

# Subsurface Investigation

---

252-258 3<sup>rd</sup> Avenue

Manhattan, New York 10010

EBI Project No. 1222000043

February 23, 2022

Prepared for:

Legion Investment Group  
660 Madison Avenue, 14th Floor  
New York, NY 10065

Prepared by:



February 23, 2022

Mr. Mert Aktas  
Legion Investment Group  
660 Madison Avenue, 14<sup>th</sup> Floor  
New York, NY 10065

**Subject: Subsurface Investigation**  
252-258 3rd Avenue  
Manhattan, New York 10010  
EBI Project No. 1222000043

Dear Mr. Aktas:

In accordance with the Proposal and Standard Conditions for Engagement dated January 27, 2022, EBI Consulting (dba EBI Consulting, hereinafter "EBI") is pleased to submit this Phase II Environmental Site Assessment (ESA) for the above-referenced property (herein referred to as the Subject Property).

This report is addressed to Legion Investment Group. This report is for the use and benefit of, and may be relied upon by, Legion Investment Group; initial and subsequent holders from time to time of any debt and/or debt securities secured, directly or indirectly, any participation interest in such debt; any indenture trustee, servicer, or other agent acting on behalf of such holders of such debt and/or debt securities; rating agencies; and the institutional provider(s) from time to time of any liquidity facility or credit support for such financings, and their respective successors and assigns.

The information contained in this report has received appropriate technical review and approval. The conclusions represent professional judgments and are founded upon the findings of the investigations identified in the report and the interpretation of such data based on our experience and expertise according to the existing standard of care. No other warranty or limitation exists, either express or implied.

The conclusions of this report are based on soil, groundwater, and soil vapor analytical data prepared by Alpha Analytical, soil screening results obtained utilizing a field screening instrument, and field observations recorded by EBI personnel.

There are no intended or unintended third-party beneficiaries to this report, except as expressly stated herein. EBI is an independent contractor, not an employee of either the issuer or the borrower, and its compensation was not based on the findings or recommendations made in the report or on the closing of any business transaction.

Thank you for the opportunity to prepare this report, and assist you with this project. Please call us if you have any questions or if we may be of further assistance.

Respectfully submitted,  
**EBI CONSULTING**



Kenneth Lukas  
Author/Project Engineer



Christine Madsen  
Reviewer/Project Manager



James M Klinder, LSRP  
Senior Project Manager

## Table of Contents

<b>1.0 INTRODUCTION .....</b>	<b>1</b>
1.1 Background.....	1
1.2 Statement of Objectives .....	1
1.3 Limitations and Assumptions.....	2
1.4 Special Terms and Conditions .....	4
<b>2.0 SUBJECT PROPERTY BACKGROUND .....</b>	<b>5</b>
2.1 Subject Property Description and Features.....	5
2.2 Physical Setting.....	5
2.3 Site History and Land Use .....	6
2.4 Adjacent Property Land Use .....	7
2.5 Summary of Previous Environmental Assessments.....	7
<b>3.0 RATIONALE AND WORK PERFORMED .....</b>	<b>8</b>
3.1 Rationale.....	8
3.1.1 Conceptual Model.....	8
3.1.2 Rationale for Soil Vapor Sample Locations .....	8
3.1.3 Chemical Testing Plan.....	8
3.1.4 Deviations from the Work Plan .....	8
3.2 Exploration, Sampling, and Test Screening Methods.....	9
3.2.1 Pre-Drilling Activities .....	9
3.2.2 Soil Borings.....	9
3.2.3 Soil Sampling and Analysis.....	9
3.2.4 Groundwater Sampling and Analysis .....	10
3.2.5 Soil Vapor Sampling and Analysis .....	10
3.2.6 Abandonment of Borings .....	10
<b>4.0 PRESENTATION OF EVALUATION AND RESULTS.....</b>	<b>11</b>
4.1 Soil Analysis Results.....	11
4.2 Soil Vapor Analysis Results.....	11
4.3 Groundwater Analysis Results.....	12
<b>5.0 FINDINGS &amp; CONCLUSIONS.....</b>	<b>14</b>
<b>6.0 RECOMMENDATIONS .....</b>	<b>15</b>

### APPENDICES

#### APPENDIX A – FIGURES

    FIGURE 1 – SITE LOCATION MAP

    FIGURE 2 – TOPOGRAPHIC MAP

    FIGURE 3 – SAMPLE LOCATION MAP

#### APPENDIX B – SOIL BORINGS

#### APPENDIX C – LABORATORY ANALYTICAL RESULTS

#### APPENDIX D – PROFESSIONAL QUALIFICATIONS

## I.0 INTRODUCTION

In accordance with our Proposal and Standard Conditions for Engagement, EBI Consulting (EBI) is pleased to submit our Phase II Environmental Site Assessment (ESA) Report on the properties located at 252-258 3<sup>rd</sup> Avenue, Manhattan, New York (the Subject Property). Ken Lukas of EBI investigated the Subject Property on February 10, 2022.

### I.1 BACKGROUND

The Subject Property is located at 252-258 3<sup>rd</sup> Avenue, New York. The Subject Property consists of four lots on New York City Tax Block 876, Lots 29, 30, 31, and 32 corresponding to addresses 258, 256, 254, and 252 3<sup>rd</sup> Avenue. The lots are occupied by multi-store mixed-use commercial and residential buildings.

EBI completed a Database/Historical Review Letter dated January 21, 2022. The following item of environmental concern was noted:

- *A former occupant of the Subject Property, identified as “Julius Klein Cleaners”, is listed as a RCRA Non-Generator of hazardous waste under EPA ID No. NYD981081839. This tenant was listed under an address of 258 3<sup>rd</sup> Avenue, which corresponds to the northernmost building on the Subject Property. This building currently consists of a mixed-use commercial and residential building, with a street-level nail salon (Iris Nail). Julius Klein Cleaners was historically registered as a RCRA Large Quantity Generator (LQG) in 1985, generating spent halogenated solvent waste, typical of on-site dry cleaning operations that utilize chlorinated cleaning solvent (i.e., tetrachloroethylene / PCE). Julius Klein Cleaners was identified on the New York Manifest database with one disposal event on June 22, 1995, involving the off-site disposal of 670 pounds of halogenated solvent waste. The generation of this waste confirms that dry cleaning operations were conducted on-site. A RCRA Compliance Evaluation Inspection was conducted in July 1993, and two violations were issued. The violations were resolved and the facility returned to compliance by June 9, 1995. The Julius Klein Cleaners facility was verified as a Non-Generator in 1995, and again in 2006 and 2007. Julius Klein Cleaners was cross-listed on the FINDS and ECHO tracking databases; however, additional pertinent information was not provided in these databases. Based upon review of historical resources, Julius Klein Cleaners was present at the Subject Property from approximately 1956 through 1995. Based upon the historical presence of a dry cleaning facility at the Subject Property for approximately 39 years and the absence of known previous subsurface investigations, the potential exists for dry cleaning solvents to have impacted subsurface conditions at the Subject Property.*

At the client's request, we limited the scope of work to investigate potential impacts in the basement level of the 258 3<sup>rd</sup> Avenue building where the former dry cleaners were located.

### I.2 STATEMENT OF OBJECTIVES

The primary objective of this Subsurface Investigation is to evaluate any potential impact to the Subject Property from the recognized environmental condition (REC) identified in the Database/Historical Review Letter, prepared by EBI, dated January 21, 2022, to provide sufficient information regarding the nature and potential extent of contamination to assist in making informed business decisions about the property. The investigation focused on potential soil vapor impacts to the subject building by the historical presence of a dry cleaner facility at the Subject Property. The dry cleaner was identified on site for approximately 39 years. Therefore, the potential use and disposal of chlorinated solvents may have impacted subsurface conditions at the Subject Property.

EBI performed the following tasks to achieve the objectives of this investigation:

- Contacted the local utility locating service New York 811 System (Ticket #220320347) before undertaking subsurface explorations.
- Advanced two borings by hand direct push drilling methods to depths of 8-feet below ground surface (bgs) in SB-1 and 9-feet bgs in SB-2.
- Collected continuous two-foot soil cores, field screened the vapor headspace of the soil samples for total ionizable volatile organic compounds (VOCs) using a photoionization detector (PID), and described the physical characteristics of the soil samples on boring logs.
- Selected one soil sample per boring, prepared, and submitted the samples under chain-of-custody documentation to a New York-certified independent laboratory to analyze volatile organic compounds (VOCs) via EPA method 8260.
- Collected sub-slab soil vapor samples from the area beneath the subject building and prepared and submitted the samples to a state-certified laboratory to analyze volatile organic compounds (VOCs) via EPA Method TO-15.
- Collected grab groundwater samples from temporary wells inserted into the completed soil boring and submitted the samples under chain-of-custody documentation to a New York-certified independent laboratory to analyze VOCs via EPA method 8260.
- Prepared this summary of pertinent information obtained during this investigation, including accompanying figures and appendices, along with EBI's findings and preliminary conclusions regarding the presence or absence of contamination in soil vapor beneath the Subject Property in the areas investigated.

### **1.3 LIMITATIONS AND ASSUMPTIONS**

This report was prepared for the use of Legion Investment Group. It was performed in accordance with ASTM E1903-11, accepted practices of other consultants undertaking similar studies at the same time and in the same locale under like circumstances. The conclusions provided by EBI are based solely on the information obtained during the subsurface investigation. EBI renders no opinion as to the presence of potential contamination in the areas not investigated. The observations in this report are valid on the date of the investigation. Any additional information that becomes available concerning the Subject Property should be provided to EBI so that our conclusions may be revised and modified, if necessary. This report has been prepared in accordance with the proposal approved by Legion Investment Group and with the limitations and assumptions described below, all of which are integral parts of this report. No other warranty, expressed or implied, is made.

#### **Limitations**

1. The observations described in this report were made under the conditions stated herein. The conclusions presented are based solely upon the services described and not on scientific tasks or procedures beyond the scope of described services or the time and budgetary constraints imposed by the client. The work described in this report was carried out under terms and conditions in our proposal.
2. In preparing this report, EBI has relied on specific information provided by state and other referenced parties and on information contained in the files of federal, state, or local agencies available to EBI at the time of the assessment. Although there may have been some degree of overlap in the information

provided by these various sources, EBI did not attempt to independently verify the accuracy or completeness of all information reviewed or received during these environmental services.

3. Observations were made of the Subject Property and structures on the Subject Property as indicated within this report. Where access to portions of the Subject Property or structures on the Subject Property was unavailable or limited, EBI renders no opinion about the presence of oil or hazardous materials (OHM) in that portion of the Subject Property or structure. EBI renders no opinion as to the presence of OHM or the presence of indirect evidence relating to OHM where direct observation of the interior walls, floor, or ceiling of a structure on a Subject Property was obstructed by objects or coverings on or over these surfaces. No representations concerning insulating material is expressed or implied.
4. EBI did not perform testing or analyses to determine the presence or concentration of asbestos, radon, or lead at the Subject Property unless expressly stated otherwise in our report. Similarly, no dust or air quality investigation was conducted unless expressly stated otherwise in our report.
5. This report aims to assess the physical characteristics of the Subject Property concerning the presence of OHM in the environment. No specific attempt was made to determine the compliance of present or past owners or operators of the Subject Property with federal, state, or local laws or regulations (environmental or otherwise).
6. Except as noted in our report, no quantitative laboratory testing was performed as part of the assessment. Where an outside laboratory has conducted such analyses, EBI has relied upon the data provided and has not conducted an independent evaluation of the reliability of this data.
7. Any qualitative or quantitative information regarding the Subject Property, which was not available to EBI at the time of this assessment, may modify the representations made herein.
8. It is acknowledged that EBI judgments shall not be based on a scientific or technical test or procedures beyond the scope of the services or beyond the time and budgetary constraints imposed by the client. It is acknowledged further that EBI conclusions shall not rest on pure science but on such considerations as economic feasibility and available alternatives. The client also acknowledges that, because geologic and soil formations are inherently random, variable, and indeterminate, the services and opinions provided under this agreement concerning such services are not guaranteed to be a representation of actual conditions on the Subject Property, which are also subject to change with time as a result of natural or human-made processes, including water permeation. In performing these services, EBI shall use that degree of care and skill ordinarily exercised by environmental consultants or engineers performing similar services in the same or similar locality. The standard of care shall be determined solely when the services are rendered and not according to standards utilized at a later date. These services shall be rendered without any other warranty, expressed or implied, including, without limitation, the warranty of merchantability and the warranty of fitness for a particular purpose.
9. The client and EBI agree that to the fullest extent permitted by law, EBI shall not be liable to the client for any special, indirect, or consequential damages whatsoever, whether caused by EBI's negligence, errors, omissions, strict liability, breach of contract, breach of warranty or other cause of causes whatsoever.

## Assumptions

- I. This Subsurface Investigation does not evaluate business environmental risks in light of data collected through the Subsurface Investigation process. Such evaluation is a function of the site and transaction-specific variables, user objectives, and risk tolerance. This practice contemplates that the P Subsurface Investigation process was planned and conducted with such variables in mind and that the user will

- evaluate the legal, business, and environmental risks in light of known data relating to the particular site and transaction, and in consultation with legal and business advisors as well as the Assessor.
2. The ASTM E1903-11 does not define the threshold levels at which target analytes pose a concern of significance to the user. Users may apply this practice in light of applicable regulatory criteria and relevant liability principles and meet self-defined objectives.
  3. The scope of work for this Subsurface Investigation is site-specific and context-specific. The assessment process defined by ASTM E1903-11 is intended to generate sound, objective, and defensible information to satisfy diverse user objectives.
  4. No Subsurface Investigation can eliminate all uncertainty. Furthermore, any sample, surface or subsurface, taken for chemical testing may or may not represent a larger population. Professional judgment and interpretation are inherent in the process, and even when exercised following objective scientific principles, uncertainty is inevitable. Additional assessment beyond that which was reasonably undertaken may reduce the uncertainty.
  5. Even when Subsurface Investigation work is executed competently and following ASTM E1903-11, it must be recognized that certain conditions present challenging target analyte detection problems. Such conditions may include, but are not limited to, complex geological settings, unusual or generally poorly understood behavior and fate characteristics of certain substances, complex, discontinuous, random, or spotty distributions of existing target analytes, physical impediments to investigation imposed by the location of utilities and other human-made objects, and the inherent limitations of assessment technologies.
  6. The Subsurface Investigation is intended to develop and present sound, scientifically valid data concerning actual site conditions. It shall not be the role of the Assessor to provide legal or business advice.

#### **I.4 SPECIAL TERMS AND CONDITIONS**

This Subsurface Investigation has been prepared to assist Legion Investment Group in its underwriting of a proposed mortgage loan on the Subject Property. This report can be relied upon by only the parties stated in the transmittal letter at the front of this report. EBI's liability to a purchaser wishing to use this report is limited to the cost of the report. Amendments to EBI's limitations as stated herein that may occur after issuance of the report are considered to be included in this report. Payment for the report is made by, and EBI's contract and report extends to Legion Investment Group only, in accordance with our Standard Conditions for Engagement and Authorization Letter and Agreement for Environmental Services.

## 2.0 SUBJECT PROPERTY BACKGROUND

### 2.1 SUBJECT PROPERTY DESCRIPTION AND FEATURES

Information regarding the Subject Property description, improvements, and operations is summarized below:

<b>PROPERTY DESCRIPTION, IMPROVEMENTS, AND OPERATIONS</b>	
<b>Address</b>	252-258 3 <sup>rd</sup> Avenue, Manhattan New York
<b>Location</b>	The Subject Property is located in the southwest quadrant of the intersection of 3 <sup>rd</sup> Avenue and East 21 <sup>st</sup> Street.
<b>Property Owner</b>	According to the New York City Department of Finance, the Subject Property is currently owned by City Lights Properties LLC (252 3rd Avenue), City Lights Properties Two, LLC (254 3rd Avenue), 256 H.M., LLC (256 3rd Avenue), and 258 Third Avenue LLC (258 3rd Avenue).
<b>Number of Parcels</b>	The Subject Property includes four contiguous rectangular-shaped parcels, identified by the New York City Department of Finance as Block 876, Lot 29 (258 3rd Avenue), Lot 30 (256 3rd Avenue), Lot 31 (254 3 <sup>rd</sup> Avenue), and Lot 32 (252 3rd Avenue)
<b>Total Land Area</b>	cumulatively totaling approximately 0.118 acres
<b>Number/Type of Buildings</b>	<p>252 3rd Avenue: one (1) one-story commercial building. The commercial building contains Namu, a deli, and a grocery store. There is a basement beneath the existing structure. The existing improvements were reportedly constructed in 1950. The building utilizes electric heating; no gas or oil is used at the property.</p> <p>254 3rd Avenue: one 1.75-story commercial building. The commercial building contains Fancy Cleaners &amp; Tailors, a drop-off only dry cleaner. No active dry cleaning operations are conducted on-site. There is a basement beneath the existing structure. The existing improvements were reported constructed in 1999. The building utilizes electric heating; no gas or oil is used at the property.</p> <p>256 3rd Avenue: one four-story mixed-use residential and commercial building. The building contains eight residential units on the second through fourth floors and one commercial unit on the first floor. The commercial unit contains Plug Uglies, a bar. There is a basement beneath the existing structure. The existing improvements were reported constructed in 1910. The building utilizes electric heating; no gas or oil is used.</p> <p>258 3rd Avenue: one two-story mixed-use residential and commercial building. The building contains two residential units on the second floor and one commercial unit. The commercial unit contains Iris Nails, a nail salon. There is a basement beneath the existing structure. The existing improvements were reported constructed in 1910. The building utilizes electric heating; no gas or oil is used at the property.</p>
<b>Site Characteristics</b>	The existing buildings fully occupy the Subject Property, with no exterior parking or landscaped areas.

