



# AEI Consultants

December 10, 2018

## SUPPLEMENTAL SUBSURFACE INVESTIGATION REPORT

**Property Identification:**

325-397 Yonkers Avenue  
Yonkers, NY 10701

AEI Project No. 398150

**Prepared for:**

Mr. Thomas Lawless  
TD Bank  
P.O. Box 9540 One Portland Square, 3rd Floor  
Portland, Maine 04112

**Prepared by:**

AEI Consultants  
30 Montgomery Street, Suite 220  
Jersey City, New Jersey 07302  
(201) 332-1844

Environmental Due  
Diligence

Site Investigation &  
Remediation

Energy Performance  
& Benchmarking

Industrial Hygiene

Construction  
Consulting

Construction,  
Site Stabilization &  
Stormwater Services

Zoning Analysis  
Reports & ALTA  
Surveys

National Presence

Regional Focus

Local Solutions

# TABLE OF CONTENTS

<b>1.0 SITE DESCRIPTION .....</b>	<b>1</b>
<b>2.0 BACKGROUND .....</b>	<b>2</b>
<b>3.0 INVESTIGATION EFFORTS .....</b>	<b>3</b>
3.1 Health and Safety Plan .....	3
3.2 Permitting and Utility Clearance .....	4
3.3 Indoor/Outdoor Air Sample Collection .....	4
3.4 Sub-Slab Soil Vapor Sample Collection .....	4
3.5 Boring Abandonment .....	5
3.6 Laboratory Analyses .....	5
3.7 Investigation Derived Wastes .....	5
<b>4.0 FINDINGS.....</b>	<b>5</b>
4.1 Sub-Slab Soil Vapor Sample Analytical Results .....	5
4.2 Air Sample Analytical Results .....	5
<b>5.0 SUMMARY AND CONCLUSIONS.....</b>	<b>6</b>
<b>6.0 REPORT LIMITATIONS AND RELIANCE.....</b>	<b>6</b>

## FIGURES

Figure 1	Site Location Map
Figure 2	Sample Location Map

## TABLES

Table 1	Air / Vapor Sampling Results
---------	------------------------------

## APPENDICES

Appendix A	October 25, 2018 Limited Phase II Subsurface Investigation
Appendix B	Indoor Air Building Survey and Sampling Form
Appendix C	Laboratory Analytical Report



December 10, 2018

Mr. Thomas Lawless  
TD Bank  
P.O. Box 9540 One Portland Square, 3rd Floor  
Portland, Maine 04112

**Subject: Supplemental Subsurface Investigation**  
325-397 Yonkers Avenue  
Yonkers, NY 10701  
AEI Project No. 398150

AEI Consultants (AEI) is pleased to provide this report which describes the activities and results of the Supplemental Subsurface Investigation performed at the above-referenced property ("Site"). This investigation was completed in general accordance with the authorized scope of services outlined in our change order number 395010-01.

## 1.0 SITE DESCRIPTION

The Site, Block 2272 Lots 1 and 3, is located on the north side of Yonkers Avenue in a mixed commercial and residential area of Yonkers, Westchester County, New York (Figure 1). The Site totals approximately 1.61 acres and is improved with three (3) two-story, slab-on-grade buildings. The buildings were reportedly constructed in 1970, 1977, 1978, 1982, and 1994, and total approximately 44,863 square feet. The Site is currently occupied by Waste Management Inc., BoniClean dry cleaner, Deli Buffet, a church, and a Sunoco gasoline service station located in the center of the property. The Site also includes a former automotive service building, which is currently vacant and in the process of being remodeled. Additionally, the Site is improved with asphalt-paved parking areas, concrete walkways, and associated landscaping.

The Site is bordered by the Fairways at Dunwoodie Golf Course to the north, vacant, wooded land and Tibbets Creek to the east, Yonkers Avenue followed by Planet Fitness to the south, and the Fairways at Dunwoodie Golf Course to the west. The properties immediately adjacent to the Site mainly include residential and commercial buildings.

The Site is relatively flat with the regional topographic gradient sloping toward the east/southeast. Therefore, the direction of groundwater flow beneath the Site is inferred to be to the east/southeast.

According to the United State Geological Survey (USGS), the Site is underlain by Pleistocene glacial till deposits. Based on a review of the United States Department of Agriculture (USDA) Soil Survey, the majority of the soils in the vicinity of the Site are classified as the Charlton-Chatfield complex, which is indicative of coarse-loamy melt-out till derived from granite, gneiss, and/or schist.

## 2.0 BACKGROUND

A Phase I Environmental Site Assessment (ESA) was prepared by AEI as detailed in our report dated August 24, 2018 (AEI Project Number 392864). Based on the Phase I ESA, the following recognized environmental conditions (RECs) were identified at the Site:

- A Phase II ESA investigation was conducted onsite in June 2005 by Laurel Environmental Associates, Ltd (LEA). This investigation included collecting soil samples west of the office/retail building to assess the presence or absence of impacts associated with two heating oil Underground Storage Tanks (USTs) reportedly located in this area. The results indicated Semi-Volatile Organic Compounds (SVOCs) at concentrations greater than the New York State Department of Environmental Conservation (NYSDEC) Residential Soil Cleanup Objectives (SCO) specified under the Technical Assistance Guidance Memorandum (TAGM). The Site representative reported no knowledge of USTs in this area, and no heating oil USTs were listed in the regulatory database report. The lack of information on the location and condition of these heating oil USTs, as well as the confirmed presence of SVOCs in soil at concentrations that exceed regulatory criteria, are considered a REC.
- In June 2005, SVOCs and lead were detected at concentrations above TAGM SCOs in soil samples collected by LEA in boring SB-17, installed west of the automotive repair building. The confirmed presence of contaminants above regulatory criteria is considered a REC.
- In June 2005, soil samples collected inside of the automotive repairs building (SB-15), and south of the automotive building (SB-13) had elevated levels of chromium. The confirmed presence of contaminants above regulatory criteria is considered a REC.
- An oil-water separator is connected to the Site truck repair shop located within the waste transfer station building. Oil-water separators have the potential to act as conduits to the subsurface of properties and their conditions may deteriorate with time. Due to its connection to the Site truck maintenance facility, there is a potential that contaminants such as oils or solvents present in the waste stream could impact the soil beneath the property if the separator or associated drain system has become compromised. On this basis, the presence of the separator represents a REC.
- Based on the age of the gasoline service station USTs (over 10 years), and the absence of consistent tank and line integrity test results, the presence of these USTs represent a REC in connection with the subject property.
- A dry cleaner has been onsite since approximately 1985, which has utilized tetrachloroethene (PCE). Subsurface sampling was conducted at the Site in June 2005 which identified detectable levels of PCE, but at concentrations below regulatory standards. The historic use of PCE by dry cleaners represents a REC in connection with the Site.

Subsequently, AEI conducted a Limited Phase II Subsurface Investigation (Phase II) to address these RECs. The details of the investigation are outlined in our report dated October 25, 2018 (AEI Project Number 395010), which is included in this report as Appendix A. The purpose of the investigation was to evaluate potential impacts related to the on-site dry-cleaning operations, the potential heating oil USTs to the west of the retail building, the oil-water separator (OWS), and the gasoline filling and auto service operations. Five (5) soil borings (SB-1 through SB-6) were advanced throughout the exterior portions of the Site. Three (3) of the boring locations (SB-1, SB-4, and SB-5) were converted into temporary well points for the collection of groundwater samples. Additionally, two (2) sub-slab soil vapor samples (SSV-1 and SSV-2), one (1) indoor air

sample (IA-1), and one (1) exterior (i.e., background/ambient) air sample (AA-01) were collected and analyzed.

The soil sample analytical results indicated that no VOCs were detected at concentrations greater than the applicable soil criteria in the soil samples analyzed. Additionally, no SVOCs, PCBs, or metals were detected at concentrations greater than the applicable soil criteria in soil sample SB-5. The groundwater sample analytical results indicated that PCE was detected in groundwater sample TW-1, collected immediately south of the dry-cleaner tenant space, at a concentration greater than the New York Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards (AWQS). Petroleum-related VOCs were also detected in the temporary well samples TW-2 and TW-3 at concentrations greater than their corresponding New York TOGS AWQS. No SVOCs were detected at concentrations greater than the applicable groundwater criteria in the groundwater samples analyzed.

The sub-slab soil vapor sample analytical results indicated that PCE was detected at concentrations greater than the NY State Department of Health (NYSDOH) screening levels and Environmental Protection Agency (EPA) Vapor Intrusion Screening Levels (VISLs) in sub-slab soil vapor samples collected beneath the dry-cleaner tenant space and the adjacent tenant space to the east. No other VOCs were detected above the NYSDOH or EPA screening levels in the sub-slab soil vapor samples analyzed. Due to the PCE exceedances in sub-slab soil vapor samples SSV-1 and SSV-2, indoor air sample IA-1 (collected within the tenant space adjacent to the dry-cleaner tenant space) and ambient air sample AA-1 were analyzed to determine whether a vapor intrusion pathway exists.

As described in the October 2018 Phase II Report, the indoor air sample analytical results identified several compounds that were likely not attributable to vapor intrusion but rather from background sources either within the Site building or the ambient (outdoor) air. However, PCE was detected in indoor air sample IA-1, collected within the tenant space adjacent to the dry-cleaner tenant space, at a concentration of 9.9 ug/m<sup>3</sup>. This concentration exceeds the NYSDOH Matrix B Indoor Air Concentrations Criteria of 3 ug/m<sup>3</sup> for PCE. When considered along with the concentrations of PCE detected in sub-slab soil vapor samples SSV-1 and SSV-2 of 1,720 ug/m<sup>3</sup> and 78,700 ug/m<sup>3</sup>, respectively, the NYSDOH Matrix B guidance table recommends that mitigation be conducted to minimize current or potential exposures associated with soil vapor intrusion.

Based on these findings, AEI recommended conducting sub-slab soil vapor and indoor air sampling within the Dunwoodie Deli/Buffer space to delineate the extent of the PCE vapor contamination in order to determine which areas of the Site building will require mitigation activities.

### **3.0 INVESTIGATION EFFORTS**

AEI was retained by TD Bank ("Client") to conduct supplemental vapor intrusion sampling to evaluate PCE levels in the soil vapor and indoor air in tenant spaces to the west of the dry-cleaner tenant space.

#### **3.1 Health and Safety Plan**

A Site-specific health and safety plan was prepared and kept onsite for the duration of the fieldwork.

### **3.2 Permitting and Utility Clearance**

Drilling permits were not required for this investigation. New York 811 was contacted to provide a mark out of public utilities servicing the Site. Additionally, AEI used a GSSI StructureScan™ Mini HR all-in-one high-resolution ground penetrating radar unit to assess those areas of the concrete floor where holes were drilled for the collection of soil vapor samples. This portable device is able to locate ferrous and nonferrous targets (i.e. rebar, stainless steel, plastic conduit) in real-time.

### **3.3 Indoor/Outdoor Air Sample Collection**

On November 27, 2018, AEI performed a survey of the interior of the dry-cleaning space and adjacent tenant space to evaluate appropriate sub-slab sample locations and the potential presence of materials/substances that could represent indoor “background” VOC sources (i.e., solvents, fuels, etc.). These observations are included on an Indoor Air Building Survey and Sampling Form (Appendix B) and used to provide context to the analytical laboratory results, as appropriate.

On November 27, 2018, two (2) indoor air samples (IA-01 and IA-02) and one (1) exterior (i.e., background/ambient) air sample (AA-01) were collected. The air samples were collected from within the breathing zone, approximately 3 to 5 feet above the ground surface. The air sampling equipment was provided by Alpha Analytical Laboratories (Alpha), a New York-certified laboratory. The air samples were collected using 2.7-liter capacity Summa® canisters equipped with a flow controller. Each canister was individually checked, tested, and certified by the laboratory for air tightness and proper vacuum prior to shipping. The flow controllers were calibrated by the laboratory to collect air samples over an 8-hour period.

The initial vacuum for each Summa® canister was checked and recorded prior to beginning sampling activities. After the vacuum was recorded, the air sample collection began, and the air sample was drawn into the Summa® canister and through a dedicated flow controller. Following the 8-hour sample collection period, each Summa® canister was sealed with a slight vacuum remaining. Once the final vacuum was recorded, the valve to the Summa canister was closed and the end of the Summa® canister was sealed with an air-tight cap.

### **3.4 Sub-Slab Soil Vapor Sample Collection**

On November 27, 2018, four (4) sub-slab soil vapor samples (SSV-01 through SSV-04) were collected at the approximate locations illustrated on Figure 2. All sub-slab soil vapor samples were collected from beneath the slab of the deli tenant space. The samples were collected by drilling a ½-inch borehole through the concrete, inserting a Teflon-lined tube into the area beneath the concrete invert, and sealing off the surface area where the tubing meets the concrete with bee’s wax. After sealing the vapor probes, a leak check was performed using helium gas to ensure no “short-circuiting” or ambient air was being drawn in through the holes drilled in the concrete floor. Helium gas was introduced into a container/shroud (5-gallon bucket) placed above the sampling point and the sampling tubing connected to a hand-held helium gas detector. If helium was detected, the annual space was not completely sealed, and additional beeswax was added in an effort to obtain a tight seal. The above-noted steps were repeated until no helium was detected.

The sampling tubing was then connected to a 2.7-liter Summa® canister equipped with a flow controller set at a maximum flow rate of 200 milliliters per minute (mL/min) for the collection of a soil vapor sample. Each canister was individually checked, tested, and certified by the laboratory

for air tightness and proper vacuum prior to shipping. Prior to sampling, a vacuum gauge was used to measure and record the initial Summa canister vacuum pressure. Once sampling was completed, each Summa® canister was sealed with a slight vacuum remaining.

### **3.5 Boring Abandonment**

Following completion of sample collection, the boreholes were backfilled and repaired to match surrounding floor conditions.

### **3.6 Laboratory Analyses**

The air and soil vapor samples were labeled, packaged, and transferred under appropriate chain-of-custody documentation to Alpha of Mansfield, Massachusetts. Laboratory analytical documentation is provided in Appendix C. The samples were analyzed as follows:

- Sub-slab soil vapor samples SSV-01 through SSV-04 were analyzed for Chlorinated VOCs (CVOCs).
- Indoor air samples IA-01 and IA-02 and ambient air sample AA-01 were analyzed for CVOCs.

### **3.7 Investigation Derived Wastes**

No investigation derived waste was created during this investigation.

## **4.0 FINDINGS**

For the purpose of providing context to the data obtained during this investigation, analytical results are compared to available regulatory screening levels. The NYSDEC and the NYSDOH have the responsibility for overseeing environmental cleanups which are managed under a variety of different regulatory programs. The results of this investigation were reviewed along with the screening levels provided in the NYSDOH 2016 Guidance for Evaluating Soil Vapor Intrusion in the State of New York (Guidance Document), and associated 2017 Matrix A, B, and C for Sub-Slab Vapor and Indoor Air.

### **4.1 Sub-Slab Soil Vapor Sample Analytical Results**

The following information is a summary of the sub-slab soil vapor sample analytical test results (Appendix C). This information has also been included in Table 1.

#### CVOCs

- No CVOCs were detected above the NYSDOH screening levels in the sub-slab soil vapor samples analyzed.

### **4.2 Air Sample Analytical Results**

The following information is a summary of the air sample analytical test results (Appendix C). This information has also been included in Table 1.

#### CVOCs

- PCE was detected in indoor air sample IA-01 at concentration of 5.16 ug/m<sup>3</sup>, which is greater than the Matrix B NYSDOH Indoor Air screening level of 3.0 ug/m<sup>3</sup>.



- TCE was detected in indoor air samples IA-01 and IA-02 at concentrations of 7.74 ug/m<sup>3</sup> and 0.269 ug/m<sup>3</sup>, respectively, which are greater than the Matrix A NYSDOH Indoor Air screening level of 0.2 ug/m<sup>3</sup>.

## 5.0 SUMMARY AND CONCLUSIONS

AEI has completed the Supplemental Subsurface Investigation at the Site. The purpose of the investigation was to delineate elevated PCE levels detected in soil vapor near the dry cleaner tenant space, and the tenant space immediately adjoining the eastern side of the dry-cleaner space. Four (4) sub-slab soil vapor samples (SSV-01 through SSV-04), two (2) indoor air samples (IA-01 and IA-02), and one (1) exterior (i.e., background/ambient) air sample (AA-01) were collected and analyzed in tenant spaces to the east of the dry-cleaner space.

The sub-slab soil vapor sample analytical results indicate that no CVOCs were detected at concentrations greater than the NYSDOH screening levels in the sub-slab soil vapor samples analyzed during this investigation.

The indoor air sample analytical results indicate that PCE was detected in indoor air sample IA-01 at concentration of 5.16 ug/m<sup>3</sup>, which is greater than the Matrix B NYSDOH Indoor Air screening level of 3.0 ug/m<sup>3</sup>. Additionally, TCE was detected in indoor air samples IA-01 and IA-02 at concentrations of 7.74 ug/m<sup>3</sup> and 0.269 ug/m<sup>3</sup>, respectively, which are greater than the Matrix A NYSDOH Indoor Air screening level of 0.2 ug/m<sup>3</sup>. However, no CVOCs were detected in ambient air sample AA-01 at concentrations greater than the NYSDOH screening levels.

The fact that TCE was identified in the indoor air samples but not in the sub-slab soil vapor samples to the east of the dry-cleaner space suggests that a TCE vapors are migrating above-ground, and within the tenant spaces, from the suspected source near the dry-cleaning space. Similarly, although PCE was detected in sub-slab soil vapor and indoor air of tenant spaces to the east of the dry-cleaner tenant space, the concentrations were substantially lower than those detected near the dry-cleaner space and diminish with distance from the dry-cleaner space.

Based on the findings above, vapor intrusion mitigation (i.e. Sub-Slab Depressurization System [SSDS]) is recommended for the dry-cleaning tenant space and tenant space immediately east of the dry-cleaner tenant space; however, the large deli tenant space adjacent further east of that area does not require mitigation. The deli tenant space would likely benefit from improved above-ground/interior ventilation, perhaps through Heating, Ventilation and Cooling (HVAC) system modifications or other means. Future testing of indoor air should be performed to verify the effectiveness of mitigation actions at reducing indoor air levels of chlorinated VOCs.

## 6.0 Report Limitations and Reliance

This report presents a summary of work completed by AEI Consultants. The completed work includes observations and descriptions of Site conditions encountered. Where appropriate, it includes analytical results for samples taken during the course of the work. The number and location of samples are chosen to provide the requested information, subject to scope of work for which AEI was retained and limitations inherent in this type of work, but it cannot be assumed that they are representative of areas not sampled. This report should not be regarded as a guarantee that no further contamination beyond that which could have been detected within the scope of this investigation is present beneath the Site. Undocumented, unauthorized releases of hazardous material, the remains of which are not readily identifiable by visual inspection and are



of different chemical constituents, are difficult and often impossible to detect within the scope of a chemical specific investigation.

Any conclusions and/or recommendations are based on these analyses and observations, and the governing regulations. Conclusions beyond those stated and reported herein should not be inferred from this document. These services were performed in accordance with generally accepted practices, in the environmental engineering and construction field, which existed at the time and location of the work. No other warranty, either expressed or implied, has been made.

This investigation was prepared for the sole use and benefit of TD Bank. All reports, both verbal and written, whether in draft or final, are for the benefit of TD Bank. This report has no other purpose and may not be relied upon by any other person or entity without the written consent of AEI. Either verbally or in writing, third parties may come into possession of this report or all or part of the information generated as a result of this work. In the absence of a written agreement with AEI granting such rights, no third parties shall have rights of recourse or recovery whatsoever under any course of action against AEI, its officers, employees, vendors, successors or assigns. Reliance is provided in accordance with AEI's Proposal and Standard Terms & Conditions executed by TD Bank. The limitation of liability defined in the Terms and Conditions is the aggregate limit of AEI's liability to the client and all relying parties.

If there are any questions regarding our investigation, please do not hesitate to contact AEI at (732) 414-2720.

Sincerely,  
**AEI Consultants**



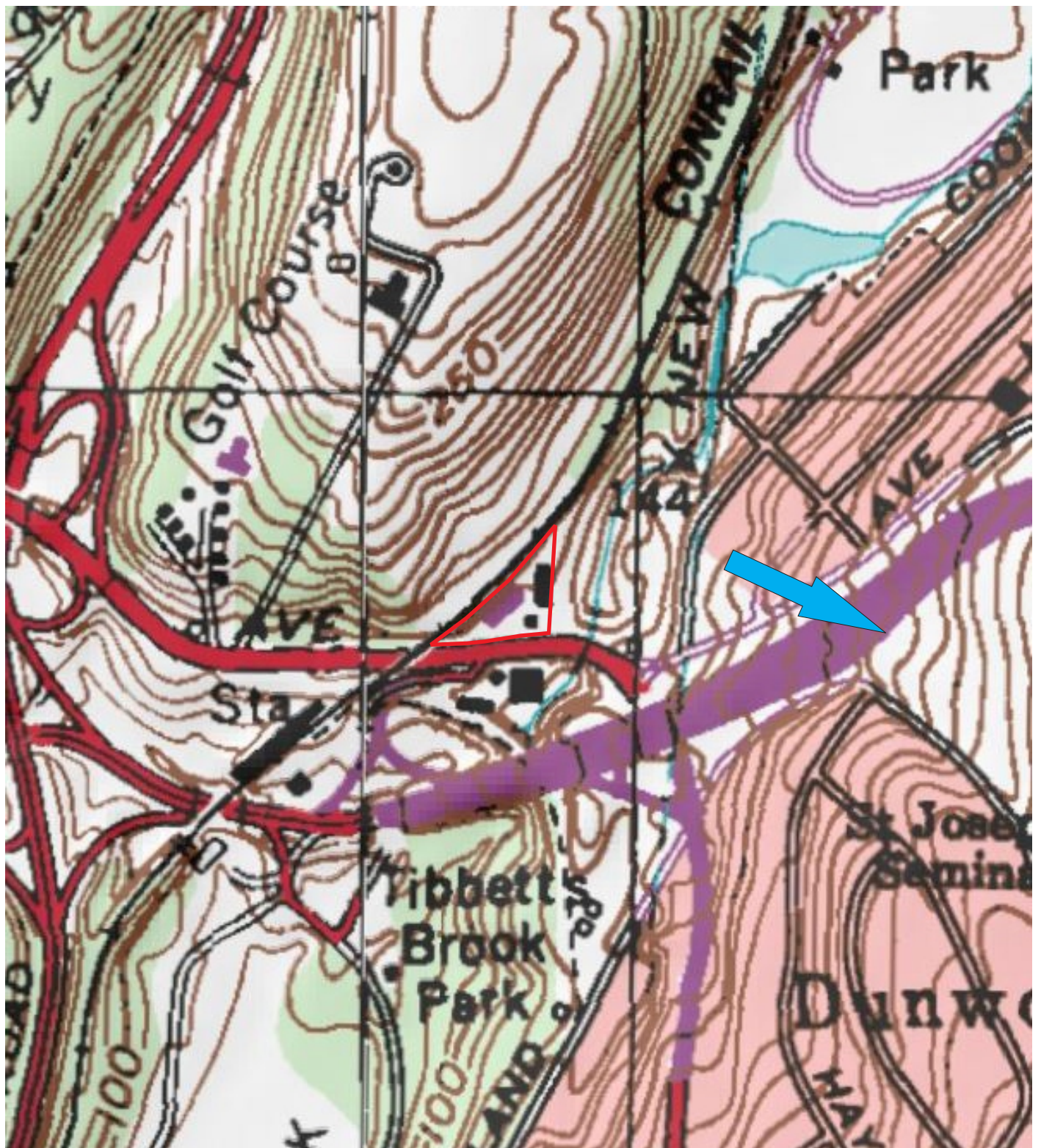
Jordan Farber  
Project Scientist



David Bausmith, PE  
Senior Author

## FIGURES

**FIGURE 1  
SITE LOCATION MAP**



Legend

Approximate Property Boundary 

Assumed Direction of Groundwater Flow 

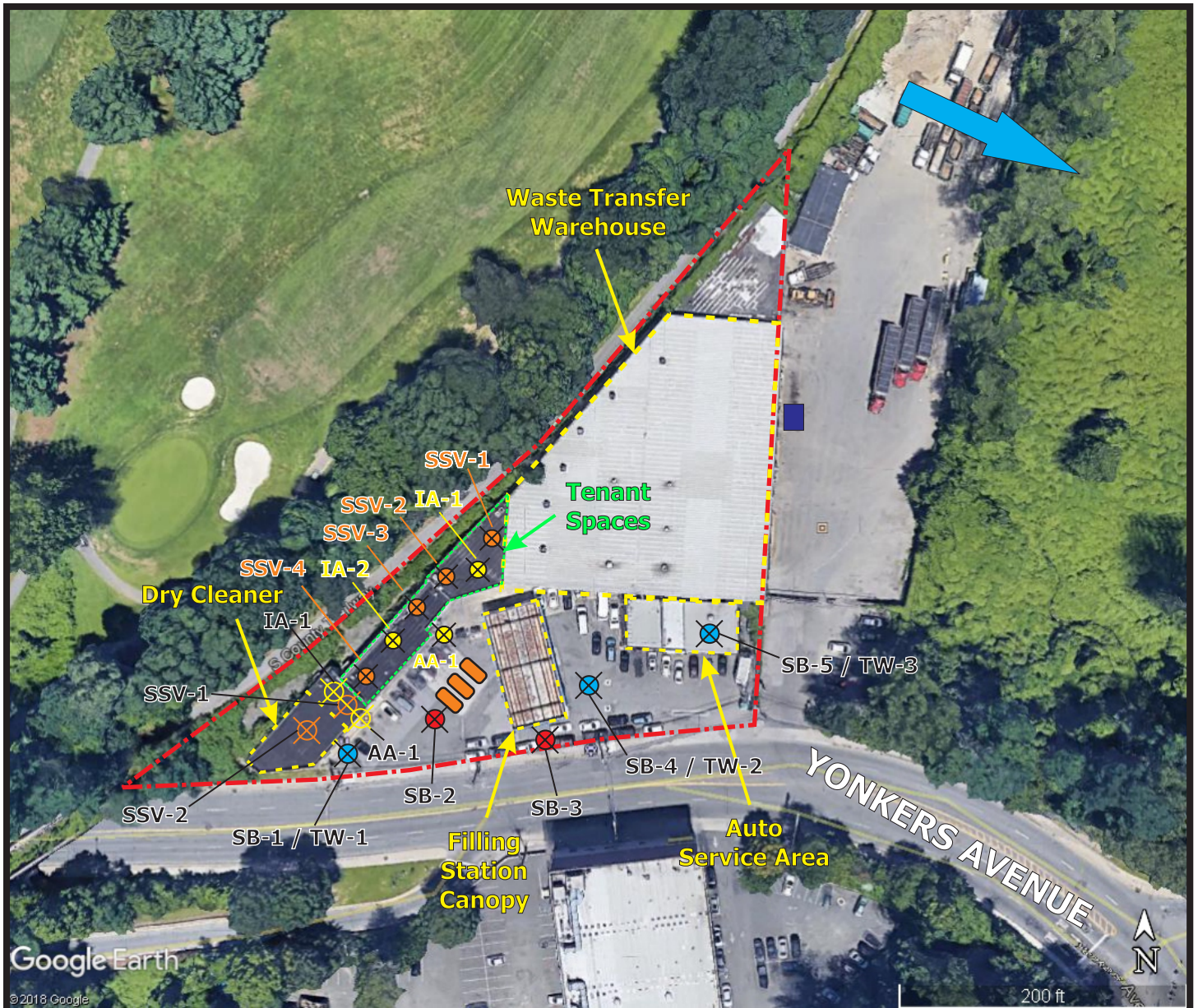


**Figure 1: Site Location Map**  
 325-397 Yonkers Avenue, Yonkers, NY 10701  
 Project Number: 398150



**FIGURE 2**  
**SAMPLE LOCATION MAP**





**Legend**

Approximate Property Boundary		11/27/18 Sub-Slab Soil Vapor Sample	
Assumed Direction of Groundwater Flow		11/27/18 Indoor/Ambient Air Sample	
Approximate UST Locations		9/26/18 Sub-Slab Soil Vapor Sample	
Approximate Oil-Water Separator		9/26/18 Indoor/Ambient Air Sample	
9/26/18 Soil Boring/Temporary Well			
9/26/18 Soil Boring			



**Figure 2: Sample Location Map**

325-397 Yonkers Avenue, Yonkers, NY 10701

Project Number: 398150



## **TABLES**



**TABLE 1**  
**AIR / VAPOR SAMPLING RESULTS**

**TABLE 1 - AIR / VAPOR SAMPLING RESULTS**  
**325-397 YONKERS AVENUE**  
**YONKERS, NEW YORK**  
**AEI PROJECT #398150**

LOCATION								SSV-1	SSV-2	SSV-01	SSV-02	SSV-03	SSV-04	IA-1	AA-1	AA-01	IA-01	IA-02	
SAMPLING DATE								9/26/2018	9/26/2018	11/27/2018	11/27/2018	11/27/2018	11/27/2018	9/26/2018	9/26/2018	11/27/2018	11/27/2018	11/27/2018	
LAB SAMPLE ID								L1838751-03	L1838751-04	L1848351-01	L1848351-02	L1848351-03	L1848351-04	L1838751-01	L1838751-02	L1848351-07	L1848351-05	L1848351-06	
SAMPLE TYPE								SOIL VAPOR	SOIL VAPOR	SOIL VAPOR	SOIL VAPOR	SOIL VAPOR	SOIL VAPOR	AIR	AIR	AIR	AIR	AIR	
	NY-SSC-A	NY-SSC-B	NY-SSC-C	NY-IAC-A	NY-IAC-B	NY-IAC-C	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
<b>Volatile Organics in Air</b>																			
1,1,1-Trichloroethane	NC	100	NC	NC	3	NC	ug/m3	ND		ND		2.16		ND		ND		ND	
1,1-Dichloroethane	NC	NC	NC	NC	NC	NC	ug/m3	ND		ND		ND		ND		ND		ND	
1,1-Dichloroethene	6	NC	NC	0.2	NC	NC	ug/m3	ND		ND		ND		ND		ND		ND	
1,2-Dichloroethane	NC	NC	NC	NC	NC	NC	ug/m3	ND		ND		ND		ND		ND		0.081	
cis-1,2-Dichloroethene	6	NC	NC	0.2	NC	NC	ug/m3	ND		ND		ND		ND		ND		ND	
Tetrachloroethene	NC	100	NC	NC	3	NC	ug/m3	<b>1720</b>		<b>78700</b>		8.95		5.79		3.32		57.8	
trans-1,2-Dichloroethene	NC	NC	NC	NC	NC	NC	ug/m3	ND		ND		ND		0.813		ND		ND	
Trichloroethene	6	NC	NC	0.2	NC	NC	ug/m3	ND		ND		ND		ND		ND		0.263	
Vinyl chloride	NC	NC	6	NC	NC	0.2	ug/m3	ND		ND		ND		ND		ND		ND	

**Notes:**

ug/m3 = micrograms per cubic meter

NC = No Criteria

ND = not detected at the reported detection limit for the sample

NY-SSC-A: New York DOH Matrix A Sub-Slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.

NY-SSC-B: New York DOH Matrix B Sub-Slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.

NY-SSC-C: New York DOH Matrix C Sub-Slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.

NY-IAC-A: New York DOH Matrix A Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.

NY-IAC-B: New York DOH Matrix B Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.

NY-IAC-C: New York DOH Matrix C Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.

Bold + Yellow Highlight = concentration exceeds applicable criteria

## **APPENDICES**

**APPENDIX A**  
**OCTOBER 25, 2018 LIMITED PHASE II SUBSURFACE**  
**INVESTIGATION**



# AEI Consultants

October 25, 2018

## LIMITED PHASE II SUBSURFACE INVESTIGATION REPORT

**Property Identification:**

325-397 Yonkers Avenue  
Yonkers, NY 10701

AEI Project No. 395010

**Prepared for:**

Mr. Thomas Lawless  
TD Bank  
P.O. Box 9540 One Portland Square, 3rd Floor  
Portland, Maine 04112

**Prepared by:**

AEI Consultants  
30 Montgomery Street, Suite 220  
Jersey City, New Jersey 07302  
(201) 332-1844

Environmental Due  
Diligence

Site Investigation &  
Remediation

Energy Performance  
& Benchmarking

Industrial Hygiene

Construction  
Consulting

Construction,  
Site Stabilization &  
Stormwater Services

Zoning Analysis  
Reports & ALTA  
Surveys

National Presence

Regional Focus

Local Solutions

# TABLE OF CONTENTS

<b>1.0 SITE DESCRIPTION .....</b>	<b>1</b>
<b>2.0 BACKGROUND .....</b>	<b>2</b>
<b>3.0 INVESTIGATION EFFORTS .....</b>	<b>2</b>
3.1 Health and Safety Plan .....	2
3.2 Permitting and Utility Clearance .....	3
3.3 Geophysical Survey .....	3
3.4 Drilling and Soil Sample Collection .....	3
3.5 Groundwater Sample Collection .....	4
3.6 Indoor/Outdoor Air Sample Collection .....	4
3.7 Sub-Slab Soil Vapor Sample Collection .....	4
3.8 Boring Abandonment .....	5
3.9 Laboratory Analyses .....	5
3.10 Investigation Derived Wastes .....	5
3.11 Limitations .....	5
<b>4.0 FINDINGS .....</b>	<b>6</b>
4.1 Geology and Hydrogeology .....	6
4.2 Soil Sample Analytical Results .....	6
4.3 Groundwater Sample Analytical Results .....	7
4.4 Sub-Slab Soil Vapor Sample Analytical Results .....	7
4.5 Air Sample Analytical Results .....	7
<b>5.0 SUMMARY AND CONCLUSIONS .....</b>	<b>8</b>
<b>6.0 REPORT LIMITATIONS AND RELIANCE .....</b>	<b>9</b>

## FIGURES

Figure 1	Site Location Map
Figure 2	Sample Location Map

## TABLES

Table 1	Soil Sampling Results
Table 2	Groundwater Sampling Results
Table 3	Sub-Slab Soil Vapor Sampling Results
Table 4	Air Sampling Results

## APPENDICES

Appendix A	Soil Boring Logs
Appendix B	Indoor Air Building Survey and Sampling Form
Appendix C	Laboratory Analytical Report (soil/groundwater)
Appendix D	Laboratory Analytical Report (air/vapor)



October 25, 2018

Mr. Thomas Lawless  
TD Bank  
P.O. Box 9540 One Portland Square, 3rd Floor  
Portland, Maine 04112

**Subject: Limited Phase II Subsurface Investigation**  
325-397 Yonkers Avenue  
Yonkers, NY 10701  
AEI Project No. 395010

AEI Consultants (AEI) is pleased to provide this report which describes the activities and results of the Limited Phase II Subsurface Investigation (Phase II) performed at the above-referenced property ("Site"). This investigation was completed in general accordance with the authorized scope of services outlined in our proposal number 60063.

## 1.0 SITE DESCRIPTION

The Site, Block 2272 Lots 1 and 3, is located on the north side of Yonkers Avenue in a mixed commercial and residential area of Yonkers, Westchester County, New York (Figure 1). The Site totals approximately 1.61 acres and is improved with three (3) two-story, slab-on-grade buildings. The buildings were reportedly constructed in 1970, 1977, 1978, 1982, and 1994, and total approximately 44,863 square feet. The Site is currently occupied by Waste Management Inc., BoniClean dry cleaner, Deli Buffet, a church, and a Sunoco gasoline service station located in the center of the property. The Site also includes a former automotive service building, which is currently vacant and in the process of being remodeled. Additionally, the Site is improved with asphalt-paved parking areas, concrete walkways, and associated landscaping.

The Site is bordered by the Fairways at Dunwoodie Golf Course to the north, vacant, wooded land and Tibbets Creek to the east, Yonkers Avenue followed by Planet Fitness to the south, and the Fairways at Dunwoodie Golf Course to the west. The properties immediately adjacent to the Site mainly include residential and commercial buildings.

The Site is relatively flat with the regional topographic gradient sloping toward the east/southeast. Therefore, the direction of groundwater flow beneath the Site is inferred to be to the east/southeast.

According to the United State Geological Survey (USGS), the Site is underlain by Pleistocene glacial till deposits. Based on a review of the United States Department of Agriculture (USDA) Soil Survey, the majority of the soils in the vicinity of the Site are classified as the Charlton-Chatfield complex, which is indicative of coarse-loamy melt-out till derived from granite, gneiss, and/or schist.



