19	1
p/m-Xylene	11		ug/kg	1.9	0.53	1
o-Xylene	3.5		ug/kg	0.95	0.28	1
Xylenes, Total	15		ug/kg	0.95	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.95	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	0.95	0.13	1
Dibromomethane	ND		ug/kg	1.9	0.23	1
Styrene	ND		ug/kg	0.95	0.19	1
Dichlorodifluoromethane	ND		ug/kg	9.5	0.87	1
Acetone	ND		ug/kg	9.5	4.6	1
Carbon disulfide	ND		ug/kg	9.5	4.3	1
2-Butanone	ND		ug/kg	9.5	2.1	1
Vinyl acetate	ND		ug/kg	9.5	2.0	1
4-Methyl-2-pentanone	ND		ug/kg	9.5	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	1.9	0.12	1
2-Hexanone	ND		ug/kg	9.5	1.1	1
Bromochloromethane	ND		ug/kg	1.9	0.20	1
2,2-Dichloropropane	ND		ug/kg	1.9	0.19	1
1,2-Dibromoethane	ND		ug/kg	0.95	0.26	1
1,3-Dichloropropane	ND		ug/kg	1.9	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.48	0.12	1
Bromobenzene	ND		ug/kg	1.9	0.14	1
n-Butylbenzene	ND		ug/kg	0.95	0.16	1
sec-Butylbenzene	ND		ug/kg	0.95	0.14	1
tert-Butylbenzene	ND		ug/kg	1.9	0.11	1
o-Chlorotoluene	ND		ug/kg	1.9	0.18	1
p-Chlorotoluene	ND		ug/kg	1.9	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.8	0.95	1
Hexachlorobutadiene	ND		ug/kg	3.8	0.16	1
Isopropylbenzene	ND		ug/kg	0.95	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.95	0.10	1
Naphthalene	ND		ug/kg	3.8	0.62	1
Acrylonitrile	ND		ug/kg	3.8	1.1	1

**Project Name:** 1956 JEROME AVE**Lab Number:** L2248090**Project Number:** 210024**Report Date:** 09/20/22**SAMPLE RESULTS**

Lab ID: L2248090-01  
 Client ID: RDI-SB-16\_0-2\_20220906  
 Sample Location: BRONX NY

Date Collected: 09/06/22 08:10  
 Date Received: 09/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
n-Propylbenzene	ND		ug/kg	0.95	0.16	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.9	0.31	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.9	0.26	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.9	0.18	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.9	0.32	1
1,4-Dioxane	ND		ug/kg	76	33.	1
p-Diethylbenzene	ND		ug/kg	1.9	0.17	1
p-Ethyltoluene	ND		ug/kg	1.9	0.36	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.9	0.18	1
Ethyl ether	ND		ug/kg	1.9	0.32	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.8	1.4	1

**Tentatively Identified Compounds**

No Tentatively Identified Compounds	ND	ug/kg	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	97		70-130

**Project Name:** 1956 JEROME AVE**Lab Number:** L2248090**Project Number:** 210024**Report Date:** 09/20/22**SAMPLE RESULTS**

Lab ID: L2248090-02  
 Client ID: RDI-SB-16\_7-9\_20220906  
 Sample Location: BRONX NY

Date Collected: 09/06/22 08:20  
 Date Received: 09/06/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8260C  
 Analytical Date: 09/09/22 10:52  
 Analyst: NLK  
 Percent Solids: 33%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	24	11.	1
1,1-Dichloroethane	ND		ug/kg	4.9	0.71	1
Chloroform	ND		ug/kg	7.3	0.68	1
Carbon tetrachloride	ND		ug/kg	4.9	1.1	1
1,2-Dichloropropane	ND		ug/kg	4.9	0.61	1
Dibromochloromethane	ND		ug/kg	4.9	0.68	1
1,1,2-Trichloroethane	ND		ug/kg	4.9	1.3	1
Tetrachloroethene	ND		ug/kg	2.4	0.96	1
Chlorobenzene	ND		ug/kg	2.4	0.62	1
Trichlorofluoromethane	ND		ug/kg	20	3.4	1
1,2-Dichloroethane	ND		ug/kg	4.9	1.2	1
1,1,1-Trichloroethane	ND		ug/kg	2.4	0.82	1
Bromodichloromethane	ND		ug/kg	2.4	0.53	1
trans-1,3-Dichloropropene	ND		ug/kg	4.9	1.3	1
cis-1,3-Dichloropropene	ND		ug/kg	2.4	0.77	1
1,3-Dichloropropene, Total	ND		ug/kg	2.4	0.77	1
1,1-Dichloropropene	ND		ug/kg	2.4	0.78	1
Bromoform	ND		ug/kg	20	1.2	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	2.4	0.81	1
Benzene	ND		ug/kg	2.4	0.81	1
Toluene	ND		ug/kg	4.9	2.6	1
Ethylbenzene	ND		ug/kg	4.9	0.69	1
Chloromethane	ND		ug/kg	20	4.6	1
Bromomethane	ND		ug/kg	9.8	2.8	1
Vinyl chloride	ND		ug/kg	4.9	1.6	1
Chloroethane	ND		ug/kg	9.8	2.2	1
1,1-Dichloroethene	ND		ug/kg	4.9	1.2	1
trans-1,2-Dichloroethene	ND		ug/kg	7.3	0.67	1

Project Name: 1956 JEROME AVE

Lab Number: L2248090

Project Number: 210024

Report Date: 09/20/22

## SAMPLE RESULTS

Lab ID: L2248090-02  
 Client ID: RDI-SB-16\_7-9\_20220906  
 Sample Location: BRONX NY

Date Collected: 09/06/22 08:20  
 Date Received: 09/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	2.4	0.67	1
1,2-Dichlorobenzene	ND		ug/kg	9.8	0.70	1
1,3-Dichlorobenzene	ND		ug/kg	9.8	0.72	1
1,4-Dichlorobenzene	ND		ug/kg	9.8	0.84	1
Methyl tert butyl ether	6.3	J	ug/kg	9.8	0.98	1
p/m-Xylene	ND		ug/kg	9.8	2.7	1
o-Xylene	ND		ug/kg	4.9	1.4	1
Xylenes, Total	ND		ug/kg	4.9	1.4	1
cis-1,2-Dichloroethene	ND		ug/kg	4.9	0.85	1
1,2-Dichloroethene, Total	ND		ug/kg	4.9	0.67	1
Dibromomethane	ND		ug/kg	9.8	1.2	1
Styrene	ND		ug/kg	4.9	0.96	1
Dichlorodifluoromethane	ND		ug/kg	49	4.5	1
Acetone	430		ug/kg	49	23.	1
Carbon disulfide	ND		ug/kg	49	22.	1
2-Butanone	91		ug/kg	49	11.	1
Vinyl acetate	ND		ug/kg	49	10.	1
4-Methyl-2-pentanone	ND		ug/kg	49	6.2	1
1,2,3-Trichloropropane	ND		ug/kg	9.8	0.62	1
2-Hexanone	ND		ug/kg	49	5.8	1
Bromochloromethane	ND		ug/kg	9.8	1.0	1
2,2-Dichloropropane	ND		ug/kg	9.8	0.99	1
1,2-Dibromoethane	ND		ug/kg	4.9	1.4	1
1,3-Dichloropropane	ND		ug/kg	9.8	0.82	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	2.4	0.64	1
Bromobenzene	ND		ug/kg	9.8	0.71	1
n-Butylbenzene	ND		ug/kg	4.9	0.82	1
sec-Butylbenzene	ND		ug/kg	4.9	0.71	1
tert-Butylbenzene	ND		ug/kg	9.8	0.58	1
o-Chlorotoluene	ND		ug/kg	9.8	0.93	1
p-Chlorotoluene	ND		ug/kg	9.8	0.53	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	15	4.9	1
Hexachlorobutadiene	ND		ug/kg	20	0.82	1
Isopropylbenzene	ND		ug/kg	4.9	0.53	1
p-Isopropyltoluene	ND		ug/kg	4.9	0.53	1
Naphthalene	ND		ug/kg	20	3.2	1
Acrylonitrile	ND		ug/kg	20	5.6	1

**Project Name:** 1956 JEROME AVE**Lab Number:** L2248090**Project Number:** 210024**Report Date:** 09/20/22**SAMPLE RESULTS**

Lab ID: L2248090-02  
 Client ID: RDI-SB-16\_7-9\_20220906  
 Sample Location: BRONX NY

Date Collected: 09/06/22 08:20  
 Date Received: 09/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
n-Propylbenzene	ND		ug/kg	4.9	0.84	1
1,2,3-Trichlorobenzene	ND		ug/kg	9.8	1.6	1
1,2,4-Trichlorobenzene	ND		ug/kg	9.8	1.3	1
1,3,5-Trimethylbenzene	ND		ug/kg	9.8	0.94	1
1,2,4-Trimethylbenzene	ND		ug/kg	9.8	1.6	1
1,4-Dioxane	ND		ug/kg	390	170	1
p-Diethylbenzene	ND		ug/kg	9.8	0.86	1
p-Ethyltoluene	ND		ug/kg	9.8	1.9	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	9.8	0.93	1
Ethyl ether	ND		ug/kg	9.8	1.7	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	24	6.9	1

**Tentatively Identified Compounds**

Total TIC Compounds	16.4	J	ug/kg			1
Unknown	16.4	J	ug/kg			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	100		70-130

Project Name: 1956 JEROME AVE

Lab Number: L2248090

Project Number: 210024

Report Date: 09/20/22

## SAMPLE RESULTS

Lab ID: L2248090-03  
 Client ID: RDI-SB-17\_0-2\_20220906  
 Sample Location: BRONX NY

Date Collected: 09/06/22 08:45  
 Date Received: 09/06/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8260C  
 Analytical Date: 09/09/22 11:18  
 Analyst: NLK  
 Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.3	2.0	1
1,1-Dichloroethane	ND		ug/kg	0.87	0.12	1
Chloroform	ND		ug/kg	1.3	0.12	1
Carbon tetrachloride	ND		ug/kg	0.87	0.20	1
1,2-Dichloropropane	ND		ug/kg	0.87	0.11	1
Dibromochloromethane	ND		ug/kg	0.87	0.12	1
1,1,2-Trichloroethane	ND		ug/kg	0.87	0.23	1
Tetrachloroethene	ND		ug/kg	0.43	0.17	1
Chlorobenzene	ND		ug/kg	0.43	0.11	1
Trichlorofluoromethane	ND		ug/kg	3.5	0.60	1
1,2-Dichloroethane	ND		ug/kg	0.87	0.22	1
1,1,1-Trichloroethane	ND		ug/kg	0.43	0.14	1
Bromodichloromethane	ND		ug/kg	0.43	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.87	0.24	1
cis-1,3-Dichloropropene	ND		ug/kg	0.43	0.14	1
1,3-Dichloropropene, Total	ND		ug/kg	0.43	0.14	1
1,1-Dichloropropene	ND		ug/kg	0.43	0.14	1
Bromoform	ND		ug/kg	3.5	0.21	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.43	0.14	1
Benzene	ND		ug/kg	0.43	0.14	1
Toluene	ND		ug/kg	0.87	0.47	1
Ethylbenzene	ND		ug/kg	0.87	0.12	1
Chloromethane	ND		ug/kg	3.5	0.81	1
Bromomethane	ND		ug/kg	1.7	0.50	1
Vinyl chloride	ND		ug/kg	0.87	0.29	1
Chloroethane	ND		ug/kg	1.7	0.39	1
1,1-Dichloroethene	ND		ug/kg	0.87	0.21	1
trans-1,2-Dichloroethene	ND		ug/kg	1.3	0.12	1

Project Name: 1956 JEROME AVE

Lab Number: L2248090

Project Number: 210024

Report Date: 09/20/22

## SAMPLE RESULTS

Lab ID: L2248090-03  
 Client ID: RDI-SB-17\_0-2\_20220906  
 Sample Location: BRONX NY

Date Collected: 09/06/22 08:45  
 Date Received: 09/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.43	0.12	1
1,2-Dichlorobenzene	ND		ug/kg	1.7	0.12	1
1,3-Dichlorobenzene	ND		ug/kg	1.7	0.13	1
1,4-Dichlorobenzene	ND		ug/kg	1.7	0.15	1
Methyl tert butyl ether	ND		ug/kg	1.7	0.17	1
p/m-Xylene	ND		ug/kg	1.7	0.49	1
o-Xylene	ND		ug/kg	0.87	0.25	1
Xylenes, Total	ND		ug/kg	0.87	0.25	1
cis-1,2-Dichloroethene	ND		ug/kg	0.87	0.15	1
1,2-Dichloroethene, Total	ND		ug/kg	0.87	0.12	1
Dibromomethane	ND		ug/kg	1.7	0.21	1
Styrene	ND		ug/kg	0.87	0.17	1
Dichlorodifluoromethane	ND		ug/kg	8.7	0.79	1
Acetone	ND		ug/kg	8.7	4.2	1
Carbon disulfide	ND		ug/kg	8.7	3.9	1
2-Butanone	ND		ug/kg	8.7	1.9	1
Vinyl acetate	ND		ug/kg	8.7	1.9	1
4-Methyl-2-pentanone	ND		ug/kg	8.7	1.1	1
1,2,3-Trichloropropane	ND		ug/kg	1.7	0.11	1
2-Hexanone	ND		ug/kg	8.7	1.0	1
Bromochloromethane	ND		ug/kg	1.7	0.18	1
2,2-Dichloropropane	ND		ug/kg	1.7	0.18	1
1,2-Dibromoethane	ND		ug/kg	0.87	0.24	1
1,3-Dichloropropane	ND		ug/kg	1.7	0.14	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.43	0.11	1
Bromobenzene	ND		ug/kg	1.7	0.12	1
n-Butylbenzene	ND		ug/kg	0.87	0.14	1
sec-Butylbenzene	ND		ug/kg	0.87	0.13	1
tert-Butylbenzene	ND		ug/kg	1.7	0.10	1
o-Chlorotoluene	ND		ug/kg	1.7	0.16	1
p-Chlorotoluene	ND		ug/kg	1.7	0.09	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.6	0.87	1
Hexachlorobutadiene	ND		ug/kg	3.5	0.15	1
Isopropylbenzene	ND		ug/kg	0.87	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.87	0.10	1
Naphthalene	ND		ug/kg	3.5	0.56	1
Acrylonitrile	ND		ug/kg	3.5	1.0	1

Project Name: 1956 JEROME AVE

Lab Number: L2248090

Project Number: 210024

Report Date: 09/20/22

## SAMPLE RESULTS

Lab ID: L2248090-03  
 Client ID: RDI-SB-17\_0-2\_20220906  
 Sample Location: BRONX NY

Date Collected: 09/06/22 08:45  
 Date Received: 09/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.87	0.15	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.7	0.28	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.7	0.24	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.7	0.17	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.7	0.29	1
1,4-Dioxane	ND		ug/kg	69	30.	1
p-Diethylbenzene	ND		ug/kg	1.7	0.15	1
p-Ethyltoluene	ND		ug/kg	1.7	0.33	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.7	0.16	1
Ethyl ether	ND		ug/kg	1.7	0.30	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.3	1.2	1

## Tentatively Identified Compounds

Total TIC Compounds	5.43	J	ug/kg			1
Butane, 2-Methyl-	3.52	NJ	ug/kg			1
Pentane	1.91	NJ	ug/kg			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	96		70-130



**Project Name:** 1956 JEROME AVE**Lab Number:** L2248090**Project Number:** 210024**Report Date:** 09/20/22**SAMPLE RESULTS**

Lab ID: L2248090-04  
 Client ID: RDI-SB-17\_7-9\_20220906  
 Sample Location: BRONX NY

Date Collected: 09/06/22 08:50  
 Date Received: 09/06/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8260C  
 Analytical Date: 09/09/22 11:44  
 Analyst: NLK  
 Percent Solids: 29%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	28	13.	1
1,1-Dichloroethane	ND		ug/kg	5.6	0.82	1
Chloroform	ND		ug/kg	8.4	0.79	1
Carbon tetrachloride	ND		ug/kg	5.6	1.3	1
1,2-Dichloropropane	ND		ug/kg	5.6	0.70	1
Dibromochloromethane	ND		ug/kg	5.6	0.79	1
1,1,2-Trichloroethane	ND		ug/kg	5.6	1.5	1
Tetrachloroethene	ND		ug/kg	2.8	1.1	1
Chlorobenzene	ND		ug/kg	2.8	0.72	1
Trichlorofluoromethane	ND		ug/kg	22	3.9	1
1,2-Dichloroethane	ND		ug/kg	5.6	1.4	1
1,1,1-Trichloroethane	ND		ug/kg	2.8	0.94	1
Bromodichloromethane	ND		ug/kg	2.8	0.61	1
trans-1,3-Dichloropropene	ND		ug/kg	5.6	1.5	1
cis-1,3-Dichloropropene	ND		ug/kg	2.8	0.89	1
1,3-Dichloropropene, Total	ND		ug/kg	2.8	0.89	1
1,1-Dichloropropene	ND		ug/kg	2.8	0.90	1
Bromoform	ND		ug/kg	22	1.4	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	2.8	0.94	1
Benzene	ND		ug/kg	2.8	0.94	1
Toluene	ND		ug/kg	5.6	3.1	1
Ethylbenzene	ND		ug/kg	5.6	0.79	1
Chloromethane	ND		ug/kg	22	5.2	1
Bromomethane	ND		ug/kg	11	3.3	1
Vinyl chloride	ND		ug/kg	5.6	1.9	1
Chloroethane	ND		ug/kg	11	2.5	1
1,1-Dichloroethene	ND		ug/kg	5.6	1.3	1
trans-1,2-Dichloroethene	ND		ug/kg	8.4	0.77	1

Project Name: 1956 JEROME AVE

Lab Number: L2248090

Project Number: 210024

Report Date: 09/20/22

## SAMPLE RESULTS

Lab ID: L2248090-04  
 Client ID: RDI-SB-17\_7-9\_20220906  
 Sample Location: BRONX NY

Date Collected: 09/06/22 08:50  
 Date Received: 09/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	2.8	0.77	1
1,2-Dichlorobenzene	ND		ug/kg	11	0.81	1
1,3-Dichlorobenzene	ND		ug/kg	11	0.83	1
1,4-Dichlorobenzene	ND		ug/kg	11	0.96	1
Methyl tert butyl ether	2.3	J	ug/kg	11	1.1	1
p/m-Xylene	ND		ug/kg	11	3.2	1
o-Xylene	ND		ug/kg	5.6	1.6	1
Xylenes, Total	ND		ug/kg	5.6	1.6	1
cis-1,2-Dichloroethene	ND		ug/kg	5.6	0.99	1
1,2-Dichloroethene, Total	ND		ug/kg	5.6	0.77	1
Dibromomethane	ND		ug/kg	11	1.3	1
Styrene	ND		ug/kg	5.6	1.1	1
Dichlorodifluoromethane	ND		ug/kg	56	5.2	1
Acetone	1100		ug/kg	56	27.	1
Carbon disulfide	ND		ug/kg	56	26.	1
2-Butanone	230		ug/kg	56	12.	1
Vinyl acetate	ND		ug/kg	56	12.	1
4-Methyl-2-pentanone	ND		ug/kg	56	7.2	1
1,2,3-Trichloropropane	ND		ug/kg	11	0.72	1
2-Hexanone	ND		ug/kg	56	6.6	1
Bromochloromethane	ND		ug/kg	11	1.2	1
2,2-Dichloropropane	ND		ug/kg	11	1.1	1
1,2-Dibromoethane	ND		ug/kg	5.6	1.6	1
1,3-Dichloropropane	ND		ug/kg	11	0.94	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	2.8	0.74	1
Bromobenzene	ND		ug/kg	11	0.82	1
n-Butylbenzene	ND		ug/kg	5.6	0.94	1
sec-Butylbenzene	ND		ug/kg	5.6	0.82	1
tert-Butylbenzene	ND		ug/kg	11	0.66	1
o-Chlorotoluene	ND		ug/kg	11	1.1	1
p-Chlorotoluene	ND		ug/kg	11	0.61	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	17	5.6	1
Hexachlorobutadiene	ND		ug/kg	22	0.95	1
Isopropylbenzene	ND		ug/kg	5.6	0.61	1
p-Isopropyltoluene	ND		ug/kg	5.6	0.61	1
Naphthalene	ND		ug/kg	22	3.7	1
Acrylonitrile	ND		ug/kg	22	6.5	1

Project Name: 1956 JEROME AVE

Lab Number: L2248090

Project Number: 210024

Report Date: 09/20/22

## SAMPLE RESULTS

Lab ID: L2248090-04  
 Client ID: RDI-SB-17\_7-9\_20220906  
 Sample Location: BRONX NY

Date Collected: 09/06/22 08:50  
 Date Received: 09/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	5.6	0.96	1
1,2,3-Trichlorobenzene	ND		ug/kg	11	1.8	1
1,2,4-Trichlorobenzene	ND		ug/kg	11	1.5	1
1,3,5-Trimethylbenzene	ND		ug/kg	11	1.1	1
1,2,4-Trimethylbenzene	ND		ug/kg	11	1.9	1
1,4-Dioxane	ND		ug/kg	450	200	1
p-Diethylbenzene	ND		ug/kg	11	1.0	1
p-Ethyltoluene	ND		ug/kg	11	2.2	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	11	1.1	1
Ethyl ether	ND		ug/kg	11	1.9	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	28	8.0	1

## Tentatively Identified Compounds

Total TIC Compounds	211	J	ug/kg			1
Unknown	15.0	J	ug/kg			1
Unknown	15.4	J	ug/kg			1
Unknown Cycloalkane	19.3	J	ug/kg			1
Cyclopentane, Methyl-	25.9	NJ	ug/kg			1
Pentane, 3-methyl-	18.5	NJ	ug/kg			1
Unknown	34.1	J	ug/kg			1
Unknown Cyclohexane	14.3	J	ug/kg			1
Cyclohexane, methyl-	68.0	NJ	ug/kg			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	97		70-130

**Project Name:** 1956 JEROME AVE**Lab Number:** L2248090**Project Number:** 210024**Report Date:** 09/20/22**SAMPLE RESULTS**

Lab ID: L2248090-05  
 Client ID: RDI-SB-18\_0-2\_20220906  
 Sample Location: BRONX NY

Date Collected: 09/06/22 09:30  
 Date Received: 09/06/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8260C  
 Analytical Date: 09/09/22 12:10  
 Analyst: NLK  
 Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	5.7	2.6	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.1	0.26	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.14	1
Dibromochloromethane	ND		ug/kg	1.1	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.30	1
Tetrachloroethene	ND		ug/kg	0.57	0.22	1
Chlorobenzene	ND		ug/kg	0.57	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.5	0.79	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.29	1
1,1,1-Trichloroethane	ND		ug/kg	0.57	0.19	1
Bromodichloromethane	ND		ug/kg	0.57	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.31	1
cis-1,3-Dichloropropene	ND		ug/kg	0.57	0.18	1
1,3-Dichloropropene, Total	ND		ug/kg	0.57	0.18	1
1,1-Dichloropropene	ND		ug/kg	0.57	0.18	1
Bromoform	ND		ug/kg	4.5	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.57	0.19	1
Benzene	ND		ug/kg	0.57	0.19	1
Toluene	ND		ug/kg	1.1	0.62	1
Ethylbenzene	ND		ug/kg	1.1	0.16	1
Chloromethane	ND		ug/kg	4.5	1.0	1
Bromomethane	ND		ug/kg	2.3	0.66	1
Vinyl chloride	ND		ug/kg	1.1	0.38	1
Chloroethane	ND		ug/kg	2.3	0.51	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.27	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.16	1

Project Name: 1956 JEROME AVE

Lab Number: L2248090

Project Number: 210024

Report Date: 09/20/22

## SAMPLE RESULTS

Lab ID: L2248090-05  
 Client ID: RDI-SB-18\_0-2\_20220906  
 Sample Location: BRONX NY

Date Collected: 09/06/22 09:30  
 Date Received: 09/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.57	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.3	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.3	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.23	1
p/m-Xylene	ND		ug/kg	2.3	0.64	1
o-Xylene	ND		ug/kg	1.1	0.33	1
Xylenes, Total	ND		ug/kg	1.1	0.33	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.20	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.16	1
Dibromomethane	ND		ug/kg	2.3	0.27	1
Styrene	ND		ug/kg	1.1	0.22	1
Dichlorodifluoromethane	ND		ug/kg	11	1.0	1
Acetone	ND		ug/kg	11	5.5	1
Carbon disulfide	ND		ug/kg	11	5.2	1
2-Butanone	ND		ug/kg	11	2.5	1
Vinyl acetate	ND		ug/kg	11	2.4	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.3	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.3	0.23	1
2,2-Dichloropropane	ND		ug/kg	2.3	0.23	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.32	1
1,3-Dichloropropane	ND		ug/kg	2.3	0.19	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.57	0.15	1
Bromobenzene	ND		ug/kg	2.3	0.16	1
n-Butylbenzene	ND		ug/kg	1.1	0.19	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.3	0.13	1
o-Chlorotoluene	ND		ug/kg	2.3	0.22	1
p-Chlorotoluene	ND		ug/kg	2.3	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.4	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.5	0.19	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.5	0.74	1
Acrylonitrile	ND		ug/kg	4.5	1.3	1

**Project Name:** 1956 JEROME AVE**Lab Number:** L2248090**Project Number:** 210024**Report Date:** 09/20/22**SAMPLE RESULTS**

Lab ID: L2248090-05  
 Client ID: RDI-SB-18\_0-2\_20220906  
 Sample Location: BRONX NY

Date Collected: 09/06/22 09:30  
 Date Received: 09/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
n-Propylbenzene	ND		ug/kg	1.1	0.19	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.3	0.36	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.3	0.31	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.3	0.22	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.3	0.38	1
1,4-Dioxane	ND		ug/kg	91	40.	1
p-Diethylbenzene	ND		ug/kg	2.3	0.20	1
p-Ethyltoluene	ND		ug/kg	2.3	0.44	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.3	0.22	1
Ethyl ether	ND		ug/kg	2.3	0.39	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.7	1.6	1

**Tentatively Identified Compounds**

No Tentatively Identified Compounds	ND	ug/kg	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	93		70-130

**Project Name:** 1956 JEROME AVE**Lab Number:** L2248090**Project Number:** 210024**Report Date:** 09/20/22**SAMPLE RESULTS**

Lab ID: L2248090-06  
 Client ID: RDI-SB-18\_7-9\_20220906  
 Sample Location: BRONX NY

Date Collected: 09/06/22 09:35  
 Date Received: 09/06/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8260C  
 Analytical Date: 09/13/22 21:43  
 Analyst: AJK  
 Percent Solids: 39%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	24	11.	1
1,1-Dichloroethane	ND		ug/kg	4.8	0.70	1
Chloroform	ND		ug/kg	7.2	0.67	1
Carbon tetrachloride	ND		ug/kg	4.8	1.1	1
1,2-Dichloropropane	ND		ug/kg	4.8	0.60	1
Dibromochloromethane	ND		ug/kg	4.8	0.67	1
1,1,2-Trichloroethane	ND		ug/kg	4.8	1.3	1
Tetrachloroethene	ND		ug/kg	2.4	0.94	1
Chlorobenzene	ND		ug/kg	2.4	0.61	1
Trichlorofluoromethane	ND		ug/kg	19	3.3	1
1,2-Dichloroethane	ND		ug/kg	4.8	1.2	1
1,1,1-Trichloroethane	ND		ug/kg	2.4	0.80	1
Bromodichloromethane	ND		ug/kg	2.4	0.52	1
trans-1,3-Dichloropropene	ND		ug/kg	4.8	1.3	1
cis-1,3-Dichloropropene	ND		ug/kg	2.4	0.76	1
1,3-Dichloropropene, Total	ND		ug/kg	2.4	0.76	1
1,1-Dichloropropene	ND		ug/kg	2.4	0.76	1
Bromoform	ND		ug/kg	19	1.2	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	2.4	0.80	1
Benzene	2.5		ug/kg	2.4	0.80	1
Toluene	ND		ug/kg	4.8	2.6	1
Ethylbenzene	ND		ug/kg	4.8	0.68	1
Chloromethane	ND		ug/kg	19	4.5	1
Bromomethane	ND		ug/kg	9.6	2.8	1
Vinyl chloride	ND		ug/kg	4.8	1.6	1
Chloroethane	ND		ug/kg	9.6	2.2	1
1,1-Dichloroethene	ND		ug/kg	4.8	1.1	1
trans-1,2-Dichloroethene	ND		ug/kg	7.2	0.66	1

Project Name: 1956 JEROME AVE

Lab Number: L2248090

Project Number: 210024

Report Date: 09/20/22

## SAMPLE RESULTS

Lab ID: L2248090-06  
 Client ID: RDI-SB-18\_7-9\_20220906  
 Sample Location: BRONX NY

Date Collected: 09/06/22 09:35  
 Date Received: 09/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	2.4	0.66	1
1,2-Dichlorobenzene	ND		ug/kg	9.6	0.69	1
1,3-Dichlorobenzene	ND		ug/kg	9.6	0.71	1
1,4-Dichlorobenzene	ND		ug/kg	9.6	0.82	1
Methyl tert butyl ether	19		ug/kg	9.6	0.97	1
p/m-Xylene	ND		ug/kg	9.6	2.7	1
o-Xylene	ND		ug/kg	4.8	1.4	1
Xylenes, Total	ND		ug/kg	4.8	1.4	1
cis-1,2-Dichloroethene	ND		ug/kg	4.8	0.84	1
1,2-Dichloroethene, Total	ND		ug/kg	4.8	0.66	1
Dibromomethane	ND		ug/kg	9.6	1.1	1
Styrene	ND		ug/kg	4.8	0.94	1
Dichlorodifluoromethane	ND		ug/kg	48	4.4	1
Acetone	490		ug/kg	48	23.	1
Carbon disulfide	ND		ug/kg	48	22.	1
2-Butanone	180		ug/kg	48	11.	1
Vinyl acetate	ND		ug/kg	48	10.	1
4-Methyl-2-pentanone	ND		ug/kg	48	6.2	1
1,2,3-Trichloropropane	ND		ug/kg	9.6	0.61	1
2-Hexanone	ND		ug/kg	48	5.7	1
Bromochloromethane	ND		ug/kg	9.6	0.99	1
2,2-Dichloropropane	ND		ug/kg	9.6	0.97	1
1,2-Dibromoethane	ND		ug/kg	4.8	1.3	1
1,3-Dichloropropane	ND		ug/kg	9.6	0.80	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	2.4	0.64	1
Bromobenzene	ND		ug/kg	9.6	0.70	1
n-Butylbenzene	ND		ug/kg	4.8	0.80	1
sec-Butylbenzene	ND		ug/kg	4.8	0.70	1
tert-Butylbenzene	ND		ug/kg	9.6	0.57	1
o-Chlorotoluene	ND		ug/kg	9.6	0.92	1
p-Chlorotoluene	ND		ug/kg	9.6	0.52	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	14	4.8	1
Hexachlorobutadiene	ND		ug/kg	19	0.81	1
Isopropylbenzene	ND		ug/kg	4.8	0.52	1
p-Isopropyltoluene	ND		ug/kg	4.8	0.52	1
Naphthalene	ND		ug/kg	19	3.1	1
Acrylonitrile	ND		ug/kg	19	5.5	1



Project Name: 1956 JEROME AVE

Lab Number: L2248090

Project Number: 210024

Report Date: 09/20/22

## SAMPLE RESULTS

Lab ID: L2248090-06  
 Client ID: RDI-SB-18\_7-9\_20220906  
 Sample Location: BRONX NY

Date Collected: 09/06/22 09:35  
 Date Received: 09/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	4.8	0.82	1
1,2,3-Trichlorobenzene	ND		ug/kg	9.6	1.6	1
1,2,4-Trichlorobenzene	ND		ug/kg	9.6	1.3	1
1,3,5-Trimethylbenzene	ND		ug/kg	9.6	0.93	1
1,2,4-Trimethylbenzene	ND		ug/kg	9.6	1.6	1
1,4-Dioxane	ND		ug/kg	380	170	1
p-Diethylbenzene	ND		ug/kg	9.6	0.85	1
p-Ethyltoluene	ND		ug/kg	9.6	1.8	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	9.6	0.92	1
Ethyl ether	ND		ug/kg	9.6	1.6	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	24	6.8	1

## Tentatively Identified Compounds

Total TIC Compounds	1430	J	ug/kg			1
Pentane, 2-methyl-	61.5	NJ	ug/kg			1
Cyclohexane, 1,1-dimethyl-	26.9	NJ	ug/kg			1
Unknown Cyclopentane	24.9	J	ug/kg			1
Unknown Cyclopentane	78.9	J	ug/kg			1
Cyclohexane, methyl-	500	NJ	ug/kg			1
Cyclopentane, Methyl-	159	NJ	ug/kg			1
Cyclohexane	178	NJ	ug/kg			1
Pentane	16.4	NJ	ug/kg			1
Unknown Cyclopentane	123	J	ug/kg			1
Unknown Cyclohexane	16.7	J	ug/kg			1
Unknown Cyclohexane	63.0	J	ug/kg			1
Unknown Cyclopentane	27.6	J	ug/kg			1
Pentane, 2,3-dimethyl-	50.0	NJ	ug/kg			1
Pentane, 3-methyl-	75.7	NJ	ug/kg			1
Hexane, 3-methyl-	25.6	NJ	ug/kg			1

**Project Name:** 1956 JEROME AVE**Lab Number:** L2248090**Project Number:** 210024**Report Date:** 09/20/22**SAMPLE RESULTS**

Lab ID: L2248090-06  
 Client ID: RDI-SB-18\_7-9\_20220906  
 Sample Location: BRONX NY

Date Collected: 09/06/22 09:35  
 Date Received: 09/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by EPA 5035 Low - Westborough Lab						
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	88		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	85		70-130

**Project Name:** 1956 JEROME AVE**Lab Number:** L2248090**Project Number:** 210024**Report Date:** 09/20/22**SAMPLE RESULTS**

Lab ID: L2248090-07  
 Client ID: RDI-SB-19\_0-2\_20220906  
 Sample Location: BRONX NY

Date Collected: 09/06/22 10:00  
 Date Received: 09/06/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8260C  
 Analytical Date: 09/09/22 13:03  
 Analyst: NLK  
 Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	5.0	2.3	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.14	1
Chloroform	ND		ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	1.0	0.23	1
1,2-Dichloropropane	ND		ug/kg	1.0	0.12	1
Dibromochloromethane	ND		ug/kg	1.0	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27	1
Tetrachloroethene	ND		ug/kg	0.50	0.20	1
Chlorobenzene	ND		ug/kg	0.50	0.13	1
Trichlorofluoromethane	ND		ug/kg	4.0	0.70	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.26	1
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17	1
Bromodichloromethane	ND		ug/kg	0.50	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27	1
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16	1
1,1-Dichloropropene	ND		ug/kg	0.50	0.16	1
Bromoform	ND		ug/kg	4.0	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17	1
Benzene	ND		ug/kg	0.50	0.17	1
Toluene	ND		ug/kg	1.0	0.54	1
Ethylbenzene	ND		ug/kg	1.0	0.14	1
Chloromethane	ND		ug/kg	4.0	0.93	1
Bromomethane	ND		ug/kg	2.0	0.58	1
Vinyl chloride	ND		ug/kg	1.0	0.34	1
Chloroethane	ND		ug/kg	2.0	0.45	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.24	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14	1

Project Name: 1956 JEROME AVE

Lab Number: L2248090

Project Number: 210024

Report Date: 09/20/22

## SAMPLE RESULTS

Lab ID: L2248090-07  
 Client ID: RDI-SB-19\_0-2\_20220906  
 Sample Location: BRONX NY

Date Collected: 09/06/22 10:00  
 Date Received: 09/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.50	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.56	1
o-Xylene	ND		ug/kg	1.0	0.29	1
Xylenes, Total	ND		ug/kg	1.0	0.29	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Dibromomethane	ND		ug/kg	2.0	0.24	1
Styrene	ND		ug/kg	1.0	0.20	1
Dichlorodifluoromethane	ND		ug/kg	10	0.92	1
Acetone	ND		ug/kg	10	4.8	1
Carbon disulfide	ND		ug/kg	10	4.6	1
2-Butanone	ND		ug/kg	10	2.2	1
Vinyl acetate	ND		ug/kg	10	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.3	1
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.20	1
2,2-Dichloropropane	ND		ug/kg	2.0	0.20	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.28	1
1,3-Dichloropropane	ND		ug/kg	2.0	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13	1
Bromobenzene	ND		ug/kg	2.0	0.14	1
n-Butylbenzene	ND		ug/kg	1.0	0.17	1
sec-Butylbenzene	ND		ug/kg	1.0	0.15	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
o-Chlorotoluene	ND		ug/kg	2.0	0.19	1
p-Chlorotoluene	ND		ug/kg	2.0	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0	1
Hexachlorobutadiene	ND		ug/kg	4.0	0.17	1
Isopropylbenzene	ND		ug/kg	1.0	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.11	1
Naphthalene	ND		ug/kg	4.0	0.65	1
Acrylonitrile	ND		ug/kg	4.0	1.2	1

**Project Name:** 1956 JEROME AVE**Lab Number:** L2248090**Project Number:** 210024**Report Date:** 09/20/22**SAMPLE RESULTS**

Lab ID: L2248090-07  
 Client ID: RDI-SB-19\_0-2\_20220906  
 Sample Location: BRONX NY

Date Collected: 09/06/22 10:00  
 Date Received: 09/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
n-Propylbenzene	ND		ug/kg	1.0	0.17	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.34	1
1,4-Dioxane	ND		ug/kg	80	35.	1
p-Diethylbenzene	ND		ug/kg	2.0	0.18	1
p-Ethyltoluene	ND		ug/kg	2.0	0.38	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19	1
Ethyl ether	ND		ug/kg	2.0	0.34	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4	1

**Tentatively Identified Compounds**

No Tentatively Identified Compounds	ND	ug/kg	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	96		70-130

**Project Name:** 1956 JEROME AVE  
**Project Number:** 210024

**Lab Number:** L2248090  
**Report Date:** 09/20/22

**SAMPLE RESULTS**

Lab ID: L2248090-08  
 Client ID: RDI-SB-19\_8-10\_20220906  
 Sample Location: BRONX NY

Date Collected: 09/06/22 10:05  
 Date Received: 09/06/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8260C  
 Analytical Date: 09/13/22 22:09  
 Analyst: AJK  
 Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 High - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	290	130	1
1,1-Dichloroethane	ND		ug/kg	58	8.3	1
Chloroform	ND		ug/kg	86	8.0	1
Carbon tetrachloride	ND		ug/kg	58	13.	1
1,2-Dichloropropane	ND		ug/kg	58	7.2	1
Dibromochloromethane	ND		ug/kg	58	8.0	1
1,1,2-Trichloroethane	ND		ug/kg	58	15.	1
Tetrachloroethene	ND		ug/kg	29	11.	1
Chlorobenzene	ND		ug/kg	29	7.3	1
Trichlorofluoromethane	ND		ug/kg	230	40.	1
1,2-Dichloroethane	ND		ug/kg	58	15.	1
1,1,1-Trichloroethane	ND		ug/kg	29	9.6	1
Bromodichloromethane	ND		ug/kg	29	6.3	1
trans-1,3-Dichloropropene	ND		ug/kg	58	16.	1
cis-1,3-Dichloropropene	ND		ug/kg	29	9.1	1
1,3-Dichloropropene, Total	ND		ug/kg	29	9.1	1
1,1-Dichloropropene	ND		ug/kg	29	9.1	1
Bromoform	ND		ug/kg	230	14.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	29	9.6	1
Benzene	ND		ug/kg	29	9.6	1
Toluene	93		ug/kg	58	31.	1
Ethylbenzene	9600		ug/kg	58	8.1	1
Chloromethane	ND		ug/kg	230	54.	1
Bromomethane	ND		ug/kg	120	33.	1
Vinyl chloride	ND		ug/kg	58	19.	1
Chloroethane	ND		ug/kg	120	26.	1
1,1-Dichloroethene	ND		ug/kg	58	14.	1
trans-1,2-Dichloroethene	ND		ug/kg	86	7.9	1

Project Name: 1956 JEROME AVE

Lab Number: L2248090

Project Number: 210024

Report Date: 09/20/22

## SAMPLE RESULTS

Lab ID: L2248090-08  
 Client ID: RDI-SB-19\_8-10\_20220906  
 Sample Location: BRONX NY

Date Collected: 09/06/22 10:05  
 Date Received: 09/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	29	7.9	1
1,2-Dichlorobenzene	ND		ug/kg	120	8.3	1
1,3-Dichlorobenzene	ND		ug/kg	120	8.5	1
1,4-Dichlorobenzene	ND		ug/kg	120	9.8	1
Methyl tert butyl ether	ND		ug/kg	120	12.	1
p/m-Xylene	22000		ug/kg	120	32.	1
o-Xylene	800		ug/kg	58	17.	1
Xylenes, Total	23000		ug/kg	58	17.	1
cis-1,2-Dichloroethene	ND		ug/kg	58	10.	1
1,2-Dichloroethene, Total	ND		ug/kg	58	7.9	1
Dibromomethane	ND		ug/kg	120	14.	1
Styrene	ND		ug/kg	58	11.	1
Dichlorodifluoromethane	ND		ug/kg	580	53.	1
Acetone	ND		ug/kg	580	280	1
Carbon disulfide	ND		ug/kg	580	260	1
2-Butanone	ND		ug/kg	580	130	1
Vinyl acetate	ND		ug/kg	580	120	1
4-Methyl-2-pentanone	ND		ug/kg	580	74.	1
1,2,3-Trichloropropane	ND		ug/kg	120	7.3	1
2-Hexanone	ND		ug/kg	580	68.	1
Bromochloromethane	ND		ug/kg	120	12.	1
2,2-Dichloropropane	ND		ug/kg	120	12.	1
1,2-Dibromoethane	ND		ug/kg	58	16.	1
1,3-Dichloropropane	ND		ug/kg	120	9.6	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	29	7.6	1
Bromobenzene	ND		ug/kg	120	8.3	1
n-Butylbenzene	2200		ug/kg	58	9.6	1
sec-Butylbenzene	1200		ug/kg	58	8.4	1
tert-Butylbenzene	130		ug/kg	120	6.8	1
o-Chlorotoluene	ND		ug/kg	120	11.	1
p-Chlorotoluene	ND		ug/kg	120	6.2	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	170	57.	1
Hexachlorobutadiene	ND		ug/kg	230	9.7	1
Isopropylbenzene	3600		ug/kg	58	6.3	1
p-Isopropyltoluene	1600		ug/kg	58	6.3	1
Naphthalene	4700		ug/kg	230	37.	1
Acrylonitrile	ND		ug/kg	230	66.	1

Project Name: 1956 JEROME AVE

Lab Number: L2248090

Project Number: 210024

Report Date: 09/20/22

## SAMPLE RESULTS

Lab ID: L2248090-08  
 Client ID: RDI-SB-19\_8-10\_20220906  
 Sample Location: BRONX NY

Date Collected: 09/06/22 10:05  
 Date Received: 09/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 High - Westborough Lab</b>						
n-Propylbenzene	7100		ug/kg	58	9.8	1
1,2,3-Trichlorobenzene	ND		ug/kg	120	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	120	16.	1
1,3,5-Trimethylbenzene	14000		ug/kg	120	11.	1
1,2,4-Trimethylbenzene	16000		ug/kg	120	19.	1
1,4-Dioxane	ND		ug/kg	4600	2000	1
p-Diethylbenzene	1700		ug/kg	120	10.	1
p-Ethyltoluene	9700		ug/kg	120	22.	1
1,2,4,5-Tetramethylbenzene	4900		ug/kg	120	11.	1
Ethyl ether	ND		ug/kg	120	20.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	290	82.	1

## Tentatively Identified Compounds

Total TIC Compounds	110000	J	ug/kg			1
Cyclopentane, 1,2-dimethyl-	4060	NJ	ug/kg			1
Octane	14400	NJ	ug/kg			1
Unknown	6410	J	ug/kg			1
Cyclohexane, methyl-	19500	NJ	ug/kg			1
Pentane, 2-methyl-	7680	NJ	ug/kg			1
Unknown Cycloalkane	3760	J	ug/kg			1
Unknown Alkane	10900	J	ug/kg			1
Unknown Cyclopentane	2580	J	ug/kg			1
Unknown Cyclopentane	3070	J	ug/kg			1
Unknown	9640	J	ug/kg			1
Unknown Cyclohexane	10900	J	ug/kg			1
Pentane, 2,3-dimethyl-	2260	NJ	ug/kg			1
Pentane, 3-methyl-	3880	NJ	ug/kg			1
Cyclopentane, Methyl-	5760	NJ	ug/kg			1
Hexane, 3-methyl-	5140	NJ	ug/kg			1



**Project Name:** 1956 JEROME AVE**Lab Number:** L2248090**Project Number:** 210024**Report Date:** 09/20/22**SAMPLE RESULTS**

Lab ID: L2248090-08  
 Client ID: RDI-SB-19\_8-10\_20220906  
 Sample Location: BRONX NY

Date Collected: 09/06/22 10:05  
 Date Received: 09/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by EPA 5035 High - Westborough Lab						
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	185	Q	70-130
4-Bromofluorobenzene	130		70-130
Dibromofluoromethane	46	Q	70-130

**Project Name:** 1956 JEROME AVE**Lab Number:** L2248090**Project Number:** 210024**Report Date:** 09/20/22**SAMPLE RESULTS**

Lab ID: L2248090-09  
 Client ID: RDI-SB-DUP-01\_20220906  
 Sample Location: BRONX NY

Date Collected: 09/06/22 08:10  
 Date Received: 09/06/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8260C  
 Analytical Date: 09/09/22 13:55  
 Analyst: NLK  
 Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	5.1	2.3	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.15	1
Chloroform	ND		ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	1.0	0.24	1
1,2-Dichloropropane	ND		ug/kg	1.0	0.13	1
Dibromochloromethane	ND		ug/kg	1.0	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27	1
Tetrachloroethene	ND		ug/kg	0.51	0.20	1
Chlorobenzene	ND		ug/kg	0.51	0.13	1
Trichlorofluoromethane	ND		ug/kg	4.1	0.71	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.26	1
1,1,1-Trichloroethane	ND		ug/kg	0.51	0.17	1
Bromodichloromethane	ND		ug/kg	0.51	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.28	1
cis-1,3-Dichloropropene	ND		ug/kg	0.51	0.16	1
1,3-Dichloropropene, Total	ND		ug/kg	0.51	0.16	1
1,1-Dichloropropene	ND		ug/kg	0.51	0.16	1
Bromoform	ND		ug/kg	4.1	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.51	0.17	1
Benzene	ND		ug/kg	0.51	0.17	1
Toluene	ND		ug/kg	1.0	0.55	1
Ethylbenzene	2.3		ug/kg	1.0	0.14	1
Chloromethane	ND		ug/kg	4.1	0.95	1
Bromomethane	ND		ug/kg	2.0	0.59	1
Vinyl chloride	ND		ug/kg	1.0	0.34	1
Chloroethane	ND		ug/kg	2.0	0.46	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.24	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14	1