### 2.2 PHYSICAL SETTING

Information regarding the physical settings at the Subject Property and immediate vicinity is summarized below:

<b>PHYSICAL SETTING DESCRIPTIONS</b>	
<b>Regional Geology</b>	<p>No bedrock outcroppings were observed at the Subject Property.</p> <p>Information concerning the geology of the Subject Property was obtained from the USGS Ground Water Atlas of the United States, New York region (1997). The Subject Property is located within the Embayed section of the Coastal Plain physiographic province, which is characterized by areas of low relief and consists of Cretaceous Coastal Plain sediments, primarily clay, sand, and gravel overlie igneous and metamorphic rocks that crop out in Connecticut. The surface of these rocks slopes to the southeast, and the overlying Coastal Plain sediments slope and thicken in the same direction. Quaternary glacial deposits, primarily out-wash sand and gravel, cover the Coastal Plain sediments on Long Island to depths of as much as 600 feet.</p>
<b>Surficial Features</b>	<p>Surface drainage on the Subject Property occurs overland to the surrounding streets, primarily east. No indication of cross-lot runoff, swales, drainage flows, or active rills or gullies were observed on the Subject Property. No natural surface water bodies were identified on or adjacent to the Subject Property. The nearest downgradient surface water body is the East River, located approximately 3,100 feet east of the Subject Property.</p>
<b>Surficial Soils</b>	<p>According to the Natural Resources Conservation Service (NRCS) Web Soil Survey (WSS) website (<a href="http://websoilsurvey.nrcs.usda.gov/app/">http://websoilsurvey.nrcs.usda.gov/app/</a>) and the Environmental Data Resources, Inc. (EDR) GeoCheck Physical Setting Source Summary, the dominant soil composition in the vicinity of the Subject Property is classified as urban land (UR). Urban land is characterized by a non-homogeneous distribution of soil and fill types. Excavation and backfilling for building foundations, utility conduits, subway systems and other construction results in a varied subsurface profile. In this setting, estimation of local subsurface parameters such as permeability, moisture content, and organic fraction is not feasible without site-specific testing data.</p>
<b>Estimated Direction of Groundwater Flow</b>	<p>Local groundwater gradient is expected to follow surface topography; therefore, groundwater flow near the Subject Property is expected to flow to the east. Groundwater depths and flow gradients are best evaluated by a subsurface investigation involving the installation of at least three groundwater-monitoring wells, survey of well elevations, and precise measurements of hydraulic head. Calculation of groundwater flow directions based on relative differences of hydraulic head on the Subject Property was not included in this scope of work.</p>
<b>Depth to Groundwater (encountered during the investigation)</b>	<p>Shallow groundwater was encountered at a depth of approximately 6.25 feet bgs in boring SB-1 during this investigation.</p>

### 2.3 SITE HISTORY AND LAND USE

According to the EBI's Phase I ESA, the site history and land use are summarized in the following table:

Period	Site History and Land Use
<b>At least 1903-circa 1971</b>	<p>The Subject Property is occupied by four buildings depicted as containing commercial stores and residential dwellings located at 252, 254, 256 and 258 3<sup>rd</sup> Avenue.</p>
<b>At least 1971 to Present</b>	<p>The Subject Property use was similar to the prior years except for a dry cleaner is noted is operating at 258 3<sup>rd</sup> Ave. The Subject Property use includes residential and commercial use. The former dry cleaner reportedly ceased operations Circa 1995.</p>

## 2.4 ADJACENT PROPERTY LAND USE

Property use in the vicinity of the Subject Property is primarily characterized by residential and commercial use buildings.

ADJOINING PROPERTIES	
<b>North</b>	The Subject Property is bound to the north by East 21st Street, followed by a 17-story residential apartment building (39 Gramercy Park North).
<b>South</b>	The Subject Property is bound to the south by a five-story mixed-use residential and commercial structure (250 3rd Avenue).
<b>East</b>	The Subject Property is bound to the east by 3rd Avenue, followed by a 20-story mixed-use residential and commercial structure (200 East 21st Street).
<b>West</b>	The Subject Property is bound to the northwest by a five-story residential apartment building (38 Gramercy Park North) and to the southwest by a 10-story residential apartment building (34 Gramercy Park East).

## 2.5 SUMMARY OF PREVIOUS ENVIRONMENTAL ASSESSMENTS

The Subject Property is located at 252-258 3rd Avenue, New York. The Subject Property consists of four lots on New York City Tax Block 876, Lots 29, 30, 31, and 32 corresponding to addresses 258, 256, 254, and 252 3rd Avenue. The lots are occupied by multi-store mixed-use commercial and residential buildings.

EBI completed a Database/Historical Review Letter dated January 21, 2022. The following item of environmental concern was noted:

- *A former occupant of the Subject Property, identified as “Julius Klein Cleaners”, is listed as a RCRA Non-Generator of hazardous waste under EPA ID No. NYD981081839. This tenant was listed under an address of 258 3rd Avenue, which corresponds to the northernmost building on the Subject Property. This building currently consists of a mixed-use commercial and residential building, with a street-level nail salon (Iris Nail). Julius Klein Cleaners was historically registered as a RCRA Large Quantity Generator (LQG) in 1985, generating spent halogenated solvent waste, typical of on-site dry cleaning operations that utilize chlorinated cleaning solvent (i.e., tetrachloroethylene / PCE). Julius Klein Cleaners was identified on the New York Manifest database with one disposal event on June 22, 1995, involving the off-site disposal of 670 pounds of halogenated solvent waste. The generation of this waste confirms that dry cleaning operations were conducted on-site. A RCRA Compliance Evaluation Inspection was conducted in July 1993, and two violations were issued. The violations were resolved and the facility returned to compliance by June 9, 1995. The Julius Klein Cleaners facility was verified as a Non-Generator in 1995, and again in 2006 and 2007. Julius Klein Cleaners was cross-listed on the FINDS and ECHO tracking databases; however, additional pertinent information was not provided in these databases. Based upon review of historical resources, Julius Klein Cleaners was present at the Subject Property from approximately 1956 through 1995. Based upon the historical presence of a dry cleaning facility at the Subject Property for approximately 39 years and the absence of known previous subsurface investigations, the potential exists for dry cleaning solvents to have impacted subsurface conditions at the Subject Property.*

### 3.0 RATIONALE AND WORK PERFORMED

#### 3.1 RATIONALE

##### 3.1.1 Conceptual Model

The conceptual model is a representation of hypothesized current site conditions, which describes the physical setting characteristics of a site and the likely distribution of target contaminants (in soil, air, groundwater, surface water, or sediments) that might have resulted from a known or likely release and the risk they pose to human or ecological receptors. This conceptual model considers the potential distributions of contaminants concerning the properties, behaviors, and fate and transport characteristics of the contaminant in a setting such as that being assessed. The sampling plan was designed to provide for the collection of potentially contaminated environmental media, if they occur, at locations and depths where the highest concentrations are likely to occur.

Site Environmental Concerns		Site Physical Characteristics		On-site Environmental Receptors	
RECs	COC's	Primary Release Media	Fate & Transport	Potential Exposure Route(s)	Potential Human Exposure
Historic use as a dry cleaner	Volatile organic compounds (VOCs)	Soil	Soil	Ingestion	Tenants
		Groundwater	Soil Vapor	Inhalation	Site workers
		Indoor Air	Groundwater	Dermal (direct Contact)	Construction workers
			Indoor Air		

COC = contaminants of concern

Assumptions:

1. Assumes the Subject Property retains existing use (Commercial/Retail/Industrial, etc.)
2. Construction Worker exposure is limited due to short exposure duration

##### 3.1.2 Rationale for Soil Vapor Sample Locations

The rationale for the placement of the soil borings was to space them at equidistant intervals throughout the lowest level of the building.

##### 3.1.3 Chemical Testing Plan

The chemical testing plan was designed to detect the target analytes present in or have been released or potentially have been released to environmental media at the Subject Property. The chemicals selected for analysis were of interest in the context of the particular Subsurface Investigation and its objectives. The presence of these COC concentrations was quantified through chemical testing.

##### 3.1.4 Deviations from the Work Plan

There were no deviations to the work plan.

### 3.2 EXPLORATION, SAMPLING, AND TEST SCREENING METHODS

#### 3.2.1 Pre-Drilling Activities

Core Down Drilling, LLC (Core Down) requested New York 811 to mark out the location of Subject Property utilities on February 2, 2022. Clearance for drilling at the Subject Property was granted after 0700 on February 7, 2022. EBI also contracted with a private utility locating company, East Coast Geophysics of Bensalem, Pennsylvania, to clear each boring location before undertaking subsurface explorations on site.

Personal health and safety precautions were followed per applicable federal and state law or local equivalents and any requirements imposed by the owner, occupant, or field personnel. EBI prepared a site-specific health and safety plan (HASP) and conducted a health and safety meeting with the on-site personnel before the drilling activities. No additional pre-drilling activities were performed as part of this investigation.

#### 3.2.2 Soil Borings

A total of two borings were advanced at the Subject Property. The soil borings were advanced hand tools operated by Core Down of Brewster, NY. Soil cores were collected continuously, and half-foot soil samples were screened with a PID during the advancement of the borings. EBI recorded soil sampling information and the physical characteristics of each soil sample onto boring logs presented in Appendix B.

**Table 3.2.2  
 Summary of Soil Boring Details**

Boring ID#	Location	Termination Depth/Reason (feet bgs)	Depth to Groundwater (feet)	Sample ID #/ Depths	Target Analytes/ EPA Method
SB-1	Eastern portion of the 258 3 <sup>rd</sup> Ave. Basement – in concrete pit	8' (equipment refusal)	~6.5'	Soil SB-1 (6'-6.5') Groundwater TWP-1	VOCs /8260
SB-2	Western portion of the 258 3 <sup>rd</sup> Ave. Basement – Nail Salon tenant space	9' (equipment refusal)	~6'	Soil SB-2 (5.5'-6') Groundwater TWP-2	VOCs /8260

Sampling locations are illustrated on Figure 3, Sample Location Map.

#### 3.2.3 Soil Sampling and Analysis

Selected “grab” soil samples (of approximate 6” intervals) were collected in laboratory-provided sample containers. Each sample was labeled and logged onto a chain-of-custody form and placed in a cooler with ice for preservation following current Federal EPA SW-846 (3<sup>rd</sup> ed.). The samples were submitted to a New York-certified laboratory (Alpha Analytical). The samples were analyzed for the target analytes noted in Table 3.2.2.

Samples submitted for VOC analysis were preserved with methanol following EPA Method 5035. All non-dedicated sampling equipment was decontaminated after each sample was collected to ensure no cross-

contamination between samples. Sampling equipment was scrubbed with a brush to remove loose material and then washed thoroughly with a laboratory-grade detergent and water to remove all particulate matter and surface film. After washing, each piece and brush was rinsed with clean distilled water. Dedicated sampling equipment such as sampling liners and latex gloves were properly disposed of after the handling of each sample was complete. Samples were then collected using clean disposable gloves and laboratory-provided glassware appropriate for the specified analysis.

#### 3.2.4 Groundwater Sampling and Analysis

Grab groundwater samples were collected from temporary small-diameter PVC well screens installed within the soil borings. Before collecting groundwater samples, each well was purged of three to five well volumes of groundwater to reduce turbidity.

The groundwater samples were collected in clean laboratory-provided containers. Samples collected for VOC analysis were preserved with hydrochloric acid to a pH of less than 2. Each sample was labeled and logged onto a chain-of-custody form and placed in a cooler with ice for preservation following current Federal EPA SW-846 (3<sup>rd</sup> ed.). After collection, the samples were submitted to Alpha Analytical for analysis. The samples were analyzed for the target analytes noted in Table 3.2.2.

#### 3.2.5 Soil Vapor Sampling and Analysis

Two temporary soil vapor sampling points (SV-I and SV-) were installed below the floor slab. A concrete drill with a 5/8-inch diameter and three-foot-long drill bit was used to advance the sampling point below the concrete floor slab. The sampling point was constructed by inserting a Vapor Pin<sup>®</sup> into the slab and connecting dedicated sampling tubing to the point.

Before sample collection, the soil vapor sampling points were purged of a minimum of three volumes to remove existing ambient air from the sampling tube and to ensure that a representative sample was collected from the sub-slab vapor.

Each soil vapor sample was collected in a pre-cleaned 1.6-liter summa canister provided by the laboratory. The samples were labeled/logged onto a chain-of-custody form and submitted to an independent qualified laboratory (Alpha Analytical) to analyze VOCs via EPA Method TO-15. The sampling start time, sampling end time, initial pressure, and final pressure readings for the summa canisters were recorded on forms provided by the laboratory.

#### 3.2.6 Abandonment of Borings

Each location was filled and sealed with concrete, flush with the surrounding concrete slab surface upon completing the sampling activities.

## 4.0 PRESENTATION OF EVALUATION AND RESULTS

### 4.1 SOIL ANALYSIS RESULTS

The samples were analyzed for the target analytes noted in Table 3.2.2. The following table presents only the contaminants identified above the laboratory reporting limits:

LOCATION	NY-RESC	NY-RESI	NY-RESR	NY-RESRR	NY-UNRES	SB-1 (6-6.5)		SB-2 (5.5-6)	
						Results	Q	Results	Q
Solids, Total	NS	NS	NS			68.7		83	
Volatile Organic Compounds (VOCs)									
Tetrachloroethene	150	300	5.5	19	1.3	0.05	U	<b>37</b>	
Vinyl chloride	13	27	0.21	0.9	0.02	0.099	U	<b>0.26</b>	
trans-1,2-Dichloroethene	500	1,000	100	100	0.19	0.15	U	0.14	J
Trichloroethene	200	400	10	21	0.47	0.05	U	<b>14</b>	
cis-1,2-Dichloroethene	500	1,000	59	100	0.25	0.099	U	<b>44</b>	
1,2-Dichloroethene, Total	NS	NS	NS	NS	NS	0.099	U	44	J
n-Butylbenzene	500	1,000	100	100	12	0.32		0.1	U
sec-Butylbenzene	500	1,000	100	100	11	0.23		0.1	U
tert-Butylbenzene	500	1,000	100	100	5.9	0.026	J	0.2	U
Isopropylbenzene	NS	NS	NS	NS	NS	0.27		0.1	U
Naphthalene	500	1,000	100	100	12	11		0.4	U
n-Propylbenzene	500	1,000	100	100	3.9	0.52		0.1	U
1,3,5-Trimethylbenzene	190	380	47	52	8.4	0.05	J	0.2	U
1,2,4-Trimethylbenzene	190	380	47	52	3.6	0.2	U	0.04	J
p-Diethylbenzene	NS	NS	NS	NS	NS	0.2		0.2	U
1,2,4,5-Tetramethylbenzene	NS	NS	NS	NS	NS	0.94		0.2	U

Notes: All results are shown in milligrams per kilogram (mg/kg)

Q – Qualifier

U – Not detected above the laboratory reporting limiting (0.0048)

J - Estimated concentration

NE - Standard Not established

Bold font indicates a concentration above laboratory reporting limits

1 – 6 NYCRR Part 375 Environmental Remediation Programs, dated December 14, 2006 Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives (this is the most restrictive NY Soil Criteria) – The other categories consist of RESC- commercial use; RESI – industrial use; RESR – residential use; RESRR – restricted residential use

The analytical results reveal low-level concentrations of VOCs in samples SB-1 (5.5-6) and SB-2 (5.5-6). Tetrachloroethene (PCE), vinyl chloride, trichloroethylene (TCE), and cis-1,2-dichloroethene were detected above the NYCRR Part 375 Residential Criteria Unrestricted Use Criteria in SB-2. TCE detected in SB-2 additionally exceeds the residential use, and PCE detected in SB-2 exceeds both the residential and restricted residential use.

Laboratory soil analytical results, complete laboratory datasheets, and chain-of-custody documentation are presented in Appendix C.