## 2.0 BACKGROUND

A Phase I Environmental Site Assessment (ESA) was prepared by AEI as detailed in our report dated August 24, 2018 (AEI Project Number 392864). Based on the Phase I ESA, the following recognized environmental conditions (RECs) were identified at the Site:

- A Phase II ESA investigation was conducted onsite in June 2005 by Laurel Environmental Associates, Ltd (LEA). This investigation included collecting soil samples west of the office/retail building to assess the presence or absence of impacts associated with two heating oil Underground Storage Tanks (USTs) reportedly located in this area. The results indicated Semi-Volatile Organic Compounds (SVOCs) at concentrations greater than the New York State Department of Environmental Conservation (NYSDEC) Residential Soil Cleanup Objectives (SCO) specified under the Technical Assistance Guidance Memorandum (TAGM). The Site representative reported no knowledge of USTs in this area, and no heating oil USTs were listed in the regulatory database report. The lack of information on the location and condition of these heating oil USTs, as well as the confirmed presence of SVOCs in soil at concentrations that exceed regulatory criteria, are considered a REC.
- In June 2005, SVOCs and lead were detected at concentrations above TAGM SCOs in soil samples collected by LEA in boring SB-17, installed west of the automotive repair building. The confirmed presence of contaminants above regulatory criteria is considered a REC.
- In June 2005, soil samples collected inside of the automotive repairs building (SB-15), and south of the automotive building (SB-13) had elevated levels of chromium. The confirmed presence of contaminants above regulatory criteria is considered a REC.
- An oil-water separator is connected to the Site truck repair shop located within the waste transfer station building. Oil-water separators have the potential to act as conduits to the subsurface of properties and their conditions may deteriorate with time. Due to its connection to the Site truck maintenance facility, there is a potential that contaminants such as oils or solvents present in the waste stream could impact the soil beneath the property if the separator or associated drain system has become compromised. On this basis, the presence of the separator represents a REC.
- Based on the age of the gasoline service station USTs (over 10 years), and the absence of consistent tank and line integrity test results, the presence of these USTs represent a REC in connection with the subject property.
- A dry cleaner has been onsite since approximately 1985, which has utilized tetrachloroethene (PCE). Subsurface sampling was conducted at the Site in June 2005 which identified detectable levels of PCE, but at concentrations below regulatory standards. The historic use of PCE by dry cleaners represents a REC in connection with the Site.

## 3.0 INVESTIGATION EFFORTS

Based on the above findings, AEI was retained by TD Bank ("Client") to evaluate potential impacts related to the on-site dry-cleaning operations, the potential heating oil USTs to the west of the retail building, the oil-water separator (OWS), and the gasoline filling and auto service operations.

### 3.1 Health and Safety Plan

A Site-specific health and safety plan was prepared and kept onsite for the duration of the fieldwork.

### **3.2 Permitting and Utility Clearance**

Drilling permits were not required for this investigation. New York 811 was contacted to provide a mark out of public utilities servicing the Site. Delta Geophysics Inc. ("Delta") of Catasauqua, Pennsylvania provided geophysical services to survey the area of the suspected heating oil USTs reported to the west of the retail building. Delta also surveyed the areas of the potential boring locations to investigate potential underground hazards.

### **3.3 Geophysical Survey**

On September 26, 2018, a geophysical survey was conducted by Delta. The purpose of the survey was to identify the presence or absence of heating oil USTs and to clear boring locations to evaluate the presence of underground structures, including utilities, disturbed soils, and/or cavities, using ground penetrating radar (GPR) and other geophysical methods. The geophysical survey was conducted throughout interior and exterior portions of the Site.

### **3.4 Drilling and Soil Sample Collection**

On September 26, 2018, five (5) soil borings (SB-1 through SB-5) were advanced on the Site (Figure 2). The borings were advanced by Core Down Drilling LLC ("Core Down") of Brewster, New York using a direct-push drill rig (Geoprobe®). The location and depth of each boring is listed below:

- Boring SB-1 was advanced to 15 feet below ground surface (bgs) in the parking lot; southeast of the dry cleaner. One soil sample was collected within the 10.5-11-foot bgs depth interval. This boring location was also converted into a temporary well point for the collection of a groundwater sample (TW-1).
- Boring SB-2 was advanced to 15 feet bgs in the parking lot; southwest of the gasoline USTs. One soil sample was collected within the 9-9.5-foot bgs depth interval.
- Boring SB-3 was advanced to 15 feet bgs to the south of the filling station. One soil sample was collected within the 14.5-15-foot bgs depth interval.
- Boring SB-4 was advanced to 20 feet bgs to the east of the filling station. One soil sample was collected within the 17-17.5-foot bgs depth interval. This boring location was also converted into a temporary well point for the collection of a groundwater sample (TW-2).
- Boring SB-5 was advanced to 20 feet bgs to the south of the auto service area. One soil sample was collected within the 18.5-19-foot bgs depth interval. This boring location was also converted into a temporary well point for the collection of a groundwater sample (TW-3).

Each boring was installed for the purpose of soil sample collection with three locations designated for temporary well point installment for groundwater sampling. The three (3) temporary well points were installed in boring locations SB-1, SB-4, and SB-5.

The borings were advanced using 2.25-inch outer diameter rods, and samples were collected continuously by advancing the five-foot-long rods equipped with acetate sample liners. After each interval, the core was retrieved, core barrel disassembled, and the sample liner was removed and transferred to the onsite geologist. The target depths were achieved at all boring locations.

The soil borings were logged using the Unified Soil Classification System. A photo ionization detector (PID) was used to screen soil samples for total VOCs in the field, and the PID readings for each sample were recorded on the boring logs (Appendix A).

### **3.5 Groundwater Sample Collection**

On September 26, 2018, groundwater was sampled from boring SB-1 (sample designation TW-1), boring SB-4 (sample designation TW-2), and boring SB-5 (sample designation TW-3). Groundwater was observed between 11 and 19 feet bgs. Groundwater was sampled from the temporary well points using temporary PVC casing inserted into the boreholes. The groundwater samples were collected using a peristaltic pump and placed into properly preserved laboratory-supplied bottles.

### **3.6 Indoor/Outdoor Air Sample Collection**

On September 26, 2018, AEI performed a survey of the interior of the dry-cleaning space and adjacent tenant space to evaluate appropriate sub-slab sample locations and the potential presence of materials/substances that could represent indoor “background” VOC sources (i.e., solvents, fuels, etc.). These observations are included on an Indoor Air Building Survey and Sampling Form (Appendix B) and used to provide context to the analytical laboratory results, as appropriate.

On September 26, 2018, one (1) indoor air sample (IA-1) and one (1) exterior (i.e., background/ambient) air sample (AA-1) were collected. The air samples were collected from within the breathing zone, approximately 3 to 5 feet above the ground surface. The air sampling equipment was provided by Alpha Analytical Laboratories (Alpha), a New York-certified laboratory. The air samples were collected using 2.7-liter capacity Summa<sup>®</sup> canisters equipped with a flow controller. Each canister was individually checked, tested, and certified by the laboratory for air tightness and proper vacuum prior to shipping. The flow controllers were calibrated by the laboratory to collect air samples over an 8-hour period.

The initial vacuum for each Summa<sup>®</sup> canister was checked and recorded prior to beginning sampling activities. After the vacuum was recorded, the air sample collection began and the air sample was drawn into the Summa<sup>®</sup> canister and through a dedicated flow controller. Following the 8-hour sample collection period, each Summa<sup>®</sup> canister was sealed with a slight vacuum remaining. Once the final vacuum was recorded, the valve to the Summa canister was closed and the end of the Summa<sup>®</sup> canister was sealed with an air-tight cap. The indoor air and ambient air samples were placed “on hold” at the laboratory pending the results of the sub-slab soil vapor sampling described in Section 3.7.

### **3.7 Sub-Slab Soil Vapor Sample Collection**

On September 26, 2018, two (2) sub-slab soil vapor samples (SSV-1 and SSV-2) were collected at the approximate locations illustrated on Figure 2. One sub-slab soil vapor sample (SSV-2) was collected from beneath the slab of the onsite dry cleaner and the other sub-slab soil vapor sample (SSV-1) was collected from beneath the slab of the tenant space adjacent to the northeast of the dry cleaner. The samples were collected by drilling a ½-inch borehole through the concrete, inserting a Teflon-lined tube into the area beneath the concrete invert, and sealing off the surface area where the tubing meets the concrete with bee’s wax. After sealing the vapor probes, a leak check was performed using helium gas to ensure no “short-circuiting” or ambient air was being

drawn in through the holes drilled in the concrete floor. Helium gas was introduced into a container/shroud (5-gallon bucket) placed above the sampling point and the sampling tubing connected to a hand-held helium gas detector. If helium was detected, the annual space was not completely sealed, and additional beeswax was added in an effort to obtain a tight seal. The above noted steps were repeated until no helium was detected.

The sampling tubing was then connected to a 2.7-liter Summa<sup>®</sup> canister equipped with a flow controller set at a maximum flow rate of 200 milliliters per minute (mL/min) for the collection of a soil vapor sample. Each canister was individually checked, tested, and certified by the laboratory for air tightness and proper vacuum prior to shipping. Prior to sampling, a vacuum gauge was used to measure and record the initial Summa canister vacuum pressure. Once sampling was completed, each Summa canister was sealed with a slight vacuum remaining.

### **3.8 Boring Abandonment**

Following completion of sample collection, the holes were backfilled and repaired to match surrounding conditions.

### **3.9 Laboratory Analyses**

The soil and groundwater samples were labeled and placed into a cooler with ice following sampling and transferred under appropriate chain-of-custody documentation to Alpha Laboratories of Westborough, Massachusetts. The air and soil vapor samples were labeled, packaged, and transferred under appropriate chain-of-custody documentation to Alpha of Mansfield, Massachusetts. Laboratory analytical documentation is provided in Appendices C and D. The samples were analyzed as follows:

- All soil samples (SB-1 through SB-5) were analyzed for Target Compound List (TCL) VOCs.
- Additionally, soil sample SB-5 was analyzed for New York Commissioner Policy (CP)-51 SVOC Base Neutral Extractables (B/Ns), Polychlorinated Biphenyls (PCBs), and Resource Conservation and Recovery Act (RCRA) metals.
- All groundwater samples (TW-1, TW-2, and TW-3) were analyzed for TCL VOCs.
- Additionally, groundwater samples TW-2 and TW-3 were analyzed for TCL B/Ns.
- Sub-slab soil vapor samples SSV-1 and SSB-2 were analyzed for VOCs.

As previously stated, the indoor air and ambient air samples were placed “on hold” at the laboratory pending the results of the sub-slab soil vapor samples.

### **3.10 Investigation Derived Wastes**

No investigation derived waste was created during this investigation.

### **3.11 Limitations**

The originally proposed boring located near the oil-water separator, to the east of the warehouse building, was not achieved due to access issues. Waste Management (current tenant of warehouse space) denied access to the proposed boring location.

Additionally, access to the area near the suspected heating oil tanks was limited due to dense vegetation. The accessible areas that could be surveyed with the GPR equipment did not reveal evidence of a former or current UST; therefore, no borings were installed in the area.

#### **4.0 FINDINGS**

For the purpose of providing context to the data obtained during this investigation, analytical results are compared to available regulatory screening levels. The NYSDEC and the NY State Department of Health (NYSDOH) have the responsibility for overseeing environmental cleanups which are managed under a variety of different regulatory programs. The results of this investigation were reviewed along with the NYSDEC CP-51 Soil Cleanup Levels for soil, New York Codes, Rules, and Regulations (NYCRR) Part 375 Restricted Use Commercial Criteria for soil, NYCRR Part 375 Unrestricted Use Criteria for soil, New York Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards (AWQS) Criteria for groundwater, and the screening levels provided in the NYSDOH 2016 Guidance for Evaluating Soil Vapor Intrusion in the State of New York (Guidance Document), and associated 2017 Matrix A, B, and C for Sub-Slab Vapor and Indoor Air. Additionally, because several non-chlorinated VOCs are not included as part of the 2016 NYSDOH Guidance Document, comparisons were made to the United States Environmental Protection Agency (EPA) Vapor Intrusion Screening Levels (VISLs) Commercial Target Sub-Slab & Exterior Soil Gas Concentrations and Default Commercial Target Indoor Air Concentrations.

#### **4.1 Geology and Hydrogeology**

Material encountered in each of the borings generally consisted of a layer of fill followed by brown sand and silt (Appendix A). Petroleum odors and green staining were observed in borings SB-2, SB-3, and SB-4, with the highest PID reading observed at 393.6 parts per million by volume (ppmv) within the 14.5-15-foot bgs depth interval of boring SB-3. Borings SB-1 and SB-5 did not exhibit any evidence of odors or staining and had PID readings of 0.0 ppmv. Soil samples were collected for laboratory analysis at the depth intervals representing the highest likelihood for contamination based on the field screening results. Since there was no evidence of impacts in borings SB-1 and SB-5, the soil samples from these borings were collected from the six-inch interval above the groundwater table.

Groundwater was encountered between 11 and 19 feet bgs throughout the Site.

#### **4.2 Soil Sample Analytical Results**

The following information is a summary of the soil sample analytical test results (Appendix C). This information has also been included in Table 1.

##### VOCs

- No VOCs were detected at concentrations greater than the applicable soil criteria in the soil samples analyzed.

##### SVOCs

- No SVOCs were detected in the soil sample analyzed (SB-5).

##### PCBs

- No PCBs were detected in the soil sample analyzed (SB-5).

#### Metals

- No metals were detected at concentrations greater than the applicable soil criteria in the soil sample analyzed (SB-5).

### **4.3 Groundwater Sample Analytical Results**

The following information is a summary of the groundwater sample analytical test results (Appendix C). This information has also been included in Table 2.

#### VOCs

- PCE was detected in groundwater sample TW-1 at a concentration greater than the New York TOGS AWQS.
- 1,2,4,5-Tetramethylbenzene, isopropylbenzene, n-butylbenzene, n-propylbenzene, and sec-butylbenzene were detected in groundwater samples TW-2 and TW-3 at concentrations greater than the New York TOGS AWQS.
- 1,2,4-Trimethylbenzene and 1,3,5-trimethylbenzene were detected in groundwater sample TW-3 at a concentration greater than the New York TOGS AWQS.
- Benzene, ethylbenzene, naphthalene, and p/m-xylene were detected in groundwater sample TW-2 at a concentration greater than the New York TOGS AWQS.
- No other VOCs were detected at concentrations greater than the New York TOGS AWQS in the groundwater samples analyzed.

#### SVOCs

- No SVOCs were detected at concentrations greater than the applicable groundwater criteria in the groundwater samples analyzed.

### **4.4 Sub-Slab Soil Vapor Sample Analytical Results**

The following information is a summary of the sub-slab soil vapor sample analytical test results (Appendix D). This information has also been included in Table 3.

#### VOCs

- PCE was detected at concentrations greater than the NYSDOH screening levels and EPA VISLs in both sub-slab soil vapor samples analyzed.
- No other VOCs were detected above the NYSDOH or EPA screening levels in the sub-slab soil vapor samples analyzed.

Due to the PCE exceedances in sub-slab soil vapor samples SSV-1 and SSV-2, indoor air sample IA-1 and ambient air sample AA-1 were analyzed to determine whether a vapor intrusion pathway exists.

### **4.5 Air Sample Analytical Results**

The following information is a summary of the air sample analytical test results (Appendix D). This information has also been included in Table 4.



## VOCs

- Benzene, carbon tetrachloride, chloroform, PCE, and trichloroethene (TCE) were detected at concentrations greater than the NYSDOH screening levels and/or EPA VISLs in indoor air sample IA-1.
- Benzene, carbon tetrachloride, PCE, tetrahydrofuran, and TCE were detected in ambient air sample AA-1.

## **5.0 SUMMARY AND CONCLUSIONS**

AEI has completed the Limited Phase II Subsurface Investigation at the Site. The purpose of the investigation was to evaluate potential impacts related to the on-site dry-cleaning operations, the potential heating oil USTs to the west of the retail building, the oil-water separator, and the gasoline filling and auto service operations. Five (5) soil borings (SB-1 through SB-6) were advanced throughout the exterior portions of the Site. Three (3) of the boring locations (SB-1, SB-4, and SB-5) were converted into temporary well points for the collection of groundwater samples. Additionally, two (2) sub-slab soil vapor samples (SSV-1 and SSV-2), one (1) indoor air sample (IA-1), and one (1) exterior (i.e., background/ambient) air sample (AA-01) were collected and analyzed.

Due to access limitations near the OWS, drilling was not conducted in this location. Additionally, due to overgrown vegetation and lack of evidence of a UST in the area of the suspected heating oil USTs, drilling was also not conducted in this location.

The soil sample analytical results indicate that no VOCs were detected at concentrations greater than the applicable soil criteria in the soil samples analyzed. Additionally, no SVOCs, PCBs, or metals were detected at concentrations greater than the applicable soil criteria in soil sample SB-5.

The groundwater sample analytical results indicate that PCE was detected in groundwater sample TW-1 at a concentration greater than the New York TOGS AWQS. Additionally, 1,2,4,5-tetramethylbenzene, isopropylbenzene, n-butylbenzene, n-propylbenzene, and sec-butylbenzene were detected in groundwater samples TW-2 and TW-3 at concentrations greater than the New York TOGS AWQS; 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene were detected in groundwater sample TW-3 at a concentration greater than the New York TOGS AWQS; and benzene, ethylbenzene, naphthalene, and p/m-xylene were detected in groundwater sample TW-2 at a concentration greater than the New York TOGS AWQS. No other VOCs were detected at concentrations greater than the New York TOGS AWQS in the groundwater samples analyzed.

No SVOCs were detected at concentrations greater than the applicable groundwater criteria in the groundwater samples analyzed.

The sub-slab soil vapor sample analytical results indicate that PCE was detected at concentrations greater than the NYSDOH screening levels and EPA VISLs in both sub-slab soil vapor samples analyzed. No other VOCs were detected above the NYSDOH or EPA screening levels in the sub-slab soil vapor samples analyzed. Due to the PCE exceedances in sub-slab soil vapor samples SSV-1 and SSV-2, indoor air sample IA-1 and ambient air sample AA-1 were analyzed to determine whether a vapor intrusion pathway exists.



The indoor air sample analytical results indicate that benzene, chloroform, and tetrahydrofuran were detected at concentrations greater than their applicable EPA VISLs in indoor air sample IA-1. However, benzene, chloroform, and tetrahydrofuran were not detected in the sub-slab soil vapor samples and were detected in ambient air sample AA-1; therefore, it is likely that their presence in indoor air is not due to vapor intrusion but is attributable to a source within the Site building or the ambient (outdoor) air.

TCE and carbon tetrachloride were detected in indoor air sample IA-1 at concentrations of 0.396 micrograms per cubic meter ( $\text{ug}/\text{m}^3$ ) and  $0.263 \text{ ug}/\text{m}^3$ , respectively. These concentrations exceed the NYSDOH Matrix A Indoor Air Concentrations Criteria of  $0.2 \text{ ug}/\text{m}^3$  for these compounds; however, since the compounds were not detected in the sub-slab soil vapor samples, no additional actions are recommended to address human exposures for these compounds per NYSDOH Matrix A.

PCE was detected in indoor air sample IA-1 at a concentration of  $9.9 \text{ ug}/\text{m}^3$ . This concentration exceeds the NYSDOH Matrix B Indoor Air Concentrations Criteria of  $3 \text{ ug}/\text{m}^3$  for PCE. When considered along with the concentrations of PCE detected in sub-slab soil vapor samples SSV-1 and SSV-2 of  $1,720 \text{ ug}/\text{m}^3$  and  $78,700 \text{ ug}/\text{m}^3$ , respectively, the NYSDOH Matrix B guidance table recommends that mitigation be conducted to minimize current or potential exposures associated with soil vapor intrusion. Additionally, AEI recommends conducting an additional round of sampling that includes sub-slab soil vapor and indoor air samples within the Dunwoodie Deli/Buffer space to delineate the extent of the PCE vapor contamination in order to determine which areas of the Site building will require mitigation activities.

Furthermore, since exceedances of dry-cleaner solvent and petroleum related VOCs were detected in groundwater throughout the Site, the release was reported to the NYSDEC as required.

## **6.0 Report Limitations and Reliance**

This report presents a summary of work completed by AEI Consultants. The completed work includes observations and descriptions of Site conditions encountered. Where appropriate, it includes analytical results for samples taken during the course of the work. The number and location of samples are chosen to provide the requested information, subject to scope of work for which AEI was retained and limitations inherent in this type of work, but it cannot be assumed that they are representative of areas not sampled. This report should not be regarded as a guarantee that no further contamination beyond that which could have been detected within the scope of this investigation is present beneath the Site. Undocumented, unauthorized releases of hazardous material, the remains of which are not readily identifiable by visual inspection and are of different chemical constituents, are difficult and often impossible to detect within the scope of a chemical specific investigation.

Any conclusions and/or recommendations are based on these analyses and observations, and the governing regulations. Conclusions beyond those stated and reported herein should not be inferred from this document. These services were performed in accordance with generally accepted practices, in the environmental engineering and construction field, which existed at the time and location of the work. No other warranty, either expressed or implied, has been made.

This investigation was prepared for the sole use and benefit of TD Bank. All reports, both verbal and written, whether in draft or final, are for the benefit of TD Bank. This report has no other

purpose and may not be relied upon by any other person or entity without the written consent of AEI. Either verbally or in writing, third parties may come into possession of this report or all or part of the information generated as a result of this work. In the absence of a written agreement with AEI granting such rights, no third parties shall have rights of recourse or recovery whatsoever under any course of action against AEI, its officers, employees, vendors, successors or assigns. Reliance is provided in accordance with AEI's Proposal and Standard Terms & Conditions executed by TD Bank. The limitation of liability defined in the Terms and Conditions is the aggregate limit of AEI's liability to the client and all relying parties.

If there are any questions regarding our investigation, please do not hesitate to contact AEI at (732) 414-2720.

Sincerely,  
**AEI Consultants**



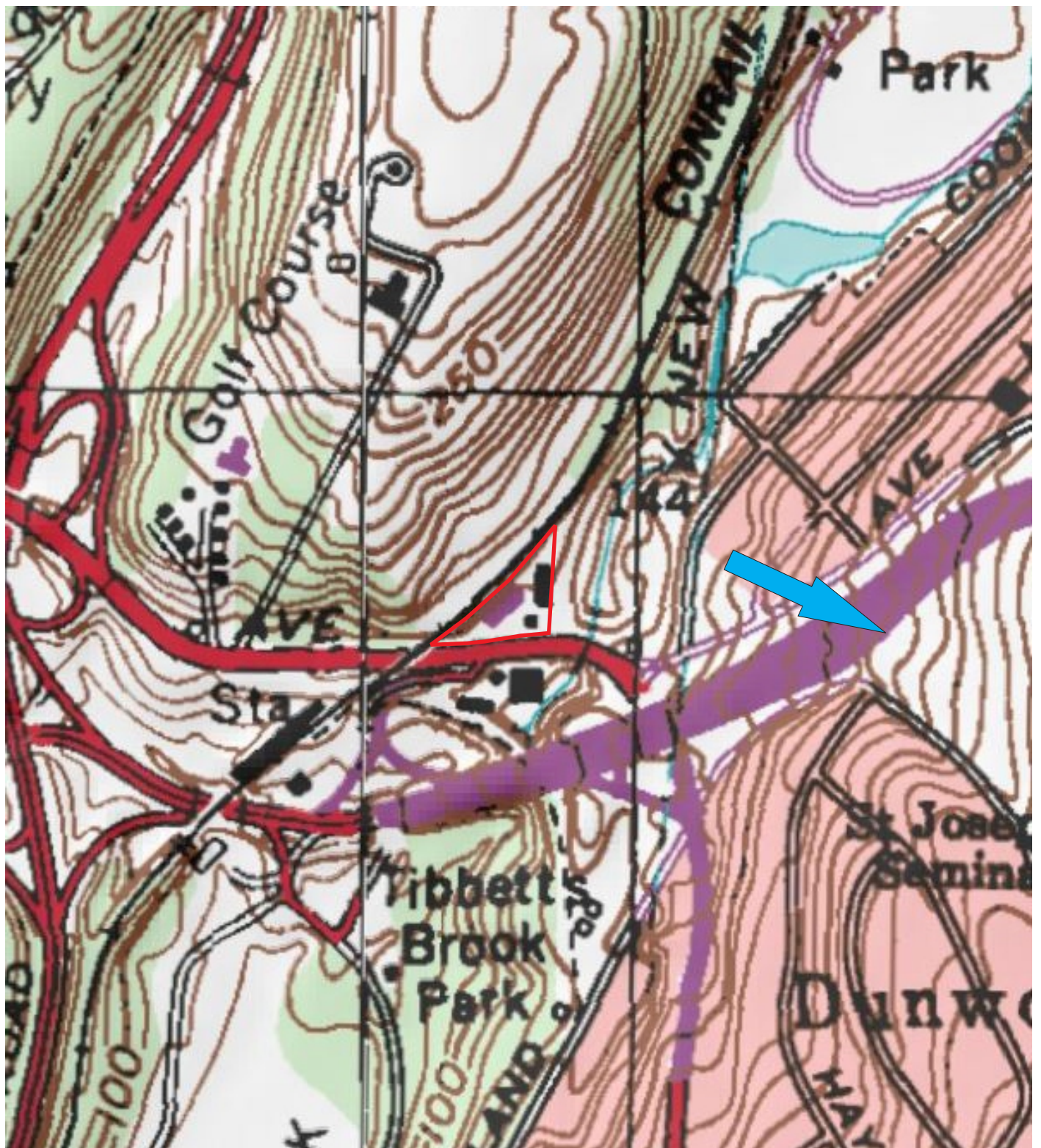
Jordan Farber  
Project Scientist



Anthony Cauterucci, CHMM  
Site Mitigation Manager – NY/NJ

## FIGURES

**FIGURE 1  
SITE LOCATION MAP**



Legend

Approximate Property Boundary 

Assumed Direction of Groundwater Flow 



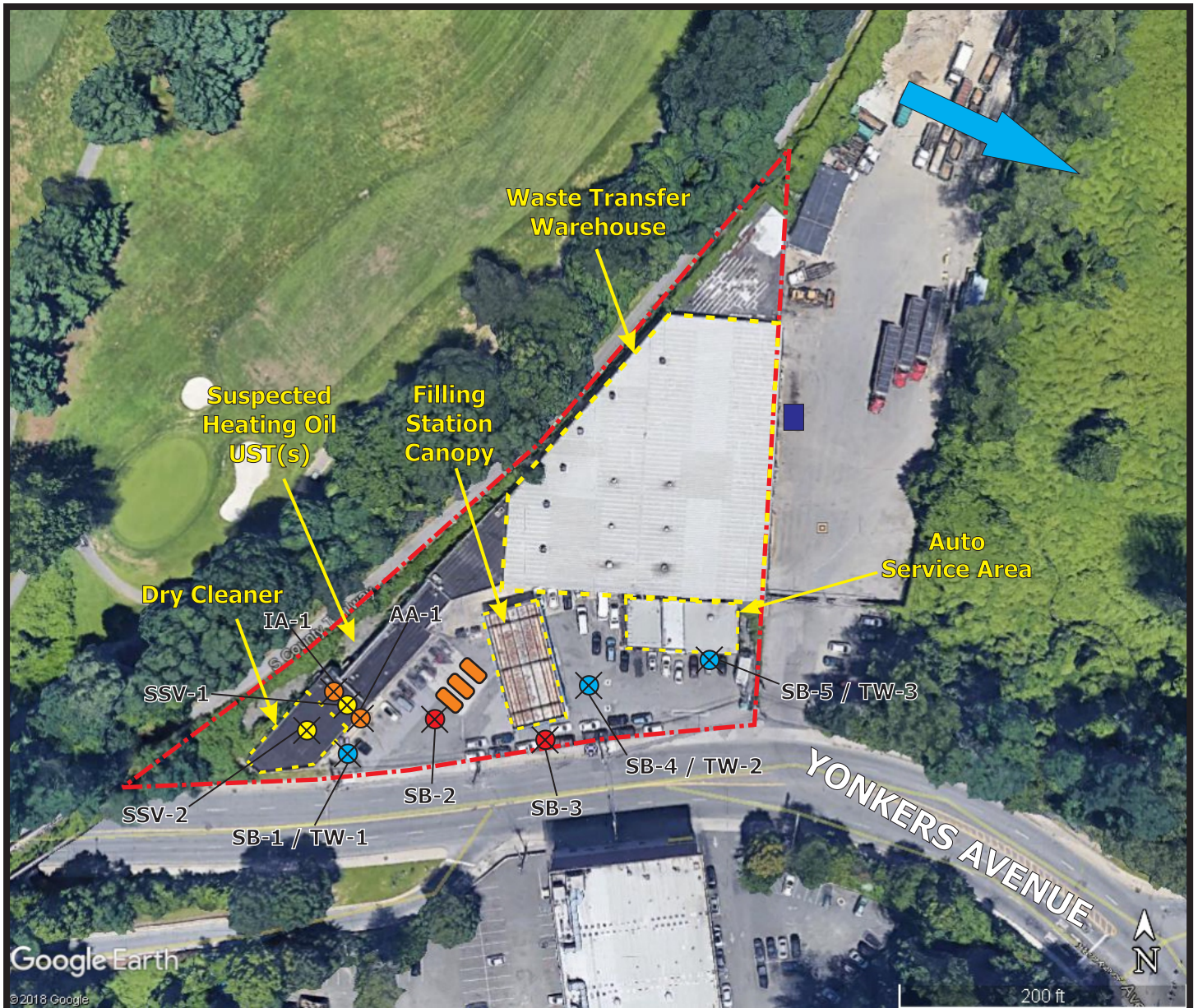
**Figure 1: Site Location Map**

325-397 Yonkers Avenue  
 Yonkers, NY 10701  
 Project Number: 395010

**AEI**  
 Consultants

**FIGURE 2**  
**SAMPLE LOCATION MAP**





**Legend**

- Approximate Property Boundary - - - - -
- Assumed Direction of Groundwater Flow ➔
- Approximate UST Locations
- Approximate Oil-Water Separator
- Soil Boring/Temporary Well Location ⊗
- Soil Boring Location ⊗
- Sub-Slab Soil Vapor Sample Location ⊗
- Indoor/Ambient Air Sample Location ⊗



**Figure 2: Sample Location Map**

325-397 Yonkers Avenue  
 Yonkers, NY 10701  
 Project Number: 395010





## **TABLES**

**TABLE 1**  
**SOIL SAMPLING RESULTS**

**TABLE 1 - SOIL SAMPLING RESULTS**  
**325-397 YONKERS AVENUE**  
**YONKERS, NEW YORK**  
**PROJECT #395010**

LOCATION	SB-1/10.5-11				SB-2/9-9.5		SB-3/14.5-15		SB-4/17-17.5		SB-5/18.5-19	
SAMPLING DATE	9/26/2018				9/26/2018		9/26/2018		9/26/2018		9/26/2018	
LAB SAMPLE ID	L1838656-01				L1838656-02		L1838656-03		L1838656-04		L1838656-05	
SAMPLE TYPE	SOIL				SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)	10.5-11				9-9.5		14.5-15		17-17.5		18.5-19	
	NY-CP51	NY-RESC	NY-UNRES	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual
<b>Volatile Organics by 8260/5035</b>												
1,1,1,2-Tetrachloroethane	NC	NC	NC	mg/kg	ND		ND		ND		ND	
1,1,1-Trichloroethane	NC	500	0.68	mg/kg	ND		ND		ND		ND	
1,1,2,2-Tetrachloroethane	NC	NC	NC	mg/kg	ND		ND		ND		ND	
1,1,2-Trichloroethane	NC	NC	NC	mg/kg	ND		ND		ND		ND	
1,1-Dichloroethane	NC	240	0.27	mg/kg	ND		ND		ND		ND	
1,1-Dichloroethene	NC	500	0.33	mg/kg	ND		ND		ND		ND	
1,1-Dichloropropene	NC	NC	NC	mg/kg	ND		ND		ND		ND	
1,2,3-Trichlorobenzene	NC	NC	NC	mg/kg	ND		ND		ND		ND	
1,2,3-Trichloropropane	NC	NC	NC	mg/kg	ND		ND		ND		ND	
1,2,4,5-Tetramethylbenzene	NC	NC	NC	mg/kg	ND		0.0082		0.16		0.089	J
1,2,4-Trichlorobenzene	NC	NC	NC	mg/kg	ND		ND		ND		ND	
1,2,4-Trimethylbenzene	3.6	190	3.6	mg/kg	ND		ND		ND		ND	
1,2-Dibromo-3-chloropropane	NC	NC	NC	mg/kg	ND		ND		ND		ND	
1,2-Dibromoethane	NC	NC	NC	mg/kg	ND		ND		ND		ND	
1,2-Dichlorobenzene	NC	500	1.1	mg/kg	ND		ND		ND		ND	
1,2-Dichloroethane	NC	30	0.02	mg/kg	ND		ND		ND		ND	
1,2-Dichloroethene, Total	NC	NC	NC	mg/kg	ND		ND		ND		ND	
1,2-Dichloropropane	NC	NC	NC	mg/kg	ND		ND		ND		ND	
1,3,5-Trimethylbenzene	8.4	190	8.4	mg/kg	ND		0.00027	J	ND		ND	
1,3-Dichlorobenzene	NC	280	2.4	mg/kg	ND		ND		ND		ND	
1,3-Dichloropropane	NC	NC	NC	mg/kg	ND		ND		ND		ND	
1,3-Dichloropropene, Total	NC	NC	NC	mg/kg	ND		ND		ND		ND	
1,4-Dichlorobenzene	NC	130	1.8	mg/kg	ND		ND		ND		ND	
1,4-Dioxane	NC	130	0.1	mg/kg	ND		ND		ND		ND	
2,2-Dichloropropane	NC	NC	NC	mg/kg	ND		ND		ND		ND	
2-Butanone	NC	500	0.12	mg/kg	ND		ND		ND		ND	
2-Hexanone	NC	NC	NC	mg/kg	ND		ND		ND		ND	
4-Methyl-2-pentanone	NC	NC	NC	mg/kg	ND		ND		ND		ND	
Acetone	NC	500	0.05	mg/kg	0.015		0.022		ND		ND	0.018
Acrylonitrile	NC	NC	NC	mg/kg	ND		ND		ND		ND	
Benzene	0.06	44	0.06	mg/kg	ND		0.0047		ND		ND	
Bromobenzene	NC	NC	NC	mg/kg	ND		ND		ND		ND	
Bromochloromethane	NC	NC	NC	mg/kg	ND		ND		ND		ND	
Bromodichloromethane	NC	NC	NC	mg/kg	ND		ND		ND		ND	
Bromoform	NC	NC	NC	mg/kg	ND		ND		ND		ND	
Bromomethane	NC	NC	NC	mg/kg	ND		ND		ND		ND	
Carbon disulfide	NC	NC	NC	mg/kg	ND		ND		ND		ND	
Carbon tetrachloride	NC	22	0.76	mg/kg	ND		ND		ND		ND	
Chlorobenzene	NC	500	1.1	mg/kg	ND		ND		ND		ND	
Chloroethane	NC	NC	NC	mg/kg	ND		ND		ND		ND	
Chloroform	NC	350	0.37	mg/kg	ND		ND		ND		ND	
Chloromethane	NC	NC	NC	mg/kg	ND		ND		ND		ND	
cis-1,2-Dichloroethene	NC	500	0.25	mg/kg	ND		ND		ND		ND	
cis-1,3-Dichloropropene	NC	NC	NC	mg/kg	ND		ND		ND		ND	
Dibromochloromethane	NC	NC	NC	mg/kg	ND		ND		ND		ND	
Dibromomethane	NC	NC	NC	mg/kg	ND		ND		ND		ND	
Dichlorodifluoromethane	NC	NC	NC	mg/kg	ND		ND		ND		ND	
Ethyl ether	NC	NC	NC	mg/kg	ND		ND		ND		ND	
Ethylbenzene	1	390	1	mg/kg	ND		0.0025		0.02	J	ND	
Hexachlorobutadiene	NC	NC	NC	mg/kg	ND		ND		ND		ND	
Isopropylbenzene	2.3	NC	NC	mg/kg	ND		0.0011		0.039	J	ND	
Methyl tert butyl ether	0.93	500	0.93	mg/kg	ND		0.00076	J	ND		ND	
Methylene chloride	NC	500	0.05	mg/kg	ND		ND		ND		ND	
n-Butylbenzene	12	500	12	mg/kg	ND		0.00081	J	0.083		0.055	
n-Propylbenzene	3.9	500	3.9	mg/kg	ND		0.0018		0.1		ND	
Naphthalene	12	500	12	mg/kg	ND		0.0027	J	0.029	J	ND	
o-Chlorotoluene	NC	NC	NC	mg/kg	ND		ND		ND		ND	
o-Xylene	0.26	NC	NC	mg/kg	ND		ND		ND		ND	
p-Chlorotoluene	NC	NC	NC	mg/kg	ND		ND		ND		ND	
p-Diethylbenzene	NC	NC	NC	mg/kg	ND		0.00087	J	0.094		0.15	
p-Ethyltoluene	NC	NC	NC	mg/kg	ND		ND		0.017	J	ND	
p-Isopropyltoluene	10	NC	NC	mg/kg	ND		ND		0.02	J	ND	
p/m-Xylene	0.26	NC	NC	mg/kg	ND		ND		ND		ND	
sec-Butylbenzene	11	500	11	mg/kg	ND		0.00039	J	0.066		0.036	J
Styrene	NC	NC	NC	mg/kg	ND		ND		ND		ND	
tert-Butylbenzene	5.9	500	5.9	mg/kg	ND		ND		ND		ND	
Tetrachloroethene	NC	150	1.3	mg/kg	0.00034	J	ND		ND		ND	
Toluene	0.7	500	0.7	mg/kg	ND		ND		ND		ND	
trans-1,2-Dichloroethene	NC	500	0.19	mg/kg	ND		ND		ND		ND	
trans-1,3-Dichloropropene	NC	NC	NC	mg/kg	ND		ND		ND		ND	
trans-1,4-Dichloro-2-butene	NC	NC	NC	mg/kg	ND		ND		ND		ND	
Trichloroethene	NC	200	0.47	mg/kg	ND		ND		ND		ND	
Trichlorofluoromethane	NC	NC	NC	mg/kg	ND		ND		ND		ND	
Vinyl acetate	NC	NC	NC	mg/kg	ND		ND		ND		ND	
Vinyl chloride	NC	13	0.02	mg/kg	ND		ND		ND		ND	
Xylenes, Total	0.26	500	0.26	mg/kg	ND		ND		ND		ND	

**Notes:**

mg/kg = milligrams per kilogram

NA = Not Analyzed

NC = No Criteria

ND = not detected at the reported detection limit for the sample

J = estimated value

NY-CP51: New York DEC CP-51 Soil Cleanup Levels Criteria per NY CP-51 Soil Cleanup Levels dated October 21, 2010.