Project Name: 1956 JEROME AVE

Lab Number: L2248090

Project Number: 210024

Report Date: 09/20/22

## SAMPLE RESULTS

Lab ID: L2248090-09  
 Client ID: RDI-SB-DUP-01\_20220906  
 Sample Location: BRONX NY

Date Collected: 09/06/22 08:10  
 Date Received: 09/06/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.51	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	12		ug/kg	2.0	0.57	1
o-Xylene	4.9		ug/kg	1.0	0.30	1
Xylenes, Total	17		ug/kg	1.0	0.30	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Dibromomethane	ND		ug/kg	2.0	0.24	1
Styrene	ND		ug/kg	1.0	0.20	1
Dichlorodifluoromethane	ND		ug/kg	10	0.94	1
Acetone	ND		ug/kg	10	4.9	1
Carbon disulfide	ND		ug/kg	10	4.6	1
2-Butanone	ND		ug/kg	10	2.3	1
Vinyl acetate	ND		ug/kg	10	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.3	1
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.21	1
2,2-Dichloropropane	ND		ug/kg	2.0	0.21	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.28	1
1,3-Dichloropropane	ND		ug/kg	2.0	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.51	0.13	1
Bromobenzene	ND		ug/kg	2.0	0.15	1
n-Butylbenzene	ND		ug/kg	1.0	0.17	1
sec-Butylbenzene	ND		ug/kg	1.0	0.15	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
o-Chlorotoluene	ND		ug/kg	2.0	0.20	1
p-Chlorotoluene	ND		ug/kg	2.0	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.1	1.0	1
Hexachlorobutadiene	ND		ug/kg	4.1	0.17	1
Isopropylbenzene	ND		ug/kg	1.0	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.11	1
Naphthalene	ND		ug/kg	4.1	0.66	1
Acrylonitrile	ND		ug/kg	4.1	1.2	1

**Project Name:** 1956 JEROME AVE  
**Project Number:** 210024

**Lab Number:** L2248090  
**Report Date:** 09/20/22

**SAMPLE RESULTS**

**Lab ID:** L2248090-09  
**Client ID:** RDI-SB-DUP-01\_20220906  
**Sample Location:** BRONX NY

**Date Collected:** 09/06/22 08:10  
**Date Received:** 09/06/22  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.0	0.17	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.33	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.28	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.20	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.34	1
1,4-Dioxane	ND		ug/kg	82	36.	1
p-Diethylbenzene	ND		ug/kg	2.0	0.18	1
p-Ethyltoluene	ND		ug/kg	2.0	0.39	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.20	1
Ethyl ether	ND		ug/kg	2.0	0.35	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.1	1.4	1

## Tentatively Identified Compounds

Total TIC Compounds	5.72	J	ug/kg			1
Unknown	2.75	J	ug/kg			1
Butane, 2-Methyl-	2.97	NJ	ug/kg			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	99		70-130

**Project Name:** 1956 JEROME AVE  
**Project Number:** 210024

**Lab Number:** L2248090  
**Report Date:** 09/20/22

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

Analytical Method: 1,8260C  
Analytical Date: 09/09/22 09:07  
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-05,07,09 Batch: WG1686942-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

**Project Name:** 1956 JEROME AVE  
**Project Number:** 210024

**Lab Number:** L2248090  
**Report Date:** 09/20/22

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

Analytical Method: 1,8260C  
Analytical Date: 09/09/22 09:07  
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-05,07,09 Batch: WG1686942-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

**Project Name:** 1956 JEROME AVE  
**Project Number:** 210024

**Lab Number:** L2248090  
**Report Date:** 09/20/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C  
Analytical Date: 09/09/22 09:07  
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-05,07,09 Batch: WG1686942-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	0.38	J	ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	0.30	J	ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	80	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

#### Tentatively Identified Compounds

No Tentatively Identified Compounds ND ug/kg

**Project Name:** 1956 JEROME AVE  
**Project Number:** 210024

**Lab Number:** L2248090  
**Report Date:** 09/20/22

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

Analytical Method: 1,8260C  
Analytical Date: 09/09/22 09:07  
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-05,07,09 Batch: WG1686942-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	93		70-130



**Project Name:** 1956 JEROME AVE  
**Project Number:** 210024

**Lab Number:** L2248090  
**Report Date:** 09/20/22

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

Analytical Method: 1,8260C  
Analytical Date: 09/13/22 17:22  
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 06 Batch: WG1687191-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

**Project Name:** 1956 JEROME AVE  
**Project Number:** 210024

**Lab Number:** L2248090  
**Report Date:** 09/20/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C  
Analytical Date: 09/13/22 17:22  
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 06 Batch: WG1687191-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

**Project Name:** 1956 JEROME AVE  
**Project Number:** 210024

**Lab Number:** L2248090  
**Report Date:** 09/20/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C  
Analytical Date: 09/13/22 17:22  
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 06 Batch: WG1687191-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	80	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

#### Tentatively Identified Compounds

No Tentatively Identified Compounds      ND      ug/kg

**Project Name:** 1956 JEROME AVE  
**Project Number:** 210024

**Lab Number:** L2248090  
**Report Date:** 09/20/22

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

Analytical Method: 1,8260C  
Analytical Date: 09/13/22 17:22  
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 06 Batch: WG1687191-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	93		70-130

**Project Name:** 1956 JEROME AVE  
**Project Number:** 210024

**Lab Number:** L2248090  
**Report Date:** 09/20/22

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

Analytical Method: 1,8260C  
Analytical Date: 09/13/22 17:22  
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 08 Batch: WG1687366-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	ND		ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
1,3-Dichloropropene, Total	ND		ug/kg	25	7.9
1,1-Dichloropropene	ND		ug/kg	25	8.0
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	ND		ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8

**Project Name:** 1956 JEROME AVE  
**Project Number:** 210024

**Lab Number:** L2248090  
**Report Date:** 09/20/22

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

Analytical Method: 1,8260C  
Analytical Date: 09/13/22 17:22  
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 08 Batch: WG1687366-5					
1,2-Dichlorobenzene	ND		ug/kg	100	7.2
1,3-Dichlorobenzene	ND		ug/kg	100	7.4
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
Xylenes, Total	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
1,2-Dichloroethene, Total	ND		ug/kg	50	6.8
Dibromomethane	ND		ug/kg	100	12.
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
Vinyl acetate	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
1,2,3-Trichloropropane	ND		ug/kg	100	6.4
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
2,2-Dichloropropane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
1,3-Dichloropropane	ND		ug/kg	100	8.4
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	6.6
Bromobenzene	ND		ug/kg	100	7.2
n-Butylbenzene	ND		ug/kg	50	8.4
sec-Butylbenzene	ND		ug/kg	50	7.3
tert-Butylbenzene	ND		ug/kg	100	5.9
o-Chlorotoluene	ND		ug/kg	100	9.6

**Project Name:** 1956 JEROME AVE  
**Project Number:** 210024

**Lab Number:** L2248090  
**Report Date:** 09/20/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C  
Analytical Date: 09/13/22 17:22  
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 08 Batch: WG1687366-5					
p-Chlorotoluene	ND		ug/kg	100	5.4
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Hexachlorobutadiene	ND		ug/kg	200	8.4
Isopropylbenzene	ND		ug/kg	50	5.4
p-Isopropyltoluene	ND		ug/kg	50	5.4
Naphthalene	ND		ug/kg	200	32.
Acrylonitrile	ND		ug/kg	200	58.
n-Propylbenzene	ND		ug/kg	50	8.6
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.
1,3,5-Trimethylbenzene	ND		ug/kg	100	9.6
1,2,4-Trimethylbenzene	ND		ug/kg	100	17.
1,4-Dioxane	ND		ug/kg	4000	1800
p-Diethylbenzene	ND		ug/kg	100	8.8
p-Ethyltoluene	ND		ug/kg	100	19.
1,2,4,5-Tetramethylbenzene	ND		ug/kg	100	9.6
Ethyl ether	ND		ug/kg	100	17.
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	71.

#### Tentatively Identified Compounds

No Tentatively Identified Compounds      ND      ug/kg

**Project Name:** 1956 JEROME AVE  
**Project Number:** 210024

**Lab Number:** L2248090  
**Report Date:** 09/20/22

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

Analytical Method: 1,8260C  
Analytical Date: 09/13/22 17:22  
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 08 Batch: WG1687366-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	93		70-130



## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 1956 JEROME AVE

Lab Number: L2248090

Project Number: 210024

Report Date: 09/20/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-05,07,09 Batch: WG1686942-3 WG1686942-4								
Methylene chloride	82		81		70-130	1		30
1,1-Dichloroethane	86		85		70-130	1		30
Chloroform	70		70		70-130	0		30
Carbon tetrachloride	82		81		70-130	1		30
1,2-Dichloropropane	100		98		70-130	2		30
Dibromochloromethane	84		84		70-130	0		30
1,1,2-Trichloroethane	82		82		70-130	0		30
Tetrachloroethene	95		94		70-130	1		30
Chlorobenzene	90		90		70-130	0		30
Trichlorofluoromethane	68	Q	67	Q	70-139	1		30
1,2-Dichloroethane	80		78		70-130	3		30
1,1,1-Trichloroethane	81		80		70-130	1		30
Bromodichloromethane	82		81		70-130	1		30
trans-1,3-Dichloropropene	82		81		70-130	1		30
cis-1,3-Dichloropropene	85		84		70-130	1		30
1,1-Dichloropropene	87		86		70-130	1		30
Bromoform	84		82		70-130	2		30
1,1,2,2-Tetrachloroethane	98		97		70-130	1		30
Benzene	91		89		70-130	2		30
Toluene	93		93		70-130	0		30
Ethylbenzene	91		91		70-130	0		30
Chloromethane	90		88		52-130	2		30
Bromomethane	76		75		57-147	1		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 1956 JEROME AVE

Lab Number: L2248090

Project Number: 210024

Report Date: 09/20/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-05,07,09 Batch: WG1686942-3 WG1686942-4								
Vinyl chloride	82		80		67-130	2		30
Chloroethane	82		82		50-151	0		30
1,1-Dichloroethene	76		74		65-135	3		30
trans-1,2-Dichloroethene	80		78		70-130	3		30
Trichloroethene	93		92		70-130	1		30
1,2-Dichlorobenzene	88		88		70-130	0		30
1,3-Dichlorobenzene	91		91		70-130	0		30
1,4-Dichlorobenzene	90		89		70-130	1		30
Methyl tert butyl ether	91		90		66-130	1		30
p/m-Xylene	94		94		70-130	0		30
o-Xylene	90		91		70-130	1		30
cis-1,2-Dichloroethene	75		73		70-130	3		30
Dibromomethane	73		72		70-130	1		30
Styrene	92		92		70-130	0		30
Dichlorodifluoromethane	40		40		30-146	0		30
Acetone	78		73		54-140	7		30
Carbon disulfide	83		81		59-130	2		30
2-Butanone	78		76		70-130	3		30
Vinyl acetate	102		100		70-130	2		30
4-Methyl-2-pentanone	112		111		70-130	1		30
1,2,3-Trichloropropane	92		91		68-130	1		30
2-Hexanone	104		100		70-130	4		30
Bromochloromethane	74		73		70-130	1		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 1956 JEROME AVE

Lab Number: L2248090

Project Number: 210024

Report Date: 09/20/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-05,07,09 Batch: WG1686942-3 WG1686942-4								
2,2-Dichloropropane	81		80		70-130	1		30
1,2-Dibromoethane	80		79		70-130	1		30
1,3-Dichloropropane	93		93		69-130	0		30
1,1,1,2-Tetrachloroethane	87		87		70-130	0		30
Bromobenzene	92		91		70-130	1		30
n-Butylbenzene	96		97		70-130	1		30
sec-Butylbenzene	97		96		70-130	1		30
tert-Butylbenzene	98		98		70-130	0		30
o-Chlorotoluene	98		97		70-130	1		30
p-Chlorotoluene	95		94		70-130	1		30
1,2-Dibromo-3-chloropropane	87		86		68-130	1		30
Hexachlorobutadiene	89		88		67-130	1		30
Isopropylbenzene	102		101		70-130	1		30
p-Isopropyltoluene	99		98		70-130	1		30
Naphthalene	90		90		70-130	0		30
Acrylonitrile	97		93		70-130	4		30
n-Propylbenzene	101		100		70-130	1		30
1,2,3-Trichlorobenzene	87		87		70-130	0		30
1,2,4-Trichlorobenzene	90		89		70-130	1		30
1,3,5-Trimethylbenzene	95		94		70-130	1		30
1,2,4-Trimethylbenzene	92		92		70-130	0		30
1,4-Dioxane	91		87		65-136	4		30
p-Diethylbenzene	98		97		70-130	1		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 1956 JEROME AVE

Project Number: 210024

Lab Number: L2248090

Report Date: 09/20/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-05,07,09 Batch: WG1686942-3 WG1686942-4								
p-Ethyltoluene	100		99		70-130	1		30
1,2,4,5-Tetramethylbenzene	90		90		70-130	0		30
Ethyl ether	82		83		67-130	1		30
trans-1,4-Dichloro-2-butene	111		109		70-130	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	82		81		70-130
Toluene-d8	101		103		70-130
4-Bromofluorobenzene	107		107		70-130
Dibromofluoromethane	78		77		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 1956 JEROME AVE

Lab Number: L2248090

Project Number: 210024

Report Date: 09/20/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 06 Batch: WG1687191-3 WG1687191-4								
Methylene chloride	79		82		70-130	4		30
1,1-Dichloroethane	85		88		70-130	3		30
Chloroform	70		73		70-130	4		30
Carbon tetrachloride	89		91		70-130	2		30
1,2-Dichloropropane	102		103		70-130	1		30
Dibromochloromethane	87		88		70-130	1		30
1,1,2-Trichloroethane	86		85		70-130	1		30
Tetrachloroethene	96		97		70-130	1		30
Chlorobenzene	90		91		70-130	1		30
Trichlorofluoromethane	69	Q	72		70-139	4		30
1,2-Dichloroethane	82		84		70-130	2		30
1,1,1-Trichloroethane	83		86		70-130	4		30
Bromodichloromethane	84		86		70-130	2		30
trans-1,3-Dichloropropene	85		84		70-130	1		30
cis-1,3-Dichloropropene	87		88		70-130	1		30
1,1-Dichloropropene	91		93		70-130	2		30
Bromoform	87		88		70-130	1		30
1,1,2,2-Tetrachloroethane	100		101		70-130	1		30
Benzene	91		91		70-130	0		30
Toluene	92		94		70-130	2		30
Ethylbenzene	90		92		70-130	2		30
Chloromethane	78		81		52-130	4		30
Bromomethane	70		71		57-147	1		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 1956 JEROME AVE

Lab Number: L2248090

Project Number: 210024

Report Date: 09/20/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 06 Batch: WG1687191-3 WG1687191-4								
Vinyl chloride	74		76		67-130	3		30
Chloroethane	76		79		50-151	4		30
1,1-Dichloroethene	75		77		65-135	3		30
trans-1,2-Dichloroethene	77		80		70-130	4		30
Trichloroethene	94		96		70-130	2		30
1,2-Dichlorobenzene	88		89		70-130	1		30
1,3-Dichlorobenzene	90		92		70-130	2		30
1,4-Dichlorobenzene	88		90		70-130	2		30
Methyl tert butyl ether	92		91		66-130	1		30
p/m-Xylene	94		96		70-130	2		30
o-Xylene	90		91		70-130	1		30
cis-1,2-Dichloroethene	75		76		70-130	1		30
Dibromomethane	76		76		70-130	0		30
Styrene	91		92		70-130	1		30
Dichlorodifluoromethane	53		56		30-146	6		30
Acetone	98		88		54-140	11		30
Carbon disulfide	74		76		59-130	3		30
2-Butanone	87		82		70-130	6		30
Vinyl acetate	107		103		70-130	4		30
4-Methyl-2-pentanone	116		113		70-130	3		30
1,2,3-Trichloropropane	94		95		68-130	1		30
2-Hexanone	111		110		70-130	1		30
Bromochloromethane	75		78		70-130	4		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 1956 JEROME AVE

Lab Number: L2248090

Project Number: 210024

Report Date: 09/20/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 06 Batch: WG1687191-3 WG1687191-4								
2,2-Dichloropropane	83		83		70-130	0		30
1,2-Dibromoethane	83		82		70-130	1		30
1,3-Dichloropropane	95		95		69-130	0		30
1,1,1,2-Tetrachloroethane	89		88		70-130	1		30
Bromobenzene	92		93		70-130	1		30
n-Butylbenzene	95		97		70-130	2		30
sec-Butylbenzene	97		100		70-130	3		30
tert-Butylbenzene	98		100		70-130	2		30
o-Chlorotoluene	95		98		70-130	3		30
p-Chlorotoluene	93		95		70-130	2		30
1,2-Dibromo-3-chloropropane	90		91		68-130	1		30
Hexachlorobutadiene	88		91		67-130	3		30
Isopropylbenzene	100		103		70-130	3		30
p-Isopropyltoluene	98		101		70-130	3		30
Naphthalene	90		92		70-130	2		30
Acrylonitrile	101		101		70-130	0		30
n-Propylbenzene	100		103		70-130	3		30
1,2,3-Trichlorobenzene	84		86		70-130	2		30
1,2,4-Trichlorobenzene	87		89		70-130	2		30
1,3,5-Trimethylbenzene	92		94		70-130	2		30
1,2,4-Trimethylbenzene	90		93		70-130	3		30
1,4-Dioxane	89		91		65-136	2		30
p-Diethylbenzene	97		99		70-130	2		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 1956 JEROME AVE

Project Number: 210024

Lab Number: L2248090

Report Date: 09/20/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 06 Batch: WG1687191-3 WG1687191-4								
p-Ethyltoluene	99		102		70-130	3		30
1,2,4,5-Tetramethylbenzene	88		91		70-130	3		30
Ethyl ether	81		83		67-130	2		30
trans-1,4-Dichloro-2-butene	114		113		70-130	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	84		84		70-130
Toluene-d8	101		101		70-130
4-Bromofluorobenzene	107		108		70-130
Dibromofluoromethane	79		79		70-130



## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 1956 JEROME AVE

Lab Number: L2248090

Project Number: 210024

Report Date: 09/20/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 08 Batch: WG1687366-3 WG1687366-4								
Methylene chloride	79		82		70-130	4		30
1,1-Dichloroethane	85		88		70-130	3		30
Chloroform	70		73		70-130	4		30
Carbon tetrachloride	89		91		70-130	2		30
1,2-Dichloropropane	102		103		70-130	1		30
Dibromochloromethane	87		88		70-130	1		30
1,1,2-Trichloroethane	86		85		70-130	1		30
Tetrachloroethene	96		97		70-130	1		30
Chlorobenzene	90		91		70-130	1		30
Trichlorofluoromethane	69	Q	72		70-139	4		30
1,2-Dichloroethane	82		84		70-130	2		30
1,1,1-Trichloroethane	83		86		70-130	4		30
Bromodichloromethane	84		86		70-130	2		30
trans-1,3-Dichloropropene	85		84		70-130	1		30
cis-1,3-Dichloropropene	87		88		70-130	1		30
1,1-Dichloropropene	91		93		70-130	2		30
Bromoform	87		88		70-130	1		30
1,1,2,2-Tetrachloroethane	100		101		70-130	1		30
Benzene	91		91		70-130	0		30
Toluene	92		94		70-130	2		30
Ethylbenzene	90		92		70-130	2		30
Chloromethane	78		81		52-130	4		30
Bromomethane	70		71		57-147	1		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 1956 JEROME AVE

Lab Number: L2248090

Project Number: 210024

Report Date: 09/20/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 08 Batch: WG1687366-3 WG1687366-4								
Vinyl chloride	74		76		67-130	3		30
Chloroethane	76		79		50-151	4		30
1,1-Dichloroethene	75		77		65-135	3		30
trans-1,2-Dichloroethene	77		80		70-130	4		30
Trichloroethene	94		96		70-130	2		30
1,2-Dichlorobenzene	88		89		70-130	1		30
1,3-Dichlorobenzene	90		92		70-130	2		30
1,4-Dichlorobenzene	88		90		70-130	2		30
Methyl tert butyl ether	92		91		66-130	1		30
p/m-Xylene	94		96		70-130	2		30
o-Xylene	90		91		70-130	1		30
cis-1,2-Dichloroethene	75		76		70-130	1		30
Dibromomethane	76		76		70-130	0		30
Styrene	91		92		70-130	1		30
Dichlorodifluoromethane	53		56		30-146	6		30
Acetone	98		88		54-140	11		30
Carbon disulfide	74		76		59-130	3		30
2-Butanone	87		82		70-130	6		30
Vinyl acetate	107		103		70-130	4		30
4-Methyl-2-pentanone	116		113		70-130	3		30
1,2,3-Trichloropropane	94		95		68-130	1		30
2-Hexanone	111		110		70-130	1		30
Bromochloromethane	75		78		70-130	4		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 1956 JEROME AVE

Lab Number: L2248090

Project Number: 210024

Report Date: 09/20/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 08 Batch: WG1687366-3 WG1687366-4								
2,2-Dichloropropane	83		83		70-130	0		30
1,2-Dibromoethane	83		82		70-130	1		30
1,3-Dichloropropane	95		95		69-130	0		30
1,1,1,2-Tetrachloroethane	89		88		70-130	1		30
Bromobenzene	92		93		70-130	1		30
n-Butylbenzene	95		97		70-130	2		30
sec-Butylbenzene	97		100		70-130	3		30
tert-Butylbenzene	98		100		70-130	2		30
o-Chlorotoluene	95		98		70-130	3		30
p-Chlorotoluene	93		95		70-130	2		30
1,2-Dibromo-3-chloropropane	90		91		68-130	1		30
Hexachlorobutadiene	88		91		67-130	3		30
Isopropylbenzene	100		103		70-130	3		30
p-Isopropyltoluene	98		101		70-130	3		30
Naphthalene	90		92		70-130	2		30
Acrylonitrile	101		101		70-130	0		30
n-Propylbenzene	100		103		70-130	3		30
1,2,3-Trichlorobenzene	84		86		70-130	2		30
1,2,4-Trichlorobenzene	87		89		70-130	2		30
1,3,5-Trimethylbenzene	92		94		70-130	2		30
1,2,4-Trimethylbenzene	90		93		70-130	3		30
1,4-Dioxane	89		91		65-136	2		30
p-Diethylbenzene	97		99		70-130	2		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 1956 JEROME AVE

Project Number: 210024

Lab Number: L2248090

Report Date: 09/20/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 08 Batch: WG1687366-3 WG1687366-4								
p-Ethyltoluene	99		102		70-130	3		30
1,2,4,5-Tetramethylbenzene	88		91		70-130	3		30
Ethyl ether	81		83		67-130	2		30
trans-1,4-Dichloro-2-butene	114		113		70-130	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	84		84		70-130
Toluene-d8	101		101		70-130
4-Bromofluorobenzene	107		108		70-130
Dibromofluoromethane	79		79		70-130

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** 1956 JEROME AVE

**Lab Number:** L2248090

**Project Number:** 210024

**Report Date:** 09/20/22

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-05,07,09 QC Batch ID: WG1686942-6 WG1686942-7 QC Sample: L2248090-03 Client ID: RDI-SB-17_0-2_20220906												
Methylene chloride	ND	88.1	73	82		83	77		70-130	13		30
1,1-Dichloroethane	ND	88.1	73	83		84	78		70-130	14		30
Chloroform	ND	88.1	58	66	Q	66	61	Q	70-130	12		30
Carbon tetrachloride	ND	88.1	75	86		89	83		70-130	17		30
1,2-Dichloropropane	ND	88.1	83	94		95	88		70-130	13		30
Dibromochloromethane	ND	88.1	66	75		77	72		70-130	16		30
1,1,2-Trichloroethane	ND	88.1	65	74		79	74		70-130	19		30
Tetrachloroethene	ND	88.1	73	82		79	74		70-130	8		30
Chlorobenzene	ND	88.1	65	74		68	64	Q	70-130	4		30
Trichlorofluoromethane	ND	88.1	67	76		87	81		70-139	26		30
1,2-Dichloroethane	ND	88.1	64	73		74	69	Q	70-130	14		30
1,1,1-Trichloroethane	ND	88.1	72	82		84	79		70-130	16		30
Bromodichloromethane	ND	88.1	66	75		75	70		70-130	12		30
trans-1,3-Dichloropropene	ND	88.1	63	72		73	68	Q	70-130	14		30
cis-1,3-Dichloropropene	ND	88.1	67	76		74	69	Q	70-130	10		30
1,1-Dichloropropene	ND	88.1	76	86		89	83		70-130	15		30
Bromoform	ND	88.1	62	71		75	70		70-130	18		30
1,1,2,2-Tetrachloroethane	ND	88.1	72	82		88	82		70-130	20		30
Benzene	ND	88.1	77	87		88	82		70-130	13		30
Toluene	ND	88.1	74	84		82	76		70-130	10		30
Ethylbenzene	ND	88.1	67	76		66	61	Q	70-130	2		30
Chloromethane	ND	88.1	86	97		120	116		52-130	37	Q	30
Bromomethane	ND	88.1	70	80		87	81		57-147	21		30

## Matrix Spike Analysis

### Batch Quality Control

**Project Name:** 1956 JEROME AVE

**Lab Number:** L2248090

**Project Number:** 210024

**Report Date:** 09/20/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-05,07,09 QC Batch ID: WG1686942-6 WG1686942-7 QC Sample: L2248090-03 Client ID: RDI-SB-17_0-2_20220906												
Vinyl chloride	ND	88.1	80	90		110	102		67-130	32	Q	30
Chloroethane	ND	88.1	83	94		99	92		50-151	18		30
1,1-Dichloroethene	ND	88.1	71	81		86	80		65-135	19		30
trans-1,2-Dichloroethene	ND	88.1	68	77		78	72		70-130	14		30
Trichloroethene	ND	88.1	76	86		84	78		70-130	10		30
1,2-Dichlorobenzene	ND	88.1	49	56	Q	49	45	Q	70-130	2		30
1,3-Dichlorobenzene	ND	88.1	51	58	Q	47	44	Q	70-130	8		30
1,4-Dichlorobenzene	ND	88.1	50	56	Q	46	42	Q	70-130	8		30
Methyl tert butyl ether	ND	88.1	75	85		95	88		66-130	24		30
p/m-Xylene	ND	176	130	76		130	60	Q	70-130	5		30
o-Xylene	ND	176	130	74		130	59	Q	70-130	2		30
cis-1,2-Dichloroethene	ND	88.1	62	70		71	66	Q	70-130	13		30
Dibromomethane	ND	88.1	58	65	Q	66	62	Q	70-130	14		30
Styrene	ND	176	130	71		120	56	Q	70-130	3		30
Dichlorodifluoromethane	ND	88.1	40	46		95	88		30-146	81	Q	30
Acetone	ND	88.1	79	89		86	80		54-140	9		30
Carbon disulfide	ND	88.1	78	88		93	86		59-130	18		30
2-Butanone	ND	88.1	64	73		77	72		70-130	19		30
Vinyl acetate	ND	88.1	30	34	Q	9.3J	9	Q	70-130	105	Q	30
4-Methyl-2-pentanone	ND	88.1	86	97		110	103		70-130	26		30
1,2,3-Trichloropropane	ND	88.1	68	77		82	77		68-130	19		30
2-Hexanone	ND	88.1	80	91		99	92		70-130	21		30
Bromochloromethane	ND	88.1	59	67	Q	68	64	Q	70-130	14		30

## Matrix Spike Analysis

### Batch Quality Control

**Project Name:** 1956 JEROME AVE

**Project Number:** 210024

**Lab Number:** L2248090

**Report Date:** 09/20/22

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-05,07,09 QC Batch ID: WG1686942-6 WG1686942-7 QC Sample: L2248090-03 Client ID: RDI-SB-17_0-2_20220906												
2,2-Dichloropropane	ND	88.1	68	77		81	76		70-130	18		30
1,2-Dibromoethane	ND	88.1	62	70		73	68	Q	70-130	17		30
1,3-Dichloropropane	ND	88.1	74	84		88	82		69-130	17		30
1,1,1,2-Tetrachloroethane	ND	88.1	67	76		77	72		70-130	14		30
Bromobenzene	ND	88.1	63	71		63	59	Q	70-130	1		30
n-Butylbenzene	ND	88.1	47	54	Q	37	34	Q	70-130	25		30
sec-Butylbenzene	ND	88.1	58	66	Q	51	47	Q	70-130	13		30
tert-Butylbenzene	ND	88.1	64	73		58	54	Q	70-130	10		30
o-Chlorotoluene	ND	88.1	63	71		59	55	Q	70-130	7		30
p-Chlorotoluene	ND	88.1	58	66	Q	52	49	Q	70-130	11		30
1,2-Dibromo-3-chloropropane	ND	88.1	60	68		73	68		68-130	19		30
Hexachlorobutadiene	ND	88.1	31	36	Q	25	23	Q	67-130	24		30
Isopropylbenzene	ND	88.1	72	82		67	63	Q	70-130	7		30
p-Isopropyltoluene	ND	88.1	56	64	Q	46	43	Q	70-130	20		30
Naphthalene	ND	88.1	40	46	Q	58	54	Q	70-130	36	Q	30
Acrylonitrile	ND	88.1	74	84		88	82		70-130	17		30
n-Propylbenzene	ND	88.1	65	74		57	53	Q	70-130	14		30
1,2,3-Trichlorobenzene	ND	88.1	28	32	Q	31	29	Q	70-130	10		30
1,2,4-Trichlorobenzene	ND	88.1	31	35	Q	31	29	Q	70-130	1		30
1,3,5-Trimethylbenzene	ND	88.1	59	67	Q	54	50	Q	70-130	10		30
1,2,4-Trimethylbenzene	ND	88.1	57	65	Q	50	47	Q	70-130	13		30
1,4-Dioxane	ND	4400	3600	82		5400	100		65-136	39	Q	30
p-Diethylbenzene	ND	88.1	51	58	Q	39	36	Q	70-130	27		30

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** 1956 JEROME AVE

**Project Number:** 210024

**Lab Number:** L2248090

**Report Date:** 09/20/22

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-05,07,09 QC Batch ID: WG1686942-6 WG1686942-7 QC Sample: L2248090-03 Client ID: RDI-SB-17_0-2_20220906												
p-Ethyltoluene	ND	88.1	63	72		54	50	Q	70-130	17		30
1,2,4,5-Tetramethylbenzene	ND	88.1	44	50	Q	37	34	Q	70-130	19		30
Ethyl ether	ND	88.1	68	77		85	79		67-130	22		30
trans-1,4-Dichloro-2-butene	ND	88.1	78	89		85	79		70-130	8		30

<b>Surrogate</b>	<b>MS % Recovery</b>	<b>Qualifier</b>	<b>MSD % Recovery</b>	<b>Qualifier</b>	<b>Acceptance Criteria</b>
1,2-Dichloroethane-d4	82		85		70-130
4-Bromofluorobenzene	108		108		70-130
Dibromofluoromethane	77		76		70-130
Toluene-d8	101		104		70-130



# **INORGANICS & MISCELLANEOUS**

Project Name: 1956 JEROME AVE

Project Number: 210024

Lab Number: L2248090

Report Date: 09/20/22

## SAMPLE RESULTS

Lab ID: L2248090-01

Client ID: RDI-SB-16\_0-2\_20220906

Sample Location: BRONX NY

Date Collected: 09/06/22 08:10

Date Received: 09/06/22

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85.6		%	0.100	NA	1	-	09/07/22 13:03	121,2540G	RI



Project Name: 1956 JEROME AVE

Lab Number: L2248090

Project Number: 210024

Report Date: 09/20/22

## SAMPLE RESULTS

Lab ID: L2248090-02

Date Collected: 09/06/22 08:20

Client ID: RDI-SB-16\_7-9\_20220906

Date Received: 09/06/22

Sample Location: BRONX NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	32.5		%	0.100	NA	1	-	09/07/22 13:03	121,2540G	RI



Project Name: 1956 JEROME AVE

Project Number: 210024

Lab Number: L2248090

Report Date: 09/20/22

## SAMPLE RESULTS

Lab ID: L2248090-03

Client ID: RDI-SB-17\_0-2\_20220906

Sample Location: BRONX NY

Date Collected: 09/06/22 08:45

Date Received: 09/06/22

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	92.3		%	0.100	NA	1	-	09/07/22 13:03	121,2540G	RI



Project Name: 1956 JEROME AVE

Lab Number: L2248090

Project Number: 210024

Report Date: 09/20/22

**SAMPLE RESULTS**

Lab ID: L2248090-04

Date Collected: 09/06/22 08:50

Client ID: RDI-SB-17\_7-9\_20220906

Date Received: 09/06/22

Sample Location: BRONX NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>										
Solids, Total	28.8		%	0.100	NA	1	-	09/07/22 13:03	121,2540G	RI



Project Name: 1956 JEROME AVE

Lab Number: L2248090

Project Number: 210024

Report Date: 09/20/22

## SAMPLE RESULTS

Lab ID: L2248090-05

Date Collected: 09/06/22 09:30

Client ID: RDI-SB-18\_0-2\_20220906

Date Received: 09/06/22

Sample Location: BRONX NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84.8		%	0.100	NA	1	-	09/07/22 13:03	121,2540G	RI



Project Name: 1956 JEROME AVE

Project Number: 210024

Lab Number: L2248090

Report Date: 09/20/22

## SAMPLE RESULTS

Lab ID: L2248090-06

Client ID: RDI-SB-18\_7-9\_20220906

Sample Location: BRONX NY

Date Collected: 09/06/22 09:35

Date Received: 09/06/22

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	38.6		%	0.100	NA	1	-	09/07/22 13:03	121,2540G	RI



Project Name: 1956 JEROME AVE

Lab Number: L2248090

Project Number: 210024

Report Date: 09/20/22

## SAMPLE RESULTS

Lab ID: L2248090-07

Date Collected: 09/06/22 10:00

Client ID: RDI-SB-19\_0-2\_20220906

Date Received: 09/06/22

Sample Location: BRONX NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	83.5		%	0.100	NA	1	-	09/07/22 13:03	121,2540G	RI





Project Name: 1956 JEROME AVE

Lab Number: L2248090

Project Number: 210024

Report Date: 09/20/22

## SAMPLE RESULTS

Lab ID: L2248090-08  
 Client ID: RDI-SB-19\_8-10\_20220906  
 Sample Location: BRONX NY

Date Collected: 09/06/22 10:05  
 Date Received: 09/06/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.0		%	0.100	NA	1	-	09/07/22 13:03	121,2540G	RI



Project Name: 1956 JEROME AVE

Lab Number: L2248090

Project Number: 210024

Report Date: 09/20/22

## SAMPLE RESULTS

Lab ID: L2248090-09  
 Client ID: RDI-SB-DUP-01\_20220906  
 Sample Location: BRONX NY

Date Collected: 09/06/22 08:10  
 Date Received: 09/06/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84.8		%	0.100	NA	1	-	09/07/22 13:03	121,2540G	RI



## Lab Duplicate Analysis

*Batch Quality Control*

**Project Name:** 1956 JEROME AVE

**Project Number:** 210024

**Lab Number:** L2248090

**Report Date:** 09/20/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1684469-1 QC Sample: L2248090-03 Client ID: RDI-SB-17_0-2_20220906						
Solids, Total	92.3	92.8	%	1		20

**Project Name:** 1956 JEROME AVE**Lab Number:** L2248090**Project Number:** 210024**Report Date:** 09/20/22**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

**Cooler Information**

<b>Cooler</b>	<b>Custody Seal</b>
A	Absent
B	Absent

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2248090-01A	Vial MeOH preserved	A	NA		5.1	Y	Absent		NYTCL-8260HLW(14)
L2248090-01B	Vial water preserved	A	NA		5.1	Y	Absent	07-SEP-22 05:07	NYTCL-8260HLW(14)
L2248090-01C	Vial water preserved	A	NA		5.1	Y	Absent	07-SEP-22 05:07	NYTCL-8260HLW(14)
L2248090-01D	Plastic 120ml unpreserved	A	NA		5.1	Y	Absent		TS(7)
L2248090-02A	Vial MeOH preserved	A	NA		5.1	Y	Absent		NYTCL-8260HLW(14)
L2248090-02B	Vial water preserved	A	NA		5.1	Y	Absent	07-SEP-22 05:07	NYTCL-8260HLW(14)
L2248090-02C	Vial water preserved	A	NA		5.1	Y	Absent	07-SEP-22 05:07	NYTCL-8260HLW(14)
L2248090-02D	Plastic 120ml unpreserved	A	NA		5.1	Y	Absent		TS(7)
L2248090-03A	Vial MeOH preserved	A	NA		5.1	Y	Absent		NYTCL-8260HLW(14)
L2248090-03A1	Vial MeOH preserved	A	NA		5.1	Y	Absent		NYTCL-8260HLW(14)
L2248090-03A2	Vial MeOH preserved	A	NA		5.1	Y	Absent		NYTCL-8260HLW(14)
L2248090-03B	Vial water preserved	A	NA		5.1	Y	Absent	07-SEP-22 05:07	NYTCL-8260HLW(14)
L2248090-03B1	Vial water preserved	A	NA		5.1	Y	Absent	07-SEP-22 05:07	NYTCL-8260HLW(14)
L2248090-03B2	Vial water preserved	A	NA		5.1	Y	Absent	07-SEP-22 05:07	NYTCL-8260HLW(14)
L2248090-03C	Vial water preserved	A	NA		5.1	Y	Absent	07-SEP-22 05:07	NYTCL-8260HLW(14)
L2248090-03C1	Vial water preserved	A	NA		5.1	Y	Absent	07-SEP-22 05:07	NYTCL-8260HLW(14)
L2248090-03C2	Vial water preserved	A	NA		5.1	Y	Absent	07-SEP-22 05:07	NYTCL-8260HLW(14)
L2248090-03D	Plastic 120ml unpreserved	A	NA		5.1	Y	Absent		TS(7)
L2248090-03D1	Plastic 120ml unpreserved	A	NA		5.1	Y	Absent		TS(7)
L2248090-03D2	Plastic 120ml unpreserved	A	NA		5.1	Y	Absent		TS(7)
L2248090-04A	Vial MeOH preserved	A	NA		5.1	Y	Absent		NYTCL-8260HLW(14)
L2248090-04B	Vial water preserved	A	NA		5.1	Y	Absent	07-SEP-22 05:07	NYTCL-8260HLW(14)

**Project Name:** 1956 JEROME AVE**Lab Number:** L2248090**Project Number:** 210024**Report Date:** 09/20/22**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2248090-04C	Vial water preserved	A	NA		5.1	Y	Absent	07-SEP-22 05:07	NYTCL-8260HLW(14)
L2248090-04D	Plastic 120ml unpreserved	A	NA		5.1	Y	Absent		TS(7)
L2248090-05A	Vial MeOH preserved	A	NA		5.1	Y	Absent		NYTCL-8260HLW(14)
L2248090-05B	Vial water preserved	A	NA		5.1	Y	Absent	07-SEP-22 05:07	NYTCL-8260HLW(14)
L2248090-05C	Vial water preserved	A	NA		5.1	Y	Absent	07-SEP-22 05:07	NYTCL-8260HLW(14)
L2248090-05D	Plastic 120ml unpreserved	A	NA		5.1	Y	Absent		TS(7)
L2248090-06A	Vial MeOH preserved	A	NA		5.1	Y	Absent		NYTCL-8260HLW(14)
L2248090-06B	Vial water preserved	A	NA		5.1	Y	Absent	07-SEP-22 05:07	NYTCL-8260HLW(14)
L2248090-06C	Vial water preserved	A	NA		5.1	Y	Absent	07-SEP-22 05:07	NYTCL-8260HLW(14)
L2248090-06D	Plastic 120ml unpreserved	A	NA		5.1	Y	Absent		TS(7)
L2248090-07A	Vial MeOH preserved	A	NA		5.1	Y	Absent		NYTCL-8260HLW(14)
L2248090-07B	Vial water preserved	A	NA		5.1	Y	Absent	07-SEP-22 05:07	NYTCL-8260HLW(14)
L2248090-07C	Vial water preserved	A	NA		5.1	Y	Absent	07-SEP-22 05:07	NYTCL-8260HLW(14)
L2248090-07D	Plastic 120ml unpreserved	A	NA		5.1	Y	Absent		TS(7)
L2248090-08A	Vial MeOH preserved	A	NA		5.1	Y	Absent		NYTCL-8260HLW(14)
L2248090-08B	Vial water preserved	A	NA		5.1	Y	Absent	07-SEP-22 05:07	NYTCL-8260HLW(14)
L2248090-08C	Vial water preserved	A	NA		5.1	Y	Absent	07-SEP-22 05:07	NYTCL-8260HLW(14)
L2248090-08D	Plastic 120ml unpreserved	A	NA		5.1	Y	Absent		TS(7)
L2248090-09A	Vial MeOH preserved	A	NA		5.1	Y	Absent		NYTCL-8260HLW(14)
L2248090-09B	Vial water preserved	A	NA		5.1	Y	Absent	07-SEP-22 05:07	NYTCL-8260HLW(14)
L2248090-09C	Vial water preserved	A	NA		5.1	Y	Absent	07-SEP-22 05:07	NYTCL-8260HLW(14)
L2248090-09D	Plastic 120ml unpreserved	A	NA		5.1	Y	Absent		TS(7)

**Project Name:** 1956 JEROME AVE  
**Project Number:** 210024

**Lab Number:** L2248090  
**Report Date:** 09/20/22

## GLOSSARY

### Acronyms

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

Report Format: DU Report with 'J' Qualifiers



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### Footnotes

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

### Terms

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

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

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

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

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

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

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

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

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

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

### Data Qualifiers

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

Report Format: DU Report with 'J' Qualifiers



**Project Name:** 1956 JEROME AVE  
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#### **Data Qualifiers**

Identified Compounds (TICs).