### 4.2 SOIL VAPOR ANALYSIS RESULTS

The soil vapor samples were analyzed for VOCs via EPA Method TO-15. The following table presents only the contaminants identified above the laboratory method detection limits:

**Table 4.2 – Soil Vapor Analytical Results**

LOCATION	EPA-VISL-CTSSGC-6	EPA-VISL-RTSSGC-6	NY-SSC-A/B/C Lower	NY-SSC-A/B/C Upper	SV-1		SV-2	
SAMPLING DATE					2/10/2022		2/10/2022	
LAB SAMPLE ID					L2207204-01		L2207204-02	
SAMPLE TYPE					SOIL_VAPOR		SOIL_VAPOR	
					Results	Q	Results	Q
<b>Volatile Organics in Air</b>								
Vinyl chloride	<u>92.9</u>	<u>5.59</u>	6 [C]	60 [C]	4.27	U	<u>49,600</u>	
Ethanol	<u>NS</u>	<u>NS</u>	NS	NS	101		335,000	U
Acetone	<u>4,510,000</u>	<u>1,070,000</u>	NS	NS	470		84,800	U
Isopropanol	<u>29,200</u>	<u>6,950</u>	NS	NS	16.1		43,800	U
2-Butanone	<u>730,000</u>	<u>174,000</u>	NS	NS	130		52,500	U
cis-1,2-Dichloroethene	<u>NS</u>	<u>NS</u>	6 [A]	60 [A]	6.62	U	<u>492,000</u>	
Chloroform	<u>17.8</u>	<u>4.07</u>	NS	NS	23.1		34,900	U
Trichloroethene	<u>99.7</u>	<u>15.9</u>	6 [A]	60 [A]	15.4		<u>290,000</u>	
2-Hexanone	<u>4,380</u>	<u>1,040</u>	NS	NS	16.5		29,300	U
1,2-Dibromoethane	<u>0.681</u>	<u>0.156</u>	NS	NS	12.8	U	54,900	U
Tetrachloroethene	<u>1,570</u>	<u>360</u>	100 [B]	1,000 [B]	<u>3,310</u>		<u>16,200,000</u>	

Notes: All results are shown in micrograms per cubic meter (µg/m<sup>3</sup>)

Q = Laboratory Qualifier

U = Non-detected above laboratory detection limits

D = Result from analysis required dilution

NS – No standard established

Underlined = is exceeds NYSDOH decision matrix criteria detailed below

NS = No Standard for Comparison

Residential / Commercial EPA-VISL-CTSSGC-6: EPA VISL Default Commercial Target Sub-Slab & Exterior Soil Gas Concentrations (TCR = 1E-06; THQ = 1) Criteria per VISL Calculator, Updated November 2019 (November 2021 RSLs).

NYSDOH Matrices [A], [B], and [C] New York State: New York State Department Health Soil Vapor Screening Decision Matrices (May 2017) lower action level range and upper action level range

The detected concentrations of VOCs in the soil vapor samples were compared to the Residential / Commercial EPA-VISL-CTSSGC-6: EPA VISL Default Residential and Commercial screening levels. Vinyl chloride, cis-1,2-dichloroethene (cis-1,2-DCE), TCE, and PCE were detected in SV-2 and PCE and chloroform in SV-1 at concentrations above the EPA commercial screening levels. Chloroform is often associated with chlorinated drinking water, the common use of bleach, and leaking sewer lines.

Vinyl chloride, cis-1,2-dichloroethene, TCE, and PCE were detected at concentrations above the New York DOH Vapor Intrusion Decision Matrix [A], [B], or [C] (as applicable), recommended action levels for mitigation.

Laboratory soil vapor analytical results, complete laboratory datasheets, and chain-of-custody documentation are presented in Appendix C.

### 4.3 GROUNDWATER ANALYSIS RESULTS

The samples were analyzed for the target analytes noted in Table 3.2.2. The following table presents only the contaminants identified above the laboratory reporting limits:

**Table 4.3 – Groundwater Analytical Results**

LOCATION	NY-AWQS	NY-TAGM-GW	TWP-1		TWP-2	
			Results	Q	Results	Q
Volatile Organics by GC/MS						
Tetrachloroethene	5	5	77		31,000	
Benzene	1	0.7	3.2		200	U
Trichloroethene	5	5	0.46	J	2,200	
cis-1,2-Dichloroethene	5	NS	2.5	U	48,000	
1,2-Dichloroethene, Total	NS	NS	2.5	U	48,000	
Acetone	50	50	45		2,000	U
2-Butanone	50	50	12		2,000	U
n-Butylbenzene	5	5	1.5	J	1,000	U
sec-Butylbenzene	5	5	2	J	1,000	U
Isopropylbenzene	5	5	4.1		1,000	U
Naphthalene	10	10	72		580	J
n-Propylbenzene	5	5	6		1,000	U
p-Diethylbenzene	NS	NS	1.4	J	800	U
1,2,4,5-Tetramethylbenzene	5	NS	8.6		800	U

Notes: All results are shown in micrograms per liter ug/L

U = Non-detected above laboratory detection limits

NS – No standard established

J = Estimated concentration

**Bold font** indicates exceedance of the (applicable standards) (highlighted color indicates which standard was exceeded)  
 NY-AWQS: New York TOGS III Ambient Water Quality Standards criteria reflect all addendum criteria through June 2004.

NY-TAGM-GW: New York TAGM Criteria current as of 1/2007

Groundwater analytical results reveal concentrations of PCE, benzene, naphthalene, n-propylbenzene, and 1,2,4,5-tetramethylbenzene in TWP-1 and PCE, TCE, cis-1,2-DCE, naphthalene, were detected in TWP-2 above the laboratory reporting limits and applicable New York TOGS III Ambient Water Quality Standards criteria and NY-TAGM criteria.

Laboratory groundwater analytical results, complete laboratory datasheets, and chain-of-custody documentation are presented in Appendix C.

## 5.0 FINDINGS & CONCLUSIONS

We have performed a Subsurface Investigation at the property at 252-258 3<sup>rd</sup> Avenue, Manhattan, New York, for the following objectives:

- The primary objective of this Subsurface Investigation is to evaluate any potential impact to the Subject Property from the recognized environmental condition (REC) identified in the Database/Historical Review Letter, prepared by EBI, dated January 21, 2022, to provide sufficient information regarding the nature and potential extent of contamination to assist in making informed business decisions about the property. The investigation focused on potential soil vapor impacts to the subject building by the historical presence of a dry cleaner facility at the Subject Property. The dry cleaner was identified on site for approximately 39 years. Therefore, the potential use and disposal of chlorinated solvents may have impacted subsurface conditions at the Subject Property..

### Findings

The results of EBI's Phase II ESA revealed:

- On February 10, 2022, EBI conducted a Phase II ESA to assess subsurface conditions in the area of the former dry cleaner in the basement level of 258 3<sup>rd</sup> Avenue. Two soil borings were advanced at the Subject Property. Groundwater was encountered in both borings at an approximate advanced two borings by hand direct push drilling methods to depths of 8-feet below ground surface (bgs) in SB-1 and 9-feet bgs in SB-2. All of the soil borings were advanced using hand drilling methods. The samples were submitted to a New York-certified laboratory, Alpha, for analysis. The soil samples were analyzed for VOCs.
- The analytical results reveal low-level VOC concentrations in samples SB-1 (5.5-6) and SB-2 (5.5-6). Tetrachloroethene (PCE), vinyl chloride, trichloroethylene (TCE), and cis-1,2-dichloroethene were detected above the NYCRR Part 375 Residential Criteria Unrestricted Use Criteria in SB-2. TCE detected in SB-2 exceeds the residential use Criteria, and PCE detected in SB-2 exceeds residential and restricted residential use.
- Two temporary soil vapor points, SV-1 and SV-2, were installed at the Subject Property. The detected concentrations of VOCs in the soil vapor samples were compared to the Residential Commercial EPA-VISL-CTSSGC-6: EPA VISL Default Residential and Commercial screening levels. Vinyl chloride, cis-1,2-dichloroethene, TCE, and PCE were detected in SV-2 and PCE and chloroform in SV-1 at concentrations above the EPA commercial screening levels. Chloroform is often associated with chlorinated drinking water, the common use of bleach, and leaking sewer lines

Vinyl chloride, cis-1,2-dichloroethene, TCE, and PCE were detected at concentrations above the New York DOH Vapor Intrusion Decision Matrix [A], [B], or [C] (as applicable), recommended action levels for mitigation.

- Temporary well points were inserted into the boring locations TWP-1 and TWP-2. Groundwater analytical results reveal concentrations of PCE, benzene, naphthalene, n-propylbenzene, and 1,2,4,5-tetramethylbenzene in TWP-1 and PCE, TCE, cis-1,2-DCE, naphthalene, were detected in TWP-2 above the laboratory reporting limits and applicable New York TOGS III Ambient Water Quality Standards criteria and NY-TAGM criteria.

## 6.0 RECOMMENDATIONS

EBI recommends completing an additional investigation to determine the extent of the contamination and assess potential impacts to the building occupants. Further, a vapor mitigation system should be installed to mitigate the sub-slab soil gas. Given the high concentrations of soil gas and groundwater contamination, there is the potential for off-site impacts. An environmental attorney should be consulted to determine potential release reporting and remedial obligations.

**APPENDIX A**  
**FIGURES**

---

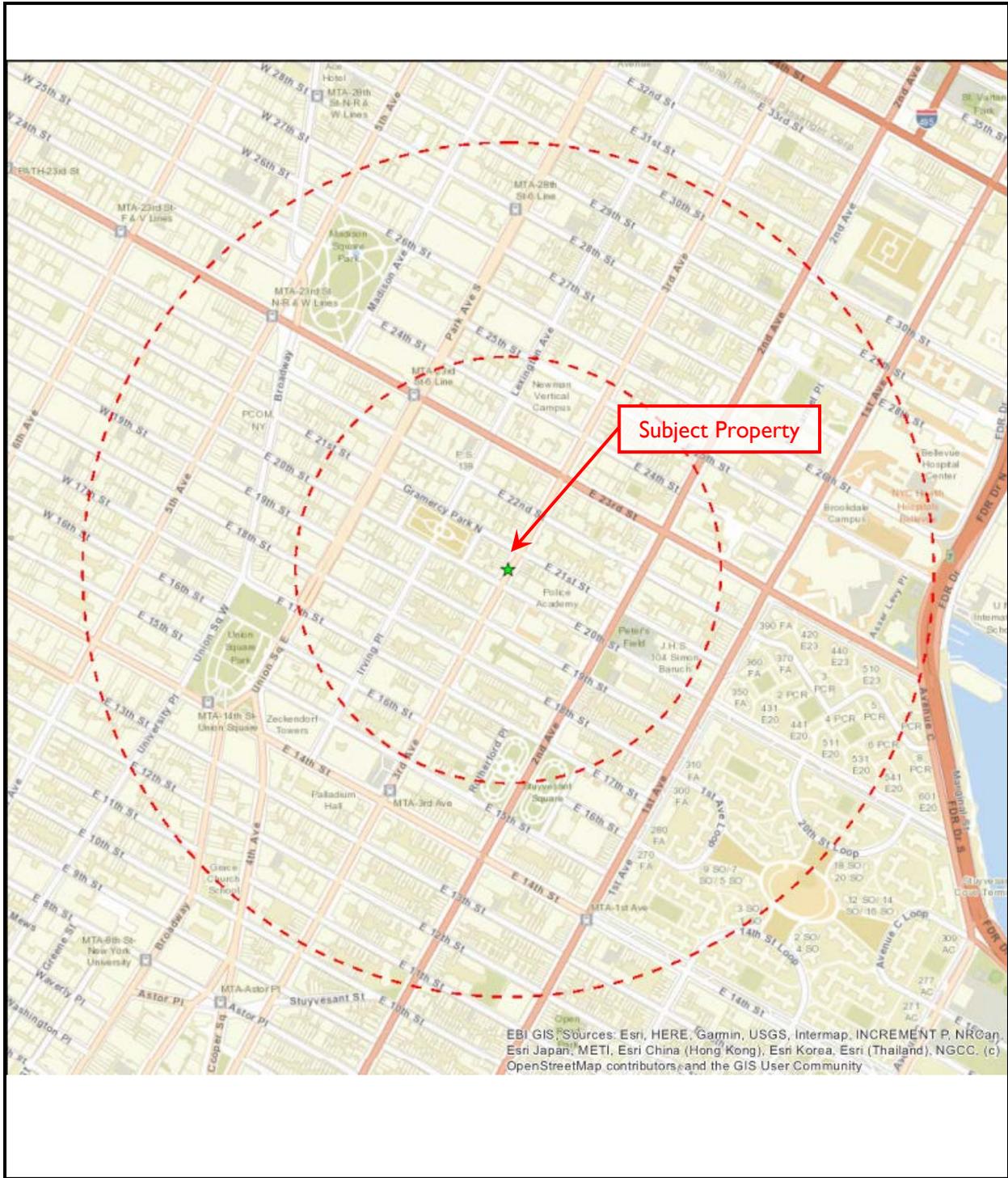


FIGURE I – SITE LOCATION MAP



Not to scale



FIGURE 2 – TOPOGRAPHIC MAP



Not to scale



FIGURE 3 – SAMPLE LOCATION MAP



Not to scale

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

---

EBI Consulting						Boring ID No.: SB-1 Well ID No.: TWP-1 Sheet 1 of 1			
Boring Location:			eastern portion of basement			ET Project Manager: K. Lukas			
Ground Elevation:						Project Number: 1222000043			
Depth to First Water:			8			Dated Started: February 10, 2022			
Depth to Static Water:			N/A			Dated Completed:			
Stabilization Time:			N/A			Drill Type: Direct Push			
Sampler			Notes:			Drilling contractor: Core Down			
Type: Continuous Core			ceiling height from base of pit ~9-feet			Drilling Company: Core Down			
Hammer: N/A						Driller's Name: Billy Johnson			
Fall: N/A						Boring logged by: K. Lukas			
						Owner/Client Rep.:			
Depth (feet)	Blow Counts	Recovery / Penetration (feet)	Sample I.D.	Sample Depth (feet bgs)	PID (ppm/v)	USCS Class.	Description of Sample	Well Construction	Depth (feet)
0					0		5-inched concrete slab		
1		0.5			0		Brown fine to coarse Sandy Silt  some mica schist [moist]  [Wet]		
2					0				
3		1.5			0				
4					0				
5		1			0				
6			SB-1	(6-6.5)	0				
7		1.5			0				
8							Boring completed to 8-feet bgs		
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

Proportions Used		Penetration Resistance ("Blow Counts")			
		Cohesionless Density		Cohesive Consistency	
Trace	0 to 10%	0-4	Very Loose	0-2	Very Soft
Little	10 to 20%	5-9	Loose	3-4	Soft
Some	20 to 35%	10-29	Med. Dense	5-8	M/Stiff
And	35 to 50%	30-49	Dense	9-15	Stiff
-----	Change in Material Type	50+	Very Dense	16-30	Very Soft
-----	Change in Deposit Type			31+	Hard

EBI Consulting						Boring ID No.: SB-2 Well ID No.: TWP-2 Sheet 1 of 1			
Boring Location:			Western portion of basement			ET Project Manager: K. Lukas			
Ground Elevation:						Project Number: 1222000043			
Depth to First Water:			9			Dated Started: February 10, 2022			
Depth to Static Water:			N/A			Dated Completed:			
Stabilization Time:			N/A			Drill Type: Direct Push			
Sampler			Notes:			Borehole Dia:			
Type: Continuous Core			Drop ceiling height ~8-feet			Drilling contractor: Core Down			
Hammer: N/A						Drilling Company: Core Down			
Fall: N/A						Driller's Name: Billy Johnson			
						Boring logged by: K. Lukas			
						Owner/Client Rep.:			
Depth (feet)	Blow Counts	Recovery / Penetration (feet)	Sample I.D.	Sample Depth (feet bgs)	PID (ppm/v)	USCS Class.	Description of Sample	Well Construction	Depth (feet)
0					0		5-inched concrete slab		
1		0.5			0				
2					21		Brown fine to coarse Sand trace mica schist [moist]		
3		1.5			22				
4					17				
5		1			42				
6			SB-2	(5.5-6)	38				
7		1.5			60				
8					248		[Wet]		
9							Boring completed to 8-feet bgs		
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

Proportions Used		Penetration Resistance ("Blow Counts")	
Trace	0 to 10%	<u>Cohesionless Density</u>	<u>Cohesive Consistency</u>
Little	10 to 20%	0-4 Very Loose	0-2 Very Soft
Some	20 to 35%	5-9 Loose	3-4 Soft
And	35 to 50%	10-29 Med. Dense	5-8 M/Stiff
---		30-49 Dense	9-15 Stiff
---	Change in Material Type	50+ Very Dense	16-30 Very Soft
---	Change in Deposit Type		31+ Hard

**APPENDIX C**  
**LABORATORY ANALYTICAL RESULTS**

---



## ANALYTICAL REPORT

Lab Number:	L2207204
Client:	EBI Consulting 6 Barbara Drive Warwick, NY 10990
ATTN:	Christine Madsen
Phone:	(631) 456-3972
Project Name:	252-258 3RD. AVE
Project Number:	1222000043
Report Date:	02/17/22

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-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

---

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



**Project Name:** 252-258 3RD. AVE  
**Project Number:** 1222000043

**Lab Number:** L2207204  
**Report Date:** 02/17/22

<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>
L2207204-01	SV-1	SOIL_VAPOR	MANHATTAN NY	02/10/22 10:40	02/10/22
L2207204-02	SV-2	SOIL_VAPOR	MANHATTAN NY	02/10/22 11:05	02/10/22

**Project Name:** 252-258 3RD. AVE  
**Project Number:** 1222000043

**Lab Number:** L2207204  
**Report Date:** 02/17/22

### 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.

---

**Project Name:** 252-258 3RD. AVE  
**Project Number:** 1222000043

**Lab Number:** L2207204  
**Report Date:** 02/17/22

### Case Narrative (continued)

#### Volatile Organics in Air

Canisters were released from the laboratory on February 9, 2022. The canister certification results are provided as an addendum.