NY-RESC: New York NYCRR Part 375 Commercial Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

NY-UNRES: New York NYCRR Part 375 New York Unrestricted use Criteria Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

**TABLE 1 - SOIL SAMPLING RESULTS (continued)**  
**325-397 YONKERS AVENUE**  
**YONKERS, NEW YORK**  
**PROJECT #395010**

LOCATION	SB-1/10.5-11				SB-2/9-9.5		SB-3/14.5-15		SB-4/17-17.5		SB-5/18.5-19	
SAMPLING DATE	9/26/2018				9/26/2018		9/26/2018		9/26/2018		9/26/2018	
LAB SAMPLE ID	L1838656-01				L1838656-02		L1838656-03		L1838656-04		L1838656-05	
SAMPLE TYPE	SOIL				SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)	10.5-11				9-9.5		14.5-15		17-17.5		18.5-19	
	NY-CP51	NY-RESC	NY-UNRES	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual
<b>Semivolatile Organics by GC/MS</b>												
Acenaphthene	20	500	20	mg/kg	NA		NA		NA		NA	
Acenaphthylene	100	500	100	mg/kg	NA		NA		NA		NA	
Anthracene	100	500	100	mg/kg	NA		NA		NA		NA	
Benzo(a)anthracene	1	5.6	1	mg/kg	NA		NA		NA		NA	
Benzo(a)pyrene	1	1	1	mg/kg	NA		NA		NA		NA	
Benzo(b)fluoranthene	1	5.6	1	mg/kg	NA		NA		NA		NA	
Benzo(ghi)perylene	100	500	100	mg/kg	NA		NA		NA		NA	
Benzo(k)fluoranthene	0.8	56	0.8	mg/kg	NA		NA		NA		NA	
Chrysene	1	56	1	mg/kg	NA		NA		NA		NA	
Dibenzo(a,h)anthracene	0.33	0.56	0.33	mg/kg	NA		NA		NA		NA	
Fluoranthene	100	500	100	mg/kg	NA		NA		NA		NA	
Fluorene	30	500	30	mg/kg	NA		NA		NA		NA	
Indeno(1,2,3-cd)pyrene	0.5	5.6	0.5	mg/kg	NA		NA		NA		NA	
Naphthalene	12	500	12	mg/kg	NA		NA		NA		NA	
Phenanthrene	100	500	100	mg/kg	NA		NA		NA		NA	
Pyrene	100	500	100	mg/kg	NA		NA		NA		NA	
<b>Polychlorinated Biphenyls by GC</b>												
Aroclor 1016	NC	1	0.1	mg/kg	NA		NA		NA		NA	
Aroclor 1221	NC	1	0.1	mg/kg	NA		NA		NA		NA	
Aroclor 1232	NC	1	0.1	mg/kg	NA		NA		NA		NA	
Aroclor 1242	NC	1	0.1	mg/kg	NA		NA		NA		NA	
Aroclor 1248	NC	1	0.1	mg/kg	NA		NA		NA		NA	
Aroclor 1254	NC	1	0.1	mg/kg	NA		NA		NA		NA	
Aroclor 1260	NC	1	0.1	mg/kg	NA		NA		NA		NA	
Aroclor 1262	NC	1	0.1	mg/kg	NA		NA		NA		NA	
Aroclor 1268	NC	1	0.1	mg/kg	NA		NA		NA		NA	
PCBs, Total	NC	1	0.1	mg/kg	NA		NA		NA		NA	
<b>Total Metals</b>												
Arsenic, Total	NC	16	13	mg/kg	NA		NA		NA		NA	0.623
Barium, Total	NC	400	350	mg/kg	NA		NA		NA		NA	31.5
Cadmium, Total	NC	9.3	2.5	mg/kg	NA		NA		NA		NA	0.103 J
Chromium, Total	NC	NC	NC	mg/kg	NA		NA		NA		NA	5.66
Lead, Total	NC	1000	63	mg/kg	NA		NA		NA		NA	1.56 J
Mercury, Total	NC	2.8	0.18	mg/kg	NA		NA		NA		NA	ND
Selenium, Total	NC	1500	3.9	mg/kg	NA		NA		NA		NA	0.218 J
Silver, Total	NC	1500	2	mg/kg	NA		NA		NA		NA	ND

**Notes:**

mg/kg = milligrams per kilogram

NA = Not Analyzed

NC = No Criteria

ND = not detected at the reported detection limit for the sample

J = estimated value

NY-CP51: New York DEC CP-51 Soil Cleanup Levels Criteria per NY CP-51 Soil Cleanup Levels dated October 21, 2010.

NY-RESC: New York NYCRR Part 375 Commercial Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

NY-UNRES: New York NYCRR Part 375 New York Unrestricted use Criteria Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

**TABLE 2**  
**GROUNDWATER SAMPLING RESULTS**

**TABLE 2 - GROUNDWATER SAMPLING RESULTS**  
**325-397 YONKERS AVENUE**  
**YONKERS, NEW YORK**  
**PROJECT #395010**

LOCATION			TW-1	TW-2	TW-3			
SAMPLING DATE			9/26/2018	9/26/2018	9/26/2018			
LAB SAMPLE ID			L1838656-06	L1838656-08	L1838656-07			
SAMPLE TYPE			WATER		WATER			
	NY-AWQS	Units	Results	Qual	Results	Qual	Results	Qual
<b>Volatile Organics</b>								
1,1,1,2-Tetrachloroethane	5	ug/l	ND		ND		ND	
1,1,1-Trichloroethane	5	ug/l	ND		ND		ND	
1,1,2,2-Tetrachloroethane	5	ug/l	ND		ND		ND	
1,1,2-Trichloroethane	1	ug/l	ND		ND		ND	
1,1-Dichloroethane	5	ug/l	ND		ND		ND	
1,1-Dichloroethene	5	ug/l	ND		ND		ND	
1,1-Dichloropropene	5	ug/l	ND		ND		ND	
1,2,3-Trichlorobenzene	5	ug/l	ND		ND		ND	
1,2,3-Trichloropropane	0.04	ug/l	ND		ND		ND	
1,2,4,5-Tetramethylbenzene	5	ug/l	ND		<b>51</b>		<b>71</b>	
1,2,4-Trichlorobenzene	5	ug/l	ND		ND		ND	
1,2,4-Trimethylbenzene	5	ug/l	ND		ND		<b>8.6</b>	
1,2-Dibromo-3-chloropropane	0.04	ug/l	ND		ND		ND	
1,2-Dibromoethane	0.0006	ug/l	ND		ND		ND	
1,2-Dichlorobenzene	3	ug/l	ND		ND		ND	
1,2-Dichloroethane	0.6	ug/l	ND		ND		ND	
1,2-Dichloroethene, Total	NC	ug/l	ND		ND		ND	
1,2-Dichloropropane	1	ug/l	ND		ND		ND	
1,3,5-Trimethylbenzene	5	ug/l	ND		ND		<b>5.4</b>	J
1,3-Dichlorobenzene	3	ug/l	ND		ND		ND	
1,3-Dichloropropane	5	ug/l	ND		ND		ND	
1,3-Dichloropropene, Total	NC	ug/l	ND		ND		ND	
1,4-Dichlorobenzene	3	ug/l	ND		ND		ND	
1,4-Dioxane	NC	ug/l	ND		ND		ND	
2,2-Dichloropropane	5	ug/l	ND		ND		ND	
2-Butanone	50	ug/l	ND		ND		ND	
2-Hexanone	50	ug/l	ND		ND		ND	
4-Methyl-2-pentanone	NC	ug/l	ND		ND		ND	
Acetone	50	ug/l	ND		8.9		ND	
Acrylonitrile	5	ug/l	ND		ND		ND	
Benzene	1	ug/l	ND		<b>89</b>		ND	
Bromobenzene	5	ug/l	ND		ND		ND	
Bromochloromethane	5	ug/l	ND		ND		ND	
Bromodichloromethane	50	ug/l	ND		ND		ND	
Bromoform	50	ug/l	ND		ND		ND	
Bromomethane	5	ug/l	ND		ND		ND	
Carbon disulfide	60	ug/l	ND		ND		ND	
Carbon tetrachloride	5	ug/l	ND		ND		ND	
Chlorobenzene	5	ug/l	ND		ND		ND	
Chloroethane	5	ug/l	ND		ND		ND	
Chloroform	7	ug/l	ND		ND		ND	
Chloromethane	NC	ug/l	ND		ND		ND	
cis-1,2-Dichloroethene	5	ug/l	ND		ND		ND	
cis-1,3-Dichloropropene	0.4	ug/l	ND		ND		ND	
Dibromochloromethane	50	ug/l	ND		ND		ND	
Dibromomethane	5	ug/l	ND		ND		ND	
Dichlorodifluoromethane	5	ug/l	ND		ND		ND	
Ethyl ether	NC	ug/l	ND		ND		ND	
Ethylbenzene	5	ug/l	ND		<b>12</b>		3.3	J
Hexachlorobutadiene	0.5	ug/l	ND		ND		ND	
Isopropylbenzene	5	ug/l	ND		<b>20</b>		<b>33</b>	
Methyl tert butyl ether	10	ug/l	ND		4.9		ND	
Methylene chloride	5	ug/l	ND		ND		ND	
n-Butylbenzene	5	ug/l	ND		<b>5.5</b>		<b>26</b>	
n-Propylbenzene	5	ug/l	ND		<b>33</b>		<b>56</b>	
Naphthalene	10	ug/l	ND		<b>22</b>		2.6	J
o-Chlorotoluene	5	ug/l	ND		ND		ND	
o-Xylene	5	ug/l	ND		1.2	J	ND	
p-Chlorotoluene	5	ug/l	ND		ND		ND	
p-Diethylbenzene	NC	ug/l	ND		14		64	
p-Ethyltoluene	NC	ug/l	ND		1.2	J	4.9	J
p-Isopropyltoluene	5	ug/l	ND		ND		3.4	J
p/m-Xylene	5	ug/l	ND		<b>11</b>		ND	
sec-Butylbenzene	5	ug/l	ND		<b>6.6</b>		<b>18</b>	
Styrene	5	ug/l	ND		ND		ND	
tert-Butylbenzene	5	ug/l	ND		0.71	J	ND	
Tetrachloroethene	5	ug/l	<b>18</b>		ND		ND	
Toluene	5	ug/l	ND		4.6		ND	
trans-1,2-Dichloroethene	5	ug/l	ND		ND		ND	
trans-1,3-Dichloropropene	0.4	ug/l	ND		ND		ND	
trans-1,4-Dichloro-2-butene	5	ug/l	ND		ND		ND	
Trichloroethene	5	ug/l	ND		ND		ND	
Trichlorofluoromethane	5	ug/l	ND		ND		ND	
Vinyl acetate	NC	ug/l	ND		ND		ND	
Vinyl chloride	2	ug/l	ND		ND		ND	
Xylenes, Total	NC	ug/l	ND		12	J	ND	

**Notes:**

ug/l = micrograms per liter

NA = Not Analyzed

NC = No Criteria

ND = not detected at the reported detection limit for the sample

J = estimated value

NY-AWQS: New York TOGS 111 Ambient Water Quality Standards criteria reflects all addendum to criteria through June 2004.

Bold + Yellow Highlight = concentration exceeds applicable criteria

**TABLE 2 - GROUNDWATER SAMPLING RESULTS (continued)**  
**325-397 YONKERS AVENUE**  
**YONKERS, NEW YORK**  
**PROJECT #395010**

LOCATION			TW-1		TW-2		TW-3	
SAMPLING DATE			9/26/2018		9/26/2018		9/26/2018	
LAB SAMPLE ID			L1838656-06		L1838656-08		L1838656-07	
SAMPLE TYPE			WATER		WATER		WATER	
	NY-AWQS	Units	Results	Qual	Results	Qual	Results	Qual
<b>Semivolatile Organics</b>								
1,2,4,5-Tetrachlorobenzene	5	ug/l	NA		ND		ND	
1,2,4-Trichlorobenzene	5	ug/l	NA		ND		ND	
1,2-Dichlorobenzene	3	ug/l	NA		ND		ND	
1,3-Dichlorobenzene	3	ug/l	NA		ND		ND	
1,4-Dichlorobenzene	3	ug/l	NA		ND		ND	
2,4-Dinitrotoluene	5	ug/l	NA		ND		ND	
2,6-Dinitrotoluene	5	ug/l	NA		ND		ND	
2-Chloronaphthalene	10	ug/l	NA		ND		ND	
2-Methylnaphthalene	NC	ug/l	NA		0.16		ND	
2-Nitroaniline	5	ug/l	NA		ND		ND	
3,3'-Dichlorobenzidine	5	ug/l	NA		ND		ND	
3-Nitroaniline	5	ug/l	NA		ND		ND	
4-Bromophenyl phenyl ether	NC	ug/l	NA		ND		ND	
4-Chloroaniline	5	ug/l	NA		ND		ND	
4-Chlorophenyl phenyl ether	NC	ug/l	NA		ND		ND	
4-Nitroaniline	5	ug/l	NA		ND		ND	
Acenaphthene	20	ug/l	NA		ND		ND	
Acenaphthylene	NC	ug/l	NA		ND		ND	
Acetophenone	NC	ug/l	NA		0.62	J	ND	
Anthracene	50	ug/l	NA		ND		ND	
Benzo(a)anthracene	0.002	ug/l	NA		ND		ND	
Benzo(a)pyrene	0	ug/l	NA		ND		ND	
Benzo(b)fluoranthene	0.002	ug/l	NA		ND		ND	
Benzo(ghi)perylene	NC	ug/l	NA		ND		ND	
Benzo(k)fluoranthene	0.002	ug/l	NA		ND		ND	
Benzyl Alcohol	NC	ug/l	NA		ND		ND	
Biphenyl	NC	ug/l	NA		ND		ND	
Bis(2-chloroethoxy)methane	5	ug/l	NA		ND		ND	
Bis(2-chloroethyl)ether	1	ug/l	NA		ND		ND	
Bis(2-chloroisopropyl)ether	5	ug/l	NA		ND		ND	
Bis(2-ethylhexyl)phthalate	5	ug/l	NA		ND		2.3	J
Butyl benzyl phthalate	50	ug/l	NA		ND		ND	
Carbazole	NC	ug/l	NA		ND		ND	
Chrysene	0.002	ug/l	NA		ND		ND	
Dibenzo(a,h)anthracene	NC	ug/l	NA		ND		ND	
Dibenzofuran	NC	ug/l	NA		ND		ND	
Diethyl phthalate	50	ug/l	NA		ND		ND	
Dimethyl phthalate	50	ug/l	NA		ND		ND	
Di-n-butylphthalate	50	ug/l	NA		ND		ND	
Di-n-octylphthalate	50	ug/l	NA		ND		ND	
Fluoranthene	50	ug/l	NA		ND		ND	
Fluorene	50	ug/l	NA		ND		ND	
Hexachlorobenzene	0.04	ug/l	NA		ND		ND	
Hexachlorobutadiene	0.5	ug/l	NA		ND		ND	
Hexachlorocyclopentadiene	5	ug/l	NA		ND		ND	
Hexachloroethane	5	ug/l	NA		ND		ND	
Indeno(1,2,3-cd)pyrene	0.002	ug/l	NA		ND		ND	
Isophorone	50	ug/l	NA		ND		ND	
Naphthalene	10	ug/l	NA		0.12		0.21	
NDPA/DPA	50	ug/l	NA		ND		ND	
Nitrobenzene	0.4	ug/l	NA		ND		ND	
n-Nitrosodi-n-propylamine	NC	ug/l	NA		ND		ND	
Phenanthrene	50	ug/l	NA		ND		ND	
Pyrene	50	ug/l	NA		ND		ND	

**Notes:**

ug/l = micrograms per liter

NA = Not Analyzed

NC = No Criteria

ND = not detected at the reported detection limit for the sample

J = estimated value

NY-AWQS: New York TOGS 111 Ambient Water Quality Standards criteria reflects all addendum to criteria through June 2004.

**TABLE 3**  
**SUB-SLAB SOIL VAPOR SAMPLING RESULTS**



**TABLE 3 - SUB-SLAB SOIL VAPOR SAMPLING RESULTS**  
**325-397 YONKERS AVENUE**  
**YONKERS, NEW YORK**  
**PROJECT #395010**

LOCATION						SSV-1	SSV-2		
SAMPLING DATE						9/26/2018	9/26/2018		
LAB SAMPLE ID						L1838751-03	L1838751-04		
SAMPLE TYPE						SOIL VAPOR	SOIL VAPOR		
	EPA-VISL-TSSGC	NY-SSC-A	NY-SSC-B	NY-SSC-C	Units	Results	Qual	Results	Qual
<b>Volatile Organics in Air</b>									
1,1,1-Trichloroethane	730000	NC	100	NC	ug/m3	ND		ND	
1,1,2,2-Tetrachloroethane	7.05	NC	NC	NC	ug/m3	ND		ND	
1,1,2-Trichloro-1,2,2-Trifluoroethane	730000	NC	NC	NC	ug/m3	ND		ND	
1,1,2-Trichloroethane	25.55	NC	NC	NC	ug/m3	ND		ND	
1,1-Dichloroethane	255.50	NC	NC	NC	ug/m3	ND		ND	
1,1-Dichloroethene	29200	6	NC	NC	ug/m3	ND		ND	
1,2,4-Trichlorobenzene	292	NC	NC	NC	ug/m3	ND		ND	
1,2,4-Trimethylbenzene	8760	NC	NC	NC	ug/m3	ND		ND	
1,2-Dibromoethane	0.68	NC	NC	NC	ug/m3	ND		ND	
1,2-Dichloro-1,1,2,2-tetrafluoroethane	NC	NC	NC	NC	ug/m3	ND		ND	
1,2-Dichlorobenzene	29200	NC	NC	NC	ug/m3	ND		ND	
1,2-Dichloroethane	15.72	NC	NC	NC	ug/m3	ND		ND	
1,2-Dichloropropane	110.49	NC	NC	NC	ug/m3	ND		ND	
1,3,5-Trimethylbenzene	8760	NC	NC	NC	ug/m3	ND		ND	
1,3-Butadiene	13.63	NC	NC	NC	ug/m3	ND		ND	
1,3-Dichlorobenzene	NC	NC	NC	NC	ug/m3	ND		ND	
1,4-Dichlorobenzene	37.16	NC	NC	NC	ug/m3	ND		ND	
1,4-Dioxane	81.76	NC	NC	NC	ug/m3	ND		ND	
2,2,4-Trimethylpentane	NC	NC	NC	NC	ug/m3	579		ND	
2-Butanone	730000	NC	NC	NC	ug/m3	ND		ND	
2-Hexanone	4380	NC	NC	NC	ug/m3	ND		ND	
3-Chloropropene	NC	NC	NC	NC	ug/m3	ND		ND	
4-Ethyltoluene	NC	NC	NC	NC	ug/m3	ND		ND	
4-Methyl-2-pentanone	438000	NC	NC	NC	ug/m3	ND		ND	
Acetone	4526000	NC	NC	NC	ug/m3	82.2		ND	
Benzene	52.41	NC	NC	NC	ug/m3	ND		ND	
Benzyl chloride	8.34	NC	NC	NC	ug/m3	ND		ND	
Bromodichloromethane	11.05	NC	NC	NC	ug/m3	ND		ND	
Bromoform	371.64	NC	NC	NC	ug/m3	ND		ND	
Bromomethane	730	NC	NC	NC	ug/m3	ND		ND	
Carbon disulfide	102200	NC	NC	NC	ug/m3	ND		ND	
Carbon tetrachloride	68.13	6	NC	NC	ug/m3	ND		ND	
Chlorobenzene	7300	NC	NC	NC	ug/m3	ND		ND	
Chloroethane	1460000	NC	NC	NC	ug/m3	ND		ND	
Chloroform	17.77	NC	NC	NC	ug/m3	ND		ND	
Chloromethane	13140	NC	NC	NC	ug/m3	ND		ND	
cis-1,2-Dichloroethene	NC	6	NC	NC	ug/m3	ND		ND	
cis-1,3-Dichloropropene	NC	NC	NC	NC	ug/m3	ND		ND	
Cyclohexane	876000	NC	NC	NC	ug/m3	ND		ND	
Dibromochloromethane	NC	NC	NC	NC	ug/m3	ND		ND	
Dichlorodifluoromethane	14600	NC	NC	NC	ug/m3	ND		ND	
Ethyl Acetate	10220	NC	NC	NC	ug/m3	ND		ND	
Ethyl Alcohol	NC	NC	NC	NC	ug/m3	ND		ND	
Ethylbenzene	163.52	NC	NC	NC	ug/m3	ND		ND	
Heptane	NC	NC	NC	NC	ug/m3	ND		ND	
Hexachlorobutadiene	18.58	NC	NC	NC	ug/m3	ND		ND	
iso-Propyl Alcohol	NC	NC	NC	NC	ug/m3	32.2		ND	
Methyl tert butyl ether	1572.31	NC	NC	NC	ug/m3	ND		ND	
Methylene chloride	40880	NC	100	NC	ug/m3	ND		ND	
n-Hexane	102200	NC	NC	NC	ug/m3	ND		ND	
o-Xylene	14600	NC	NC	NC	ug/m3	ND		ND	
p/m-Xylene	14600	NC	NC	NC	ug/m3	ND		ND	
Styrene	146000	NC	NC	NC	ug/m3	ND		ND	
tert-Butyl Alcohol	NC	NC	NC	NC	ug/m3	ND		ND	
Tetrachloroethene	1572.31	NC	100	NC	ug/m3	<b>1720</b>		<b>78700</b>	
Tetrahydrofuran	292000	NC	NC	NC	ug/m3	ND		ND	
Toluene	730000	NC	NC	NC	ug/m3	ND		ND	
trans-1,2-Dichloroethene	NC	NC	NC	NC	ug/m3	ND		ND	
trans-1,3-Dichloropropene	NC	NC	NC	NC	ug/m3	ND		ND	
Trichloroethene	99.71	6	NC	NC	ug/m3	ND		ND	
Trichlorofluoromethane	NC	NC	NC	NC	ug/m3	ND		ND	
Vinyl bromide	12.78	NC	NC	NC	ug/m3	ND		ND	
Vinyl chloride	92.91	NC	NC	6	ug/m3	ND		ND	

**Notes:**

ug/m3 = micrograms per cubic meter

NC = No Criteria

ND = not detected at the reported detection limit for the sample

EPA-VISL-TSSGC: EPA VISL Default Commercial Target Sub-Slab & Exterior Soil Gas Concentrations Criteria per VISL Calculator, Version 3.5, Updated October 2017 (June 2017 RSLs).

NY-SSC-A: New York DOH Matrix A Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.

NY-SSC-B: New York DOH Matrix B Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.

NY-SSC-C: New York DOH Matrix C Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.

Bold + Yellow Highlight = concentration exceeds applicable criteria

**TABLE 4**  
**AIR SAMPLING RESULTS**

**TABLE 4 - AIR SAMPLING RESULTS**  
**325-397 YONKERS AVENUE**  
**YONKERS, NEW YORK**  
**PROJECT #395010**

LOCATION						IA-1	AA-1
SAMPLING DATE						9/26/2018	9/26/2018
LAB SAMPLE ID						L1838751-01	L1838751-02
SAMPLE TYPE						AIR	
	EPA-VISL-TIAC	NY-IAC-A	NY-IAC-B	NY-IAC-C	Units	Results	Qual
<b>Volatile Organics in Air</b>							
1,1,1-Trichloroethane	21900	NC	3	NC	ug/m3	ND	ND
1,1,2,2-Tetrachloroethane	0.21	NC	NC	NC	ug/m3	ND	ND
1,1,2-Trichloro-1,2,2-Trifluoroethane	21900	NC	NC	NC	ug/m3	ND	ND
1,1,2-Trichloroethane	0.77	NC	NC	NC	ug/m3	ND	ND
1,1-Dichloroethane	7.67	NC	NC	NC	ug/m3	ND	ND
1,1-Dichloroethene	876	0.2	NC	NC	ug/m3	ND	ND
1,2,4-Trichlorobenzene	8.76	NC	NC	NC	ug/m3	ND	ND
1,2,4-Trimethylbenzene	262.80	NC	NC	NC	ug/m3	3.51	1.14
1,2-Dibromoethane	0.02	NC	NC	NC	ug/m3	ND	ND
1,2-Dichloro-1,1,2,2-tetrafluoroethane	NC	NC	NC	NC	ug/m3	ND	ND
1,2-Dichlorobenzene	876	NC	NC	NC	ug/m3	ND	ND
1,2-Dichloroethane	0.47	NC	NC	NC	ug/m3	ND	ND
1,2-Dichloropropane	3.31	NC	NC	NC	ug/m3	ND	ND
1,3,5-Trimethylbenzene	262.80	NC	NC	NC	ug/m3	1.01	ND
1,3-Butadiene	0.41	NC	NC	NC	ug/m3	ND	ND
1,3-Dichlorobenzene	NC	NC	NC	NC	ug/m3	ND	ND
1,4-Dichlorobenzene	1.11	NC	NC	NC	ug/m3	ND	ND
1,4-Dioxane	2.45	NC	NC	NC	ug/m3	ND	ND
2,2,4-Trimethylpentane	NC	NC	NC	NC	ug/m3	5	2.58
2-Butanone	21900	NC	NC	NC	ug/m3	5.87	ND
2-Hexanone	131.40	NC	NC	NC	ug/m3	ND	ND
3-Chloropropene	NC	NC	NC	NC	ug/m3	ND	ND
4-Ethyltoluene	NC	NC	NC	NC	ug/m3	ND	ND
4-Methyl-2-pentanone	13140	NC	NC	NC	ug/m3	2.2	ND
Acetone	135780	NC	NC	NC	ug/m3	35.2	6.41
Benzene	1.57	NC	NC	NC	ug/m3	<b>2.19</b>	1.16
Benzyl chloride	0.25	NC	NC	NC	ug/m3	ND	ND
Bromodichloromethane	0.33	NC	NC	NC	ug/m3	ND	ND
Bromoform	11.15	NC	NC	NC	ug/m3	ND	ND
Bromomethane	21.90	NC	NC	NC	ug/m3	ND	ND
Carbon disulfide	3066	NC	NC	NC	ug/m3	ND	ND
Carbon tetrachloride	2.04	0.2	NC	NC	ug/m3	<b>0.396</b>	0.396
Chlorobenzene	219	NC	NC	NC	ug/m3	ND	ND
Chloroethane	NC	NC	NC	NC	ug/m3	ND	ND
Chloroform	0.53	NC	NC	NC	ug/m3	<b>1.15</b>	ND
Chloromethane	394.20	NC	NC	NC	ug/m3	1.1	1.16
cis-1,2-Dichloroethene	NC	0.2	NC	NC	ug/m3	ND	ND
cis-1,3-Dichloropropene	NC	NC	NC	NC	ug/m3	ND	ND
Cyclohexane	26280	NC	NC	NC	ug/m3	0.995	0.981
Dibromochloromethane	NC	NC	NC	NC	ug/m3	ND	ND
Dichlorodifluoromethane	438	NC	NC	NC	ug/m3	2.5	2.35
Ethyl Acetate	306.60	NC	NC	NC	ug/m3	ND	ND
Ethyl Alcohol	NC	NC	NC	NC	ug/m3	59.5	10.3
Ethylbenzene	4.91	NC	NC	NC	ug/m3	1.09	1.45
Heptane	NC	NC	NC	NC	ug/m3	1.25	0.852
Hexachlorobutadiene	0.56	NC	NC	NC	ug/m3	ND	ND
iso-Propyl Alcohol	NC	NC	NC	NC	ug/m3	46.7	1.59
Methyl tert butyl ether	47.17	NC	NC	NC	ug/m3	ND	ND
Methylene chloride	1226.40	NC	3	NC	ug/m3	ND	ND
n-Hexane	3066	NC	NC	NC	ug/m3	4.69	3.98
o-Xylene	438	NC	NC	NC	ug/m3	1.58	2.22
p/m-Xylene	438	NC	NC	NC	ug/m3	4.34	7.21
Styrene	4380	NC	NC	NC	ug/m3	ND	ND
tert-Butyl Alcohol	NC	NC	NC	NC	ug/m3	ND	ND
Tetrachloroethene	47.17	NC	3	NC	ug/m3	<b>9.9</b>	0.868
Tetrahydrofuran	8760	NC	NC	NC	ug/m3	2.27	1.92
Toluene	21900	NC	NC	NC	ug/m3	5.39	3.46
trans-1,2-Dichloroethene	NC	NC	NC	NC	ug/m3	ND	ND
trans-1,3-Dichloropropene	NC	NC	NC	NC	ug/m3	ND	ND
Trichloroethene	2.99	0.2	NC	NC	ug/m3	<b>0.263</b>	0.758
Trichlorofluoromethane	NC	NC	NC	NC	ug/m3	1.37	1.31
Vinyl bromide	0.38	NC	NC	NC	ug/m3	ND	ND
Vinyl chloride	2.79	NC	NC	0.2	ug/m3	ND	ND

**Notes:**

ug/m3 = micrograms per cubic meter

NC = No Criteria

ND = not detected at the reported detection limit for the sample

EPA-VISL-TIAC: EPA VISL Default Commercial Target Indoor Air Concentrations Criteria per VISL Calculator, Version 3.5, Updated October 2017 (June 2017 RSLs).

NY-IAC-A: New York DOH Matrix A Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.

NY-IAC-B: New York DOH Matrix B Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.

NY-IAC-C: New York DOH Matrix C Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.

Bold + Yellow Highlight = concentration exceeds applicable criteria

## **APPENDICES**

**APPENDIX A  
SOIL BORING LOGS**

AEI CONSULTANTS  
 2500 CAMINO DIABLO  
 WALNUT CREEK CA 94597-3998  
 Telephone: 925 746-6000  
 Fax: 925 746-6099

# WELL NUMBER SB-1

**CLIENT** TD Bank

**PROJECT NUMBER** 395010

**DATE STARTED** 9/26/18      **COMPLETED** 9/26/18

**DRILLING CONTRACTOR** Core Down Drilling

**DRILLING METHOD** Direct Push

**LOGGED BY** J. Farber      **CHECKED BY** \_\_\_\_\_

**NOTES** Parking lot; southeast of drycleaner

**PROJECT NAME** 325-397 Yonkers Avenue

**PROJECT LOCATION** 325-397 Yonkers Avenue, Yonkers, NY 10701

**GROUND ELEVATION** \_\_\_\_\_      **HOLE SIZE** 2.25 inches

**GROUND WATER LEVELS:**

**AT TIME OF DRILLING** ---

**AT END OF DRILLING** ---

**AFTER DRILLING** ---

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 10/4/18 10:13 - P:\COMPANYWIDE PROJECTS\395000 SERIES\395010 YONKERS, NY\SM-PHINPHI REPORT\ATTACHMENTS\395010 YONKERS, NY, BORING LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
0.0					
0.0 - 0.5			Asphalt		
0.5 - 1.0			Fill, dry, no odor, no staining		
1.0 - 15.0			Brown Fine to Medium SAND, Some Silt, wet at 11', no odor, no staining	PID = 0.0	
2.5				PID = 0.0	
5.0				PID = 0.0	1" PVC Riser
7.5				PID = 0.0	
10.0				PID = 0.0	
10.5 - 11.0	GB SB-1/10.5-11			PID = 0.0	
12.5				PID = 0.0	
15.0	GB TW-1			PID = 0.0	1" 0.10 Inch Slotted PVC

Bottom of borehole at 15.0 feet.

AEI CONSULTANTS  
 2500 CAMINO DIABLO  
 WALNUT CREEK CA 94597-3998  
 Telephone: 925 746-6000  
 Fax: 925 746-6099

# BORING NUMBER SB-2

**CLIENT** TD Bank **PROJECT NAME** 325-397 Yonkers Avenue  
**PROJECT NUMBER** 395010 **PROJECT LOCATION** 325-397 Yonkers Avenue, Yonkers, NY 10701  
**DATE STARTED** 9/26/18 **COMPLETED** 9/26/18 **GROUND ELEVATION** \_\_\_\_\_ **HOLE SIZE** 2.25 inches  
**DRILLING CONTRACTOR** Core Down Drilling **GROUND WATER LEVELS:**  
**DRILLING METHOD** Direct Push **AT TIME OF DRILLING** ---  
**LOGGED BY** J. Farber **CHECKED BY** \_\_\_\_\_ **AT END OF DRILLING** ---  
**NOTES** Parking lot; southwest of gasoline USTs **AFTER DRILLING** ---

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 10/4/18 10:13 - P:\COMPANYWIDE PROJECTS\395000 SERIES\395010 YONKERS, NY\SM-PHINPHI REPORT\ATTACHMENTS\395010 YONKERS, NY, BORING LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA
0.0				
0.0 - 0.5			Asphalt	
0.5 - 4.5			Fill, dry, odorous (burnt rubber), no staining	PID = 1.2 PID = 4.8 PID = 10.0
4.5 - 5.0			Brown Fine to Medium SAND, Some Silt, dry, odorous (burnt rubber), no staining	PID = 3.6
5.0 - 5.5			Brown/Green Fine to Medium SAND, Some Silt, Some Gravel, moist, petroleum odor, some green staining	PID = 4.6
5.5 - 7.5				PID = 0.5 PID = 2.8
7.5 - 10.0				PID = 20.9
10.0 - 10.5	GB SB-2/9-9-18			PID = 34.9
10.5 - 12.5				PID = 5.9 PID = 14.2
12.5 - 15.0				PID = 5.8 PID = 4.0 PID = 3.8

Bottom of borehole at 15.0 feet.