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

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**Project Name:** 1956 JEROME AVE  
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**Lab Number:** L2248090  
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## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

## LIMITATION OF LIABILITIES

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

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



## Certification Information

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

### Westborough Facility

**EPA 624/624.1:** m/p-xylene, o-xylene, Naphthalene

**EPA 625/625.1:** alpha-Terpineol

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

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

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

### Mansfield Facility

**SM 2540D:** TSS

**EPA 8082A:** NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

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

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

**Biological Tissue Matrix:** EPA 3050B

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

### Westborough Facility:

#### Drinking Water

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

**EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**

**EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

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

#### Non-Potable Water

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

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

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

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

**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

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

### Mansfield Facility:

#### Drinking Water

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

**EPA 522, EPA 537.1.**

#### Non-Potable Water

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


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

**EPA 245.1 Hg.**

**SM2340B**

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

 <b>NEW YORK CHAIN OF CUSTODY</b> Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	<b>Service Centers</b> Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page 1 of 1	Date Rec'd in Lab <b>9/7/22</b>	ALPHA Job # <b>L2248090</b>					
		<b>Project Information</b> Project Name: <b>1956 Jerome Ave</b> Project Location: <b>Bronx NY</b> Project # <b>210024</b> (Use Project name as Project #) <input type="checkbox"/>		<b>Deliverables</b> <input type="checkbox"/> ASP-A <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQUS (1 File) <input type="checkbox"/> EQUS (4 File) <input type="checkbox"/> Other		<b>Billing Information</b> <input type="checkbox"/> Same as Client Info PO #				
<b>Client Information</b> Client: <b>AKRF</b> Address: <b>440 Park Ave South</b> <b>NY NY</b> Phone: Fax: Email: <b>jdiggins@akrf.com</b>		<b>Project Manager:</b> <b>Pamick Diggins</b> ALPHAQuote #: Turn-Around Time: Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		<b>Regulatory Requirement</b> <input type="checkbox"/> NY TOGS <input checked="" type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		<b>Disposal Site Information</b> Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:				
These samples have been previously analyzed by Alpha <input type="checkbox"/> <b>Other project specific requirements/comments:</b> <b>AKRF EQUS EDDS</b> Please specify Metals or TAL.				<b>ANALYSIS</b> VOGS + TS		<b>Sample Filtration</b> <input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below)				
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	VOGS + TS	Sample Specific Comments			
		Date	Time							
48090-01	RDI-SB-16-0-2-20220906	9/6/22	8:10	Soil	CS/URF	X				
-02	RDI-SB-16-7-9-20220906		8:20							
-03	RDI-SB-17-0-2-20220906		8:45				MS/MSD			
-04	RDI-SB-17-7-9-20220906		8:50							
-05	RDI-SB-18-0-2-20220906		9:30							
-06	RDI-SB-18-7-9-20220906		9:35							
-07	RDI-SB-19-0-2-20220906		10:10							
-08	RDI-SB-19-8-10-20220906		10:05							
-09	RDI-SB-DUP-01-20220906		8:10							
Preservative Code: A = None B = HCl C = HNO <sub>3</sub> D = H <sub>2</sub> SO <sub>4</sub> E = NaOH F = MeOH G = NaHSO <sub>4</sub> H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> K/E = Zn Ac/NaOH O = Other		Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type: <b>V</b> Preservative: <b>B</b>		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)		
		Relinquished By: <b>Claire Bearden</b>		Date/Time: <b>9/6/22 1325</b>		Received By: <b>Cary</b>			Date/Time: <b>9/6/22 1325</b>	
		Relinquished By: <b>Cary</b>		Date/Time: <b>9/6/22 1325</b>		Received By: <b>Yes</b>			Date/Time: <b>9/6/22 2100</b>	
		Relinquished By: <b>Yes</b>		Date/Time: <b>9.6.22</b>		Received By: <b>ST ADL</b>			Date/Time: <b>9/6/22 2300</b>	
		Relinquished By: <b>ST ADL</b>		Date/Time: <b>9/7/22 0040</b>		Received By: <b>ST ADL</b>		Date/Time: <b>9/7/22 0040</b>		

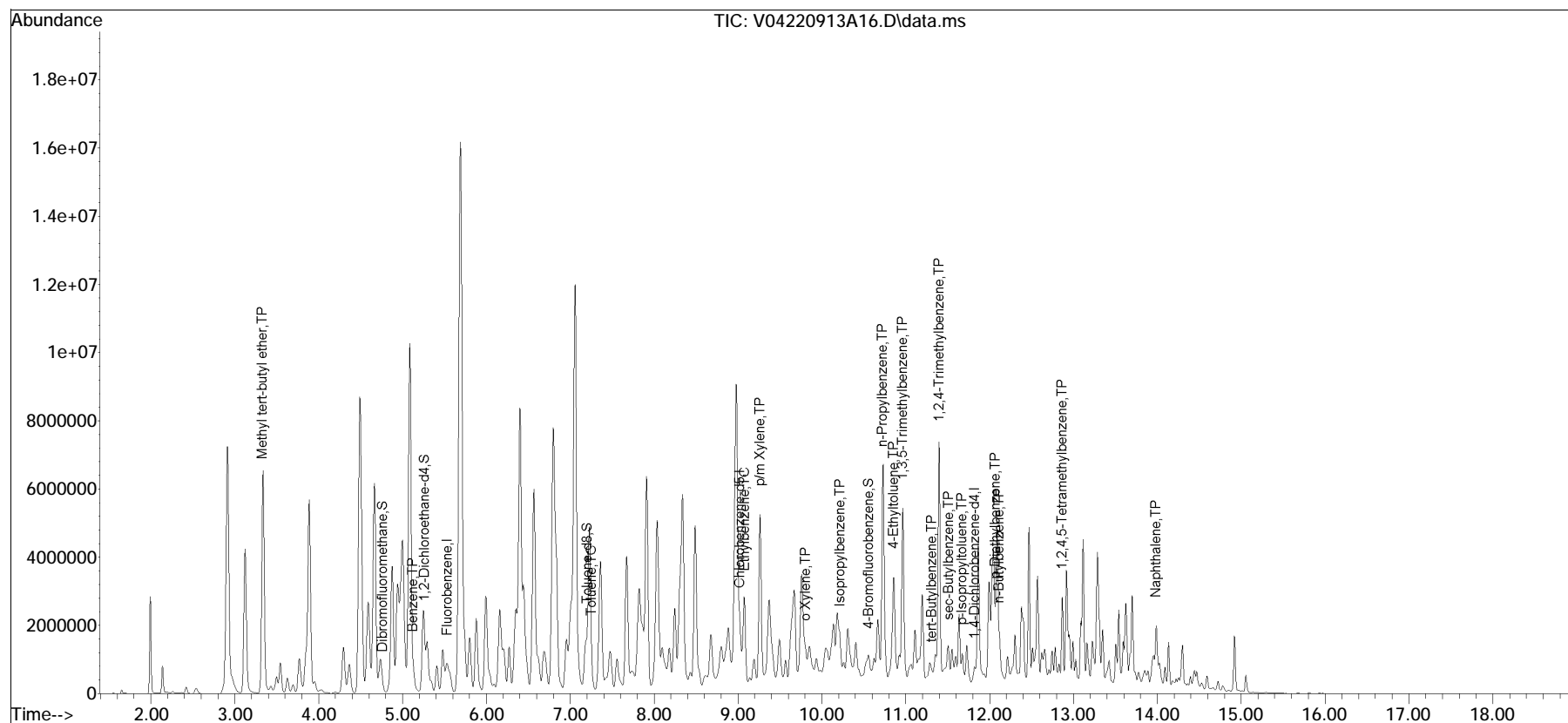
TOTAL BOTTLES

## Quantitation Report (QT/LSC Reviewed)

Data Path : I:\VOLATILES\VOA104\2022\220913A\  
 Data File : V04220913A16.D  
 Acq On : 13 Sep 2022 10:09 pm  
 Operator : VOA104:AJK  
 Sample : L2248090-08,31H,5.74,5,0.100,,A,PRI  
 Misc : WG1687366,ICAL19119  
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 13 23:33:10 2022  
 Quant Method : I:\VOLATILES\VOA104\2022\220913A\V104\_220621A\_8260.m  
 Quant Title : VOLATILES BY GC/MS  
 QLast Update : Wed Jun 22 06:56:43 2022  
 Response via : Initial Calibration

Sub List : 8260-NYTCL - Megamix plus Diox20913A\V04220913A01.D•





## ANALYTICAL REPORT

Lab Number:	L2251399
Client:	AKRF, Inc. 440 Park Avenue South 7th Floor New York, NY 10016
ATTN:	Patrick Diggins
Phone:	(646) 388-9784
Project Name:	1956 JEROME
Project Number:	210024
Report Date:	10/04/22

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

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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Eight Walkup Drive, Westborough, MA 01581-1019  
508-898-9220 (Fax) 508-898-9193 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** 1956 JEROME  
**Project Number:** 210024

**Lab Number:** L2251399  
**Report Date:** 10/04/22

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2251399-01	RDI-MW-10_20220920	WATER	1956 JEROME AVE	09/20/22 09:00	09/20/22
L2251399-02	RDI-MW-X_20220920	WATER	1956 JEROME AVE	09/20/22 09:00	09/20/22
L2251399-03	RDI-MW-11_20220920	WATER	1956 JEROME AVE	09/20/22 10:50	09/20/22
L2251399-04	RDI-MW-12_20220920	WATER	1956 JEROME AVE	09/20/22 10:00	09/20/22
L2251399-05	RDI-MW-13_20220920	WATER	1956 JEROME AVE	09/20/22 12:40	09/20/22

**Project Name:** 1956 JEROME  
**Project Number:** 210024

**Lab Number:** L2251399  
**Report Date:** 10/04/22

### Case Narrative

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

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

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

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

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

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

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**Project Name:** 1956 JEROME  
**Project Number:** 210024

**Lab Number:** L2251399  
**Report Date:** 10/04/22

### Case Narrative (continued)

#### Report Submission

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

#### Sample Receipt

L2251399-02: The client ID was specified by the client.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Melissa Sturgis

Title: Technical Director/Representative

Date: 10/04/22



# ORGANICS

# VOLATILES

Project Name: 1956 JEROME

Lab Number: L2251399

Project Number: 210024

Report Date: 10/04/22

## SAMPLE RESULTS

Lab ID: L2251399-01  
 Client ID: RDI-MW-10\_20220920  
 Sample Location: 1956 JEROME AVE

Date Collected: 09/20/22 09:00  
 Date Received: 09/20/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 10/03/22 15:31  
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.35	J	ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: 1956 JEROME

Lab Number: L2251399

Project Number: 210024

Report Date: 10/04/22

## SAMPLE RESULTS

Lab ID: L2251399-01  
 Client ID: RDI-MW-10\_20220920  
 Sample Location: 1956 JEROME AVE

Date Collected: 09/20/22 09:00  
 Date Received: 09/20/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	22		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: 1956 JEROME

Lab Number: L2251399

Project Number: 210024

Report Date: 10/04/22

## SAMPLE RESULTS

Lab ID: L2251399-01  
 Client ID: RDI-MW-10\_20220920  
 Sample Location: 1956 JEROME AVE

Date Collected: 09/20/22 09:00  
 Date Received: 09/20/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	1.3	J	ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	2.1	J	ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	2.4	J	ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	2.1		ug/l	2.0	0.70	1
p-Ethyltoluene	1.2	J	ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	0.70	J	ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	99		70-130

Project Name: 1956 JEROME

Lab Number: L2251399

Project Number: 210024

Report Date: 10/04/22

## SAMPLE RESULTS

Lab ID: L2251399-02  
 Client ID: RDI-MW-X\_20220920  
 Sample Location: 1956 JEROME AVE

Date Collected: 09/20/22 09:00  
 Date Received: 09/20/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 09/29/22 03:37  
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.25	J	ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: 1956 JEROME

Lab Number: L2251399

Project Number: 210024

Report Date: 10/04/22

## SAMPLE RESULTS

Lab ID: L2251399-02  
 Client ID: RDI-MW-X\_20220920  
 Sample Location: 1956 JEROME AVE

Date Collected: 09/20/22 09:00  
 Date Received: 09/20/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	18		ug/l	2.5	0.70	1
p/m-Xylene	0.77	J	ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	0.77	J	ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	0.86	J	ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: 1956 JEROME

Lab Number: L2251399

Project Number: 210024

Report Date: 10/04/22

## SAMPLE RESULTS

Lab ID: L2251399-02  
 Client ID: RDI-MW-X\_20220920  
 Sample Location: 1956 JEROME AVE

Date Collected: 09/20/22 09:00  
 Date Received: 09/20/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	2.0	J	ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	3.2		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	3.7		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	3.4		ug/l	2.0	0.70	1
p-Ethyltoluene	2.0		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	1.3	J	ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	93		70-130



Project Name: 1956 JEROME

Lab Number: L2251399

Project Number: 210024

Report Date: 10/04/22

## SAMPLE RESULTS

Lab ID: L2251399-03  
 Client ID: RDI-MW-11\_20220920  
 Sample Location: 1956 JEROME AVE

Date Collected: 09/20/22 10:50  
 Date Received: 09/20/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 09/29/22 04:02  
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: 1956 JEROME

Lab Number: L2251399

Project Number: 210024

Report Date: 10/04/22

## SAMPLE RESULTS

Lab ID: L2251399-03  
 Client ID: RDI-MW-11\_20220920  
 Sample Location: 1956 JEROME AVE

Date Collected: 09/20/22 10:50  
 Date Received: 09/20/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	18		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: 1956 JEROME

Lab Number: L2251399

Project Number: 210024

Report Date: 10/04/22

## SAMPLE RESULTS

Lab ID: L2251399-03  
 Client ID: RDI-MW-11\_20220920  
 Sample Location: 1956 JEROME AVE

Date Collected: 09/20/22 10:50  
 Date Received: 09/20/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	120		70-130

Project Name: 1956 JEROME

Lab Number: L2251399

Project Number: 210024

Report Date: 10/04/22

## SAMPLE RESULTS

Lab ID: L2251399-04  
 Client ID: RDI-MW-12\_20220920  
 Sample Location: 1956 JEROME AVE

Date Collected: 09/20/22 10:00  
 Date Received: 09/20/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 09/29/22 04:27  
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	6.2		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: 1956 JEROME

Lab Number: L2251399

Project Number: 210024

Report Date: 10/04/22

## SAMPLE RESULTS

Lab ID: L2251399-04  
 Client ID: RDI-MW-12\_20220920  
 Sample Location: 1956 JEROME AVE

Date Collected: 09/20/22 10:00  
 Date Received: 09/20/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	15		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: 1956 JEROME

Lab Number: L2251399

Project Number: 210024

Report Date: 10/04/22

## SAMPLE RESULTS

Lab ID: L2251399-04  
 Client ID: RDI-MW-12\_20220920  
 Sample Location: 1956 JEROME AVE

Date Collected: 09/20/22 10:00  
 Date Received: 09/20/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	117		70-130

Project Name: 1956 JEROME

Lab Number: L2251399

Project Number: 210024

Report Date: 10/04/22

## SAMPLE RESULTS

Lab ID: L2251399-05  
 Client ID: RDI-MW-13\_20220920  
 Sample Location: 1956 JEROME AVE

Date Collected: 09/20/22 12:40  
 Date Received: 09/20/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 09/29/22 04:52  
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: 1956 JEROME

Lab Number: L2251399

Project Number: 210024

Report Date: 10/04/22

## SAMPLE RESULTS

Lab ID: L2251399-05  
 Client ID: RDI-MW-13\_20220920  
 Sample Location: 1956 JEROME AVE

Date Collected: 09/20/22 12:40  
 Date Received: 09/20/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	18		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1



Project Name: 1956 JEROME

Lab Number: L2251399

Project Number: 210024

Report Date: 10/04/22

## SAMPLE RESULTS

Lab ID: L2251399-05  
 Client ID: RDI-MW-13\_20220920  
 Sample Location: 1956 JEROME AVE

Date Collected: 09/20/22 12:40  
 Date Received: 09/20/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	122		70-130

**Project Name:** 1956 JEROME  
**Project Number:** 210024

**Lab Number:** L2251399  
**Report Date:** 10/04/22

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

Analytical Method: 1,8260C  
Analytical Date: 09/28/22 22:09  
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-05 Batch: WG1693989-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

**Project Name:** 1956 JEROME  
**Project Number:** 210024

**Lab Number:** L2251399  
**Report Date:** 10/04/22

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

Analytical Method: 1,8260C  
Analytical Date: 09/28/22 22:09  
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-05 Batch: WG1693989-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

**Project Name:** 1956 JEROME  
**Project Number:** 210024

**Lab Number:** L2251399  
**Report Date:** 10/04/22

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

Analytical Method: 1,8260C  
Analytical Date: 09/28/22 22:09  
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-05 Batch: WG1693989-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	115		70-130

**Project Name:** 1956 JEROME  
**Project Number:** 210024

**Lab Number:** L2251399  
**Report Date:** 10/04/22

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

Analytical Method: 1,8260C  
Analytical Date: 10/03/22 08:42  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1695132-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

**Project Name:** 1956 JEROME  
**Project Number:** 210024

**Lab Number:** L2251399  
**Report Date:** 10/04/22

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

Analytical Method: 1,8260C  
Analytical Date: 10/03/22 08:42  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1695132-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

**Project Name:** 1956 JEROME  
**Project Number:** 210024

**Lab Number:** L2251399  
**Report Date:** 10/04/22

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

Analytical Method: 1,8260C  
Analytical Date: 10/03/22 08:42  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1695132-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	107		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 1956 JEROME

Lab Number: L2251399

Project Number: 210024

Report Date: 10/04/22

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-05 Batch: WG1693989-3 WG1693989-4								
Methylene chloride	110		110		70-130	0		20
1,1-Dichloroethane	120		120		70-130	0		20
Chloroform	110		110		70-130	0		20
Carbon tetrachloride	110		110		63-132	0		20
1,2-Dichloropropane	110		110		70-130	0		20
Dibromochloromethane	90		92		63-130	2		20
1,1,2-Trichloroethane	90		91		70-130	1		20
Tetrachloroethene	97		96		70-130	1		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	110		140		62-150	24	Q	20
1,2-Dichloroethane	97		100		70-130	3		20
1,1,1-Trichloroethane	110		110		67-130	0		20
Bromodichloromethane	99		100		67-130	1		20
trans-1,3-Dichloropropene	87		88		70-130	1		20
cis-1,3-Dichloropropene	94		97		70-130	3		20
1,1-Dichloropropene	110		110		70-130	0		20
Bromoform	82		85		54-136	4		20
1,1,2,2-Tetrachloroethane	92		96		67-130	4		20
Benzene	110		110		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	110		110		64-130	0		20
Bromomethane	32	Q	34	Q	39-139	6		20



## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 1956 JEROME

Lab Number: L2251399

Project Number: 210024

Report Date: 10/04/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-05 Batch: WG1693989-3 WG1693989-4								
Vinyl chloride	120		120		55-140	0		20
Chloroethane	<b>140</b>	Q	<b>140</b>	Q	55-138	0		20
1,1-Dichloroethene	120		120		61-145	0		20
trans-1,2-Dichloroethene	120		120		70-130	0		20
Trichloroethene	100		100		70-130	0		20
1,2-Dichlorobenzene	97		98		70-130	1		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		99		70-130	1		20
Methyl tert butyl ether	81		85		63-130	5		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	110		120		70-130	9		20
Dibromomethane	100		100		70-130	0		20
1,2,3-Trichloropropane	86		89		64-130	3		20
Acrylonitrile	90		97		70-130	7		20
Styrene	95		95		70-130	0		20
Dichlorodifluoromethane	97		98		36-147	1		20
Acetone	60		75		58-148	<b>22</b>	Q	20
Carbon disulfide	120		120		51-130	0		20
2-Butanone	90		84		63-138	7		20
Vinyl acetate	82		87		70-130	6		20
4-Methyl-2-pentanone	63		66		59-130	5		20
2-Hexanone	<b>52</b>	Q	64		57-130	<b>21</b>	Q	20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 1956 JEROME

Lab Number: L2251399

Project Number: 210024

Report Date: 10/04/22

Parameter	LCS		LCSD		%Recovery		RPD	RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	Qual		Limits	
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-05 Batch: WG1693989-3 WG1693989-4									
Bromochloromethane	110		120		70-130		9		20
2,2-Dichloropropane	120		120		63-133		0		20
1,2-Dibromoethane	91		90		70-130		1		20
1,3-Dichloropropane	92		94		70-130		2		20
1,1,1,2-Tetrachloroethane	87		87		64-130		0		20
Bromobenzene	96		98		70-130		2		20
n-Butylbenzene	100		100		53-136		0		20
sec-Butylbenzene	100		100		70-130		0		20
tert-Butylbenzene	97		99		70-130		2		20
o-Chlorotoluene	99		99		70-130		0		20
p-Chlorotoluene	98		98		70-130		0		20
1,2-Dibromo-3-chloropropane	78		84		41-144		7		20
Hexachlorobutadiene	100		98		63-130		2		20
Isopropylbenzene	98		100		70-130		2		20
p-Isopropyltoluene	98		98		70-130		0		20
Naphthalene	97		86		70-130		12		20
n-Propylbenzene	100		100		69-130		0		20
1,2,3-Trichlorobenzene	91		90		70-130		1		20
1,2,4-Trichlorobenzene	94		93		70-130		1		20
1,3,5-Trimethylbenzene	94		97		64-130		3		20
1,2,4-Trimethylbenzene	95		95		70-130		0		20
1,4-Dioxane	80		74		56-162		8		20
p-Diethylbenzene	95		95		70-130		0		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 1956 JEROME

Project Number: 210024

Lab Number: L2251399

Report Date: 10/04/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-05 Batch: WG1693989-3 WG1693989-4								
p-Ethyltoluene	100		100		70-130	0		20
1,2,4,5-Tetramethylbenzene	90		88		70-130	2		20
Ethyl ether	99		100		59-134	1		20
trans-1,4-Dichloro-2-butene	66	Q	62	Q	70-130	6		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	92		94		70-130
Toluene-d8	97		96		70-130
4-Bromofluorobenzene	94		95		70-130
Dibromofluoromethane	103		106		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 1956 JEROME

Lab Number: L2251399

Project Number: 210024

Report Date: 10/04/22

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1695132-3 WG1695132-4								
Methylene chloride	100		110		70-130	10		20
1,1-Dichloroethane	120		120		70-130	0		20
Chloroform	100		110		70-130	10		20
Carbon tetrachloride	110		110		63-132	0		20
1,2-Dichloropropane	110		120		70-130	9		20
Dibromochloromethane	92		89		63-130	3		20
1,1,2-Trichloroethane	94		89		70-130	5		20
Tetrachloroethene	100		100		70-130	0		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	94		100		62-150	6		20
1,2-Dichloroethane	100		110		70-130	10		20
1,1,1-Trichloroethane	100		110		67-130	10		20
Bromodichloromethane	100		110		67-130	10		20
trans-1,3-Dichloropropene	99		100		70-130	1		20
cis-1,3-Dichloropropene	100		100		70-130	0		20
1,1-Dichloropropene	110		110		70-130	0		20
Bromoform	83		84		54-136	1		20
1,1,2,2-Tetrachloroethane	91		95		67-130	4		20
Benzene	100		110		70-130	10		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	130		130		64-130	0		20
Bromomethane	86		84		39-139	2		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 1956 JEROME

Lab Number: L2251399

Project Number: 210024

Report Date: 10/04/22

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1695132-3 WG1695132-4								
Vinyl chloride	120		120		55-140	0		20
Chloroethane	85		90		55-138	6		20
1,1-Dichloroethene	100		100		61-145	0		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	99		100		70-130	1		20
1,2-Dichlorobenzene	95		97		70-130	2		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	95		100		70-130	5		20
Methyl tert butyl ether	85		91		63-130	7		20
p/m-Xylene	105		105		70-130	0		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	100		96		70-130	4		20
Dibromomethane	90		91		70-130	1		20
1,2,3-Trichloropropane	91		96		64-130	5		20
Acrylonitrile	89		92		70-130	3		20
Styrene	100		100		70-130	0		20
Dichlorodifluoromethane	95		99		36-147	4		20
Acetone	85		90		58-148	6		20
Carbon disulfide	110		110		51-130	0		20
2-Butanone	61	Q	66		63-138	8		20
Vinyl acetate	110		110		70-130	0		20
4-Methyl-2-pentanone	75		75		59-130	0		20
2-Hexanone	74		74		57-130	0		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 1956 JEROME

Lab Number: L2251399

Project Number: 210024

Report Date: 10/04/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1695132-3 WG1695132-4								
Bromochloromethane	95		100		70-130	5		20
2,2-Dichloropropane	120		120		63-133	0		20
1,2-Dibromoethane	87		91		70-130	4		20
1,3-Dichloropropane	98		98		70-130	0		20
1,1,1,2-Tetrachloroethane	100		100		64-130	0		20
Bromobenzene	100		100		70-130	0		20
n-Butylbenzene	95		100		53-136	5		20
sec-Butylbenzene	99		100		70-130	1		20
tert-Butylbenzene	97		100		70-130	3		20
o-Chlorotoluene	110		120		70-130	9		20
p-Chlorotoluene	110		110		70-130	0		20
1,2-Dibromo-3-chloropropane	65		67		41-144	3		20
Hexachlorobutadiene	90		97		63-130	7		20
Isopropylbenzene	100		110		70-130	10		20
p-Isopropyltoluene	94		98		70-130	4		20
Naphthalene	70		74		70-130	6		20
n-Propylbenzene	110		110		69-130	0		20
1,2,3-Trichlorobenzene	84		89		70-130	6		20
1,2,4-Trichlorobenzene	90		93		70-130	3		20
1,3,5-Trimethylbenzene	100		110		64-130	10		20
1,2,4-Trimethylbenzene	100		110		70-130	10		20
1,4-Dioxane	66		82		56-162	22	Q	20
p-Diethylbenzene	91		96		70-130	5		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 1956 JEROME

Project Number: 210024

Lab Number: L2251399

Report Date: 10/04/22

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1695132-3 WG1695132-4								
p-Ethyltoluene	100		110		70-130	10		20
1,2,4,5-Tetramethylbenzene	80		82		70-130	2		20
Ethyl ether	86		89		59-134	3		20
trans-1,4-Dichloro-2-butene	91		91		70-130	0		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	101		104		70-130
Toluene-d8	99		100		70-130
4-Bromofluorobenzene	113		113		70-130
Dibromofluoromethane	100		108		70-130

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** 1956 JEROME

**Lab Number:** L2251399

**Project Number:** 210024

**Report Date:** 10/04/22

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1695132-6 WG1695132-7 QC Sample: L2251399-01 Client ID: RDI-MW-10_20220920												
Methylene chloride	ND	10	13	130		13	130		70-130	0		20
1,1-Dichloroethane	ND	10	14	140	Q	14	140	Q	70-130	0		20
Chloroform	ND	10	13	130		12	120		70-130	8		20
Carbon tetrachloride	ND	10	13	130		13	130		63-132	0		20
1,2-Dichloropropane	ND	10	14	140	Q	14	140	Q	70-130	0		20
Dibromochloromethane	ND	10	11	110		11	110		63-130	0		20
1,1,2-Trichloroethane	ND	10	12	120		12	120		70-130	0		20
Tetrachloroethene	0.35J	10	12	120		13	130		70-130	8		20
Chlorobenzene	ND	10	12	120		12	120		75-130	0		20
Trichlorofluoromethane	ND	10	11	110		12	120		62-150	9		20
1,2-Dichloroethane	ND	10	13	130		13	130		70-130	0		20
1,1,1-Trichloroethane	ND	10	13	130		12	120		67-130	8		20
Bromodichloromethane	ND	10	13	130		12	120		67-130	8		20
trans-1,3-Dichloropropene	ND	10	12	120		12	120		70-130	0		20
cis-1,3-Dichloropropene	ND	10	12	120		12	120		70-130	0		20
1,1-Dichloropropene	ND	10	14	140	Q	13	130		70-130	7		20
Bromoform	ND	10	9.8	98		9.3	93		54-136	5		20
1,1,2,2-Tetrachloroethane	ND	10	11	110		11	110		67-130	0		20
Benzene	ND	10	13	130		13	130		70-130	0		20
Toluene	ND	10	12	120		12	120		70-130	0		20
Ethylbenzene	ND	10	13	130		13	130		70-130	0		20
Chloromethane	ND	10	18	180	Q	18	180	Q	64-130	0		20
Bromomethane	ND	10	8.1	81		8.5	85		39-139	5		20



## Matrix Spike Analysis

Batch Quality Control

Project Name: 1956 JEROME

Lab Number: L2251399

Project Number: 210024

Report Date: 10/04/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1695132-6 WG1695132-7 QC Sample: L2251399-01 Client ID: RDI-MW-10_20220920												
Vinyl chloride	ND	10	16	160	Q	16	160	Q	55-140	0		20
Chloroethane	ND	10	11	110		11	110		55-138	0		20
1,1-Dichloroethene	ND	10	13	130		13	130		61-145	0		20
trans-1,2-Dichloroethene	ND	10	12	120		12	120		70-130	0		20
Trichloroethene	ND	10	12	120		12	120		70-130	0		20
1,2-Dichlorobenzene	ND	10	11	110		11	110		70-130	0		20
1,3-Dichlorobenzene	ND	10	11	110		11	110		70-130	0		20
1,4-Dichlorobenzene	ND	10	11	110		11	110		70-130	0		20
Methyl tert butyl ether	22	10	35	130		34	120		63-130	3		20
p/m-Xylene	ND	20	26	130		24	120		70-130	8		20
o-Xylene	ND	20	24	120		24	120		70-130	0		20
cis-1,2-Dichloroethene	ND	10	12	120		12	120		70-130	0		20
Dibromomethane	ND	10	11	110		11	110		70-130	0		20
1,2,3-Trichloropropane	ND	10	11	110		11	110		64-130	0		20
Acrylonitrile	ND	10	20	200	Q	18	180	Q	70-130	11		20
Styrene	ND	20	24	120		23	115		70-130	4		20
Dichlorodifluoromethane	ND	10	13	130		14	140		36-147	7		20
Acetone	ND	10	9.0	90		11	110		58-148	20		20
Carbon disulfide	ND	10	14	140	Q	14	140	Q	51-130	0		20
2-Butanone	ND	10	14	140	Q	18	180	Q	63-138	25	Q	20
Vinyl acetate	ND	10	13	130		13	130		70-130	0		20
4-Methyl-2-pentanone	ND	10	9.8	98		9.2	92		59-130	6		20
2-Hexanone	ND	10	9.5	95		9.7	97		57-130	2		20

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** 1956 JEROME

**Lab Number:** L2251399

**Project Number:** 210024

**Report Date:** 10/04/22

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1695132-6 WG1695132-7 QC Sample: L2251399-01 Client ID: RDI-MW-10_20220920												
Bromochloromethane	ND	10	11	110		11	110		70-130	0		20
2,2-Dichloropropane	ND	10	14	140	Q	13	130		63-133	7		20
1,2-Dibromoethane	ND	10	11	110		11	110		70-130	0		20
1,3-Dichloropropane	ND	10	12	120		12	120		70-130	0		20
1,1,1,2-Tetrachloroethane	ND	10	12	120		12	120		64-130	0		20
Bromobenzene	ND	10	12	120		12	120		70-130	0		20
n-Butylbenzene	ND	10	11	110		11	110		53-136	0		20
sec-Butylbenzene	ND	10	12	120		12	120		70-130	0		20
tert-Butylbenzene	ND	10	12	120		11	110		70-130	9		20
o-Chlorotoluene	ND	10	13	130		13	130		70-130	0		20
p-Chlorotoluene	ND	10	12	120		12	120		70-130	0		20
1,2-Dibromo-3-chloropropane	ND	10	8.6	86		8.4	84		41-144	2		20
Hexachlorobutadiene	ND	10	9.5	95		10	100		63-130	5		20
Isopropylbenzene	ND	10	13	130		12	120		70-130	8		20
p-Isopropyltoluene	ND	10	11	110		11	110		70-130	0		20
Naphthalene	ND	10	9.4	94		9.5	95		70-130	1		20
n-Propylbenzene	1.3J	10	14	140	Q	13	130		69-130	7		20
1,2,3-Trichlorobenzene	ND	10	9.8	98		10	100		70-130	2		20
1,2,4-Trichlorobenzene	ND	10	10	100		10	100		70-130	0		20
1,3,5-Trimethylbenzene	2.1J	10	14	140	Q	14	140	Q	64-130	0		20
1,2,4-Trimethylbenzene	2.4J	10	15	150	Q	14	140	Q	70-130	7		20
1,4-Dioxane	ND	500	440	88		400	80		56-162	10		20
p-Diethylbenzene	2.1	10	13	109		13	109		70-130	0		20

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** 1956 JEROME

**Lab Number:** L2251399

**Project Number:** 210024

**Report Date:** 10/04/22

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1695132-6 WG1695132-7 QC Sample: L2251399-01 Client ID: RDI-MW-10_20220920												
p-Ethyltoluene	1.2J	10	13	130		13	130		70-130	0		20
1,2,4,5-Tetramethylbenzene	0.70J	10	10	100		9.9	99		70-130	1		20
Ethyl ether	ND	10	11	110		11	110		59-134	0		20
trans-1,4-Dichloro-2-butene	ND	10	10	100		10	100		70-130	0		20

<b>Surrogate</b>	<b>MS</b>		<b>MSD</b>		<b>Acceptance Criteria</b>
	<b>% Recovery</b>	<b>Qualifier</b>	<b>% Recovery</b>	<b>Qualifier</b>	
1,2-Dichloroethane-d4	102		103		70-130
4-Bromofluorobenzene	113		111		70-130
Dibromofluoromethane	100		93		70-130
Toluene-d8	100		102		70-130

**Project Name:** 1956 JEROME**Lab Number:** L2251399**Project Number:** 210024**Report Date:** 10/04/22**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

**Cooler Information**

<b>Cooler</b>	<b>Custody Seal</b>
A	Absent

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2251399-01A	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260(14)
L2251399-01A1	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260(14)
L2251399-01A2	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260(14)
L2251399-01B	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260(14)
L2251399-01B1	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260(14)
L2251399-01B2	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260(14)
L2251399-01C	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260(14)
L2251399-01C1	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260(14)
L2251399-01C2	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260(14)
L2251399-02A	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260(14)
L2251399-02B	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260(14)
L2251399-02C	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260(14)
L2251399-03A	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260(14)
L2251399-03B	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260(14)
L2251399-03C	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260(14)
L2251399-04A	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260(14)
L2251399-04B	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260(14)
L2251399-04C	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260(14)
L2251399-05A	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260(14)
L2251399-05B	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260(14)
L2251399-05C	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260(14)

**Project Name:** 1956 JEROME  
**Project Number:** 210024

**Lab Number:** L2251399  
**Report Date:** 10/04/22

## GLOSSARY

### Acronyms

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

Report Format: DU Report with 'J' Qualifiers



**Project Name:** 1956 JEROME  
**Project Number:** 210024

**Lab Number:** L2251399  
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### Footnotes

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

### Terms

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

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

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

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

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

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

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

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

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

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

### Data Qualifiers

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

Report Format: DU Report with 'J' Qualifiers



**Project Name:** 1956 JEROME  
**Project Number:** 210024

**Lab Number:** L2251399  
**Report Date:** 10/04/22

#### **Data Qualifiers**

Identified Compounds (TICs).

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

**Project Name:** 1956 JEROME  
**Project Number:** 210024

**Lab Number:** L2251399  
**Report Date:** 10/04/22

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

## LIMITATION OF LIABILITIES

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

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





## Certification Information

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

### Westborough Facility

**EPA 624/624.1:** m/p-xylene, o-xylene, Naphthalene

**EPA 625/625.1:** alpha-Terpineol

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

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

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

### Mansfield Facility

**SM 2540D:** TSS

**EPA 8082A:** NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

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

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

**Biological Tissue Matrix:** EPA 3050B

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

### Westborough Facility:

#### Drinking Water

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

**EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**

**EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

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

#### Non-Potable Water

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

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

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

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

**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

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

### Mansfield Facility:

#### Drinking Water

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

**EPA 522, EPA 537.1.**

#### Non-Potable Water

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

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

**EPA 245.1 Hg.**

**SM2340B**

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



**DATA USABILITY SUMMARY REPORT – DUSR  
DATA VALIDATION SUMMARY**

**ORGANIC ANALYSIS**

**VOLATILES BY GC/MS METHOD 8260C**

**For Soil and Groundwater Samples  
Collected September 06, 2022, and September 20, 2022  
From 1956 Jerome Avenue  
Bronx, New York**

**Collected by AKRF, Inc.  
Project# 210024**

**SAMPLE DELIVERY GROUP NUMBERS:  
L2248090 and L2251399**

**BY ALPHA ANALYTICAL (ELAP #11148)**

**SUBMITTED TO:**

**Mr. Patrick Diggins/Technical Director  
AKRF, Inc.  
440 Park Avenue South, 7<sup>th</sup> Floor  
New York, NY 10016**

**October 16, 2022**

**PREPARED BY:**

**Lori A. Beyer/President  
L.A.B. Validation Corp.  
14 West Point Drive  
East Northport, NY 11731**

*Lori A. Beyer*

**1956 Jerome Avenue, Bronx, New York**

Soil and Groundwater Data Usability Summary Report (Data Validation)

Sampling and Analysis – September Sampling Events.

Analysis for Volatile Organics

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**APPENDICES:**

- A. Chain of Custody Documents
- B. Case Narratives
- C. Validated Form I's with Qualifications

A validation was performed on soil and groundwater samples and the associated quality control samples (Field Duplicates and MS/MSDs) for organic analysis for samples collected under chain of custody documentation by AKRF and submitted to Alpha Analytical for subsequent analysis. This report contains the laboratory and validation results for the field samples itemized below. Analysis was performed in accordance with requested tests per the chain of custody documents.

The samples were analyzed by Alpha Analytical, utilizing SW846 Methods and submitted under NYSDEC ASP Category B equivalent deliverable requirements for the associated analytical methodologies employed. The analytical testing for soil and groundwater samples consisted of Volatile Organics. Tentatively Identified Compounds (TICs) were required and provided for soil samples. The data was evaluated in accordance with EPA Region II National Functional Guidelines for Organic Data Review and EPA Region II SOP for 8260 and in conjunction with the analytical methodologies for which the samples were analyzed, where applicable and relevant.

The data validation report pertains to the following soil and groundwater samples:

<b>Sample ID</b>	<b>Lab ID</b>	<b>Analysis</b>	<b>Date Collected/ Received</b>
RDI-SB-16_0-2_20220906	L2248090-01	Volatiles by SW846 Method 8260C Plus, TICS	09/06/2022
RDI-SB-16_7-9_20220906	L2248090-02	Volatiles by SW846 Method 8260C Plus, TICS	09/06/2022
RDI-SB-17_0-2_20220906 [Plus, MS/MSD]	L2248090-03	Volatiles by SW846 Method 8260C Plus, TICS	09/06/2022
RDI-SB-17_7-9_20220906	L2248090-04	Volatiles by SW846 Method 8260C Plus, TICS	09/06/2022
RDI-SB-18_0-2_20220906	L2248090-05	Volatiles by SW846 Method 8260C Plus, TICS	09/06/2022
RDI-SB-18_7-9_20220906	L2248090-06	Volatiles by SW846 Method 8260C Plus, TICS	09/06/2022
RDI-SB-19_0-2_20220906	L2248090-07	Volatiles by SW846 Method 8260C Plus, TICS	09/06/2022
RDI-SB-19_8-10_20220906	L2248090-08	Volatiles by SW846 Method 8260C Plus, TICS	09/06/2022
RDI-SB-DUP-01_20220906 [Field Duplicate of RDI-SB-16_0-2_20220906]	L2248090-09	Volatiles by SW846 Method 8260C Plus, TICS	09/06/2022
RDI-MW-10_20220920 [Plus, MS/MSD]	L2251399-01	Volatiles by SW846 Method 8260C	09/20/2022
RDI-MW-X_20220920 [Field Duplicate of RDI-MW-10_20220920]	L2251399-02	Volatiles by SW846 Method 8260C	09/20/2022
RDI-MW-11_20220920	L2251399-03	Volatiles by SW846 Method 8260C	09/20/2022
RDI-MW-12_20220920	L2251399-04	Volatiles by SW846 Method 8260C	09/20/2022
RDI-MW-13_20220920	L2251399-05	Volatiles by SW846 Method 8260C	09/20/2022

**Data Qualifier Definitions:**

The following definitions provide brief explanations of the qualifiers assigned to results in the data review process.

**U** - The analyte was analyzed for but was not detected above the reported sample quantitation limit.

**J** - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

**UJ** - The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

**R** - The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.

**N** - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."

**NJ** - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate quantity.

**J+** - The result is an estimated quantity, but the result may be biased high.

**J-** - The result is an estimated quantity, but the result may be biased low.

**D** - Analyte concentration is from diluted analysis.

**Sample Receipt:**

The Chain of Custody documents indicates that the samples were received at Alpha Analytical via laboratory courier upon completion of the sampling event. Sample login notes were generated. The cooler temperature for the sample receipt was recorded upon receipt and determined to be acceptable (<6.0 degrees C). The actual temperatures (5.1/2.9/3.2 degrees C) str recorded on the sample receipt checklists provided in the lab report. No problems and/or discrepancies were noted, consequently, the integrity of the samples has been assumed to be good.

The data summary Form I's included in Appendix C includes all usable (qualified) and unusable (rejected) results for the samples identified above. The Form I's summarize the detailed narrative section of the report.

**NOTE:**

L.A.B. Validation Corp. believes it is appropriate to note that the data validation criteria utilized for data evaluation is different than the method requirements utilized by the laboratory. Qualified data does not necessarily mean that the laboratory was non-compliant in the analysis that was performed.

**1.0 Volatile Organics by GC/MS SW846 Method 8260C**

The following method criteria were reviewed: holding times, SMCs, MS, MSD, LCS, Laboratory Spiked Blanks, Field Duplicate, Method Blanks, Tunes, Calibrations, Internal Standards, Target Component Identification, Quantitation, Reported Quantitation Limits and Overall System Performance. The Volatile results are valid and usable except for non-detects in all samples for 1,4-Dioxane due to low calibration responses as noted within the following text:

**1.1 Holding Time**

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the technical holding time is exceeded, the data may not be considered valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimates, "J." The non-detects (sample quantitation limits) are required to be flagged as estimated, "J," or unusable, "R," if the holding times are grossly exceeded.

**Soil samples were prepared within the method required holding times as well as the technical holding times for data validation of 48 hours from collection to preparation for Encores. Once preparation is complete, the holding time extends to 14 days. Groundwater samples were analyzed within the method required holding times as well as the technical holding times for data validation of 14 days from collection for acid preserved vials. No data validation qualifiers were required based upon holding time or sample preservation.**

**1.2 System Monitoring Compound (Surrogate) Recovery**

All samples are spiked with surrogate compounds prior to sample analysis to evaluate overall laboratory performance and efficiency of the analytical technique. If the measure of surrogate concentrations is outside contract specification, qualifications are required to be applied to associated samples and analytes.

**Surrogate recoveries (%R) for Dibromofluoromethane, 1,2-Dichloroethane-d4, Toluene-d8 and 4-Bromofluorobenzene were found to be within acceptable limits for surrogate compounds for all analyses except for Toluene-d8 (185%) and Dibromofluoromethane (46%) in RDI-SB-19\_8-10\_20220906. Surrogate outliers can be attributed to complicated matrix as evidenced by the sample chromatogram. Analysis was performed at high level. No associated target detections were found within the retention time range for early -eluting surrogate Dibromofluoromethane.**

The laboratory detected concentration for Toluene, Ethylbenzene, m+p-Xylene and o-Xylene have been qualified, biased high "J+."

### 1.3 Matrix Spikes (MS)/ Matrix Spike Duplicates (MSD)

The MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data.

#### *Soil MS/MSD – RDI-SB-17\_0-2\_20220906:*

Recovery values for Chloroform (66%/62%), Chlorobenzene (64%), 1,2-Dichloroethane (69%), trans-1,3-Dichloropropene (68%), cis-1,3-Dichloropropene (69%), Ethylbenzene (61%), 1,2-Dichlorobenzene (56%/45%), 1,3-Dichlorobenzene (58%/44%), 1,4-Dichlorobenzene (56%/42%), m+p-Xylene (60%), o-Xylene (59%), cis-1,2-Dichloroethene (66%), Dibromomethane (65%/63%), Styrene (56%), Vinyl Acetate (34%/9%), Bromochloromethane (67%/64%), 1,2-Dibromoethane (68%), Bromobenzene (59%), n-Butylbenzene (54%/34%), sec-Butylbenzene (66%/47%), tert-Butylbenzene (54%), o-Chlorotoluene (55%), p-Chlorotoluene (66%/49%), Hexachlorobutadiene (36%/23%), Isopropylbenzene (63%), p-Isopropyl toluene (64%/43%), Naphthalene (46%/54%), n-Propylbenzene (53%), 1,2,3-Trichlorobenzene (332%/25%), 1,2,4-Trichlorobenzene (35%/29%), 1,3,5-Trimethylbenzene (67%/50%), 1,2,4-Trimethylbenzene (65%/47%), p-Diethyl benzene (58%/36%), p-Ethyl toluene (50%) and 1,2,4,5-Tetramethylbenzene (50%/34%) recovered below laboratory limits in the MS and/or MSD. No target analytes were detected in the parent sample. The sample chromatogram does not support any non-target presence. Non-detects for these analytes have been qualified, "UJ." No additional qualifiers were applied for RPD outliers.

#### *Groundwater MS/MSD – RDI-MW-10\_20220920:*

Elevated recovery values above laboratory criteria was obtained for 1,1-Dichloroethane (140%/140%), 1,2-Dichloropropane (140%/140%), 1,1-Dichloropropene (140%), Chloromethane (180%/180%), Vinyl Chloride (160%/160%), Acrylonitrile (200%/160%), Carbon Disulfide (140%/140%), 2-Butanone (140%/180%), n-Propylbenzene (140%), 1,3,5-Trimethylbenzene (140%/140%), 2,2-Dichloropropane (140%), and 1,2,4-Trimethylbenzene (150%/140%). These target analytes were not detected in the parent sample. Elevated recovery does not support any potential loss of detection and/or result bias. RPD for 2-Butanone (25%) was also obtained. No qualifiers were applied based on these outliers.

The National Functional Guidelines and EPA Region 2 SOPs state that "No qualifications to the data are necessary based on MS data alone."

### 1.4 Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

The LCS data for laboratory control samples (LCS) are generated to provide information on the accuracy of the analytical method and on the laboratory performance.

LCS/LCS Duplicates were analyzed for each sequence. Recovery met acceptance criteria for all spiked analytes with exceptions discussed below:

LCS/LCS Duplicate associated with RDI-SB-16\_0-2\_20220906, RDI-SB-16\_7-9\_20220906, RDI-SB-17\_0-2\_20220906, RDI-SB-17\_7-9\_20220906, RDI-SB-18\_0-2\_20220906, RDI-SB-19\_0-2\_20220906, and RDI-SB-DUP-01\_20220906 yielded Trichlorofluoromethane (68%/67%) below laboratory criteria. Non-detects have been qualified, "UJ."



LCS associated with RDI-SB-18\_7-9\_20220906 and RDI-SB-19\_8-10\_20220906 yielded Trichlorofluoromethane (69%) below laboratory limits. LCS Duplicate met acceptance criteria (72%). Non-detects have been qualified, "UJ."

LCS/LCS Duplicate associated with RDI-MW-X\_20220920, RDI-MW-11\_20220920, RDI-MW-12\_20220920, and RDI-MW-13\_20220920 yielded Bromomethane (32%/34%), 2-Hexanone (52%), and trans-1,4-Dichloro-2-butene (66%/62%) below laboratory criteria. Non-detects have been qualified, "UJ." Chloroethane (140%/140%) recovered above limits. This target analyte was not detected in field samples. Results are not impacted. No qualifiers were applied for RPD outliers that were above laboratory criteria of 20% but reasonable per the methodology.

LCS associated with RDI-MW-10\_20220920 yielded 2-butanone (61%) below laboratory limits. Non-detects have been qualified, "UJ."

**1.5 Blank Contamination**

Quality assurance (QA) blanks, i.e., method, trip and field blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field blanks measure cross-contamination of samples during field operations.

The following table was utilized to qualify target analyte results due to contamination. The largest value from all the associated blanks is required to be utilized:

Blank Type	Blank Result	Sample Result	Action for Samples
Method, Storage, field, Trip, Instrument	Detects	Not Detected	No qualification required
	<CRQL*	<CRQL*	Report CRQL value with a U
		>= CRQL* and <2x the CRQL**	No qualification required
	>CRQL*	<= CRQL*	Report CRQL value with a U
		>=CRQL* and <= blank concentration	Report blank value for sample concentration with a U
		>= CRQL* and > blank concentration	No qualification required
	=CRQL*	<= CRQL*	Report CRQL value with a U
		>CRQL*	No qualification required
Gross Contamination**	Detects	Report blank value for sample concentration with a U	

\*2x the CRQL for methylene chloride, 2-butanone, and acetone.

\*\*4x the CRQL for methylene chloride, 2-butanone, and acetone

\*\*\*Qualifications based on instrument blank results affect only the sample analyzed immediately after the sample that has target compounds that exceed the calibration range or non-target compounds that exceed 100 ug/L.

Below is a summary of the compounds in the sample and the associated qualifications that have been applied:

**A) Method Blank Contamination:**

The method blank associated with RDI-SB-16\_0-2\_20220906, RDI-SB-16\_7-9\_20220906, RDI-SB-17\_0-2\_20220906, RDI-SB-17\_7-9\_20220906, RDI-SB-18\_0-2\_20220906, RDI-SB-19\_0-2\_20220906, and RDI-SB-DUP-01\_20220906 yielded 1,2,3-Trichlorobenzene (0.38 ug/kg) and 1,2,4-Trichlorobenzene (0.30 ug/kg). These target compounds were not detected in corresponding samples. Results are not impacted.

B) **Field Blank Contamination:**  
Field Blanks were not collected for these sampling events.

C) **Trip Blank Contamination:**  
Trip Blanks were not provided for these sampling events.

#### 1.6 GC/MS Instrument Performance Check

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The Tuning standard for volatile organics is Bromofluorobenzene (BFB).

**Instrument performance was generated within acceptable limits and frequency for Bromofluorobenzene (BFB) for all analyses.**

#### 1.7 Initial and Continuing Calibrations

Satisfactory instrument calibration is established to ensure that the instrument can produce acceptable quantitative data. An initial calibration demonstrates that the instrument can produce acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance. Initial calibration verifications were acceptable.