L2207204-01D: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

L2207204-02D: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

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

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 02/17/22

**AIR**

**Project Name:** 252-258 3RD. AVE  
**Project Number:** 1222000043

**Lab Number:** L2207204  
**Report Date:** 02/17/22

### SAMPLE RESULTS

Lab ID: L2207204-01 D  
 Client ID: SV-1  
 Sample Location: MANHATTAN NY

Date Collected: 02/10/22 10:40  
 Date Received: 02/10/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 02/17/22 05:51  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	1.67	--	ND	8.26	--		8.333
Chloromethane	ND	1.67	--	ND	3.45	--		8.333
Freon-114	ND	1.67	--	ND	11.7	--		8.333
Vinyl chloride	ND	1.67	--	ND	4.27	--		8.333
1,3-Butadiene	ND	1.67	--	ND	3.69	--		8.333
Bromomethane	ND	1.67	--	ND	6.48	--		8.333
Chloroethane	ND	1.67	--	ND	4.41	--		8.333
Ethanol	53.4	41.7	--	101	78.6	--		8.333
Vinyl bromide	ND	1.67	--	ND	7.30	--		8.333
Acetone	198	8.33	--	470	19.8	--		8.333
Trichlorofluoromethane	ND	1.67	--	ND	9.38	--		8.333
Isopropanol	6.55	4.17	--	16.1	10.3	--		8.333
1,1-Dichloroethene	ND	1.67	--	ND	6.62	--		8.333
Tertiary butyl Alcohol	ND	4.17	--	ND	12.6	--		8.333
Methylene chloride	ND	4.17	--	ND	14.5	--		8.333
3-Chloropropene	ND	1.67	--	ND	5.23	--		8.333
Carbon disulfide	ND	1.67	--	ND	5.20	--		8.333
Freon-113	ND	1.67	--	ND	12.8	--		8.333
trans-1,2-Dichloroethene	ND	1.67	--	ND	6.62	--		8.333
1,1-Dichloroethane	ND	1.67	--	ND	6.76	--		8.333
Methyl tert butyl ether	ND	1.67	--	ND	6.02	--		8.333
2-Butanone	44.2	4.17	--	130	12.3	--		8.333
cis-1,2-Dichloroethene	ND	1.67	--	ND	6.62	--		8.333



**Project Name:** 252-258 3RD. AVE**Lab Number:** L2207204**Project Number:** 1222000043**Report Date:** 02/17/22**SAMPLE RESULTS**

Lab ID: L2207204-01 D

Date Collected: 02/10/22 10:40

Client ID: SV-1

Date Received: 02/10/22

Sample Location: MANHATTAN NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Ethyl Acetate	ND	4.17	--	ND	15.0	--		8.333
Chloroform	4.74	1.67	--	23.1	8.16	--		8.333
Tetrahydrofuran	ND	4.17	--	ND	12.3	--		8.333
1,2-Dichloroethane	ND	1.67	--	ND	6.76	--		8.333
n-Hexane	ND	1.67	--	ND	5.89	--		8.333
1,1,1-Trichloroethane	ND	1.67	--	ND	9.11	--		8.333
Benzene	ND	1.67	--	ND	5.34	--		8.333
Carbon tetrachloride	ND	1.67	--	ND	10.5	--		8.333
Cyclohexane	ND	1.67	--	ND	5.75	--		8.333
1,2-Dichloropropane	ND	1.67	--	ND	7.72	--		8.333
Bromodichloromethane	ND	1.67	--	ND	11.2	--		8.333
1,4-Dioxane	ND	1.67	--	ND	6.02	--		8.333
Trichloroethene	2.86	1.67	--	15.4	8.97	--		8.333
2,2,4-Trimethylpentane	ND	1.67	--	ND	7.80	--		8.333
Heptane	ND	1.67	--	ND	6.84	--		8.333
cis-1,3-Dichloropropene	ND	1.67	--	ND	7.58	--		8.333
4-Methyl-2-pentanone	ND	4.17	--	ND	17.1	--		8.333
trans-1,3-Dichloropropene	ND	1.67	--	ND	7.58	--		8.333
1,1,2-Trichloroethane	ND	1.67	--	ND	9.11	--		8.333
Toluene	ND	1.67	--	ND	6.29	--		8.333
2-Hexanone	4.03	1.67	--	16.5	6.84	--		8.333
Dibromochloromethane	ND	1.67	--	ND	14.2	--		8.333
1,2-Dibromoethane	ND	1.67	--	ND	12.8	--		8.333
Tetrachloroethene	488	1.67	--	3310	11.3	--		8.333
Chlorobenzene	ND	1.67	--	ND	7.69	--		8.333
Ethylbenzene	ND	1.67	--	ND	7.25	--		8.333



**Project Name:** 252-258 3RD. AVE  
**Project Number:** 1222000043

**Lab Number:** L2207204  
**Report Date:** 02/17/22

**SAMPLE RESULTS**

Lab ID: L2207204-01 D  
 Client ID: SV-1  
 Sample Location: MANHATTAN NY

Date Collected: 02/10/22 10:40  
 Date Received: 02/10/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
p/m-Xylene	ND	3.33	--	ND	14.5	--		8.333
Bromoform	ND	1.67	--	ND	17.3	--		8.333
Styrene	ND	1.67	--	ND	7.11	--		8.333
1,1,2,2-Tetrachloroethane	ND	1.67	--	ND	11.5	--		8.333
o-Xylene	ND	1.67	--	ND	7.25	--		8.333
4-Ethyltoluene	ND	1.67	--	ND	8.21	--		8.333
1,3,5-Trimethylbenzene	ND	1.67	--	ND	8.21	--		8.333
1,2,4-Trimethylbenzene	ND	1.67	--	ND	8.21	--		8.333
Benzyl chloride	ND	1.67	--	ND	8.65	--		8.333
1,3-Dichlorobenzene	ND	1.67	--	ND	10.0	--		8.333
1,4-Dichlorobenzene	ND	1.67	--	ND	10.0	--		8.333
1,2-Dichlorobenzene	ND	1.67	--	ND	10.0	--		8.333
1,2,4-Trichlorobenzene	ND	1.67	--	ND	12.4	--		8.333
Hexachlorobutadiene	ND	1.67	--	ND	17.8	--		8.333

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	95		60-140
Bromochloromethane	99		60-140
chlorobenzene-d5	107		60-140



**Project Name:** 252-258 3RD. AVE  
**Project Number:** 1222000043

**Lab Number:** L2207204  
**Report Date:** 02/17/22

### SAMPLE RESULTS

Lab ID: L2207204-02 D  
 Client ID: SV-2  
 Sample Location: MANHATTAN NY

Date Collected: 02/10/22 11:05  
 Date Received: 02/10/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 02/17/22 06:27  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	7140	--	ND	35300	--		35710
Chloromethane	ND	7140	--	ND	14700	--		35710
Freon-114	ND	7140	--	ND	49900	--		35710
Vinyl chloride	19400	7140	--	49600	18300	--		35710
1,3-Butadiene	ND	7140	--	ND	15800	--		35710
Bromomethane	ND	7140	--	ND	27700	--		35710
Chloroethane	ND	7140	--	ND	18800	--		35710
Ethanol	ND	178000	--	ND	335000	--		35710
Vinyl bromide	ND	7140	--	ND	31200	--		35710
Acetone	ND	35700	--	ND	84800	--		35710
Trichlorofluoromethane	ND	7140	--	ND	40100	--		35710
Isopropanol	ND	17800	--	ND	43800	--		35710
1,1-Dichloroethene	ND	7140	--	ND	28300	--		35710
Tertiary butyl Alcohol	ND	17800	--	ND	54000	--		35710
Methylene chloride	ND	17800	--	ND	61800	--		35710
3-Chloropropene	ND	7140	--	ND	22300	--		35710
Carbon disulfide	ND	7140	--	ND	22200	--		35710
Freon-113	ND	7140	--	ND	54700	--		35710
trans-1,2-Dichloroethene	ND	7140	--	ND	28300	--		35710
1,1-Dichloroethane	ND	7140	--	ND	28900	--		35710
Methyl tert butyl ether	ND	7140	--	ND	25700	--		35710
2-Butanone	ND	17800	--	ND	52500	--		35710
cis-1,2-Dichloroethene	124000	7140	--	492000	28300	--		35710



**Project Name:** 252-258 3RD. AVE  
**Project Number:** 1222000043

**Lab Number:** L2207204  
**Report Date:** 02/17/22

### SAMPLE RESULTS

Lab ID: L2207204-02 D  
 Client ID: SV-2  
 Sample Location: MANHATTAN NY

Date Collected: 02/10/22 11:05  
 Date Received: 02/10/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Ethyl Acetate	ND	17800	--	ND	64100	--		35710
Chloroform	ND	7140	--	ND	34900	--		35710
Tetrahydrofuran	ND	17800	--	ND	52500	--		35710
1,2-Dichloroethane	ND	7140	--	ND	28900	--		35710
n-Hexane	ND	7140	--	ND	25200	--		35710
1,1,1-Trichloroethane	ND	7140	--	ND	39000	--		35710
Benzene	ND	7140	--	ND	22800	--		35710
Carbon tetrachloride	ND	7140	--	ND	44900	--		35710
Cyclohexane	ND	7140	--	ND	24600	--		35710
1,2-Dichloropropane	ND	7140	--	ND	33000	--		35710
Bromodichloromethane	ND	7140	--	ND	47800	--		35710
1,4-Dioxane	ND	7140	--	ND	25700	--		35710
Trichloroethene	53900	7140	--	290000	38400	--		35710
2,2,4-Trimethylpentane	ND	7140	--	ND	33300	--		35710
Heptane	ND	7140	--	ND	29300	--		35710
cis-1,3-Dichloropropene	ND	7140	--	ND	32400	--		35710
4-Methyl-2-pentanone	ND	17800	--	ND	72900	--		35710
trans-1,3-Dichloropropene	ND	7140	--	ND	32400	--		35710
1,1,2-Trichloroethane	ND	7140	--	ND	39000	--		35710
Toluene	ND	7140	--	ND	26900	--		35710
2-Hexanone	ND	7140	--	ND	29300	--		35710
Dibromochloromethane	ND	7140	--	ND	60800	--		35710
1,2-Dibromoethane	ND	7140	--	ND	54900	--		35710
Tetrachloroethene	2390000	7140	--	16200000	48400	--		35710
Chlorobenzene	ND	7140	--	ND	32900	--		35710
Ethylbenzene	ND	7140	--	ND	31000	--		35710



**Project Name:** 252-258 3RD. AVE  
**Project Number:** 1222000043

**Lab Number:** L2207204  
**Report Date:** 02/17/22

**SAMPLE RESULTS**

Lab ID: L2207204-02 D  
 Client ID: SV-2  
 Sample Location: MANHATTAN NY

Date Collected: 02/10/22 11:05  
 Date Received: 02/10/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
p/m-Xylene	ND	14300	--	ND	62100	--		35710
Bromoform	ND	7140	--	ND	73800	--		35710
Styrene	ND	7140	--	ND	30400	--		35710
1,1,2,2-Tetrachloroethane	ND	7140	--	ND	49000	--		35710
o-Xylene	ND	7140	--	ND	31000	--		35710
4-Ethyltoluene	ND	7140	--	ND	35100	--		35710
1,3,5-Trimethylbenzene	ND	7140	--	ND	35100	--		35710
1,2,4-Trimethylbenzene	ND	7140	--	ND	35100	--		35710
Benzyl chloride	ND	7140	--	ND	37000	--		35710
1,3-Dichlorobenzene	ND	7140	--	ND	42900	--		35710
1,4-Dichlorobenzene	ND	7140	--	ND	42900	--		35710
1,2-Dichlorobenzene	ND	7140	--	ND	42900	--		35710
1,2,4-Trichlorobenzene	ND	7140	--	ND	53000	--		35710
Hexachlorobutadiene	ND	7140	--	ND	76200	--		35710

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	96		60-140
Bromochloromethane	101		60-140
chlorobenzene-d5	107		60-140



Project Name: 252-258 3RD. AVE

Lab Number: L2207204

Project Number: 1222000043

Report Date: 02/17/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 02/16/22 15:55

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02 Batch: WG1605813-4								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1



Project Name: 252-258 3RD. AVE

Lab Number: L2207204

Project Number: 1222000043

Report Date: 02/17/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 02/16/22 15:55

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02 Batch: WG1605813-4								
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1

Project Name: 252-258 3RD. AVE

Lab Number: L2207204

Project Number: 1222000043

Report Date: 02/17/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 02/16/22 15:55

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02 Batch: WG1605813-4								
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 252-258 3RD. AVE

Lab Number: L2207204

Project Number: 1222000043

Report Date: 02/17/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG1605813-3								
Dichlorodifluoromethane	96		-		70-130	-		
Chloromethane	91		-		70-130	-		
Freon-114	96		-		70-130	-		
Vinyl chloride	81		-		70-130	-		
1,3-Butadiene	88		-		70-130	-		
Bromomethane	84		-		70-130	-		
Chloroethane	83		-		70-130	-		
Ethanol	96		-		40-160	-		
Vinyl bromide	93		-		70-130	-		
Acetone	111		-		40-160	-		
Trichlorofluoromethane	96		-		70-130	-		
Isopropanol	103		-		40-160	-		
1,1-Dichloroethene	86		-		70-130	-		
Tertiary butyl Alcohol	77		-		70-130	-		
Methylene chloride	95		-		70-130	-		
3-Chloropropene	110		-		70-130	-		
Carbon disulfide	119		-		70-130	-		
Freon-113	115		-		70-130	-		
trans-1,2-Dichloroethene	93		-		70-130	-		
1,1-Dichloroethane	102		-		70-130	-		
Methyl tert butyl ether	101		-		70-130	-		
2-Butanone	103		-		70-130	-		
cis-1,2-Dichloroethene	96		-		70-130	-		

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 252-258 3RD. AVE

Lab Number: L2207204

Project Number: 1222000043

Report Date: 02/17/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG1605813-3								
Ethyl Acetate	97		-		70-130	-		
Chloroform	95		-		70-130	-		
Tetrahydrofuran	98		-		70-130	-		
1,2-Dichloroethane	104		-		70-130	-		
n-Hexane	81		-		70-130	-		
1,1,1-Trichloroethane	101		-		70-130	-		
Benzene	82		-		70-130	-		
Carbon tetrachloride	102		-		70-130	-		
Cyclohexane	80		-		70-130	-		
1,2-Dichloropropane	93		-		70-130	-		
Bromodichloromethane	92		-		70-130	-		
1,4-Dioxane	83		-		70-130	-		
Trichloroethene	88		-		70-130	-		
2,2,4-Trimethylpentane	84		-		70-130	-		
Heptane	97		-		70-130	-		
cis-1,3-Dichloropropene	98		-		70-130	-		
4-Methyl-2-pentanone	97		-		70-130	-		
trans-1,3-Dichloropropene	88		-		70-130	-		
1,1,2-Trichloroethane	96		-		70-130	-		
Toluene	88		-		70-130	-		
2-Hexanone	104		-		70-130	-		
Dibromochloromethane	111		-		70-130	-		
1,2-Dibromoethane	109		-		70-130	-		