AEI CONSULTANTS  
 2500 CAMINO DIABLO  
 WALNUT CREEK CA 94597-3998  
 Telephone: 925 746-6000  
 Fax: 925 746-6099

# BORING NUMBER SB-3

**CLIENT** TD Bank **PROJECT NAME** 325-397 Yonkers Avenue  
**PROJECT NUMBER** 395010 **PROJECT LOCATION** 325-397 Yonkers Avenue, Yonkers, NY 10701  
**DATE STARTED** 9/26/18 **COMPLETED** 9/26/18 **GROUND ELEVATION** \_\_\_\_\_ **HOLE SIZE** 2.25 inches  
**DRILLING CONTRACTOR** Core Down Drilling **GROUND WATER LEVELS:**  
**DRILLING METHOD** Direct Push **AT TIME OF DRILLING** ---  
**LOGGED BY** J. Farber **CHECKED BY** \_\_\_\_\_ **AT END OF DRILLING** ---  
**NOTES** South of filling station **AFTER DRILLING** ---

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 10/4/18 10:13 - P:\COMPANYWIDE PROJECTS\395000 SERIES\395010 YONKERS, NY\SM-PHINPHI REPORT\ATTACHMENTS\395010 YONKERS, NY, BORING LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA
0.0				
0.5		Asphalt	Asphalt	
2.5		Fill, dry, slight tar odor, no staining	Fill, dry, slight tar odor, no staining	PID = 0.0 PID = 0.0 PID = 1.1 PID = 0.0
5.0		Brown Sandy SILT, moist, no odor, no staining	Brown Sandy SILT, moist, no odor, no staining	PID = 0.0 PID = 0.0 PID = 0.0 PID = 0.0
9.5		Brown/Green Sandy SILT, moist, petroleum odor, green staining	Brown/Green Sandy SILT, moist, petroleum odor, green staining	PID = 1.4 PID = 2.8 PID = 12.6 PID = 24.3 PID = 169.0 PID = 188.3 PID = 393.6
15.0	GB			

Bottom of borehole at 15.0 feet.


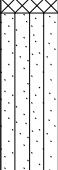
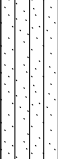
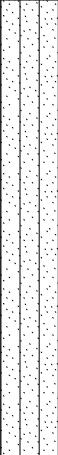




AEI CONSULTANTS  
 2500 CAMINO DIABLO  
 WALNUT CREEK CA 94597-3998  
 Telephone: 925 746-6000  
 Fax: 925 746-6099

# WELL NUMBER SB-4

**CLIENT** TD Bank **PROJECT NAME** 325-397 Yonkers Avenue  
**PROJECT NUMBER** 395010 **PROJECT LOCATION** 325-397 Yonkers Avenue, Yonkers, NY 10701  
**DATE STARTED** 9/26/18 **COMPLETED** 9/26/18 **GROUND ELEVATION** \_\_\_\_\_ **SOLE SIZE** 2.25 inches  
**DRILLING CONTRACTOR** Core Down Drilling **GROUND WATER LEVELS:**  
**DRILLING METHOD** Direct Push **AT TIME OF DRILLING** ---  
**LOGGED BY** J. Farber **CHECKED BY** \_\_\_\_\_ **AT END OF DRILLING** ---  
**NOTES** East of filling station **AFTER DRILLING** ---

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 10/4/18 10:13 - P:\COMPANYWIDE PROJECTS\395000 SERIES\395010 YONKERS, NY\SM-PHINPHI REPORT\ATTACHMENTS\395010 YONKERS, NY, BORING LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
0					
0.5			Asphalt Fill, dry, no odor, no staining	PID = 0.0 PID = 0.0 PID = 0.1 PID = 0.9	1" PVC Riser
5.0			Brown Sandy SILT, moist, no odor, no staining	PID = 0.5 PID = 0.8	
7.5			Brown/Green Sandy SILT, moist, slight petroleum odor, green staining	PID = 0.3 PID = 0.3	
10.0			Brown/Green Silty SAND, wet at 15', petroleum odor, green staining	PID = 1.3 PID = 1.6 PID = 3.1 PID = 9.9 PID = 15.8 PID = 15.0	1" 0.10 Inch Slotted PVC
17.5	GB SB-4/17-17.5			PID = 14.6 PID = 13.9	
17.5	GB TW-2			PID = 58.7 PID = 16.6	
20.0				PID = 2.8	

Bottom of borehole at 20.0 feet.



**APPENDIX B**  
**INDOOR AIR BUILDING SURVEY AND SAMPLING FORM**

**INDOOR AIR BUILDING SURVEY  
and SAMPLING FORM**

Preparer's name: Jordan Farber

Date: 9/26/2018

Preparer's affiliation: AEI Consultants

Phone #: 973-508-5050

Site Name: 325-397 Yonkers Avenue

Case #: \_\_\_\_\_

**Part I - Occupants**

Building Address: 325-397 Yonkers Avenue, Yonkers, NY

Property Contact: Baroukh Sassouness Owner / Renter / other: Realtor

Contact's Phone: home ( ) \_\_\_\_\_ work ( ) \_\_\_\_\_ cell (212) 234-0234

Building occupants: Children under age 13 No Children age 13-18 No Adults No

**Part II – Building Characteristics**

Building type: residential / multi-family residential / office / strip mall / commercial / industrial

Describe building: Two-story commercial building Year constructed: 1970

Sensitive population: day care / nursing home / hospital / school / other (specify): N/A

Number of floors below grade: 0 (full basement / crawl space / slab on grade / partial basement)

Number of floors at or above grade: 2

Depth of basement below grade surface: N/A ft. Basement size: N/A ft<sup>2</sup>

Basement floor construction: concrete / dirt / floating / stone / other (specify): \_\_\_\_\_

Foundation walls: poured concrete / cinder blocks / stone / other (specify): masonry

Basement sump present? Yes / No Sump pump? Yes / No Water in sump? Yes / No

Type of heating system (circle all that apply):

- |                            |                     |                 |                    |
|----------------------------|---------------------|-----------------|--------------------|
| <u>hot air circulation</u> | hot air radiation   | wood            | steam radiation    |
| heat pump                  | hot water radiation | kerosene heater | electric baseboard |
| other (specify): _____     |                     |                 |                    |

Type of ventilation system (circle all that apply):

- |                                 |                        |                           |                |
|---------------------------------|------------------------|---------------------------|----------------|
| <u>central air conditioning</u> | mechanical fans        | bathroom ventilation fans | individual air |
| conditioning units              | kitchen range hood fan | outside air intake        |                |
| other (specify): _____          |                        |                           |                |

Type of fuel utilized (circle all that apply):

- Natural gas / electric / fuel oil / wood / coal / solar / kerosene

Are the basement walls or floor sealed with waterproof paint or epoxy coatings? Yes / No N/A

Is there a whole house fan? Yes / **(No)**

Septic system? Yes / Yes (but not used) / **(No)**

Irrigation/private well? Yes / Yes (but not used) / **(No)**

Type of ground cover outside of building: **(grass)** **(concrete)** **(asphalt)** / other (specify) \_\_\_\_\_

Existing subsurface depressurization (radon) system in place? Yes / **(No)** active / passive

Sub-slab vapor/moisture barrier in place? Yes / **(No)**  
 Type of barrier: \_\_\_\_\_

**Part III - Outside Contaminant Sources**

Contaminated site (1000-ft. radius): Unknown

Other stationary sources nearby (gas stations, emission stacks, etc.): gas station onsite

Heavy vehicular traffic nearby (or other mobile sources): yes

**Part IV – Indoor Contaminant Sources**

Identify all potential indoor sources found in the building (including attached garages), the location of the source (floor and room), and whether the item was removed from the building 48 hours prior to indoor air sampling event. Any ventilation implemented after removal of the items should be completed at least 24 hours prior to the commencement of the indoor air sampling event.

Potential Sources	Location(s)	Removed (Yes / No / NA)
Gasoline storage cans		N/A
Gas-powered equipment		N/A
Kerosene storage cans		N/A
Paints / thinners / strippers		N/A
Cleaning solvents	Drycleaner	No
Oven cleaners		N/A
Carpet / upholstery cleaners		N/A
Other house cleaning products		N/A
Moth balls		N/A
Polishes / waxes		N/A
Insecticides		N/A
Furniture / floor polish		N/A
Nail polish / polish remover		N/A
Hairspray		N/A
Cologne / perfume		N/A
Air fresheners		N/A
Fuel tank (inside building)		N/A
Wood stove or fireplace		N/A
New furniture / upholstery		N/A
New carpeting / flooring		N/A
Hobbies - glues, paints, etc.		N/A

Part V – Miscellaneous Items

Do any occupants of the building smoke? *Yes / No N/A* How often? \_\_\_\_\_

Last time someone smoked in the building? \_\_\_\_\_ hours / days ago

Does the building have an attached garage directly connected to living space? *Yes / (No)*

If so, is a car usually parked in the garage? *Yes / No*

Are gas-powered equipment or cans of gasoline/fuels stored in the garage? *Yes / No*

Do the occupants of the building have their clothes dry cleaned? *Yes / No N/A*

If yes, how often? weekly / monthly / 3-4 times a year

Do any of the occupants use solvents in work? *Yes / No N/A*

If yes, what types of solvents are used? \_\_\_\_\_

If yes, are their clothes washed at work? *Yes / No*

Have any pesticides/herbicides been applied around the building or in the yard? *Yes / (No)*

If so, when and which chemicals? \_\_\_\_\_

Has there ever been a fire in the building? *Yes / (No)* If yes, when? \_\_\_\_\_

Has painting or staining been done in the building in the last 6 months? *(Yes) / No*

If yes, when unknown and where? unknown

Part VI – Sampling Information

Sample Technician: Jordan Farber Phone number: (973) 508-5050

Sample Source: (Indoor Air) (Sub-Slab) Near Slab Soil Gas / Exterior Soil Gas

Sampler Type: Tedlar bag / Sorbent / (Stainless Steel Canister) Other (specify): \_\_\_\_\_

Analytical Method: (TO-15) / TO-17 / other: \_\_\_\_\_ Cert. Laboratory: Alpha Analytical

Sample locations (floor, room):

Field ID #  
IA-1: 1<sup>st</sup> floor of tenant space

Field ID #  
SSV-1: 1<sup>st</sup> floor of tenant space

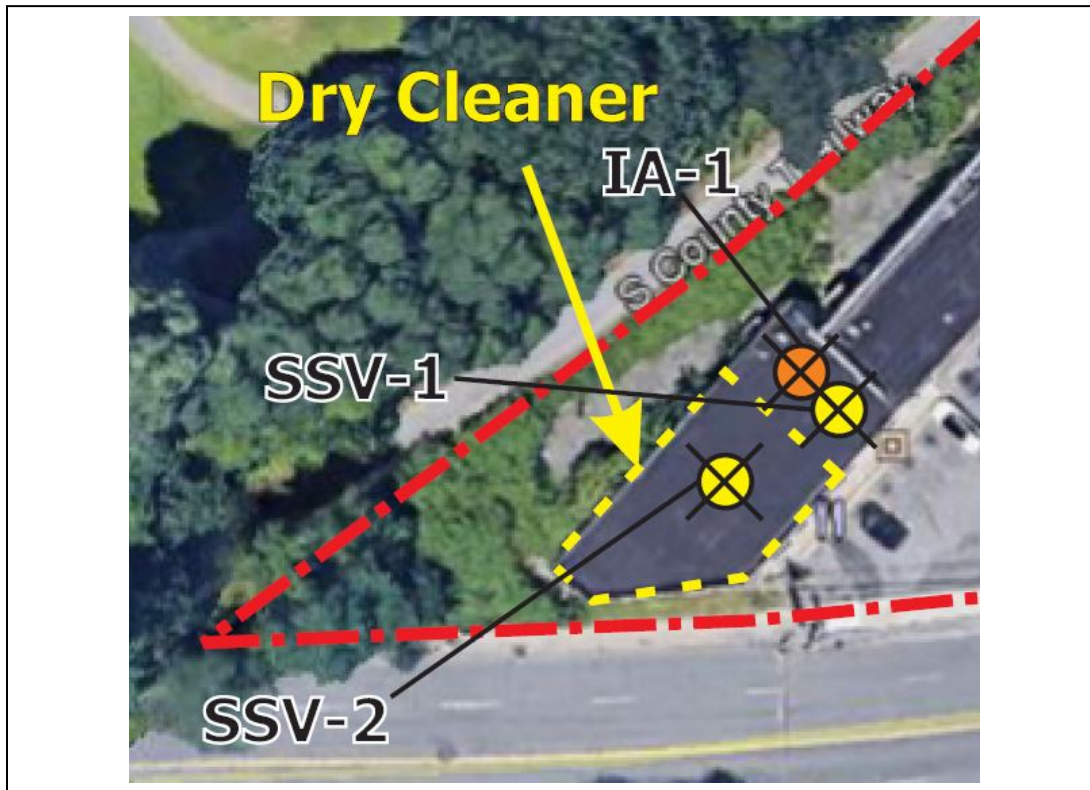
Field ID #  
SSV-2: Drycleaner space (1<sup>st</sup> floor)

Were “Instructions for Occupants” followed? *(Yes) / No*

If not, describe modifications: \_\_\_\_\_



Provide Drawing of Sample Location(s) in Building



Part VII - Meteorological Conditions

Was there significant precipitation within 12 hours prior to (or during) the sampling event?  Yes / No

Describe the general weather conditions: 70 degrees Fahrenheit, intermittent rain

Part VIII – General Observations

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process.

---

---

---

**APPENDIX C**  
**LABORATORY ANALYTICAL REPORT (SOIL/GROUNDWATER)**



## ANALYTICAL REPORT

Lab Number:	L1838656
Client:	AEI Consultants 30 Montgomery Street Suite 220 Jersey City, NJ 07302
ATTN:	Jordan Farber
Phone:	(201) 332-1844
Project Name:	YONKERS AVENUE
Project Number:	395010
Report Date:	10/07/18

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:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

<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>
L1838656-01	SB-1/10.5-11	SOIL	325-397 YONKERS AVE., YONKERS, NY	09/26/18 09:30	09/26/18
L1838656-02	SB-2/9-9.5	SOIL	325-397 YONKERS AVE., YONKERS, NY	09/26/18 10:00	09/26/18
L1838656-03	SB-3/14.5-15	SOIL	325-397 YONKERS AVE., YONKERS, NY	09/26/18 10:15	09/26/18
L1838656-04	SB-4/17-17.5	SOIL	325-397 YONKERS AVE., YONKERS, NY	09/26/18 10:40	09/26/18
L1838656-05	SB-5/18.5-19	SOIL	325-397 YONKERS AVE., YONKERS, NY	09/26/18 11:20	09/26/18
L1838656-06	TW-1	WATER	325-397 YONKERS AVE., YONKERS, NY	09/26/18 12:15	09/26/18
L1838656-07	TW-3	WATER	325-397 YONKERS AVE., YONKERS, NY	09/26/18 12:35	09/26/18
L1838656-08	TW-2	WATER	325-397 YONKERS AVE., YONKERS, NY	09/26/18 13:10	09/26/18

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

### Case Narrative

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

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

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

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

#### HOLD POLICY

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

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

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

### Case Narrative (continued)

#### Report Submission

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


#### Volatile Organics

L1838656-03 and -04: The analysis of Volatile Organics by EPA Method 5035/8260 Low Level could not be performed due to the elevated concentrations of non-target compounds in the sample.

L1838656-07: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-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:

 Kelly Stenstrom

Title: Technical Director/Representative

Date: 10/07/18



# ORGANICS

# VOLATILES

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

Lab ID: L1838656-01  
 Client ID: SB-1/10.5-11  
 Sample Location: 325-397 YONKERS AVE., YONKERS, NY

Date Collected: 09/26/18 09:30  
 Date Received: 09/26/18  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8260C  
 Analytical Date: 10/04/18 05:04  
 Analyst: MV  
 Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	4.1	1.9	1
1,1-Dichloroethane	ND		ug/kg	0.83	0.12	1
Chloroform	ND		ug/kg	1.2	0.12	1
Carbon tetrachloride	ND		ug/kg	0.83	0.19	1
1,2-Dichloropropane	ND		ug/kg	0.83	0.10	1
Dibromochloromethane	ND		ug/kg	0.83	0.12	1
1,1,2-Trichloroethane	ND		ug/kg	0.83	0.22	1
Tetrachloroethene	0.34	J	ug/kg	0.41	0.16	1
Chlorobenzene	ND		ug/kg	0.41	0.10	1
Trichlorofluoromethane	ND		ug/kg	3.3	0.58	1
1,2-Dichloroethane	ND		ug/kg	0.83	0.21	1
1,1,1-Trichloroethane	ND		ug/kg	0.41	0.14	1
Bromodichloromethane	ND		ug/kg	0.41	0.09	1
trans-1,3-Dichloropropene	ND		ug/kg	0.83	0.23	1
cis-1,3-Dichloropropene	ND		ug/kg	0.41	0.13	1
1,3-Dichloropropene, Total	ND		ug/kg	0.41	0.13	1
1,1-Dichloropropene	ND		ug/kg	0.41	0.13	1
Bromoform	ND		ug/kg	3.3	0.20	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.41	0.14	1
Benzene	ND		ug/kg	0.41	0.14	1
Toluene	ND		ug/kg	0.83	0.45	1
Ethylbenzene	ND		ug/kg	0.83	0.12	1
Chloromethane	ND		ug/kg	3.3	0.77	1
Bromomethane	ND		ug/kg	1.6	0.48	1
Vinyl chloride	ND		ug/kg	0.83	0.28	1
Chloroethane	ND		ug/kg	1.6	0.37	1
1,1-Dichloroethene	ND		ug/kg	0.83	0.20	1
trans-1,2-Dichloroethene	ND		ug/kg	1.2	0.11	1

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

**Lab ID:** L1838656-01  
**Client ID:** SB-1/10.5-11  
**Sample Location:** 325-397 YONKERS AVE., YONKERS, NY

**Date Collected:** 09/26/18 09:30  
**Date Received:** 09/26/18  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Trichloroethene	ND		ug/kg	0.41	0.11	1
1,2-Dichlorobenzene	ND		ug/kg	1.6	0.12	1
1,3-Dichlorobenzene	ND		ug/kg	1.6	0.12	1
1,4-Dichlorobenzene	ND		ug/kg	1.6	0.14	1
Methyl tert butyl ether	ND		ug/kg	1.6	0.17	1
p/m-Xylene	ND		ug/kg	1.6	0.46	1
o-Xylene	ND		ug/kg	0.83	0.24	1
Xylenes, Total	ND		ug/kg	0.83	0.24	1
cis-1,2-Dichloroethene	ND		ug/kg	0.83	0.14	1
1,2-Dichloroethene, Total	ND		ug/kg	0.83	0.11	1
Dibromomethane	ND		ug/kg	1.6	0.20	1
Styrene	ND		ug/kg	0.83	0.16	1
Dichlorodifluoromethane	ND		ug/kg	8.3	0.76	1
Acetone	15		ug/kg	8.3	4.0	1
Carbon disulfide	ND		ug/kg	8.3	3.8	1
2-Butanone	ND		ug/kg	8.3	1.8	1
Vinyl acetate	ND		ug/kg	8.3	1.8	1
4-Methyl-2-pentanone	ND		ug/kg	8.3	1.1	1
1,2,3-Trichloropropane	ND		ug/kg	1.6	0.10	1
2-Hexanone	ND		ug/kg	8.3	0.98	1
Bromochloromethane	ND		ug/kg	1.6	0.17	1
2,2-Dichloropropane	ND		ug/kg	1.6	0.17	1
1,2-Dibromoethane	ND		ug/kg	0.83	0.23	1
1,3-Dichloropropane	ND		ug/kg	1.6	0.14	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.41	0.11	1
Bromobenzene	ND		ug/kg	1.6	0.12	1
n-Butylbenzene	ND		ug/kg	0.83	0.14	1
sec-Butylbenzene	ND		ug/kg	0.83	0.12	1
tert-Butylbenzene	ND		ug/kg	1.6	0.10	1
o-Chlorotoluene	ND		ug/kg	1.6	0.16	1
p-Chlorotoluene	ND		ug/kg	1.6	0.09	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.5	0.83	1
Hexachlorobutadiene	ND		ug/kg	3.3	0.14	1
Isopropylbenzene	ND		ug/kg	0.83	0.09	1
p-Isopropyltoluene	ND		ug/kg	0.83	0.09	1
Naphthalene	ND		ug/kg	3.3	0.54	1
Acrylonitrile	ND		ug/kg	3.3	0.95	1

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

**Lab ID:** L1838656-01  
**Client ID:** SB-1/10.5-11  
**Sample Location:** 325-397 YONKERS AVE., YONKERS, NY

**Date Collected:** 09/26/18 09:30  
**Date Received:** 09/26/18  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
n-Propylbenzene	ND		ug/kg	0.83	0.14	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.6	0.27	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.6	0.22	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.6	0.16	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.6	0.28	1
1,4-Dioxane	ND		ug/kg	83	29.	1
p-Diethylbenzene	ND		ug/kg	1.6	0.15	1
p-Ethyltoluene	ND		ug/kg	1.6	0.32	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.6	0.16	1
Ethyl ether	ND		ug/kg	1.6	0.28	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.1	1.2	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	100		70-130

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

**Lab ID:** L1838656-02  
**Client ID:** SB-2/9-9.5  
**Sample Location:** 325-397 YONKERS AVE., YONKERS, NY

**Date Collected:** 09/26/18 10:00  
**Date Received:** 09/26/18  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 10/04/18 05:31  
**Analyst:** MV  
**Percent Solids:** 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	4.8	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.97	0.14	1
Chloroform	ND		ug/kg	1.4	0.14	1
Carbon tetrachloride	ND		ug/kg	0.97	0.22	1
1,2-Dichloropropane	ND		ug/kg	0.97	0.12	1
Dibromochloromethane	ND		ug/kg	0.97	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	0.97	0.26	1
Tetrachloroethene	ND		ug/kg	0.48	0.19	1
Chlorobenzene	ND		ug/kg	0.48	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.9	0.68	1
1,2-Dichloroethane	ND		ug/kg	0.97	0.25	1
1,1,1-Trichloroethane	ND		ug/kg	0.48	0.16	1
Bromodichloromethane	ND		ug/kg	0.48	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.97	0.26	1
cis-1,3-Dichloropropene	ND		ug/kg	0.48	0.15	1
1,3-Dichloropropene, Total	ND		ug/kg	0.48	0.15	1
1,1-Dichloropropene	ND		ug/kg	0.48	0.15	1
Bromoform	ND		ug/kg	3.9	0.24	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.48	0.16	1
Benzene	4.7		ug/kg	0.48	0.16	1
Toluene	ND		ug/kg	0.97	0.53	1
Ethylbenzene	2.5		ug/kg	0.97	0.14	1
Chloromethane	ND		ug/kg	3.9	0.90	1
Bromomethane	ND		ug/kg	1.9	0.56	1
Vinyl chloride	ND		ug/kg	0.97	0.32	1
Chloroethane	ND		ug/kg	1.9	0.44	1
1,1-Dichloroethene	ND		ug/kg	0.97	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1



**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

**Lab ID:** L1838656-02  
**Client ID:** SB-2/9-9.5  
**Sample Location:** 325-397 YONKERS AVE., YONKERS, NY

**Date Collected:** 09/26/18 10:00  
**Date Received:** 09/26/18  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Trichloroethene	ND		ug/kg	0.48	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	1.9	0.17	1
Methyl tert butyl ether	0.76	J	ug/kg	1.9	0.20	1
p/m-Xylene	ND		ug/kg	1.9	0.54	1
o-Xylene	ND		ug/kg	0.97	0.28	1
Xylenes, Total	ND		ug/kg	0.97	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.97	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	0.97	0.13	1
Dibromomethane	ND		ug/kg	1.9	0.23	1
Styrene	ND		ug/kg	0.97	0.19	1
Dichlorodifluoromethane	ND		ug/kg	9.7	0.89	1
Acetone	22		ug/kg	9.7	4.7	1
Carbon disulfide	ND		ug/kg	9.7	4.4	1
2-Butanone	ND		ug/kg	9.7	2.2	1
Vinyl acetate	ND		ug/kg	9.7	2.1	1
4-Methyl-2-pentanone	ND		ug/kg	9.7	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	1.9	0.12	1
2-Hexanone	ND		ug/kg	9.7	1.1	1
Bromochloromethane	ND		ug/kg	1.9	0.20	1
2,2-Dichloropropane	ND		ug/kg	1.9	0.20	1
1,2-Dibromoethane	ND		ug/kg	0.97	0.27	1
1,3-Dichloropropane	ND		ug/kg	1.9	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.48	0.13	1
Bromobenzene	ND		ug/kg	1.9	0.14	1
n-Butylbenzene	0.81	J	ug/kg	0.97	0.16	1
sec-Butylbenzene	0.39	J	ug/kg	0.97	0.14	1
tert-Butylbenzene	ND		ug/kg	1.9	0.11	1
o-Chlorotoluene	ND		ug/kg	1.9	0.18	1
p-Chlorotoluene	ND		ug/kg	1.9	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.9	0.97	1
Hexachlorobutadiene	ND		ug/kg	3.9	0.16	1
Isopropylbenzene	1.1		ug/kg	0.97	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.97	0.10	1
Naphthalene	2.7	J	ug/kg	3.9	0.63	1
Acrylonitrile	ND		ug/kg	3.9	1.1	1

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

**Lab ID:** L1838656-02  
**Client ID:** SB-2/9-9.5  
**Sample Location:** 325-397 YONKERS AVE., YONKERS, NY

**Date Collected:** 09/26/18 10:00  
**Date Received:** 09/26/18  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
n-Propylbenzene	1.8		ug/kg	0.97	0.17	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.9	0.31	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.9	0.26	1
1,3,5-Trimethylbenzene	0.27	J	ug/kg	1.9	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.9	0.32	1
1,4-Dioxane	ND		ug/kg	97	34.	1
p-Diethylbenzene	0.87	J	ug/kg	1.9	0.17	1
p-Ethyltoluene	ND		ug/kg	1.9	0.37	1
1,2,4,5-Tetramethylbenzene	8.2		ug/kg	1.9	0.18	1
Ethyl ether	ND		ug/kg	1.9	0.33	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.8	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	99		70-130

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

Lab ID: L1838656-03  
 Client ID: SB-3/14.5-15  
 Sample Location: 325-397 YONKERS AVE., YONKERS, NY

Date Collected: 09/26/18 10:15  
 Date Received: 09/26/18  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8260C  
 Analytical Date: 10/04/18 15:21  
 Analyst: KJD  
 Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	210	97.	1
1,1-Dichloroethane	ND		ug/kg	42	6.2	1
Chloroform	ND		ug/kg	64	6.0	1
Carbon tetrachloride	ND		ug/kg	42	9.8	1
1,2-Dichloropropane	ND		ug/kg	42	5.3	1
Dibromochloromethane	ND		ug/kg	42	6.0	1
1,1,2-Trichloroethane	ND		ug/kg	42	11.	1
Tetrachloroethene	ND		ug/kg	21	8.3	1
Chlorobenzene	ND		ug/kg	21	5.4	1
Trichlorofluoromethane	ND		ug/kg	170	30.	1
1,2-Dichloroethane	ND		ug/kg	42	11.	1
1,1,1-Trichloroethane	ND		ug/kg	21	7.1	1
Bromodichloromethane	ND		ug/kg	21	4.6	1
trans-1,3-Dichloropropene	ND		ug/kg	42	12.	1
cis-1,3-Dichloropropene	ND		ug/kg	21	6.7	1
1,3-Dichloropropene, Total	ND		ug/kg	21	6.7	1
1,1-Dichloropropene	ND		ug/kg	21	6.8	1
Bromoform	ND		ug/kg	170	10.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	21	7.0	1
Benzene	ND		ug/kg	21	7.0	1
Toluene	ND		ug/kg	42	23.	1
Ethylbenzene	20	J	ug/kg	42	6.0	1
Chloromethane	ND		ug/kg	170	40.	1
Bromomethane	ND		ug/kg	85	25.	1
Vinyl chloride	ND		ug/kg	42	14.	1
Chloroethane	ND		ug/kg	85	19.	1
1,1-Dichloroethene	ND		ug/kg	42	10.	1
trans-1,2-Dichloroethene	ND		ug/kg	64	5.8	1

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

**Lab ID:** L1838656-03  
**Client ID:** SB-3/14.5-15  
**Sample Location:** 325-397 YONKERS AVE., YONKERS, NY

**Date Collected:** 09/26/18 10:15  
**Date Received:** 09/26/18  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Trichloroethene	ND		ug/kg	21	5.8	1
1,2-Dichlorobenzene	ND		ug/kg	85	6.1	1
1,3-Dichlorobenzene	ND		ug/kg	85	6.3	1
1,4-Dichlorobenzene	ND		ug/kg	85	7.3	1
Methyl tert butyl ether	ND		ug/kg	85	8.5	1
p/m-Xylene	ND		ug/kg	85	24.	1
o-Xylene	ND		ug/kg	42	12.	1
Xylenes, Total	ND		ug/kg	42	12.	1
cis-1,2-Dichloroethene	ND		ug/kg	42	7.4	1
1,2-Dichloroethene, Total	ND		ug/kg	42	5.8	1
Dibromomethane	ND		ug/kg	85	10.	1
Styrene	ND		ug/kg	42	8.3	1
Dichlorodifluoromethane	ND		ug/kg	420	39.	1
Acetone	ND		ug/kg	420	200	1
Carbon disulfide	ND		ug/kg	420	190	1
2-Butanone	ND		ug/kg	420	94.	1
Vinyl acetate	ND		ug/kg	420	91.	1
4-Methyl-2-pentanone	ND		ug/kg	420	54.	1
1,2,3-Trichloropropane	ND		ug/kg	85	5.4	1
2-Hexanone	ND		ug/kg	420	50.	1
Bromochloromethane	ND		ug/kg	85	8.7	1
2,2-Dichloropropane	ND		ug/kg	85	8.6	1
1,2-Dibromoethane	ND		ug/kg	42	12.	1
1,3-Dichloropropane	ND		ug/kg	85	7.1	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	21	5.6	1
Bromobenzene	ND		ug/kg	85	6.2	1
n-Butylbenzene	83		ug/kg	42	7.1	1
sec-Butylbenzene	66		ug/kg	42	6.2	1
tert-Butylbenzene	ND		ug/kg	85	5.0	1
o-Chlorotoluene	ND		ug/kg	85	8.1	1
p-Chlorotoluene	ND		ug/kg	85	4.6	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	130	42.	1
Hexachlorobutadiene	ND		ug/kg	170	7.2	1
Isopropylbenzene	39	J	ug/kg	42	4.6	1
p-Isopropyltoluene	20	J	ug/kg	42	4.6	1
Naphthalene	29	J	ug/kg	170	28.	1
Acrylonitrile	ND		ug/kg	170	49.	1

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

**Lab ID:** L1838656-03  
**Client ID:** SB-3/14.5-15  
**Sample Location:** 325-397 YONKERS AVE., YONKERS, NY

**Date Collected:** 09/26/18 10:15  
**Date Received:** 09/26/18  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
n-Propylbenzene	100		ug/kg	42	7.3	1
1,2,3-Trichlorobenzene	ND		ug/kg	85	14.	1
1,2,4-Trichlorobenzene	ND		ug/kg	85	12.	1
1,3,5-Trimethylbenzene	ND		ug/kg	85	8.2	1
1,2,4-Trimethylbenzene	ND		ug/kg	85	14.	1
1,4-Dioxane	ND		ug/kg	4200	1500	1
p-Diethylbenzene	94		ug/kg	85	7.5	1
p-Ethyltoluene	17	J	ug/kg	85	16.	1
1,2,4,5-Tetramethylbenzene	160		ug/kg	85	8.1	1
Ethyl ether	ND		ug/kg	85	14.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	210	60.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	116		70-130
Dibromofluoromethane	95		70-130

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

**Lab ID:** L1838656-04  
**Client ID:** SB-4/17-17.5  
**Sample Location:** 325-397 YONKERS AVE., YONKERS, NY

**Date Collected:** 09/26/18 10:40  
**Date Received:** 09/26/18  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 10/04/18 15:47  
**Analyst:** KJD  
**Percent Solids:** 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	240	110	1
1,1-Dichloroethane	ND		ug/kg	48	6.9	1
Chloroform	ND		ug/kg	71	6.6	1
Carbon tetrachloride	ND		ug/kg	48	11.	1
1,2-Dichloropropane	ND		ug/kg	48	5.9	1
Dibromochloromethane	ND		ug/kg	48	6.6	1
1,1,2-Trichloroethane	ND		ug/kg	48	13.	1
Tetrachloroethene	ND		ug/kg	24	9.3	1
Chlorobenzene	ND		ug/kg	24	6.0	1
Trichlorofluoromethane	ND		ug/kg	190	33.	1
1,2-Dichloroethane	ND		ug/kg	48	12.	1
1,1,1-Trichloroethane	ND		ug/kg	24	7.9	1
Bromodichloromethane	ND		ug/kg	24	5.2	1
trans-1,3-Dichloropropene	ND		ug/kg	48	13.	1
cis-1,3-Dichloropropene	ND		ug/kg	24	7.5	1
1,3-Dichloropropene, Total	ND		ug/kg	24	7.5	1
1,1-Dichloropropene	ND		ug/kg	24	7.6	1
Bromoform	ND		ug/kg	190	12.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	24	7.9	1
Benzene	ND		ug/kg	24	7.9	1
Toluene	ND		ug/kg	48	26.	1
Ethylbenzene	ND		ug/kg	48	6.7	1
Chloromethane	ND		ug/kg	190	44.	1
Bromomethane	ND		ug/kg	95	28.	1
Vinyl chloride	ND		ug/kg	48	16.	1
Chloroethane	ND		ug/kg	95	21.	1
1,1-Dichloroethene	ND		ug/kg	48	11.	1
trans-1,2-Dichloroethene	ND		ug/kg	71	6.5	1

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

**Lab ID:** L1838656-04  
**Client ID:** SB-4/17-17.5  
**Sample Location:** 325-397 YONKERS AVE., YONKERS, NY

**Date Collected:** 09/26/18 10:40  
**Date Received:** 09/26/18  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatiles Organics by 8260/5035 - Westborough Lab</b>						
Trichloroethene	ND		ug/kg	24	6.5	1
1,2-Dichlorobenzene	ND		ug/kg	95	6.8	1
1,3-Dichlorobenzene	ND		ug/kg	95	7.0	1
1,4-Dichlorobenzene	ND		ug/kg	95	8.1	1
Methyl tert butyl ether	ND		ug/kg	95	9.6	1
p/m-Xylene	ND		ug/kg	95	27.	1
o-Xylene	ND		ug/kg	48	14.	1
Xylenes, Total	ND		ug/kg	48	14.	1
cis-1,2-Dichloroethene	ND		ug/kg	48	8.3	1
1,2-Dichloroethene, Total	ND		ug/kg	48	6.5	1
Dibromomethane	ND		ug/kg	95	11.	1
Styrene	ND		ug/kg	48	9.3	1
Dichlorodifluoromethane	ND		ug/kg	480	43.	1
Acetone	ND		ug/kg	480	230	1
Carbon disulfide	ND		ug/kg	480	220	1
2-Butanone	ND		ug/kg	480	100	1
Vinyl acetate	ND		ug/kg	480	100	1
4-Methyl-2-pentanone	ND		ug/kg	480	61.	1
1,2,3-Trichloropropane	ND		ug/kg	95	6.0	1
2-Hexanone	ND		ug/kg	480	56.	1
Bromochloromethane	ND		ug/kg	95	9.7	1
2,2-Dichloropropane	ND		ug/kg	95	9.6	1
1,2-Dibromoethane	ND		ug/kg	48	13.	1
1,3-Dichloropropane	ND		ug/kg	95	7.9	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	24	6.3	1
Bromobenzene	ND		ug/kg	95	6.9	1
n-Butylbenzene	55		ug/kg	48	7.9	1
sec-Butylbenzene	36	J	ug/kg	48	6.9	1
tert-Butylbenzene	ND		ug/kg	95	5.6	1
o-Chlorotoluene	ND		ug/kg	95	9.1	1
p-Chlorotoluene	ND		ug/kg	95	5.1	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	140	47.	1
Hexachlorobutadiene	ND		ug/kg	190	8.0	1
Isopropylbenzene	ND		ug/kg	48	5.2	1
p-Isopropyltoluene	ND		ug/kg	48	5.2	1
Naphthalene	ND		ug/kg	190	31.	1
Acrylonitrile	ND		ug/kg	190	55.	1



**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

**Lab ID:** L1838656-04  
**Client ID:** SB-4/17-17.5  
**Sample Location:** 325-397 YONKERS AVE., YONKERS, NY

**Date Collected:** 09/26/18 10:40  
**Date Received:** 09/26/18  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
n-Propylbenzene	ND		ug/kg	48	8.1	1
1,2,3-Trichlorobenzene	ND		ug/kg	95	15.	1
1,2,4-Trichlorobenzene	ND		ug/kg	95	13.	1
1,3,5-Trimethylbenzene	ND		ug/kg	95	9.2	1
1,2,4-Trimethylbenzene	ND		ug/kg	95	16.	1
1,4-Dioxane	ND		ug/kg	4800	1700	1
p-Diethylbenzene	150		ug/kg	95	8.4	1
p-Ethyltoluene	ND		ug/kg	95	18.	1
1,2,4,5-Tetramethylbenzene	89	J	ug/kg	95	9.1	1
Ethyl ether	ND		ug/kg	95	16.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	240	68.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	96		70-130

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

Lab ID: L1838656-05  
 Client ID: SB-5/18.5-19  
 Sample Location: 325-397 YONKERS AVE., YONKERS, NY