##### A) Response Factor GC/MS:

The response factor measures the instrument's response to specific chemical compounds. The response factor for all compounds must be  $\geq 0.05$  in both initial and continuing calibrations. A value  $< 0.05$  indicates a serious detection and quantitation problem (poor sensitivity). Analytes detected in the sample will be qualified as estimated, "J." All non-detects for that compound in the corresponding samples will be rejected, "R." Method 8260C allows for a minimum response factor of 0.1 for Acetone and 2-Butanone. Validation criteria allows response factor to be  $\geq 0.01$  for poor responders (Acetone, MEK, Carbon Disulfide, Chloroethane, Chloromethane, Cyclohexane, 1,2-Dibromoethane, Dichlorodifluoromethane, cis-1,2-Dichloroethene, 1,2-Dichloropropane, 1,2-Dibromo-3-chloropropane, Isopropylbenzene, Methyl Acetate, Methylene Chloride, Methylcyclohexane, MTBE, trans-1,2-Dichloroethene, 4-Methyl-2-Pentanone, 2-Hexanone, Trichlorofluoromethane, 1,1,2-Trichloro-1,2,2-Trifluoroethane.

**Response factors for the target analytes reported were found to be within acceptable limits ( $\geq 0.05$ ) and ( $\geq 0.01$  for poor responders) and minimum response criteria in Table 4 of Method 8260C, for the initial and continuing calibrations for all reported analytes except for 1,4-Dioxane (0.001-0.002). 1,4-Dioxane non-detects have been rejected in all samples.**

##### B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentrations. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Percent RSD must be  $< 20\%$  and %D must be  $< 20\%$ . A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects are flagged "UJ." If %RSD and %D grossly exceed QC criteria, non-detect data may be qualified, "R," unusable. Additionally, in cases where the %RSD is  $> 20\%$  and eliminating either the high or the low point of the curve does not restore the %RSD to less than or equal to 20% then positive results are qualified, "J". In cases where removal of either the low or high point restores the linearity, then only low or high-

level results will be qualified, "J" in the portion of the curve where non-linearity exists. Closing CCV must meet 30% criteria. Poor responders must be  $\leq 40\%$ .

\*Method 8260C allows for several analytes to be outside requirements due to the large number of compounds analyzed by the method.

**Initial Calibrations:** The initial calibrations provided and the %RSD were within acceptable limits (20%) and (40% for poor responders) for all reported compounds. Acceptable ICVs (second source) were analyzed.

**Continuing Calibrations:** The continuing calibrations provided and the %D was within acceptable limits (20%) and (40% for poor responders) for all reported compounds except as noted below:

CCAL VOA104 09/09/2022 – Dichlorodifluoromethane – 58.5%, 1,1-Dichloroethene – 21.2%, Vinyl Acetate – 21.4%, Bromochloromethane – 23.5%, Chloroform – 28.2%, Dibromomethane – 23.9%; "UJ" non-detects in RDI-SB-16\_0-2\_20220906, RDI-SB-16\_7-9\_20220906, RDI-SB-17\_0-2\_20220906, RDI-SB-17\_7-9\_20220906, RDI-SB-18\_0-2\_20220906, RDI-SB-19\_0-2\_20220906, and RDI-SB-DUP-01\_20220906.

CCAL VOA104 09/13/2022 – Vinyl Acetate – 24.0%, trans-1,4-Dichloro-2-butene – 22.9%; "UJ" non-detects in RDI-SB-18\_7-9\_20220906, and RDI-SB-19\_8-10\_20220906.

CCAL VOA122 09/28/2022 – Bromomethane – 67.5%, Chloroethane – 40.8%, 1,1-Dichloroethene – 20.7%, Acetone – 40.2%, 2-Hexanone – 47.3%, trans-1,4-Dichloro-2-butene – 33.8%; "UJ" non-detects in RDI-MW-X\_20220920, RDI-MW-11\_20220920, RDI-MW-12\_20220920, and RDI-MW-13\_20220920.

CCAL ELAINE 10/03/2022 – 2,2-Dichloropropane – 22.6%, Naphthalene – 29.5%; "UJ" non-detects in RDO-MW-10\_20220920.

### 1.8 Internal Standards

Internal Standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The retention time of the internal standard must not vary more than +/-30 seconds from the associated continuing calibration standard. If the area count is outside the (-50% to +100%) range of the associated standard, all the positive results for compounds quantitated using that IS are qualified as estimated, "J", and all non-detects as "UJ", or "R" if there is a severe loss of sensitivity.

If an internal standard retention time varies by more than 30 seconds, professional judgment will be used to determine either partial or total rejection of the data for that sample fraction.

All samples were spiked with the internal standards Fluorobenzene, Chlorobenzene-d5 and 1,4-Dichlorobenzene-d4 prior to sample analysis. The area responses and retention time of each internal standard met QC criteria in all samples.

### 1.9 Field Duplicates

Field duplicate samples are collected and analyzed as an indication of overall precision. These results are expected to have more variability than laboratory duplicate samples.

An acceptable RPD is 25% as documented in EPA Region 2 SOP HW33. Professional judgment is utilized for analytes that demonstrate high percent difference.

Soil field duplicate analysis was collected on RDI-SB-16\_0-2\_20220906 as RDI-SB-DUP-01\_20220906. Precision is acceptable for detected analytes Ethylbenzene (2.0 ug/kg vs. 1.3 ug/kg), m+p-Xylene (11 ug/kg vs 12 ug/kg), o-xylene (3.5 ug/kg vs. 4.9 ug/kg) and Xylene, total (15 ug/kg vs 17 ug/kg).

Groundwater field duplicate analysis was collected on RDI-MW-10\_20220920 as RDI-MW-X\_20220920. Acceptable precision was obtained for Tetrachloroethene (0.35 ug/L vs. 0.25 ug/L), MTBE (22 ug/L vs 18 ug/L), n-Propylbenzene (1.3 ug/L vs. 2.0 ug/L), 1,3,5-Trimethylbenzene (2.1 ug/L vs 3.2 ug/L), 1,2,4-Trimethylbenzene (2.4 ug/L vs 3.7 ug/L), p-Ethyl toluene (1.2 ug/L vs 1.3 ug/L), and 1,2,4,5-Tetramethylbenzene (0.70 ug/L vs 1.3 ug/L). Low detections of m+p-Xylene (0.77 ug/L) and Isopropylbenzene (0.86 ug/L) were detected in the field duplicate and not in the parent sample. These detections are less than the reporting limit and qualified, "J" by the laboratory. No additional qualifiers were applied.

#### 1.10 Target Compound List Identification

TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within  $\pm 0.06RRT$  units of the standard compound and have an ion spectrum which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound.

GC/MS spectra met the qualitative criteria for identification. Retention times were within required specifications.

#### 1.11 Tentatively Identified Compounds (TICs)

TICs were not required for these sampling events. When detected the identification must be considered tentative (both quantitative and qualitative) due to the lack of required compound specific response factors. Consequently, all concentrations should be considered estimated, "J" due to the qualitative uncertainty should be qualified, "N" where an identification has been made.

TICS were provided for soil samples. Non-target peaks consist primarily of late eluting hydrocarbons. TICs were not requested or provided for groundwater samples. Sample chromatograms for RDI-MW-11\_20220920, RDI-MW-12\_20220920, and RDI-MW-13\_20220920 do not demonstrate non-target presence. There is evidence of non-target presence based on the sample chromatogram for RDI-MW-10\_20220920 and the field duplicate from this location; RDI-MW-X\_20220920.

#### 1.12 Compound Quantification and Reported Detection Limits

GC/MS quantitative analysis is acceptable. Correct internal standards per SW846 and response factors were used to calculate final concentrations.

As required, the laboratory reported "J" values between the reporting limits (RL) and Method Detection Limits (MDLs). This is consistent with common laboratory practices and a requirement of the National Environmental Laboratory Approval Program (NELAP).

Soil samples were analyzed at low level except for RDI-SB-19\_8-10\_20220906 which was performed at high-level. Reporting limits have been adjusted accordingly. Raw data supports the analysis that was conducted. Groundwater samples were analyzed undiluted at 10mls.

#### 1.13 Overall System Performance

Good resolution and chromatographic performance were observed.

Reviewer's Signature John A. Bell Date 10/16/2022

**Appendix A**  
**Chain of Custody Documents**

**NEW YORK CHAIN OF CUSTODY**  
 Westborough, MA 01581  
 8 Walkup Dr.  
 TEL: 508-898-9220  
 FAX: 508-898-9193

**Service Centers**  
 Mahwah, NJ 07430: 35 Whitney Rd, Suite 5  
 Albany, NY 12205: 14 Walker Way  
 Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

**Project Information**  
 Project Name: 1956 Jerome Ave  
 Project Location: Bronx NY  
 Project # 24024

**Client Information**  
 Client: AKKF  
 Address: 440 Park Ave South  
 NY NY  
 Phone:  
 Fax:  
 Email: jdingins@aerf.com

**Deliveryables**  
 ASP-A  
 EQUS (1 File)  
 Other

**Regulatory Requirement**  
 NY TOGS  
 AWQ Standards  
 NY Restricted Use  
 NY Unrestricted Use  
 NYC Sewer Discharge

**Disposal Site Information**  
 Please identify below location of applicable disposal facilities.  
 Disposal Facility:  
 NJ  NY  
 Other:

**ANALYSIS**

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Sample Filtration
		Date	Time			
48090-01	R01-SB-16-0-2-20220906	9/6/22	8:10	Soil	CSJ/EF	Done
-02	R01-SB-16-7-9-20220906		8:20			Lab to do
-03	R01-SB-17-0-2-20220906		8:45			Preservation
-04	R01-SB-17-7-9-20220906		8:50			Lab to do
-05	R01-SB-16-0-2-20220906		9:30			(Please Specify below)
-06	R01-SB-16-7-9-20220906		9:35			MS/MSD
-07	R01-SB-19-0-2-20220906		10:00			
-08	R01-SB-19-6-10-20220906		10:05			
-09	R01-SB-DUP-01-20220906		8:10			

These samples have been previously analyzed by Alpha

Other project specific requirements/comments:  
 AKKF EQUS EDOS  
 Please specify Metals or TAL.

**Container Code**  
 P = Plastic  
 A = Amber Glass  
 V = Vial  
 G = Glass  
 B = Bacteria Cup  
 C = Cube  
 O = Other  
 E = Encore  
 D = BOD Bottle  
 K/E = Zn Ac/NaOH  
 O = Other

**Westbord: Certification No: MA935**  
**Mansfield: Certification No: MA015**

**Relinquished By:** Claire Bender  
**Received By:** Gary C...  
**Date/Time:** 9/6/22 13:35  
 9/6/22 13:20  
 9/6/22 13:00  
 9/7/22 00:40

**Container: Type V**  
**Preservative B**

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

# CHAIN OF CUSTODY

PAGE \_\_\_\_\_ OF \_\_\_\_\_

ALPHA Job #: **U251399**

Date Received in Lab: **9/20/22**

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

### Project Information

Project Name: **1956 Jerome Ave**  
 Project Location: **1956 Jerome Ave**  
 Project #: **210024**  
 Project Manager: **Pat Diggins**  
 ALPHA Quote #:

### Reporting Information - Data Deliverables

FAX  EMAIL  
 Add'l Deliverables

### Billing Information

Same as Client info PO #:

### Client Information

Client: **ARRF**  
 Address: **440 Park Aves**

Phone: **914-922-2794**

Fax: **HigginsDakrf.com**

### Turn-Around Time

Standard  RUSH (only equipment & pre-approved)

Date Due: \_\_\_\_\_ Time: \_\_\_\_\_

### Other Project Specific Requirements/Comments/Detection Limits:

If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed.  
 (Note: All CAM methods for inorganic analytes require MS every 20 soil samples)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials
		Date	Time		
51399-01	RDI-MW-10- <del>10000</del> <b>20220920</b>	9/20	900	W	JLF
-02	RDI-MW-10- <del>10000</del> <b>20220920</b>	9/20	900	W	JLF
-03	RDI-MW-11- <del>20220920</del> <b>20220920</b>	9/20	1050	W	JLF
-04	RDI-MW-12- <del>20220920</del> <b>20220920</b>	9/20	1000	W	JLF
-05	RDI-MW-13- <del>20220920</del> <b>20220920</b>	9/20	1240	W	JLF

ANALYSIS  
VOCs

**SAMPLE HANDLING**  
 Filtration \_\_\_\_\_  
 Done  
 Not needed  
 Lab to do  
 Preservation  
 Lab to do  
 (Please specify below)

Sample Specific Comments

**TOTAL # BOTTLES**  
 3x Volume **9**  
**3**  
**3**  
**3**  
**3**

### PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT  
 MA MCP or CT RCP?

Relinquished By: **[Signature]**  
 Date/Time: **9/20/22 1815**  
 Container Type: **Preservative**  
 Date/Time: **9/20/22 2135**

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

**Appendix B  
Case Narratives**



**Project Name:** 1956 JEROME AVE  
**Project Number:** 210024

**Lab Number:** L2248090  
**Report Date:** 09/20/22

### Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

#### HOLD POLICY

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

Please contact Client Services at 800-624-9220 with any questions.



**Project Name:** 1956 JEROME AVE  
**Project Number:** 210024

**Lab Number:** L2248090  
**Report Date:** 09/20/22

**Case Narrative (continued)**

**Report Submission**

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

**Volatile Organics**

L2248090-08: The surrogate recovery is outside the method acceptance criteria for dibromofluoromethane (46%) due to interference with the Internal Standard.

L2248090-08: The surrogate recovery is outside the acceptance criteria for toluene-d8 (185%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: *Caitlin Walukera* Report Date: 09/20/22

Title: Technical Director/Representative

*For 1011572*



**Project Name:** 1956 JEROME  
**Project Number:** 210024

**Lab Number:** L2251399  
**Report Date:** 10/04/22

### Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures outside of the method's compliance. In these instances the specific failure is not mandated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

#### HOLD POLICY

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

Please contact Client Services at 800-624-9220 with any questions.

**Project Name:** 1956 JEROME  
**Project Number:** 210024

**Lab Number:** L2251399  
**Report Date:** 10/04/22

**Case Narrative (continued)**

**Report Submission**

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

**Sample Receipt**

L2251399-02: The client ID was specified by the client.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: *Melissa Sturgis*

Report Date: 10/04/22

Title: Technical Director/Representative

*for 10/16/22*



**Appendix C  
Data Summary Form I's  
With Qualifications**

**Results Summary  
Form 1  
Volatile Organics by EPA 5035**

Client : AKRF, Inc.  
 Project Name : 1956 JEROME AVE  
 Lab ID : L2248090-01  
 Client ID : RDI-SB-16\_0-2\_20220906  
 Sample Location : BRONX NY  
 Sample Matrix : SOIL  
 Analytical Method : 1,8260C  
 Lab File ID : V04220909A08  
 Sample Amount : 6.1 g  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2248090  
 Project Number : 210024  
 Date Collected : 09/06/22 08:10  
 Date Received : 09/06/22  
 Date Analyzed : 09/09/22 10:25  
 Dilution Factor : 1  
 Analyst : NLK  
 Instrument ID : VOA104  
 GC Column : RTX-VMS  
 %Solids : 86  
 Injection Volume : N/A

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
75-09-2	Methylene chloride	ND	4.8	2.2	U
75-34-3	1,1-Dichloroethane	ND	0.95	0.14	U
67-66-3	Chloroform	ND	1.4	0.13	<del>U</del> UJ
56-23-5	Carbon tetrachloride	ND	0.95	0.22	U
78-87-5	1,2-Dichloropropane	ND	0.95	0.12	U
124-48-1	Dibromochloromethane	ND	0.95	0.13	U
79-00-5	1,1,2-Trichloroethane	ND	0.95	0.25	U
127-18-4	Tetrachloroethene	ND	0.48	0.19	U
108-90-7	Chlorobenzene	ND	0.48	0.12	U
75-69-4	Trichlorofluoromethane	ND	3.8	0.66	<del>U</del> UJ
107-06-2	1,2-Dichloroethane	ND	0.95	0.24	U
71-55-6	1,1,1-Trichloroethane	ND	0.48	0.16	U
75-27-4	Bromodichloromethane	ND	0.48	0.10	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.95	0.26	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.48	0.15	U
542-75-6	1,3-Dichloropropene, Total	ND	0.48	0.15	U
563-58-6	1,1-Dichloropropene	ND	0.48	0.15	U
75-25-2	Bromoform	ND	3.8	0.23	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.48	0.16	U
71-43-2	Benzene	ND	0.48	0.16	U
108-88-3	Toluene	ND	0.95	0.52	U
100-41-4	Ethylbenzene	2.0	0.95	0.13	
74-87-3	Chloromethane	ND	3.8	0.89	U
74-83-9	Bromomethane	ND	1.9	0.55	U
75-01-4	Vinyl chloride	ND	0.95	0.32	U

*Handwritten signature and date: 10/15/22*



# Results Summary Form 1 Volatile Organics by EPA 5035

Client : AKRF, Inc.  
 Project Name : 1956 JEROME AVE  
 Lab ID : L2248090-01  
 Client ID : RDI-SB-16\_0-2\_20220906  
 Sample Location : BRONX NY  
 Sample Matrix : SOIL  
 Analytical Method : 1,8260C  
 Lab File ID : V04220909A08  
 Sample Amount : 6.1 g  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2248090  
 Project Number : 210024  
 Date Collected : 09/06/22 08:10  
 Date Received : 09/06/22  
 Date Analyzed : 09/09/22 10:25  
 Dilution Factor : 1  
 Analyst : NLK  
 Instrument ID : VOA104  
 GC Column : RTX-VMS  
 %Solids : 86  
 Injection Volume : N/A

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
75-00-3	Chloroethane	ND	1.9	0.43	U
75-35-4	1,1-Dichloroethene	ND	0.95	0.23	<del>U</del> UJ
156-60-5	trans-1,2-Dichloroethene	ND	1.4	0.13	U
79-01-6	Trichloroethene	ND	0.48	0.13	U
95-50-1	1,2-Dichlorobenzene	ND	1.9	0.14	U
541-73-1	1,3-Dichlorobenzene	ND	1.9	0.14	U
106-46-7	1,4-Dichlorobenzene	ND	1.9	0.16	U
1634-04-4	Methyl tert butyl ether	ND	1.9	0.19	U
179601-23-1	p/m-Xylene	11	1.9	0.53	
95-47-6	o-Xylene	3.5	0.95	0.28	
1330-20-7	Xylenes, Total	15	0.95	0.28	
156-59-2	cis-1,2-Dichloroethene	ND	0.95	0.17	U
540-59-0	1,2-Dichloroethene, Total	ND	0.95	0.13	U
74-95-3	Dibromomethane	ND	1.9	0.23	<del>U</del> UJ
100-42-5	Styrene	ND	0.95	0.19	U
75-71-8	Dichlorodifluoromethane	ND	9.5	0.87	<del>U</del> UJ
67-64-1	Acetone	ND	9.5	4.6	U
75-15-0	Carbon disulfide	ND	9.5	4.3	U
78-93-3	2-Butanone	ND	9.5	2.1	U
108-05-4	Vinyl acetate	ND	9.5	2.0	U
108-10-1	4-Methyl-2-pentanone	ND	9.5	1.2	U
96-18-4	1,2,3-Trichloropropane	ND	1.9	0.12	U
591-78-6	2-Hexanone	ND	9.5	1.1	U
74-97-5	Bromochloromethane	ND	1.9	0.20	<del>U</del> UJ
594-20-7	2,2-Dichloropropane	ND	1.9	0.19	U



**Results Summary  
Form 1  
Volatile Organics by EPA 5035**

Client : AKRF, Inc.  
 Project Name : 1956 JEROME AVE  
 Lab ID : L2248090-01  
 Client ID : RDI-SB-16\_0-2\_20220906  
 Sample Location : BRONX NY  
 Sample Matrix : SOIL  
 Analytical Method : 1,8260C  
 Lab File ID : V04220909A08  
 Sample Amount : 6.1 g  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2248090  
 Project Number : 210024  
 Date Collected : 09/06/22 08:10  
 Date Received : 09/06/22  
 Date Analyzed : 09/09/22 10:25  
 Dilution Factor : 1  
 Analyst : NLK  
 Instrument ID : VOA104  
 GC Column : RTX-VMS  
 %Solids : 86  
 Injection Volume : N/A

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
106-93-4	1,2-Dibromoethane	ND	0.95	0.26	U
142-28-9	1,3-Dichloropropane	ND	1.9	0.16	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.48	0.12	U
108-86-1	Bromobenzene	ND	1.9	0.14	U
104-51-8	n-Butylbenzene	ND	0.95	0.16	U
135-98-8	sec-Butylbenzene	ND	0.95	0.14	U
98-06-6	tert-Butylbenzene	ND	1.9	0.11	U
95-49-8	o-Chlorotoluene	ND	1.9	0.18	U
106-43-4	p-Chlorotoluene	ND	1.9	0.10	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.8	0.95	U
87-68-3	Hexachlorobutadiene	ND	3.8	0.16	U
98-82-8	Isopropylbenzene	ND	0.95	0.10	U
99-87-6	p-Isopropyltoluene	ND	0.95	0.10	U
91-20-3	Naphthalene	ND	3.8	0.62	U
107-13-1	Acrylonitrile	ND	3.8	1.1	U
103-65-1	n-Propylbenzene	ND	0.95	0.16	U
87-61-6	1,2,3-Trichlorobenzene	ND	1.9	0.31	U
120-82-1	1,2,4-Trichlorobenzene	ND	1.9	0.26	U
108-67-8	1,3,5-Trimethylbenzene	ND	1.9	0.18	U
95-63-6	1,2,4-Trimethylbenzene	ND	1.9	0.32	U
123-91-1	1,4-Dioxane	ND	76	33.	U R
105-05-5	p-Diethylbenzene	ND	1.9	0.17	U
622-96-8	p-Ethyltoluene	ND	1.9	0.36	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	1.9	0.18	U
60-29-7	Ethyl ether	ND	1.9	0.32	U

*for 10/15/22*  




**Results Summary  
Form 1  
Volatile Organics by EPA 5035**

Client : AKRF, Inc.  
 Project Name : 1956 JEROME AVE  
 Lab ID : L2248090-01  
 Client ID : RDI-SB-16\_0-2\_20220906  
 Sample Location : BRONX NY  
 Sample Matrix : SOIL  
 Analytical Method : 1,8260C  
 Lab File ID : V04220909A08  
 Sample Amount : 6.1 g  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2248090  
 Project Number : 210024  
 Date Collected : 09/06/22 08:10  
 Date Received : 09/06/22  
 Date Analyzed : 09/09/22 10:25  
 Dilution Factor : 1  
 Analyst : NLK  
 Instrument ID : VOA104  
 GC Column : RTX-VMS  
 %Solids : 86  
 Injection Volume : N/A

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	4.8	1.4	U



**Tentatively Identified Compounds  
Form 1  
Volatile Organics by EPA 5035**

Client	: AKRF, Inc.	Lab Number	: L2248090
Project Name	: 1956 JEROME AVE	Project Number	: 210024
Lab ID	: L2248090-01	Date Collected	: 09/06/22 08:10
Client ID	: RDI-SB-16_0-2_20220906	Date Received	: 09/06/22
Sample Location	: BRONX NY	Date Analyzed	: 09/09/22 10:25
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: V04220909A08	Instrument ID	: VOA104
Sample Amount	:	GC Column	: RTX-VMS
Level	:	%Solids	: 86
Extract Volume (MeOH)	: NA	Injection Volume	: 1

Number TICS found: 0

Concentration Units: ug/Kg

CAS Number	Compound Name	RT	EST. CONC.	Qualifier
NO TENTATIVELY IDENTIFIED COMPOUNDS				



**Results Summary  
Form 1  
Volatile Organics by EPA 5035**

Client : AKRF, Inc.  
 Project Name : 1956 JEROME AVE  
 Lab ID : L2248090-02  
 Client ID : RDI-SB-16\_7-9\_20220906  
 Sample Location : BRONX NY  
 Sample Matrix : SOIL  
 Analytical Method : 1,8260C  
 Lab File ID : V04220909A09  
 Sample Amount : 3.2 g  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2248090  
 Project Number : 210024  
 Date Collected : 09/06/22 08:20  
 Date Received : 09/06/22  
 Date Analyzed : 09/09/22 10:52  
 Dilution Factor : 1  
 Analyst : NLK  
 Instrument ID : VOA104  
 GC Column : RTX-VMS  
 %Solids : 33  
 Injection Volume : N/A

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
75-09-2	Methylene chloride	ND	24	11.	U
75-34-3	1,1-Dichloroethane	ND	4.9	0.71	U
67-66-3	Chloroform	ND	7.3	0.68	U <i>UH</i>
56-23-5	Carbon tetrachloride	ND	4.9	1.1	U
78-87-5	1,2-Dichloropropane	ND	4.9	0.61	U
124-48-1	Dibromochloromethane	ND	4.9	0.68	U
79-00-5	1,1,2-Trichloroethane	ND	4.9	1.3	U
127-18-4	Tetrachloroethene	ND	2.4	0.96	U
108-90-7	Chlorobenzene	ND	2.4	0.62	U
75-69-4	Trichlorofluoromethane	ND	20	3.4	U <i>UH</i>
107-06-2	1,2-Dichloroethane	ND	4.9	1.2	U
71-55-6	1,1,1-Trichloroethane	ND	2.4	0.82	U
75-27-4	Bromodichloromethane	ND	2.4	0.53	U
10061-02-6	trans-1,3-Dichloropropene	ND	4.9	1.3	U
10061-01-5	cis-1,3-Dichloropropene	ND	2.4	0.77	U
542-75-6	1,3-Dichloropropene, Total	ND	2.4	0.77	U
563-58-6	1,1-Dichloropropene	ND	2.4	0.78	U
75-25-2	Bromoform	ND	20	1.2	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.4	0.81	U
71-43-2	Benzene	ND	2.4	0.81	U
108-88-3	Toluene	ND	4.9	2.6	U
100-41-4	Ethylbenzene	ND	4.9	0.69	U
74-87-3	Chloromethane	ND	20	4.6	U
74-83-9	Bromomethane	ND	9.8	2.8	U
75-01-4	Vinyl chloride	ND	4.9	1.6	U

*JK 10/15/22*



**Results Summary  
Form 1  
Volatile Organics by EPA 5035**

Client : AKRF, Inc.  
 Project Name : 1956 JEROME AVE  
 Lab ID : L2248090-02  
 Client ID : RDI-SB-16\_7-9\_20220906  
 Sample Location : BRONX NY  
 Sample Matrix : SOIL  
 Analytical Method : 1,8260C  
 Lab File ID : V04220909A09  
 Sample Amount : 3.2 g  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2248090  
 Project Number : 210024  
 Date Collected : 09/06/22 08:20  
 Date Received : 09/06/22  
 Date Analyzed : 09/09/22 10:52  
 Dilution Factor : 1  
 Analyst : NLK  
 Instrument ID : VOA104  
 GC Column : RTX-VMS  
 %Solids : 33  
 Injection Volume : N/A

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
75-00-3	Chloroethane	ND	9.8	2.2	U
75-35-4	1,1-Dichloroethene	ND	4.9	1.2	U UJ
156-60-5	trans-1,2-Dichloroethene	ND	7.3	0.67	U
79-01-6	Trichloroethene	ND	2.4	0.67	U
95-50-1	1,2-Dichlorobenzene	ND	9.8	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	9.8	0.72	U
106-46-7	1,4-Dichlorobenzene	ND	9.8	0.84	U
1634-04-4	Methyl tert butyl ether	6.3	9.8	0.98	J
179601-23-1	p/m-Xylene	ND	9.8	2.7	U
95-47-6	o-Xylene	ND	4.9	1.4	U
1330-20-7	Xylenes, Total	ND	4.9	1.4	U
156-59-2	cis-1,2-Dichloroethene	ND	4.9	0.85	U
540-59-0	1,2-Dichloroethene, Total	ND	4.9	0.67	U
74-95-3	Dibromomethane	ND	9.8	1.2	U UJ
100-42-5	Styrene	ND	4.9	0.96	U
75-71-8	Dichlorodifluoromethane	ND	49	4.5	U UJ
67-64-1	Acetone	430	49	23.	
75-15-0	Carbon disulfide	ND	49	22.	U
78-93-3	2-Butanone	91	49	11.	
108-05-4	Vinyl acetate	ND	49	10.	U
108-10-1	4-Methyl-2-pentanone	ND	49	6.2	U
96-18-4	1,2,3-Trichloropropane	ND	9.8	0.62	U
591-78-6	2-Hexanone	ND	49	5.8	U
74-97-5	Bromochloromethane	ND	9.8	1.0	U UJ
594-20-7	2,2-Dichloropropane	ND	9.8	0.99	U

*Handwritten signature and date: 10/18/22*



**Results Summary**  
**Form 1**  
**Volatile Organics by EPA 5035**

Client : AKRF, Inc.  
Project Name : 1956 JEROME AVE  
Lab ID : L2248090-02  
Client ID : RDI-SB-16\_7-9\_20220906  
Sample Location : BRONX NY  
Sample Matrix : SOIL  
Analytical Method : 1,8260C  
Lab File ID : V04220909A09  
Sample Amount : 3.2 g  
Level : LOW  
Extract Volume (MeOH) : N/A

Lab Number : L2248090  
Project Number : 210024  
Date Collected : 09/06/22 08:20  
Date Received : 09/06/22  
Date Analyzed : 09/09/22 10:52  
Dilution Factor : 1  
Analyst : NLK  
Instrument ID : VOA104  
GC Column : RTX-VMS  
%Solids : 33  
Injection Volume : N/A

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
106-93-4	1,2-Dibromoethane	ND	4.9	1.4	U
142-28-9	1,3-Dichloropropane	ND	9.8	0.82	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.4	0.64	U
108-86-1	Bromobenzene	ND	9.8	0.71	U
104-51-8	n-Butylbenzene	ND	4.9	0.82	U
135-98-8	sec-Butylbenzene	ND	4.9	0.71	U
98-06-6	tert-Butylbenzene	ND	9.8	0.58	U
95-49-8	o-Chlorotoluene	ND	9.8	0.93	U
106-43-4	p-Chlorotoluene	ND	9.8	0.53	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	15	4.9	U
87-68-3	Hexachlorobutadiene	ND	20	0.82	U
98-82-8	Isopropylbenzene	ND	4.9	0.53	U
99-87-6	p-Isopropyltoluene	ND	4.9	0.53	U
91-20-3	Naphthalene	ND	20	3.2	U
107-13-1	Acrylonitrile	ND	20	5.6	U
103-65-1	n-Propylbenzene	ND	4.9	0.84	U
87-61-6	1,2,3-Trichlorobenzene	ND	9.8	1.6	U
120-82-1	1,2,4-Trichlorobenzene	ND	9.8	1.3	U
108-67-8	1,3,5-Trimethylbenzene	ND	9.8	0.94	U
95-63-6	1,2,4-Trimethylbenzene	ND	9.8	1.6	U
123-91-1	1,4-Dioxane	ND	390	170	U <i>P</i>
105-05-5	p-Diethylbenzene	ND	9.8	0.86	U
622-96-8	p-Ethyltoluene	ND	9.8	1.9	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	9.8	0.93	U
60-29-7	Ethyl ether	ND	9.8	1.7	U

*John 10/18/22*  


**Results Summary  
Form 1  
Volatile Organics by EPA 5035**

Client	: AKRF, Inc.	Lab Number	: L2248090
Project Name	: 1956 JEROME AVE	Project Number	: 210024
Lab ID	: L2248090-02	Date Collected	: 09/06/22 08:20
Client ID	: RDI-SB-16_7-9_20220906	Date Received	: 09/06/22
Sample Location	: BRONX NY	Date Analyzed	: 09/09/22 10:52
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: V04220909A09	Instrument ID	: VOA104
Sample Amount	: 3.2 g	GC Column	: RTX-VMS
Level	: LOW	%Solids	: 33
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	24	6.9	U



**Tentatively Identified Compounds  
Form 1  
Volatile Organics by EPA 5035**

Client	: AKRF, Inc.	Lab Number	: L2248090
Project Name	: 1956 JEROME AVE	Project Number	: 210024
Lab ID	: L2248090-02	Date Collected	: 09/06/22 08:20
Client ID	: RDI-SB-16_7-9_20220906	Date Received	: 09/06/22
Sample Location	: BRONX NY	Date Analyzed	: 09/09/22 10:52
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: V04220909A09	Instrument ID	: VOA104
Sample Amount	:	GC Column	: RTX-VMS
Level	:	%Solids	: 33
Extract Volume (MeOH)	: NA	Injection Volume	: 1

Number TICS found: 2

Concentration Units: ug/Kg

CAS Number	Compound Name	RT	EST. CONC.	Qualifier
	Unknown	1.43	16.4	J
Total TIC Compounds			16.4J	J



# Results Summary Form 1 Volatile Organics by EPA 5035

Client : AKRF, Inc.  
 Project Name : 1956 JEROME AVE  
 Lab ID : L2248090-03  
 Client ID : RDI-SB-17\_0-2\_20220906  
 Sample Location : BRONX NY  
 Sample Matrix : SOIL  
 Analytical Method : 1,8260C  
 Lab File ID : V04220909A10  
 Sample Amount : 6.2 g  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2248090  
 Project Number : 210024  
 Date Collected : 09/06/22 08:45  
 Date Received : 09/06/22  
 Date Analyzed : 09/09/22 11:18  
 Dilution Factor : 1  
 Analyst : NLK  
 Instrument ID : VOA104  
 GC Column : RTX-VMS  
 %Solids : 92  
 Injection Volume : N/A

CAS NO.	Parameter	Results	ug/Kg		Qualifier
			RL	MDL	
75-09-2	Methylene chloride	ND	4.3	2.0	U
75-34-3	1,1-Dichloroethane	ND	0.87	0.12	U
67-66-3	Chloroform	ND	1.3	0.12	U UJ
56-23-5	Carbon tetrachloride	ND	0.87	0.20	U
78-87-5	1,2-Dichloropropane	ND	0.87	0.11	U
124-48-1	Dibromochloromethane	ND	0.87	0.12	U
79-00-5	1,1,2-Trichloroethane	ND	0.87	0.23	U
127-18-4	Tetrachloroethene	ND	0.43	0.17	U
108-90-7	Chlorobenzene	ND	0.43	0.11	U UJ
75-69-4	Trichlorofluoromethane	ND	3.5	0.60	U UJ
107-06-2	1,2-Dichloroethane	ND	0.87	0.22	U UJ
71-55-6	1,1,1-Trichloroethane	ND	0.43	0.14	U
75-27-4	Bromodichloromethane	ND	0.43	0.10	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.87	0.24	U UJ
10061-01-5	cis-1,3-Dichloropropene	ND	0.43	0.14	U UJ
542-75-6	1,3-Dichloropropene, Total	ND	0.43	0.14	U UJ
563-58-6	1,1-Dichloropropene	ND	0.43	0.14	U
75-25-2	Bromoform	ND	3.5	0.21	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.43	0.14	U
71-43-2	Benzene	ND	0.43	0.14	U
108-88-3	Toluene	ND	0.87	0.47	U
100-41-4	Ethylbenzene	ND	0.87	0.12	U UJ
74-87-3	Chloromethane	ND	3.5	0.81	U
74-83-9	Bromomethane	ND	1.7	0.50	U
75-01-4	Vinyl chloride	ND	0.87	0.29	U

*Jan 10/18/22*





**Results Summary**  
**Form 1**  
**Volatile Organics by EPA 5035**

Client : AKRF, Inc.  
 Project Name : 1956 JEROME AVE  
 Lab ID : L2248090-03  
 Client ID : RDI-SB-17\_0-2\_20220906  
 Sample Location : BRONX NY  
 Sample Matrix : SOIL  
 Analytical Method : 1,8260C  
 Lab File ID : V04220909A10  
 Sample Amount : 6.2 g  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2248090  
 Project Number : 210024  
 Date Collected : 09/06/22 08:45  
 Date Received : 09/06/22  
 Date Analyzed : 09/09/22 11:18  
 Dilution Factor : 1  
 Analyst : NLK  
 Instrument ID : VOA104  
 GC Column : RTX-VMS  
 %Solids : 92  
 Injection Volume : N/A

CAS NO.	Parameter	Results	ug/Kg		Qualifier
			RL	MDL	
75-00-3	Chloroethane	ND	1.7	0.39	U
75-35-4	1,1-Dichloroethene	ND	0.87	0.21	U UJ
156-60-5	trans-1,2-Dichloroethene	ND	1.3	0.12	U
79-01-6	Trichloroethene	ND	0.43	0.12	U
95-50-1	1,2-Dichlorobenzene	ND	1.7	0.12	U UJ
541-73-1	1,3-Dichlorobenzene	ND	1.7	0.13	U UJ
106-46-7	1,4-Dichlorobenzene	ND	1.7	0.15	U UJ
1634-04-4	Methyl tert butyl ether	ND	1.7	0.17	U
179601-23-1	p/m-Xylene	ND	1.7	0.49	U UJ
95-47-6	o-Xylene	ND	0.87	0.25	U UJ
1330-20-7	Xylenes, Total	ND	0.87	0.25	U UJ
156-59-2	cis-1,2-Dichloroethene	ND	0.87	0.15	U UJ
540-59-0	1,2-Dichloroethene, Total	ND	0.87	0.12	U UJ
74-95-3	Dibromomethane	ND	1.7	0.21	U UJ
100-42-5	Styrene	ND	0.87	0.17	U UJ
75-71-8	Dichlorodifluoromethane	ND	8.7	0.79	U UJ
67-64-1	Acetone	ND	8.7	4.2	U
75-15-0	Carbon disulfide	ND	8.7	3.9	U
78-93-3	2-Butanone	ND	8.7	1.9	U
108-05-4	Vinyl acetate	ND	8.7	1.9	U UJ
108-10-1	4-Methyl-2-pentanone	ND	8.7	1.1	U
96-18-4	1,2,3-Trichloropropane	ND	1.7	0.11	U
591-78-6	2-Hexanone	ND	8.7	1.0	U
74-97-5	Bromochloromethane	ND	1.7	0.18	U UJ
594-20-7	2,2-Dichloropropane	ND	1.7	0.18	U

*for 10/18/22*  


**Results Summary  
Form 1  
Volatile Organics by EPA 5035**

Client : AKRF, Inc.  
 Project Name : 1956 JEROME AVE  
 Lab ID : L2248090-03  
 Client ID : RDI-SB-17\_0-2\_20220906  
 Sample Location : BRONX NY  
 Sample Matrix : SOIL  
 Analytical Method : 1,8260C  
 Lab File ID : V04220909A10  
 Sample Amount : 6.2 g  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2248090  
 Project Number : 210024  
 Date Collected : 09/06/22 08:45  
 Date Received : 09/06/22  
 Date Analyzed : 09/09/22 11:18  
 Dilution Factor : 1  
 Analyst : NLK  
 Instrument ID : VOA104  
 GC Column : RTX-VMS  
 %Solids : 92  
 Injection Volume : N/A

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
106-93-4	1,2-Dibromoethane	ND	0.87	0.24	U UJ
142-28-9	1,3-Dichloropropane	ND	1.7	0.14	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.43	0.11	U
108-86-1	Bromobenzene	ND	1.7	0.12	U UJ
104-51-8	n-Butylbenzene	ND	0.87	0.14	U UJ
135-98-8	sec-Butylbenzene	ND	0.87	0.13	U UJ
98-06-6	tert-Butylbenzene	ND	1.7	0.10	U UJ
95-49-8	o-Chlorotoluene	ND	1.7	0.16	U UJ
106-43-4	p-Chlorotoluene	ND	1.7	0.09	U UJ
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.6	0.87	U
87-68-3	Hexachlorobutadiene	ND	3.5	0.15	U UJ
98-82-8	Isopropylbenzene	ND	0.87	0.10	U UJ
99-87-6	p-Isopropyltoluene	ND	0.87	0.10	U UJ
91-20-3	Naphthalene	ND	3.5	0.56	U UJ
107-13-1	Acrylonitrile	ND	3.5	1.0	U
103-65-1	n-Propylbenzene	ND	0.87	0.15	U UJ
87-61-6	1,2,3-Trichlorobenzene	ND	1.7	0.28	U UJ
120-82-1	1,2,4-Trichlorobenzene	ND	1.7	0.24	U UJ
108-67-8	1,3,5-Trimethylbenzene	ND	1.7	0.17	U UJ
95-63-6	1,2,4-Trimethylbenzene	ND	1.7	0.29	U UJ
123-91-1	1,4-Dioxane	ND	69	30.	U R
105-05-5	p-Diethylbenzene	ND	1.7	0.15	U UJ
622-96-8	p-Ethyltoluene	ND	1.7	0.33	U UJ
95-93-2	1,2,4,5-Tetramethylbenzene	ND	1.7	0.16	U UJ
60-29-7	Ethyl ether	ND	1.7	0.30	U

*for 10/11/22*



**Results Summary  
Form 1  
Volatile Organics by EPA 5035**

Client : AKRF, Inc.  
 Project Name : 1956 JEROME AVE  
 Lab ID : L2248090-03  
 Client ID : RDI-SB-17\_0-2\_20220906  
 Sample Location : BRONX NY  
 Sample Matrix : SOIL  
 Analytical Method : 1,8260C  
 Lab File ID : V04220909A10  
 Sample Amount : 6.2 g  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2248090  
 Project Number : 210024  
 Date Collected : 09/06/22 08:45  
 Date Received : 09/06/22  
 Date Analyzed : 09/09/22 11:18  
 Dilution Factor : 1  
 Analyst : NLK  
 Instrument ID : VOA104  
 GC Column : RTX-VMS  
 %Solids : 92  
 Injection Volume : N/A

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	4.3	1.2	U

*Jan 10/15/22*  


**Tentatively Identified Compounds  
Form 1  
Volatile Organics by EPA 5035**

Client	: AKRF, Inc.	Lab Number	: L2248090
Project Name	: 1956 JEROME AVE	Project Number	: 210024
Lab ID	: L2248090-03	Date Collected	: 09/06/22 08:45
Client ID	: RDI-SB-17_0-2_20220906	Date Received	: 09/06/22
Sample Location	: BRONX NY	Date Analyzed	: 09/09/22 11:18
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: V04220909A10	Instrument ID	: VOA104
Sample Amount	:	GC Column	: RTX-VMS
Level	:	%Solids	: 92
Extract Volume (MeOH)	: NA	Injection Volume	: 1

Number TICS found: 3

Concentration Units: ug/Kg

CAS Number	Compound Name	RT	EST. CONC.	Qualifier
000078-78-4	Butane, 2-methyl-	2.01	3.52	NJ
000109-66-0	Pentane	2.18	1.91	NJ
<b>Total TIC Compounds</b>			<b>5.43J</b>	<b>J</b>



**Results Summary  
Form 1  
Volatile Organics by EPA 5035**

Client : AKRF, Inc.  
 Project Name : 1956 JEROME AVE  
 Lab ID : L2248090-04  
 Client ID : RDI-SB-17\_7-9\_20220906  
 Sample Location : BRONX NY  
 Sample Matrix : SOIL  
 Analytical Method : 1,8260C  
 Lab File ID : V04220909A11  
 Sample Amount : 3.1 g  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2248090  
 Project Number : 210024  
 Date Collected : 09/06/22 08:50  
 Date Received : 09/06/22  
 Date Analyzed : 09/09/22 11:44  
 Dilution Factor : 1  
 Analyst : NLK  
 Instrument ID : VOA104  
 GC Column : RTX-VMS  
 %Solids : 29  
 Injection Volume : N/A

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
75-09-2	Methylene chloride	ND	28	13.	U
75-34-3	1,1-Dichloroethane	ND	5.6	0.82	U
67-66-3	Chloroform	ND	8.4	0.79	U <i>UT</i>
56-23-5	Carbon tetrachloride	ND	5.6	1.3	U
78-87-5	1,2-Dichloropropane	ND	5.6	0.70	U
124-48-1	Dibromochloromethane	ND	5.6	0.79	U
79-00-5	1,1,2-Trichloroethane	ND	5.6	1.5	U
127-18-4	Tetrachloroethene	ND	2.8	1.1	U
108-90-7	Chlorobenzene	ND	2.8	0.72	U
75-69-4	Trichlorofluoromethane	ND	22	3.9	U <i>UT</i>
107-06-2	1,2-Dichloroethane	ND	5.6	1.4	U
71-55-6	1,1,1-Trichloroethane	ND	2.8	0.94	U
75-27-4	Bromodichloromethane	ND	2.8	0.61	U
10061-02-6	trans-1,3-Dichloropropene	ND	5.6	1.5	U
10061-01-5	cis-1,3-Dichloropropene	ND	2.8	0.89	U
542-75-6	1,3-Dichloropropene, Total	ND	2.8	0.89	U
563-58-6	1,1-Dichloropropene	ND	2.8	0.90	U
75-25-2	Bromoform	ND	22	1.4	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.8	0.94	U
71-43-2	Benzene	ND	2.8	0.94	U
108-88-3	Toluene	ND	5.6	3.1	U
100-41-4	Ethylbenzene	ND	5.6	0.79	U
74-87-3	Chloromethane	ND	22	5.2	U
74-83-9	Bromomethane	ND	11	3.3	U
75-01-4	Vinyl chloride	ND	5.6	1.9	U

*Jan 10/15/22*  


**Results Summary**  
**Form 1**  
**Volatile Organics by EPA 5035**

Client : AKRF, Inc.  
 Project Name : 1956 JEROME AVE  
 Lab ID : L2248090-04  
 Client ID : RDI-SB-17\_7-9\_20220906  
 Sample Location : BRONX NY  
 Sample Matrix : SOIL  
 Analytical Method : 1,8260C  
 Lab File ID : V04220909A11  
 Sample Amount : 3.1 g  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2248090  
 Project Number : 210024  
 Date Collected : 09/06/22 08:50  
 Date Received : 09/06/22  
 Date Analyzed : 09/09/22 11:44  
 Dilution Factor : 1  
 Analyst : NLK  
 Instrument ID : VOA104  
 GC Column : RTX-VMS  
 %Solids : 29  
 Injection Volume : N/A

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
75-00-3	Chloroethane	ND	11	2.5	U
75-35-4	1,1-Dichloroethene	ND	5.6	1.3	<del>U</del> UJ
156-60-5	trans-1,2-Dichloroethene	ND	8.4	0.77	U
79-01-6	Trichloroethene	ND	2.8	0.77	U
95-50-1	1,2-Dichlorobenzene	ND	11	0.81	U
541-73-1	1,3-Dichlorobenzene	ND	11	0.83	U
106-46-7	1,4-Dichlorobenzene	ND	11	0.96	U
1634-04-4	Methyl tert butyl ether	2.3	11	1.1	J
179601-23-1	p/m-Xylene	ND	11	3.2	U
95-47-6	o-Xylene	ND	5.6	1.6	U
1330-20-7	Xylenes, Total	ND	5.6	1.6	U
156-59-2	cis-1,2-Dichloroethene	ND	5.6	0.99	U
540-59-0	1,2-Dichloroethene, Total	ND	5.6	0.77	U
74-95-3	Dibromomethane	ND	11	1.3	<del>U</del> UJ
100-42-5	Styrene	ND	5.6	1.1	U
75-71-8	Dichlorodifluoromethane	ND	56	5.2	<del>U</del> UJ
67-64-1	Acetone	1100	56	27.	
75-15-0	Carbon disulfide	ND	56	26.	U
78-93-3	2-Butanone	230	56	12.	
108-05-4	Vinyl acetate	ND	56	12.	U
108-10-1	4-Methyl-2-pentanone	ND	56	7.2	U
96-18-4	1,2,3-Trichloropropane	ND	11	0.72	U
591-78-6	2-Hexanone	ND	56	6.6	U
74-97-5	Bromochloromethane	ND	11	1.2	<del>U</del> UJ
594-20-7	2,2-Dichloropropane	ND	11	1.1	U