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 252-258 3RD. AVE

Lab Number: L2207204

Project Number: 1222000043

Report Date: 02/17/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG1605813-3								
Tetrachloroethene	94		-		70-130	-		
Chlorobenzene	104		-		70-130	-		
Ethylbenzene	101		-		70-130	-		
p/m-Xylene	102		-		70-130	-		
Bromoform	114		-		70-130	-		
Styrene	111		-		70-130	-		
1,1,2,2-Tetrachloroethane	96		-		70-130	-		
o-Xylene	104		-		70-130	-		
4-Ethyltoluene	112		-		70-130	-		
1,3,5-Trimethylbenzene	114		-		70-130	-		
1,2,4-Trimethylbenzene	116		-		70-130	-		
Benzyl chloride	102		-		70-130	-		
1,3-Dichlorobenzene	115		-		70-130	-		
1,4-Dichlorobenzene	111		-		70-130	-		
1,2-Dichlorobenzene	113		-		70-130	-		
1,2,4-Trichlorobenzene	108		-		70-130	-		
Hexachlorobutadiene	107		-		70-130	-		

Project Name: 252-258 3RD. AVE

Project Number: 1222000043

Serial\_No:02172217:10  
Lab Number: L2207204

Report Date: 02/17/22

### Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2207204-01	SV-1	0015	Flow 1	02/09/22	378319		-	-	-	Pass	144	139	4
L2207204-01	SV-1	534	2.7L Can	02/09/22	378319	L2205332-06	Pass	-29.2	+1.8	-	-	-	-
L2207204-02	SV-2	01445	Flow 3	02/09/22	378319		-	-	-	Pass	144	135	6
L2207204-02	SV-2	372	2.7L Can	02/09/22	378319	L2205332-06	Pass	-29.1	-1.2	-	-	-	-

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

**Lab Number:** L2205332  
**Report Date:** 02/17/22

### Air Canister Certification Results

Lab ID: L2205332-06  
 Client ID: CAN 2430 SHELF 12  
 Sample Location:

Date Collected: 02/02/22 09:00  
 Date Received: 02/02/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15  
 Analytical Date: 02/03/22 00:39  
 Analyst: TS

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



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

**Lab Number:** L2205332  
**Report Date:** 02/17/22

### Air Canister Certification Results

Lab ID: L2205332-06  
 Client ID: CAN 2430 SHELF 12  
 Sample Location:

Date Collected: 02/02/22 09:00  
 Date Received: 02/02/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



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

**Lab Number:** L2205332  
**Report Date:** 02/17/22

### Air Canister Certification Results

Lab ID: L2205332-06  
 Client ID: CAN 2430 SHELF 12  
 Sample Location:

Date Collected: 02/02/22 09:00  
 Date Received: 02/02/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



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

**Lab Number:** L2205332  
**Report Date:** 02/17/22

### Air Canister Certification Results

Lab ID: L2205332-06  
 Client ID: CAN 2430 SHELF 12  
 Sample Location:

Date Collected: 02/02/22 09:00  
 Date Received: 02/02/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



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

**Lab Number:** L2205332  
**Report Date:** 02/17/22

### Air Canister Certification Results

Lab ID: L2205332-06  
 Client ID: CAN 2430 SHELF 12  
 Sample Location:

Date Collected: 02/02/22 09:00  
 Date Received: 02/02/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	96		60-140

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

**Lab Number:** L2205332  
**Report Date:** 02/17/22

### Air Canister Certification Results

Lab ID: L2205332-06  
 Client ID: CAN 2430 SHELF 12  
 Sample Location:

Date Collected: 02/02/22 09:00  
 Date Received: 02/02/22  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 02/03/22 00:39  
 Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



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

**Lab Number:** L2205332  
**Report Date:** 02/17/22

### Air Canister Certification Results

Lab ID: L2205332-06  
 Client ID: CAN 2430 SHELF 12  
 Sample Location:

Date Collected: 02/02/22 09:00  
 Date Received: 02/02/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

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

**Lab Number:** L2205332  
**Report Date:** 02/17/22

### Air Canister Certification Results

Lab ID: L2205332-06  
 Client ID: CAN 2430 SHELF 12  
 Sample Location:

Date Collected: 02/02/22 09:00  
 Date Received: 02/02/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	94		60-140
bromochloromethane	93		60-140
chlorobenzene-d5	100		60-140

Project Name: 252-258 3RD. AVE

Project Number: 1222000043

**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

**Cooler Information****Cooler**                      **Custody Seal**

NA                                      Absent

**Container Information****Container ID**    **Container Type**

L2207204-01A    Canister - 2.7 Liter

L2207204-02A    Canister - 2.7 Liter

<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>
NA	NA			Y	Absent		TO15-LL(30)
NA	NA			Y	Absent		TO15-LL(30)

**Project Name:** 252-258 3RD. AVE  
**Project Number:** 1222000043

**Lab Number:** L2207204  
**Report Date:** 02/17/22

## 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: Data Usability Report



**Project Name:** 252-258 3RD. AVE  
**Project Number:** 1222000043

**Lab Number:** L2207204  
**Report Date:** 02/17/22

#### 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.

**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'.

**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.

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.)

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

#### Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where

Report Format: Data Usability Report



**Project Name:** 252-258 3RD. AVE  
**Project Number:** 1222000043

**Lab Number:** L2207204  
**Report Date:** 02/17/22

**Data Qualifiers**

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:** 252-258 3RD. AVE  
**Project Number:** 1222000043

**Lab Number:** L2207204  
**Report Date:** 02/17/22

## REFERENCES

- 48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

## LIMITATION OF LIABILITIES

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

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



## Certification Information

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.



# AIR ANALYSIS

CHAIN OF CUSTODY

PAGE 1 OF 1

320 Forbes Blvd, Mansfield, MA 02048  
 TEL: 508-822-9300 FAX: 508-822-3288

**Client Information**

Client: **EBI**  
 Address: **21 B St.**  
**Burlington MA**  
 Phone: **6314563972**

Fax:  
 Email: **klukas@ebiconsulting.com**

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List:

**Project Information**

Project Name: **252-258 3rd. Ave**  
 Project Location: **Manhattan NY**  
 Project #: **1222000043**  
 Project Manager: **C. Madgen**  
 ALPHA Quote #:

**Turn-Around Time**

Standard  RUSH (only confirmed if pre-approved)  
**5-day**  
 Date Due: Time:

Date Rec'd in Lab: **2/11/22**

**Report Information - Data Deliverables**

FAX  
 ADEx  
 Criteria Checker:  
 (Default based on Regulatory Criteria Indicated)  
 Other Formats:  
 EMAIL (standard pdf report)  
 Additional Deliverables:  
 Report to: (if different than Project Manager)

ALPHA Job #: **L2207204**

**Billing Information**

Same as Client info PO #:  
**EBI**

**Regulatory Requirements/Report Limits**

State/Fed	Program	Res / Comm

**All Columns Below Must Be Filled Out**

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION					Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	TO-15	TO-15 SIM	APH	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
		End Date	Start Time	End Time	Initial Vacuum	Final Vacuum											
07204-01	SV-1	2-10-22	1025	1040	36.52	unkn	SV	KL	1.6	534	095	X					
02	SV-2	2-10-22	1050	1105	23.64	2.56	SV	KL	1.6	372	0145	X					

**\*SAMPLE MATRIX CODES**

AA = Ambient Air (Indoor/Outdoor)  
 SV = Soil Vapor/Landfill Gas/SVE  
 Other = Please Specify

Container Type

**5**

Relinquished By:

Date/Time

Received By:

Date/Time:

*[Handwritten signatures and dates]*  
 Relinquished By: **OTURN** Date/Time: **2-10-22 1540**  
 Received By: **OTURN** Date/Time: **2-10-22 1540**  
 Relinquished By: **Yathoury Mreem** Date/Time: **2/10/22 1540**  
 Received By: **Yathoury Mreem** Date/Time: **2/10/22 1540**  
 Relinquished By: **OTURN** Date/Time: **2/11/22 0005**  
 Received By: **OTURN** Date/Time: **2/11/22 0005**

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.

JOB: L2207214      REPORT STYLE: Data Usability Report  
0010: Alpha Analytical Report Cover Page - OK  
0015: Sample Cross Reference Summary - OK  
0060: Case Narrative - OK  
0100: Volatiles Cover Page - OK  
0110: Volatiles Sample Results - OK  
0120: Volatiles Method Blank Report - OK  
0130: Volatiles LCS Report - OK  
1180: Inorganics Cover Page - OK  
1200: Wet Chemistry Sample Results - OK  
1250: Wet Chemistry Duplicate Report - OK  
5100: Sample Receipt & Container Information Report - OK  
5200: Glossary - OK  
5400: References - OK

-----



## ANALYTICAL REPORT

Lab Number:	L2207214
Client:	EBI Consulting 6 Barbara Drive Warwick, NY 10990
ATTN:	Christine Madsen
Phone:	(631) 456-3972
Project Name:	252-258 3RD AVE.
Project Number:	1222000043
Report Date:	02/17/22

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).

---

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:** 252-258 3RD AVE.  
**Project Number:** 1222000043

**Lab Number:** L2207214  
**Report Date:** 02/17/22

<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>
L2207214-01	SB-1 (6-6.5)	SOIL	MANHATTAN, NY	02/10/22 10:20	02/10/22
L2207214-02	SB-1 (7.5-8)	SOIL	MANHATTAN, NY	02/10/22 10:30	02/10/22
L2207214-03	TWP-1	WATER	MANHATTAN, NY	02/10/22 10:40	02/10/22
L2207214-04	SB-2 (5.5-6)	SOIL	MANHATTAN, NY	02/10/22 11:10	02/10/22
L2207214-05	SB-2 (8.5-9)	SOIL	MANHATTAN, NY	02/10/22 11:30	02/10/22
L2207214-06	TWP-2	WATER	MANHATTAN, NY	02/10/22 11:00	02/10/22

**Project Name:** 252-258 3RD AVE.  
**Project Number:** 1222000043

**Lab Number:** L2207214  
**Report Date:** 02/17/22

### 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.

---

**Project Name:** 252-258 3RD AVE.  
**Project Number:** 1222000043

**Lab Number:** L2207214  
**Report Date:** 02/17/22

### Case Narrative (continued)

#### Report Submission

February 17, 2022: This is a preliminary report.

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

#### Volatile Organics

L2207214-03: The pH was greater than two; however, the sample was analyzed within the method required holding time.

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: 02/17/22

# ORGANICS

# VOLATILES

**Project Name:** 252-258 3RD AVE.  
**Project Number:** 1222000043

**Lab Number:** L2207214  
**Report Date:** 02/17/22

**SAMPLE RESULTS**

Lab ID: L2207214-01  
 Client ID: SB-1 (6-6.5)  
 Sample Location: MANHATTAN, NY

Date Collected: 02/10/22 10:20  
 Date Received: 02/10/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8260C  
 Analytical Date: 02/14/22 12:59  
 Analyst: JC  
 Percent Solids: 69%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 High - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	500	230	1
1,1-Dichloroethane	ND		ug/kg	99	14.	1
Chloroform	ND		ug/kg	150	14.	1
Carbon tetrachloride	ND		ug/kg	99	23.	1
1,2-Dichloropropane	ND		ug/kg	99	12.	1
Dibromochloromethane	ND		ug/kg	99	14.	1
1,1,2-Trichloroethane	ND		ug/kg	99	26.	1
Tetrachloroethene	ND		ug/kg	50	19.	1
Chlorobenzene	ND		ug/kg	50	12.	1
Trichlorofluoromethane	ND		ug/kg	400	69.	1
1,2-Dichloroethane	ND		ug/kg	99	25.	1
1,1,1-Trichloroethane	ND		ug/kg	50	16.	1
Bromodichloromethane	ND		ug/kg	50	11.	1
trans-1,3-Dichloropropene	ND		ug/kg	99	27.	1
cis-1,3-Dichloropropene	ND		ug/kg	50	16.	1
1,3-Dichloropropene, Total	ND		ug/kg	50	16.	1
1,1-Dichloropropene	ND		ug/kg	50	16.	1
Bromoform	ND		ug/kg	400	24.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	50	16.	1
Benzene	ND		ug/kg	50	16.	1
Toluene	ND		ug/kg	99	54.	1
Ethylbenzene	ND		ug/kg	99	14.	1
Chloromethane	ND		ug/kg	400	92.	1
Bromomethane	ND		ug/kg	200	58.	1
Vinyl chloride	ND		ug/kg	99	33.	1
Chloroethane	ND		ug/kg	200	45.	1
1,1-Dichloroethene	ND		ug/kg	99	24.	1
trans-1,2-Dichloroethene	ND		ug/kg	150	14.	1

Project Name: 252-258 3RD AVE.

Lab Number: L2207214

Project Number: 1222000043

Report Date: 02/17/22

## SAMPLE RESULTS

Lab ID: L2207214-01  
 Client ID: SB-1 (6-6.5)  
 Sample Location: MANHATTAN, NY

Date Collected: 02/10/22 10:20  
 Date Received: 02/10/22  
 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	50	14.	1
1,2-Dichlorobenzene	ND		ug/kg	200	14.	1
1,3-Dichlorobenzene	ND		ug/kg	200	15.	1
1,4-Dichlorobenzene	ND		ug/kg	200	17.	1
Methyl tert butyl ether	ND		ug/kg	200	20.	1
p/m-Xylene	ND		ug/kg	200	55.	1
o-Xylene	ND		ug/kg	99	29.	1
Xylenes, Total	ND		ug/kg	99	29.	1
cis-1,2-Dichloroethene	ND		ug/kg	99	17.	1
1,2-Dichloroethene, Total	ND		ug/kg	99	14.	1
Dibromomethane	ND		ug/kg	200	24.	1
Styrene	ND		ug/kg	99	19.	1
Dichlorodifluoromethane	ND		ug/kg	990	91.	1
Acetone	ND		ug/kg	990	480	1
Carbon disulfide	ND		ug/kg	990	450	1
2-Butanone	ND		ug/kg	990	220	1
Vinyl acetate	ND		ug/kg	990	210	1
4-Methyl-2-pentanone	ND		ug/kg	990	130	1
1,2,3-Trichloropropane	ND		ug/kg	200	12.	1
2-Hexanone	ND		ug/kg	990	120	1
Bromochloromethane	ND		ug/kg	200	20.	1
2,2-Dichloropropane	ND		ug/kg	200	20.	1
1,2-Dibromoethane	ND		ug/kg	99	28.	1
1,3-Dichloropropane	ND		ug/kg	200	16.	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	50	13.	1
Bromobenzene	ND		ug/kg	200	14.	1
n-Butylbenzene	320		ug/kg	99	16.	1
sec-Butylbenzene	230		ug/kg	99	14.	1
tert-Butylbenzene	26	J	ug/kg	200	12.	1
o-Chlorotoluene	ND		ug/kg	200	19.	1
p-Chlorotoluene	ND		ug/kg	200	11.	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	300	99.	1
Hexachlorobutadiene	ND		ug/kg	400	17.	1
Isopropylbenzene	270		ug/kg	99	11.	1
p-Isopropyltoluene	ND		ug/kg	99	11.	1
Naphthalene	11000		ug/kg	400	64.	1
Acrylonitrile	ND		ug/kg	400	110	1

**Project Name:** 252-258 3RD AVE.  
**Project Number:** 1222000043

**Lab Number:** L2207214  
**Report Date:** 02/17/22

**SAMPLE RESULTS**

**Lab ID:** L2207214-01  
**Client ID:** SB-1 (6-6.5)  
**Sample Location:** MANHATTAN, NY

**Date Collected:** 02/10/22 10:20  
**Date Received:** 02/10/22  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	520		ug/kg	99	17.	1
1,2,3-Trichlorobenzene	ND		ug/kg	200	32.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	27.	1
1,3,5-Trimethylbenzene	50	J	ug/kg	200	19.	1
1,2,4-Trimethylbenzene	ND		ug/kg	200	33.	1
1,4-Dioxane	ND		ug/kg	7900	3500	1
p-Diethylbenzene	200		ug/kg	200	18.	1
p-Ethyltoluene	ND		ug/kg	200	38.	1
1,2,4,5-Tetramethylbenzene	940		ug/kg	200	19.	1
Ethyl ether	ND		ug/kg	200	34.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	500	140	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	88		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	96		70-130

**Project Name:** 252-258 3RD AVE.  
**Project Number:** 1222000043

**Lab Number:** L2207214  
**Report Date:** 02/17/22

**SAMPLE RESULTS**

**Lab ID:** L2207214-03  
**Client ID:** TWP-1  
**Sample Location:** MANHATTAN, NY

**Date Collected:** 02/10/22 10:40  
**Date Received:** 02/10/22  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 1,8260C  
**Analytical Date:** 02/12/22 16:06  
**Analyst:** PD

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	77		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	3.2		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: 252-258 3RD AVE.