Date Collected: 09/26/18 11:20  
 Date Received: 09/26/18  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8260C  
 Analytical Date: 10/04/18 05:58  
 Analyst: MV  
 Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	4.5	2.0	1
1,1-Dichloroethane	ND		ug/kg	0.90	0.13	1
Chloroform	ND		ug/kg	1.3	0.12	1
Carbon tetrachloride	ND		ug/kg	0.90	0.21	1
1,2-Dichloropropane	ND		ug/kg	0.90	0.11	1
Dibromochloromethane	ND		ug/kg	0.90	0.12	1
1,1,2-Trichloroethane	ND		ug/kg	0.90	0.24	1
Tetrachloroethene	ND		ug/kg	0.45	0.18	1
Chlorobenzene	ND		ug/kg	0.45	0.11	1
Trichlorofluoromethane	ND		ug/kg	3.6	0.62	1
1,2-Dichloroethane	ND		ug/kg	0.90	0.23	1
1,1,1-Trichloroethane	ND		ug/kg	0.45	0.15	1
Bromodichloromethane	ND		ug/kg	0.45	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.90	0.24	1
cis-1,3-Dichloropropene	ND		ug/kg	0.45	0.14	1
1,3-Dichloropropene, Total	ND		ug/kg	0.45	0.14	1
1,1-Dichloropropene	ND		ug/kg	0.45	0.14	1
Bromoform	ND		ug/kg	3.6	0.22	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.45	0.15	1
Benzene	ND		ug/kg	0.45	0.15	1
Toluene	ND		ug/kg	0.90	0.49	1
Ethylbenzene	ND		ug/kg	0.90	0.13	1
Chloromethane	ND		ug/kg	3.6	0.84	1
Bromomethane	ND		ug/kg	1.8	0.52	1
Vinyl chloride	ND		ug/kg	0.90	0.30	1
Chloroethane	ND		ug/kg	1.8	0.40	1
1,1-Dichloroethene	ND		ug/kg	0.90	0.21	1
trans-1,2-Dichloroethene	ND		ug/kg	1.3	0.12	1

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

**Lab ID:** L1838656-05  
**Client ID:** SB-5/18.5-19  
**Sample Location:** 325-397 YONKERS AVE., YONKERS, NY

**Date Collected:** 09/26/18 11:20  
**Date Received:** 09/26/18  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Trichloroethene	ND		ug/kg	0.45	0.12	1
1,2-Dichlorobenzene	ND		ug/kg	1.8	0.13	1
1,3-Dichlorobenzene	ND		ug/kg	1.8	0.13	1
1,4-Dichlorobenzene	ND		ug/kg	1.8	0.15	1
Methyl tert butyl ether	ND		ug/kg	1.8	0.18	1
p/m-Xylene	ND		ug/kg	1.8	0.50	1
o-Xylene	ND		ug/kg	0.90	0.26	1
Xylenes, Total	ND		ug/kg	0.90	0.26	1
cis-1,2-Dichloroethene	ND		ug/kg	0.90	0.16	1
1,2-Dichloroethene, Total	ND		ug/kg	0.90	0.12	1
Dibromomethane	ND		ug/kg	1.8	0.21	1
Styrene	ND		ug/kg	0.90	0.18	1
Dichlorodifluoromethane	ND		ug/kg	9.0	0.82	1
Acetone	18		ug/kg	9.0	4.3	1
Carbon disulfide	ND		ug/kg	9.0	4.1	1
2-Butanone	ND		ug/kg	9.0	2.0	1
Vinyl acetate	ND		ug/kg	9.0	1.9	1
4-Methyl-2-pentanone	ND		ug/kg	9.0	1.1	1
1,2,3-Trichloropropane	ND		ug/kg	1.8	0.11	1
2-Hexanone	ND		ug/kg	9.0	1.0	1
Bromochloromethane	ND		ug/kg	1.8	0.18	1
2,2-Dichloropropane	ND		ug/kg	1.8	0.18	1
1,2-Dibromoethane	ND		ug/kg	0.90	0.25	1
1,3-Dichloropropane	ND		ug/kg	1.8	0.15	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.45	0.12	1
Bromobenzene	ND		ug/kg	1.8	0.13	1
n-Butylbenzene	ND		ug/kg	0.90	0.15	1
sec-Butylbenzene	ND		ug/kg	0.90	0.13	1
tert-Butylbenzene	ND		ug/kg	1.8	0.10	1
o-Chlorotoluene	ND		ug/kg	1.8	0.17	1
p-Chlorotoluene	ND		ug/kg	1.8	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.7	0.90	1
Hexachlorobutadiene	ND		ug/kg	3.6	0.15	1
Isopropylbenzene	ND		ug/kg	0.90	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.90	0.10	1
Naphthalene	ND		ug/kg	3.6	0.58	1
Acrylonitrile	ND		ug/kg	3.6	1.0	1

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

**Lab ID:** L1838656-05  
**Client ID:** SB-5/18.5-19  
**Sample Location:** 325-397 YONKERS AVE., YONKERS, NY

**Date Collected:** 09/26/18 11:20  
**Date Received:** 09/26/18  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.90	0.15	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.8	0.29	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.8	0.24	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.8	0.17	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.8	0.30	1
1,4-Dioxane	ND		ug/kg	90	31.	1
p-Diethylbenzene	ND		ug/kg	1.8	0.16	1
p-Ethyltoluene	ND		ug/kg	1.8	0.34	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.8	0.17	1
Ethyl ether	ND		ug/kg	1.8	0.30	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.5	1.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	99		70-130

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

Lab ID: L1838656-06  
 Client ID: TW-1  
 Sample Location: 325-397 YONKERS AVE., YONKERS, NY

Date Collected: 09/26/18 12:15  
 Date Received: 09/26/18  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 10/03/18 23:30  
 Analyst: NLK

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	18		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

**Lab ID:** L1838656-06  
**Client ID:** TW-1  
**Sample Location:** 325-397 YONKERS AVE., YONKERS, NY

**Date Collected:** 09/26/18 12:15  
**Date Received:** 09/26/18  
**Field Prep:** Not Specified

**Sample Depth:**

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

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

Lab ID: L1838656-06  
 Client ID: TW-1  
 Sample Location: 325-397 YONKERS AVE., YONKERS, NY

Date Collected: 09/26/18 12:15  
 Date Received: 09/26/18  
 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	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	93		70-130

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

Lab ID: L1838656-07 D  
 Client ID: TW-3  
 Sample Location: 325-397 YONKERS AVE., YONKERS, NY

Date Collected: 09/26/18 12:35  
 Date Received: 09/26/18  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 10/03/18 23:59  
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	6.2	1.8	2.5
1,1-Dichloroethane	ND		ug/l	6.2	1.8	2.5
Chloroform	ND		ug/l	6.2	1.8	2.5
Carbon tetrachloride	ND		ug/l	1.2	0.34	2.5
1,2-Dichloropropane	ND		ug/l	2.5	0.34	2.5
Dibromochloromethane	ND		ug/l	1.2	0.37	2.5
1,1,2-Trichloroethane	ND		ug/l	3.8	1.2	2.5
Tetrachloroethene	ND		ug/l	1.2	0.45	2.5
Chlorobenzene	ND		ug/l	6.2	1.8	2.5
Trichlorofluoromethane	ND		ug/l	6.2	1.8	2.5
1,2-Dichloroethane	ND		ug/l	1.2	0.33	2.5
1,1,1-Trichloroethane	ND		ug/l	6.2	1.8	2.5
Bromodichloromethane	ND		ug/l	1.2	0.48	2.5
trans-1,3-Dichloropropene	ND		ug/l	1.2	0.41	2.5
cis-1,3-Dichloropropene	ND		ug/l	1.2	0.36	2.5
1,3-Dichloropropene, Total	ND		ug/l	1.2	0.36	2.5
1,1-Dichloropropene	ND		ug/l	6.2	1.8	2.5
Bromoform	ND		ug/l	5.0	1.6	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	1.2	0.42	2.5
Benzene	ND		ug/l	1.2	0.40	2.5
Toluene	ND		ug/l	6.2	1.8	2.5
Ethylbenzene	3.3	J	ug/l	6.2	1.8	2.5
Chloromethane	ND		ug/l	6.2	1.8	2.5
Bromomethane	ND		ug/l	6.2	1.8	2.5
Vinyl chloride	ND		ug/l	2.5	0.18	2.5
Chloroethane	ND		ug/l	6.2	1.8	2.5
1,1-Dichloroethene	ND		ug/l	1.2	0.42	2.5
trans-1,2-Dichloroethene	ND		ug/l	6.2	1.8	2.5



**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

Lab ID: L1838656-07 D  
 Client ID: TW-3  
 Sample Location: 325-397 YONKERS AVE., YONKERS, NY

Date Collected: 09/26/18 12:35  
 Date Received: 09/26/18  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Trichloroethene	ND		ug/l	1.2	0.44	2.5
1,2-Dichlorobenzene	ND		ug/l	6.2	1.8	2.5
1,3-Dichlorobenzene	ND		ug/l	6.2	1.8	2.5
1,4-Dichlorobenzene	ND		ug/l	6.2	1.8	2.5
Methyl tert butyl ether	ND		ug/l	6.2	1.8	2.5
p/m-Xylene	ND		ug/l	6.2	1.8	2.5
o-Xylene	ND		ug/l	6.2	1.8	2.5
Xylenes, Total	ND		ug/l	6.2	1.8	2.5
cis-1,2-Dichloroethene	ND		ug/l	6.2	1.8	2.5
1,2-Dichloroethene, Total	ND		ug/l	6.2	1.8	2.5
Dibromomethane	ND		ug/l	12	2.5	2.5
1,2,3-Trichloropropane	ND		ug/l	6.2	1.8	2.5
Acrylonitrile	ND		ug/l	12	3.8	2.5
Styrene	ND		ug/l	6.2	1.8	2.5
Dichlorodifluoromethane	ND		ug/l	12	2.5	2.5
Acetone	ND		ug/l	12	3.6	2.5
Carbon disulfide	ND		ug/l	12	2.5	2.5
2-Butanone	ND		ug/l	12	4.8	2.5
Vinyl acetate	ND		ug/l	12	2.5	2.5
4-Methyl-2-pentanone	ND		ug/l	12	2.5	2.5
2-Hexanone	ND		ug/l	12	2.5	2.5
Bromochloromethane	ND		ug/l	6.2	1.8	2.5
2,2-Dichloropropane	ND		ug/l	6.2	1.8	2.5
1,2-Dibromoethane	ND		ug/l	5.0	1.6	2.5
1,3-Dichloropropane	ND		ug/l	6.2	1.8	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	6.2	1.8	2.5
Bromobenzene	ND		ug/l	6.2	1.8	2.5
n-Butylbenzene	26		ug/l	6.2	1.8	2.5
sec-Butylbenzene	18		ug/l	6.2	1.8	2.5
tert-Butylbenzene	ND		ug/l	6.2	1.8	2.5
o-Chlorotoluene	ND		ug/l	6.2	1.8	2.5
p-Chlorotoluene	ND		ug/l	6.2	1.8	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	6.2	1.8	2.5
Hexachlorobutadiene	ND		ug/l	6.2	1.8	2.5
Isopropylbenzene	33		ug/l	6.2	1.8	2.5
p-Isopropyltoluene	3.4	J	ug/l	6.2	1.8	2.5
Naphthalene	2.6	J	ug/l	6.2	1.8	2.5

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

Lab ID: L1838656-07 D  
 Client ID: TW-3  
 Sample Location: 325-397 YONKERS AVE., YONKERS, NY

Date Collected: 09/26/18 12:35  
 Date Received: 09/26/18  
 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	56		ug/l	6.2	1.8	2.5
1,2,3-Trichlorobenzene	ND		ug/l	6.2	1.8	2.5
1,2,4-Trichlorobenzene	ND		ug/l	6.2	1.8	2.5
1,3,5-Trimethylbenzene	5.4	J	ug/l	6.2	1.8	2.5
1,2,4-Trimethylbenzene	8.6		ug/l	6.2	1.8	2.5
1,4-Dioxane	ND		ug/l	620	150	2.5
p-Diethylbenzene	64		ug/l	5.0	1.8	2.5
p-Ethyltoluene	4.9	J	ug/l	5.0	1.8	2.5
1,2,4,5-Tetramethylbenzene	71		ug/l	5.0	1.4	2.5
Ethyl ether	ND		ug/l	6.2	1.8	2.5
trans-1,4-Dichloro-2-butene	ND		ug/l	6.2	1.8	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	89		70-130

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

Lab ID: L1838656-08  
 Client ID: TW-2  
 Sample Location: 325-397 YONKERS AVE., YONKERS, NY

Date Collected: 09/26/18 13:10  
 Date Received: 09/26/18  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 10/04/18 00:27  
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	89		ug/l	0.50	0.16	1
Toluene	4.6		ug/l	2.5	0.70	1
Ethylbenzene	12		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:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

**Lab ID:** L1838656-08  
**Client ID:** TW-2  
**Sample Location:** 325-397 YONKERS AVE., YONKERS, NY

**Date Collected:** 09/26/18 13:10  
**Date Received:** 09/26/18  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	4.9		ug/l	2.5	0.70	1
p/m-Xylene	11		ug/l	2.5	0.70	1
o-Xylene	1.2	J	ug/l	2.5	0.70	1
Xylenes, Total	12	J	ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	8.9		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	5.5		ug/l	2.5	0.70	1
sec-Butylbenzene	6.6		ug/l	2.5	0.70	1
tert-Butylbenzene	0.71	J	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	20		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	22		ug/l	2.5	0.70	1

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

**Lab ID:** L1838656-08  
**Client ID:** TW-2  
**Sample Location:** 325-397 YONKERS AVE., YONKERS, NY

**Date Collected:** 09/26/18 13:10  
**Date Received:** 09/26/18  
**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	33		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	14		ug/l	2.0	0.70	1
p-Ethyltoluene	1.2	J	ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	51		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	102		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	88		70-130

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

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

Analytical Method: 1,8260C  
Analytical Date: 10/03/18 21:43  
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02,05 Batch: WG1164029-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

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

Analytical Method: 1,8260C  
Analytical Date: 10/03/18 21:43  
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02,05 Batch: WG1164029-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

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

**Analytical Method:** 1,8260C  
**Analytical Date:** 10/03/18 21:43  
**Analyst:** AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02,05 Batch: WG1164029-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	100	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	100		70-130



**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

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

**Analytical Method:** 1,8260C  
**Analytical Date:** 10/03/18 20:10  
**Analyst:** MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06-08 Batch: WG1164162-5					
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:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

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

Analytical Method: 1,8260C  
Analytical Date: 10/03/18 20:10  
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06-08 Batch: WG1164162-5					
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:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

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

Analytical Method: 1,8260C  
Analytical Date: 10/03/18 20:10  
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06-08 Batch: WG1164162-5					
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	107		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	97		70-130

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

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

Analytical Method: 1,8260C  
Analytical Date: 10/04/18 09:43  
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 03-04 Batch: WG1164397-5					
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:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

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

Analytical Method: 1,8260C  
Analytical Date: 10/04/18 09:43  
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 03-04 Batch: WG1164397-5					
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:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

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

Analytical Method: 1,8260C  
Analytical Date: 10/04/18 09:43  
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 03-04 Batch: WG1164397-5					
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	5000	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	102		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	98		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838656

Report Date: 10/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,05 Batch: WG1164029-3 WG1164029-4								
Methylene chloride	88		90		70-130	2		30
1,1-Dichloroethane	101		104		70-130	3		30
Chloroform	106		110		70-130	4		30
Carbon tetrachloride	103		106		70-130	3		30
1,2-Dichloropropane	108		111		70-130	3		30
Dibromochloromethane	105		109		70-130	4		30
1,1,2-Trichloroethane	110		113		70-130	3		30
Tetrachloroethene	106		110		70-130	4		30
Chlorobenzene	103		108		70-130	5		30
Trichlorofluoromethane	91		96		70-139	5		30
1,2-Dichloroethane	105		107		70-130	2		30
1,1,1-Trichloroethane	105		108		70-130	3		30
Bromodichloromethane	112		116		70-130	4		30
trans-1,3-Dichloropropene	109		112		70-130	3		30
cis-1,3-Dichloropropene	114		118		70-130	3		30
1,1-Dichloropropene	104		108		70-130	4		30
Bromoform	103		106		70-130	3		30
1,1,2,2-Tetrachloroethane	108		109		70-130	1		30
Benzene	103		106		70-130	3		30
Toluene	106		108		70-130	2		30
Ethylbenzene	104		107		70-130	3		30
Chloromethane	66		69		52-130	4		30
Bromomethane	77		76		57-147	1		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838656

Report Date: 10/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,05 Batch: WG1164029-3 WG1164029-4								
Vinyl chloride	71		72		67-130	1		30
Chloroethane	78		83		50-151	6		30
1,1-Dichloroethene	90		94		65-135	4		30
trans-1,2-Dichloroethene	98		100		70-130	2		30
Trichloroethene	107		111		70-130	4		30
1,2-Dichlorobenzene	102		106		70-130	4		30
1,3-Dichlorobenzene	101		106		70-130	5		30
1,4-Dichlorobenzene	100		105		70-130	5		30
Methyl tert butyl ether	105		105		66-130	0		30
p/m-Xylene	105		109		70-130	4		30
o-Xylene	106		110		70-130	4		30
cis-1,2-Dichloroethene	105		108		70-130	3		30
Dibromomethane	110		111		70-130	1		30
Styrene	108		111		70-130	3		30
Dichlorodifluoromethane	44		46		30-146	4		30
Acetone	115		110		54-140	4		30
Carbon disulfide	71		71		59-130	0		30
2-Butanone	121		101		70-130	18		30
Vinyl acetate	108		106		70-130	2		30
4-Methyl-2-pentanone	110		107		70-130	3		30
1,2,3-Trichloropropane	107		106		68-130	1		30
2-Hexanone	115		121		70-130	5		30
Bromochloromethane	109		109		70-130	0		30



## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838656

Report Date: 10/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,05 Batch: WG1164029-3 WG1164029-4								
2,2-Dichloropropane	102		103		70-130	1		30
1,2-Dibromoethane	113		114		70-130	1		30
1,3-Dichloropropane	108		110		69-130	2		30
1,1,1,2-Tetrachloroethane	105		109		70-130	4		30
Bromobenzene	102		106		70-130	4		30
n-Butylbenzene	101		106		70-130	5		30
sec-Butylbenzene	101		106		70-130	5		30
tert-Butylbenzene	102		105		70-130	3		30
o-Chlorotoluene	101		107		70-130	6		30
p-Chlorotoluene	100		104		70-130	4		30
1,2-Dibromo-3-chloropropane	96		94		68-130	2		30
Hexachlorobutadiene	100		105		67-130	5		30
Isopropylbenzene	101		105		70-130	4		30
p-Isopropyltoluene	101		105		70-130	4		30
Naphthalene	105		106		70-130	1		30
Acrylonitrile	110		107		70-130	3		30
n-Propylbenzene	101		105		70-130	4		30
1,2,3-Trichlorobenzene	102		107		70-130	5		30
1,2,4-Trichlorobenzene	103		108		70-130	5		30
1,3,5-Trimethylbenzene	99		104		70-130	5		30
1,2,4-Trimethylbenzene	100		105		70-130	5		30
1,4-Dioxane	116		111		65-136	4		30
p-Diethylbenzene	102		107		70-130	5		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838656

Report Date: 10/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,05 Batch: WG1164029-3 WG1164029-4								
p-Ethyltoluene	101		106		70-130	5		30
1,2,4,5-Tetramethylbenzene	101		106		70-130	5		30
Ethyl ether	97		98		67-130	1		30
trans-1,4-Dichloro-2-butene	96		102		70-130	6		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	99		95		70-130
Toluene-d8	97		97		70-130
4-Bromofluorobenzene	98		98		70-130
Dibromofluoromethane	101		101		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS AVENUE

Lab Number: L1838656

Project Number: 395010

Report Date: 10/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-08 Batch: WG1164162-3 WG1164162-4								
Methylene chloride	84		87		70-130	4		20
1,1-Dichloroethane	97		100		70-130	3		20
Chloroform	84		88		70-130	5		20
Carbon tetrachloride	88		92		63-132	4		20
1,2-Dichloropropane	99		100		70-130	1		20
Dibromochloromethane	84		86		63-130	2		20
1,1,2-Trichloroethane	83		88		70-130	6		20
Tetrachloroethene	90		94		70-130	4		20
Chlorobenzene	84		88		75-130	5		20
Trichlorofluoromethane	89		94		62-150	5		20
1,2-Dichloroethane	96		98		70-130	2		20
1,1,1-Trichloroethane	88		92		67-130	4		20
Bromodichloromethane	87		88		67-130	1		20
trans-1,3-Dichloropropene	81		85		70-130	5		20
cis-1,3-Dichloropropene	82		85		70-130	4		20
1,1-Dichloropropene	87		91		70-130	4		20
Bromoform	74		77		54-136	4		20
1,1,2,2-Tetrachloroethane	78		80		67-130	3		20
Benzene	86		90		70-130	5		20
Toluene	84		89		70-130	6		20
Ethylbenzene	85		89		70-130	5		20
Chloromethane	110		120		64-130	9		20
Bromomethane	76		82		39-139	8		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838656

Report Date: 10/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-08 Batch: WG1164162-3 WG1164162-4								
Vinyl chloride	110		120		55-140	9		20
Chloroethane	110		120		55-138	9		20
1,1-Dichloroethene	85		91		61-145	7		20
trans-1,2-Dichloroethene	84		89		70-130	6		20
Trichloroethene	84		88		70-130	5		20
1,2-Dichlorobenzene	85		88		70-130	3		20
1,3-Dichlorobenzene	86		90		70-130	5		20
1,4-Dichlorobenzene	88		88		70-130	0		20
Methyl tert butyl ether	85		87		63-130	2		20
p/m-Xylene	90		95		70-130	5		20
o-Xylene	90		95		70-130	5		20
cis-1,2-Dichloroethene	89		86		70-130	3		20
Dibromomethane	83		86		70-130	4		20
1,2,3-Trichloropropane	75		77		64-130	3		20
Acrylonitrile	110		110		70-130	0		20
Styrene	85		85		70-130	0		20
Dichlorodifluoromethane	100		110		36-147	10		20
Acetone	110		110		58-148	0		20
Carbon disulfide	86		90		51-130	5		20
2-Butanone	94		91		63-138	3		20
Vinyl acetate	100		100		70-130	0		20
4-Methyl-2-pentanone	100		110		59-130	10		20
2-Hexanone	92		90		57-130	2		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838656

Report Date: 10/07/18

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-08 Batch: WG1164162-3 WG1164162-4								
Bromochloromethane	91		93		70-130	2		20
2,2-Dichloropropane	87		92		63-133	6		20
1,2-Dibromoethane	83		87		70-130	5		20
1,3-Dichloropropane	84		87		70-130	4		20
1,1,1,2-Tetrachloroethane	86		89		64-130	3		20
Bromobenzene	80		85		70-130	6		20
n-Butylbenzene	89		95		53-136	7		20
sec-Butylbenzene	91		96		70-130	5		20
tert-Butylbenzene	89		92		70-130	3		20
o-Chlorotoluene	85		90		70-130	6		20
p-Chlorotoluene	84		88		70-130	5		20
1,2-Dibromo-3-chloropropane	72		69		41-144	4		20
Hexachlorobutadiene	79		82		63-130	4		20
Isopropylbenzene	89		94		70-130	5		20
p-Isopropyltoluene	90		94		70-130	4		20
Naphthalene	64	Q	61	Q	70-130	5		20
n-Propylbenzene	86		91		69-130	6		20
1,2,3-Trichlorobenzene	62	Q	62	Q	70-130	0		20
1,2,4-Trichlorobenzene	74		73		70-130	1		20
1,3,5-Trimethylbenzene	88		94		64-130	7		20
1,2,4-Trimethylbenzene	90		94		70-130	4		20
1,4-Dioxane	112		120		56-162	7		20
p-Diethylbenzene	92		97		70-130	5		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838656

Report Date: 10/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-08 Batch: WG1164162-3 WG1164162-4								
p-Ethyltoluene	91		95		70-130	4		20
1,2,4,5-Tetramethylbenzene	87		86		70-130	1		20
Ethyl ether	86		89		59-134	3		20
trans-1,4-Dichloro-2-butene	110		100		70-130	10		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	106		103		70-130
Toluene-d8	101		102		70-130
4-Bromofluorobenzene	97		99		70-130
Dibromofluoromethane	99		98		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838656

Report Date: 10/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 03-04 Batch: WG1164397-3 WG1164397-4								
Methylene chloride	100		101		70-130	1		30
1,1-Dichloroethane	109		111		70-130	2		30
Chloroform	111		113		70-130	2		30
Carbon tetrachloride	105		107		70-130	2		30
1,2-Dichloropropane	107		110		70-130	3		30
Dibromochloromethane	109		112		70-130	3		30
1,1,2-Trichloroethane	107		107		70-130	0		30
Tetrachloroethene	109		111		70-130	2		30
Chlorobenzene	107		109		70-130	2		30
Trichlorofluoromethane	109		112		70-139	3		30
1,2-Dichloroethane	113		114		70-130	1		30
1,1,1-Trichloroethane	114		117		70-130	3		30
Bromodichloromethane	117		120		70-130	3		30
trans-1,3-Dichloropropene	108		110		70-130	2		30
cis-1,3-Dichloropropene	114		115		70-130	1		30
1,1-Dichloropropene	106		110		70-130	4		30
Bromoform	108		114		70-130	5		30
1,1,2,2-Tetrachloroethane	107		108		70-130	1		30
Benzene	106		109		70-130	3		30
Toluene	106		109		70-130	3		30
Ethylbenzene	108		110		70-130	2		30
Chloromethane	111		110		52-130	1		30
Bromomethane	108		106		57-147	2		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS AVENUE

Lab Number: L1838656

Project Number: 395010

Report Date: 10/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 03-04 Batch: WG1164397-3 WG1164397-4								
Vinyl chloride	107		109		67-130	2		30
Chloroethane	121		123		50-151	2		30
1,1-Dichloroethene	103		105		65-135	2		30
trans-1,2-Dichloroethene	107		110		70-130	3		30
Trichloroethene	110		114		70-130	4		30
1,2-Dichlorobenzene	108		110		70-130	2		30
1,3-Dichlorobenzene	108		110		70-130	2		30
1,4-Dichlorobenzene	107		109		70-130	2		30
Methyl tert butyl ether	109		112		66-130	3		30
p/m-Xylene	112		114		70-130	2		30
o-Xylene	112		114		70-130	2		30
cis-1,2-Dichloroethene	110		111		70-130	1		30
Dibromomethane	112		113		70-130	1		30
Styrene	104		105		70-130	1		30
Dichlorodifluoromethane	100		102		30-146	2		30
Acetone	105		107		54-140	2		30
Carbon disulfide	99		100		59-130	1		30
2-Butanone	104		108		70-130	4		30
Vinyl acetate	114		116		70-130	2		30
4-Methyl-2-pentanone	98		102		70-130	4		30
1,2,3-Trichloropropane	103		106		68-130	3		30
2-Hexanone	100		99		70-130	1		30
Bromochloromethane	111		112		70-130	1		30



## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS AVENUE

Lab Number: L1838656

Project Number: 395010

Report Date: 10/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 03-04 Batch: WG1164397-3 WG1164397-4								
2,2-Dichloropropane	105		108		70-130	3		30
1,2-Dibromoethane	112		110		70-130	2		30
1,3-Dichloropropane	106		108		69-130	2		30
1,1,1,2-Tetrachloroethane	112		113		70-130	1		30
Bromobenzene	104		106		70-130	2		30
n-Butylbenzene	104		108		70-130	4		30
sec-Butylbenzene	104		107		70-130	3		30
tert-Butylbenzene	104		108		70-130	4		30
o-Chlorotoluene	102		106		70-130	4		30
p-Chlorotoluene	103		105		70-130	2		30
1,2-Dibromo-3-chloropropane	103		100		68-130	3		30
Hexachlorobutadiene	106		108		67-130	2		30
Isopropylbenzene	105		109		70-130	4		30
p-Isopropyltoluene	106		110		70-130	4		30
Naphthalene	111		111		70-130	0		30
Acrylonitrile	114		112		70-130	2		30
n-Propylbenzene	101		105		70-130	4		30
1,2,3-Trichlorobenzene	111		112		70-130	1		30
1,2,4-Trichlorobenzene	111		113		70-130	2		30
1,3,5-Trimethylbenzene	104		108		70-130	4		30
1,2,4-Trimethylbenzene	107		110		70-130	3		30
1,4-Dioxane	95		94		65-136	1		30
p-Diethylbenzene	106		109		70-130	3		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838656

Report Date: 10/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 03-04 Batch: WG1164397-3 WG1164397-4								
p-Ethyltoluene	104		108		70-130	4		30
1,2,4,5-Tetramethylbenzene	106		108		70-130	2		30
Ethyl ether	106		108		67-130	2		30
trans-1,4-Dichloro-2-butene	95		97		70-130	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	106		105		70-130
Toluene-d8	98		98		70-130
4-Bromofluorobenzene	97		98		70-130
Dibromofluoromethane	104		104		70-130

# SEMIVOLATILES

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

**Lab ID:** L1838656-05  
**Client ID:** SB-5/18.5-19  
**Sample Location:** 325-397 YONKERS AVE., YONKERS, NY

**Date Collected:** 09/26/18 11:20  
**Date Received:** 09/26/18  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8270D  
**Analytical Date:** 10/05/18 11:19  
**Analyst:** IM  
**Percent Solids:** 93%

**Extraction Method:** EPA 3546  
**Extraction Date:** 10/02/18 05:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	ND		ug/kg	140	18.	1
Fluoranthene	ND		ug/kg	100	20.	1
Naphthalene	ND		ug/kg	180	21.	1
Benzo(a)anthracene	ND		ug/kg	100	20.	1
Benzo(a)pyrene	ND		ug/kg	140	43.	1
Benzo(b)fluoranthene	ND		ug/kg	100	30.	1
Benzo(k)fluoranthene	ND		ug/kg	100	28.	1
Chrysene	ND		ug/kg	100	18.	1
Acenaphthylene	ND		ug/kg	140	27.	1
Anthracene	ND		ug/kg	100	34.	1
Benzo(ghi)perylene	ND		ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	17.	1
Phenanthrene	ND		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	24.	1
Pyrene	ND		ug/kg	100	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	77		30-120
4-Terphenyl-d14	60		18-120

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

**Lab ID:** L1838656-07  
**Client ID:** TW-3  
**Sample Location:** 325-397 YONKERS AVE., YONKERS, NY

**Date Collected:** 09/26/18 12:35  
**Date Received:** 09/26/18  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 1,8270D  
**Analytical Date:** 10/05/18 16:09  
**Analyst:** JG

**Extraction Method:** EPA 3510C  
**Extraction Date:** 10/02/18 07:29

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	2.3	J	ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

Lab ID: L1838656-07  
 Client ID: TW-3  
 Sample Location: 325-397 YONKERS AVE., YONKERS, NY

Date Collected: 09/26/18 12:35  
 Date Received: 09/26/18  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	71		21-120
Phenol-d6	29		10-120
Nitrobenzene-d5	87		23-120
2-Fluorobiphenyl	78		15-120
2,4,6-Tribromophenol	79		10-120
4-Terphenyl-d14	77		41-149

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

Lab ID: L1838656-07  
 Client ID: TW-3  
 Sample Location: 325-397 YONKERS AVE., YONKERS, NY

Date Collected: 09/26/18 12:35  
 Date Received: 09/26/18  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D-SIM  
 Analytical Date: 10/05/18 13:27  
 Analyst: DV

Extraction Method: EPA 3510C  
 Extraction Date: 10/02/18 07:25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS-SIM - Westborough Lab</b>						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.21		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

Lab ID: L1838656-07  
 Client ID: TW-3  
 Sample Location: 325-397 YONKERS AVE., YONKERS, NY

Date Collected: 09/26/18 12:35  
 Date Received: 09/26/18  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	66		21-120
Phenol-d6	55		10-120
Nitrobenzene-d5	91		23-120
2-Fluorobiphenyl	86		15-120
2,4,6-Tribromophenol	90		10-120
4-Terphenyl-d14	84		41-149



**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

**Lab ID:** L1838656-08  
**Client ID:** TW-2  
**Sample Location:** 325-397 YONKERS AVE., YONKERS, NY

**Date Collected:** 09/26/18 13:10  
**Date Received:** 09/26/18  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 1,8270D  
**Analytical Date:** 10/05/18 16:37  
**Analyst:** JG

**Extraction Method:** EPA 3510C  
**Extraction Date:** 10/02/18 07:29

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

Lab ID: L1838656-08  
 Client ID: TW-2  
 Sample Location: 325-397 YONKERS AVE., YONKERS, NY

Date Collected: 09/26/18 13:10  
 Date Received: 09/26/18  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	0.62	J	ug/l	5.0	0.53	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	87		21-120
Phenol-d6	21		10-120
Nitrobenzene-d5	106		23-120
2-Fluorobiphenyl	98		15-120
2,4,6-Tribromophenol	101		10-120
4-Terphenyl-d14	87		41-149

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

Lab ID: L1838656-08  
 Client ID: TW-2  
 Sample Location: 325-397 YONKERS AVE., YONKERS, NY

Date Collected: 09/26/18 13:10  
 Date Received: 09/26/18  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D-SIM  
 Analytical Date: 10/05/18 15:22  
 Analyst: DV

Extraction Method: EPA 3510C  
 Extraction Date: 10/02/18 07:25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS-SIM - Westborough Lab</b>						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.12		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.16		ug/l	0.10	0.02	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

Lab ID: L1838656-08  
 Client ID: TW-2  
 Sample Location: 325-397 YONKERS AVE., YONKERS, NY

Date Collected: 09/26/18 13:10  
 Date Received: 09/26/18  
 Field Prep: Not Specified

Sample Depth:

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

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	70		21-120
Phenol-d6	22		10-120
Nitrobenzene-d5	97		23-120
2-Fluorobiphenyl	85		15-120
2,4,6-Tribromophenol	98		10-120
4-Terphenyl-d14	106		41-149

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

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

**Analytical Method:** 1,8270D  
**Analytical Date:** 10/02/18 23:49  
**Analyst:** SZ

**Extraction Method:** EPA 3510C  
**Extraction Date:** 10/01/18 09:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 07-08 Batch: WG1162636-1					
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Isophorone	ND		ug/l	5.0	1.2
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38
Dimethyl phthalate	ND		ug/l	5.0	1.8
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

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

**Analytical Method:** 1,8270D  
**Analytical Date:** 10/02/18 23:49  
**Analyst:** SZ

**Extraction Method:** EPA 3510C  
**Extraction Date:** 10/01/18 09:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 07-08 Batch: WG1162636-1					
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Tentatively Identified Compounds

Total TIC Compounds	27.8	J	ug/l
Aldol Condensates	27.8	J	ug/l

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	47		21-120
Phenol-d6	37		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	64		15-120
2,4,6-Tribromophenol	47		10-120
4-Terphenyl-d14	60		41-149

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

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

**Analytical Method:** 1,8270D-SIM  
**Analytical Date:** 10/03/18 15:22  
**Analyst:** DV

**Extraction Method:** EPA 3510C  
**Extraction Date:** 10/01/18 09:37

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 07-08 Batch: WG1162638-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: YONKERS AVENUE

Lab Number: L1838656

Project Number: 395010

Report Date: 10/07/18

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

Analytical Method: 1,8270D-SIM  
 Analytical Date: 10/03/18 15:22  
 Analyst: DV

Extraction Method: EPA 3510C  
 Extraction Date: 10/01/18 09:37

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 07-08 Batch: WG1162638-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	45		21-120
Phenol-d6	39		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	63		15-120
2,4,6-Tribromophenol	62		10-120
4-Terphenyl-d14	63		41-149



**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

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

**Analytical Method:** 1,8270D  
**Analytical Date:** 10/05/18 00:20  
**Analyst:** RC

**Extraction Method:** EPA 3546  
**Extraction Date:** 10/02/18 05:22

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 05 Batch: WG1162987-1					
Acenaphthene	ND		ug/kg	130	17.
Fluoranthene	ND		ug/kg	99	19.
Naphthalene	ND		ug/kg	160	20.
Benzo(a)anthracene	ND		ug/kg	99	19.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	99	28.
Benzo(k)fluoranthene	ND		ug/kg	99	26.
Chrysene	ND		ug/kg	99	17.
Acenaphthylene	ND		ug/kg	130	26.
Anthracene	ND		ug/kg	99	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	99	20.
Dibenzo(a,h)anthracene	ND		ug/kg	99	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	99	16.