*for 10/11/22*  


**Results Summary  
Form 1  
Volatile Organics by EPA 5035**

Client : AKRF, Inc.  
 Project Name : 1956 JEROME AVE  
 Lab ID : L2248090-04  
 Client ID : RDI-SB-17\_7-9\_20220906  
 Sample Location : BRONX NY  
 Sample Matrix : SOIL  
 Analytical Method : 1,8260C  
 Lab File ID : V04220909A11  
 Sample Amount : 3.1 g  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2248090  
 Project Number : 210024  
 Date Collected : 09/06/22 08:50  
 Date Received : 09/06/22  
 Date Analyzed : 09/09/22 11:44  
 Dilution Factor : 1  
 Analyst : NLK  
 Instrument ID : VOA104  
 GC Column : RTX-VMS  
 %Solids : 29  
 Injection Volume : N/A

CAS NO.	Parameter	Results	ug/Kg		Qualifier
			RL	MDL	
106-93-4	1,2-Dibromoethane	ND	5.6	1.6	U
142-28-9	1,3-Dichloropropane	ND	11	0.94	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.8	0.74	U
108-86-1	Bromobenzene	ND	11	0.82	U
104-51-8	n-Butylbenzene	ND	5.6	0.94	U
135-98-8	sec-Butylbenzene	ND	5.6	0.82	U
98-06-6	tert-Butylbenzene	ND	11	0.66	U
95-49-8	o-Chlorotoluene	ND	11	1.1	U
106-43-4	p-Chlorotoluene	ND	11	0.61	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	17	5.6	U
87-68-3	Hexachlorobutadiene	ND	22	0.95	U
98-82-8	Isopropylbenzene	ND	5.6	0.61	U
99-87-6	p-Isopropyltoluene	ND	5.6	0.61	U
91-20-3	Naphthalene	ND	22	3.7	U
107-13-1	Acrylonitrile	ND	22	6.5	U
103-65-1	n-Propylbenzene	ND	5.6	0.96	U
87-61-6	1,2,3-Trichlorobenzene	ND	11	1.8	U
120-82-1	1,2,4-Trichlorobenzene	ND	11	1.5	U
108-67-8	1,3,5-Trimethylbenzene	ND	11	1.1	U
95-63-6	1,2,4-Trimethylbenzene	ND	11	1.9	U
123-91-1	1,4-Dioxane	ND	450	200	U R
105-05-5	p-Diethylbenzene	ND	11	1.0	U
622-96-8	p-Ethyltoluene	ND	11	2.2	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	11	1.1	U
60-29-7	Ethyl ether	ND	11	1.9	U

*for 10/18/22*  


**Results Summary**  
**Form 1**  
**Volatile Organics by EPA 5035**

Client	: AKRF, Inc.	Lab Number	: L2248090
Project Name	: 1956 JEROME AVE	Project Number	: 210024
Lab ID	: L2248090-04	Date Collected	: 09/06/22 08:50
Client ID	: RDI-SB-17_7-9_20220906	Date Received	: 09/06/22
Sample Location	: BRONX NY	Date Analyzed	: 09/09/22 11:44
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: V04220909A11	Instrument ID	: VOA104
Sample Amount	: 3.1 g	GC Column	: RTX-VMS
Level	: LOW	%Solids	: 29
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	28	8.0	U





**Tentatively Identified Compounds  
Form 1  
Volatile Organics by EPA 5035**

Client	: AKRF, Inc.	Lab Number	: L2248090
Project Name	: 1956 JEROME AVE	Project Number	: 210024
Lab ID	: L2248090-04	Date Collected	: 09/06/22 08:50
Client ID	: RDI-SB-17_7-9_20220906	Date Received	: 09/06/22
Sample Location	: BRONX NY	Date Analyzed	: 09/09/22 11:44
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: V04220909A11	Instrument ID	: VOA104
Sample Amount	:	GC Column	: RTX-VMS
Level	:	%Solids	: 29
Extract Volume (MeOH)	: NA	Injection Volume	: 1

Number TICS found: 9

Concentration Units: ug/Kg

CAS Number	Compound Name	RT	EST. CONC.	Qualifier
	Unknown	1.43	15.4	J
	Unknown	2.92	15	J
000096-14-0	Pentane, 3-methyl-	3.14	18.5	NJ
000096-37-7	Cyclopentane, methyl-	3.89	25.9	NJ
	Unknown	4.51	34.1	J
	Unknown Cycloalkane	5.01	19.3	J
000108-87-2	Cyclohexane, methyl-	5.69	68	NJ
	Unknown Cyclohexane	6.80	14.3	J
	<b>Total TIC Compounds</b>		<b>211J</b>	<b>J</b>



**Results Summary  
Form 1  
Volatile Organics by EPA 5035**

Client : AKRF, Inc.  
 Project Name : 1956 JEROME AVE  
 Lab ID : L2248090-05  
 Client ID : RDI-SB-18\_0-2\_20220906  
 Sample Location : BRONX NY  
 Sample Matrix : SOIL  
 Analytical Method : 1,8260C  
 Lab File ID : V04220909A12  
 Sample Amount : 5.2 g  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2248090  
 Project Number : 210024  
 Date Collected : 09/06/22 09:30  
 Date Received : 09/06/22  
 Date Analyzed : 09/09/22 12:10  
 Dilution Factor : 1  
 Analyst : NLK  
 Instrument ID : VOA104  
 GC Column : RTX-VMS  
 %Solids : 85  
 Injection Volume : N/A

CAS NO.	Parameter	Results	ug/Kg		Qualifier
			RL	MDL	
75-09-2	Methylene chloride	ND	5.7	2.6	U
75-34-3	1,1-Dichloroethane	ND	1.1	0.16	U
67-66-3	Chloroform	ND	1.7	0.16	U - UJ
56-23-5	Carbon tetrachloride	ND	1.1	0.26	U
78-87-5	1,2-Dichloropropane	ND	1.1	0.14	U
124-48-1	Dibromochloromethane	ND	1.1	0.16	U
79-00-5	1,1,2-Trichloroethane	ND	1.1	0.30	U
127-18-4	Tetrachloroethene	ND	0.57	0.22	U
108-90-7	Chlorobenzene	ND	0.57	0.14	U
75-69-4	Trichlorofluoromethane	ND	4.5	0.79	U - UJ
107-06-2	1,2-Dichloroethane	ND	1.1	0.29	U
71-55-6	1,1,1-Trichloroethane	ND	0.57	0.19	U
75-27-4	Bromodichloromethane	ND	0.57	0.12	U
10061-02-6	trans-1,3-Dichloropropene	ND	1.1	0.31	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.57	0.18	U
542-75-6	1,3-Dichloropropene, Total	ND	0.57	0.18	U
563-58-6	1,1-Dichloropropene	ND	0.57	0.18	U
75-25-2	Bromoform	ND	4.5	0.28	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.57	0.19	U
71-43-2	Benzene	ND	0.57	0.19	U
108-88-3	Toluene	ND	1.1	0.62	U
100-41-4	Ethylbenzene	ND	1.1	0.16	U
74-87-3	Chloromethane	ND	4.5	1.0	U
74-83-9	Bromomethane	ND	2.3	0.66	U
75-01-4	Vinyl chloride	ND	1.1	0.38	U

*Jan 10/15/22*  


**Results Summary**  
**Form 1**  
**Volatile Organics by EPA 5035**

Client : AKRF, Inc.  
Project Name : 1956 JEROME AVE  
Lab ID : L2248090-05  
Client ID : RDI-SB-18\_0-2\_20220906  
Sample Location : BRONX NY  
Sample Matrix : SOIL  
Analytical Method : 1,8260C  
Lab File ID : V04220909A12  
Sample Amount : 5.2 g  
Level : LOW  
Extract Volume (MeOH) : N/A

Lab Number : L2248090  
Project Number : 210024  
Date Collected : 09/06/22 09:30  
Date Received : 09/06/22  
Date Analyzed : 09/09/22 12:10  
Dilution Factor : 1  
Analyst : NLK  
Instrument ID : VOA104  
GC Column : RTX-VMS  
%Solids : 85  
Injection Volume : N/A

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
75-00-3	Chloroethane	ND	2.3	0.51	U
75-35-4	1,1-Dichloroethene	ND	1.1	0.27	U UJ
156-60-5	trans-1,2-Dichloroethene	ND	1.7	0.16	U
79-01-6	Trichloroethene	ND	0.57	0.16	U
95-50-1	1,2-Dichlorobenzene	ND	2.3	0.16	U
541-73-1	1,3-Dichlorobenzene	ND	2.3	0.17	U
106-46-7	1,4-Dichlorobenzene	ND	2.3	0.19	U
1634-04-4	Methyl tert butyl ether	ND	2.3	0.23	U
179601-23-1	p/m-Xylene	ND	2.3	0.64	U
95-47-6	o-Xylene	ND	1.1	0.33	U
1330-20-7	Xylenes, Total	ND	1.1	0.33	U
156-59-2	cis-1,2-Dichloroethene	ND	1.1	0.20	U
540-59-0	1,2-Dichloroethene, Total	ND	1.1	0.16	U
74-95-3	Dibromomethane	ND	2.3	0.27	U UJ
100-42-5	Styrene	ND	1.1	0.22	U
75-71-8	Dichlorodifluoromethane	ND	11	1.0	U UJ
67-64-1	Acetone	ND	11	5.5	U
75-15-0	Carbon disulfide	ND	11	5.2	U
78-93-3	2-Butanone	ND	11	2.5	U
108-05-4	Vinyl acetate	ND	11	2.4	U
108-10-1	4-Methyl-2-pentanone	ND	11	1.4	U
96-18-4	1,2,3-Trichloropropane	ND	2.3	0.14	U
591-78-6	2-Hexanone	ND	11	1.3	U
74-97-5	Bromochloromethane	ND	2.3	0.23	U UJ
594-20-7	2,2-Dichloropropane	ND	2.3	0.23	U

*Jan 10/11/22*  


**Results Summary  
Form 1  
Volatile Organics by EPA 5035**

Client : AKRF, Inc.  
 Project Name : 1956 JEROME AVE  
 Lab ID : L2248090-05  
 Client ID : RDI-SB-18\_0-2\_20220906  
 Sample Location : BRONX NY  
 Sample Matrix : SOIL  
 Analytical Method : 1,8260C  
 Lab File ID : V04220909A12  
 Sample Amount : 5.2 g  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2248090  
 Project Number : 210024  
 Date Collected : 09/06/22 09:30  
 Date Received : 09/06/22  
 Date Analyzed : 09/09/22 12:10  
 Dilution Factor : 1  
 Analyst : NLK  
 Instrument ID : VOA104  
 GC Column : RTX-VMS  
 %Solids : 85  
 Injection Volume : N/A

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
106-93-4	1,2-Dibromoethane	ND	1.1	0.32	U
142-28-9	1,3-Dichloropropane	ND	2.3	0.19	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.57	0.15	U
108-86-1	Bromobenzene	ND	2.3	0.16	U
104-51-8	n-Butylbenzene	ND	1.1	0.19	U
135-98-8	sec-Butylbenzene	ND	1.1	0.16	U
98-06-6	tert-Butylbenzene	ND	2.3	0.13	U
95-49-8	o-Chlorotoluene	ND	2.3	0.22	U
106-43-4	p-Chlorotoluene	ND	2.3	0.12	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.4	1.1	U
87-68-3	Hexachlorobutadiene	ND	4.5	0.19	U
98-82-8	Isopropylbenzene	ND	1.1	0.12	U
99-87-6	p-Isopropyltoluene	ND	1.1	0.12	U
91-20-3	Naphthalene	ND	4.5	0.74	U
107-13-1	Acrylonitrile	ND	4.5	1.3	U
103-65-1	n-Propylbenzene	ND	1.1	0.19	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.3	0.36	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.3	0.31	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.3	0.22	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.3	0.38	U
123-91-1	1,4-Dioxane	ND	91	40.	OR
105-05-5	p-Diethylbenzene	ND	2.3	0.20	U
622-96-8	p-Ethyltoluene	ND	2.3	0.44	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.3	0.22	U
60-29-7	Ethyl ether	ND	2.3	0.39	U

*OR 10/18/22*  


**Results Summary  
Form 1  
Volatile Organics by EPA 5035**

Client	: AKRF, Inc.	Lab Number	: L2248090
Project Name	: 1956 JEROME AVE	Project Number	: 210024
Lab ID	: L2248090-05	Date Collected	: 09/06/22 09:30
Client ID	: RDI-SB-18_0-2_20220906	Date Received	: 09/06/22
Sample Location	: BRONX NY	Date Analyzed	: 09/09/22 12:10
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: V04220909A12	Instrument ID	: VOA104
Sample Amount	: 5.2 g	GC Column	: RTX-VMS
Level	: LOW	%Solids	: 85
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.7	1.6	U



**Tentatively Identified Compounds  
Form 1  
Volatile Organics by EPA 5035**

Client	: AKRF, Inc.	Lab Number	: L2248090
Project Name	: 1956 JEROME AVE	Project Number	: 210024
Lab ID	: L2248090-05	Date Collected	: 09/06/22 09:30
Client ID	: RDI-SB-18_0-2_20220906	Date Received	: 09/06/22
Sample Location	: BRONX NY	Date Analyzed	: 09/09/22 12:10
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: V04220909A12	Instrument ID	: VOA104
Sample Amount	:	GC Column	: RTX-VMS
Level	:	%Solids	: 85
Extract Volume (MeOH)	: NA	Injection Volume	: 1

Number TICS found: 0

Concentration Units: ug/Kg

CAS Number	Compound Name	RT	EST. CONC.	Qualifier
NO TENTATIVELY IDENTIFIED COMPOUNDS				



**Results Summary  
Form 1  
Volatile Organics by EPA 5035**

Client : AKRF, Inc.  
 Project Name : 1956 JEROME AVE  
 Lab ID : L2248090-06  
 Client ID : RDI-SB-18\_7-9\_20220906  
 Sample Location : BRONX NY  
 Sample Matrix : SOIL  
 Analytical Method : 1,8260C  
 Lab File ID : V04220913A15  
 Sample Amount : 2.7 g  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2248090  
 Project Number : 210024  
 Date Collected : 09/06/22 09:35  
 Date Received : 09/06/22  
 Date Analyzed : 09/13/22 21:43  
 Dilution Factor : 1  
 Analyst : AJK  
 Instrument ID : VOA104  
 GC Column : RTX-VMS  
 %Solids : 39  
 Injection Volume : N/A

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
75-09-2	Methylene chloride	ND	24	11.	U
75-34-3	1,1-Dichloroethane	ND	4.8	0.70	U
67-66-3	Chloroform	ND	7.2	0.67	U
56-23-5	Carbon tetrachloride	ND	4.8	1.1	U
78-87-5	1,2-Dichloropropane	ND	4.8	0.60	U
124-48-1	Dibromochloromethane	ND	4.8	0.67	U
79-00-5	1,1,2-Trichloroethane	ND	4.8	1.3	U
127-18-4	Tetrachloroethene	ND	2.4	0.94	U
108-90-7	Chlorobenzene	ND	2.4	0.61	U
75-69-4	Trichlorofluoromethane	ND	19	3.3	U
107-06-2	1,2-Dichloroethane	ND	4.8	1.2	U
71-55-6	1,1,1-Trichloroethane	ND	2.4	0.80	U
75-27-4	Bromodichloromethane	ND	2.4	0.52	U
10061-02-6	trans-1,3-Dichloropropene	ND	4.8	1.3	U
10061-01-5	cis-1,3-Dichloropropene	ND	2.4	0.76	U
542-75-6	1,3-Dichloropropene, Total	ND	2.4	0.76	U
563-58-6	1,1-Dichloropropene	ND	2.4	0.76	U
75-25-2	Bromoform	ND	19	1.2	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.4	0.80	U
71-43-2	Benzene	2.5	2.4	0.80	
108-88-3	Toluene	ND	4.8	2.6	U
100-41-4	Ethylbenzene	ND	4.8	0.68	U
74-87-3	Chloromethane	ND	19	4.5	U
74-83-9	Bromomethane	ND	9.6	2.8	U
75-01-4	Vinyl chloride	ND	4.8	1.6	U

*AJK*  
10/11/22  


**Results Summary  
Form 1  
Volatile Organics by EPA 5035**

Client : AKRF, Inc.  
 Project Name : 1956 JEROME AVE  
 Lab ID : L2248090-06  
 Client ID : RDI-SB-18\_7-9\_20220906  
 Sample Location : BRONX NY  
 Sample Matrix : SOIL  
 Analytical Method : 1,8260C  
 Lab File ID : V04220913A15  
 Sample Amount : 2.7 g  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2248090  
 Project Number : 210024  
 Date Collected : 09/06/22 09:35  
 Date Received : 09/06/22  
 Date Analyzed : 09/13/22 21:43  
 Dilution Factor : 1  
 Analyst : AJK  
 Instrument ID : VOA104  
 GC Column : RTX-VMS  
 %Solids : 39  
 Injection Volume : N/A

CAS NO.	Parameter	Results	ug/Kg		Qualifier
			RL	MDL	
75-00-3	Chloroethane	ND	9.6	2.2	U
75-35-4	1,1-Dichloroethene	ND	4.8	1.1	U
156-60-5	trans-1,2-Dichloroethene	ND	7.2	0.66	U
79-01-6	Trichloroethene	ND	2.4	0.66	U
95-50-1	1,2-Dichlorobenzene	ND	9.6	0.69	U
541-73-1	1,3-Dichlorobenzene	ND	9.6	0.71	U
106-46-7	1,4-Dichlorobenzene	ND	9.6	0.82	U
1634-04-4	Methyl tert butyl ether	19	9.6	0.97	
179601-23-1	p/m-Xylene	ND	9.6	2.7	U
95-47-6	o-Xylene	ND	4.8	1.4	U
1330-20-7	Xylenes, Total	ND	4.8	1.4	U
156-59-2	cis-1,2-Dichloroethene	ND	4.8	0.84	U
540-59-0	1,2-Dichloroethene, Total	ND	4.8	0.66	U
74-95-3	Dibromomethane	ND	9.6	1.1	U
100-42-5	Styrene	ND	4.8	0.94	U
75-71-8	Dichlorodifluoromethane	ND	48	4.4	U
67-64-1	Acetone	490	48	23.	
75-15-0	Carbon disulfide	ND	48	22.	U
78-93-3	2-Butanone	180	48	11.	
108-05-4	Vinyl acetate	ND	48	10.	U UJ
108-10-1	4-Methyl-2-pentanone	ND	48	6.2	U
96-18-4	1,2,3-Trichloropropane	ND	9.6	0.61	U
591-78-6	2-Hexanone	ND	48	5.7	U
74-97-5	Bromochloromethane	ND	9.6	0.99	U
594-20-7	2,2-Dichloropropane	ND	9.6	0.97	U

*Jan 10/15/22*  




**Results Summary  
Form 1  
Volatile Organics by EPA 5035**

Client : AKRF, Inc.  
 Project Name : 1956 JEROME AVE  
 Lab ID : L2248090-06  
 Client ID : RDI-SB-18\_7-9\_20220906  
 Sample Location : BRONX NY  
 Sample Matrix : SOIL  
 Analytical Method : 1,8260C  
 Lab File ID : V04220913A15  
 Sample Amount : 2.7 g  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2248090  
 Project Number : 210024  
 Date Collected : 09/06/22 09:35  
 Date Received : 09/06/22  
 Date Analyzed : 09/13/22 21:43  
 Dilution Factor : 1  
 Analyst : AJK  
 Instrument ID : VOA104  
 GC Column : RTX-VMS  
 %Solids : 39  
 Injection Volume : N/A

CAS NO.	Parameter	Results	ug/Kg		Qualifier
			RL	MDL	
106-93-4	1,2-Dibromoethane	ND	4.8	1.3	U
142-28-9	1,3-Dichloropropane	ND	9.6	0.80	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.4	0.64	U
108-86-1	Bromobenzene	ND	9.6	0.70	U
104-51-8	n-Butylbenzene	ND	4.8	0.80	U
135-98-8	sec-Butylbenzene	ND	4.8	0.70	U
98-06-6	tert-Butylbenzene	ND	9.6	0.57	U
95-49-8	o-Chlorotoluene	ND	9.6	0.92	U
106-43-4	p-Chlorotoluene	ND	9.6	0.52	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	14	4.8	U
87-68-3	Hexachlorobutadiene	ND	19	0.81	U
98-82-8	Isopropylbenzene	ND	4.8	0.52	U
99-87-6	p-Isopropyltoluene	ND	4.8	0.52	U
91-20-3	Naphthalene	ND	19	3.1	U
107-13-1	Acrylonitrile	ND	19	5.5	U
103-65-1	n-Propylbenzene	ND	4.8	0.82	U
87-61-6	1,2,3-Trichlorobenzene	ND	9.6	1.6	U
120-82-1	1,2,4-Trichlorobenzene	ND	9.6	1.3	U
108-67-8	1,3,5-Trimethylbenzene	ND	9.6	0.93	U
95-63-6	1,2,4-Trimethylbenzene	ND	9.6	1.6	U
123-91-1	1,4-Dioxane	ND	380	170	U-R
105-05-5	p-Diethylbenzene	ND	9.6	0.85	U
622-96-8	p-Ethyltoluene	ND	9.6	1.8	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	9.6	0.92	U
60-29-7	Ethyl ether	ND	9.6	1.6	U

*for 10/11/22*  


**Results Summary  
Form 1  
Volatile Organics by EPA 5035**

Client : AKRF, Inc.  
 Project Name : 1956 JEROME AVE  
 Lab ID : L2248090-06  
 Client ID : RDI-SB-18\_7-9\_20220906  
 Sample Location : BRONX NY  
 Sample Matrix : SOIL  
 Analytical Method : 1,8260C  
 Lab File ID : V04220913A15  
 Sample Amount : 2.7 g  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2248090  
 Project Number : 210024  
 Date Collected : 09/06/22 09:35  
 Date Received : 09/06/22  
 Date Analyzed : 09/13/22 21:43  
 Dilution Factor : 1  
 Analyst : AJK  
 Instrument ID : VOA104  
 GC Column : RTX-VMS  
 %Solids : 39  
 Injection Volume : N/A

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	24	6.8	UJ

JG 10/15/22



**Tentatively Identified Compounds  
Form 1  
Volatile Organics by EPA 5035**

Client	: AKRF, Inc.	Lab Number	: L2248090
Project Name	: 1956 JEROME AVE	Project Number	: 210024
Lab ID	: L2248090-06	Date Collected	: 09/06/22 09:35
Client ID	: RDI-SB-18_7-9_20220906	Date Received	: 09/06/22
Sample Location	: BRONX NY	Date Analyzed	: 09/13/22 21:43
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: AJK
Lab File ID	: V04220913A15	Instrument ID	: VOA104
Sample Amount	:	GC Column	: RTX-VMS
Level	:	%Solids	: 39
Extract Volume (MeOH)	: NA	Injection Volume	: 1

Number TICS found: 16

Concentration Units: ug/Kg

CAS Number	Compound Name	RT	EST. CONC.	Qualifier
000109-66-0	Pentane	2.19	16.4	NJ
000107-83-5	Pentane, 2-methyl-	2.92	61.5	NJ
000096-14-0	Pentane, 3-methyl-	3.14	75.7	NJ
000096-37-7	Cyclopentane, methyl-	3.89	159	NJ
000110-82-7	Cyclohexane	4.51	178	NJ
000565-59-3	Pentane, 2,3-dimethyl-	4.60	50	NJ
000589-34-4	Hexane, 3-methyl-	4.67	25.6	NJ
	Unknown Cyclopentane	4.94	78.9	J
	Unknown Cyclopentane	5.00	123	J
000108-87-2	Cyclohexane, methyl-	5.69	500	NJ
	Unknown Cyclopentane	6.00	24.9	J
	Unknown Cyclopentane	6.16	27.6	J
	Unknown Cyclohexane	6.80	63	J
000590-66-9	Cyclohexane, 1,1-dimethyl-	7.02	26.9	NJ
	Unknown Cyclohexane	7.36	16.7	J
	<b>Total TIC Compounds</b>		<b>1430J</b>	<b>J</b>



**Results Summary  
Form 1  
Volatile Organics by EPA 5035**

Client : AKRF, Inc.  
 Project Name : 1956 JEROME AVE  
 Lab ID : L2248090-07  
 Client ID : RDI-SB-19\_0-2\_20220906  
 Sample Location : BRONX NY  
 Sample Matrix : SOIL  
 Analytical Method : 1,8260C  
 Lab File ID : V04220909A14  
 Sample Amount : 6.0 g  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2248090  
 Project Number : 210024  
 Date Collected : 09/06/22 10:00  
 Date Received : 09/06/22  
 Date Analyzed : 09/09/22 13:03  
 Dilution Factor : 1  
 Analyst : NLK  
 Instrument ID : VOA104  
 GC Column : RTX-VMS  
 %Solids : 84  
 Injection Volume : N/A

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
75-09-2	Methylene chloride	ND	5.0	2.3	U
75-34-3	1,1-Dichloroethane	ND	1.0	0.14	U
67-66-3	Chloroform	ND	1.5	0.14	U UJ
56-23-5	Carbon tetrachloride	ND	1.0	0.23	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.12	U
124-48-1	Dibromochloromethane	ND	1.0	0.14	U
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.27	U
127-18-4	Tetrachloroethene	ND	0.50	0.20	U
108-90-7	Chlorobenzene	ND	0.50	0.13	U
75-69-4	Trichlorofluoromethane	ND	4.0	0.70	U UJ
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	U
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.17	U
75-27-4	Bromodichloromethane	ND	0.50	0.11	U
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.27	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.16	U
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.16	U
563-58-6	1,1-Dichloropropene	ND	0.50	0.16	U
75-25-2	Bromoform	ND	4.0	0.25	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.17	U
108-88-3	Toluene	ND	1.0	0.54	U
100-41-4	Ethylbenzene	ND	1.0	0.14	U
74-87-3	Chloromethane	ND	4.0	0.93	U
74-83-9	Bromomethane	ND	2.0	0.58	U
75-01-4	Vinyl chloride	ND	1.0	0.34	U

*for 10/18/22*  


**Results Summary  
Form 1  
Volatile Organics by EPA 5035**

Client : AKRF, Inc.  
 Project Name : 1956 JEROME AVE  
 Lab ID : L2248090-07  
 Client ID : RDI-SB-19\_0-2\_20220906  
 Sample Location : BRONX NY  
 Sample Matrix : SOIL  
 Analytical Method : 1,8260C  
 Lab File ID : V04220909A14  
 Sample Amount : 6.0 g  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2248090  
 Project Number : 210024  
 Date Collected : 09/06/22 10:00  
 Date Received : 09/06/22  
 Date Analyzed : 09/09/22 13:03  
 Dilution Factor : 1  
 Analyst : NLK  
 Instrument ID : VOA104  
 GC Column : RTX-VMS  
 %Solids : 84  
 Injection Volume : N/A

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
75-00-3	Chloroethane	ND	2.0	0.45	U
75-35-4	1,1-Dichloroethene	ND	1.0	0.24	U UJ
156-60-5	trans-1,2-Dichloroethene	ND	1.5	0.14	U
79-01-6	Trichloroethene	ND	0.50	0.14	U
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.14	U
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.15	U
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.17	U
1634-04-4	Methyl tert butyl ether	ND	2.0	0.20	U
179601-23-1	p/m-Xylene	ND	2.0	0.56	U
95-47-6	o-Xylene	ND	1.0	0.29	U
1330-20-7	Xylenes, Total	ND	1.0	0.29	U
156-59-2	cls-1,2-Dichloroethene	ND	1.0	0.18	U
540-59-0	1,2-Dichloroethene, Total	ND	1.0	0.14	U
74-95-3	Dibromomethane	ND	2.0	0.24	U UJ
100-42-5	Styrene	ND	1.0	0.20	U
75-71-8	Dichlorodifluoromethane	ND	10	0.92	U UJ
67-64-1	Acetone	ND	10	4.8	U
75-15-0	Carbon disulfide	ND	10	4.6	U
78-93-3	2-Butanone	ND	10	2.2	U
108-05-4	Vinyl acetate	ND	10	2.2	U
108-10-1	4-Methyl-2-pentanone	ND	10	1.3	U
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.13	U
591-78-6	2-Hexanone	ND	10	1.2	U
74-97-5	Bromochloromethane	ND	2.0	0.20	U UJ
594-20-7	2,2-Dichloropropane	ND	2.0	0.20	U

*John 10/11/22*  


**Results Summary  
Form 1  
Volatile Organics by EPA 5035**

Client : AKRF, Inc.  
 Project Name : 1956 JEROME AVE  
 Lab ID : L2248090-07  
 Client ID : RDI-SB-19\_0-2\_20220906  
 Sample Location : BRONX NY  
 Sample Matrix : SOIL  
 Analytical Method : 1,8260C  
 Lab File ID : V04220909A14  
 Sample Amount : 6.0 g  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2248090  
 Project Number : 210024  
 Date Collected : 09/06/22 10:00  
 Date Received : 09/06/22  
 Date Analyzed : 09/09/22 13:03  
 Dilution Factor : 1  
 Analyst : NLK  
 Instrument ID : VOA104  
 GC Column : RTX-VMS  
 %Solids : 84  
 Injection Volume : N/A

CAS NO.	Parameter	Results	ug/Kg		Qualifier
			RL	MDL	
106-93-4	1,2-Dibromoethane	ND	1.0	0.28	U
142-28-9	1,3-Dichloropropane	ND	2.0	0.17	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.13	U
108-86-1	Bromobenzene	ND	2.0	0.14	U
104-51-8	n-Butylbenzene	ND	1.0	0.17	U
135-98-8	sec-Butylbenzene	ND	1.0	0.15	U
98-06-6	tert-Butylbenzene	ND	2.0	0.12	U
95-49-8	o-Chlorotoluene	ND	2.0	0.19	U
106-43-4	p-Chlorotoluene	ND	2.0	0.11	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.0	1.0	U
87-68-3	Hexachlorobutadiene	ND	4.0	0.17	U
98-82-8	Isopropylbenzene	ND	1.0	0.11	U
99-87-6	p-Isopropyltoluene	ND	1.0	0.11	U
91-20-3	Naphthalene	ND	4.0	0.65	U
107-13-1	Acrylonitrile	ND	4.0	1.2	U
103-65-1	n-Propylbenzene	ND	1.0	0.17	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.32	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.27	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.19	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.34	U
123-91-1	1,4-Dioxane	ND	80	35.	U R
105-05-5	p-Diethylbenzene	ND	2.0	0.18	U
622-96-8	p-Ethyltoluene	ND	2.0	0.38	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.19	U
60-29-7	Ethyl ether	ND	2.0	0.34	U

*for 10/18/22*  


**Results Summary  
Form 1  
Volatile Organics by EPA 5035**

Client	: AKRF, Inc.	Lab Number	: L2248090
Project Name	: 1956 JEROME AVE	Project Number	: 210024
Lab ID	: L2248090-07	Date Collected	: 09/06/22 10:00
Client ID	: RDI-SB-19_0-2_20220906	Date Received	: 09/06/22
Sample Location	: BRONX NY	Date Analyzed	: 09/09/22 13:03
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: V04220909A14	Instrument ID	: VOA104
Sample Amount	: 6.0 g	GC Column	: RTX-VMS
Level	: LOW	%Solids	: 84
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.0	1.4	U



**Tentatively Identified Compounds  
Form 1  
Volatile Organics by EPA 5035**

Client	: AKRF, Inc.	Lab Number	: L2248090
Project Name	: 1956 JEROME AVE	Project Number	: 210024
Lab ID	: L2248090-07	Date Collected	: 09/06/22 10:00
Client ID	: RDI-SB-19_0-2_20220906	Date Received	: 09/06/22
Sample Location	: BRONX NY	Date Analyzed	: 09/09/22 13:03
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: V04220909A14	Instrument ID	: VOA104
Sample Amount	:	GC Column	: RTX-VMS
Level	:	%Solids	: 84
Extract Volume (MeOH)	: NA	Injection Volume	: 1

Number TICS found: 0

Concentration Units: ug/Kg

CAS Number	Compound Name	RT	EST. CONC.	Qualifier
NO TENTATIVELY IDENTIFIED COMPOUNDS				





**Results Summary**  
**Form 1**  
**Volatile Organics by EPA 5035**

Client : AKRF, Inc.  
 Project Name : 1956 JEROME AVE  
 Lab ID : L2248090-08  
 Client ID : RDI-SB-19\_8-10\_20220906  
 Sample Location : BRONX NY  
 Sample Matrix : SOIL  
 Analytical Method : 1,8260C  
 Lab File ID : V04220913A16  
 Sample Amount : 5.7 g  
 Level : HIGH  
 Extract Volume (MeOH) : 5 ml

Lab Number : L2248090  
 Project Number : 210024  
 Date Collected : 09/06/22 10:05  
 Date Received : 09/06/22  
 Date Analyzed : 09/13/22 22:09  
 Dilution Factor : 1  
 Analyst : AJK  
 Instrument ID : VOA104  
 GC Column : RTX-VMS  
 %Solids : 87  
 Injection Volume : N/A

CAS NO.	Parameter	Results	ug/Kg		Qualifier
			RL	MDL	
75-09-2	Methylene chloride	ND	290	130	U
75-34-3	1,1-Dichloroethane	ND	58	8.3	U
67-66-3	Chloroform	ND	86	8.0	U
56-23-5	Carbon tetrachloride	ND	58	13.	U
78-87-5	1,2-Dichloropropane	ND	58	7.2	U
124-48-1	Dibromochloromethane	ND	58	8.0	U
79-00-5	1,1,2-Trichloroethane	ND	58	15.	U
127-18-4	Tetrachloroethene	ND	29	11.	U
108-90-7	Chlorobenzene	ND	29	7.3	U
75-69-4	Trichlorofluoromethane	ND	230	40.	U UJ
107-06-2	1,2-Dichloroethane	ND	58	15.	U
71-55-6	1,1,1-Trichloroethane	ND	29	9.6	U
75-27-4	Bromodichloromethane	ND	29	6.3	U
10061-02-6	trans-1,3-Dichloropropene	ND	58	16.	U
10061-01-5	cis-1,3-Dichloropropene	ND	29	9.1	U
542-75-6	1,3-Dichloropropene, Total	ND	29	9.1	U
563-58-6	1,1-Dichloropropene	ND	29	9.1	U
75-25-2	Bromoform	ND	230	14.	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	29	9.6	U
71-43-2	Benzene	ND	29	9.6	U
108-88-3	Toluene	93	58	31.	J+
100-41-4	Ethylbenzene	9600	58	8.1	J+
74-87-3	Chloromethane	ND	230	54.	U
74-83-9	Bromomethane	ND	120	33.	U
75-01-4	Vinyl chloride	ND	58	19.	U

*Handwritten signature and date:*  
 JAK  
 10/16/22



**Results Summary  
Form 1  
Volatile Organics by EPA 5035**

Client : AKRF, Inc.  
 Project Name : 1956 JEROME AVE  
 Lab ID : L2248090-08  
 Client ID : RDI-SB-19\_8-10\_20220906  
 Sample Location : BRONX NY  
 Sample Matrix : SOIL  
 Analytical Method : 1,8260C  
 Lab File ID : V04220913A16  
 Sample Amount : 5.7 g  
 Level : HIGH  
 Extract Volume (MeOH) : 5 ml

Lab Number : L2248090  
 Project Number : 210024  
 Date Collected : 09/06/22 10:05  
 Date Received : 09/06/22  
 Date Analyzed : 09/13/22 22:09  
 Dilution Factor : 1  
 Analyst : AJK  
 Instrument ID : VOA104  
 GC Column : RTX-VMS  
 %Solids : 87  
 Injection Volume : N/A

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
75-00-3	Chloroethane	ND	120	26.	U
75-35-4	1,1-Dichloroethene	ND	58	14.	U
156-60-5	trans-1,2-Dichloroethene	ND	86	7.9	U
79-01-6	Trichloroethene	ND	29	7.9	U
95-50-1	1,2-Dichlorobenzene	ND	120	8.3	U
541-73-1	1,3-Dichlorobenzene	ND	120	8.5	U
106-46-7	1,4-Dichlorobenzene	ND	120	9.8	U
1634-04-4	Methyl tert butyl ether	ND	120	12.	U
179601-23-1	p/m-Xylene	22000	120	32.	J+
95-47-6	o-Xylene	800	58	17.	J+
1330-20-7	Xylenes, Total	23000	58	17.	J+
156-59-2	cls-1,2-Dichloroethene	ND	58	10.	U
540-59-0	1,2-Dichloroethene, Total	ND	58	7.9	U
74-95-3	Dibromomethane	ND	120	14.	U
100-42-5	Styrene	ND	58	11.	U
75-71-8	Dichlorodifluoromethane	ND	580	53.	U
67-64-1	Acetone	ND	580	280	U
75-15-0	Carbon disulfide	ND	580	260	U
78-93-3	2-Butanone	ND	580	130	U
108-05-4	Vinyl acetate	ND	580	120	U UJ
108-10-1	4-Methyl-2-pentanone	ND	580	74.	U
96-18-4	1,2,3-Trichloropropane	ND	120	7.3	U
591-78-6	2-Hexanone	ND	580	68.	U
74-97-5	Bromochloromethane	ND	120	12.	U
594-20-7	2,2-Dichloropropane	ND	120	12.	U

*for 10/16/22*  


**Results Summary**  
**Form 1**  
**Volatile Organics by EPA 5035**

Client : AKRF, Inc.  
 Project Name : 1956 JEROME AVE  
 Lab ID : L2248090-08  
 Client ID : RDI-SB-19\_8-10\_20220906  
 Sample Location : BRONX NY  
 Sample Matrix : SOIL  
 Analytical Method : 1,8260C  
 Lab File ID : V04220913A16  
 Sample Amount : 5.7 g  
 Level : HIGH  
 Extract Volume (MeOH) : 5 ml

Lab Number : L2248090  
 Project Number : 210024  
 Date Collected : 09/06/22 10:05  
 Date Received : 09/06/22  
 Date Analyzed : 09/13/22 22:09  
 Dilution Factor : 1  
 Analyst : AJK  
 Instrument ID : VOA104  
 GC Column : RTX-VMS  
 %Solids : 87  
 Injection Volume : N/A

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
106-93-4	1,2-Dibromoethane	ND	58	16.	U
142-28-9	1,3-Dichloropropane	ND	120	9.6	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	29	7.6	U
108-86-1	Bromobenzene	ND	120	8.3	U
104-51-8	n-Butylbenzene	2200	58	9.6	
135-98-8	sec-Butylbenzene	1200	58	8.4	
98-06-6	tert-Butylbenzene	130	120	6.8	
95-49-8	o-Chlorotoluene	ND	120	11.	U
106-43-4	p-Chlorotoluene	ND	120	6.2	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	170	57.	U
87-68-3	Hexachlorobutadiene	ND	230	9.7	U
98-82-8	Isopropylbenzene	3600	58	6.3	
99-87-6	p-Isopropyltoluene	1600	58	6.3	
91-20-3	Naphthalene	4700	230	37.	
107-13-1	Acrylonitrile	ND	230	66.	U
103-65-1	n-Propylbenzene	7100	58	9.8	
87-61-6	1,2,3-Trichlorobenzene	ND	120	18.	U
120-82-1	1,2,4-Trichlorobenzene	ND	120	16.	U
108-67-8	1,3,5-Trimethylbenzene	14000	120	11.	
95-63-6	1,2,4-Trimethylbenzene	16000	120	19.	
123-91-1	1,4-Dioxane	ND	4600	2000	U - R
105-05-5	p-Diethylbenzene	1700	120	10.	
622-96-8	p-Ethyltoluene	9700	120	22.	
95-93-2	1,2,4,5-Tetramethylbenzene	4900	120	11.	
60-29-7	Ethyl ether	ND	120	20.	U

*AJK*  
10/13/22



**Results Summary  
Form 1  
Volatile Organics by EPA 5035**

Client : AKRF, Inc.  
 Project Name : 1956 JEROME AVE  
 Lab ID : L2248090-08  
 Client ID : RDI-SB-19\_8-10\_20220906  
 Sample Location : BRONX NY  
 Sample Matrix : SOIL  
 Analytical Method : 1,8260C  
 Lab File ID : V04220913A16  
 Sample Amount : 5.7 g  
 Level : HIGH  
 Extract Volume (MeOH) : 5 ml

Lab Number : L2248090  
 Project Number : 210024  
 Date Collected : 09/06/22 10:05  
 Date Received : 09/06/22  
 Date Analyzed : 09/13/22 22:09  
 Dilution Factor : 1  
 Analyst : AJK  
 Instrument ID : VOA104  
 GC Column : RTX-VMS  
 %Solids : 87  
 Injection Volume : N/A

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	290	82.	UJ

for 10/16/22  


**Tentatively Identified Compounds  
Form 1  
Volatile Organics by EPA 5035**

Client : AKRF, Inc.  
 Project Name : 1956 JEROME AVE  
 Lab ID : L2248090-08  
 Client ID : RDI-SB-19\_8-10\_20220906  
 Sample Location : BRONX NY  
 Sample Matrix : SOIL  
 Analytical Method : 1,8260C  
 Lab File ID : V04220913A16  
 Sample Amount :  
 Level :  
 Extract Volume (MeOH) : NA

Lab Number : L2248090  
 Project Number : 210024  
 Date Collected : 09/06/22 10:05  
 Date Received : 09/06/22  
 Date Analyzed : 09/13/22 22:09  
 Dilution Factor : 1  
 Analyst : AJK  
 Instrument ID : VOA104  
 GC Column : RTX-VMS  
 %Solids : 87  
 Injection Volume : 0.1 g

Number TICS found: 16

Concentration Units: ug/Kg

CAS Number	Compound Name	RT	EST. CONC.	Qualifier
000107-83-5	Pentane, 2-methyl-	2.91	7680	NJ
000096-14-0	Pentane, 3-methyl-	3.12	3880	NJ
000096-37-7	Cyclopentane, methyl-	3.89	5760	NJ
	Unknown	4.49	9640	J
000565-59-3	Pentane, 2,3-dimethyl-	4.59	2260	NJ
000589-34-4	Hexane, 3-methyl-	4.66	5140	NJ
	Unknown Cycloalkane	4.88	3760	J
002452-99-5	Cyclopentane, 1,2-dimethyl-	5.00	4060	NJ
000108-87-2	Cyclohexane, methyl-	5.69	19500	NJ
	Unknown Cyclopentane	6.00	3070	J
	Unknown Cyclopentane	6.16	2580	J
	Unknown Alkane	6.40	10900	J
	Unknown	6.57	6410	J
	Unknown Cyclohexane	6.80	10900	J
000111-65-9	Octane	7.06	14400	NJ
	Total TIC Compounds		110000J	J



# Results Summary Form 1 Volatile Organics by EPA 5035

Client	: AKRF, Inc.	Lab Number	: L2248090
Project Name	: 1956 JEROME AVE	Project Number	: 210024
Lab ID	: L2248090-09	Date Collected	: 09/06/22 08:10
Client ID	: RDI-SB-DUP-01_20220906	Date Received	: 09/06/22
Sample Location	: BRONX NY <i>RDI-SB-16-D-2-20220906</i>	Date Analyzed	: 09/09/22 13:55
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: V04220909A16	Instrument ID	: VOA104
Sample Amount	: 5.8 g	GC Column	: RTX-VMS
Level	: LOW	%Solids	: 85
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
75-09-2	Methylene chloride	ND	5.1	2.3	U
75-34-3	1,1-Dichloroethane	ND	1.0	0.15	U
67-66-3	Chloroform	ND	1.5	0.14	<del>U</del> <i>UJ</i>
56-23-5	Carbon tetrachloride	ND	1.0	0.24	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.13	U
124-48-1	Dibromochloromethane	ND	1.0	0.14	U
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.27	U
127-18-4	Tetrachloroethene	ND	0.51	0.20	U
108-90-7	Chlorobenzene	ND	0.51	0.13	U
75-69-4	Trichlorofluoromethane	ND	4.1	0.71	<del>U</del> <i>UJ</i>
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	U
71-55-6	1,1,1-Trichloroethane	ND	0.51	0.17	U
75-27-4	Bromodichloromethane	ND	0.51	0.11	U
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.28	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.51	0.16	U
542-75-6	1,3-Dichloropropene, Total	ND	0.51	0.16	U
563-58-6	1,1-Dichloropropene	ND	0.51	0.16	U
75-25-2	Bromoform	ND	4.1	0.25	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.51	0.17	U
71-43-2	Benzene	ND	0.51	0.17	U
108-88-3	Toluene	ND	1.0	0.55	U
100-41-4	Ethylbenzene	2.3	1.0	0.14	
74-87-3	Chloromethane	ND	4.1	0.95	U
74-83-9	Bromomethane	ND	2.0	0.59	U
75-01-4	Vinyl chloride	ND	1.0	0.34	U

*for 10/15/22*



# Results Summary Form 1 Volatile Organics by EPA 5035

Client	: AKRF, Inc.	Lab Number	: L2248090
Project Name	: 1956 JEROME AVE	Project Number	: 210024
Lab ID	: L2248090-09	Date Collected	: 09/06/22 08:10
Client ID	: RDI-SB-DUP-01_20220906	Date Received	: 09/06/22
Sample Location	: BRONX NY <i>RDI-SB-16-0-2-20220906</i>	Date Analyzed	: 09/09/22 13:55
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: V04220909A16	Instrument ID	: VOA104
Sample Amount	: 5.8 g	GC Column	: RTX-VMS
Level	: LOW	%Solids	: 85
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	Results	ug/Kg		Qualifier
			RL	MDL	
75-00-3	Chloroethane	ND	2.0	0.46	U
75-35-4	1,1-Dichloroethene	ND	1.0	0.24	<del>U</del> UJ
156-60-5	trans-1,2-Dichloroethene	ND	1.5	0.14	U
79-01-6	Trichloroethene	ND	0.51	0.14	U
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.15	U
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.15	U
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.17	U
1634-04-4	Methyl tert butyl ether	ND	2.0	0.20	U
179601-23-1	p/m-Xylene	12	2.0	0.57	
95-47-6	o-Xylene	4.9	1.0	0.30	
1330-20-7	Xylenes, Total	17	1.0	0.30	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.18	U
540-59-0	1,2-Dichloroethene, Total	ND	1.0	0.14	U
74-95-3	Dibromomethane	ND	2.0	0.24	<del>U</del> UJ
100-42-5	Styrene	ND	1.0	0.20	U
75-71-8	Dichlorodifluoromethane	ND	10	0.94	<del>U</del> UJ
67-64-1	Acetone	ND	10	4.9	U
75-15-0	Carbon disulfide	ND	10	4.6	U
78-93-3	2-Butanone	ND	10	2.3	U
108-05-4	Vinyl acetate	ND	10	2.2	U
108-10-1	4-Methyl-2-pentanone	ND	10	1.3	U
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.13	U
591-78-6	2-Hexanone	ND	10	1.2	U
74-97-5	Bromochloromethane	ND	2.0	0.21	<del>U</del> UJ
594-20-7	2,2-Dichloropropane	ND	2.0	0.21	U