Lab Number: L2207214

Project Number: 1222000043

Report Date: 02/17/22

## SAMPLE RESULTS

Lab ID: L2207214-03  
 Client ID: TWP-1  
 Sample Location: MANHATTAN, NY

Date Collected: 02/10/22 10:40  
 Date Received: 02/10/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	0.46	J	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	ND		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	45		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	12		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	1.5	J	ug/l	2.5	0.70	1
sec-Butylbenzene	2.0	J	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	4.1		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	72		ug/l	2.5	0.70	1

**Project Name:** 252-258 3RD AVE.  
**Project Number:** 1222000043

**Lab Number:** L2207214  
**Report Date:** 02/17/22

**SAMPLE RESULTS**

**Lab ID:** L2207214-03  
**Client ID:** TWP-1  
**Sample Location:** MANHATTAN, NY

**Date Collected:** 02/10/22 10:40  
**Date Received:** 02/10/22  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
n-Propylbenzene	6.0		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	1.4	J	ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	8.6		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	97		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	101		70-130

**Project Name:** 252-258 3RD AVE.  
**Project Number:** 1222000043

**Lab Number:** L2207214  
**Report Date:** 02/17/22

**SAMPLE RESULTS**

Lab ID: L2207214-04 D2  
 Client ID: SB-2 (5.5-6)  
 Sample Location: MANHATTAN, NY

Date Collected: 02/10/22 11:10  
 Date Received: 02/10/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8260C  
 Analytical Date: 02/16/22 14:38  
 Analyst: AJK  
 Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 High - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	500	230	2
1,1-Dichloroethane	ND		ug/kg	100	14.	2
Chloroform	ND		ug/kg	150	14.	2
Carbon tetrachloride	ND		ug/kg	100	23.	2
1,2-Dichloropropane	ND		ug/kg	100	12.	2
Dibromochloromethane	ND		ug/kg	100	14.	2
1,1,2-Trichloroethane	ND		ug/kg	100	27.	2
Tetrachloroethene	38000	E	ug/kg	50	20.	2
Chlorobenzene	ND		ug/kg	50	13.	2
Trichlorofluoromethane	ND		ug/kg	400	70.	2
1,2-Dichloroethane	ND		ug/kg	100	26.	2
1,1,1-Trichloroethane	ND		ug/kg	50	17.	2
Bromodichloromethane	ND		ug/kg	50	11.	2
trans-1,3-Dichloropropene	ND		ug/kg	100	27.	2
cis-1,3-Dichloropropene	ND		ug/kg	50	16.	2
1,3-Dichloropropene, Total	ND		ug/kg	50	16.	2
1,1-Dichloropropene	ND		ug/kg	50	16.	2
Bromoform	ND		ug/kg	400	25.	2
1,1,2,2-Tetrachloroethane	ND		ug/kg	50	17.	2
Benzene	ND		ug/kg	50	17.	2
Toluene	ND		ug/kg	100	54.	2
Ethylbenzene	ND		ug/kg	100	14.	2
Chloromethane	ND		ug/kg	400	94.	2
Bromomethane	ND		ug/kg	200	58.	2
Vinyl chloride	260		ug/kg	100	34.	2
Chloroethane	ND		ug/kg	200	45.	2
1,1-Dichloroethene	ND		ug/kg	100	24.	2
trans-1,2-Dichloroethene	140	J	ug/kg	150	14.	2

Project Name: 252-258 3RD AVE.

Lab Number: L2207214

Project Number: 1222000043

Report Date: 02/17/22

## SAMPLE RESULTS

Lab ID: L2207214-04 D2

Date Collected: 02/10/22 11:10

Client ID: SB-2 (5.5-6)

Date Received: 02/10/22

Sample Location: MANHATTAN, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	14000		ug/kg	50	14.	2
1,2-Dichlorobenzene	ND		ug/kg	200	14.	2
1,3-Dichlorobenzene	ND		ug/kg	200	15.	2
1,4-Dichlorobenzene	ND		ug/kg	200	17.	2
Methyl tert butyl ether	ND		ug/kg	200	20.	2
p/m-Xylene	ND		ug/kg	200	56.	2
o-Xylene	ND		ug/kg	100	29.	2
Xylenes, Total	ND		ug/kg	100	29.	2
cis-1,2-Dichloroethene	44000	E	ug/kg	100	18.	2
Dibromomethane	ND		ug/kg	200	24.	2
Styrene	ND		ug/kg	100	20.	2
Dichlorodifluoromethane	ND		ug/kg	1000	92.	2
Acetone	ND		ug/kg	1000	480	2
Carbon disulfide	ND		ug/kg	1000	460	2
2-Butanone	ND		ug/kg	1000	220	2
Vinyl acetate	ND		ug/kg	1000	220	2
4-Methyl-2-pentanone	ND		ug/kg	1000	130	2
1,2,3-Trichloropropane	ND		ug/kg	200	13.	2
2-Hexanone	ND		ug/kg	1000	120	2
Bromochloromethane	ND		ug/kg	200	20.	2
2,2-Dichloropropane	ND		ug/kg	200	20.	2
1,2-Dibromoethane	ND		ug/kg	100	28.	2
1,3-Dichloropropane	ND		ug/kg	200	17.	2
1,1,1,2-Tetrachloroethane	ND		ug/kg	50	13.	2
Bromobenzene	ND		ug/kg	200	14.	2
n-Butylbenzene	ND		ug/kg	100	17.	2
sec-Butylbenzene	ND		ug/kg	100	15.	2
tert-Butylbenzene	ND		ug/kg	200	12.	2
o-Chlorotoluene	ND		ug/kg	200	19.	2
p-Chlorotoluene	ND		ug/kg	200	11.	2
1,2-Dibromo-3-chloropropane	ND		ug/kg	300	100	2
Hexachlorobutadiene	ND		ug/kg	400	17.	2
Isopropylbenzene	ND		ug/kg	100	11.	2
p-Isopropyltoluene	ND		ug/kg	100	11.	2
Naphthalene	ND		ug/kg	400	65.	2
Acrylonitrile	ND		ug/kg	400	120	2
n-Propylbenzene	ND		ug/kg	100	17.	2

**Project Name:** 252-258 3RD AVE.  
**Project Number:** 1222000043

**Lab Number:** L2207214  
**Report Date:** 02/17/22

**SAMPLE RESULTS**

Lab ID: L2207214-04 D2  
 Client ID: SB-2 (5.5-6)  
 Sample Location: MANHATTAN, NY

Date Collected: 02/10/22 11:10  
 Date Received: 02/10/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	200	32.	2
1,2,4-Trichlorobenzene	ND		ug/kg	200	27.	2
1,3,5-Trimethylbenzene	ND		ug/kg	200	19.	2
1,2,4-Trimethylbenzene	40	J	ug/kg	200	34.	2
1,4-Dioxane	ND		ug/kg	8000	3500	2
p-Diethylbenzene	ND		ug/kg	200	18.	2
p-Ethyltoluene	ND		ug/kg	200	38.	2
1,2,4,5-Tetramethylbenzene	ND		ug/kg	200	19.	2
Ethyl ether	ND		ug/kg	200	34.	2
trans-1,4-Dichloro-2-butene	ND		ug/kg	500	140	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	88		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	96		70-130

**Project Name:** 252-258 3RD AVE.  
**Project Number:** 1222000043

**Lab Number:** L2207214  
**Report Date:** 02/17/22

**SAMPLE RESULTS**

Lab ID: L2207214-04 D  
 Client ID: SB-2 (5.5-6)  
 Sample Location: MANHATTAN, NY

Date Collected: 02/10/22 11:10  
 Date Received: 02/10/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8260C  
 Analytical Date: 02/14/22 13:25  
 Analyst: JC  
 Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
-----------	--------	-----------	-------	----	-----	-----------------

Volatile Organics by EPA 5035 High - Westborough Lab						
Tetrachloroethene	37000		ug/kg	250	98.	10
cis-1,2-Dichloroethene	44000		ug/kg	500	88.	10
1,2-Dichloroethene, Total	44000	J	ug/kg	150	14.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	97		70-130

**Project Name:** 252-258 3RD AVE.**Lab Number:** L2207214**Project Number:** 1222000043**Report Date:** 02/17/22**SAMPLE RESULTS**

Lab ID: L2207214-06 D

Date Collected: 02/10/22 11:00

Client ID: TWP-2

Date Received: 02/10/22

Sample Location: MANHATTAN, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 1,8260C

Analytical Date: 02/12/22 16:31

Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	1000	280	400
1,1-Dichloroethane	ND		ug/l	1000	280	400
Chloroform	ND		ug/l	1000	280	400
Carbon tetrachloride	ND		ug/l	200	54.	400
1,2-Dichloropropane	ND		ug/l	400	55.	400
Dibromochloromethane	ND		ug/l	200	60.	400
1,1,2-Trichloroethane	ND		ug/l	600	200	400
Tetrachloroethene	31000		ug/l	200	72.	400
Chlorobenzene	ND		ug/l	1000	280	400
Trichlorofluoromethane	ND		ug/l	1000	280	400
1,2-Dichloroethane	ND		ug/l	200	53.	400
1,1,1-Trichloroethane	ND		ug/l	1000	280	400
Bromodichloromethane	ND		ug/l	200	77.	400
trans-1,3-Dichloropropene	ND		ug/l	200	66.	400
cis-1,3-Dichloropropene	ND		ug/l	200	58.	400
1,3-Dichloropropene, Total	ND		ug/l	200	58.	400
1,1-Dichloropropene	ND		ug/l	1000	280	400
Bromoform	ND		ug/l	800	260	400
1,1,1,2,2-Tetrachloroethane	ND		ug/l	200	67.	400
Benzene	ND		ug/l	200	64.	400
Toluene	ND		ug/l	1000	280	400
Ethylbenzene	ND		ug/l	1000	280	400
Chloromethane	ND		ug/l	1000	280	400
Bromomethane	ND		ug/l	1000	280	400
Vinyl chloride	320	J	ug/l	400	28.	400
Chloroethane	ND		ug/l	1000	280	400
1,1-Dichloroethene	ND		ug/l	200	68.	400
trans-1,2-Dichloroethene	ND		ug/l	1000	280	400

Project Name: 252-258 3RD AVE.

Lab Number: L2207214

Project Number: 1222000043

Report Date: 02/17/22

## SAMPLE RESULTS

Lab ID: L2207214-06 D

Date Collected: 02/10/22 11:00

Client ID: TWP-2

Date Received: 02/10/22

Sample Location: MANHATTAN, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	2200		ug/l	200	70.	400
1,2-Dichlorobenzene	ND		ug/l	1000	280	400
1,3-Dichlorobenzene	ND		ug/l	1000	280	400
1,4-Dichlorobenzene	ND		ug/l	1000	280	400
Methyl tert butyl ether	ND		ug/l	1000	280	400
p/m-Xylene	ND		ug/l	1000	280	400
o-Xylene	ND		ug/l	1000	280	400
Xylenes, Total	ND		ug/l	1000	280	400
cis-1,2-Dichloroethene	48000		ug/l	1000	280	400
1,2-Dichloroethene, Total	48000		ug/l	1000	280	400
Dibromomethane	ND		ug/l	2000	400	400
1,2,3-Trichloropropane	ND		ug/l	1000	280	400
Acrylonitrile	ND		ug/l	2000	600	400
Styrene	ND		ug/l	1000	280	400
Dichlorodifluoromethane	ND		ug/l	2000	400	400
Acetone	ND		ug/l	2000	580	400
Carbon disulfide	ND		ug/l	2000	400	400
2-Butanone	ND		ug/l	2000	780	400
Vinyl acetate	ND		ug/l	2000	400	400
4-Methyl-2-pentanone	ND		ug/l	2000	400	400
2-Hexanone	ND		ug/l	2000	400	400
Bromochloromethane	ND		ug/l	1000	280	400
2,2-Dichloropropane	ND		ug/l	1000	280	400
1,2-Dibromoethane	ND		ug/l	800	260	400
1,3-Dichloropropane	ND		ug/l	1000	280	400
1,1,1,2-Tetrachloroethane	ND		ug/l	1000	280	400
Bromobenzene	ND		ug/l	1000	280	400
n-Butylbenzene	ND		ug/l	1000	280	400
sec-Butylbenzene	ND		ug/l	1000	280	400
tert-Butylbenzene	ND		ug/l	1000	280	400
o-Chlorotoluene	ND		ug/l	1000	280	400
p-Chlorotoluene	ND		ug/l	1000	280	400
1,2-Dibromo-3-chloropropane	ND		ug/l	1000	280	400
Hexachlorobutadiene	ND		ug/l	1000	280	400
Isopropylbenzene	ND		ug/l	1000	280	400
p-Isopropyltoluene	ND		ug/l	1000	280	400
Naphthalene	580	J	ug/l	1000	280	400

**Project Name:** 252-258 3RD AVE.  
**Project Number:** 1222000043

**Lab Number:** L2207214  
**Report Date:** 02/17/22

**SAMPLE RESULTS**

Lab ID: L2207214-06 D  
 Client ID: TWP-2  
 Sample Location: MANHATTAN, NY

Date Collected: 02/10/22 11:00  
 Date Received: 02/10/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
n-Propylbenzene	ND		ug/l	1000	280	400
1,2,3-Trichlorobenzene	ND		ug/l	1000	280	400
1,2,4-Trichlorobenzene	ND		ug/l	1000	280	400
1,3,5-Trimethylbenzene	ND		ug/l	1000	280	400
1,2,4-Trimethylbenzene	ND		ug/l	1000	280	400
1,4-Dioxane	ND		ug/l	100000	24000	400
p-Diethylbenzene	ND		ug/l	800	280	400
p-Ethyltoluene	ND		ug/l	800	280	400
1,2,4,5-Tetramethylbenzene	ND		ug/l	800	220	400
Ethyl ether	ND		ug/l	1000	280	400
trans-1,4-Dichloro-2-butene	ND		ug/l	1000	280	400

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

**Project Name:** 252-258 3RD AVE.  
**Project Number:** 1222000043

**Lab Number:** L2207214  
**Report Date:** 02/17/22

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 02/14/22 09:11  
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 01,04 Batch: WG1604711-5					
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:** 252-258 3RD AVE.  
**Project Number:** 1222000043

**Lab Number:** L2207214  
**Report Date:** 02/17/22

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 02/14/22 09:11  
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 01,04 Batch: WG1604711-5					
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:** 252-258 3RD AVE.  
**Project Number:** 1222000043

**Lab Number:** L2207214  
**Report Date:** 02/17/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C  
Analytical Date: 02/14/22 09:11  
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 01,04 Batch: WG1604711-5					
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.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	97		70-130

**Project Name:** 252-258 3RD AVE.  
**Project Number:** 1222000043

**Lab Number:** L2207214  
**Report Date:** 02/17/22

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

Analytical Method: 1,8260C  
Analytical Date: 02/12/22 12:25  
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03,06 Batch: WG1605174-5					
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:** 252-258 3RD AVE.  
**Project Number:** 1222000043

**Lab Number:** L2207214  
**Report Date:** 02/17/22

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

Analytical Method: 1,8260C  
Analytical Date: 02/12/22 12:25  
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03,06 Batch: WG1605174-5					
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:** 252-258 3RD AVE.  
**Project Number:** 1222000043

**Lab Number:** L2207214  
**Report Date:** 02/17/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C  
Analytical Date: 02/12/22 12:25  
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03,06 Batch: WG1605174-5					
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	105		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	110		70-130

**Project Name:** 252-258 3RD AVE.  
**Project Number:** 1222000043

**Lab Number:** L2207214  
**Report Date:** 02/17/22

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

Analytical Method: 1,8260C  
Analytical Date: 02/16/22 08:42  
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 04 Batch: WG1605826-5					
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:** 252-258 3RD AVE.  
**Project Number:** 1222000043

**Lab Number:** L2207214  
**Report Date:** 02/17/22

**Method Blank Analysis  
 Batch Quality Control**

Analytical Method: 1,8260C  
 Analytical Date: 02/16/22 08:42  
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 04 Batch: WG1605826-5					
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:** 252-258 3RD AVE.  
**Project Number:** 1222000043

**Lab Number:** L2207214  
**Report Date:** 02/17/22

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C  
Analytical Date: 02/16/22 08:42  
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 04 Batch: WG1605826-5					
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.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	88		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	96		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 252-258 3RD AVE.

Lab Number: L2207214

Project Number: 1222000043

Report Date: 02/17/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 01,04 Batch: WG1604711-3 WG1604711-4								
Methylene chloride	83		84		70-130	1		30
1,1-Dichloroethane	81		83		70-130	2		30
Chloroform	88		90		70-130	2		30
Carbon tetrachloride	100		106		70-130	6		30
1,2-Dichloropropane	84		85		70-130	1		30
Dibromochloromethane	100		99		70-130	1		30
1,1,2-Trichloroethane	93		92		70-130	1		30
Tetrachloroethene	124		129		70-130	4		30
Chlorobenzene	98		99		70-130	1		30
Trichlorofluoromethane	85		92		70-139	8		30
1,2-Dichloroethane	83		83		70-130	0		30
1,1,1-Trichloroethane	95		101		70-130	6		30
Bromodichloromethane	89		89		70-130	0		30
trans-1,3-Dichloropropene	92		91		70-130	1		30
cis-1,3-Dichloropropene	91		92		70-130	1		30
1,1-Dichloropropene	94		99		70-130	5		30
Bromoform	93		92		70-130	1		30
1,1,2,2-Tetrachloroethane	88		88		70-130	0		30
Benzene	89		91		70-130	2		30
Toluene	92		94		70-130	2		30
Ethylbenzene	93		95		70-130	2		30
Chloromethane	63		66		52-130	5		30
Bromomethane	108		109		57-147	1		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 252-258 3RD AVE.