**Tentatively Identified Compounds**

Total TIC Compounds	146	J	ug/kg
Unknown Ketone	146	J	ug/kg

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

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

Analytical Method: 1,8270D  
 Analytical Date: 10/05/18 00:20  
 Analyst: RC

Extraction Method: EPA 3546  
 Extraction Date: 10/02/18 05:22

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 05 Batch: WG1162987-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	88		25-120
Phenol-d6	87		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	77		30-120
2,4,6-Tribromophenol	86		10-136
4-Terphenyl-d14	74		18-120

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838656

Report Date: 10/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 07-08 Batch: WG1162636-2 WG1162636-3								
1,2,4-Trichlorobenzene	54		50		39-98	8		30
Bis(2-chloroethyl)ether	57		52		40-140	9		30
1,2-Dichlorobenzene	54		50		40-140	8		30
1,3-Dichlorobenzene	54		50		40-140	8		30
1,4-Dichlorobenzene	53		50		36-97	6		30
3,3'-Dichlorobenzidine	50		40		40-140	22		30
2,4-Dinitrotoluene	59		52		48-143	13		30
2,6-Dinitrotoluene	64		53		40-140	19		30
4-Chlorophenyl phenyl ether	60		52		40-140	14		30
4-Bromophenyl phenyl ether	58		48		40-140	19		30
Bis(2-chloroisopropyl)ether	63		57		40-140	10		30
Bis(2-chloroethoxy)methane	60		52		40-140	14		30
Hexachlorocyclopentadiene	48		46		40-140	4		30
Isophorone	61		53		40-140	14		30
Nitrobenzene	60		57		40-140	5		30
NDPA/DPA	61		54		40-140	12		30
n-Nitrosodi-n-propylamine	63		56		29-132	12		30
Bis(2-ethylhexyl)phthalate	68		56		40-140	19		30
Butyl benzyl phthalate	59		51		40-140	15		30
Di-n-butylphthalate	58		50		40-140	15		30
Di-n-octylphthalate	59		52		40-140	13		30
Diethyl phthalate	65		56		40-140	15		30
Dimethyl phthalate	64		55		40-140	15		30

### Lab Control Sample Analysis Batch Quality Control

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 07-08 Batch: WG1162636-2 WG1162636-3								
Biphenyl	59		54		40-140	9		30
4-Chloroaniline	46		44		40-140	4		30
2-Nitroaniline	58		50	Q	52-143	15		30
3-Nitroaniline	54		44		25-145	20		30
4-Nitroaniline	51		44	Q	51-143	15		30
Dibenzofuran	58		52		40-140	11		30
1,2,4,5-Tetrachlorobenzene	53		48		2-134	10		30
Acetophenone	59		52		39-129	13		30
Benzyl Alcohol	52		46		26-116	12		30
Carbazole	58		52	Q	55-144	11		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	48		42		21-120
Phenol-d6	42		37		10-120
Nitrobenzene-d5	60		55		23-120
2-Fluorobiphenyl	55		52		15-120
2,4,6-Tribromophenol	58		47		10-120
4-Terphenyl-d14	53		45		41-149

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838656

Report Date: 10/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 07-08 Batch: WG1162638-2 WG1162638-3								
Acenaphthene	72		79		40-140	9		40
2-Chloronaphthalene	63		74		40-140	16		40
Fluoranthene	69		77		40-140	11		40
Hexachlorobutadiene	58		65		40-140	11		40
Naphthalene	63		70		40-140	11		40
Benzo(a)anthracene	70		76		40-140	8		40
Benzo(a)pyrene	62		68		40-140	9		40
Benzo(b)fluoranthene	60		68		40-140	13		40
Benzo(k)fluoranthene	72		79		40-140	9		40
Chrysene	70		79		40-140	12		40
Acenaphthylene	69		75		40-140	8		40
Anthracene	70		77		40-140	10		40
Benzo(ghi)perylene	66		74		40-140	11		40
Fluorene	74		81		40-140	9		40
Phenanthrene	66		73		40-140	10		40
Dibenzo(a,h)anthracene	67		74		40-140	10		40
Indeno(1,2,3-cd)pyrene	55		64		40-140	15		40
Pyrene	69		76		40-140	10		40
2-Methylnaphthalene	82		91		40-140	10		40
Hexachlorobenzene	61		67		40-140	9		40
Hexachloroethane	61		69		40-140	12		40

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838656

Report Date: 10/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 07-08 Batch: WG1162638-2 WG1162638-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	47		51		21-120
Phenol-d6	46		49		10-120
Nitrobenzene-d5	63		70		23-120
2-Fluorobiphenyl	60		65		15-120
2,4,6-Tribromophenol	59		70		10-120
4-Terphenyl-d14	55		60		41-149

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838656

Report Date: 10/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 05 Batch: WG1162987-2 WG1162987-3								
Acenaphthene	81		84		31-137	4		50
Fluoranthene	78		81		40-140	4		50
Naphthalene	77		78		40-140	1		50
Benzo(a)anthracene	71		76		40-140	7		50
Benzo(a)pyrene	84		89		40-140	6		50
Benzo(b)fluoranthene	72		75		40-140	4		50
Benzo(k)fluoranthene	96		101		40-140	5		50
Chrysene	85		90		40-140	6		50
Acenaphthylene	78		78		40-140	0		50
Anthracene	81		88		40-140	8		50
Benzo(ghi)perylene	78		83		40-140	6		50
Fluorene	80		83		40-140	4		50
Phenanthrene	76		81		40-140	6		50
Dibenzo(a,h)anthracene	80		84		40-140	5		50
Indeno(1,2,3-cd)pyrene	72		76		40-140	5		50
Pyrene	75		82		35-142	9		50

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 05 Batch: WG1162987-2 WG1162987-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	80		81		25-120
Phenol-d6	80		82		10-120
Nitrobenzene-d5	70		75		23-120
2-Fluorobiphenyl	71		71		30-120
2,4,6-Tribromophenol	76		78		10-136
4-Terphenyl-d14	62		66		18-120



# PCBS

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

**SAMPLE RESULTS**

**Lab ID:** L1838656-05  
**Client ID:** SB-5/18.5-19  
**Sample Location:** 325-397 YONKERS AVE., YONKERS, NY

**Date Collected:** 09/26/18 11:20  
**Date Received:** 09/26/18  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Soil  
**Analytical Method:** 1,8082A  
**Analytical Date:** 10/04/18 19:52  
**Analyst:** AWS  
**Percent Solids:** 93%

**Extraction Method:** EPA 3546  
**Extraction Date:** 10/02/18 00:22  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 10/02/18  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 10/02/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Polychlorinated Biphenyls by GC - Westborough Lab</b>							
Aroclor 1016	ND		ug/kg	34.4	3.06	1	A
Aroclor 1221	ND		ug/kg	34.4	3.45	1	A
Aroclor 1232	ND		ug/kg	34.4	7.30	1	A
Aroclor 1242	ND		ug/kg	34.4	4.64	1	A
Aroclor 1248	ND		ug/kg	34.4	5.17	1	A
Aroclor 1254	ND		ug/kg	34.4	3.77	1	A
Aroclor 1260	ND		ug/kg	34.4	6.37	1	A
Aroclor 1262	ND		ug/kg	34.4	4.38	1	A
Aroclor 1268	ND		ug/kg	34.4	3.57	1	A
PCBs, Total	ND		ug/kg	34.4	3.06	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	54		30-150	A
Decachlorobiphenyl	37		30-150	A
2,4,5,6-Tetrachloro-m-xylene	58		30-150	B
Decachlorobiphenyl	41		30-150	B

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

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

**Analytical Method:** 1,8082A  
**Analytical Date:** 10/02/18 21:46  
**Analyst:** HT

**Extraction Method:** EPA 3546  
**Extraction Date:** 10/02/18 00:23  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 10/02/18  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 10/02/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 05 Batch: WG1162940-1						
Aroclor 1016	ND		ug/kg	31.9	2.84	A
Aroclor 1221	ND		ug/kg	31.9	3.20	A
Aroclor 1232	ND		ug/kg	31.9	6.77	A
Aroclor 1242	ND		ug/kg	31.9	4.31	A
Aroclor 1248	ND		ug/kg	31.9	4.79	A
Aroclor 1254	ND		ug/kg	31.9	3.50	A
Aroclor 1260	ND		ug/kg	31.9	5.90	A
Aroclor 1262	ND		ug/kg	31.9	4.06	A
Aroclor 1268	ND		ug/kg	31.9	3.31	A
PCBs, Total	ND		ug/kg	31.9	2.84	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	A
Decachlorobiphenyl	68		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	71		30-150	B

### Lab Control Sample Analysis Batch Quality Control

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 05 Batch: WG1162940-2 WG1162940-3									
Aroclor 1016	74		78		40-140	5		50	A
Aroclor 1260	65		68		40-140	5		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		76		30-150	A
Decachlorobiphenyl	63		64		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		76		30-150	B
Decachlorobiphenyl	68		69		30-150	B

## METALS

**Project Name:** YONKERS AVENUE**Lab Number:** L1838656**Project Number:** 395010**Report Date:** 10/07/18**SAMPLE RESULTS**

Lab ID: L1838656-05

Date Collected: 09/26/18 11:20

Client ID: SB-5/18.5-19

Date Received: 09/26/18

Sample Location: 325-397 YONKERS AVE., YONKERS, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Arsenic, Total	0.623		mg/kg	0.412	0.086	1	10/04/18 07:50	10/04/18 19:55	EPA 3050B	1,6010D	LC
Barium, Total	31.5		mg/kg	0.412	0.072	1	10/04/18 07:50	10/04/18 19:55	EPA 3050B	1,6010D	LC
Cadmium, Total	0.103	J	mg/kg	0.412	0.040	1	10/04/18 07:50	10/04/18 19:55	EPA 3050B	1,6010D	LC
Chromium, Total	5.66		mg/kg	0.412	0.040	1	10/04/18 07:50	10/04/18 19:55	EPA 3050B	1,6010D	LC
Lead, Total	1.56	J	mg/kg	2.06	0.110	1	10/04/18 07:50	10/04/18 19:55	EPA 3050B	1,6010D	LC
Mercury, Total	ND		mg/kg	0.068	0.014	1	10/04/18 05:30	10/05/18 00:19	EPA 7471B	1,7471B	EA
Selenium, Total	0.218	J	mg/kg	0.825	0.106	1	10/04/18 07:50	10/04/18 19:55	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.412	0.117	1	10/04/18 07:50	10/04/18 19:55	EPA 3050B	1,6010D	LC



**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

### Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 05 Batch: WG1163989-1										
Mercury, Total	ND		mg/kg	0.083	0.018	1	10/04/18 05:30	10/04/18 23:30	1,7471B	EA

#### Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 05 Batch: WG1164025-1										
Arsenic, Total	0.176	J	mg/kg	0.400	0.083	1	10/04/18 07:50	10/04/18 10:41	1,6010D	LC
Barium, Total	ND		mg/kg	0.400	0.070	1	10/04/18 07:50	10/04/18 10:41	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.400	0.039	1	10/04/18 07:50	10/04/18 10:41	1,6010D	LC
Chromium, Total	ND		mg/kg	0.400	0.038	1	10/04/18 07:50	10/04/18 10:41	1,6010D	LC
Lead, Total	ND		mg/kg	2.00	0.107	1	10/04/18 07:50	10/04/18 10:41	1,6010D	LC
Selenium, Total	ND		mg/kg	0.800	0.103	1	10/04/18 07:50	10/04/18 10:41	1,6010D	LC
Silver, Total	ND		mg/kg	0.400	0.113	1	10/04/18 07:50	10/04/18 10:41	1,6010D	LC

#### Prep Information

Digestion Method: EPA 3050B

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838656

Report Date: 10/07/18

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Total Metals - Mansfield Lab Associated sample(s): 05 Batch: WG1163989-2 SRM Lot Number: D102-540								
Mercury, Total	104		-		65-134	-		
Total Metals - Mansfield Lab Associated sample(s): 05 Batch: WG1164025-2 SRM Lot Number: D102-540								
Arsenic, Total	90		-		83-117	-		
Barium, Total	84		-		83-118	-		
Cadmium, Total	92		-		83-118	-		
Chromium, Total	83		-		83-117	-		
Lead, Total	89		-		82-118	-		
Selenium, Total	95		-		79-121	-		
Silver, Total	87		-		80-120	-		



### Matrix Spike Analysis Batch Quality Control

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 05 QC Batch ID: WG1163989-3 QC Sample: L1837950-22 Client ID: MS Sample												
Mercury, Total	9.26	0.127	10.5	974	Q	-	-		80-120	-		20
Total Metals - Mansfield Lab Associated sample(s): 05 QC Batch ID: WG1164025-3 WG1164025-4 QC Sample: L1839882-03 Client ID: MS Sample												
Arsenic, Total	10.9	18.5	28.2	93		28.7	94		75-125	2		20
Barium, Total	145.	309	412	86		415	86		75-125	1		20
Cadmium, Total	0.698J	7.88	7.22	92		7.35	92		75-125	2		20
Chromium, Total	63.4	30.9	92.2	93		89.1	82		75-125	3		20
Lead, Total	33.3	78.8	97.6	82		98.9	82		75-125	1		20
Selenium, Total	1.23J	18.5	17.6	95		17.7	94		75-125	1		20
Silver, Total	0.392J	46.3	41.0	88		41.7	89		75-125	2		20

## Lab Duplicate Analysis

*Batch Quality Control*

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838656

Report Date: 10/07/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 05 QC Batch ID: WG1163989-4 QC Sample: L1837950-22 Client ID: DUP Sample						
Mercury, Total	9.26	11.2	mg/kg	19		20

# **INORGANICS & MISCELLANEOUS**

Project Name: YONKERS AVENUE

Lab Number: L1838656

Project Number: 395010

Report Date: 10/07/18

**SAMPLE RESULTS**

Lab ID: L1838656-01

Date Collected: 09/26/18 09:30

Client ID: SB-1/10.5-11

Date Received: 09/26/18

Sample Location: 325-397 YONKERS AVE., YONKERS, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>										
Solids, Total	90.5		%	0.100	NA	1	-	10/02/18 01:51	121,2540G	FN



**Project Name:** YONKERS AVENUE**Project Number:** 395010**Lab Number:** L1838656**Report Date:** 10/07/18**SAMPLE RESULTS**

Lab ID: L1838656-02

Client ID: SB-2/9-9.5

Sample Location: 325-397 YONKERS AVE., YONKERS, NY

Date Collected: 09/26/18 10:00

Date Received: 09/26/18

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	93.2		%	0.100	NA	1	-	10/02/18 01:51	121,2540G	FN



Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838656

Report Date: 10/07/18

**SAMPLE RESULTS**

Lab ID: L1838656-03

Client ID: SB-3/14.5-15

Sample Location: 325-397 YONKERS AVE., YONKERS, NY

Date Collected: 09/26/18 10:15

Date Received: 09/26/18

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	92.0		%	0.100	NA	1	-	10/02/18 01:51	121,2540G	FN



Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838656

Report Date: 10/07/18

## SAMPLE RESULTS

Lab ID: L1838656-04

Client ID: SB-4/17-17.5

Sample Location: 325-397 YONKERS AVE., YONKERS, NY

Date Collected: 09/26/18 10:40

Date Received: 09/26/18

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.9		%	0.100	NA	1	-	10/02/18 01:51	121,2540G	FN



Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838656

Report Date: 10/07/18

**SAMPLE RESULTS**

Lab ID: L1838656-05

Client ID: SB-5/18.5-19

Sample Location: 325-397 YONKERS AVE., YONKERS, NY

Date Collected: 09/26/18 11:20

Date Received: 09/26/18

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	93.2		%	0.100	NA	1	-	10/02/18 01:51	121,2540G	FN





## Lab Duplicate Analysis

*Batch Quality Control*

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838656

Report Date: 10/07/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1162951-1 QC Sample: L1838846-01 Client ID: DUP Sample						
Solids, Total	73.8	74.2	%	1		20

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

Serial\_No:10071819:17  
**Lab Number:** L1838656  
**Report Date:** 10/07/18

**Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

**Cooler Information**

**Cooler**                      **Custody Seal**  
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>
L1838656-01A	Vial MeOH preserved	A	NA		3.0	Y	Absent		NYTCL-8260HLW(14)
L1838656-01B	Vial water preserved	A	NA		3.0	Y	Absent	27-SEP-18 13:44	NYTCL-8260HLW(14)
L1838656-01C	Vial water preserved	A	NA		3.0	Y	Absent	27-SEP-18 13:44	NYTCL-8260HLW(14)
L1838656-01D	Plastic 2oz unpreserved for TS	A	NA		3.0	Y	Absent		TS(7)
L1838656-02A	Vial MeOH preserved	A	NA		3.0	Y	Absent		NYTCL-8260HLW(14)
L1838656-02B	Vial water preserved	A	NA		3.0	Y	Absent	27-SEP-18 13:44	NYTCL-8260HLW(14)
L1838656-02C	Vial water preserved	A	NA		3.0	Y	Absent	27-SEP-18 13:44	NYTCL-8260HLW(14)
L1838656-02D	Plastic 2oz unpreserved for TS	A	NA		3.0	Y	Absent		TS(7)
L1838656-03A	Vial MeOH preserved	A	NA		3.0	Y	Absent		NYTCL-8260HLW(14)
L1838656-03B	Vial water preserved	A	NA		3.0	Y	Absent	27-SEP-18 13:44	NYTCL-8260HLW(14)
L1838656-03C	Vial water preserved	A	NA		3.0	Y	Absent	27-SEP-18 13:44	NYTCL-8260HLW(14)
L1838656-03D	Plastic 2oz unpreserved for TS	A	NA		3.0	Y	Absent		TS(7)
L1838656-04A	Vial MeOH preserved	A	NA		3.0	Y	Absent		NYTCL-8260HLW(14)
L1838656-04B	Vial water preserved	A	NA		3.0	Y	Absent	27-SEP-18 13:44	NYTCL-8260HLW(14)
L1838656-04C	Vial water preserved	A	NA		3.0	Y	Absent	27-SEP-18 13:44	NYTCL-8260HLW(14)
L1838656-04D	Plastic 2oz unpreserved for TS	A	NA		3.0	Y	Absent		TS(7)
L1838656-05A	Vial MeOH preserved	A	NA		3.0	Y	Absent		NYTCL-8260HLW(14)
L1838656-05B	Vial water preserved	A	NA		3.0	Y	Absent	27-SEP-18 13:44	NYTCL-8260HLW(14)
L1838656-05C	Vial water preserved	A	NA		3.0	Y	Absent	27-SEP-18 13:44	NYTCL-8260HLW(14)
L1838656-05D	Glass 60mL/2oz unpreserved	A	NA		3.0	Y	Absent		NYTCL-8082(14)
L1838656-05E	Plastic 2oz unpreserved for TS	A	NA		3.0	Y	Absent		TS(7)
L1838656-05F	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.0	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180)

\*Values in parentheses indicate holding time in days



**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

Serial\_No:10071819:17  
**Lab Number:** L1838656  
**Report Date:** 10/07/18

**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>
L1838656-05G	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		NYTCL-8270(14)
L1838656-06A	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260(14)
L1838656-06B	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260(14)
L1838656-06C	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260(14)
L1838656-07A	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260(14)
L1838656-07B	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260(14)
L1838656-07C	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260(14)
L1838656-07D	Amber 250ml unpreserved	A	7	7	3.0	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1838656-08A	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260(14)
L1838656-08B	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260(14)
L1838656-08C	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260(14)
L1838656-08D	Amber 250ml unpreserved	A	7	7	3.0	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1838656-08E	Amber 250ml unpreserved	A	7	7	3.0	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)

**Container Comments**

L1838656-03A

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

## GLOSSARY

### Acronyms

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.
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.
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.
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.

### 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.

**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.

**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.

**Report Format:** DU Report with 'J' Qualifiers



**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

#### Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- 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.
- 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.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- 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 exceedances 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.
- 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).
- 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:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838656  
**Report Date:** 10/07/18

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 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:** m/p-xylene, o-xylene

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

**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

**EPA 300:** DW: Bromide

**EPA 6860:** SCM: Perchlorate

**EPA 9010:** NPW and SCM: Amenable Cyanide Distillation

**SM4500:** NPW: Amenable Cyanide, Dissolved Oxygen; 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**

**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, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **EPA 351.1, 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 624:** Volatile Halocarbons & Aromatics,

**EPA 608:** 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:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

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

### Mansfield Facility:

#### Drinking Water

**EPA 200.7:** Al, Ba, Be, Cd, Cr, Cu, 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.**

#### 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, Pb, Mn, Ni, Se, Ag, 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>	Page <u>1</u>	Date Rec'd in Lab	ALPHA Job #											
	Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	of <u>1</u>	9/26/18	L183865C											
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>		<b>Deliverables</b>											
<b>Client Information</b>		Project Name: <u>Yonkers Avenue</u>		<input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B											
Client: <u>AET</u>		Project Location: <u>335-397 Yonkers Ave, Yonkers, NY</u>		<input type="checkbox"/> EQulS (1 File) <input type="checkbox"/> EQulS (4 File)											
Address:		Project # <u>395010</u>		<input type="checkbox"/> Other											
Phone:		(Use Project name as Project #) <input type="checkbox"/>		<b>Regulatory Requirement</b>											
Fax:		Project Manager: <u>Jordan Farber</u>		<input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375											
Email: <u>jfarber@aei.com</u>		ALPHAQuote #:		<input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51											
Turn-Around Time		Standard <input checked="" type="checkbox"/> Due Date:		<input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other											
Rush (only if pre approved) <input type="checkbox"/>		# of Days:		<input type="checkbox"/> NY Unrestricted Use											
These samples have been previously analyzed by Alpha <input type="checkbox"/>		Other project specific requirements/comments:		<input type="checkbox"/> NYC Sewer Discharge											
Please specify Metals or TAL.		ANALYSIS		<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:											
				<b>Sample Filtration</b>											
				<input type="checkbox"/> Done											
				<input type="checkbox"/> Lab to do											
				<input type="checkbox"/> Lab to do											
				(Please Specify below)											
				Sample Specific Comments											
				T o t a l  B o t t l e											
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL-VOCs	CP-51 B/Ns	PCBs	RCRA 8 Metals	TCL B/Ns					
38656-01	SB-1/10.5-11	09/26/18	0930	SO	JF	X									
-02	SB-2/9-9.5	↓	1000	SO	↓	X									
-03	SB-3/14.5-15		1015	SO		X									
-04	SB-4/17-17.5		1040	SO		X									
-05	SB-5/18.5-19		1120	SO		X		X	X	X					
-06	TW-1		1215	GW		X									
-07	TW-3		1235	GW		X						X			
-08	TW-2		1310	GW		X						X			
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	V A A A A	Preservative	B/E A A A A									
Relinquished By:		Date/Time		Received By:		Date/Time		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.)							
<u>Jordan Farber</u>		09/26/18 1520		<u>D. Santos</u>		09/26/18 1830									
D. Santos AAL		9/26/18 2230				9/26/18 2230									



**APPENDIX D**  
**LABORATORY ANALYTICAL REPORT (AIR/VAPOR)**



## ANALYTICAL REPORT

Lab Number:	L1838751
Client:	AEI Consultants 30 Montgomery Street Suite 220 Jersey City, NJ 07302
ATTN:	Jordan Farber
Phone:	(201) 332-1844
Project Name:	YONKERS AVENUE
Project Number:	395010
Report Date:	10/23/18

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).

---

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:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838751  
**Report Date:** 10/23/18

<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>
L1838751-01	IA-1	AIR	325-397 YONKERS AVE., YONKERS, NY	09/26/18 15:15	09/26/18
L1838751-02	AA-1	AIR	325-397 YONKERS AVE., YONKERS, NY	09/26/18 15:10	09/26/18
L1838751-03	SSV-1	SOIL_VAPOR	325-397 YONKERS AVE., YONKERS, NY	09/26/18 13:42	09/26/18
L1838751-04	SSV-2	SOIL_VAPOR	325-397 YONKERS AVE., YONKERS, NY	09/26/18 14:13	09/26/18

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838751  
**Report Date:** 10/23/18

### Case Narrative

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

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

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

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

#### HOLD POLICY

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

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

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838751  
**Report Date:** 10/23/18

### Case Narrative (continued)

#### Report Submission

This is a final report including the final results for all samples submitted for analysis. This report replaces the one issued on October 16, 2018.

#### Volatile Organics in Air

Canisters were released from the laboratory on September 25, 2018. The canister certification results are provided as an addendum.

L1838751-03: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

L1838751-03 results for Acetone should be considered estimated due to co-elution with a non-target peak.

L1838751-04: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

L1838751-01 and -02 results for Acetone should be considered estimated due to co-elution with a non-target peak.

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: 10/23/18

**AIR**

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838751  
**Report Date:** 10/23/18

### SAMPLE RESULTS

Lab ID: L1838751-01  
 Client ID: IA-1  
 Sample Location: 325-397 YONKERS AVE., YONKERS, NY

Date Collected: 09/26/18 15:15  
 Date Received: 09/26/18  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15  
 Analytical Date: 10/19/18 18:52  
 Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.505	0.200	--	2.50	0.989	--		1
Chloromethane	0.533	0.200	--	1.10	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	31.6	5.00	--	59.5	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	14.8	1.00	--	35.2	2.38	--		1
Trichlorofluoromethane	0.244	0.200	--	1.37	1.12	--		1
iso-Propyl Alcohol	19.0	0.500	--	46.7	1.23	--		1
tert-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
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.99	0.500	--	5.87	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.235	0.200	--	1.15	0.977	--		1
Tetrahydrofuran	0.770	0.500	--	2.27	1.47	--		1



**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838751  
**Report Date:** 10/23/18

### SAMPLE RESULTS

Lab ID: L1838751-01  
 Client ID: IA-1  
 Sample Location: 325-397 YONKERS AVE., YONKERS, NY

Date Collected: 09/26/18 15:15  
 Date Received: 09/26/18  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	1.33	0.200	--	4.69	0.705	--		1
Benzene	0.685	0.200	--	2.19	0.639	--		1
Cyclohexane	0.289	0.200	--	0.995	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
2,2,4-Trimethylpentane	1.07	0.200	--	5.00	0.934	--		1
Heptane	0.304	0.200	--	1.25	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	0.537	0.500	--	2.20	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	1.43	0.200	--	5.39	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
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.251	0.200	--	1.09	0.869	--		1
p/m-Xylene	0.999	0.400	--	4.34	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.363	0.200	--	1.58	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	0.205	0.200	--	1.01	0.983	--		1





**Project Name:** YONKERS AVENUE**Lab Number:** L1838751**Project Number:** 395010**Report Date:** 10/23/18**SAMPLE RESULTS**

Lab ID: L1838751-01

Date Collected: 09/26/18 15:15

Client ID: IA-1

Date Received: 09/26/18

Sample Location: 325-397 YONKERS AVE., YONKERS, 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>								
1,2,4-Trimethylbenzene	0.714	0.200	--	3.51	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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	87		60-140
Bromochloromethane	90		60-140
chlorobenzene-d5	88		60-140



**Project Name:** YONKERS AVENUE**Lab Number:** L1838751**Project Number:** 395010**Report Date:** 10/23/18**SAMPLE RESULTS**

Lab ID: L1838751-01  
 Client ID: IA-1  
 Sample Location: 325-397 YONKERS AVE., YONKERS, NY

Date Collected: 09/26/18 15:15  
 Date Received: 09/26/18  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 10/19/18 18:52  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air by SIM - Mansfield Lab</b>								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.063	0.020	--	0.396	0.126	--		1
Trichloroethene	0.049	0.020	--	0.263	0.107	--		1
Tetrachloroethene	1.46	0.020	--	9.90	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	88		60-140
bromochloromethane	91		60-140
chlorobenzene-d5	87		60-140



**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838751  
**Report Date:** 10/23/18

### SAMPLE RESULTS

Lab ID: L1838751-02  
 Client ID: AA-1  
 Sample Location: 325-397 YONKERS AVE., YONKERS, NY

Date Collected: 09/26/18 15:10  
 Date Received: 09/26/18  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15  
 Analytical Date: 10/19/18 18:20  
 Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.475	0.200	--	2.35	0.989	--		1
Chloromethane	0.561	0.200	--	1.16	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	5.49	5.00	--	10.3	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	2.70	1.00	--	6.41	2.38	--		1
Trichlorofluoromethane	0.234	0.200	--	1.31	1.12	--		1
iso-Propyl Alcohol	0.646	0.500	--	1.59	1.23	--		1
tert-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
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	0.652	0.500	--	1.92	1.47	--		1



**Project Name:** YONKERS AVENUE**Lab Number:** L1838751**Project Number:** 395010**Report Date:** 10/23/18**SAMPLE RESULTS**

Lab ID: L1838751-02

Date Collected: 09/26/18 15:10

Client ID: AA-1

Date Received: 09/26/18

Sample Location: 325-397 YONKERS AVE., YONKERS, 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>								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	1.13	0.200	--	3.98	0.705	--		1
Benzene	0.362	0.200	--	1.16	0.639	--		1
Cyclohexane	0.285	0.200	--	0.981	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
2,2,4-Trimethylpentane	0.552	0.200	--	2.58	0.934	--		1
Heptane	0.208	0.200	--	0.852	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	0.919	0.200	--	3.46	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
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.334	0.200	--	1.45	0.869	--		1
p/m-Xylene	1.66	0.400	--	7.21	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.510	0.200	--	2.22	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1



**Project Name:** YONKERS AVENUE**Lab Number:** L1838751**Project Number:** 395010**Report Date:** 10/23/18**SAMPLE RESULTS**

Lab ID: L1838751-02

Date Collected: 09/26/18 15:10

Client ID: AA-1

Date Received: 09/26/18

Sample Location: 325-397 YONKERS AVE., YONKERS, 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>								
1,2,4-Trimethylbenzene	0.231	0.200	--	1.14	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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	87		60-140
Bromochloromethane	87		60-140
chlorobenzene-d5	91		60-140



**Project Name:** YONKERS AVENUE**Lab Number:** L1838751**Project Number:** 395010**Report Date:** 10/23/18**SAMPLE RESULTS**

Lab ID: L1838751-02  
 Client ID: AA-1  
 Sample Location: 325-397 YONKERS AVE., YONKERS, NY

Date Collected: 09/26/18 15:10  
 Date Received: 09/26/18  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 10/19/18 18:20  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air by SIM - Mansfield Lab</b>								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.063	0.020	--	0.396	0.126	--		1
Trichloroethene	0.141	0.020	--	0.758	0.107	--		1
Tetrachloroethene	0.128	0.020	--	0.868	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	89		60-140
bromochloromethane	90		60-140
chlorobenzene-d5	89		60-140



**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838751  
**Report Date:** 10/23/18

### SAMPLE RESULTS

Lab ID: L1838751-03 D  
 Client ID: SSV-1  
 Sample Location: 325-397 YONKERS AVE., YONKERS, NY

Date Collected: 09/26/18 13:42  
 Date Received: 09/26/18  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 09/29/18 23:03  
 Analyst: MB

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Dichlorodifluoromethane	ND	2.00	--	ND	9.89	--		10
Chloromethane	ND	2.00	--	ND	4.13	--		10
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	2.00	--	ND	14.0	--		10
Vinyl chloride	ND	2.00	--	ND	5.11	--		10
1,3-Butadiene	ND	2.00	--	ND	4.42	--		10
Bromomethane	ND	2.00	--	ND	7.77	--		10
Chloroethane	ND	2.00	--	ND	5.28	--		10
Ethyl Alcohol	ND	50.0	--	ND	94.2	--		10
Vinyl bromide	ND	2.00	--	ND	8.74	--		10
Acetone	34.6	10.0	--	82.2	23.8	--		10
Trichlorofluoromethane	ND	2.00	--	ND	11.2	--		10
iso-Propyl Alcohol	13.1	5.00	--	32.2	12.3	--		10
1,1-Dichloroethene	ND	2.00	--	ND	7.93	--		10
tert-Butyl Alcohol	ND	5.00	--	ND	15.2	--		10
Methylene chloride	ND	5.00	--	ND	17.4	--		10
3-Chloropropene	ND	2.00	--	ND	6.26	--		10
Carbon disulfide	ND	2.00	--	ND	6.23	--		10
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	2.00	--	ND	15.3	--		10
trans-1,2-Dichloroethene	ND	2.00	--	ND	7.93	--		10
1,1-Dichloroethane	ND	2.00	--	ND	8.09	--		10
Methyl tert butyl ether	ND	2.00	--	ND	7.21	--		10
2-Butanone	ND	5.00	--	ND	14.7	--		10
cis-1,2-Dichloroethene	ND	2.00	--	ND	7.93	--		10



**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838751  
**Report Date:** 10/23/18

### SAMPLE RESULTS

Lab ID: L1838751-03 D  
 Client ID: SSV-1  
 Sample Location: 325-397 YONKERS AVE., YONKERS, NY

Date Collected: 09/26/18 13:42  
 Date Received: 09/26/18  
 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								
Ethyl Acetate	ND	5.00	--	ND	18.0	--		10
Chloroform	ND	2.00	--	ND	9.77	--		10
Tetrahydrofuran	ND	5.00	--	ND	14.7	--		10
1,2-Dichloroethane	ND	2.00	--	ND	8.09	--		10
n-Hexane	ND	2.00	--	ND	7.05	--		10
1,1,1-Trichloroethane	ND	2.00	--	ND	10.9	--		10
Benzene	ND	2.00	--	ND	6.39	--		10
Carbon tetrachloride	ND	2.00	--	ND	12.6	--		10
Cyclohexane	ND	2.00	--	ND	6.88	--		10
1,2-Dichloropropane	ND	2.00	--	ND	9.24	--		10
Bromodichloromethane	ND	2.00	--	ND	13.4	--		10
1,4-Dioxane	ND	2.00	--	ND	7.21	--		10
Trichloroethene	ND	2.00	--	ND	10.7	--		10
2,2,4-Trimethylpentane	124	2.00	--	579	9.34	--		10
Heptane	ND	2.00	--	ND	8.20	--		10
cis-1,3-Dichloropropene	ND	2.00	--	ND	9.08	--		10
4-Methyl-2-pentanone	ND	5.00	--	ND	20.5	--		10
trans-1,3-Dichloropropene	ND	2.00	--	ND	9.08	--		10
1,1,2-Trichloroethane	ND	2.00	--	ND	10.9	--		10
Toluene	ND	2.00	--	ND	7.54	--		10
2-Hexanone	ND	2.00	--	ND	8.20	--		10
Dibromochloromethane	ND	2.00	--	ND	17.0	--		10
1,2-Dibromoethane	ND	2.00	--	ND	15.4	--		10
Tetrachloroethene	254	2.00	--	1720	13.6	--		10
Chlorobenzene	ND	2.00	--	ND	9.21	--		10
Ethylbenzene	ND	2.00	--	ND	8.69	--		10





**Project Name:** YONKERS AVENUE**Lab Number:** L1838751**Project Number:** 395010**Report Date:** 10/23/18**SAMPLE RESULTS**

Lab ID: L1838751-03 D

Date Collected: 09/26/18 13:42

Client ID: SSV-1

Date Received: 09/26/18

Sample Location: 325-397 YONKERS AVE., YONKERS, 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>								
p/m-Xylene	ND	4.00	--	ND	17.4	--		10
Bromoform	ND	2.00	--	ND	20.7	--		10
Styrene	ND	2.00	--	ND	8.52	--		10
1,1,2,2-Tetrachloroethane	ND	2.00	--	ND	13.7	--		10
o-Xylene	ND	2.00	--	ND	8.69	--		10
4-Ethyltoluene	ND	2.00	--	ND	9.83	--		10
1,3,5-Trimethylbenzene	ND	2.00	--	ND	9.83	--		10
1,2,4-Trimethylbenzene	ND	2.00	--	ND	9.83	--		10
Benzyl chloride	ND	2.00	--	ND	10.4	--		10
1,3-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,4-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,2-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,2,4-Trichlorobenzene	ND	2.00	--	ND	14.8	--		10
Hexachlorobutadiene	ND	2.00	--	ND	21.3	--		10

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	67		60-140
Bromochloromethane	67		60-140
chlorobenzene-d5	73		60-140



**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838751  
**Report Date:** 10/23/18

### SAMPLE RESULTS

Lab ID: L1838751-04 D  
 Client ID: SSV-2  
 Sample Location: 325-397 YONKERS AVE., YONKERS, NY

Date Collected: 09/26/18 14:13  
 Date Received: 09/26/18  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 09/29/18 23:39  
 Analyst: MB