*for 10/15/22* 

**Results Summary  
Form 1  
Volatile Organics by EPA 5035**

Client	: AKRF, Inc.	Lab Number	: L2248090
Project Name	: 1956 JEROME AVE	Project Number	: 210024
Lab ID	: L2248090-09	Date Collected	: 09/06/22 08:10
Client ID	: RDI-SB-DUP-01_20220906	Date Received	: 09/06/22
Sample Location	: BRONX NY <i>RDI-SB-16-0-2-20220906</i>	Date Analyzed	: 09/09/22 13:55
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: V04220909A16	Instrument ID	: VOA104
Sample Amount	: 5.8 g	GC Column	: RTX-VMS
Level	: LOW	%Solids	: 85
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	Results	ug/Kg		Qualifier
			RL	MDL	
106-93-4	1,2-Dibromoethane	ND	1.0	0.28	U
142-28-9	1,3-Dichloropropane	ND	2.0	0.17	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.51	0.13	U
108-86-1	Bromobenzene	ND	2.0	0.15	U
104-51-8	n-Butylbenzene	ND	1.0	0.17	U
135-98-8	sec-Butylbenzene	ND	1.0	0.15	U
98-06-6	tert-Butylbenzene	ND	2.0	0.12	U
95-49-8	o-Chlorotoluene	ND	2.0	0.20	U
106-43-4	p-Chlorotoluene	ND	2.0	0.11	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.1	1.0	U
87-68-3	Hexachlorobutadiene	ND	4.1	0.17	U
98-82-8	Isopropylbenzene	ND	1.0	0.11	U
99-87-6	p-Isopropyltoluene	ND	1.0	0.11	U
91-20-3	Naphthalene	ND	4.1	0.66	U
107-13-1	Acrylonitrile	ND	4.1	1.2	U
103-65-1	n-Propylbenzene	ND	1.0	0.17	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.33	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.28	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.34	U
123-91-1	1,4-Dioxane	ND	82	36.	<i>UR</i>
105-05-5	p-Diethylbenzene	ND	2.0	0.18	U
622-96-8	p-Ethyltoluene	ND	2.0	0.39	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.20	U
60-29-7	Ethyl ether	ND	2.0	0.35	U

for 10/15/22





**Results Summary  
Form 1  
Volatile Organics by EPA 5035**

Client	: AKRF, Inc.	Lab Number	: L2248090
Project Name	: 1956 JEROME AVE	Project Number	: 210024
Lab ID	: L2248090-09	Date Collected	: 09/06/22 08:10
Client ID	: RDI-SB-DUP-01_20220906	Date Received	: 09/06/22
Sample Location	: BRONX NY <i>RAI-SB-16-0-2-20220906</i>	Date Analyzed	: 09/09/22 13:55
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: V04220909A16	Instrument ID	: VOA104
Sample Amount	: 5.8 g	GC Column	: RTX-VMS
Level	: LOW	%Solids	: 85
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/Kg			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.1	1.4	U

*for  
10/15/22*



**Tentatively Identified Compounds  
Form 1  
Volatile Organics by EPA 5035**

Client	: AKRF, Inc.	Lab Number	: L2248090
Project Name	: 1956 JEROME AVE	Project Number	: 210024
Lab ID	: L2248090-09	Date Collected	: 09/06/22 08:10
Client ID	: RDI-SB-DUP-01_20220906	Date Received	: 09/06/22
Sample Location	: BRONX NY	Date Analyzed	: 09/09/22 13:55
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: V04220909A16	Instrument ID	: VOA104
Sample Amount	:	GC Column	: RTX-VMS
Level	:	%Solids	: 85
Extract Volume (MeOH)	: NA	Injection Volume	: 1

RDI-SB-16-0-2-20220906

Number TICS found: 3

Concentration Units: ug/Kg

CAS Number	Compound Name	RT	EST. CONC.	Qualifier
000078-78-4	Butane, 2-methyl-	2.01	2.97	NJ
	Unknown	12.55	2.75	J
Total TIC Compounds			5.72J	J

for 10/15/22



**Results Summary  
Form 1  
Volatile Organics by GC/MS**

Client : AKRF, Inc.  
 Project Name : 1956 JEROME  
 Lab ID : L2251399-01  
 Client ID : RDI-MW-10\_20220920  
 Sample Location : 1956 JEROME AVE  
 Sample Matrix : WATER  
 Analytical Method : 1,8260C  
 Lab File ID : VE221003A25  
 Sample Amount : 10 ml  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2251399  
 Project Number : 210024  
 Date Collected : 09/20/22 09:00  
 Date Received : 09/20/22  
 Date Analyzed : 10/03/22 15:31  
 Dilution Factor : 1  
 Analyst : MV  
 Instrument ID : ELAINE  
 GC Column : RTX-502.2  
 %Solids : N/A  
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	0.35	0.50	0.18	J
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U

*Jan  
10/16/22*



# Results Summary Form 1 Volatile Organics by GC/MS

Client : AKRF, Inc.  
 Project Name : 1956 JEROME  
 Lab ID : L2251399-01  
 Client ID : RDI-MW-10\_20220920  
 Sample Location : 1956 JEROME AVE  
 Sample Matrix : WATER  
 Analytical Method : 1,8260C  
 Lab File ID : VE221003A25  
 Sample Amount : 10 ml  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2251399  
 Project Number : 210024  
 Date Collected : 09/20/22 09:00  
 Date Received : 09/20/22  
 Date Analyzed : 10/03/22 15:31  
 Dilution Factor : 1  
 Analyst : MV  
 Instrument ID : ELAINE  
 GC Column : RTX-502.2  
 %Solids : N/A  
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	22	2.5	0.70	
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U <i>UJ</i>
108-05-4	Vinyl acetate	ND	5.0	1.0	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U

*JOP*  
*10/16/22*  


# Results Summary Form 1 Volatile Organics by GC/MS

Client : AKRF, Inc.  
 Project Name : 1956 JEROME  
 Lab ID : L2251399-01  
 Client ID : RDI-MW-10\_20220920  
 Sample Location : 1956 JEROME AVE  
 Sample Matrix : WATER  
 Analytical Method : 1,8260C  
 Lab File ID : VE221003A25  
 Sample Amount : 10 ml  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2251399  
 Project Number : 210024  
 Date Collected : 09/20/22 09:00  
 Date Received : 09/20/22  
 Date Analyzed : 10/03/22 15:31  
 Dilution Factor : 1  
 Analyst : MV  
 Instrument ID : ELAINE  
 GC Column : RTX-502.2  
 %Solids : N/A  
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	<del>U</del> UJ
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	<del>U</del> UJ
103-65-1	n-Propylbenzene	1.3	2.5	0.70	J
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	2.1	2.5	0.70	J
95-63-6	1,2,4-Trimethylbenzene	2.4	2.5	0.70	J
123-91-1	1,4-Dioxane	ND	250	61.	<del>U</del> R
105-05-5	p-Diethylbenzene	2.1	2.0	0.70	
622-96-8	p-Ethyltoluene	1.2	2.0	0.70	J
95-93-2	1,2,4,5-Tetramethylbenzene	0.70	2.0	0.54	J
60-29-7	Ethyl ether	ND	2.5	0.70	U



**Results Summary  
Form 1  
Volatile Organics by GC/MS**

Client : AKRF, Inc.  
 Project Name : 1956 JEROME  
 Lab ID : L2251399-01  
 Client ID : RDI-MW-10\_20220920  
 Sample Location : 1956 JEROME AVE  
 Sample Matrix : WATER  
 Analytical Method : 1,8260C  
 Lab File ID : VE221003A25  
 Sample Amount : 10 ml  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2251399  
 Project Number : 210024  
 Date Collected : 09/20/22 09:00  
 Date Received : 09/20/22  
 Date Analyzed : 10/03/22 15:31  
 Dilution Factor : 1  
 Analyst : MV  
 Instrument ID : ELAINE  
 GC Column : RTX-502.2  
 %Solids : N/A  
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U

*Jan 10/16/22*



**Results Summary  
Form 1  
Volatile Organics by GC/MS**

Client	: AKRF, Inc.	Lab Number	: L2251399
Project Name	: 1956 JEROME	Project Number	: 210024
Lab ID	: L2251399-02	Date Collected	: 09/20/22 09:00
Client ID	: RDI-MW-X_20220920	Date Received	: 09/20/22
Sample Location	: 1956 JEROME AVE	Date Analyzed	: 09/29/22 03:37
Sample Matrix	: WATER <i>ROI - MW-10-20220920</i>	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MV
Lab File ID	: V22220928N20	Instrument ID	: VOA122
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	0.25	0.50	0.18	J
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	<i>U U</i>
75-01-4	Vinyl chloride	ND	1.0	0.07	U

*for*  
*10/16/22*  


**Results Summary  
Form 1  
Volatile Organics by GC/MS**

Client	: AKRF, Inc.	Lab Number	: L2251399
Project Name	: 1956 JEROME	Project Number	: 210024
Lab ID	: L2251399-02	Date Collected	: 09/20/22 09:00
Client ID	: RDI-MW-X_20220920	Date Received	: 09/20/22
Sample Location	: 1956 JEROME AVE	Date Analyzed	: 09/29/22 03:37
Sample Matrix	: WATER <span style="color: red; font-style: italic;">ROI-MW-10-20220920</span>	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MV
Lab File ID	: V22220928N20	Instrument ID	: VOA122
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-00-3	Chloroethane	ND	2.5	0.70	U UJ
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U UJ
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	18	2.5	0.70	
179601-23-1	p/m-Xylene	0.77	2.5	0.70	J
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	0.77	2.5	0.70	J
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U UJ
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U UJ
74-97-5	Bromochloromethane	ND	2.5	0.70	U

for  
10/16/22





# Results Summary Form 1 Volatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2251399
Project Name	: 1956 JEROME	Project Number	: 210024
Lab ID	: L2251399-02	Date Collected	: 09/20/22 09:00
Client ID	: RDI-MW-X_20220920	Date Received	: 09/20/22
Sample Location	: 1956 JEROME AVE	Date Analyzed	: 09/29/22 03:37
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MV
Lab File ID	: V22220928N20	Instrument ID	: VOA122
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

RDI-MW-10-20220920

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	0.86	2.5	0.70	J
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	2.0	2.5	0.70	J
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	3.2	2.5	0.70	
95-63-6	1,2,4-Trimethylbenzene	3.7	2.5	0.70	
123-91-1	1,4-Dioxane	ND	250	61.	U <span style="color: red;">R</span>
105-05-5	p-Diethylbenzene	3.4	2.0	0.70	
622-96-8	p-Ethyltoluene	2.0	2.0	0.70	
95-93-2	1,2,4,5-Tetramethylbenzene	1.3	2.0	0.54	J
60-29-7	Ethyl ether	ND	2.5	0.70	U


  
 10/16/22

**Results Summary  
Form 1  
Volatile Organics by GC/MS**

Client	: AKRF, Inc.	Lab Number	: L2251399
Project Name	: 1956 JEROME	Project Number	: 210024
Lab ID	: L2251399-02	Date Collected	: 09/20/22 09:00
Client ID	: RDI-MW-X_20220920	Date Received	: 09/20/22
Sample Location	: 1956 JEROME AVE	Date Analyzed	: 09/29/22 03:37
Sample Matrix	: WATER <i>ROI-NW-10-20220920</i>	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MV
Lab File ID	: V22220928N20	Instrument ID	: VOA122
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	<i>UJ</i>

*for 10116122*  


# Results Summary Form 1 Volatile Organics by GC/MS

Client : AKRF, Inc.  
 Project Name : 1956 JEROME  
 Lab ID : L2251399-03  
 Client ID : RDI-MW-11\_20220920  
 Sample Location : 1956 JEROME AVE  
 Sample Matrix : WATER  
 Analytical Method : 1,8260C  
 Lab File ID : V22220928N21  
 Sample Amount : 10 ml  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2251399  
 Project Number : 210024  
 Date Collected : 09/20/22 10:50  
 Date Received : 09/20/22  
 Date Analyzed : 09/29/22 04:02  
 Dilution Factor : 1  
 Analyst : MV  
 Instrument ID : VOA122  
 GC Column : RTX-502.2  
 %Solids : N/A  
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U

*UJ*

*for 10/16/22*



**Results Summary  
Form 1  
Volatile Organics by GC/MS**

Client : AKRF, Inc.  
 Project Name : 1956 JEROME  
 Lab ID : L2251399-03  
 Client ID : RDI-MW-11\_20220920  
 Sample Location : 1956 JEROME AVE  
 Sample Matrix : WATER  
 Analytical Method : 1,8260C  
 Lab File ID : V22220928N21  
 Sample Amount : 10 ml  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2251399  
 Project Number : 210024  
 Date Collected : 09/20/22 10:50  
 Date Received : 09/20/22  
 Date Analyzed : 09/29/22 04:02  
 Dilution Factor : 1  
 Analyst : MV  
 Instrument ID : VOA122  
 GC Column : RTX-502.2  
 %Solids : N/A  
 Injection Volume : N/A

CAS NO.	Parameter	Results	ug/L		Qualifier
			RL	MDL	
75-00-3	Chloroethane	ND	2.5	0.70	<del>U</del> UJ
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	<del>U</del> UJ
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	18	2.5	0.70	
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	<del>U</del> UJ
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	<del>U</del> UJ
74-97-5	Bromochloromethane	ND	2.5	0.70	U

*for 10/16/22*  


# Results Summary Form 1 Volatile Organics by GC/MS

Client : AKRF, Inc.  
 Project Name : 1956 JEROME  
 Lab ID : L2251399-03  
 Client ID : RDI-MW-11\_20220920  
 Sample Location : 1956 JEROME AVE  
 Sample Matrix : WATER  
 Analytical Method : 1,8260C  
 Lab File ID : V22220928N21  
 Sample Amount : 10 ml  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2251399  
 Project Number : 210024  
 Date Collected : 09/20/22 10:50  
 Date Received : 09/20/22  
 Date Analyzed : 09/29/22 04:02  
 Dilution Factor : 1  
 Analyst : MV  
 Instrument ID : VOA122  
 GC Column : RTX-502.2  
 %Solids : N/A  
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	U <i>R</i>
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U

*for 10/16/22*  


**Results Summary  
Form 1  
Volatile Organics by GC/MS**

Client	: AKRF, Inc.	Lab Number	: L2251399
Project Name	: 1956 JEROME	Project Number	: 210024
Lab ID	: L2251399-03	Date Collected	: 09/20/22 10:50
Client ID	: RDI-MW-11_20220920	Date Received	: 09/20/22
Sample Location	: 1956 JEROME AVE	Date Analyzed	: 09/29/22 04:02
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MV
Lab File ID	: V22220928N21	Instrument ID	: VOA122
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	UJ

for 10/16/22



# Results Summary Form 1 Volatile Organics by GC/MS

Client : AKRF, Inc.  
 Project Name : 1956 JEROME  
 Lab ID : L2251399-04  
 Client ID : RDI-MW-12\_20220920  
 Sample Location : 1956 JEROME AVE  
 Sample Matrix : WATER  
 Analytical Method : 1,8260C  
 Lab File ID : V22220928N22  
 Sample Amount : 10 ml  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2251399  
 Project Number : 210024  
 Date Collected : 09/20/22 10:00  
 Date Received : 09/20/22  
 Date Analyzed : 09/29/22 04:27  
 Dilution Factor : 1  
 Analyst : MV  
 Instrument ID : VOA122  
 GC Column : RTX-502.2  
 %Solids : N/A  
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	6.2	2.5	0.70	
74-83-9	Bromomethane	ND	2.5	0.70	U UJ
75-01-4	Vinyl chloride	ND	1.0	0.07	U

for 10/16/22



**Results Summary  
Form 1  
Volatile Organics by GC/MS**

Client : AKRF, Inc.  
 Project Name : 1956 JEROME  
 Lab ID : L2251399-04  
 Client ID : RDI-MW-12\_20220920  
 Sample Location : 1956 JEROME AVE  
 Sample Matrix : WATER  
 Analytical Method : 1,8260C  
 Lab File ID : V22220928N22  
 Sample Amount : 10 ml  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2251399  
 Project Number : 210024  
 Date Collected : 09/20/22 10:00  
 Date Received : 09/20/22  
 Date Analyzed : 09/29/22 04:27  
 Dilution Factor : 1  
 Analyst : MV  
 Instrument ID : VOA122  
 GC Column : RTX-502.2  
 %Solids : N/A  
 Injection Volume : N/A

CAS NO.	Parameter	Results	ug/L		Qualifier
			RL	MDL	
75-00-3	Chloroethane	ND	2.5	0.70	<del>U</del> UJ
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	<del>U</del> UJ
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	15	2.5	0.70	
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	<del>U</del> UJ
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	<del>U</del> UJ
74-97-5	Bromochloromethane	ND	2.5	0.70	U

807 10/18/22  




**Results Summary**  
**Form 1**  
**Volatile Organics by GC/MS**

Client : AKRF, Inc.  
Project Name : 1956 JEROME  
Lab ID : L2251399-04  
Client ID : RDI-MW-12\_20220920  
Sample Location : 1956 JEROME AVE  
Sample Matrix : WATER  
Analytical Method : 1,8260C  
Lab File ID : V22220928N22  
Sample Amount : 10 ml  
Level : LOW  
Extract Volume (MeOH) : N/A

Lab Number : L2251399  
Project Number : 210024  
Date Collected : 09/20/22 10:00  
Date Received : 09/20/22  
Date Analyzed : 09/29/22 04:27  
Dilution Factor : 1  
Analyst : MV  
Instrument ID : VOA122  
GC Column : RTX-502.2  
%Solids : N/A  
Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	U R
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U

*for 10/16/22*  


**Results Summary  
Form 1  
Volatile Organics by GC/MS**

Client : AKRF, Inc.  
 Project Name : 1956 JEROME  
 Lab ID : L2251399-04  
 Client ID : RDI-MW-12\_20220920  
 Sample Location : 1956 JEROME AVE  
 Sample Matrix : WATER  
 Analytical Method : 1,8260C  
 Lab File ID : V22220928N22  
 Sample Amount : 10 ml  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2251399  
 Project Number : 210024  
 Date Collected : 09/20/22 10:00  
 Date Received : 09/20/22  
 Date Analyzed : 09/29/22 04:27  
 Dilution Factor : 1  
 Analyst : MV  
 Instrument ID : VOA122  
 GC Column : RTX-502.2  
 %Solids : N/A  
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U UJ

*for 10/16/22*



**Results Summary  
Form 1  
Volatile Organics by GC/MS**

Client : AKRF, Inc.  
 Project Name : 1956 JEROME  
 Lab ID : L2251399-05  
 Client ID : RDI-MW-13\_20220920  
 Sample Location : 1956 JEROME AVE  
 Sample Matrix : WATER  
 Analytical Method : 1,8260C  
 Lab File ID : V22220928N23  
 Sample Amount : 10 ml  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2251399  
 Project Number : 210024  
 Date Collected : 09/20/22 12:40  
 Date Received : 09/20/22  
 Date Analyzed : 09/29/22 04:52  
 Dilution Factor : 1  
 Analyst : MV  
 Instrument ID : VOA122  
 GC Column : RTX-502.2  
 %Solids : N/A  
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U-UT
75-01-4	Vinyl chloride	ND	1.0	0.07	U

*for 10/16/22*  


# Results Summary Form 1 Volatile Organics by GC/MS

Client : AKRF, Inc.  
 Project Name : 1956 JEROME  
 Lab ID : L2251399-05  
 Client ID : RDI-MW-13\_20220920  
 Sample Location : 1956 JEROME AVE  
 Sample Matrix : WATER  
 Analytical Method : 1,8260C  
 Lab File ID : V22220928N23  
 Sample Amount : 10 ml  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2251399  
 Project Number : 210024  
 Date Collected : 09/20/22 12:40  
 Date Received : 09/20/22  
 Date Analyzed : 09/29/22 04:52  
 Dilution Factor : 1  
 Analyst : MV  
 Instrument ID : VOA122  
 GC Column : RTX-502.2  
 %Solids : N/A  
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-00-3	Chloroethane	ND	2.5	0.70	U UJ
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U UJ
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	18	2.5	0.70	
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U UJ
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U UJ
74-97-5	Bromochloromethane	ND	2.5	0.70	U

*for 10/16/22*  


# Results Summary Form 1 Volatile Organics by GC/MS

Client : AKRF, Inc.  
 Project Name : 1956 JEROME  
 Lab ID : L2251399-05  
 Client ID : RDI-MW-13\_20220920  
 Sample Location : 1956 JEROME AVE  
 Sample Matrix : WATER  
 Analytical Method : 1,8260C  
 Lab File ID : V22220928N23  
 Sample Amount : 10 ml  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2251399  
 Project Number : 210024  
 Date Collected : 09/20/22 12:40  
 Date Received : 09/20/22  
 Date Analyzed : 09/29/22 04:52  
 Dilution Factor : 1  
 Analyst : MV  
 Instrument ID : VOA122  
 GC Column : RTX-502.2  
 %Solids : N/A  
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61	U R
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U

JRM 10/11/22



**Results Summary  
Form 1  
Volatile Organics by GC/MS**

Client : AKRF, Inc.  
 Project Name : 1956 JEROME  
 Lab ID : L2251399-05  
 Client ID : RDI-MW-13\_20220920  
 Sample Location : 1956 JEROME AVE  
 Sample Matrix : WATER  
 Analytical Method : 1,8260C  
 Lab File ID : V22220928N23  
 Sample Amount : 10 ml  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2251399  
 Project Number : 210024  
 Date Collected : 09/20/22 12:40  
 Date Received : 09/20/22  
 Date Analyzed : 09/29/22 04:52  
 Dilution Factor : 1  
 Analyst : MV  
 Instrument ID : VOA122  
 GC Column : RTX-502.2  
 %Solids : N/A  
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U-UJ

*for 10/18/22*



**APPENDIX F**  
**ISOTECH BENCH SCALE STUDY**



# BENCH SCALE TREATABILITY STUDY REPORT

JEROME AVENUE SITE  
BRONX, NEW YORK

AUGUST 1, 2022

*PREPARED FOR*

AKRF, Inc.  
34 SOUTH BROADWAY, SUITE 300  
WHITE PLAINS, NY 10601

ISOTEC PROJECT No. 803031

---

In-Situ Oxidative Technologies, Inc.  
11 Princess Road, Suite A  
Lawrenceville, New Jersey 08648  
Phone: (609) 275-8500, Fax: (609) 275-9608  
[www.ISOTEC-INC.com](http://www.ISOTEC-INC.com)

*SBA Certified Small Business*





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## FIGURES

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## ATTACHMENTS

ATTACHMENT A	.....	BENCH STUDY ANALYTICAL DATA PACKAGES
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## ACRONYMS

BTEX	Benzene, toluene, ethylbenzene and xylenes
GRO	Total petroleum hydrocarbon-gasoline range organics
g	Gram
g/kg	Grams per kilogram
GW	groundwater
ISCO	In-situ chemical oxidation
ISOTEC	In-Situ Oxidative Technologies, Inc.
mg	Milligram
mg/kg	Milligrams per kilogram
mg/l	Milligrams per liter
ml	Milliliters
N	Naphthalene
ND	Non-detect concentration
NELAP	National Environmental Laboratory Accreditation Program
OS	Oxidant stability
ppm	Parts per million
SGS	SGS Laboratories
124-TMB	1,2,4-Trimethylbenzene
135-TMB	1,3,5-Trimethylbenzene
N+TMBs	Naphthalene + 124-TMB + 135-TMB
TOC	Total organic carbon
TOD	Total oxidant demand
µg	Microgram
µg/kg	Micrograms per kilogram
µg/l	Micrograms per liter
VOCs	Volatile organic compounds

## 1.0 EXECUTIVE SUMMARY

In-Situ Oxidative Technologies, Inc. (ISOTEC<sup>SM</sup>) was retained by AKRF, Inc. (AKRF) to conduct an in-situ chemical oxidation (ISCO) bench-scale laboratory treatability study (study) on soil and groundwater (GW) samples collected from the Jerome Avenue Site located in Bronx, New York. Based on the information provided to ISOTEC, shallow subsurface lithology consists of mostly sands with some silts and gravel with groundwater encountered at approximately 5 feet (ft) below ground surface (bgs). Site subsurface is impacted with petroleum related contaminants that are present in saturated soils and groundwater. Target constituents of concern (COCs) for the study are volatile organic compounds (VOCs) primarily benzene, toluene, ethylbenzene and xylenes (BTEX), naphthalene (N), 1,2,4-trimethylbenzene (124-TMB) and 1,3,5-trimethylbenzene (135-TMB), and gasoline range organics (GRO). The conceptual remedial plan for the site is to achieve VOCs/GRO reduction using modified Fenton's reagent (MFR). The bench-scale study was performed with the objective to collect data to support site remediation of VOCs/GRO using MFR (COC-test) and assess the stability of oxidant using in MFR (OS-test).

AKRF provided soil (SO) and GW (MW-6) samples collected from the site for use in the treatability study. COC-test and OS-test were performed using slurry, a mixture of site soils with site GW or distilled (DI) water (see Table 1 below).

**Table 1. Summary of Experiments Performed**

Experiment (Oxidant Evaluated)>>	COC-test (H <sub>2</sub> O <sub>2</sub> )	OS-test (H <sub>2</sub> O <sub>2</sub> )
Slurry made up	SO, MW-6	SO, DI water
MFR Low dose	2.5 g/kg	2.5 g/kg
MFR Medium dose	7.5 g/kg	7.5 g/kg
MFR High dose	12.5 g/kg	12.5 g/kg
Experiment duration	4 days	1 day
Evaluated	VOCs/GRO treatment	Oxidant (H <sub>2</sub> O <sub>2</sub> ) longevity

**Note:** MFR doses are presented as g/kg (grams of oxidant per kilogram of soil in slurry).

Summary results of the bench scale treatability study indicate that MFR is effective towards treatment of VOCs and GRO achieving COC mass removal of up to 96% for target VOCs, 99% for BTEX, and 77% for GRO. Treatability study results can be used to design field treatment program for site remediation.

## 2.0 BENCH SCALE STUDY OBJECTIVES

The bench-scale study was performed with the following objectives:

- ◆ Evaluate the effectiveness of MFR towards treatment of VOCs including BTEX, N and TMBs, and GRO on GW and soil samples collected from the site, and
- ◆ Determine oxidant stability (OS) and total oxidant demand (TOD) of hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>) for MFR.

### **3.0 SAMPLE COLLECTION AND PREPARATION**

AKRF provided a GW sample (collected on May 4, 2022) from MW-6 (before it was destroyed during building demolition) and four soil samples (BH-1, BH-2, BH-3, and BH-4, collected on May 27, 2022) for use in the treatability study. Prior to start of the experiments, a composite soil sample (referred to as "SO") was prepared by mixing an equal amount of soil from each of the 4 samples after removing large rocks/debris. A portion of SO along with a portion of MW-6 was collected and submitted for initial characterization analyses. Parameters analyzed in the initial characterization included VOCs, GRO, total organic carbon (TOC), iron and manganese.

Then, a 1:1 slurry was prepared by mixing SO with MW-6 at a soil-to-GW ratio of 1-to-1 by weight) for the COC-test and 1:2 slurry (SO mixed with DI water) for the OS-test.

## **4.0 EXPERIMENTAL PROCEDURES**

Two experiments (COC-test and OS-test) were performed using slurry samples in the treatability study.

### **4.1 COC-test**

In general, COC-test comprised of the following three steps:

1. Reagent identification
2. Establishing baseline and experimental control sample
3. Experimental setup and analytical sample collection/analyses

#### **4.1.1 Reagent Identification**

Upon discussion with AKRF, MFR was selected for evaluation in the bench scale study. MFR consists of stabilized hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>) as oxidant and a proprietary chelated iron catalyst (Cat-4260), which is a circum-neutral pH organometallic complex (chelated iron) with high mobility within the subsurface.

#### **4.1.2 Establishing Experimental Control/Baseline**

An experimental “control” sample was set up in the COC-test to document the following:

- Reduction or changes in concentrations of the target constituents due to sample dilution by reagent volumes injected.
- Reduction in concentrations of the target constituents due to volatilization caused by room temperature test conditions.

The “control” sample was set up and was subject to the same conditions as the associated “treatment” reactors. However, the “control” reactor received distilled water instead of reagent at the time of reagent application (see Section 4.1.3 below). The volume of distilled water added in “control” was identical to the volume of reagent injected into the “treatment” reactors.

#### **4.1.3 Experimental Setup and Analytical Sample Collection/Analyses**

The COC-test was performed using a 1:1 slurry (SO mixed with MW-6). A total of 4 reactors (a Control and 3 treatment reactors) were set up in 250 ml VOC-tight glass jars sealed with screw top caps fitted with septa to facilitate reagent injections. Each reactor included 300 grams (g) of 1:1 slurry (150 g of soil and 150 ml of GW). Reactors were set up in duplicates, one set for VOCs/GRO analyses and the other set for TOD assessments.

##### **4.1.3.1 Reagent Application**

A predetermined amount of MFR was applied into each treatment reactor to reach target doses of 2.5 g/kg (low), 7.5 g/kg (medium) and 12.5 g/kg (high) as shown in Table 1. DI water was used to compensate for volume differences between doses so that each reactor had exact same dilution effect. The “Control” reactors received equivalent

amount of DI water instead of MFR. All reactors stayed under room temperatures during entire duration of experiment and were inverted ~10 times daily to improve contact between oxidants and sample contents. Concentrations of residual oxidant in the treatment reactors were periodically measured, and tests were terminated when oxidant consumption reached greater than 90% in all treatment reactors. The duration of the experiments was 4 days. A quenching agent, catalase, was injected into each reactor to quench residual hydrogen peroxide and the experiment was complete. Then, sample contents in each reactor were separated into aqueous and solid phases first. Analytical samples were collected from each phase and submitted to SGS [a National Environmental Laboratory Accreditation Program (NELAP) certified laboratory] for VOCs and GRO analyses.

#### 4.1.3.2 *TOD assessment*

Total oxidant demand (TOD) of hydrogen peroxide was assessed based on oxidant (i.e. H<sub>2</sub>O<sub>2</sub>) consumption. Concentrations of H<sub>2</sub>O<sub>2</sub> were measured in the duplicate reactors set up in the COC-test using a Hach test kit. The oxidant measurements were collected immediately after introducing the oxidant (i.e. time = 0 days) and periodically thereafter at various time points (i.e. time = days). TOD was determined by the difference between the initial (t=0) and residual (t= days at quenching period) oxidant concentrations. TOD is reported as "g/kg" of oxidant per kilogram of soil in slurry being tested. Since hydrogen peroxide is relatively unstable, the TOD value is often similar to the applied initial oxidant dose as 100% oxidant consumption is achieved quickly. Therefore, oxidant stability experiments were performed as discussed in Section 4.2 below.

## 4.2 OS-test

Oxidant stability was evaluated for H<sub>2</sub>O<sub>2</sub> (the oxidant in MFR) since hydrogen peroxide can theoretically exhibit an infinite value for demand due to catalytic decomposition and its unstable nature. The test was performed on 1:2 slurry (mixture of soils with DI water). H<sub>2</sub>O<sub>2</sub> concentration measurements were collected using a spectrophotometer immediately after introducing the oxidant (i.e. t=0) and periodically thereafter at various time points (t = 1 hour, 2 hours, and so on). Three initial oxidant doses (2.5 g/kg, 7.5 g/kg and 12.5 g/kg) were evaluated. Oxidant stability was assessed in terms of half-life of the oxidant, i.e. time elapsed for the oxidant concentrations to decrease by 50% from its corresponding initial concentration (t=0 hours).



## 5.0 RESULTS AND DISCUSSION

Detailed bench-scale study results are discussed below. Initial characterization results are presented in Table 2. Experiments results are presented in Table 3. Laboratory analytical data packages are provided in Attachment A.

### 5.1 Initial Characterization (Table 2)

Data in Table 2 shows soils are heavily impacted with VOCs (25,432 ug/kg) and GRO (352 mg/kg) while relatively low impacts were noted in GW (174 ug/l for VOCs and 0.84 mg/l for GRO). Therefore, greater than 99% of the total site contamination is present in soils.

TOC in soil consumes oxidants, and a higher TOC value will cause a greater oxidant competition that can result in significant oxidant scavenging. The TOC level noted in the soil sample (11,900 mg/kg) is expected to exert a moderate to high oxidant demand. Iron and manganese in dissolved phases are known catalysts for Fenton-like reactions. However, both iron (<100 µg/l) and manganese (1,530 µg/l) concentrations observed in GW are too low to serve as effective catalysts and external catalyst is warranted for field application of MFR.

### 5.2 Experiment Results

#### 5.2.1 COC-test (Table 3)

Site COCs (i.e., VOCs/GRO) treatment effectiveness is evaluated by comparison of "treated" sample data with the "Control" data. For discussion purposes, all non-detect (ND) values are assumed to be equal to zero in the contaminant reduction calculations. It should be noted that increases in acetone concentration were observed in treated samples following reagent application. Acetone is a known byproduct of oxidation reactions using peroxide, and based on ISOTEC's past experience, it is amenable to chemical oxidation given sufficient oxidant dosage and treatment duration. Therefore, acetone was excluded from total target COCs in treatment effectiveness discussion.

As discussed in Section 4.1, VOCs and GRO were analyzed on aqueous and soil/solid phases of the tested sample matrices. The term "mass reduction" used below refers to the combined aqueous and soil matrix mass. Concentrations of the primary COCs detected in Control sample are summarized in Table 4 below:

**Table 4. Primary COCs detected in Control**

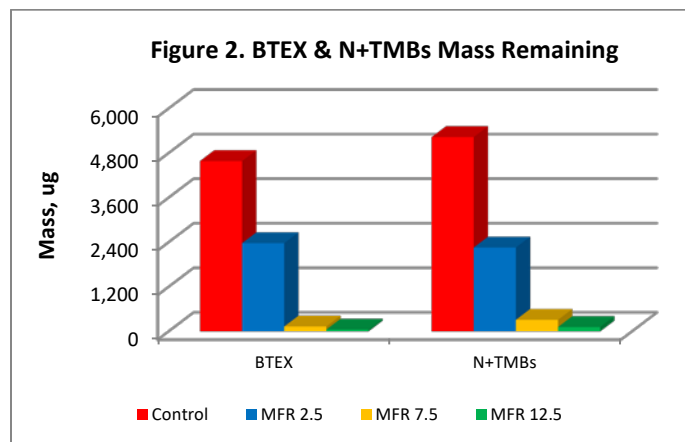
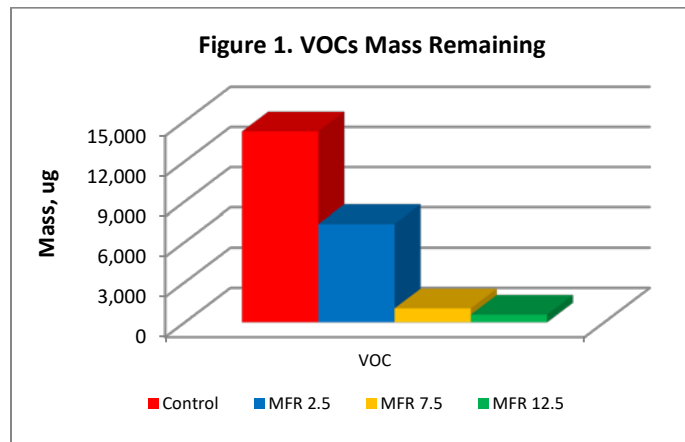
Primary COCs	VOCs	BTEX	N+TMBs	GRO
Aqueous phase (ug/l)	2,360	1,129	904	6,000
Solid phase (ug/kg)	92,402	30,742	45,630	620,000
Mass (ug)	14,241	4,589	5,233	94,016

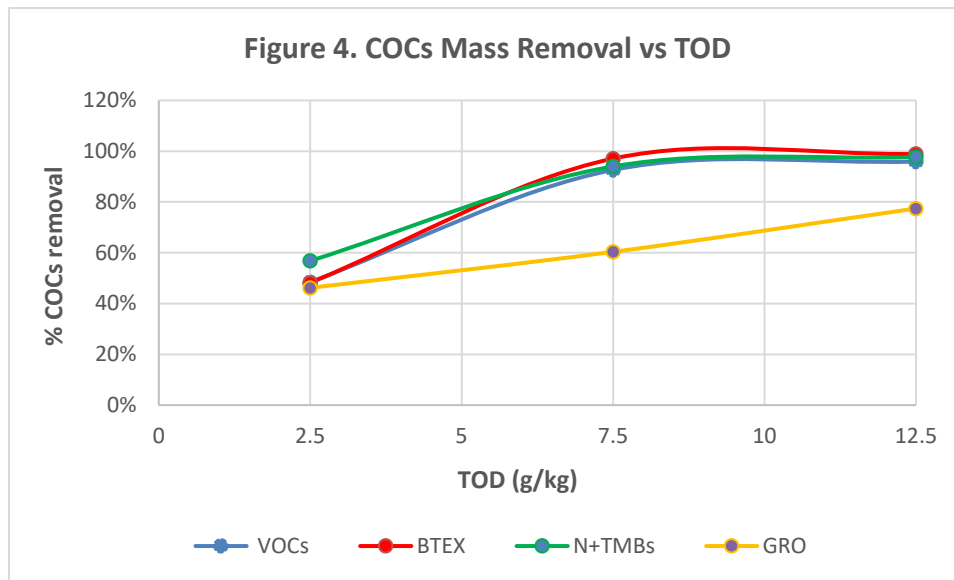
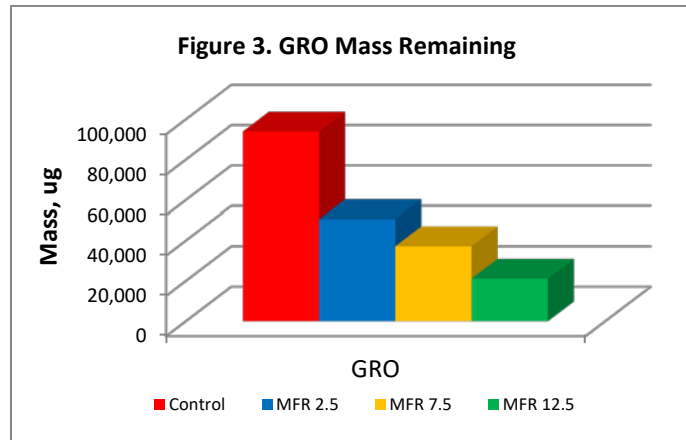
Note: N+TMBs = Naphthalene + 124-TMB + 135-TMB

Table 5 below summarizes COC reductions achieved with each reagent dose tested and the optimal doses for COCs treatment. Figures 1 through 3 show residual COC mass following each dose treatment. Figure 4 illustrated COC mass reduction in relation to TOD. The optimal doses were assessed based on COC mass reduction achieved per unit oxidant consumed.

**Table 5. COCs Mass Reductions Summary**

Mass Removal>>>	VOCs	BTEX	N+TMBs	GRO
Low dose_2.5 g/kg	48%	48%	57%	47%
Medium dose_7.5 g/kg	93%	97%	94%	60%
High dose_12.5 g/kg	96%	99%	98%	77%
Optimal dose	7.5 g/kg	7.5 g/kg	7.5 g/kg	12.5 g/kg



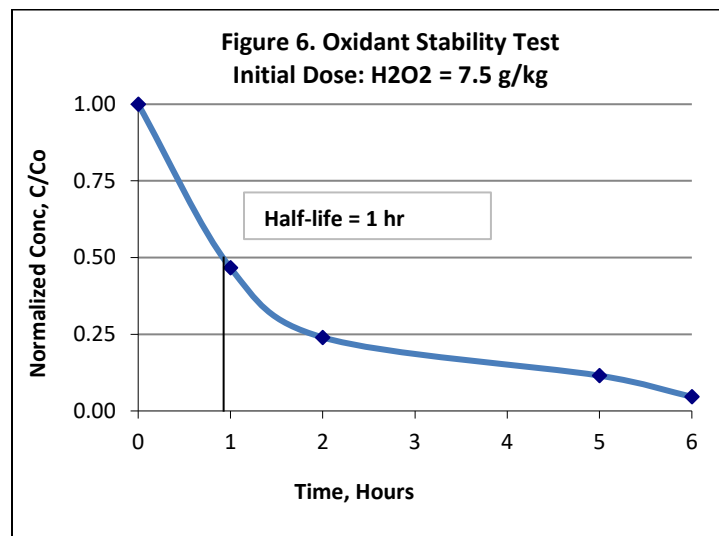
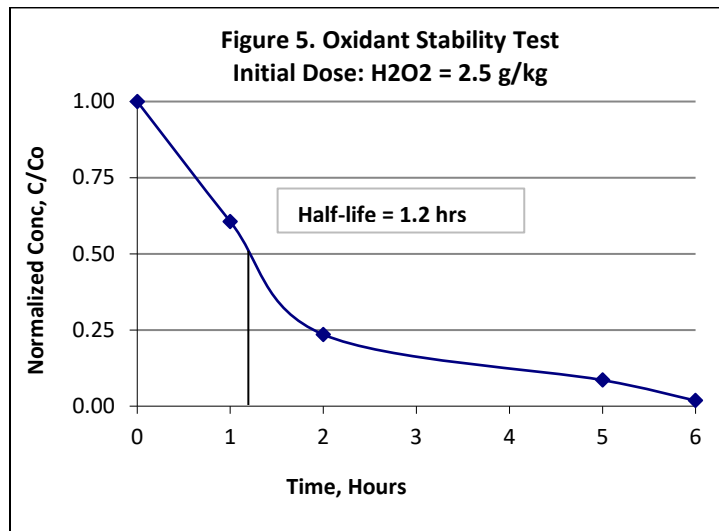


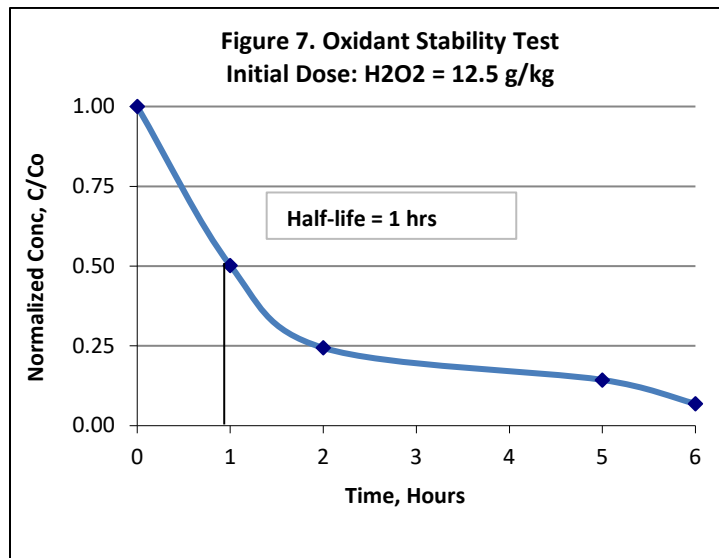
In summary, MFR is effective in treating site COCs achieving maximum mass removal of 77% for GRO and >96% for target VOCs, 99% for BTEX, and 98% N+TMBs (naphthalene +124-TMB + 135-TMB). The optimal doses were determined to be close to the medium dose (7.5 g/kg) for VOCs treatment and high dose (12.5 g/kg) for GRO treatment.

TOD assessment indicated that the oxidant applied in the 3 reagent doses were all consumed at the end of the experiment, rendering TOD values of 2.5 g/kg, 7.5 g/kg and 12.5 g.kg for the low, medium and high doses, respectively.

### 5.2.2 OS-test (Figures 5 through 7)

Oxidant stability is presented in terms of oxidant half-life and reported as time in hours as shown in Figures below. The results indicated a half-life of approximate 1 hour for all three initial H<sub>2</sub>O<sub>2</sub> doses (2.5 g/kg, 7.5 g/kg and 12.5 g/kg) evaluated, suggesting both site lithology and COC impact in site soils would consume hydrogen peroxide fast and multiple applications with smaller amount each time would be more efficient than fewer injections with a larger amount each time approach.





## **6.0 CONCLUSIONS AND RECOMMENDATIONS**

Results of the bench scale treatability study indicate that MFR promoted effective treatment of site COCs. An optimal dose close to the medium dose of 7.5 g/kg is recommended for field application. Additional reagent volume may be warranted in areas of the site exhibiting higher GRO impacts. Bench scale study results can be used in site remedial design.