Lab Number: L2207214

Project Number: 1222000043

Report Date: 02/17/22

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 01,04 Batch: WG1604711-3 WG1604711-4								
Vinyl chloride	74		80		67-130	8		30
Chloroethane	83		88		50-151	6		30
1,1-Dichloroethene	93		99		65-135	6		30
trans-1,2-Dichloroethene	93		98		70-130	5		30
Trichloroethene	96		100		70-130	4		30
1,2-Dichlorobenzene	103		101		70-130	2		30
1,3-Dichlorobenzene	102		101		70-130	1		30
1,4-Dichlorobenzene	102		101		70-130	1		30
Methyl tert butyl ether	83		83		66-130	0		30
p/m-Xylene	99		100		70-130	1		30
o-Xylene	96		97		70-130	1		30
cis-1,2-Dichloroethene	93		95		70-130	2		30
Dibromomethane	96		95		70-130	1		30
Styrene	97		97		70-130	0		30
Dichlorodifluoromethane	79		88		30-146	11		30
Acetone	55		55		54-140	0		30
Carbon disulfide	80		85		59-130	6		30
2-Butanone	72		73		70-130	1		30
Vinyl acetate	77		75		70-130	3		30
4-Methyl-2-pentanone	86		87		70-130	1		30
1,2,3-Trichloropropane	86		86		68-130	0		30
2-Hexanone	76		76		70-130	0		30
Bromochloromethane	104		103		70-130	1		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 252-258 3RD AVE.

Lab Number: L2207214

Project Number: 1222000043

Report Date: 02/17/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 01,04 Batch: WG1604711-3 WG1604711-4								
2,2-Dichloropropane	92		96		70-130	4		30
1,2-Dibromoethane	106		105		70-130	1		30
1,3-Dichloropropane	91		90		69-130	1		30
1,1,1,2-Tetrachloroethane	103		102		70-130	1		30
Bromobenzene	102		102		70-130	0		30
n-Butylbenzene	96		99		70-130	3		30
sec-Butylbenzene	97		100		70-130	3		30
tert-Butylbenzene	98		100		70-130	2		30
o-Chlorotoluene	86		87		70-130	1		30
p-Chlorotoluene	87		88		70-130	1		30
1,2-Dibromo-3-chloropropane	102		100		68-130	2		30
Hexachlorobutadiene	114		119		67-130	4		30
Isopropylbenzene	93		95		70-130	2		30
p-Isopropyltoluene	100		102		70-130	2		30
Naphthalene	101		99		70-130	2		30
Acrylonitrile	86		85		70-130	1		30
n-Propylbenzene	90		93		70-130	3		30
1,2,3-Trichlorobenzene	113		112		70-130	1		30
1,2,4-Trichlorobenzene	116		113		70-130	3		30
1,3,5-Trimethylbenzene	93		94		70-130	1		30
1,2,4-Trimethylbenzene	92		92		70-130	0		30
1,4-Dioxane	93		105		65-136	12		30
p-Diethylbenzene	100		101		70-130	1		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 252-258 3RD AVE.

Project Number: 1222000043

Lab Number: L2207214

Report Date: 02/17/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 01,04 Batch: WG1604711-3 WG1604711-4								
p-Ethyltoluene	93		94		70-130	1		30
1,2,4,5-Tetramethylbenzene	95		95		70-130	0		30
Ethyl ether	82		81		67-130	1		30
trans-1,4-Dichloro-2-butene	81		78		70-130	4		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	89		90		70-130
Toluene-d8	97		97		70-130
4-Bromofluorobenzene	87		86		70-130
Dibromofluoromethane	100		100		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 252-258 3RD AVE.

Lab Number: L2207214

Project Number: 1222000043

Report Date: 02/17/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03,06 Batch: WG1605174-3 WG1605174-4								
Methylene chloride	98		99		70-130	1		20
1,1-Dichloroethane	100		110		70-130	10		20
Chloroform	98		99		70-130	1		20
Carbon tetrachloride	110		110		63-132	0		20
1,2-Dichloropropane	100		100		70-130	0		20
Dibromochloromethane	100		99		63-130	1		20
1,1,2-Trichloroethane	96		98		70-130	2		20
Tetrachloroethene	100		110		70-130	10		20
Chlorobenzene	100		110		75-130	10		20
Trichlorofluoromethane	110		110		62-150	0		20
1,2-Dichloroethane	99		99		70-130	0		20
1,1,1-Trichloroethane	110		110		67-130	0		20
Bromodichloromethane	99		99		67-130	0		20
trans-1,3-Dichloropropene	85		84		70-130	1		20
cis-1,3-Dichloropropene	99		99		70-130	0		20
1,1-Dichloropropene	110		110		70-130	0		20
Bromoform	84		85		54-136	1		20
1,1,2,2-Tetrachloroethane	99		100		67-130	1		20
Benzene	100		100		70-130	0		20
Toluene	100		110		70-130	10		20
Ethylbenzene	110		110		70-130	0		20
Chloromethane	87		89		64-130	2		20
Bromomethane	99		100		39-139	1		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 252-258 3RD AVE.

Lab Number: L2207214

Project Number: 1222000043

Report Date: 02/17/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03,06 Batch: WG1605174-3 WG1605174-4								
Vinyl chloride	110		110		55-140	0		20
Chloroethane	130		120		55-138	8		20
1,1-Dichloroethene	110		110		61-145	0		20
trans-1,2-Dichloroethene	110		110		70-130	0		20
Trichloroethene	100		100		70-130	0		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	93		95		63-130	2		20
p/m-Xylene	110		115		70-130	4		20
o-Xylene	105		110		70-130	5		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Dibromomethane	99		98		70-130	1		20
1,2,3-Trichloropropane	98		96		64-130	2		20
Acrylonitrile	93		96		70-130	3		20
Styrene	105		110		70-130	5		20
Dichlorodifluoromethane	72		75		36-147	4		20
Acetone	130		140		58-148	7		20
Carbon disulfide	110		110		51-130	0		20
2-Butanone	110		110		63-138	0		20
Vinyl acetate	100		99		70-130	1		20
4-Methyl-2-pentanone	83		84		59-130	1		20
2-Hexanone	75		84		57-130	11		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 252-258 3RD AVE.

Lab Number: L2207214

Project Number: 1222000043

Report Date: 02/17/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03,06 Batch: WG1605174-3 WG1605174-4								
Bromochloromethane	100		100		70-130	0		20
2,2-Dichloropropane	120		120		63-133	0		20
1,2-Dibromoethane	95		96		70-130	1		20
1,3-Dichloropropane	97		98		70-130	1		20
1,1,1,2-Tetrachloroethane	95		97		64-130	2		20
Bromobenzene	100		100		70-130	0		20
n-Butylbenzene	110		110		53-136	0		20
sec-Butylbenzene	110		110		70-130	0		20
tert-Butylbenzene	100		100		70-130	0		20
o-Chlorotoluene	100		110		70-130	10		20
p-Chlorotoluene	100		110		70-130	10		20
1,2-Dibromo-3-chloropropane	91		91		41-144	0		20
Hexachlorobutadiene	100		110		63-130	10		20
Isopropylbenzene	110		110		70-130	0		20
p-Isopropyltoluene	110		110		70-130	0		20
Naphthalene	94		97		70-130	3		20
n-Propylbenzene	110		110		69-130	0		20
1,2,3-Trichlorobenzene	96		100		70-130	4		20
1,2,4-Trichlorobenzene	100		100		70-130	0		20
1,3,5-Trimethylbenzene	100		100		64-130	0		20
1,2,4-Trimethylbenzene	100		100		70-130	0		20
1,4-Dioxane	96		98		56-162	2		20
p-Diethylbenzene	100		110		70-130	10		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 252-258 3RD AVE.

Lab Number: L2207214

Project Number: 1222000043

Report Date: 02/17/22

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03,06 Batch: WG1605174-3 WG1605174-4								
p-Ethyltoluene	110		110		70-130	0		20
1,2,4,5-Tetramethylbenzene	100		100		70-130	0		20
Ethyl ether	94		95		59-134	1		20
trans-1,4-Dichloro-2-butene	90		86		70-130	5		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	96		96		70-130
Toluene-d8	100		101		70-130
4-Bromofluorobenzene	96		95		70-130
Dibromofluoromethane	98		100		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 252-258 3RD AVE.

Lab Number: L2207214

Project Number: 1222000043

Report Date: 02/17/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 04 Batch: WG1605826-3 WG1605826-4								
Methylene chloride	83		81		70-130	2		30
1,1-Dichloroethane	82		79		70-130	4		30
Chloroform	86		85		70-130	1		30
Carbon tetrachloride	100		97		70-130	3		30
1,2-Dichloropropane	83		82		70-130	1		30
Dibromochloromethane	93		94		70-130	1		30
1,1,2-Trichloroethane	89		90		70-130	1		30
Tetrachloroethene	128		124		70-130	3		30
Chlorobenzene	99		96		70-130	3		30
Trichlorofluoromethane	93		90		70-139	3		30
1,2-Dichloroethane	79		78		70-130	1		30
1,1,1-Trichloroethane	95		93		70-130	2		30
Bromodichloromethane	84		84		70-130	0		30
trans-1,3-Dichloropropene	88		89		70-130	1		30
cis-1,3-Dichloropropene	88		88		70-130	0		30
1,1-Dichloropropene	97		95		70-130	2		30
Bromoform	87		86		70-130	1		30
1,1,2,2-Tetrachloroethane	83		83		70-130	0		30
Benzene	90		87		70-130	3		30
Toluene	93		92		70-130	1		30
Ethylbenzene	94		92		70-130	2		30
Chloromethane	72		68		52-130	6		30
Bromomethane	114		111		57-147	3		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 252-258 3RD AVE.

Lab Number: L2207214

Project Number: 1222000043

Report Date: 02/17/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 04 Batch: WG1605826-3 WG1605826-4								
Vinyl chloride	80		76		67-130	5		30
Chloroethane	83		80		50-151	4		30
1,1-Dichloroethene	101		97		65-135	4		30
trans-1,2-Dichloroethene	97		93		70-130	4		30
Trichloroethene	96		94		70-130	2		30
1,2-Dichlorobenzene	101		98		70-130	3		30
1,3-Dichlorobenzene	102		99		70-130	3		30
1,4-Dichlorobenzene	101		98		70-130	3		30
Methyl tert butyl ether	80		79		66-130	1		30
p/m-Xylene	99		97		70-130	2		30
o-Xylene	96		95		70-130	1		30
cis-1,2-Dichloroethene	93		91		70-130	2		30
Dibromomethane	89		90		70-130	1		30
Styrene	95		94		70-130	1		30
Dichlorodifluoromethane	98		94		30-146	4		30
Acetone	53	Q	52	Q	54-140	2		30
Carbon disulfide	86		83		59-130	4		30
2-Butanone	67	Q	61	Q	70-130	9		30
Vinyl acetate	73		71		70-130	3		30
4-Methyl-2-pentanone	80		84		70-130	5		30
1,2,3-Trichloropropane	81		81		68-130	0		30
2-Hexanone	70		74		70-130	6		30
Bromochloromethane	100		98		70-130	2		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 252-258 3RD AVE.

Lab Number: L2207214

Project Number: 1222000043

Report Date: 02/17/22

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 04 Batch: WG1605826-3 WG1605826-4								
2,2-Dichloropropane	94		91		70-130	3		30
1,2-Dibromoethane	100		101		70-130	1		30
1,3-Dichloropropane	87		88		69-130	1		30
1,1,1,2-Tetrachloroethane	98		97		70-130	1		30
Bromobenzene	103		100		70-130	3		30
n-Butylbenzene	98		94		70-130	4		30
sec-Butylbenzene	99		96		70-130	3		30
tert-Butylbenzene	100		96		70-130	4		30
o-Chlorotoluene	88		84		70-130	5		30
p-Chlorotoluene	88		85		70-130	3		30
1,2-Dibromo-3-chloropropane	91		94		68-130	3		30
Hexachlorobutadiene	121		117		67-130	3		30
Isopropylbenzene	96		92		70-130	4		30
p-Isopropyltoluene	101		97		70-130	4		30
Naphthalene	98		97		70-130	1		30
Acrylonitrile	80		81		70-130	1		30
n-Propylbenzene	92		89		70-130	3		30
1,2,3-Trichlorobenzene	111		109		70-130	2		30
1,2,4-Trichlorobenzene	115		112		70-130	3		30
1,3,5-Trimethylbenzene	95		91		70-130	4		30
1,2,4-Trimethylbenzene	93		89		70-130	4		30
1,4-Dioxane	84		86		65-136	2		30
p-Diethylbenzene	100		98		70-130	2		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 252-258 3RD AVE.

Lab Number: L2207214

Project Number: 1222000043

Report Date: 02/17/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 04 Batch: WG1605826-3 WG1605826-4								
p-Ethyltoluene	95		91		70-130	4		30
1,2,4,5-Tetramethylbenzene	96		93		70-130	3		30
Ethyl ether	82		80		67-130	2		30
trans-1,4-Dichloro-2-butene	75		75		70-130	0		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	84		86		70-130
Toluene-d8	96		99		70-130
4-Bromofluorobenzene	89		87		70-130
Dibromofluoromethane	97		96		70-130

# **INORGANICS & MISCELLANEOUS**

Project Name: 252-258 3RD AVE.

Project Number: 1222000043

Lab Number: L2207214

Report Date: 02/17/22

**SAMPLE RESULTS**

Lab ID: L2207214-01

Client ID: SB-1 (6-6.5)

Sample Location: MANHATTAN, NY

Date Collected: 02/10/22 10:20

Date Received: 02/10/22

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	68.7		%	0.100	NA	1	-	02/11/22 09:46	121,2540G	RI



Project Name: 252-258 3RD AVE.

Project Number: 1222000043

Lab Number: L2207214

Report Date: 02/17/22

**SAMPLE RESULTS**

Lab ID: L2207214-04

Client ID: SB-2 (5.5-6)

Sample Location: MANHATTAN, NY

Date Collected: 02/10/22 11:10

Date Received: 02/10/22

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	83.0		%	0.100	NA	1	-	02/11/22 09:46	121,2540G	RI



## Lab Duplicate Analysis

*Batch Quality Control*

Project Name: 252-258 3RD AVE.

Project Number: 1222000043

Lab Number: L2207214

Report Date: 02/17/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01,04 QC Batch ID: WG1603879-1 QC Sample: L2207024-01 Client ID: DUP Sample						
Solids, Total	86.2	87.4	%	1		20

**Project Name:** 252-258 3RD AVE.**Lab Number:** L2207214**Project Number:** 1222000043**Report Date:** 02/17/22**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>
L2207214-01A	Vial MeOH preserved	A	NA		3.3	Y	Absent		NYTCL-8260HLW(14)
L2207214-01B	Vial water preserved	A	NA		3.3	Y	Absent	11-FEB-22 03:49	NYTCL-8260HLW(14)
L2207214-01C	Vial water preserved	A	NA		3.3	Y	Absent	11-FEB-22 03:49	NYTCL-8260HLW(14)
L2207214-01D	Plastic 120ml unpreserved	A	NA		3.3	Y	Absent		TS(7)
L2207214-02A	Vial MeOH preserved	A	NA		3.3	Y	Absent		HOLD-8260HLW(14)
L2207214-02B	Vial water preserved	A	NA		3.3	Y	Absent	11-FEB-22 03:49	HOLD-8260HLW(14)
L2207214-02C	Vial water preserved	A	NA		3.3	Y	Absent	11-FEB-22 03:49	HOLD-8260HLW(14)
L2207214-02D	Plastic 120ml unpreserved	A	NA		3.3	Y	Absent		HOLD-WETCHEM()
L2207214-03A	Vial HCl preserved	A	NA		3.3	Y	Absent		NYTCL-8260(14)
L2207214-03B	Vial HCl preserved	A	NA		3.3	Y	Absent		NYTCL-8260(14)
L2207214-03C	Vial HCl preserved	A	NA		3.3	Y	Absent		NYTCL-8260(14)
L2207214-04A	Vial MeOH preserved	A	NA		3.3	Y	Absent		NYTCL-8260HLW(14)
L2207214-04B	Vial water preserved	A	NA		3.3	Y	Absent	11-FEB-22 03:49	NYTCL-8260HLW(14)
L2207214-04C	Vial water preserved	A	NA		3.3	Y	Absent	11-FEB-22 03:49	NYTCL-8260HLW(14)
L2207214-04D	Plastic 120ml unpreserved	A	NA		3.3	Y	Absent		TS(7)
L2207214-05A	Vial MeOH preserved	A	NA		3.3	Y	Absent		HOLD-8260HLW(14)
L2207214-05B	Vial water preserved	A	NA		3.3	Y	Absent	11-FEB-22 03:49	HOLD-8260HLW(14)
L2207214-05C	Vial water preserved	A	NA		3.3	Y	Absent	11-FEB-22 03:49	HOLD-8260HLW(14)
L2207214-05D	Plastic 120ml unpreserved	A	NA		3.3	Y	Absent		HOLD-WETCHEM()
L2207214-06A	Vial HCl preserved	A	NA		3.3	Y	Absent		NYTCL-8260(14)
L2207214-06B	Vial HCl preserved	A	NA		3.3	Y	Absent		NYTCL-8260(14)
L2207214-06C	Vial HCl preserved	A	NA		3.3	Y	Absent		NYTCL-8260(14)

**Project Name:** 252-258 3RD AVE.  
**Project Number:** 1222000043

**Lab Number:** L2207214  
**Report Date:** 02/17/22

## 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:** 252-258 3RD AVE.  
**Project Number:** 1222000043

**Lab Number:** L2207214  
**Report Date:** 02/17/22

#### 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.

**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'.

**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.

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.)