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Dichlorodifluoromethane	ND	51.5	--	ND	255	--		257.7
Chloromethane	ND	51.5	--	ND	106	--		257.7
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	51.5	--	ND	360	--		257.7
Vinyl chloride	ND	51.5	--	ND	132	--		257.7
1,3-Butadiene	ND	51.5	--	ND	114	--		257.7
Bromomethane	ND	51.5	--	ND	200	--		257.7
Chloroethane	ND	51.5	--	ND	136	--		257.7
Ethyl Alcohol	ND	1290	--	ND	2430	--		257.7
Vinyl bromide	ND	51.5	--	ND	225	--		257.7
Acetone	ND	258	--	ND	613	--		257.7
Trichlorofluoromethane	ND	51.5	--	ND	289	--		257.7
iso-Propyl Alcohol	ND	129.	--	ND	317	--		257.7
1,1-Dichloroethene	ND	51.5	--	ND	204	--		257.7
tert-Butyl Alcohol	ND	129.	--	ND	391	--		257.7
Methylene chloride	ND	129.	--	ND	448	--		257.7
3-Chloropropene	ND	51.5	--	ND	161	--		257.7
Carbon disulfide	ND	51.5	--	ND	160	--		257.7
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	51.5	--	ND	395	--		257.7
trans-1,2-Dichloroethene	ND	51.5	--	ND	204	--		257.7
1,1-Dichloroethane	ND	51.5	--	ND	208	--		257.7
Methyl tert butyl ether	ND	51.5	--	ND	186	--		257.7
2-Butanone	ND	129.	--	ND	380	--		257.7
cis-1,2-Dichloroethene	ND	51.5	--	ND	204	--		257.7



**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838751  
**Report Date:** 10/23/18

### SAMPLE RESULTS

Lab ID: L1838751-04 D  
 Client ID: SSV-2  
 Sample Location: 325-397 YONKERS AVE., YONKERS, NY

Date Collected: 09/26/18 14:13  
 Date Received: 09/26/18  
 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								
Ethyl Acetate	ND	129.	--	ND	465	--		257.7
Chloroform	ND	51.5	--	ND	251	--		257.7
Tetrahydrofuran	ND	129.	--	ND	380	--		257.7
1,2-Dichloroethane	ND	51.5	--	ND	208	--		257.7
n-Hexane	ND	51.5	--	ND	182	--		257.7
1,1,1-Trichloroethane	ND	51.5	--	ND	281	--		257.7
Benzene	ND	51.5	--	ND	165	--		257.7
Carbon tetrachloride	ND	51.5	--	ND	324	--		257.7
Cyclohexane	ND	51.5	--	ND	177	--		257.7
1,2-Dichloropropane	ND	51.5	--	ND	238	--		257.7
Bromodichloromethane	ND	51.5	--	ND	345	--		257.7
1,4-Dioxane	ND	51.5	--	ND	186	--		257.7
Trichloroethene	ND	51.5	--	ND	277	--		257.7
2,2,4-Trimethylpentane	ND	51.5	--	ND	241	--		257.7
Heptane	ND	51.5	--	ND	211	--		257.7
cis-1,3-Dichloropropene	ND	51.5	--	ND	234	--		257.7
4-Methyl-2-pentanone	ND	129.	--	ND	529	--		257.7
trans-1,3-Dichloropropene	ND	51.5	--	ND	234	--		257.7
1,1,2-Trichloroethane	ND	51.5	--	ND	281	--		257.7
Toluene	ND	51.5	--	ND	194	--		257.7
2-Hexanone	ND	51.5	--	ND	211	--		257.7
Dibromochloromethane	ND	51.5	--	ND	439	--		257.7
1,2-Dibromoethane	ND	51.5	--	ND	396	--		257.7
Tetrachloroethene	11600	51.5	--	78700	349	--		257.7
Chlorobenzene	ND	51.5	--	ND	237	--		257.7
Ethylbenzene	ND	51.5	--	ND	224	--		257.7



**Project Name:** YONKERS AVENUE**Lab Number:** L1838751**Project Number:** 395010**Report Date:** 10/23/18**SAMPLE RESULTS**

Lab ID: L1838751-04 D

Date Collected: 09/26/18 14:13

Client ID: SSV-2

Date Received: 09/26/18

Sample Location: 325-397 YONKERS AVE., YONKERS, 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>								
p/m-Xylene	ND	103.	--	ND	447	--		257.7
Bromoform	ND	51.5	--	ND	532	--		257.7
Styrene	ND	51.5	--	ND	219	--		257.7
1,1,2,2-Tetrachloroethane	ND	51.5	--	ND	354	--		257.7
o-Xylene	ND	51.5	--	ND	224	--		257.7
4-Ethyltoluene	ND	51.5	--	ND	253	--		257.7
1,3,5-Trimethylbenzene	ND	51.5	--	ND	253	--		257.7
1,2,4-Trimethylbenzene	ND	51.5	--	ND	253	--		257.7
Benzyl chloride	ND	51.5	--	ND	267	--		257.7
1,3-Dichlorobenzene	ND	51.5	--	ND	310	--		257.7
1,4-Dichlorobenzene	ND	51.5	--	ND	310	--		257.7
1,2-Dichlorobenzene	ND	51.5	--	ND	310	--		257.7
1,2,4-Trichlorobenzene	ND	51.5	--	ND	382	--		257.7
Hexachlorobutadiene	ND	51.5	--	ND	549	--		257.7

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	80		60-140
Bromochloromethane	79		60-140
chlorobenzene-d5	85		60-140



Project Name: YONKERS AVENUE

Lab Number: L1838751

Project Number: 395010

Report Date: 10/23/18

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 09/29/18 14:57

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 03-04 Batch: WG1162356-4								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1



Project Name: YONKERS AVENUE

Lab Number: L1838751

Project Number: 395010

Report Date: 10/23/18

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 09/29/18 14:57

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 03-04 Batch: WG1162356-4								
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
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
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Isopropyl Ether	ND	0.200	--	ND	0.836	--		1
Ethyl-Tert-Butyl-Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-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
Tertiary-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1



Project Name: YONKERS AVENUE

Lab Number: L1838751

Project Number: 395010

Report Date: 10/23/18

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 09/29/18 14:57

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 03-04 Batch: WG1162356-4								
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
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1



Project Name: YONKERS AVENUE

Lab Number: L1838751

Project Number: 395010

Report Date: 10/23/18

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 09/29/18 14:57

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 03-04 Batch: WG1162356-4								
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane (C9)	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
o-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
p-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane (C10)	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane (C12)	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1





Project Name: YONKERS AVENUE

Lab Number: L1838751

Project Number: 395010

Report Date: 10/23/18

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 09/29/18 14:57

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 03-04 Batch: WG1162356-4								
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: YONKERS AVENUE

Lab Number: L1838751

Project Number: 395010

Report Date: 10/23/18

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 10/19/18 16:00

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: WG1170260-4								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1



Project Name: YONKERS AVENUE

Lab Number: L1838751

Project Number: 395010

Report Date: 10/23/18

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 10/19/18 16:00

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: WG1170260-4								
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Isopropyl Ether	ND	0.200	--	ND	0.836	--		1
Ethyl-Tert-Butyl-Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-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
Tertiary-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1



Project Name: YONKERS AVENUE

Lab Number: L1838751

Project Number: 395010

Report Date: 10/23/18

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 10/19/18 16:00

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: WG1170260-4								
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



Project Name: YONKERS AVENUE

Lab Number: L1838751

Project Number: 395010

Report Date: 10/23/18

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 10/19/18 16:00

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: WG1170260-4								
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane (C9)	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
o-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
p-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane (C10)	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane (C12)	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1

Project Name: YONKERS AVENUE

Lab Number: L1838751

Project Number: 395010

Report Date: 10/23/18

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 10/19/18 16:00

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: WG1170260-4								
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: YONKERS AVENUE

Lab Number: L1838751

Project Number: 395010

Report Date: 10/23/18

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 10/19/18 16:32

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-02 Batch: WG1170261-4								
Propylene	ND	0.500	--	ND	0.861	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.050	--	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
Ethyl Alcohol	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	0.050	--	ND	0.281	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
tert-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
1,1,2-Trichloro-1,2,2-Trifluoroethane	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
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1



Project Name: YONKERS AVENUE

Lab Number: L1838751

Project Number: 395010

Report Date: 10/23/18

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM  
Analytical Date: 10/19/18 16:32

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-02 Batch: WG1170261-4								
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		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
Cyclohexane	ND	0.200	--	ND	0.688	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
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
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.020	--	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	0.050	--	ND	0.188	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1





Project Name: YONKERS AVENUE

Lab Number: L1838751

Project Number: 395010

Report Date: 10/23/18

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 10/19/18 16:32

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-02 Batch: WG1170261-4								
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
1,2,3-Trichloropropane	ND	0.020	--	ND	0.121	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		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	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
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



Project Name: YONKERS AVENUE

Lab Number: L1838751

Project Number: 395010

Report Date: 10/23/18

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 10/19/18 16:32

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-02 Batch: WG1170261-4								
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838751

Report Date: 10/23/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 03-04 Batch: WG1162356-3								
Chlorodifluoromethane	83		-		70-130	-		
Propylene	99		-		70-130	-		
Propane	95		-		70-130	-		
Dichlorodifluoromethane	86		-		70-130	-		
Chloromethane	98		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	91		-		70-130	-		
Methanol	98		-		70-130	-		
Vinyl chloride	90		-		70-130	-		
1,3-Butadiene	100		-		70-130	-		
Butane	80		-		70-130	-		
Bromomethane	87		-		70-130	-		
Chloroethane	84		-		70-130	-		
Ethyl Alcohol	104		-		70-130	-		
Vinyl bromide	82		-		70-130	-		
Acrolein	82		-		70-130	-		
Acetone	86		-		70-130	-		
Acetonitrile	74		-		70-130	-		
Trichlorofluoromethane	76		-		70-130	-		
iso-Propyl Alcohol	96		-		70-130	-		
Acrylonitrile	87		-		70-130	-		
Pentane	78		-		70-130	-		
Ethyl ether	95		-		70-130	-		
1,1-Dichloroethene	89		-		70-130	-		

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838751

Report Date: 10/23/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 03-04 Batch: WG1162356-3								
tert-Butyl Alcohol	78		-		70-130	-		
Methylene chloride	101		-		70-130	-		
3-Chloropropene	93		-		70-130	-		
Carbon disulfide	88		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	90		-		70-130	-		
trans-1,2-Dichloroethene	86		-		70-130	-		
1,1-Dichloroethane	85		-		70-130	-		
Methyl tert butyl ether	85		-		70-130	-		
Vinyl acetate	97		-		70-130	-		
2-Butanone	92		-		70-130	-		
cis-1,2-Dichloroethene	86		-		70-130	-		
Ethyl Acetate	88		-		70-130	-		
Chloroform	80		-		70-130	-		
Tetrahydrofuran	93		-		70-130	-		
1,2-Dichloroethane	72		-		70-130	-		
n-Hexane	100		-		70-130	-		
Isopropyl Ether	85		-		70-130	-		
Ethyl-Tert-Butyl-Ether	82		-		70-130	-		
1,1,1-Trichloroethane	86		-		70-130	-		
1,1-Dichloropropene	93		-		70-130	-		
Benzene	96		-		70-130	-		
Carbon tetrachloride	86		-		70-130	-		
Cyclohexane	102		-		70-130	-		

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838751

Report Date: 10/23/18

Parameter	LCS	Qual	LCS	Qual	%Recovery	RPD	Qual	RPD
	%Recovery		%Recovery		Limits			Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 03-04 Batch: WG1162356-3								
Tertiary-Amyl Methyl Ether	83		-		70-130	-		
Dibromomethane	90		-		70-130	-		
1,2-Dichloropropane	102		-		70-130	-		
Bromodichloromethane	96		-		70-130	-		
1,4-Dioxane	101		-		70-130	-		
Trichloroethene	94		-		70-130	-		
2,2,4-Trimethylpentane	104		-		70-130	-		
Methyl Methacrylate	95		-		70-130	-		
Heptane	110		-		70-130	-		
cis-1,3-Dichloropropene	101		-		70-130	-		
4-Methyl-2-pentanone	108		-		70-130	-		
trans-1,3-Dichloropropene	84		-		70-130	-		
1,1,2-Trichloroethane	99		-		70-130	-		
Toluene	91		-		70-130	-		
1,3-Dichloropropane	86		-		70-130	-		
2-Hexanone	102		-		70-130	-		
Dibromochloromethane	96		-		70-130	-		
1,2-Dibromoethane	94		-		70-130	-		
Butyl Acetate	87		-		70-130	-		
Octane	84		-		70-130	-		
Tetrachloroethene	83		-		70-130	-		
1,1,1,2-Tetrachloroethane	79		-		70-130	-		
Chlorobenzene	90		-		70-130	-		

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS AVENUE

Lab Number: L1838751

Project Number: 395010

Report Date: 10/23/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 03-04 Batch: WG1162356-3								
Ethylbenzene	90		-		70-130	-		
p/m-Xylene	90		-		70-130	-		
Bromoform	88		-		70-130	-		
Styrene	87		-		70-130	-		
1,1,2,2-Tetrachloroethane	98		-		70-130	-		
o-Xylene	90		-		70-130	-		
1,2,3-Trichloropropane	84		-		70-130	-		
Nonane (C9)	92		-		70-130	-		
Isopropylbenzene	83		-		70-130	-		
Bromobenzene	83		-		70-130	-		
o-Chlorotoluene	78		-		70-130	-		
n-Propylbenzene	80		-		70-130	-		
p-Chlorotoluene	78		-		70-130	-		
4-Ethyltoluene	88		-		70-130	-		
1,3,5-Trimethylbenzene	94		-		70-130	-		
tert-Butylbenzene	80		-		70-130	-		
1,2,4-Trimethylbenzene	92		-		70-130	-		
Decane (C10)	91		-		70-130	-		
Benzyl chloride	97		-		70-130	-		
1,3-Dichlorobenzene	87		-		70-130	-		
1,4-Dichlorobenzene	84		-		70-130	-		
sec-Butylbenzene	82		-		70-130	-		
p-Isopropyltoluene	74		-		70-130	-		

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838751

Report Date: 10/23/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 03-04 Batch: WG1162356-3								
1,2-Dichlorobenzene	85		-		70-130	-		
n-Butylbenzene	91		-		70-130	-		
1,2-Dibromo-3-chloropropane	85		-		70-130	-		
Undecane	91		-		70-130	-		
Dodecane (C12)	90		-		70-130	-		
1,2,4-Trichlorobenzene	91		-		70-130	-		
Naphthalene	81		-		70-130	-		
1,2,3-Trichlorobenzene	77		-		70-130	-		
Hexachlorobutadiene	81		-		70-130	-		

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838751

Report Date: 10/23/18

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: WG1170260-3								
Chlorodifluoromethane	81		-		70-130	-		
Propylene	100		-		70-130	-		
Propane	75		-		70-130	-		
Dichlorodifluoromethane	97		-		70-130	-		
Chloromethane	88		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	102		-		70-130	-		
Methanol	72		-		70-130	-		
Vinyl chloride	98		-		70-130	-		
1,3-Butadiene	98		-		70-130	-		
Butane	80		-		70-130	-		
Bromomethane	98		-		70-130	-		
Chloroethane	95		-		70-130	-		
Ethyl Alcohol	76		-		70-130	-		
Dichlorofluoromethane	88		-		70-130	-		
Vinyl bromide	104		-		70-130	-		
Acrolein	84		-		70-130	-		
Acetone	97		-		70-130	-		
Acetonitrile	76		-		70-130	-		
Trichlorofluoromethane	100		-		70-130	-		
iso-Propyl Alcohol	104		-		70-130	-		
Acrylonitrile	91		-		70-130	-		
Pentane	81		-		70-130	-		
Ethyl ether	76		-		70-130	-		



## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838751

Report Date: 10/23/18

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: WG1170260-3								
1,1-Dichloroethene	95		-		70-130	-		
tert-Butyl Alcohol	88		-		70-130	-		
Methylene chloride	95		-		70-130	-		
3-Chloropropene	96		-		70-130	-		
Carbon disulfide	97		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	105		-		70-130	-		
trans-1,2-Dichloroethene	94		-		70-130	-		
1,1-Dichloroethane	96		-		70-130	-		
Methyl tert butyl ether	101		-		70-130	-		
Vinyl acetate	98		-		70-130	-		
2-Butanone	96		-		70-130	-		
cis-1,2-Dichloroethene	96		-		70-130	-		
Ethyl Acetate	109		-		70-130	-		
Chloroform	101		-		70-130	-		
Tetrahydrofuran	100		-		70-130	-		
2,2-Dichloropropane	90		-		70-130	-		
1,2-Dichloroethane	93		-		70-130	-		
n-Hexane	87		-		70-130	-		
Isopropyl Ether	83		-		70-130	-		
Ethyl-Tert-Butyl-Ether	78		-		70-130	-		
1,1,1-Trichloroethane	87		-		70-130	-		
1,1-Dichloropropene	82		-		70-130	-		
Benzene	86		-		70-130	-		

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838751

Report Date: 10/23/18

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: WG1170260-3								
Carbon tetrachloride	87		-		70-130	-		
Cyclohexane	86		-		70-130	-		
Tertiary-Amyl Methyl Ether	78		-		70-130	-		
Dibromomethane	82		-		70-130	-		
1,2-Dichloropropane	83		-		70-130	-		
Bromodichloromethane	90		-		70-130	-		
1,4-Dioxane	87		-		70-130	-		
Trichloroethene	94		-		70-130	-		
2,2,4-Trimethylpentane	88		-		70-130	-		
Methyl Methacrylate	81		-		70-130	-		
Heptane	82		-		70-130	-		
cis-1,3-Dichloropropene	92		-		70-130	-		
4-Methyl-2-pentanone	84		-		70-130	-		
trans-1,3-Dichloropropene	78		-		70-130	-		
1,1,2-Trichloroethane	90		-		70-130	-		
Toluene	104		-		70-130	-		
1,3-Dichloropropane	95		-		70-130	-		
2-Hexanone	99		-		70-130	-		
Dibromochloromethane	114		-		70-130	-		
1,2-Dibromoethane	107		-		70-130	-		
Butyl Acetate	94		-		70-130	-		
Octane	97		-		70-130	-		
Tetrachloroethene	110		-		70-130	-		

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838751

Report Date: 10/23/18

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: WG1170260-3								
1,1,1,2-Tetrachloroethane	100		-		70-130	-		
Chlorobenzene	109		-		70-130	-		
Ethylbenzene	105		-		70-130	-		
p/m-Xylene	106		-		70-130	-		
Bromoform	118		-		70-130	-		
Styrene	109		-		70-130	-		
1,1,1,2-Tetrachloroethane	109		-		70-130	-		
o-Xylene	108		-		70-130	-		
1,2,3-Trichloropropane	96		-		70-130	-		
Nonane (C9)	90		-		70-130	-		
Isopropylbenzene	106		-		70-130	-		
Bromobenzene	97		-		70-130	-		
o-Chlorotoluene	105		-		70-130	-		
n-Propylbenzene	104		-		70-130	-		
p-Chlorotoluene	97		-		70-130	-		
4-Ethyltoluene	114		-		70-130	-		
1,3,5-Trimethylbenzene	97		-		70-130	-		
tert-Butylbenzene	95		-		70-130	-		
1,2,4-Trimethylbenzene	104		-		70-130	-		
Decane (C10)	83		-		70-130	-		
Benzyl chloride	93		-		70-130	-		
1,3-Dichlorobenzene	96		-		70-130	-		
1,4-Dichlorobenzene	95		-		70-130	-		

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838751

Report Date: 10/23/18

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: WG1170260-3								
sec-Butylbenzene	82		-		70-130	-		
p-Isopropyltoluene	80		-		70-130	-		
1,2-Dichlorobenzene	112		-		70-130	-		
n-Butylbenzene	104		-		70-130	-		
1,2-Dibromo-3-chloropropane	92		-		70-130	-		
Undecane	99		-		70-130	-		
Dodecane (C12)	104		-		70-130	-		
1,2,4-Trichlorobenzene	119		-		70-130	-		
Naphthalene	103		-		70-130	-		
1,2,3-Trichlorobenzene	106		-		70-130	-		
Hexachlorobutadiene	116		-		70-130	-		

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838751

Report Date: 10/23/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-02 Batch: WG1170261-3								
Propylene	93		-		70-130	-		25
Dichlorodifluoromethane	94		-		70-130	-		25
Chloromethane	86		-		70-130	-		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	94		-		70-130	-		25
Vinyl chloride	88		-		70-130	-		25
1,3-Butadiene	92		-		70-130	-		25
Bromomethane	95		-		70-130	-		25
Chloroethane	86		-		70-130	-		25
Ethyl Alcohol	77		-		70-130	-		25
Vinyl bromide	98		-		70-130	-		25
Acetone	95		-		70-130	-		25
Trichlorofluoromethane	94		-		70-130	-		25
iso-Propyl Alcohol	110		-		70-130	-		25
Acrylonitrile	89		-		70-130	-		25
1,1-Dichloroethene	90		-		70-130	-		25
tert-Butyl Alcohol <sup>1</sup>	90		-		70-130	-		25
Methylene chloride	93		-		70-130	-		25
3-Chloropropene	93		-		70-130	-		25
Carbon disulfide	96		-		70-130	-		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	101		-		70-130	-		25
trans-1,2-Dichloroethene	92		-		70-130	-		25
1,1-Dichloroethane	92		-		70-130	-		25
Methyl tert butyl ether	100		-		70-130	-		25

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838751

Report Date: 10/23/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-02 Batch: WG1170261-3								
Vinyl acetate	95		-		70-130	-		25
2-Butanone	92		-		70-130	-		25
cis-1,2-Dichloroethene	93		-		70-130	-		25
Ethyl Acetate	103		-		70-130	-		25
Chloroform	98		-		70-130	-		25
Tetrahydrofuran	102		-		70-130	-		25
1,2-Dichloroethane	89		-		70-130	-		25
n-Hexane	84		-		70-130	-		25
1,1,1-Trichloroethane	83		-		70-130	-		25
Benzene	84		-		70-130	-		25
Carbon tetrachloride	84		-		70-130	-		25
Cyclohexane	84		-		70-130	-		25
Dibromomethane <sup>1</sup>	73		-		70-130	-		25
1,2-Dichloropropane	82		-		70-130	-		25
Bromodichloromethane	89		-		70-130	-		25
1,4-Dioxane	99		-		70-130	-		25
Trichloroethene	92		-		70-130	-		25
2,2,4-Trimethylpentane	87		-		70-130	-		25
cis-1,3-Dichloropropene	89		-		70-130	-		25
4-Methyl-2-pentanone	83		-		70-130	-		25
trans-1,3-Dichloropropene	75		-		70-130	-		25
1,1,2-Trichloroethane	91		-		70-130	-		25
Toluene	101		-		70-130	-		25

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838751

Report Date: 10/23/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-02 Batch: WG1170261-3								
2-Hexanone	96		-		70-130	-		25
Dibromochloromethane	111		-		70-130	-		25
1,2-Dibromoethane	105		-		70-130	-		25
Tetrachloroethene	107		-		70-130	-		25
1,1,1,2-Tetrachloroethane	98		-		70-130	-		25
Chlorobenzene	107		-		70-130	-		25
Ethylbenzene	101		-		70-130	-		25
p/m-Xylene	102		-		70-130	-		25
Bromoform	114		-		70-130	-		25
Styrene	107		-		70-130	-		25
1,1,2,2-Tetrachloroethane	107		-		70-130	-		25
o-Xylene	103		-		70-130	-		25
1,2,3-Trichloropropane <sup>1</sup>	94		-		70-130	-		25
Isopropylbenzene	103		-		70-130	-		25
Bromobenzene <sup>1</sup>	95		-		70-130	-		25
4-Ethyltoluene	114		-		70-130	-		25
1,3,5-Trimethylbenzene	113		-		70-130	-		25
1,2,4-Trimethylbenzene	135	Q	-		70-130	-		25
Benzyl chloride	121		-		70-130	-		25
1,3-Dichlorobenzene	126		-		70-130	-		25
1,4-Dichlorobenzene	123		-		70-130	-		25
sec-Butylbenzene	108		-		70-130	-		25
p-Isopropyltoluene	97		-		70-130	-		25

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** YONKERS AVENUE

**Project Number:** 395010

**Lab Number:** L1838751

**Report Date:** 10/23/18

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-02 Batch: WG1170261-3								
1,2-Dichlorobenzene	120		-		70-130	-		25
n-Butylbenzene	105		-		70-130	-		25
1,2,4-Trichlorobenzene	<b>131</b>	Q	-		70-130	-		25
Naphthalene	116		-		70-130	-		25
1,2,3-Trichlorobenzene	123		-		70-130	-		25
Hexachlorobutadiene	126		-		70-130	-		25



## Lab Duplicate Analysis

Batch Quality Control

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838751

Report Date: 10/23/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 03-04 QC Batch ID: WG1162356-5 QC Sample: L1838220-01 Client ID: DUP Sample						
Dichlorodifluoromethane	1.35	1.39	ppbV	3		25
Chloromethane	ND	ND	ppbV	NC		25
Vinyl chloride	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acrolein	1.09	1.13	ppbV	4		25
Acetone	58.2	61.0	ppbV	5		25
Trichlorofluoromethane	9.77	10.4	ppbV	6		25
iso-Propyl Alcohol	3.03	2.91	ppbV	4		25
Acrylonitrile	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
Methylene chloride	6.15	6.44	ppbV	5		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	0.974	1.02	ppbV	5		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25
Chloroform	1.50	1.52	ppbV	1		25

## Lab Duplicate Analysis

Batch Quality Control

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838751

Report Date: 10/23/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 03-04 QC Batch ID: WG1162356-5 QC Sample: L1838220-01 Client ID: DUP Sample						
Tetrahydrofuran	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	0.474	0.462	ppbV	3		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Benzene	0.598	0.596	ppbV	0		25
Carbon tetrachloride	ND	ND	ppbV	NC		25
Cyclohexane	0.494	0.454	ppbV	8		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	0.990	0.920	ppbV	7		25
Trichloroethene	24.8	25.0	ppbV	1		25
Methyl Methacrylate	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Toluene	0.616	0.624	ppbV	1		25
1,3-Dichloropropane	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Tetrachloroethene	2.65	2.79	ppbV	5		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	ND	ND	ppbV	NC		25

## Lab Duplicate Analysis

Batch Quality Control

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838751

Report Date: 10/23/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 03-04 QC Batch ID: WG1162356-5 QC Sample: L1838220-01 Client ID: DUP Sample						
p/m-Xylene	ND	ND	ppbV	NC		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	ND	ND	ppbV	NC		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	ND	ND	ppbV	NC		25
Isopropylbenzene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC		25
1,2,4-Trimethylbenzene	ND	ND	ppbV	NC		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	0.404	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Naphthalene	ND	ND	ppbV	NC		25

## Lab Duplicate Analysis

Batch Quality Control

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838751

Report Date: 10/23/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1170260-5 QC Sample: L1841680-02 Client ID: DUP Sample						
Dichlorodifluoromethane	ND	ND	ppbV	NC		25
Chloromethane	ND	ND	ppbV	NC		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethyl Alcohol	ND	ND	ppbV	NC		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	ND	ND	ppbV	NC		25
Trichlorofluoromethane	ND	ND	ppbV	NC		25
iso-Propyl Alcohol	ND	ND	ppbV	NC		25
tert-Butyl Alcohol	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25
2-Butanone	ND	ND	ppbV	NC		25
Ethyl Acetate	ND	ND	ppbV	NC		25

## Lab Duplicate Analysis

### Batch Quality Control

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838751

Report Date: 10/23/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1170260-5 QC Sample: L1841680-02 Client ID: DUP Sample						
Chloroform	ND	ND	ppbV	NC		25
Tetrahydrofuran	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	948	976	ppbV	3		25
Benzene	25.6	27.2	ppbV	6		25
Cyclohexane	165	166	ppbV	1		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	845	864	ppbV	2		25
Heptane	466	480	ppbV	3		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Toluene	88.9	93.7	ppbV	5		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Chlorobenzene	39.7	40.8	ppbV	3		25
Ethylbenzene	89.6	92.0	ppbV	3		25

## Lab Duplicate Analysis

Batch Quality Control

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838751

Report Date: 10/23/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1170260-5 QC Sample: L1841680-02 Client ID: DUP Sample						
p/m-Xylene	372	384	ppbV	3		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	ND	ND	ppbV	NC		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	78.6	81.9	ppbV	4		25
4-Ethyltoluene	13.4	13.9	ppbV	4		25
1,3,5-Trimethylbenzene	21.1	21.8	ppbV	3		25
1,2,4-Trimethylbenzene	26.2	27.4	ppbV	4		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25

## Lab Duplicate Analysis

Batch Quality Control

Project Name: YONKERS AVENUE

Project Number: 395010

Lab Number: L1838751

Report Date: 10/23/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1170261-5 QC Sample: L1841680-02 Client ID: DUP Sample						
Vinyl chloride	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Carbon tetrachloride	ND	ND	ppbV	NC		25
Trichloroethene	ND	ND	ppbV	NC		25
Tetrachloroethene	1.25	1.29	ppbV	3		25

Project Name: YONKERS AVENUE

Project Number: 395010

Serial\_No:10231816:10  
Lab Number: L1838751

Report Date: 10/23/18

### 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
L1838751-01	IA-1	01103	Flow 5	09/25/18	275037		-	-	-	Pass	4.5	4.5	0
L1838751-01	IA-1	2313	2.7L Can	09/25/18	275037	L1837237-01	Pass	-29.9	-7.4	-	-	-	-
L1838751-02	AA-1	0337	Flow 5	09/25/18	275037		-	-	-	Pass	4.5	4.8	6
L1838751-02	AA-1	151	2.7L Can	09/25/18	275037	L1837237-01	Pass	-29.8	-7.7	-	-	-	-
L1838751-03	SSV-1	0864	SV200	09/25/18	275037		-	-	-	Pass	226	215	5
L1838751-03	SSV-1	2216	2.7L Can	09/25/18	275037	L1837237-01	Pass	-29.8	-4.4	-	-	-	-
L1838751-04	SSV-2	0525	SV200	09/25/18	275037		-	-	-	Pass	229	212	8
L1838751-04	SSV-2	1731	2.7L Can	09/25/18	275037	L1837237-01	Pass	-29.8	-4.4	-	-	-	-



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

**Lab Number:** L1837237  
**Report Date:** 10/23/18

### Air Canister Certification Results

Lab ID: L1837237-01  
 Client ID: CAN 536 SHELF 2  
 Sample Location:

Date Collected: 09/18/18 16:00  
 Date Received: 09/19/18  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15  
 Analytical Date: 09/19/18 20:42  
 Analyst: MB

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
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1

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

**Lab Number:** L1837237  
**Report Date:** 10/23/18

### Air Canister Certification Results

Lab ID: L1837237-01  
 Client ID: CAN 536 SHELF 2  
 Sample Location:

Date Collected: 09/18/18 16:00  
 Date Received: 09/19/18  
 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								
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
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
1,1,1-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
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



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

**Lab Number:** L1837237  
**Report Date:** 10/23/18

### Air Canister Certification Results

Lab ID: L1837237-01  
 Client ID: CAN 536 SHELF 2  
 Sample Location:

Date Collected: 09/18/18 16:00  
 Date Received: 09/19/18  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
1,4-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
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



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

**Lab Number:** L1837237  
**Report Date:** 10/23/18

### Air Canister Certification Results

Lab ID: L1837237-01  
 Client ID: CAN 536 SHELF 2  
 Sample Location:

Date Collected: 09/18/18 16:00  
 Date Received: 09/19/18  
 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								
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:** L1837237  
**Report Date:** 10/23/18

### Air Canister Certification Results

Lab ID: L1837237-01  
 Client ID: CAN 536 SHELF 2  
 Sample Location:

Date Collected: 09/18/18 16:00  
 Date Received: 09/19/18  
 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	98		60-140
Bromochloromethane	103		60-140
chlorobenzene-d5	96		60-140



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

**Lab Number:** L1837237  
**Report Date:** 10/23/18

### Air Canister Certification Results

**Lab ID:** L1837237-01  
**Client ID:** CAN 536 SHELF 2  
**Sample Location:**

**Date Collected:** 09/18/18 16:00  
**Date Received:** 09/19/18  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Air  
**Analytical Method:** 48,TO-15-SIM  
**Analytical Date:** 09/19/18 20:42  
**Analyst:** MB

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
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
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1



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

**Lab Number:** L1837237  
**Report Date:** 10/23/18

### Air Canister Certification Results

Lab ID: L1837237-01  
 Client ID: CAN 536 SHELF 2  
 Sample Location:

Date Collected: 09/18/18 16:00  
 Date Received: 09/19/18  
 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								
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	0.050	--	ND	0.188	--		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	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1



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

**Lab Number:** L1837237  
**Report Date:** 10/23/18

### Air Canister Certification Results

Lab ID: L1837237-01  
 Client ID: CAN 536 SHELF 2  
 Sample Location:

Date Collected: 09/18/18 16:00  
 Date Received: 09/19/18  
 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								
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	98		60-140
bromochloromethane	103		60-140
chlorobenzene-d5	96		60-140



Project Name: YONKERS AVENUE

Project Number: 395010

**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

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

N/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>
L1838751-01A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1838751-02A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1838751-03A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1838751-04A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838751  
**Report Date:** 10/23/18

## GLOSSARY

### Acronyms

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.
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.
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.
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.

### 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.

**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.

**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.

**Report Format:** Data Usability Report



**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838751  
**Report Date:** 10/23/18

#### Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- 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.
- 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.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- 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 exceedances 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.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

**Project Name:** YONKERS AVENUE  
**Project Number:** 395010

**Lab Number:** L1838751  
**Report Date:** 10/23/18

## 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

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

**EPA 8270D:** NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

**EPA 6860:** SCM: Perchlorate

**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

**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**

**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, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

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

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

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

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

**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.**

**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

PAGE 1 OF 1

**Project Information**

Project Name: Yonkers Avenue  
 Project Location: 325-397 Yonkers Ave, Yonkers, NY  
 Project #: 395010  
 Project Manager:  
 ALPHA Quote #:

**Turn-Around Time**

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

Date Rec'd in Lab: 9/27/18

**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 #: U838751

**Billing Information**

Same as Client info PO #:

**Regulatory Requirements/Report Limits**

State/Fed	Program	Res / Comm

**Client Information**

Client: AEI  
 Address:  
 Phone:  
 Fax:  
 Email: JFarber@aeiconsultants.com  
 These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List:

**ANALYSIS**

TO-15  
 TO-15 SIM  
 APH Substrate Non-petroleum HCs  
 Fixed Gases  
 Sulfides & Mercaptans by TO-15

**All Columns Below Must Be Filled Out**

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION					Sample Matrix*	Sampler's Initials	Can Size	TD Can	TD - 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											
38751.01	IA-1	9/26/18	0720	1515	-29.9	-6.80	AA	JF	2.7L	2313	01103	H					H=HOLD
.02	AA-1	9/26/18	0730	1510	-29.8	-7.04	AA	JF	2.7L	151	0337	H					H=HOLD
.03	SSV-1	9/26/18	1330	1342	-29.8	-3.82	SV	JF	2.7L	2216	0864	X					
.04	SSV-2	9/26/18	1400	1413	-29.8	-3.62	SV	JF	2.7L	1731	0525	X					

**\*SAMPLE MATRIX CODES**

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

Container Type

Relinquished By: [Signature] Date/Time: 9/26/18 1520  
 Received By: [Signature] Date/Time: 9/26/18 1545  
9/27/18 0510

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

**APPENDIX B**  
**INDOOR AIR BUILDING SURVEY AND SAMPLING FORM**

**INDOOR AIR BUILDING SURVEY  
and SAMPLING FORM**

Preparer's name: Jordan Farber

Date: 11/27/2018

Preparer's affiliation: AEI Consultants

Phone #: 973-508-5050

Site Name: 325-397 Yonkers Avenue

Case #: \_\_\_\_\_

**Part I - Occupants**

Building Address: 325-397 Yonkers Avenue, Yonkers, NY

Property Contact: Baroukh Sassouness Owner / Renter / other: Realtor

Contact's Phone: home ( ) \_\_\_\_\_ work ( ) \_\_\_\_\_ cell (212) 234-0234

Building occupants: Children under age 13 No Children age 13-18 No Adults No

**Part II – Building Characteristics**

Building type: residential / multi-family residential / office / strip mall / commercial / industrial

Describe building: Two-story commercial building Year constructed: 1970

Sensitive population: day care / nursing home / hospital / school / other (specify): N/A

Number of floors below grade: 0 (full basement / crawl space / slab on grade / partial basement)

Number of floors at or above grade: 2

Depth of basement below grade surface: N/A ft. Basement size: N/A ft<sup>2</sup>

Basement floor construction: concrete / dirt / floating / stone / other (specify): \_\_\_\_\_

Foundation walls: poured concrete / cinder blocks / stone / other (specify): masonry

Basement sump present? Yes / No Sump pump? Yes / No Water in sump? Yes / No

Type of heating system (circle all that apply):

<u>hot air circulation</u>	hot air radiation	wood	steam radiation
heat pump	hot water radiation	kerosene heater	electric baseboard
other (specify): _____			

Type of ventilation system (circle all that apply):

<u>central air conditioning</u>	mechanical fans	bathroom ventilation fans	individual air
conditioning units	kitchen range hood fan	outside air intake	
other (specify): _____			

Type of fuel utilized (circle all that apply):

Natural gas / electric / fuel oil / wood / coal / solar / kerosene

Are the basement walls or floor sealed with waterproof paint or epoxy coatings? Yes / No N/A



Is there a whole house fan?                      Yes /  No

Septic system?                                      Yes / Yes (but not used) /  No

Irrigation/private well?                          Yes / Yes (but not used) /  No

Type of ground cover outside of building:  grass /  concrete /  asphalt / other (specify) \_\_\_\_\_

Existing subsurface depressurization (radon) system in place?      Yes /  No                      active / passive

Sub-slab vapor/moisture barrier in place?      Yes /  No

    Type of barrier: \_\_\_\_\_

**Part III - Outside Contaminant Sources**

Contaminated site (1000-ft. radius): Unknown \_\_\_\_\_

Other stationary sources nearby (gas stations, emission stacks, etc.): gas station onsite \_\_\_\_\_

Heavy vehicular traffic nearby (or other mobile sources): yes \_\_\_\_\_

**Part IV – Indoor Contaminant Sources**

Identify all potential indoor sources found in the building (including attached garages), the location of the source (floor and room), and whether the item was removed from the building 48 hours prior to indoor air sampling event. Any ventilation implemented after removal of the items should be completed at least 24 hours prior to the commencement of the indoor air sampling event.