## TABLES

**Table 2. Initial Characteristics  
Jerome Avenue Site, Bronx, New York  
ISOTEC Project #: 803031**

<b>Sample ID Matrix</b>	<b>SO soil</b>	<b>GW groundwater</b>
<b>VOCs</b>	<b>ug/kg</b>	<b>ug/l</b>
Acetone	ND (410)	6.2 J
Cyclohexane	986	49
Ethylbenzene	969	ND (0.60)
Isopropylbenzene	284	ND (0.65)
Methylcyclohexane	7,030	46.7
Methyl Tert Butyl Ether	ND (46)	22.5
4-Methyl-2-pentanone(MIBK)	ND (220)	2.4 J
Naphthalene	3,230	24.8
Tetrachloroethene	72.4 J	ND (0.90)
Toluene	283	ND (0.53)
1,2,3-Trichlorobenzene	489 Jc	ND (0.50)
1,2,4-Trichlorobenzene	845	ND (0.50)
1,2,4-Trimethylbenzene (124TMB)	5,220	ND (2.0)
1,3,5-Trimethylbenzene (135TMB)	1,960	21.7
m,p-Xylene	3,350	0.83 J
o-Xylene	714	ND (0.59)
<b>Total VOCs</b>	<b>25,432</b>	<b>174</b>
	<b>mg/kg</b>	<b>mg/l</b>
<b>GRO (C6-C10)</b>	352	0.84
<b>TOC</b>	<b>mg/kg</b>	
Total Organic Carbon	11,900 d	
<b>Other parameters</b>	<b>mg/kg</b>	<b>ug/l</b>
Iron	12,600	<100
Manganese	170	1,530
Solids, percent	79.2	

Note:

ug/l = micrograms per liter, ug/l = milligrams per liter

mg/l = milligrams per liter, mg/kg = milligrams per kilogram

a Associated CCV outside of control limits low. A sensitivity check was analyzed

to demonstrate system suitability to detect affected analyte. Sample was ND.

c Associated CCV outside of control limits high.

d TOC Replicate Range: 6130 - 17500 mg/kg



**Table 3. Experiment Results**  
**Jerome Avenue Site, Bronx, New York**  
**ISOTEC Project #803031**

Sample ID	Control	MFR Low	MFR Medium	MFR High
Oxidant used	none	H <sub>2</sub> O <sub>2</sub>	H <sub>2</sub> O <sub>2</sub>	H <sub>2</sub> O <sub>2</sub>
Activator used	none	CAT	CAT	CAT
Oxidant added (by weight)	0 g/kg	2.5 g/kg	7.5 g/kg	12.5 g/kg
<b>VOCs (ug/l)</b>				
<b>Aqueous Phase</b>				
Acetone	47.1	1300	3940	4660
Benzene	46.2	21.4	2.6	ND (0.43)
2-Butanone (MEK)	16.3	240	369	239
Carbon disulfide	ND (0.46)	1.1	0.76	ND (0.46)
Carbon tetrachloride	3.4	7.9	5.3	2.8
Chlorobenzene	1.3	1.5	ND (0.56)	ND (0.56)
Chloromethane	ND (0.76)	ND (0.76)	ND (0.76)	0.96
Cyclohexane	78.3	64.1	14.6	1.4
Ethylbenzene	228	167	31.6	4.1
2-Hexanone	ND (2.0)	19.3	13.5	3.4
Isopropylbenzene	44.7	29.9	6.9	ND (0.65)
Methyl Acetate	ND (0.80)	ND (0.80)	7	12.1
Methylcyclohexane	159	171	78.3	6.3
Methyl Tert Butyl Ether	21.5	3	ND (0.51)	ND (0.51)
4-Methyl-2-pentanone(MIBK)	3.5	11.9	8.5	ND (1.9)
Naphthalene	199	167	37.3	5.1
Tetrachloroethene	3.6	5	1.8	ND (0.90)
Toluene	68.1	44.4	7.8	1.5
1,2,3-Trichlorobenzene	0.72	1.3	0.61	ND (0.50)
1,2,4-Trichlorobenzene	2.5	4.4	2.1	ND (0.50)
1,2,4-Trimethylbenzene (124TMB)	524	370	107	6.4
1,3,5-Trimethylbenzene (135TMB)	181	126	38	2.4
Trichloroethene	8	ND (0.53)	ND (0.53)	ND (0.53)
m,p-Xylene	693	404	92.4	12.9
o-Xylene	94	75.5	13.9	4.9
<b>Total Target VOCs (ug/l)</b>	<b>2,360</b>	<b>1,696</b>	<b>470</b>	<b>64</b>
<b>GRO (mg/l)</b>	<b>6.3</b>	<b>4.9</b>	<b>1.26</b>	<b>0.406</b>
<b>COCs reduction</b>				
<b>Target VOCs</b>		<b>28%</b>	<b>80%</b>	<b>97%</b>
<b>BTEX</b>		<b>37%</b>	<b>87%</b>	<b>98%</b>
<b>N+TMBs</b>		<b>30%</b>	<b>79%</b>	<b>99%</b>
<b>GRO</b>		<b>22%</b>	<b>80%</b>	<b>94%</b>
<b>VOCs (ug/kg)</b>				
<b>Soil/Solid Phase</b>				
Acetone	ND (830)	797	2,320	2,840
Benzene	382	120	ND (65)	ND (70)
Carbon tetrachloride	ND (120)	83	ND (88)	ND (95)
Cyclohexane	2,020	802	ND (94)	ND (100)
Ethylbenzene	6,570	3,170	150	75
Isopropylbenzene	1,460	959	ND (200)	ND (220)
Methyl Acetate	ND (280)	599	686	1,430
Methylcyclohexane	11,500	5,400	1,360	414
Naphthalene	11,500	7,220	1,190	871
Tetrachloroethene	ND (120)	180	ND (83)	ND (90)
Toluene	1,290	732	ND (75)	ND (81)
1,2,3-Trichlorobenzene	ND (500)	559	ND (360)	ND (390)
1,2,4-Trichlorobenzene	1,050	892	577	ND (390)
1,2,4-Trimethylbenzene (124TMB)	25,800	10,700	1,420	579
1,3,5-Trimethylbenzene (135TMB)	8,330	3,830	516	213
m,p-Xylene	20,000	9,830	510	234
o-Xylene	2,500	2,010	81	ND (71)
<b>Total Target VOCs (ug/kg)</b>	<b>92,402</b>	<b>47,086</b>	<b>6,490</b>	<b>3,816</b>
<b>GRO (mg/kg)</b>	<b>620</b>	<b>332</b>	<b>247</b>	<b>141</b>
<b>COCs reduction</b>				
<b>Target VOCs</b>		<b>49%</b>	<b>93%</b>	<b>96%</b>
<b>BTEX</b>		<b>48%</b>	<b>98%</b>	<b>99%</b>
<b>N+TMBs</b>		<b>57%</b>	<b>94%</b>	<b>98%</b>
<b>GRO</b>		<b>46%</b>	<b>60%</b>	<b>77%</b>
<b>Mass (ug)**</b>				
<b>VOC</b>	<b>14,241</b>	<b>7,336</b>	<b>1,049</b>	<b>583</b>
<b>BTEX</b>	<b>4,589</b>	<b>2,377</b>	<b>134</b>	<b>50</b>
<b>N+TMBs</b>	<b>5,233</b>	<b>2,259</b>	<b>314</b>	<b>120</b>
<b>GRO</b>	<b>94,016</b>	<b>50,590</b>	<b>37,253</b>	<b>21,215</b>
<b>Mass reduction</b>				
<b>Target VOCs</b>		<b>48%</b>	<b>93%</b>	<b>96%</b>
<b>BTEX</b>		<b>48%</b>	<b>97%</b>	<b>99%</b>
<b>N+TMBs</b>		<b>57%</b>	<b>94%</b>	<b>98%</b>
<b>GRO</b>		<b>46%</b>	<b>60%</b>	<b>77%</b>
<b>H<sub>2</sub>O<sub>2</sub> consumption (%)</b>		<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
<b>TOD of H<sub>2</sub>O<sub>2</sub> (g/kg)</b>		<b>2.50</b>	<b>7.50</b>	<b>12.50</b>
pH (SU)	7.78	7.24	6.75	6.74
ORP (mV)	250	266	268	260
Solids, Percent	39.5	56.7	57.5	53.1

**Note:**

MFR = Modified Fenton's reagent, N+TMBs = Naphthalene+124TMB+135TMB

ug/kg = micrograms per kilogram, ug/l = micrograms per liter, mg/kg = milligrams per kilogram

J - Indicate the concentration is an approximate value. a: Result is from Run# 2.

\*: Target VOCs = All VOCs detected excluding acetone and 2-Butanone (MEK).

\*\* : mass = (Total Aqueous Concentration x Aqueous Volume) + (Total Solid Concentration x Solids Weight)

Oxidant doses and total oxidant demand (TOD) are presented as "g/kg" (grams of oxidant per kilogram of soil [in slurry] tested).



## **ATTACHMENT A**

# **LABORATORY ANALYTICAL DATA PACKAGES**

The results set forth herein are provided by SGS North America Inc.

*e-Hardcopy 2.0*  
*Automated Report*

## Technical Report for

**Isotec**

**Jerome Avenue Site, NY**

**803031 PO#7362**

**SGS Job Number: JD46347**

**Sampling Date: 06/09/22**

**Report to:**

**Isotec  
11 Princess Road Suite A  
Lawrenceville, NJ 08648  
ychin@isotec-inc.com**

**ATTN: Yan Chin**

**Total number of pages in report: 52**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

A blue ink signature of David Chastain.

**David Chastain  
General Manager**

**Client Service contact: Jadon Schiller 732-329-0200**

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA(68-00408), RI, SC, TX, UT, VA, WV

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Test results relate only to samples analyzed.

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## Sample Summary

Isotec

**Job No:** JD46347

Jerome Avenue Site, NY  
 Project No: 803031 PO#7362

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
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This report contains results reported as ND = Not detected. The following applies:  
 Organics ND = Not detected above the MDL

JD46347-1	06/09/22	09:00	YC	06/09/22	AQ	Ground Water	MW-6
JD46347-2F	06/09/22	09:00	YC	06/09/22	AQ	Groundwater Filtered	MW-6F
JD46347-3	06/09/22	09:00	YC	06/09/22	SO	Soil	SO
JD46347-4	06/09/22	09:00	YC	06/09/22	AQ	Ground Water	CT1
JD46347-5	06/09/22	09:00	YC	06/09/22	AQ	Ground Water	CT2
JD46347-6	06/09/22	09:00	YC	06/09/22	AQ	Ground Water	MFR-L
JD46347-7	06/09/22	09:00	YC	06/09/22	AQ	Ground Water	MFR-M
JD46347-8	06/09/22	09:00	YC	06/09/22	AQ	Ground Water	MFR-H
JD46347-9	06/09/22	09:00	YC	06/09/22	SO	Soil	CT1
JD46347-10	06/09/22	09:00	YC	06/09/22	SO	Soil	CT2
JD46347-11	06/09/22	09:00	YC	06/09/22	SO	Soil	MFR-L
JD46347-12	06/09/22	09:00	YC	06/09/22	SO	Soil	MFR-M

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



## Sample Summary

(continued)

Isotec

Job No: JD46347

Jerome Avenue Site, NY  
Project No: 803031 PO#7362

Sample Number	Collected		Matrix			Client Sample ID
	Date	Time By	Received	Code	Type	
JD46347-13	06/09/22	09:00 YC	06/09/22	SO	Soil	MFR-H

---

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

## Summary of Hits

**Job Number:** JD46347  
**Account:** Isotec  
**Project:** Jerome Avenue Site, NY  
**Collected:** 06/09/22

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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**JD46347-1 MW-6**

Acetone	6.2 J	10	3.1	ug/l	SW846 8260D
Cyclohexane	49.0	5.0	0.78	ug/l	SW846 8260D
Methylcyclohexane	46.7	5.0	0.60	ug/l	SW846 8260D
Methyl Tert Butyl Ether	22.5	1.0	0.51	ug/l	SW846 8260D
4-Methyl-2-pentanone(MIBK)	2.4 J	5.0	1.9	ug/l	SW846 8260D
m,p-Xylene	0.83 J	1.0	0.78	ug/l	SW846 8260D
Xylene (total)	0.83 J	1.0	0.59	ug/l	SW846 8260D
TPH-GRO (C6-C10)	0.838	0.20	0.11	mg/l	SW846 8015D

**JD46347-2F MW-6F**

Manganese	1530	15		ug/l	SW846 6010D
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**JD46347-3 SO**

Cyclohexane	986	200	65	ug/kg	SW846 8260D
Ethylbenzene	969	98	45	ug/kg	SW846 8260D
Isopropylbenzene	284	200	140	ug/kg	SW846 8260D
Methylcyclohexane	7030	200	86	ug/kg	SW846 8260D
Tetrachloroethene	72.4 J	200	57	ug/kg	SW846 8260D
Toluene	283	98	52	ug/kg	SW846 8260D
1,2,3-Trichlorobenzene <sup>a</sup>	489 J	490	250	ug/kg	SW846 8260D
1,2,4-Trichlorobenzene	845	490	250	ug/kg	SW846 8260D
m,p-Xylene	3350	98	88	ug/kg	SW846 8260D
o-Xylene	714	98	45	ug/kg	SW846 8260D
Xylene (total)	4060	98	45	ug/kg	SW846 8260D
TPH-GRO (C6-C10)	352	20	9.8	mg/kg	SW846 8015D
Iron	12600	66		mg/kg	SW846 6010D
Manganese	170	2.0		mg/kg	SW846 6010D
Total Organic Carbon <sup>b</sup>	11900	1300		mg/kg	SW846 9060A

**JD46347-4 CT1**

Acetone	47.1	10	3.1	ug/l	SW846 8260D
Benzene	46.2	0.50	0.43	ug/l	SW846 8260D
2-Butanone (MEK)	16.3	10	6.9	ug/l	SW846 8260D
Carbon tetrachloride	3.4	1.0	0.55	ug/l	SW846 8260D
Chlorobenzene	1.3	1.0	0.56	ug/l	SW846 8260D
Cyclohexane	78.3	5.0	0.78	ug/l	SW846 8260D
Ethylbenzene	228	2.0	1.2	ug/l	SW846 8260D
Isopropylbenzene	44.7	1.0	0.65	ug/l	SW846 8260D
Methylcyclohexane	159	5.0	0.60	ug/l	SW846 8260D
Methyl Tert Butyl Ether	21.5	1.0	0.51	ug/l	SW846 8260D

## Summary of Hits

**Job Number:** JD46347  
**Account:** Isotec  
**Project:** Jerome Avenue Site, NY  
**Collected:** 06/09/22

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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4-Methyl-2-pentanone(MIBK)		3.5 J	5.0	1.9	ug/l	SW846 8260D
Tetrachloroethene		3.6	1.0	0.90	ug/l	SW846 8260D
Toluene		68.1	1.0	0.53	ug/l	SW846 8260D
1,2,3-Trichlorobenzene		0.72 J	1.0	0.50	ug/l	SW846 8260D
1,2,4-Trichlorobenzene		2.5	1.0	0.50	ug/l	SW846 8260D
Trichloroethene		8.0	1.0	0.53	ug/l	SW846 8260D
m,p-Xylene		693	2.0	1.6	ug/l	SW846 8260D
o-Xylene		94.0	1.0	0.59	ug/l	SW846 8260D
Xylene (total)		787	2.0	1.2	ug/l	SW846 8260D
TPH-GRO (C6-C10)		6.30	0.20	0.11	mg/l	SW846 8015D

### JD46347-5 CT2

Acetone		78.3	10	3.1	ug/l	SW846 8260D
Benzene		0.98	0.50	0.43	ug/l	SW846 8260D
2-Butanone (MEK)		36.7	10	6.9	ug/l	SW846 8260D
Carbon tetrachloride		3.2	1.0	0.55	ug/l	SW846 8260D
Cyclohexane		68.0	5.0	0.78	ug/l	SW846 8260D
Ethylbenzene		6.0	1.0	0.60	ug/l	SW846 8260D
2-Hexanone		3.1 J	5.0	2.0	ug/l	SW846 8260D
Isopropylbenzene		0.74 J	1.0	0.65	ug/l	SW846 8260D
Methylcyclohexane		100	5.0	0.60	ug/l	SW846 8260D
Methyl Tert Butyl Ether		19.0	1.0	0.51	ug/l	SW846 8260D
4-Methyl-2-pentanone(MIBK)		4.3 J	5.0	1.9	ug/l	SW846 8260D
Tetrachloroethene		3.0	1.0	0.90	ug/l	SW846 8260D
Toluene		2.3	1.0	0.53	ug/l	SW846 8260D
1,2,3-Trichlorobenzene		1.2	1.0	0.50	ug/l	SW846 8260D
1,2,4-Trichlorobenzene		2.9	1.0	0.50	ug/l	SW846 8260D
m,p-Xylene		41.9	1.0	0.78	ug/l	SW846 8260D
o-Xylene		63.8	1.0	0.59	ug/l	SW846 8260D
Xylene (total)		106	1.0	0.59	ug/l	SW846 8260D
TPH-GRO (C6-C10)		1.73	0.20	0.11	mg/l	SW846 8015D

### JD46347-6 MFR-L

Acetone		1300	100	31	ug/l	SW846 8260D
Benzene		21.4	0.50	0.43	ug/l	SW846 8260D
2-Butanone (MEK)		240	10	6.9	ug/l	SW846 8260D
Carbon disulfide		1.1 J	2.0	0.46	ug/l	SW846 8260D
Carbon tetrachloride		7.9	1.0	0.55	ug/l	SW846 8260D
Chlorobenzene		1.5	1.0	0.56	ug/l	SW846 8260D
Cyclohexane		64.1	5.0	0.78	ug/l	SW846 8260D
Ethylbenzene		167	1.0	0.60	ug/l	SW846 8260D
2-Hexanone		19.3	5.0	2.0	ug/l	SW846 8260D
Isopropylbenzene		29.9	1.0	0.65	ug/l	SW846 8260D



## Summary of Hits

**Job Number:** JD46347  
**Account:** Isotec  
**Project:** Jerome Avenue Site, NY  
**Collected:** 06/09/22

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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Methylcyclohexane		171	5.0	0.60	ug/l	SW846 8260D
Methyl Tert Butyl Ether		3.0	1.0	0.51	ug/l	SW846 8260D
4-Methyl-2-pentanone(MIBK)		11.9	5.0	1.9	ug/l	SW846 8260D
Tetrachloroethene		5.0	1.0	0.90	ug/l	SW846 8260D
Toluene		44.4	1.0	0.53	ug/l	SW846 8260D
1,2,3-Trichlorobenzene		1.3	1.0	0.50	ug/l	SW846 8260D
1,2,4-Trichlorobenzene		4.4	1.0	0.50	ug/l	SW846 8260D
m,p-Xylene		404	10	7.8	ug/l	SW846 8260D
o-Xylene		75.5	1.0	0.59	ug/l	SW846 8260D
Xylene (total)		480	10	5.9	ug/l	SW846 8260D
TPH-GRO (C6-C10)		4.90	0.20	0.11	mg/l	SW846 8015D

### JD46347-7 MFR-M

Acetone		3940	100	31	ug/l	SW846 8260D
Benzene		2.6	0.50	0.43	ug/l	SW846 8260D
2-Butanone (MEK)		369	10	6.9	ug/l	SW846 8260D
Carbon disulfide		0.76 J	2.0	0.46	ug/l	SW846 8260D
Carbon tetrachloride		5.3	1.0	0.55	ug/l	SW846 8260D
Cyclohexane		14.6	5.0	0.78	ug/l	SW846 8260D
Ethylbenzene		31.6	1.0	0.60	ug/l	SW846 8260D
2-Hexanone		13.5	5.0	2.0	ug/l	SW846 8260D
Isopropylbenzene		6.9	1.0	0.65	ug/l	SW846 8260D
Methyl Acetate		7.0	5.0	0.80	ug/l	SW846 8260D
Methylcyclohexane		78.3	5.0	0.60	ug/l	SW846 8260D
4-Methyl-2-pentanone(MIBK)		8.5	5.0	1.9	ug/l	SW846 8260D
Tetrachloroethene		1.8	1.0	0.90	ug/l	SW846 8260D
Toluene		7.8	1.0	0.53	ug/l	SW846 8260D
1,2,3-Trichlorobenzene		0.61 J	1.0	0.50	ug/l	SW846 8260D
1,2,4-Trichlorobenzene		2.1	1.0	0.50	ug/l	SW846 8260D
m,p-Xylene		92.4	1.0	0.78	ug/l	SW846 8260D
o-Xylene		13.9	1.0	0.59	ug/l	SW846 8260D
Xylene (total)		106	1.0	0.59	ug/l	SW846 8260D
TPH-GRO (C6-C10)		1.26	0.20	0.11	mg/l	SW846 8015D

### JD46347-8 MFR-H

Acetone		4660	100	31	ug/l	SW846 8260D
2-Butanone (MEK)		239	10	6.9	ug/l	SW846 8260D
Carbon tetrachloride		2.8	1.0	0.55	ug/l	SW846 8260D
Chloromethane		0.96 J	1.0	0.76	ug/l	SW846 8260D
Cyclohexane		1.4 J	5.0	0.78	ug/l	SW846 8260D
Ethylbenzene		4.1	1.0	0.60	ug/l	SW846 8260D
2-Hexanone		3.4 J	5.0	2.0	ug/l	SW846 8260D
Methyl Acetate		12.1	5.0	0.80	ug/l	SW846 8260D

## Summary of Hits

**Job Number:** JD46347  
**Account:** Isotec  
**Project:** Jerome Avenue Site, NY  
**Collected:** 06/09/22

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Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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Methylcyclohexane		6.3	5.0	0.60	ug/l	SW846 8260D
Toluene		1.5	1.0	0.53	ug/l	SW846 8260D
m,p-Xylene		12.9	1.0	0.78	ug/l	SW846 8260D
o-Xylene		4.9	1.0	0.59	ug/l	SW846 8260D
Xylene (total)		17.8	1.0	0.59	ug/l	SW846 8260D
TPH-GRO (C6-C10)		0.406	0.20	0.11	mg/l	SW846 8015D

### JD46347-9 CT1

Benzene		382	100	92	ug/kg	SW846 8260D
Cyclohexane		2020	400	130	ug/kg	SW846 8260D
Ethylbenzene		6570	200	91	ug/kg	SW846 8260D
Isopropylbenzene		1460	400	290	ug/kg	SW846 8260D
Methylcyclohexane		11500	400	180	ug/kg	SW846 8260D
Toluene		1290	200	110	ug/kg	SW846 8260D
1,2,4-Trichlorobenzene		1050	1000	500	ug/kg	SW846 8260D
m,p-Xylene		20000	200	180	ug/kg	SW846 8260D
o-Xylene		2500	200	92	ug/kg	SW846 8260D
Xylene (total)		22500	200	92	ug/kg	SW846 8260D
TPH-GRO (C6-C10)		620	40	20	mg/kg	SW846 8015D

### JD46347-10 CT2

Benzene		108	31	29	ug/kg	SW846 8260D
Cyclohexane		951	130	41	ug/kg	SW846 8260D
Ethylbenzene		2570	63	28	ug/kg	SW846 8260D
Isopropylbenzene		656	130	89	ug/kg	SW846 8260D
Methylcyclohexane		6140	130	55	ug/kg	SW846 8260D
Tetrachloroethene		42.7 J	130	36	ug/kg	SW846 8260D
Toluene		355	63	33	ug/kg	SW846 8260D
1,2,4-Trichlorobenzene		377	310	160	ug/kg	SW846 8260D
m,p-Xylene		7510	63	56	ug/kg	SW846 8260D
o-Xylene		937	63	29	ug/kg	SW846 8260D
Xylene (total)		8450	63	29	ug/kg	SW846 8260D
TPH-GRO (C6-C10)		282	13	6.3	mg/kg	SW846 8015D

### JD46347-11 MFR-L

Acetone		797 J	1200	490	ug/kg	SW846 8260D
Benzene		120	59	54	ug/kg	SW846 8260D
Carbon tetrachloride		83.4 J	240	73	ug/kg	SW846 8260D
Cyclohexane		802	240	78	ug/kg	SW846 8260D
Ethylbenzene		3170	120	54	ug/kg	SW846 8260D
Isopropylbenzene		959	240	170	ug/kg	SW846 8260D
Methyl Acetate		599	590	160	ug/kg	SW846 8260D

## Summary of Hits

**Job Number:** JD46347  
**Account:** Isotec  
**Project:** Jerome Avenue Site, NY  
**Collected:** 06/09/22

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Methylcyclohexane		5400	240	100	ug/kg	SW846 8260D
Tetrachloroethene		180 J	240	69	ug/kg	SW846 8260D
Toluene		732	120	62	ug/kg	SW846 8260D
1,2,3-Trichlorobenzene <sup>a</sup>		559 J	590	300	ug/kg	SW846 8260D
1,2,4-Trichlorobenzene		892	590	300	ug/kg	SW846 8260D
m,p-Xylene		9830	120	110	ug/kg	SW846 8260D
o-Xylene		2010	120	54	ug/kg	SW846 8260D
Xylene (total)		11800	120	54	ug/kg	SW846 8260D
TPH-GRO (C6-C10)		332	24	12	mg/kg	SW846 8015D

### JD46347-12 MFR-M

Acetone		2320	1400	590	ug/kg	SW846 8260D
Ethylbenzene		150	140	65	ug/kg	SW846 8260D
Methyl Acetate		686 J	710	200	ug/kg	SW846 8260D
Methylcyclohexane		1360	290	130	ug/kg	SW846 8260D
1,2,4-Trichlorobenzene		577 J	710	360	ug/kg	SW846 8260D
m,p-Xylene		510	140	130	ug/kg	SW846 8260D
o-Xylene		80.7 J	140	65	ug/kg	SW846 8260D
Xylene (total)		591	140	65	ug/kg	SW846 8260D
TPH-GRO (C6-C10)		247	29	14	mg/kg	SW846 8015D

### JD46347-13 MFR-H

Acetone		2840	1500	640	ug/kg	SW846 8260D
Ethylbenzene		75.1 J	150	70	ug/kg	SW846 8260D
Methyl Acetate		1430	770	210	ug/kg	SW846 8260D
Methylcyclohexane		414	310	140	ug/kg	SW846 8260D
m,p-Xylene		234	150	140	ug/kg	SW846 8260D
Xylene (total)		234	150	71	ug/kg	SW846 8260D
TPH-GRO (C6-C10)		141	31	15	mg/kg	SW846 8015D

(a) Associated CCV outside of control limits high.

(b) TOC Replicate Range: 6130 - 17500 mg/kg

Sample Results

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Report of Analysis

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## Report of Analysis

<b>Client Sample ID:</b> MW-6		<b>Date Sampled:</b> 06/09/22
<b>Lab Sample ID:</b> JD46347-1		<b>Date Received:</b> 06/09/22
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260D		
<b>Project:</b> Jerome Avenue Site, NY		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	L343047.D	1	06/17/22 11:12	BK	n/a	n/a	VL10358

Run #1	Purge Volume
Run #2	5.0 ml

## VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	6.2	10	3.1	ug/l	J
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	49.0	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	0.58	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	MW-6	<b>Date Sampled:</b>	06/09/22
<b>Lab Sample ID:</b>	JD46347-1	<b>Date Received:</b>	06/09/22
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260D		
<b>Project:</b>	Jerome Avenue Site, NY		

## VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	46.7	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	22.5	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	2.4	5.0	1.9	ug/l	J
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	0.83	1.0	0.78	ug/l	J
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	0.83	1.0	0.59	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		80-120%
17060-07-0	1,2-Dichloroethane-D4	103%		80-120%
2037-26-5	Toluene-D8	102%		80-120%
460-00-4	4-Bromofluorobenzene	100%		82-114%

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

3.1  
3

<b>Client Sample ID:</b> MW-6	<b>Date Sampled:</b> 06/09/22
<b>Lab Sample ID:</b> JD46347-1	<b>Date Received:</b> 06/09/22
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8015D	
<b>Project:</b> Jerome Avenue Site, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LM117540.D	1	06/13/22 13:07	MJ	n/a	n/a	GLM4892
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.838	0.20	0.11	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
98-08-8	aaa-Trifluorotoluene	97%		63-120%		

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MW-6F	<b>Date Sampled:</b> 06/09/22
<b>Lab Sample ID:</b> JD46347-2F	<b>Date Received:</b> 06/09/22
<b>Matrix:</b> AQ - Groundwater Filtered	<b>Percent Solids:</b> n/a
<b>Project:</b> Jerome Avenue Site, NY	

### Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	< 100	100	ug/l	1	06/15/22	06/15/22 ND	SW846 6010D <sup>1</sup>	SW846 3010A <sup>2</sup>
Manganese	1530	15	ug/l	1	06/15/22	06/15/22 ND	SW846 6010D <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA52586

(2) Prep QC Batch: MP33473

RL = Reporting Limit



## Report of Analysis

<b>Client Sample ID:</b> SO		
<b>Lab Sample ID:</b> JD46347-3		<b>Date Sampled:</b> 06/09/22
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 06/09/22
<b>Method:</b> SW846 8260D		<b>Percent Solids:</b> 79.2
<b>Project:</b> Jerome Avenue Site, NY		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	D283828.D	1	06/16/22 14:02	ED	n/a	n/a	VD11457
Run #2							

Run #1	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.4 g	10.0 ml	100 ul
Run #2			

## VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	980	410	ug/kg	
71-43-2	Benzene	ND	49	45	ug/kg	
74-97-5	Bromochloromethane	ND	490	55	ug/kg	
75-27-4	Bromodichloromethane	ND	200	42	ug/kg	
75-25-2	Bromoform	ND	490	130	ug/kg	
74-83-9	Bromomethane	ND	490	75	ug/kg	
78-93-3	2-Butanone (MEK)	ND	980	240	ug/kg	
75-15-0	Carbon disulfide	ND	200	53	ug/kg	
56-23-5	Carbon tetrachloride	ND	200	61	ug/kg	
108-90-7	Chlorobenzene	ND	200	45	ug/kg	
75-00-3	Chloroethane <sup>a</sup>	ND	490	58	ug/kg	
67-66-3	Chloroform	ND	200	51	ug/kg	
74-87-3	Chloromethane <sup>a</sup>	ND	490	190	ug/kg	
110-82-7	Cyclohexane	986	200	65	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropan <sup>b</sup>	ND	200	68	ug/kg	
124-48-1	Dibromochloromethane	ND	200	55	ug/kg	
106-93-4	1,2-Dibromoethane	ND	98	41	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	98	54	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	98	49	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	98	49	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	490	72	ug/kg	
75-34-3	1,1-Dichloroethane	ND	98	49	ug/kg	
107-06-2	1,2-Dichloroethane	ND	98	46	ug/kg	
75-35-4	1,1-Dichloroethene	ND	98	64	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	98	83	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	98	60	ug/kg	
78-87-5	1,2-Dichloropropane	ND	200	47	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	200	47	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	200	45	ug/kg	
100-41-4	Ethylbenzene	969	98	45	ug/kg	
76-13-1	Freon 113	ND	490	260	ug/kg	
591-78-6	2-Hexanone	ND	490	210	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	SO	<b>Date Sampled:</b>	06/09/22
<b>Lab Sample ID:</b>	JD46347-3	<b>Date Received:</b>	06/09/22
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	79.2
<b>Method:</b>	SW846 8260D		
<b>Project:</b>	Jerome Avenue Site, NY		

## VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	284	200	140	ug/kg	
79-20-9	Methyl Acetate	ND	490	140	ug/kg	
108-87-2	Methylcyclohexane	7030	200	86	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	98	46	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	490	220	ug/kg	
75-09-2	Methylene chloride	ND	490	260	ug/kg	
100-42-5	Styrene	ND	200	40	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	200	59	ug/kg	
127-18-4	Tetrachloroethene	72.4	200	57	ug/kg	J
108-88-3	Toluene	283	98	52	ug/kg	
87-61-6	1,2,3-Trichlorobenzene <sup>c</sup>	489	490	250	ug/kg	J
120-82-1	1,2,4-Trichlorobenzene	845	490	250	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	200	48	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	200	55	ug/kg	
79-01-6	Trichloroethene	ND	98	75	ug/kg	
75-69-4	Trichlorofluoromethane	ND	490	67	ug/kg	
75-01-4	Vinyl chloride <sup>a</sup>	ND	200	47	ug/kg	
	m,p-Xylene	3350	98	88	ug/kg	
95-47-6	o-Xylene	714	98	45	ug/kg	
1330-20-7	Xylene (total)	4060	98	45	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		80-124%
17060-07-0	1,2-Dichloroethane-D4	111%		75-133%
2037-26-5	Toluene-D8	109%		79-125%
460-00-4	4-Bromofluorobenzene	94%		58-148%

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

(b) Associated CCV outside of control limits high, sample was ND.

(c) Associated CCV outside of control limits high.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> SO		
<b>Lab Sample ID:</b> JD46347-3		<b>Date Sampled:</b> 06/09/22
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 06/09/22
<b>Method:</b> SW846 8015D		<b>Percent Solids:</b> 79.2
<b>Project:</b> Jerome Avenue Site, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LM117517.D	1	06/10/22 16:16	MJ	n/a	n/a	GLM4891
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.4 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	352	20	9.8	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
98-08-8	aaa-Trifluorotoluene	106%		70-116%		

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> SO		<b>Date Sampled:</b> 06/09/22
<b>Lab Sample ID:</b> JD46347-3		<b>Date Received:</b> 06/09/22
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 79.2
<b>Project:</b> Jerome Avenue Site, NY		

## Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	12600	66	mg/kg	1	06/17/22	06/21/22 ND	SW846 6010D <sup>1</sup>	SW846 3050B <sup>2</sup>
Manganese	170	2.0	mg/kg	1	06/17/22	06/21/22 ND	SW846 6010D <sup>1</sup>	SW846 3050B <sup>2</sup>

(1) Instrument QC Batch: MA52606

(2) Prep QC Batch: MP33497

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RL = Reporting Limit

# Report of Analysis

<b>Client Sample ID:</b> SO	<b>Date Sampled:</b> 06/09/22
<b>Lab Sample ID:</b> JD46347-3	<b>Date Received:</b> 06/09/22
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 79.2
<b>Project:</b> Jerome Avenue Site, NY	

## General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	79.2		%	1	06/15/22 16:37	BG	SM2540 G 18TH ED MOD
Total Organic Carbon <sup>a</sup>	11900	1300	mg/kg	1	06/14/22 15:57	MB	SW846 9060A

(a) TOC Replicate Range: 6130 - 17500 mg/kg

RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b> CT1		<b>Date Sampled:</b> 06/09/22
<b>Lab Sample ID:</b> JD46347-4		<b>Date Received:</b> 06/09/22
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260D		
<b>Project:</b> Jerome Avenue Site, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L343050.D	1	06/17/22 12:23	BK	n/a	n/a	VL10358
Run #2	2A217751.D	2	06/16/22 19:31	NH	n/a	n/a	V2A9466

Run #	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

## VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	47.1	10	3.1	ug/l	
71-43-2	Benzene	46.2	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	16.3	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	3.4	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	1.3	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	78.3	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	228 <sup>a</sup>	2.0	1.2	ug/l	
76-13-1	Freon 113	ND	5.0	0.58	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> CT1		<b>Date Sampled:</b> 06/09/22
<b>Lab Sample ID:</b> JD46347-4		<b>Date Received:</b> 06/09/22
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260D		
<b>Project:</b> Jerome Avenue Site, NY		

## VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	44.7	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	159	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	21.5	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	3.5	5.0	1.9	ug/l	J
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	3.6	1.0	0.90	ug/l	
108-88-3	Toluene	68.1	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	0.72	1.0	0.50	ug/l	J
120-82-1	1,2,4-Trichlorobenzene	2.5	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	8.0	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	693 <sup>a</sup>	2.0	1.6	ug/l	
95-47-6	o-Xylene	94.0	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	787 <sup>a</sup>	2.0	1.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%	97%	80-120%
17060-07-0	1,2-Dichloroethane-D4	106%	97%	80-120%
2037-26-5	Toluene-D8	103%	97%	80-120%
460-00-4	4-Bromofluorobenzene	98%	100%	82-114%

(a) Result is from Run# 2

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

3.4  
3

<b>Client Sample ID:</b> CT1	<b>Date Sampled:</b> 06/09/22
<b>Lab Sample ID:</b> JD46347-4	<b>Date Received:</b> 06/09/22
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8015D	
<b>Project:</b> Jerome Avenue Site, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LM117541.D	1	06/13/22 13:33	MJ	n/a	n/a	GLM4892
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	6.30	0.20	0.11	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
98-08-8	aaa-Trifluorotoluene	102%		63-120%		

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b> CT2		<b>Date Sampled:</b> 06/09/22
<b>Lab Sample ID:</b> JD46347-5		<b>Date Received:</b> 06/09/22
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260D		
<b>Project:</b> Jerome Avenue Site, NY		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L343048.D	1	06/17/22 11:36	BK	n/a	n/a	VL10358
Run #2							

Run #1	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	78.3	10	3.1	ug/l	
71-43-2	Benzene	0.98	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	36.7	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	3.2	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	68.0	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	6.0	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	0.58	ug/l	
591-78-6	2-Hexanone	3.1	5.0	2.0	ug/l	J

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> CT2		<b>Date Sampled:</b> 06/09/22
<b>Lab Sample ID:</b> JD46347-5		<b>Date Received:</b> 06/09/22
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260D		
<b>Project:</b> Jerome Avenue Site, NY		

## VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	0.74	1.0	0.65	ug/l	J
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	100	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	19.0	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	4.3	5.0	1.9	ug/l	J
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	3.0	1.0	0.90	ug/l	
108-88-3	Toluene	2.3	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	1.2	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	2.9	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	41.9	1.0	0.78	ug/l	
95-47-6	o-Xylene	63.8	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	106	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		80-120%
17060-07-0	1,2-Dichloroethane-D4	102%		80-120%
2037-26-5	Toluene-D8	102%		80-120%
460-00-4	4-Bromofluorobenzene	94%		82-114%

ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> CT2		
<b>Lab Sample ID:</b> JD46347-5		<b>Date Sampled:</b> 06/09/22
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 06/09/22
<b>Method:</b> SW846 8015D		<b>Percent Solids:</b> n/a
<b>Project:</b> Jerome Avenue Site, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LM117542.D	1	06/13/22 14:00	MJ	n/a	n/a	GLM4892
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	1.73	0.20	0.11	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
98-08-8	aaa-Trifluorotoluene	98%		63-120%		

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound



### Report of Analysis

<b>Client Sample ID:</b> MFR-L		<b>Date Sampled:</b> 06/09/22
<b>Lab Sample ID:</b> JD46347-6		<b>Date Received:</b> 06/09/22
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260D		
<b>Project:</b> Jerome Avenue Site, NY		

#### VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	29.9	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	171	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	3.0	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	11.9	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	5.0	1.0	0.90	ug/l	
108-88-3	Toluene	44.4	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	1.3	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	4.4	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	404 <sup>a</sup>	10	7.8	ug/l	
95-47-6	o-Xylene	75.5	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	480 <sup>a</sup>	10	5.9	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%	106%	80-120%
17060-07-0	1,2-Dichloroethane-D4	105%	104%	80-120%
2037-26-5	Toluene-D8	104%	103%	80-120%
460-00-4	4-Bromofluorobenzene	96%	100%	82-114%

(a) Result is from Run# 2

ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound



# Report of Analysis

<b>Client Sample ID:</b> MFR-M		<b>Date Sampled:</b> 06/09/22
<b>Lab Sample ID:</b> JD46347-7		<b>Date Received:</b> 06/09/22
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260D		
<b>Project:</b> Jerome Avenue Site, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L343055.D	1	06/17/22 14:20	BK	n/a	n/a	VL10358
Run #2	L343051.D	10	06/17/22 12:46	BK	n/a	n/a	VL10358

Run #	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

## VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	3940 <sup>a</sup>	100	31	ug/l	
71-43-2	Benzene	2.6	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	369	10	6.9	ug/l	
75-15-0	Carbon disulfide	0.76	2.0	0.46	ug/l	J
56-23-5	Carbon tetrachloride	5.3	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	14.6	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	31.6	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	0.58	ug/l	
591-78-6	2-Hexanone	13.5	5.0	2.0	ug/l	

ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> MFR-M		<b>Date Sampled:</b> 06/09/22
<b>Lab Sample ID:</b> JD46347-7		<b>Date Received:</b> 06/09/22
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260D		
<b>Project:</b> Jerome Avenue Site, NY		

## VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	6.9	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	7.0	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	78.3	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	8.5	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	1.8	1.0	0.90	ug/l	
108-88-3	Toluene	7.8	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	0.61	1.0	0.50	ug/l	J
120-82-1	1,2,4-Trichlorobenzene	2.1	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	92.4	1.0	0.78	ug/l	
95-47-6	o-Xylene	13.9	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	106	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%	104%	80-120%
17060-07-0	1,2-Dichloroethane-D4	104%	106%	80-120%
2037-26-5	Toluene-D8	103%	106%	80-120%
460-00-4	4-Bromofluorobenzene	96%	98%	82-114%

(a) Result is from Run# 2

ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound



## Report of Analysis

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<b>Client Sample ID:</b> MFR-M	<b>Date Sampled:</b> 06/09/22
<b>Lab Sample ID:</b> JD46347-7	<b>Date Received:</b> 06/09/22
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8015D	
<b>Project:</b> Jerome Avenue Site, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LM117553.D	1	06/13/22 19:18	MJ	n/a	n/a	GLM4892
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	1.26	0.20	0.11	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
98-08-8	aaa-Trifluorotoluene	95%		63-120%		

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MFR-H		<b>Date Sampled:</b> 06/09/22
<b>Lab Sample ID:</b> JD46347-8		<b>Date Received:</b> 06/09/22
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260D		
<b>Project:</b> Jerome Avenue Site, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L343056.D	1	06/17/22 14:43	BK	n/a	n/a	VL10358
Run #2	L343054.D	10	06/17/22 13:56	BK	n/a	n/a	VL10358

Run #	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

## VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	4660 <sup>a</sup>	100	31	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	239	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	2.8	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	0.96	1.0	0.76	ug/l	J
110-82-7	Cyclohexane	1.4	5.0	0.78	ug/l	J
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	4.1	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	0.58	ug/l	
591-78-6	2-Hexanone	3.4	5.0	2.0	ug/l	J

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	MFR-H	<b>Date Sampled:</b>	06/09/22
<b>Lab Sample ID:</b>	JD46347-8	<b>Date Received:</b>	06/09/22
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260D		
<b>Project:</b>	Jerome Avenue Site, NY		

## VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	12.1	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	6.3	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	1.5	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	12.9	1.0	0.78	ug/l	
95-47-6	o-Xylene	4.9	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	17.8	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%	106%	80-120%
17060-07-0	1,2-Dichloroethane-D4	105%	103%	80-120%
2037-26-5	Toluene-D8	102%	103%	80-120%
460-00-4	4-Bromofluorobenzene	100%	100%	82-114%

(a) Result is from Run# 2

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MFR-H		
<b>Lab Sample ID:</b> JD46347-8		<b>Date Sampled:</b> 06/09/22
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 06/09/22
<b>Method:</b> SW846 8015D		<b>Percent Solids:</b> n/a
<b>Project:</b> Jerome Avenue Site, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LM117557.D	1	06/13/22 21:05	MJ	n/a	n/a	GLM4892
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.406	0.20	0.11	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
98-08-8	aaa-Trifluorotoluene	91%		63-120%		

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b> CT1		
<b>Lab Sample ID:</b> JD46347-9		<b>Date Sampled:</b> 06/09/22
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 06/09/22
<b>Method:</b> SW846 8260D		<b>Percent Solids:</b> 39.5
<b>Project:</b> Jerome Avenue Site, NY		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	D283809.D	1	06/16/22 00:02	ED	n/a	n/a	VD11456
Run #2							

Run #1	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.1 g	10.0 ml	100 ul
Run #2			

### VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	2000	830	ug/kg	
71-43-2	Benzene	382	100	92	ug/kg	
74-97-5	Bromochloromethane	ND	1000	110	ug/kg	
75-27-4	Bromodichloromethane	ND	400	86	ug/kg	
75-25-2	Bromoform	ND	1000	270	ug/kg	
74-83-9	Bromomethane	ND	1000	150	ug/kg	
78-93-3	2-Butanone (MEK)	ND	2000	490	ug/kg	
75-15-0	Carbon disulfide	ND	400	110	ug/kg	
56-23-5	Carbon tetrachloride	ND	400	120	ug/kg	
108-90-7	Chlorobenzene	ND	400	92	ug/kg	
75-00-3	Chloroethane <sup>a</sup>	ND	1000	120	ug/kg	
67-66-3	Chloroform	ND	400	100	ug/kg	
74-87-3	Chloromethane	ND	1000	390	ug/kg	
110-82-7	Cyclohexane	2020	400	130	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	400	140	ug/kg	
124-48-1	Dibromochloromethane	ND	400	110	ug/kg	
106-93-4	1,2-Dibromoethane	ND	200	85	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	200	110	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	200	100	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	200	99	ug/kg	
75-71-8	Dichlorodifluoromethane <sup>b</sup>	ND	1000	150	ug/kg	
75-34-3	1,1-Dichloroethane	ND	200	100	ug/kg	
107-06-2	1,2-Dichloroethane	ND	200	95	ug/kg	
75-35-4	1,1-Dichloroethene	ND	200	130	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	200	170	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	200	120	ug/kg	
78-87-5	1,2-Dichloropropane	ND	400	95	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	400	96	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	400	92	ug/kg	
100-41-4	Ethylbenzene	6570	200	91	ug/kg	
76-13-1	Freon 113	ND	1000	540	ug/kg	
591-78-6	2-Hexanone	ND	1000	430	ug/kg	

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound



## Report of Analysis

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<b>Client Sample ID:</b> CT1	<b>Date Sampled:</b> 06/09/22
<b>Lab Sample ID:</b> JD46347-9	<b>Date Received:</b> 06/09/22
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 39.5
<b>Method:</b> SW846 8015D	
<b>Project:</b> Jerome Avenue Site, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LM117518.D	1	06/10/22 16:43	MJ	n/a	n/a	GLM4891
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.1 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	620	40	20	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
98-08-8	aaa-Trifluorotoluene	104%		70-116%		

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> CT2		<b>Date Sampled:</b> 06/09/22
<b>Lab Sample ID:</b> JD46347-10		<b>Date Received:</b> 06/09/22
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 69.5
<b>Method:</b> SW846 8260D		
<b>Project:</b> Jerome Avenue Site, NY		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	D283810.D	1	06/16/22 00:30	ED	n/a	n/a	VD11456
Run #2							

Run #1	Initial Weight	Final Volume	Methanol Aliquot
Run #1	17.6 g	10.0 ml	100 ul
Run #2			

## VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	630	260	ug/kg	
71-43-2	Benzene	108	31	29	ug/kg	
74-97-5	Bromochloromethane	ND	310	35	ug/kg	
75-27-4	Bromodichloromethane	ND	130	27	ug/kg	
75-25-2	Bromoform	ND	310	85	ug/kg	
74-83-9	Bromomethane	ND	310	48	ug/kg	
78-93-3	2-Butanone (MEK)	ND	630	150	ug/kg	
75-15-0	Carbon disulfide	ND	130	34	ug/kg	
56-23-5	Carbon tetrachloride	ND	130	39	ug/kg	
108-90-7	Chlorobenzene	ND	130	29	ug/kg	
75-00-3	Chloroethane <sup>a</sup>	ND	310	37	ug/kg	
67-66-3	Chloroform	ND	130	33	ug/kg	
74-87-3	Chloromethane	ND	310	120	ug/kg	
110-82-7	Cyclohexane	951	130	41	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	130	44	ug/kg	
124-48-1	Dibromochloromethane	ND	130	35	ug/kg	
106-93-4	1,2-Dibromoethane	ND	63	26	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	63	34	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	63	31	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	63	31	ug/kg	
75-71-8	Dichlorodifluoromethane <sup>b</sup>	ND	310	46	ug/kg	
75-34-3	1,1-Dichloroethane	ND	63	31	ug/kg	
107-06-2	1,2-Dichloroethane	ND	63	29	ug/kg	
75-35-4	1,1-Dichloroethene	ND	63	41	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	63	53	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	63	38	ug/kg	
78-87-5	1,2-Dichloropropane	ND	130	30	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	130	30	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	130	29	ug/kg	
100-41-4	Ethylbenzene	2570	63	28	ug/kg	
76-13-1	Freon 113	ND	310	170	ug/kg	
591-78-6	2-Hexanone	ND	310	130	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b> CT2		<b>Date Sampled:</b> 06/09/22
<b>Lab Sample ID:</b> JD46347-10		<b>Date Received:</b> 06/09/22
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 69.5
<b>Method:</b> SW846 8260D		
<b>Project:</b> Jerome Avenue Site, NY		

## VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	656	130	89	ug/kg	
79-20-9	Methyl Acetate	ND	310	87	ug/kg	
108-87-2	Methylcyclohexane	6140	130	55	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	63	29	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	310	140	ug/kg	
75-09-2	Methylene chloride	ND	310	160	ug/kg	
100-42-5	Styrene	ND	130	25	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	130	38	ug/kg	
127-18-4	Tetrachloroethene	42.7	130	36	ug/kg	J
108-88-3	Toluene	355	63	33	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	310	160	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	377	310	160	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	130	30	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	130	35	ug/kg	
79-01-6	Trichloroethene	ND	63	48	ug/kg	
75-69-4	Trichlorofluoromethane	ND	310	43	ug/kg	
75-01-4	Vinyl chloride	ND	130	30	ug/kg	
	m,p-Xylene	7510	63	56	ug/kg	
95-47-6	o-Xylene	937	63	29	ug/kg	
1330-20-7	Xylene (total)	8450	63	29	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		80-124%
17060-07-0	1,2-Dichloroethane-D4	108%		75-133%
2037-26-5	Toluene-D8	113%		79-125%
460-00-4	4-Bromofluorobenzene	100%		58-148%

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> CT2	<b>Date Sampled:</b> 06/09/22
<b>Lab Sample ID:</b> JD46347-10	<b>Date Received:</b> 06/09/22
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 69.5
<b>Method:</b> SW846 8015D	
<b>Project:</b> Jerome Avenue Site, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LM117519.D	1	06/10/22 17:10	MJ	n/a	n/a	GLM4891
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	17.6 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	282	13	6.3	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
98-08-8	aaa-Trifluorotoluene	109%		70-116%		

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MFR-L		
<b>Lab Sample ID:</b> JD46347-11		<b>Date Sampled:</b> 06/09/22
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 06/09/22
<b>Method:</b> SW846 8260D		<b>Percent Solids:</b> 56.7
<b>Project:</b> Jerome Avenue Site, NY		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	D283829.D	1	06/16/22 14:30	ED	n/a	n/a	VD11457
Run #2							

Run #1	Initial Weight	Final Volume	Methanol Aliquot
Run #1	11.0 g	10.0 ml	100 ul
Run #2			

## VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	797	1200	490	ug/kg	J
71-43-2	Benzene	120	59	54	ug/kg	
74-97-5	Bromochloromethane	ND	590	66	ug/kg	
75-27-4	Bromodichloromethane	ND	240	51	ug/kg	
75-25-2	Bromoform	ND	590	160	ug/kg	
74-83-9	Bromomethane	ND	590	90	ug/kg	
78-93-3	2-Butanone (MEK)	ND	1200	290	ug/kg	
75-15-0	Carbon disulfide	ND	240	63	ug/kg	
56-23-5	Carbon tetrachloride	83.4	240	73	ug/kg	J
108-90-7	Chlorobenzene	ND	240	54	ug/kg	
75-00-3	Chloroethane <sup>a</sup>	ND	590	70	ug/kg	
67-66-3	Chloroform	ND	240	61	ug/kg	
74-87-3	Chloromethane <sup>a</sup>	ND	590	230	ug/kg	
110-82-7	Cyclohexane	802	240	78	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropan <sup>b</sup>	ND	240	82	ug/kg	
124-48-1	Dibromochloromethane	ND	240	66	ug/kg	
106-93-4	1,2-Dibromoethane	ND	120	50	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	120	65	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	120	59	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	120	58	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	590	86	ug/kg	
75-34-3	1,1-Dichloroethane	ND	120	59	ug/kg	
107-06-2	1,2-Dichloroethane	ND	120	56	ug/kg	
75-35-4	1,1-Dichloroethene	ND	120	77	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	120	99	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	120	72	ug/kg	
78-87-5	1,2-Dichloropropane	ND	240	56	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	240	56	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	240	54	ug/kg	
100-41-4	Ethylbenzene	3170	120	54	ug/kg	
76-13-1	Freon 113	ND	590	320	ug/kg	
591-78-6	2-Hexanone	ND	590	250	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	MFR-L	<b>Date Sampled:</b>	06/09/22
<b>Lab Sample ID:</b>	JD46347-11	<b>Date Received:</b>	06/09/22
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	56.7
<b>Method:</b>	SW846 8260D		
<b>Project:</b>	Jerome Avenue Site, NY		

## VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	959	240	170	ug/kg	
79-20-9	Methyl Acetate	599	590	160	ug/kg	
108-87-2	Methylcyclohexane	5400	240	100	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	120	55	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	590	270	ug/kg	
75-09-2	Methylene chloride	ND	590	310	ug/kg	
100-42-5	Styrene	ND	240	48	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	240	71	ug/kg	
127-18-4	Tetrachloroethene	180	240	69	ug/kg	J
108-88-3	Toluene	732	120	62	ug/kg	
87-61-6	1,2,3-Trichlorobenzene <sup>c</sup>	559	590	300	ug/kg	J
120-82-1	1,2,4-Trichlorobenzene	892	590	300	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	240	57	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	240	65	ug/kg	
79-01-6	Trichloroethene	ND	120	90	ug/kg	
75-69-4	Trichlorofluoromethane	ND	590	81	ug/kg	
75-01-4	Vinyl chloride <sup>a</sup>	ND	240	57	ug/kg	
	m,p-Xylene	9830	120	110	ug/kg	
95-47-6	o-Xylene	2010	120	54	ug/kg	
1330-20-7	Xylene (total)	11800	120	54	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		80-124%
17060-07-0	1,2-Dichloroethane-D4	102%		75-133%
2037-26-5	Toluene-D8	113%		79-125%
460-00-4	4-Bromofluorobenzene	92%		58-148%

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

(b) Associated CCV outside of control limits high, sample was ND.