**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 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.

Report Format: DU Report with 'J' Qualifiers



**Project Name:** 252-258 3RD AVE.  
**Project Number:** 1222000043

**Lab Number:** L2207214  
**Report Date:** 02/17/22

**Data Qualifiers**

- 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:** 252-258 3RD AVE.  
**Project Number:** 1222000043

**Lab Number:** L2207214  
**Report Date:** 02/17/22

## 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

---

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.

 <b>NEW YORK CHAIN OF CUSTODY</b>		<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 <u>1</u> of <u>1</u>		Date Rec'd in Lab <u>2/10/22</u>		ALPHA Job # <u>L2207214</u>		
		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>Project Information</b> Project Name: <u>252-258 3rd. Ave.</u> Project Location: <u>MANHATTAN NY</u> Project # <u>1222000043</u> (Use Project name as Project #) <input type="checkbox"/>		<b>Deliverables</b> <input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B <input type="checkbox"/> EQuIS (1 File) <input type="checkbox"/> EQuIS (4 File) <input type="checkbox"/> Other		<b>Billing Information</b> <input checked="" type="checkbox"/> Same as Client Info PO # <u>EBC</u>
<b>Client Information</b> Client: <u>EBC</u> Address: <u>21 B St.</u> <u>Burlington MA</u> Phone: <u>631-456-3972</u> Fax: _____ Email: <u>klukaswebiconsulting.com</u>		Project Manager: <u>C. Madsen</u> ALPHAQuote #: _____ Turn-Around Time Standard <input checked="" type="checkbox"/> <u>5-day</u> Due Date: _____ Rush (only if pre approved) <input type="checkbox"/> # of Days: _____		<b>Regulatory Requirement</b> <input type="checkbox"/> NY TOGS <input 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>ANALYSIS</b>		<b>Sample Filtration</b> <input type="checkbox"/> Done <input type="checkbox"/> Lab to do <b>Preservation</b> <input type="checkbox"/> Lab to do (Please Specify below) Sample Specific Comments		
Other project specific requirements/comments: <u>might not be enough GW - if so then we want to run deeper soil samples</u>						VoCs		Total Bottles		
Please specify Metals or TAL.										
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials					
		Date	Time							
<u>0724-01</u>	<u>SB-1(6-6.5)</u>	<u>2-10-22</u>	<u>1020</u>	<u>SO</u>	<u>KL</u>	<u>X</u>				
<u>02</u>	<u>*SB-1(7.5-8)*</u>	<u>2-10-22</u>	<u>1030</u>	<u>SO</u>	<u>KL</u>	<u>X</u>			<u>Contingent on GW</u>	
<u>03</u>	<u>TWP-1</u>		<u>1040</u>	<u>GW</u>	<u>KL</u>	<u>X</u>				
<u>04</u>	<u>SB-2 (5.5-6)</u>		<u>1110</u>	<u>SO</u>	<u>KL</u>	<u>X</u>				
<u>05</u>	<u>*SB-2 (J.5-9)*</u>		<u>1130</u>	<u>SO</u>	<u>KL</u>	<u>X</u>			<u>Contingent on GW</u>	
<u>06</u>	<u>TWP-2</u>		<u>1100</u>	<u>GW</u>	<u>KL</u>	<u>X</u>				
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 <u>V P</u> Preservative <u>F B</u>		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: <u>[Signature]</u>		Date/Time: <u>2-10-22 1540</u>		Received By: <u>[Signature]</u>		Date/Time: <u>2/10/22 1540</u>				
Relinquished By: <u>[Signature]</u>		Date/Time: <u>2/10/22 1800</u>		Received By: <u>[Signature]</u>		Date/Time: <u>2/10/22 1800</u>				
Relinquished By: <u>[Signature]</u>		Date/Time: <u>2/10/22</u>		Received By: <u>[Signature]</u>		Date/Time: <u>2/10/22</u>				

**APPENDIX D**  
**PROFESSIONAL QUALIFICATIONS**

---

### **Summary of Experience**

Mr. Lukas is a Project Engineer specializing in Phase I and Phase II Environmental Site Assessments in the commercial real estate, telecommunications, and environmental health and safety industries. Mr. Lukas's experience includes five years of field work and report preparation associated with NYDEC and NJDEP sites, under the guidance of an LSRP. Mr. Lukas has conducted numerous pre-acquisition/due diligence environmental assessments for a wide range of properties throughout New York and New Jersey. These assessments have been performed to evaluate site conditions, potential off-site liabilities, historic site and vicinity usage, environmental control systems, and site remediation costs in order to advise prospective buyers, lenders, current operators, and owners of potential and existing environmental concerns. Sites inspected include multi-family residential, commercial, retail and industrial properties.

### **Relevant Project Experience**

**Phase II Subsurface Investigations:** Mr. Lukas has completed several Phase II and Phase III subsurface investigation and remediation projects, with extensive field and project management experience associated with the following: soil, groundwater, soil vapor, and surface water monitoring; UST closure; monitoring well abandonments; operation and maintenance of groundwater pump and treat systems; and construction site air monitoring. Mr. Lukas has prepared project schedules, work plans, soil management plans, NJDEP Site Investigation Reports, Remedial Action Work Plans, Remedial Investigation Reports, and Response Action Outcomes reports.

**Pre-development Phase II Environmental ESA and Waste Characterization Sampling, Manhattan New York:** Completed field work including groundwater well installation and monitoring, geological soil borings, and sub slab/near slab soil vapor point installation and sampling. Assisted in the completion of a Soil Management Plan (SMP), and conducted community air monitoring during trucking and off-site disposal of varying levels of impacted soil.

**Groundwater Monitoring for long term NJDEP site Remediation, Montville New Jersey:** Developed a sampling schedule and managed a field crew for the collection of multiple rounds of groundwater sampling, to determine large scale air sparge system and pump and treat system effectiveness.

**Sub slab Depressurization System pilot Test and OM&M:** Completed sampling and OM&M of three active sub-slab depressurization systems to mitigate vapor migration from beneath the sub-slab into the building's interior space.

### **Education**

Bachelors of Science, Environmental Resources Engineering, S.U.N.Y. College of Environmental Science and Forestry, Syracuse NY

### **Professional Training/Affiliations**

40 hour HAZWOPER training certification- 29 CFR 1910.120

### **Summary of Experience**

Ms. Madsen is Project Manager, currently residing in the state of New Jersey with eight years of experience with Environmental Consulting experience in New Jersey, California, New York, and Maryland. Ms. Madsen has worked on a variety of complex environmental sites, adapting current technical practices to achieve successful remediation solutions. Ms. Madsen has intimate knowledge of environmental regulatory requirements in New Jersey, New York, and California.

Ms. Madsen has been involved with the full project life cycle coordination and management for several remedial investigation projects, from initial due diligence reporting including Phase I ESA and Preliminary Assessments, through workplan preparation and completion, to ultimate successful completion of remediation and site closure. Ms. Madsen has worked on a variety of sites impacted by various contaminants of concern in various media phases.

### **Relevant Project Experience**

#### **Preliminary Assessments and Environmental Site Assessments**

Performed numerous Preliminary Assessments in accordance with New Jersey Technical requirements and Environmental Site Assessments per ASTM Phase I ESA guidelines for various entities including the real estate community, regional and local financial institutions, and insurance companies in New Jersey, California, and New York.

**Site Investigation** - Designed and implemented detailed soil, groundwater, and soil vapor quality investigations involving the installation and sampling of test pits, soil borings, ground water monitoring wells, soil vapor sampling points, and sub-slab vapor sampling to assess the extent of onsite contamination and determine the conceptual site model based on field parameters and laboratory data. Performed vapor intrusion assessments and investigations via sub-slab and indoor air sampling.

**Site Remediation** – Developed and implemented remediation alternatives in work plans including source removal, installation of soil vapor extraction systems, installation of vapor mitigation systems, engineering and/or institutional controls, and routine monitoring and reporting. Experience with short term remediation solutions, and long-term monitoring and maintenance of remedial technologies such as sub-slab vapor depressurization systems, and pump and treat groundwater systems. Performed UST closure activities in accordance with all local, state, and federal regulations. Closure activities included permitting, UST removal oversight, soil removal/staging, post-excavation soil sampling, clean fill deliveries, and reporting.



**Selected Projects:**

- Gateway of Pacific, Soil Vapor Extraction System Design and Implementation, South San Francisco, CA
- 4001 Miranda Avenue, Long Term Groundwater Monitoring and Remedial Alternative Analysis, Palo Alto, CA
- Former National Semi-Conductor Site, Groundwater Pump and Treat System Monitoring, Santa Clara, CA
- SJSC Towers Soil and Groundwater Remedial Excavation and Dewatering and UST Removal, San Jose, CA
- San Pedro Square, Soil Remediation Excavation and UST Removal, San Jose, CA
- Collegiate School, 301 Freedom Place South, Soil Remediation and Vapor Mitigation System Installation, New York City, NY
- 365 and 363 Bond Street Project, located on the Gowanus Canal, ACEC Engineering Excellence Diamond Award, Remediation including Excavation, UST Removal, Soil Vapor/Air Sparge System Installation, Bulkhead Installation, Sub-Slab Vapor Depressurization System, and Vapor Mitigation System Installation, Brooklyn, NY
- One Manhattan Square, Soil, Groundwater Investigation, Soil Remediation, New York City, NY
- 505 W 19<sup>th</sup> Street, Soil Remediation and UST Removal, New York City, NY
- Riker's Island Central and Main Facilities, Soil Investigation, Bronx, NY
- Pan Graphics Soil, Groundwater, Surface Water Remediation Sites, Lodi and Garfield Facilities, NJ
- Thorlabs Redevelopment Sites – Newton and Andover, NJ
- Former Flintkote Facility, LNAPL, PCB, Soil and Groundwater Remediation, East Rutherford, NJ
- Liberty Plaza Redevelopment Site, Randallstown, MD

**Education**

Bachelor of Engineering, Environmental Engineering, Rensselaer polytechnic Institute, Troy, NY  
Master of Engineering, Environmental Engineering, Stevens Institute of Technology, Hoboken, NJ

**Professional Training/Affiliations**

40 Hour HAZWOPER training certification – 29 CFR 1910.120  
10 Hour OSHA Construction certification

### **Summary of Experience**

Mr. Klinder is a Licensed Site Remediation Professional (LSRP) in the state of New Jersey with 20 years of Environmental Consulting experience in New Jersey, New York, Pennsylvania and Maryland. Mr. Klinder has served as project manager for several hundred Phase I and Phase II environmental assessments required for financial and real estate transactions, including those properties in New Jersey subject to the Industrial Site Recovery Act (ISRA).

Mr. Klinder has extensive experience as both Project Manager and Site Health and Safety Officer for major urban development projects and Brownfields redevelopment sites along the Hudson River waterfront and abroad. Responsibilities included initial site characterization, development and coordination of all onsite environmental activities, health and safety supervision of construction personnel, and post-development biennial certifications, if warranted.

As a Senior Project Manager at EBI, Mr. Klinder's duties include initial site characterization, development, and coordination of all onsite environmental activities.

### **Relevant Project Experience**

#### **Preliminary Assessments and Environmental Site Assessments**

Performed numerous Preliminary Assessments in accordance with New Jersey Technical requirements and Environmental Site Assessments per ASTM Phase I ESA guidelines for various entities including the real estate community, regional and local financial institutions, and insurance companies in New York, New Jersey, Pennsylvania, and Maryland.

**Site Investigation** - Designed and implemented detailed soil and groundwater quality investigations involving the installation and sampling of test pits, soil borings, and ground water monitoring wells to assess the extent of onsite contamination and determine hydraulic parameters. Performed vapor intrusion assessments and investigations via sub-slab and indoor air sampling.

**Site Remediation** – Developed and implemented remediation work plans including source removal, installation of pumping/treatment systems, engineering and/or institutional controls, and routine monitoring and reporting. Performed UST closure activities in accordance with all local, state, and federal regulations. Closure activities included permitting, UST removal oversight, soil removal/staging, post-excavation soil sampling, clean fill deliveries, and reporting.

**Regulatory Compliance** - Maintained regulatory compliance for several facilities that utilize extraordinarily hazardous substances in accordance with the New Jersey Toxic Catastrophe Prevention Act Program Rules using air dispersion modeling, risk assessments, risk management programs, and annual reporting.

**Selected Projects:**

- Kuser Road Redevelopment, Soil and Groundwater Remediation, Landfill Evaluation, Hamilton, NJ (LSRP)
- Shire Road, Drum Dump Soil and Groundwater Remediation, New Holland, NJ (LSRP)
- Niagara Falls Redevelopment, Environmental Due Diligence for Numerous Sites Spanning Several City Blocks, Niagara Falls, NY
- Riker's Island Central and Main Facilities, Bronx, NY
- Seward Park Redevelopment Due Diligence, Manhattan, NY
- 1127 Flatbush Avenue Redevelopment, New York, NY
- Orange and Rockland Non-MGP Sites, Goshen, West Warwick, Ringwood
- Orange and Rockland Utilities – Goshen, Warwick, Lovett, New Hempstead Substations
- Con Edison Laconia Substation, Bronx, NY
- New Jersey Turnpike Interchange 8, Soil, Groundwater, and Surface Water Remediation, East Windsor Township, NJ
- Pan Graphics Soil, Groundwater, Surface Water Remediation Sites, Lodi and Garfield Facilities, NJ
- Thorlabs Redevelopment Sites – Newton and Andover, NJ
- Former Flintkote Facility, LNAPL, PCB, Soil and Groundwater Remediation, East Rutherford, NJ
- Tinton Falls Plaza Site, Chlorinated Solvents Remediation, Tinton Falls, NJ
- Tiger Run Service Stations – Tenafly, Ridgewood, Fairfield, Paramus, NJ (LSRP)
- Hess Terminal – Edgewater, NJ
- Farmland Dairies, Toxic Catastrophe Prevention Act Compliance for Extraordinarily Hazardous Substances, Wallington, NJ
- Quaker Harbor Petroleum Corp., Soil and Groundwater Remediation, Burlington, NJ (LSRP)
- 250 Hanover Road, Shooting Ranges Soil and Groundwater Remediation, Hanover, NJ (LSRP)
- Cargo Logistics, Soil and Groundwater Remediation, Soil Vapor Intrusion Investigation, Edison, NJ (LSRP)
- Charles Bahr & Son, Inc. Lumber Yard and Heating Oil Business, Soil and Groundwater Remediation/Redevelopment Project, Verona, NJ (LSRP)
- Sun Valley Plaza Redevelopment Project, Historic Fill Site Investigation and Remedial Action, Florham Park, NJ (LSRP)
- 398-406 Forest Ave, Pesticides/Arsenic/Lead Remediation, Paramus, NJ (LSRP)
- Kingston Pointe Redevelopment, Soil Remediation/Capping, North Bergen, NJ
- Camelot Cove Redevelopment, Soil Remediation/Capping, North Bergen, NJ
- Port Imperial North Redevelopment, Soil Remediation/Capping Weehawken, NJ
- Port Imperial Ferry Corporation, Soil Remediation/Capping, Weehawken, NJ
- Liberty Plaza Redevelopment Site, Randallstown, MD

**Education**

B.A., Environmental Studies/Geology, Edinboro University

**Professional Affiliations**

Association of Environmental & Engineering Geologists (AEG)

Association of Environmental Professionals (AEP)

National Environmental Policy Act (NEPA) Professional