Potential Sources	Location(s)	Removed (Yes / No / NA)
Gasoline storage cans		N/A
Gas-powered equipment		N/A
Kerosene storage cans		N/A
Paints / thinners / strippers		N/A
Cleaning solvents		N/A
Oven cleaners		N/A
Carpet / upholstery cleaners		N/A
Other house cleaning products	Northeast area of deli space	No
Moth balls		N/A
Polishes / waxes		N/A
Insecticides		N/A
Furniture / floor polish		N/A
Nail polish / polish remover		N/A
Hairspray		N/A
Cologne / perfume		N/A
Air fresheners		N/A
Fuel tank (inside building)		N/A
Wood stove or fireplace		N/A
New furniture / upholstery		N/A
New carpeting / flooring		N/A
Hobbies - glues, paints, etc.		N/A

Part V – Miscellaneous Items

Do any occupants of the building smoke? *Yes / No N/A* How often? \_\_\_\_\_

Last time someone smoked in the building? \_\_\_\_\_ hours / days ago

Does the building have an attached garage directly connected to living space? *Yes / (No)*

If so, is a car usually parked in the garage? *Yes / No*

Are gas-powered equipment or cans of gasoline/fuels stored in the garage? *Yes / No*

Do the occupants of the building have their clothes dry cleaned? *Yes / No N/A*

If yes, how often? weekly / monthly / 3-4 times a year

Do any of the occupants use solvents in work? *Yes / No N/A*

If yes, what types of solvents are used? \_\_\_\_\_

If yes, are their clothes washed at work? *Yes / No*

Have any pesticides/herbicides been applied around the building or in the yard? *Yes / (No)*

If so, when and which chemicals? \_\_\_\_\_

Has there ever been a fire in the building? *Yes / (No)* If yes, when? \_\_\_\_\_

Has painting or staining been done in the building in the last 6 months? *(Yes) / No*

If yes, when unknown and where? unknown

Part VI – Sampling Information

Sample Technician: Jordan Farber Phone number: (973) 508-5050

Sample Source: (Indoor Air) (Sub-Slab) Near Slab Soil Gas / Exterior Soil Gas

Sampler Type: Tedlar bag / Sorbent / (Stainless Steel Canister) Other (specify): \_\_\_\_\_

Analytical Method: (TO-15) / TO-17 / other: \_\_\_\_\_ Cert. Laboratory: Alpha Analytical

Sample locations (floor, room):

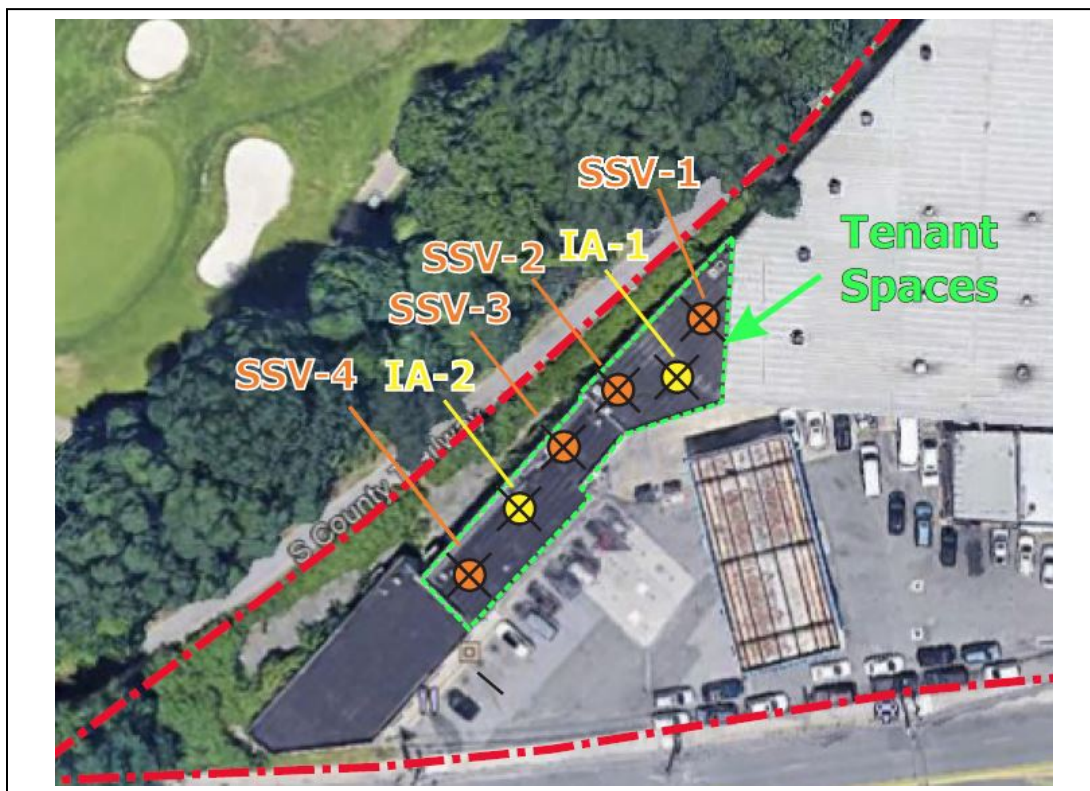
Field ID #  
IA-1/IA-2: 1<sup>st</sup> floor of tenant space (deli)

Field ID #  
SSV-1 through SSV-4: 1<sup>st</sup> floor of tenant space (deli)

Were "Instructions for Occupants" followed? *(Yes) / No*

If not, describe modifications: \_\_\_\_\_

Provide Drawing of Sample Location(s) in Building



Part VII - Meteorological Conditions

Was there significant precipitation within 12 hours prior to (or during) the sampling event? Yes / No

Describe the general weather conditions: 40 degrees Fahrenheit, partly cloudy

Part VIII – General Observations

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process.

---

---

---

**APPENDIX C**  
**LABORATORY ANALYTICAL REPORT**



## ANALYTICAL REPORT

Lab Number:	L1848351
Client:	AEI Consultants 30 Montgomery Street Suite 220 Jersey City, NJ 07302
ATTN:	Joseph Maggiulli
Phone:	(201) 332-1844
Project Name:	YONKERS, NY
Project Number:	398150
Report Date:	12/03/18

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:** YONKERS, NY  
**Project Number:** 398150

**Lab Number:** L1848351  
**Report Date:** 12/03/18

<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>
L1848351-01	SSV-01	SOIL_VAPOR	325-397 YONKERS AVE.	11/27/18 09:15	11/27/18
L1848351-02	SSV-02	SOIL_VAPOR	325-397 YONKERS AVE.	11/27/18 10:00	11/27/18
L1848351-03	SSV-03	SOIL_VAPOR	325-397 YONKERS AVE.	11/27/18 10:45	11/27/18
L1848351-04	SSV-04	SOIL_VAPOR	325-397 YONKERS AVE.	11/27/18 11:15	11/27/18
L1848351-05	IA-01	AIR	325-397 YONKERS AVE.	11/27/18 14:40	11/27/18
L1848351-06	IA-02	AIR	325-397 YONKERS AVE.	11/27/18 14:30	11/27/18
L1848351-07	AA-01	AIR	325-397 YONKERS AVE.	11/27/18 14:45	11/27/18

**Project Name:** YONKERS, NY  
**Project Number:** 398150

**Lab Number:** L1848351  
**Report Date:** 12/03/18

### Case Narrative

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

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

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

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

#### HOLD POLICY

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

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

**Project Name:** YONKERS, NY  
**Project Number:** 398150

**Lab Number:** L1848351  
**Report Date:** 12/03/18

### Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on November 26, 2018. The canister certification results are provided as an addendum.

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: 12/03/18



**AIR**

**Project Name:** YONKERS, NY**Lab Number:** L1848351**Project Number:** 398150**Report Date:** 12/03/18**SAMPLE RESULTS**

Lab ID: L1848351-01  
 Client ID: SSV-01  
 Sample Location: 325-397 YONKERS AVE.

Date Collected: 11/27/18 09:15  
 Date Received: 11/27/18  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 12/01/18 00:15  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
1,1,1-Trichloroethane	0.396	0.200	--	2.16	1.09	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
Tetrachloroethene	1.32	0.200	--	8.95	1.36	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	89		60-140
Bromochloromethane	90		60-140
chlorobenzene-d5	89		60-140



**Project Name:** YONKERS, NY**Lab Number:** L1848351**Project Number:** 398150**Report Date:** 12/03/18**SAMPLE RESULTS**

Lab ID: L1848351-02  
 Client ID: SSV-02  
 Sample Location: 325-397 YONKERS AVE.

Date Collected: 11/27/18 10:00  
 Date Received: 11/27/18  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 12/01/18 00:47  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
trans-1,2-Dichloroethene	0.205	0.200	--	0.813	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
Tetrachloroethene	0.854	0.200	--	5.79	1.36	--		1

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



**Project Name:** YONKERS, NY  
**Project Number:** 398150

**Lab Number:** L1848351  
**Report Date:** 12/03/18

### SAMPLE RESULTS

Lab ID: L1848351-03  
 Client ID: SSV-03  
 Sample Location: 325-397 YONKERS AVE.

Date Collected: 11/27/18 10:45  
 Date Received: 11/27/18  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 12/01/18 01:20  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
Tetrachloroethene	0.489	0.200	--	3.32	1.36	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	90		60-140
chlorobenzene-d5	90		60-140



**Project Name:** YONKERS, NY**Lab Number:** L1848351**Project Number:** 398150**Report Date:** 12/03/18**SAMPLE RESULTS**

Lab ID: L1848351-04  
 Client ID: SSV-04  
 Sample Location: 325-397 YONKERS AVE.

Date Collected: 11/27/18 11:15  
 Date Received: 11/27/18  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 12/01/18 01:52  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
Tetrachloroethene	8.52	0.200	--	57.8	1.36	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	94		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	91		60-140



**Project Name:** YONKERS, NY**Lab Number:** L1848351**Project Number:** 398150**Report Date:** 12/03/18**SAMPLE RESULTS**

Lab ID: L1848351-05  
 Client ID: IA-01  
 Sample Location: 325-397 YONKERS AVE.

Date Collected: 11/27/18 14:40  
 Date Received: 11/27/18  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 11/30/18 21:33  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air by SIM - Mansfield Lab</b>								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	0.212	0.020	--	0.841	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,2-Dichloroethane	0.065	0.020	--	0.263	0.081	--		1
1,1,1-Trichloroethane	0.119	0.020	--	0.649	0.109	--		1
Trichloroethene	1.44	0.020	--	7.74	0.107	--		1
Tetrachloroethene	0.761	0.020	--	5.16	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	86		60-140
bromochloromethane	88		60-140
chlorobenzene-d5	86		60-140



**Project Name:** YONKERS, NY**Lab Number:** L1848351**Project Number:** 398150**Report Date:** 12/03/18**SAMPLE RESULTS**

Lab ID: L1848351-06  
 Client ID: IA-02  
 Sample Location: 325-397 YONKERS AVE.

Date Collected: 11/27/18 14:30  
 Date Received: 11/27/18  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 11/30/18 22:38  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air by SIM - Mansfield Lab</b>								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,2-Dichloroethane	0.026	0.020	--	0.105	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	0.050	0.020	--	0.269	0.107	--		1
Tetrachloroethene	0.221	0.020	--	1.50	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	86		60-140
bromochloromethane	89		60-140
chlorobenzene-d5	87		60-140



**Project Name:** YONKERS, NY**Lab Number:** L1848351**Project Number:** 398150**Report Date:** 12/03/18**SAMPLE RESULTS**

Lab ID: L1848351-07  
 Client ID: AA-01  
 Sample Location: 325-397 YONKERS AVE.

Date Collected: 11/27/18 14:45  
 Date Received: 11/27/18  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 11/30/18 21:00  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air by SIM - Mansfield Lab</b>								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,2-Dichloroethane	0.020	0.020	--	0.081	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	86		60-140
bromochloromethane	90		60-140
chlorobenzene-d5	85		60-140





Project Name: YONKERS, NY

Lab Number: L1848351

Project Number: 398150

Report Date: 12/03/18

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 11/30/18 16:30

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 05-07 Batch: WG1184481-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Project Name: YONKERS, NY

Lab Number: L1848351

Project Number: 398150

Report Date: 12/03/18

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 11/30/18 15:58

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-04 Batch: WG1184485-4								
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS, NY

Lab Number: L1848351

Project Number: 398150

Report Date: 12/03/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 05-07 Batch: WG1184481-3								
Propylene	101		-		70-130	-		25
Dichlorodifluoromethane	90		-		70-130	-		25
Chloromethane	102		-		70-130	-		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	109		-		70-130	-		25
Vinyl chloride	105		-		70-130	-		25
1,3-Butadiene	109		-		70-130	-		25
Bromomethane	111		-		70-130	-		25
Chloroethane	104		-		70-130	-		25
Ethyl Alcohol	93		-		70-130	-		25
Vinyl bromide	110		-		70-130	-		25
Acetone	107		-		70-130	-		25
Trichlorofluoromethane	108		-		70-130	-		25
iso-Propyl Alcohol	110		-		70-130	-		25
Acrylonitrile	94		-		70-130	-		25
1,1-Dichloroethene	96		-		70-130	-		25
tert-Butyl Alcohol <sup>1</sup>	108		-		70-130	-		25
Methylene chloride	98		-		70-130	-		25
3-Chloropropene	100		-		70-130	-		25
Carbon disulfide	94		-		70-130	-		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	97		-		70-130	-		25
trans-1,2-Dichloroethene	94		-		70-130	-		25
1,1-Dichloroethane	95		-		70-130	-		25
Methyl tert butyl ether	95		-		70-130	-		25

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS, NY

Lab Number: L1848351

Project Number: 398150

Report Date: 12/03/18

Parameter	LCS	Qual	LCS	Qual	%Recovery	RPD	Qual	RPD
	%Recovery		%Recovery		Limits			Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 05-07 Batch: WG1184481-3								
Vinyl acetate	98		-		70-130	-		25
2-Butanone	101		-		70-130	-		25
cis-1,2-Dichloroethene	96		-		70-130	-		25
Ethyl Acetate	108		-		70-130	-		25
Chloroform	98		-		70-130	-		25
Tetrahydrofuran	92		-		70-130	-		25
1,2-Dichloroethane	93		-		70-130	-		25
n-Hexane	95		-		70-130	-		25
1,1,1-Trichloroethane	97		-		70-130	-		25
Benzene	95		-		70-130	-		25
Carbon tetrachloride	101		-		70-130	-		25
Cyclohexane	96		-		70-130	-		25
Dibromomethane <sup>1</sup>	87		-		70-130	-		25
1,2-Dichloropropane	97		-		70-130	-		25
Bromodichloromethane	104		-		70-130	-		25
1,4-Dioxane	109		-		70-130	-		25
Trichloroethene	99		-		70-130	-		25
2,2,4-Trimethylpentane	100		-		70-130	-		25
cis-1,3-Dichloropropene	102		-		70-130	-		25
4-Methyl-2-pentanone	104		-		70-130	-		25
trans-1,3-Dichloropropene	87		-		70-130	-		25
1,1,2-Trichloroethane	102		-		70-130	-		25
Toluene	99		-		70-130	-		25

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS, NY

Lab Number: L1848351

Project Number: 398150

Report Date: 12/03/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 05-07 Batch: WG1184481-3								
2-Hexanone	104		-		70-130	-		25
Dibromochloromethane	113		-		70-130	-		25
1,2-Dibromoethane	102		-		70-130	-		25
Tetrachloroethene	101		-		70-130	-		25
1,1,1,2-Tetrachloroethane	98		-		70-130	-		25
Chlorobenzene	101		-		70-130	-		25
Ethylbenzene	99		-		70-130	-		25
p/m-Xylene	97		-		70-130	-		25
Bromoform	113		-		70-130	-		25
Styrene	100		-		70-130	-		25
1,1,2,2-Tetrachloroethane	105		-		70-130	-		25
o-Xylene	100		-		70-130	-		25
1,2,3-Trichloropropane <sup>1</sup>	96		-		70-130	-		25
Isopropylbenzene	98		-		70-130	-		25
Bromobenzene <sup>1</sup>	95		-		70-130	-		25
4-Ethyltoluene	105		-		70-130	-		25
1,3,5-Trimethylbenzene	102		-		70-130	-		25
1,2,4-Trimethylbenzene	110		-		70-130	-		25
Benzyl chloride	101		-		70-130	-		25
1,3-Dichlorobenzene	109		-		70-130	-		25
1,4-Dichlorobenzene	108		-		70-130	-		25
sec-Butylbenzene	103		-		70-130	-		25
p-Isopropyltoluene	96		-		70-130	-		25

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS, NY

Project Number: 398150

Lab Number: L1848351

Report Date: 12/03/18

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 05-07 Batch: WG1184481-3								
1,2-Dichlorobenzene	107		-		70-130	-		25
n-Butylbenzene	112		-		70-130	-		25
1,2,4-Trichlorobenzene	130		-		70-130	-		25
Naphthalene	98		-		70-130	-		25
1,2,3-Trichlorobenzene	123		-		70-130	-		25
Hexachlorobutadiene	127		-		70-130	-		25

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS, NY

Project Number: 398150

Lab Number: L1848351

Report Date: 12/03/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG1184485-3								
Chlorodifluoromethane	88		-		70-130	-		
Propylene	100		-		70-130	-		
Propane	86		-		70-130	-		
Dichlorodifluoromethane	85		-		70-130	-		
Chloromethane	105		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	116		-		70-130	-		
Methanol	118		-		70-130	-		
Vinyl chloride	107		-		70-130	-		
1,3-Butadiene	109		-		70-130	-		
Butane	90		-		70-130	-		
Bromomethane	106		-		70-130	-		
Chloroethane	107		-		70-130	-		
Ethyl Alcohol	89		-		70-130	-		
Dichlorofluoromethane	104		-		70-130	-		
Vinyl bromide	113		-		70-130	-		
Acrolein	94		-		70-130	-		
Acetone	105		-		70-130	-		
Acetonitrile	91		-		70-130	-		
Trichlorofluoromethane	112		-		70-130	-		
iso-Propyl Alcohol	110		-		70-130	-		
Acrylonitrile	98		-		70-130	-		
Pentane	90		-		70-130	-		
Ethyl ether	76		-		70-130	-		

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS, NY

Project Number: 398150

Lab Number: L1848351

Report Date: 12/03/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG1184485-3								
1,1-Dichloroethene	98		-		70-130	-		
tert-Butyl Alcohol	116		-		70-130	-		
Methylene chloride	98		-		70-130	-		
3-Chloropropene	96		-		70-130	-		
Carbon disulfide	96		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	102		-		70-130	-		
trans-1,2-Dichloroethene	96		-		70-130	-		
1,1-Dichloroethane	96		-		70-130	-		
Methyl tert butyl ether	95		-		70-130	-		
Vinyl acetate	102		-		70-130	-		
2-Butanone	100		-		70-130	-		
cis-1,2-Dichloroethene	102		-		70-130	-		
Ethyl Acetate	109		-		70-130	-		
Chloroform	101		-		70-130	-		
Tetrahydrofuran	101		-		70-130	-		
2,2-Dichloropropane	89		-		70-130	-		
1,2-Dichloroethane	95		-		70-130	-		
n-Hexane	102		-		70-130	-		
Isopropyl Ether	95		-		70-130	-		
Ethyl-Tert-Butyl-Ether	90		-		70-130	-		
1,1,1-Trichloroethane	98		-		70-130	-		
1,1-Dichloropropene	99		-		70-130	-		
Benzene	97		-		70-130	-		



## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS, NY

Lab Number: L1848351

Project Number: 398150

Report Date: 12/03/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG1184485-3								
Carbon tetrachloride	104		-		70-130	-		
Cyclohexane	100		-		70-130	-		
Tertiary-Amyl Methyl Ether	90		-		70-130	-		
Dibromomethane	99		-		70-130	-		
1,2-Dichloropropane	103		-		70-130	-		
Bromodichloromethane	107		-		70-130	-		
1,4-Dioxane	106		-		70-130	-		
Trichloroethene	103		-		70-130	-		
2,2,4-Trimethylpentane	104		-		70-130	-		
Methyl Methacrylate	100		-		70-130	-		
Heptane	99		-		70-130	-		
cis-1,3-Dichloropropene	106		-		70-130	-		
4-Methyl-2-pentanone	103		-		70-130	-		
trans-1,3-Dichloropropene	89		-		70-130	-		
1,1,2-Trichloroethane	104		-		70-130	-		
Toluene	102		-		70-130	-		
1,3-Dichloropropane	99		-		70-130	-		
2-Hexanone	104		-		70-130	-		
Dibromochloromethane	114		-		70-130	-		
1,2-Dibromoethane	106		-		70-130	-		
Butyl Acetate	95		-		70-130	-		
Octane	97		-		70-130	-		
Tetrachloroethene	105		-		70-130	-		

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS, NY

Lab Number: L1848351

Project Number: 398150

Report Date: 12/03/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG1184485-3								
1,1,1,2-Tetrachloroethane	104		-		70-130	-		
Chlorobenzene	105		-		70-130	-		
Ethylbenzene	101		-		70-130	-		
p/m-Xylene	102		-		70-130	-		
Bromoform	116		-		70-130	-		
Styrene	100		-		70-130	-		
1,1,1,2-Tetrachloroethane	113		-		70-130	-		
o-Xylene	108		-		70-130	-		
1,2,3-Trichloropropane	98		-		70-130	-		
Nonane (C9)	98		-		70-130	-		
Isopropylbenzene	102		-		70-130	-		
Bromobenzene	97		-		70-130	-		
o-Chlorotoluene	100		-		70-130	-		
n-Propylbenzene	99		-		70-130	-		
p-Chlorotoluene	94		-		70-130	-		
4-Ethyltoluene	105		-		70-130	-		
1,3,5-Trimethylbenzene	103		-		70-130	-		
tert-Butylbenzene	106		-		70-130	-		
1,2,4-Trimethylbenzene	114		-		70-130	-		
Decane (C10)	104		-		70-130	-		
Benzyl chloride	107		-		70-130	-		
1,3-Dichlorobenzene	106		-		70-130	-		
1,4-Dichlorobenzene	108		-		70-130	-		

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: YONKERS, NY

Project Number: 398150

Lab Number: L1848351

Report Date: 12/03/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG1184485-3								
sec-Butylbenzene	104		-		70-130	-		
p-Isopropyltoluene	96		-		70-130	-		
1,2-Dichlorobenzene	106		-		70-130	-		
n-Butylbenzene	106		-		70-130	-		
1,2-Dibromo-3-chloropropane	100		-		70-130	-		
Undecane	116		-		70-130	-		
Dodecane (C12)	<b>145</b>	Q	-		70-130	-		
1,2,4-Trichlorobenzene	124		-		70-130	-		
Naphthalene	94		-		70-130	-		
1,2,3-Trichlorobenzene	114		-		70-130	-		
Hexachlorobutadiene	124		-		70-130	-		

## Lab Duplicate Analysis

Batch Quality Control

Project Name: YONKERS, NY

Project Number: 398150

Lab Number: L1848351

Report Date: 12/03/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
<b>Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 05-07 QC Batch ID: WG1184481-5 QC Sample: L1848351-05 Client ID: IA-01</b>						
Vinyl chloride	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	0.212	0.229	ppbV	8		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,2-Dichloroethane	0.065	0.067	ppbV	3		25
1,1,1-Trichloroethane	0.119	0.124	ppbV	4		25
Trichloroethene	1.44	1.48	ppbV	3		25
Tetrachloroethene	0.761	0.772	ppbV	1		25
<b>Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1184485-5 QC Sample: L1800011-225 Client ID: DUP Sample</b>						
Vinyl chloride	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	0.209	0.238	ppbV	13		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Trichloroethene	1.50	1.51	ppbV	1		25
Tetrachloroethene	0.751	0.763	ppbV	2		25

Project Name: YONKERS, NY

Project Number: 398150

Serial\_No:12031816:45  
Lab Number: L1848351

Report Date: 12/03/18

### 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
L1848351-01	SSV-01	01046	Flow 1	11/26/18	279589		-	-	-	Pass	144	143	1
L1848351-01	SSV-01	2343	2.7L Can	11/26/18	279589	L1847723-01	Pass	-28.5	-3.4	-	-	-	-
L1848351-02	SSV-02	0078	Flow 1	11/26/18	279589		-	-	-	Pass	144	158	9
L1848351-02	SSV-02	124	2.7L Can	11/26/18	279589	L1847723-01	Pass	-29.5	-3.3	-	-	-	-
L1848351-03	SSV-03	0448	Flow 1	11/26/18	279589		-	-	-	Pass	144	145	1
L1848351-03	SSV-03	113	2.7L Can	11/26/18	279589	L1847723-01	Pass	-29.5	-3.4	-	-	-	-
L1848351-04	SSV-04	0067	Flow 1	11/26/18	279589		-	-	-	Pass	144	151	5
L1848351-04	SSV-04	172	2.7L Can	11/26/18	279589	L1847723-01	Pass	-29.5	-1.9	-	-	-	-
L1848351-05	IA-01	0777	Flow 5	11/26/18	279589		-	-	-	Pass	4.5	4.3	5
L1848351-05	IA-01	106	2.7L Can	11/26/18	279589	L1847819-01	Pass	-29.5	-8.2	-	-	-	-
L1848351-06	IA-02	0760	Flow 4	11/26/18	279589		-	-	-	Pass	4.5	3.1	37
L1848351-06	IA-02	448	2.7L Can	11/26/18	279589	L1847723-01	Pass	-29.5	-7.9	-	-	-	-
L1848351-07	AA-01	0133	Flow 5	11/26/18	279589		-	-	-	Pass	4.5	4.2	7
L1848351-07	AA-01	2219	2.7L Can	11/26/18	279589	L1847723-01	Pass	-29.5	-8.2	-	-	-	-

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

**Lab Number:** L1847723  
**Report Date:** 12/03/18

### Air Canister Certification Results

Lab ID: L1847723-01  
 Client ID: CAN 497 SHELF 4  
 Sample Location:

Date Collected: 11/20/18 09:00  
 Date Received: 11/20/18  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15  
 Analytical Date: 11/20/18 23:24  
 Analyst: MB

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:** L1847723  
**Report Date:** 12/03/18

### Air Canister Certification Results

Lab ID: L1847723-01  
 Client ID: CAN 497 SHELF 4  
 Sample Location:

Date Collected: 11/20/18 09:00  
 Date Received: 11/20/18  
 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
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
1,1,1-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
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1

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

**Lab Number:** L1847723  
**Report Date:** 12/03/18

### Air Canister Certification Results

Lab ID: L1847723-01  
 Client ID: CAN 497 SHELF 4  
 Sample Location:

Date Collected: 11/20/18 09:00  
 Date Received: 11/20/18  
 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								
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
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1



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

**Lab Number:** L1847723  
**Report Date:** 12/03/18

### Air Canister Certification Results

Lab ID: L1847723-01  
 Client ID: CAN 497 SHELF 4  
 Sample Location:

Date Collected: 11/20/18 09:00  
 Date Received: 11/20/18  
 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								
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:** L1847723  
**Report Date:** 12/03/18

### Air Canister Certification Results

Lab ID: L1847723-01  
 Client ID: CAN 497 SHELF 4  
 Sample Location:

Date Collected: 11/20/18 09:00  
 Date Received: 11/20/18  
 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	79		60-140
Bromochloromethane	83		60-140
chlorobenzene-d5	81		60-140

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

**Lab Number:** L1847723  
**Report Date:** 12/03/18

### Air Canister Certification Results

Lab ID: L1847723-01  
 Client ID: CAN 497 SHELF 4  
 Sample Location:

Date Collected: 11/20/18 09:00  
 Date Received: 11/20/18  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 11/20/18 23:24  
 Analyst: MB

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
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
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1

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

**Lab Number:** L1847723  
**Report Date:** 12/03/18

### Air Canister Certification Results

Lab ID: L1847723-01  
 Client ID: CAN 497 SHELF 4  
 Sample Location:

Date Collected: 11/20/18 09:00  
 Date Received: 11/20/18  
 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								
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	0.050	--	ND	0.188	--		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	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1



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

**Lab Number:** L1847723  
**Report Date:** 12/03/18

### Air Canister Certification Results

Lab ID: L1847723-01  
 Client ID: CAN 497 SHELF 4  
 Sample Location:

Date Collected: 11/20/18 09:00  
 Date Received: 11/20/18  
 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								
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	79		60-140
bromochloromethane	87		60-140
chlorobenzene-d5	83		60-140

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

**Lab Number:** L1847819  
**Report Date:** 12/03/18

### Air Canister Certification Results

Lab ID: L1847819-01  
 Client ID: CAN 379 SHELF 9  
 Sample Location:

Date Collected: 11/20/18 16:00  
 Date Received: 11/21/18  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15  
 Analytical Date: 11/21/18 07:01  
 Analyst: MB

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:** L1847819  
**Report Date:** 12/03/18

### Air Canister Certification Results

Lab ID: L1847819-01  
 Client ID: CAN 379 SHELF 9  
 Sample Location:

Date Collected: 11/20/18 16:00  
 Date Received: 11/21/18  
 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
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
1,1,1-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
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1

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

**Lab Number:** L1847819  
**Report Date:** 12/03/18

### Air Canister Certification Results

Lab ID: L1847819-01  
 Client ID: CAN 379 SHELF 9  
 Sample Location:

Date Collected: 11/20/18 16:00  
 Date Received: 11/21/18  
 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								
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
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1



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

**Lab Number:** L1847819  
**Report Date:** 12/03/18

### Air Canister Certification Results

Lab ID: L1847819-01  
 Client ID: CAN 379 SHELF 9  
 Sample Location:

Date Collected: 11/20/18 16:00  
 Date Received: 11/21/18  
 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								
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:** L1847819  
**Report Date:** 12/03/18

### Air Canister Certification Results

Lab ID: L1847819-01  
 Client ID: CAN 379 SHELF 9  
 Sample Location:

Date Collected: 11/20/18 16:00  
 Date Received: 11/21/18  
 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	80		60-140
Bromochloromethane	84		60-140
chlorobenzene-d5	79		60-140



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

**Lab Number:** L1847819  
**Report Date:** 12/03/18

### Air Canister Certification Results

Lab ID: L1847819-01  
 Client ID: CAN 379 SHELF 9  
 Sample Location:

Date Collected: 11/20/18 16:00  
 Date Received: 11/21/18  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 11/21/18 07:01  
 Analyst: MB

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
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
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1



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

**Lab Number:** L1847819  
**Report Date:** 12/03/18

### Air Canister Certification Results

Lab ID: L1847819-01  
 Client ID: CAN 379 SHELF 9  
 Sample Location:

Date Collected: 11/20/18 16:00  
 Date Received: 11/21/18  
 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								
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	0.050	--	ND	0.188	--		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	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1



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

**Lab Number:** L1847819  
**Report Date:** 12/03/18

### Air Canister Certification Results

Lab ID: L1847819-01  
 Client ID: CAN 379 SHELF 9  
 Sample Location:

Date Collected: 11/20/18 16:00  
 Date Received: 11/21/18  
 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								
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	79		60-140
bromochloromethane	88		60-140
chlorobenzene-d5	83		60-140

**Project Name:** YONKERS, NY**Lab Number:** L1848351**Project Number:** 398150**Report Date:** 12/03/18**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

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

N/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>
L1848351-01A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1848351-02A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1848351-03A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1848351-04A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1848351-05A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-SIM(30)
L1848351-06A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-SIM(30)
L1848351-07A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-SIM(30)

**Project Name:** YONKERS, NY  
**Project Number:** 398150

**Lab Number:** L1848351  
**Report Date:** 12/03/18

## GLOSSARY

### Acronyms

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.
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.
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.
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.

### 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.

**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.

**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.

**Report Format:** Data Usability Report



**Project Name:** YONKERS, NY  
**Project Number:** 398150

**Lab Number:** L1848351  
**Report Date:** 12/03/18

#### Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- 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.
- 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.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- 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 exceedances 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.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.



**Project Name:** YONKERS, NY  
**Project Number:** 398150

**Lab Number:** L1848351  
**Report Date:** 12/03/18

## 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

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

**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

**EPA 6860:** SCM: Perchlorate

**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**

**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, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

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

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

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

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

### 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.**

#### 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.

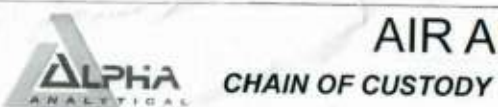
**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

**EPA 245.1 Hg.**

**SM2340B**

---

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



# AIR ANALYSIS

PAGE 1 OF 1

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

### Client Information

Client: **AEI**  
 Address:  
 Phone:  
 Fax:  
 Email:

### Project Information

Project Name: **Yonkers NY**  
 Project Location: **325-397 Yonkers ave**  
 Project #: **398150**  
 Project Manager: **Joe Maggiali**  
 ALPHA Quote #:

### Turn-Around Time

Standard  RUSH (only confirmed if pre-approved)

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

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments: **Report only VOCs!!**  
 Project-Specific Target Compound List:

Date Rec'd in Lab: **11/28/18**

### 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 #: **L1848351**

### Billing Information

Same as Client info PO #: **17933**

### Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

*Do not report anything other than VOCs.*  
*please exclude chloroform*

### ANALYSIS

TO-15  
 TO-15 SIM  
 APH Substrate Non-petroleum HCs  
 Fixed Gases  
 Sulfides & Mercaptans by TO-15

*COCs only!!!*

### All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION					Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	TO-15	TO-15 SIM	APH Substrate Non-petroleum HCs	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
		End Date	Start Time	End Time	Initial Vacuum	Final Vacuum											
48351.01	SSV-01	11/27	0900	0915	28.25	4.86	SV	JM	2.7	124	1046	X					FL0448 multfunction, FL1046 used twice
.02	SSV-02	11/27	0945	1000	28.71	4.55	SV	JM	2.7	124	0078	X					
.03	SSV-03	11/27	1030	1045	29.07	3.97	SV	JM	2.7	113	1046	X					FL0448 multfunction, FL1046 used twice
.04	SSV-04	11/27	1100	1115	29.50	3.59	SV	JM	2.7	122	0067	X					
.05	IA-01	11/27	0810	1440	29.46	8.95	AA	JM	2.7	106	0777	X					
.06	IA-02	11/27	0815	1435	29.48	8.35	AA	JM	2.7	448	0760	X					
.07	AA-01	11/27	0800	1445	29.46	0833	AA	JL	2.7	219	0133	X					

### \*SAMPLE MATRIX CODES

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

Container Type

Relinquished By: **Paul Maggiali** Date/Time: **11/27/18 1706**  
 Received By: **Paul Maggiali** Date/Time: **11/27/18 1938**  
*AEI*  
*11/28/18 0620*  
*11/27/18 2345*  
*11/27/18*  
*11/27/18*  
*11/27/18 0620*

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.