(c) Associated CCV outside of control limits high.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MFR-L	<b>Date Sampled:</b> 06/09/22
<b>Lab Sample ID:</b> JD46347-11	<b>Date Received:</b> 06/09/22
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 56.7
<b>Method:</b> SW846 8015D	
<b>Project:</b> Jerome Avenue Site, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LM117520.D	1	06/10/22 17:37	MJ	n/a	n/a	GLM4891
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	11.0 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	332	24	12	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
98-08-8	aaa-Trifluorotoluene	105%		70-116%		

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MFR-M		
<b>Lab Sample ID:</b> JD46347-12		<b>Date Sampled:</b> 06/09/22
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 06/09/22
<b>Method:</b> SW846 8260D		<b>Percent Solids:</b> 57.5
<b>Project:</b> Jerome Avenue Site, NY		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	D283830.D	1	06/16/22 14:59	ED	n/a	n/a	VD11457
Run #2							

Run #1	Initial Weight	Final Volume	Methanol Aliquot
Run #1	8.2 g	10.0 ml	100 ul
Run #2			

## VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2320	1400	590	ug/kg	
71-43-2	Benzene	ND	71	65	ug/kg	
74-97-5	Bromochloromethane	ND	710	80	ug/kg	
75-27-4	Bromodichloromethane	ND	290	61	ug/kg	
75-25-2	Bromoform	ND	710	190	ug/kg	
74-83-9	Bromomethane	ND	710	110	ug/kg	
78-93-3	2-Butanone (MEK)	ND	1400	350	ug/kg	
75-15-0	Carbon disulfide	ND	290	76	ug/kg	
56-23-5	Carbon tetrachloride	ND	290	88	ug/kg	
108-90-7	Chlorobenzene	ND	290	66	ug/kg	
75-00-3	Chloroethane <sup>a</sup>	ND	710	84	ug/kg	
67-66-3	Chloroform	ND	290	74	ug/kg	
74-87-3	Chloromethane <sup>a</sup>	ND	710	280	ug/kg	
110-82-7	Cyclohexane	ND	290	94	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropan <sup>b</sup>	ND	290	99	ug/kg	
124-48-1	Dibromochloromethane	ND	290	80	ug/kg	
106-93-4	1,2-Dibromoethane	ND	140	60	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	140	78	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	140	71	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	140	71	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	710	100	ug/kg	
75-34-3	1,1-Dichloroethane	ND	140	71	ug/kg	
107-06-2	1,2-Dichloroethane	ND	140	67	ug/kg	
75-35-4	1,1-Dichloroethene	ND	140	94	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	140	120	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	140	87	ug/kg	
78-87-5	1,2-Dichloropropane	ND	290	68	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	290	68	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	290	65	ug/kg	
100-41-4	Ethylbenzene	150	140	65	ug/kg	
76-13-1	Freon 113	ND	710	380	ug/kg	
591-78-6	2-Hexanone	ND	710	300	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> MFR-M		<b>Date Sampled:</b> 06/09/22
<b>Lab Sample ID:</b> JD46347-12		<b>Date Received:</b> 06/09/22
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 57.5
<b>Method:</b> SW846 8260D		
<b>Project:</b> Jerome Avenue Site, NY		

## VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	290	200	ug/kg	
79-20-9	Methyl Acetate	686	710	200	ug/kg	J
108-87-2	Methylcyclohexane	1360	290	130	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	140	67	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	710	320	ug/kg	
75-09-2	Methylene chloride	ND	710	370	ug/kg	
100-42-5	Styrene	ND	290	57	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	290	86	ug/kg	
127-18-4	Tetrachloroethene	ND	290	83	ug/kg	
108-88-3	Toluene	ND	140	75	ug/kg	
87-61-6	1,2,3-Trichlorobenzene <sup>b</sup>	ND	710	360	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	577	710	360	ug/kg	J
71-55-6	1,1,1-Trichloroethane	ND	290	69	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	290	79	ug/kg	
79-01-6	Trichloroethene	ND	140	110	ug/kg	
75-69-4	Trichlorofluoromethane	ND	710	98	ug/kg	
75-01-4	Vinyl chloride <sup>a</sup>	ND	290	69	ug/kg	
	m,p-Xylene	510	140	130	ug/kg	
95-47-6	o-Xylene	80.7	140	65	ug/kg	J
1330-20-7	Xylene (total)	591	140	65	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		80-124%
17060-07-0	1,2-Dichloroethane-D4	99%		75-133%
2037-26-5	Toluene-D8	111%		79-125%
460-00-4	4-Bromofluorobenzene	95%		58-148%

- (a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- (b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MFR-M		
<b>Lab Sample ID:</b> JD46347-12		<b>Date Sampled:</b> 06/09/22
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 06/09/22
<b>Method:</b> SW846 8015D		<b>Percent Solids:</b> 57.5
<b>Project:</b> Jerome Avenue Site, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LM117521.D	1	06/10/22 18:04	MJ	n/a	n/a	GLM4891
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	8.2 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	247	29	14	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
98-08-8	aaa-Trifluorotoluene	101%		70-116%		

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b> MFR-H		
<b>Lab Sample ID:</b> JD46347-13		<b>Date Sampled:</b> 06/09/22
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 06/09/22
<b>Method:</b> SW846 8260D		<b>Percent Solids:</b> 53.1
<b>Project:</b> Jerome Avenue Site, NY		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	D283831.D	1	06/16/22 15:27	ED	n/a	n/a	VD11457
Run #2							

Run #1	Initial Weight	Final Volume	Methanol Aliquot
Run #1	8.5 g	10.0 ml	100 ul
Run #2			

## VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2840	1500	640	ug/kg	
71-43-2	Benzene	ND	77	70	ug/kg	
74-97-5	Bromochloromethane	ND	770	86	ug/kg	
75-27-4	Bromodichloromethane	ND	310	66	ug/kg	
75-25-2	Bromoform	ND	770	210	ug/kg	
74-83-9	Bromomethane	ND	770	120	ug/kg	
78-93-3	2-Butanone (MEK)	ND	1500	380	ug/kg	
75-15-0	Carbon disulfide	ND	310	83	ug/kg	
56-23-5	Carbon tetrachloride	ND	310	95	ug/kg	
108-90-7	Chlorobenzene	ND	310	71	ug/kg	
75-00-3	Chloroethane <sup>a</sup>	ND	770	91	ug/kg	
67-66-3	Chloroform	ND	310	80	ug/kg	
74-87-3	Chloromethane <sup>a</sup>	ND	770	300	ug/kg	
110-82-7	Cyclohexane	ND	310	100	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropan <sup>b</sup>	ND	310	110	ug/kg	
124-48-1	Dibromochloromethane	ND	310	86	ug/kg	
106-93-4	1,2-Dibromoethane	ND	150	65	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	150	84	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	150	77	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	150	76	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	770	110	ug/kg	
75-34-3	1,1-Dichloroethane	ND	150	76	ug/kg	
107-06-2	1,2-Dichloroethane	ND	150	73	ug/kg	
75-35-4	1,1-Dichloroethene	ND	150	100	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	150	130	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	150	94	ug/kg	
78-87-5	1,2-Dichloropropane	ND	310	73	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	310	73	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	310	71	ug/kg	
100-41-4	Ethylbenzene	75.1	150	70	ug/kg	J
76-13-1	Freon 113	ND	770	410	ug/kg	
591-78-6	2-Hexanone	ND	770	330	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	MFR-H	<b>Date Sampled:</b>	06/09/22
<b>Lab Sample ID:</b>	JD46347-13	<b>Date Received:</b>	06/09/22
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	53.1
<b>Method:</b>	SW846 8260D		
<b>Project:</b>	Jerome Avenue Site, NY		

## VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	310	220	ug/kg	
79-20-9	Methyl Acetate	1430	770	210	ug/kg	
108-87-2	Methylcyclohexane	414	310	140	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	150	72	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	770	350	ug/kg	
75-09-2	Methylene chloride	ND	770	400	ug/kg	
100-42-5	Styrene	ND	310	62	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	310	92	ug/kg	
127-18-4	Tetrachloroethene	ND	310	90	ug/kg	
108-88-3	Toluene	ND	150	81	ug/kg	
87-61-6	1,2,3-Trichlorobenzene <sup>b</sup>	ND	770	390	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	770	390	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	310	75	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	310	86	ug/kg	
79-01-6	Trichloroethene	ND	150	120	ug/kg	
75-69-4	Trichlorofluoromethane	ND	770	110	ug/kg	
75-01-4	Vinyl chloride <sup>a</sup>	ND	310	74	ug/kg	
	m,p-Xylene	234	150	140	ug/kg	
95-47-6	o-Xylene	ND	150	71	ug/kg	
1330-20-7	Xylene (total)	234	150	71	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		80-124%
17060-07-0	1,2-Dichloroethane-D4	98%		75-133%
2037-26-5	Toluene-D8	106%		79-125%
460-00-4	4-Bromofluorobenzene	98%		58-148%

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MFR-H		
<b>Lab Sample ID:</b> JD46347-13		<b>Date Sampled:</b> 06/09/22
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 06/09/22
<b>Method:</b> SW846 8015D		<b>Percent Solids:</b> 53.1
<b>Project:</b> Jerome Avenue Site, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LM117522.D	1	06/10/22 18:30	MJ	n/a	n/a	GLM4891
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	8.5 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	141	31	15	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
98-08-8	aaa-Trifluorotoluene	99%		70-116%		

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Misc. Forms

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Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody



GW  
SO  
SLL  
SMF

# CHAIN OF CUSTODY

2335 Route 130, Dayton, NJ 08810  
TEL: 732-329-0200 FAX: 732-329-3492/3480  
www.accutest.com

Initial Assessment 2BEN  
Label Verification \_\_\_\_\_

JD 46347

<b>Client / Reporting Information</b> Company Name: ISOTEC Street Address: 11 Princell Road, Suite A City: Lawrenceville, NJ 08648 Project Contact: Yan Chin, ychin@isotec-inc.com Phone: 609-843-0485, Fax: 609-275-9608 Sampler(s) Name(s): Yan Chin, 609-843-0485		<b>Project Information</b> Project Name: Jerome Ave Site Street: _____ Billing Information (if different from Report to): Company Name: _____ Project #: 803031 Client Purchase Order #: 7362 Project Manager: _____		<b>Requested Analysis (see TEST CODE sheet)</b> VOCs (8260 No TICs) [X] Fe [X] Mn [X] TOC (9060) [X] GRO (8015) [X]										<b>Matrix Codes</b> DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank									
Accutest Sample #	Field ID / Point of Collection	MEOHDI Vial #	Date	Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	None	Dil Water	MeOH	EtOH	VOCs (8260 No TICs)	GRO (8015)	Fe	Mn	TOC (9060)	LAB USE ONLY		
1	MW-6		6/9/22	9am	YC	AQ	5									X	X						
2F	MW-6F		6/9/22	9am	YC	AQ	1			1						X	X	X	X				
3	SO		6/9/22	9am	YC	SO	5					1	2	2		X	X	X	X				
4	CT1		6/9/22	9am	YC	AQ	4	4								X	X						
5	CT2		6/9/22	9am	YC	AQ	4	4								X	X						
6	MFR-L		6/9/22	9am	YC	AQ	4	4								X	X					1402	
7	MFR-M		6/9/22	9am	YC	AQ	4	4								X	X					4050	
8	MFR-H		6/9/22	9am	YC	AQ	4	4								X	X						
9	CT1		6/9/22	9am	YC	SO	5					1	2	2		X	X						
10	CT2		6/9/22	9am	YC	SO	5					1	2	2		X	X						
11	MFR-L		6/9/22	9am	YC	SO	5					1	2	2		X	X						
12	MFR-M		6/9/22	9am	YC	SO	5					1	2	2		X	X						
13	MFR-H		6/9/22	9am	YC	SO	5					1	2	2		X	X						
Turnaround Time (Business days)		Data Deliverable Information										Comments / Special Instructions											
<input checked="" type="checkbox"/> Std. 7 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY <input type="checkbox"/> other _____		Approved By (Accutest PM): / Date: _____		<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> NYASP Category A <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> NYASP Category B <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> State Forms <input type="checkbox"/> NJ Reduced <input type="checkbox"/> EDD Format <input type="checkbox"/> Commercial "C" <input checked="" type="checkbox"/> Other <b>Results only</b>										Please use the lowest MDL possible. <b>VOCs analysis including 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene and naphthalene</b> AQ samples for metals analysis were field filtered									
Emergency & Rush T/A data available VIA Lablink																							
<b>Sample Custody must be documented below each time samples change possession, including courier delivery.</b>																							
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:	Relinquished By:	Date Time:	
1 Yan Chin	6/9/2022 10am	1 [Signature]	2 [Signature]	16:27	6/9/22	3 [Signature]	4 [Signature]	4 [Signature]	5 [Signature]	5 [Signature]	5 [Signature]	5 [Signature]	5 [Signature]	5 [Signature]	5 [Signature]	5 [Signature]	5 [Signature]	5 [Signature]	5 [Signature]	5 [Signature]	5 [Signature]	5 [Signature]	
Custody Seal #		<input type="checkbox"/> Intact    Preserved where applicable    On Ice    Cooler Temp.		<input type="checkbox"/> Not Intact <input type="checkbox"/> <input type="checkbox"/> 23																			

4.1  
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## SGS Sample Receipt Summary

Job Number: JD46347

Client: ISOTEC

Project: JEROME AVE SITE

Date / Time Received: 6/9/2022 4:27:00 PM

Delivery Method: \_\_\_\_\_

Airbill #s: \_\_\_\_\_

Cooler Temps (Raw Measured) °C: Cooler 1: (2.3);

Cooler Temps (Corrected) °C: Cooler 1: (2.0);

<u>Cooler Security</u>	<u>Y or N</u>		<u>Y or N</u>	
1. Custody Seals Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/> <input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/> <input type="checkbox"/>

<u>Cooler Temperature</u>	<u>Y or N</u>	
1. Temp criteria achieved:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Cooler temp verification:	<u>IR Gun</u>	
3. Cooler media:	<u>Ice (Bag)</u>	
4. No. Coolers:	<u>1</u>	

<u>Quality Control Preservation</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. VOCs headspace free:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

<u>Sample Integrity - Documentation</u>	<u>Y or N</u>	
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<u>Sample Integrity - Condition</u>	<u>Y or N</u>	
1. Sample recvd within HT:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Condition of sample:	<u>Intact</u>	

<u>Sample Integrity - Instructions</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Test Strip Lot #s:	pH 1-12: <u>231619</u>	pH 12+: <u>203117A</u>	Other: (Specify) _____
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Comments

SM089-03  
Rev. Date 12/7/17

JD46347: Chain of Custody

Page 2 of 2

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The results set forth herein are provided by SGS North America Inc.

*e-Hardcopy 2.0*  
*Automated Report*

## Technical Report for

Isotec

Jerome Avenue Site, NY

803031 PO#7362

SGS Job Number: JD46347R

Sampling Date: 06/09/22

Report to:

Isotec  
11 Princess Road Suite A  
Lawrenceville, NJ 08648  
ychin@isotec-inc.com

ATTN: Yan Chin

Total number of pages in report: 22



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

A handwritten signature in blue ink, appearing to read "D. Chastain".

David Chastain  
General Manager

Client Service contact: Jadon Schiller 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA(68-00408), RI, SC, TX, UT, VA, WV

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Test results relate only to samples analyzed.

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## Sample Summary

Isotec

**Job No:** JD46347R

Jerome Avenue Site, NY  
 Project No: 803031 PO#7362

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
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This report contains results reported as ND = Not detected. The following applies:  
 Organics ND = Not detected above the MDL

JD46347-1R	06/09/22	09:00	YC	06/09/22	AQ	Ground Water	MW-6
JD46347-3R	06/09/22	09:00	YC	06/09/22	SO	Soil	SO
JD46347-4R	06/09/22	09:00	YC	06/09/22	AQ	Ground Water	CT1
JD46347-5R	06/09/22	09:00	YC	06/09/22	AQ	Ground Water	CT2
JD46347-6R	06/09/22	09:00	YC	06/09/22	AQ	Ground Water	MFR-L
JD46347-7R	06/09/22	09:00	YC	06/09/22	AQ	Ground Water	MFR-M
JD46347-8R	06/09/22	09:00	YC	06/09/22	AQ	Ground Water	MFR-H
JD46347-9R	06/09/22	09:00	YC	06/09/22	SO	Soil	CT1
JD46347-10R	06/09/22	09:00	YC	06/09/22	SO	Soil	CT2
JD46347-11R	06/09/22	09:00	YC	06/09/22	SO	Soil	MFR-L
JD46347-12R	06/09/22	09:00	YC	06/09/22	SO	Soil	MFR-M
JD46347-13R	06/09/22	09:00	YC	06/09/22	SO	Soil	MFR-H

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

## Summary of Hits

**Job Number:** JD46347R  
**Account:** Isotec  
**Project:** Jerome Avenue Site, NY  
**Collected:** 06/09/22

Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method
<b>JD46347-1R</b>		<b>MW-6</b>				
		Naphthalene	24.8	5.0	2.5	ug/l SW846 8260D
		1,3,5-Trimethylbenzene	21.7	2.0	1.0	ug/l SW846 8260D
<b>JD46347-3R</b>		<b>SO</b>				
		Naphthalene	3230	490	250	ug/kg SW846 8260D
		1,2,4-Trimethylbenzene	5220	200	49	ug/kg SW846 8260D
		1,3,5-Trimethylbenzene	1960	200	42	ug/kg SW846 8260D
<b>JD46347-4R</b>		<b>CT1</b>				
		Naphthalene	199	10	5.0	ug/l SW846 8260D
		1,2,4-Trimethylbenzene <sup>a</sup>	524 E	4.0	2.0	ug/l SW846 8260D
		1,3,5-Trimethylbenzene	181	2.0	1.0	ug/l SW846 8260D
<b>JD46347-5R</b>		<b>CT2</b>				
		Naphthalene	17.1	5.0	2.5	ug/l SW846 8260D
		1,2,4-Trimethylbenzene	5.1	2.0	1.0	ug/l SW846 8260D
		1,3,5-Trimethylbenzene	131	2.0	1.0	ug/l SW846 8260D
<b>JD46347-6R</b>		<b>MFR-L</b>				
		Naphthalene	167	5.0	2.5	ug/l SW846 8260D
		1,2,4-Trimethylbenzene	370	20	10	ug/l SW846 8260D
		1,3,5-Trimethylbenzene	126	2.0	1.0	ug/l SW846 8260D
<b>JD46347-7R</b>		<b>MFR-M</b>				
		Naphthalene	37.3	5.0	2.5	ug/l SW846 8260D
		1,2,4-Trimethylbenzene	107	2.0	1.0	ug/l SW846 8260D
		1,3,5-Trimethylbenzene	38.0	2.0	1.0	ug/l SW846 8260D
<b>JD46347-8R</b>		<b>MFR-H</b>				
		Naphthalene	5.1	5.0	2.5	ug/l SW846 8260D
		1,2,4-Trimethylbenzene	6.4	2.0	1.0	ug/l SW846 8260D
		1,3,5-Trimethylbenzene	2.4	2.0	1.0	ug/l SW846 8260D
<b>JD46347-9R</b>		<b>CT1</b>				
		Naphthalene	11500	1000	500	ug/kg SW846 8260D
		1,2,4-Trimethylbenzene	25800	400	100	ug/kg SW846 8260D

## Summary of Hits

**Job Number:** JD46347R  
**Account:** Isotec  
**Project:** Jerome Avenue Site, NY  
**Collected:** 06/09/22

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
1,3,5-Trimethylbenzene		8330	400	87	ug/kg	SW846 8260D
<b>JD46347-10R CT2</b>						
Naphthalene		4500	310	160	ug/kg	SW846 8260D
1,2,4-Trimethylbenzene		9860	130	31	ug/kg	SW846 8260D
1,3,5-Trimethylbenzene		3380	130	27	ug/kg	SW846 8260D
<b>JD46347-11R MFR-L</b>						
Naphthalene <sup>b</sup>		7220	590	300	ug/kg	SW846 8260D
1,2,4-Trimethylbenzene		10700	240	59	ug/kg	SW846 8260D
1,3,5-Trimethylbenzene		3830	240	51	ug/kg	SW846 8260D
<b>JD46347-12R MFR-M</b>						
Naphthalene <sup>b</sup>		1190	710	360	ug/kg	SW846 8260D
1,2,4-Trimethylbenzene		1420	290	71	ug/kg	SW846 8260D
1,3,5-Trimethylbenzene		516	290	62	ug/kg	SW846 8260D
<b>JD46347-13R MFR-H</b>						
Naphthalene <sup>b</sup>		871	770	390	ug/kg	SW846 8260D
1,2,4-Trimethylbenzene		579	310	77	ug/kg	SW846 8260D
1,3,5-Trimethylbenzene		213 J	310	67	ug/kg	SW846 8260D

(a) Estimated value, the compound was re-logged outside the holding time per client's request.

(b) Associated CCV outside of control limits high.

Sample Results

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Report of Analysis

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## Report of Analysis

3.1  
3

<b>Client Sample ID:</b> MW-6	<b>Date Sampled:</b> 06/09/22
<b>Lab Sample ID:</b> JD46347-1R	<b>Date Received:</b> 06/09/22
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260D	
<b>Project:</b> Jerome Avenue Site, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L343047R.D	1	06/17/22 11:12	BK	n/a	n/a	VL10358
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	24.8	5.0	2.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	21.7	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		80-120%
17060-07-0	1,2-Dichloroethane-D4	103%		80-120%
2037-26-5	Toluene-D8	102%		80-120%
460-00-4	4-Bromofluorobenzene	100%		82-114%

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

32  
3

<b>Client Sample ID:</b> SO	<b>Date Sampled:</b> 06/09/22
<b>Lab Sample ID:</b> JD46347-3R	<b>Date Received:</b> 06/09/22
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 79.2
<b>Method:</b> SW846 8260D	
<b>Project:</b> Jerome Avenue Site, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	D283754R.D	1	06/14/22 21:31	ED	n/a	n/a	VD11453
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.4 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	3230	490	250	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	5220	200	49	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	1960	200	42	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		80-124%
17060-07-0	1,2-Dichloroethane-D4	97%		75-133%
2037-26-5	Toluene-D8	115%		79-125%
460-00-4	4-Bromofluorobenzene	101%		58-148%

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> CT1		<b>Date Sampled:</b> 06/09/22
<b>Lab Sample ID:</b> JD46347-4R		<b>Date Received:</b> 06/09/22
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260D		
<b>Project:</b> Jerome Avenue Site, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L343050R.D	1	06/17/22 12:23	BK	n/a	n/a	VL10358
Run #2	2A217751R.D	2	06/16/22 19:31	NH	n/a	n/a	V2A9466

Run #	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	199 <sup>a</sup>	10	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene <sup>b</sup>	524 <sup>a</sup>	4.0	2.0	ug/l	E
108-67-8	1,3,5-Trimethylbenzene	181	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%	97%	80-120%
17060-07-0	1,2-Dichloroethane-D4	106%	97%	80-120%
2037-26-5	Toluene-D8	103%	97%	80-120%
460-00-4	4-Bromofluorobenzene	98%	100%	82-114%

(a) Result is from Run# 2

(b) Estimated value, the compound was re-logged outside the holding time per client's request.

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> CT2	<b>Date Sampled:</b> 06/09/22
<b>Lab Sample ID:</b> JD46347-5R	<b>Date Received:</b> 06/09/22
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260D	
<b>Project:</b> Jerome Avenue Site, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L343048R.D	1	06/17/22 11:36	BK	n/a	n/a	VL10358
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	17.1	5.0	2.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	5.1	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	131	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		80-120%
17060-07-0	1,2-Dichloroethane-D4	102%		80-120%
2037-26-5	Toluene-D8	102%		80-120%
460-00-4	4-Bromofluorobenzene	94%		82-114%

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound



# Report of Analysis

3.5  
3

<b>Client Sample ID:</b> MFR-L		
<b>Lab Sample ID:</b> JD46347-6R		<b>Date Sampled:</b> 06/09/22
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 06/09/22
<b>Method:</b> SW846 8260D		<b>Percent Solids:</b> n/a
<b>Project:</b> Jerome Avenue Site, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L343049R.D	1	06/17/22 11:59	BK	n/a	n/a	VL10358
Run #2	L343059R.D	10	06/17/22 15:55	BK	n/a	n/a	VL10358

Run #	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	167	5.0	2.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	370 <sup>a</sup>	20	10	ug/l	
108-67-8	1,3,5-Trimethylbenzene	126	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%	106%	80-120%
17060-07-0	1,2-Dichloroethane-D4	105%	104%	80-120%
2037-26-5	Toluene-D8	104%	103%	80-120%
460-00-4	4-Bromofluorobenzene	96%	100%	82-114%

(a) Result is from Run# 2

ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

3.6  
3

<b>Client Sample ID:</b> MFR-M	<b>Date Sampled:</b> 06/09/22
<b>Lab Sample ID:</b> JD46347-7R	<b>Date Received:</b> 06/09/22
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260D	
<b>Project:</b> Jerome Avenue Site, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L343055R.D	1	06/17/22 14:20	BK	n/a	n/a	VL10358
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	37.3	5.0	2.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	107	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	38.0	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		80-120%
17060-07-0	1,2-Dichloroethane-D4	104%		80-120%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	96%		82-114%

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

37  
3

<b>Client Sample ID:</b> MFR-H		<b>Date Sampled:</b> 06/09/22
<b>Lab Sample ID:</b> JD46347-8R		<b>Date Received:</b> 06/09/22
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260D		
<b>Project:</b> Jerome Avenue Site, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L343056R.D	1	06/17/22 14:43	BK	n/a	n/a	VL10358
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	5.1	5.0	2.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	6.4	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	2.4	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		80-120%
17060-07-0	1,2-Dichloroethane-D4	105%		80-120%
2037-26-5	Toluene-D8	102%		80-120%
460-00-4	4-Bromofluorobenzene	100%		82-114%

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

3.8  
3

<b>Client Sample ID:</b> CT1	
<b>Lab Sample ID:</b> JD46347-9R	<b>Date Sampled:</b> 06/09/22
<b>Matrix:</b> SO - Soil	<b>Date Received:</b> 06/09/22
<b>Method:</b> SW846 8260D	<b>Percent Solids:</b> 39.5
<b>Project:</b> Jerome Avenue Site, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	D283809R.D	1	06/16/22 00:02	ED	n/a	n/a	VD11456
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.1 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	11500	1000	500	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	25800	400	100	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	8330	400	87	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		80-124%
17060-07-0	1,2-Dichloroethane-D4	105%		75-133%
2037-26-5	Toluene-D8	114%		79-125%
460-00-4	4-Bromofluorobenzene	99%		58-148%

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

3.9  
3

<b>Client Sample ID:</b> CT2	<b>Date Sampled:</b> 06/09/22
<b>Lab Sample ID:</b> JD46347-10R	<b>Date Received:</b> 06/09/22
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 69.5
<b>Method:</b> SW846 8260D	
<b>Project:</b> Jerome Avenue Site, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	D283810R.D	1	06/16/22 00:30	ED	n/a	n/a	VD11456
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	17.6 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	4500	310	160	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	9860	130	31	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	3380	130	27	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		80-124%
17060-07-0	1,2-Dichloroethane-D4	108%		75-133%
2037-26-5	Toluene-D8	113%		79-125%
460-00-4	4-Bromofluorobenzene	100%		58-148%

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> MFR-L		
<b>Lab Sample ID:</b> JD46347-11R		<b>Date Sampled:</b> 06/09/22
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 06/09/22
<b>Method:</b> SW846 8260D		<b>Percent Solids:</b> 56.7
<b>Project:</b> Jerome Avenue Site, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	D283829R.D	1	06/16/22 14:30	ED	n/a	n/a	VD11457
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	11.0 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene <sup>a</sup>	7220	590	300	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	10700	240	59	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	3830	240	51	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		80-124%
17060-07-0	1,2-Dichloroethane-D4	102%		75-133%
2037-26-5	Toluene-D8	113%		79-125%
460-00-4	4-Bromofluorobenzene	92%		58-148%

(a) Associated CCV outside of control limits high.

ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MFR-M		<b>Date Sampled:</b> 06/09/22
<b>Lab Sample ID:</b> JD46347-12R		<b>Date Received:</b> 06/09/22
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 57.5
<b>Method:</b> SW846 8260D		
<b>Project:</b> Jerome Avenue Site, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	D283830R.D	1	06/16/22 14:59	ED	n/a	n/a	VD11457
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	8.2 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene <sup>a</sup>	1190	710	360	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	1420	290	71	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	516	290	62	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		80-124%
17060-07-0	1,2-Dichloroethane-D4	99%		75-133%
2037-26-5	Toluene-D8	111%		79-125%
460-00-4	4-Bromofluorobenzene	95%		58-148%

(a) Associated CCV outside of control limits high.

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> MFR-H	<b>Date Sampled:</b> 06/09/22
<b>Lab Sample ID:</b> JD46347-13R	<b>Date Received:</b> 06/09/22
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 53.1
<b>Method:</b> SW846 8260D	
<b>Project:</b> Jerome Avenue Site, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	D283831R.D	1	06/16/22 15:27	ED	n/a	n/a	VD11457
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	8.5 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene <sup>a</sup>	871	770	390	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	579	310	77	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	213	310	67	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		80-124%
17060-07-0	1,2-Dichloroethane-D4	98%		75-133%
2037-26-5	Toluene-D8	106%		79-125%
460-00-4	4-Bromofluorobenzene	98%		58-148%

(a) Associated CCV outside of control limits high.

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound



Misc. Forms

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Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody



GW  
SO  
SLL  
SME

# CHAIN OF CUSTODY

2335 Route 130, Dayton, NJ 08810  
TEL: 732-329-0200 FAX: 732-329-3492/3480  
www.accutest.com

Initial Assessment 2BEN  
Label Verification \_\_\_\_\_

JD 46347R  
PAGE 1 OF 1

FED-EX Tracking # \_\_\_\_\_  
Accutest Quote # \_\_\_\_\_  
Matrix Order Control # none  
Accutest Job # \_\_\_\_\_

Client / Reporting Information		Project Information										Requested Analysis ( see TEST CODE sheet)							Matrix Codes														
Company Name <b>ISOTEC</b>		Project Name <b>Jerome Ave Site</b>										DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank							LAB USE ONLY														
Street Address <b>11 Princell Road, Suite A</b>		Street <b>Lawrenceville NJ 08648</b>																															
City State Zip <b>Lawrenceville NJ 08648</b>		City State <b>NY</b>																															
Project Contact <b>Yan Chin ychin@isotec-inc.com</b>		Project # <b>803031</b>		Billing Information ( # different from Report to ) Company Name _____								VOCs (8260 No TICs) GRO (8015) Fe Mn TOC (9060)																					
Phone # <b>609-843-0485</b>		Client Purchase Order # <b>7362</b>		Street Address _____																													
Fax # <b>609-275-9608</b>		City State Zip _____		City State Zip _____																													
Sampler(s) Name(s) <b>Yan Chin</b>		Project Manager _____		Attention: _____																													
Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection		Sampled by	Matrix	# of bottles	Number of preserved Bottles										VOCs (8260 No TICs)	GRO (8015)	Fe	Mn	TOC (9060)											
			Date	Time				HCl	NaOH	HNO3	H2SO4	H3PO4	None	DI Water	MeOH	EtOH																	
1	MW-6		6/9/22	9am	YC	AQ	5	5																									
2F	MW-6F		6/9/22	9am	YC	AQ	1	1																									
3	SO		6/9/22	9am	YC	SO	5							1	2	2																	
4	CT1		6/9/22	9am	YC	AQ	4	4																									
5	CT2		6/9/22	9am	YC	AQ	4	4																									
6	MFR-L		6/9/22	9am	YC	AQ	4	4																									
7	MFR-M		6/9/22	9am	YC	AQ	4	4																									
8	MFR-H		6/9/22	9am	YC	AQ	4	4																									
9	CT1		6/9/22	9am	YC	SO	5							1	2	2																	
10	CT2		6/9/22	9am	YC	SO	5							1	2	2																	
11	MFR-L		6/9/22	9am	YC	SO	5							1	2	2																	
12	MFR-M		6/9/22	9am	YC	SO	5							1	2	2																	
13	MFR-H		6/9/22	9am	YC	SO	5							1	2	2																	
Turnaround Time ( Business days )		Data Deliverable Information										Comments / Special Instructions																					
<input checked="" type="checkbox"/> Std. 7 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY <input type="checkbox"/> other _____		Approved By (Accutest PM) / Date: _____ <input type="checkbox"/> Commercial "A" ( Level 1 ) <input type="checkbox"/> NYASP Category A <input type="checkbox"/> Commercial "B" ( Level 2 ) <input type="checkbox"/> NYASP Category B <input type="checkbox"/> FULLT1 ( Level 3+4 ) <input type="checkbox"/> State Forms <input type="checkbox"/> NJ Reduced <input type="checkbox"/> EDD Format <input type="checkbox"/> Commercial "C" <input checked="" type="checkbox"/> Other <b>Results only</b>										Please use the lowest MDL possible. <b>VOCs analysis including 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene and naphthalene</b>  AQ samples for metals analysis were field filtered																					
Emergency & Rush T/A data available VIA Lablink		Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data																															
Sample Custody must be documented below each time samples change possession, including courier delivery.																																	
Relinquished by Sampler: <b>Yan Chin</b>		Date Time: <b>6/9/2022 10am</b>		Received By: <b>[Signature]</b>		Date Time: <b>16:27 6/9/22</b>		Relinquished By: <b>[Signature]</b>		Date Time: <b>6/9/22</b>		Received By: <b>Jermit Patec</b>		Date Time: _____		Received By: _____		Date Time: _____		Received By: _____													
Relinquished by Sampler: _____		Date Time: _____		Received By: _____		Date Time: _____		Relinquished By: _____		Date Time: _____		Received By: _____		Date Time: _____		Received By: _____		Date Time: _____		Received By: _____													
Relinquished by: _____		Date Time: _____		Received By: _____		Date Time: _____		Relinquished By: _____		Date Time: _____		Received By: _____		Date Time: _____		Received By: _____		Date Time: _____		Received By: _____													
Custody Seal # _____		<input type="checkbox"/> Intact		<input type="checkbox"/> Not intact		Preserved where applicable <input type="checkbox"/>		On Ice <input type="checkbox"/>		Cooler Temp. <b>23</b>																							

4.1  
4



## SGS Sample Receipt Summary

Job Number: JD46347

Client: ISOTEC

Project: JEROME AVE SITE

Date / Time Received: 6/9/2022 4:27:00 PM

Delivery Method: \_\_\_\_\_

Airbill #s: \_\_\_\_\_

Cooler Temps (Raw Measured) °C: Cooler 1: (2.3);

Cooler Temps (Corrected) °C: Cooler 1: (2.0);

<u>Cooler Security</u>	<u>Y or N</u>		<u>Y or N</u>	
1. Custody Seals Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/> <input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/> <input type="checkbox"/>

<u>Cooler Temperature</u>	<u>Y or N</u>	
1. Temp criteria achieved:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Cooler temp verification:	<u>IR Gun</u>	
3. Cooler media:	<u>Ice (Bag)</u>	
4. No. Coolers:	<u>1</u>	

<u>Quality Control Preservation</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. VOCs headspace free:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

<u>Sample Integrity - Documentation</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>		<input type="checkbox"/>

<u>Sample Integrity - Condition</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Condition of sample:	<u>Intact</u>		

<u>Sample Integrity - Instructions</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Test Strip Lot #s:	pH 1-12: <u>231619</u>	pH 12+: <u>203117A</u>	Other: (Specify) _____
--------------------	------------------------	------------------------	------------------------

Comments

SM089-03  
Rev. Date 12/7/17

**JD46347R: Chain of Custody**

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4.1  
4

Job Change Order: JD46347

Requested Date: 6/27/2022 Received Date: 6/9/2022  
Account Name: Isotec Due Date: 6/27/2022  
Project Description: Jerome Avenue Site, NY Deliverable: COMMA  
C/O Initiated By: JADONS PM: JBS TAT (Days): 1

=====  
Sample #: JD46347-1 and 3 thru 13 Change: Please relog/retrieve for VR8260NAP, VMS+124TMB, VMS+135TMB  
Dept:  
TAT: 1  
=====

JD46347R: Chain of Custody  
Page 3 of 3

Above Changes Per: Yan Chin Date/Time: 6/27/2022

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

**APPENDIX G**  
**MFR FACT SHEET**



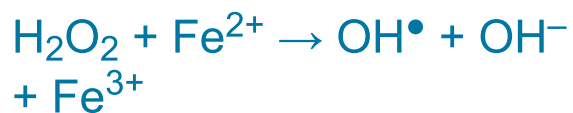
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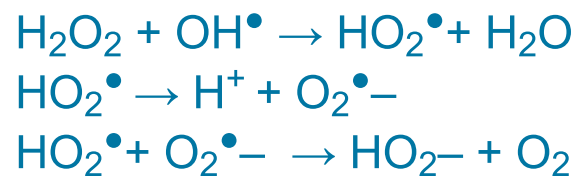
## MODIFIED FENTON'S REAGENT



ISOTEC's modified Fenton's reagent (MFR) is based on the fundamental principles of Fenton's chemistry. Henry J.H. Fenton was a British chemist who first demonstrated the use of Fenton's chemistry in 1894, through the oxidation of tartaric acid using a soluble iron-catalyzed decomposition of dilute hydrogen peroxide under acidic conditions. Our MFR process was developed with the fundamental goal of enhancing in-situ treatment of soil and groundwater contamination using Fenton's chemistry while mitigating the drawbacks associated with application of Fenton's reagent in its conventional form (such as acidic pH, limited catalyst mobility, etc). The process generates powerful free radicals when the catalyst reacts with hydrogen peroxide. The principal chemical reaction associated with the modified Fenton's process is provided below:



In addition to the initial reaction that produces hydroxyl radical oxidants, the modified Fenton's process also produces superoxide radical and hydroperoxide anion reductants through additional chain propagation reactions. The perhydroxyl radical is known to be a weaker reductant compared to superoxide radical and hydroperoxide anions.



### Where:

$\text{O}_2^{\bullet-}$  = Superoxide Radical Anion

$\text{HO}_2^-$  = Hydroperoxide Anion

$\text{HO}_2^\bullet$  = Perhydroxyl Radical

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**Where:** $H_2O_2$  = Hydrogen Peroxide $Fe^{2+}$  = Ferrous Ion $Fe^{3+}$  = Ferric Ion $OH^\bullet$  = Hydroxyl Radicals $OH^-$  = Hydroxide Ion

The co-existing oxidation-reduction reactions associated with a modified Fenton's process promote enhanced desorption and degradation of recalcitrant compounds. These include compounds such as carbon tetrachloride and chloroform, which were previously considered untreatable by Fenton's chemistry.

## WHY USE MODIFIED FENTON'S REAGENT?

### Isotec's Modified Fenton's R...



ISOTEC's modified Fenton's Reagent is quickly emerging as the leading remedial technique of the 21st century. However, if you are familiar with how conventional Fenton's is most often applied, using strong acids and high reagent concentrations under pressure, then you are familiar with its shortcomings. ISOTEC's MFR was specifically designed to overcome these problems, which often include incomplete treatment, explosive reactions, organic vapor generation and contaminant migration.

The MFR process consists of injecting patented chelated iron catalysts and stabilized hydrogen peroxide into contaminated aquifers. Our patented catalysts and stabilizers allow reagents at background neutral pH conditions to be effectively distributed within the aquifer, destroying contaminants in saturated soil and groundwater while minimizing generation of organic vapors or high temperatures. As compared to conventional Fenton's Reagent, which require acidic conditions (pH~3), MFR is effective at neutral (pH~7) conditions. This is an important consideration in full-scale application, since acidifying an aquifer is typically impractical. Additionally, the production of superoxide, the driving reaction for contaminant reduction and desorption, is inhibited under acidic conditions.

## COMPARISON WITH OTHER PEROXIDE-BASED TECHNOLOGIES

Technology Features	Hydrogen Peroxide	Classic Fenton's Reagent	Modified Fenton's Reagent
Aquifer Acidification	No	Yes	No
Hydroxyl Radical Production	Limited	Yes, if pH < 3	Yes
Superoxide Radical Production	No	Limited	Yes
Controlled Reaction	No	No	Yes
Bioremediation Stimulation	Yes	Limited	Yes



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