



121 West 27<sup>th</sup> Street, Suite 702  
New York, NY 10001  
(646) 606-2332

June 29, 2021

New York State Department of Environmental Conservation  
Division of Environmental Remediation  
625 Broadway, 12<sup>th</sup> Floor  
Albany, NY 12233-7016

Attn: Ronnie Lee

Re: Groundwater and Soil Vapor Investigation  
Parkchester Crossing – Off-site  
1590 White Plains Road – Bronx, NY 10462  
NYSDEC Site No. C203079A (Off-site to BCP Site No. C203079)

Dear Ronnie,

On March 24, 2021, Tenen Environmental, LLC (Tenen) conducted groundwater and soil vapor sampling within sidewalks surrounding the above-referenced Site on behalf of West Lane Realty Corp. and Park-Plains, Inc. The sampling was conducted to determine whether there has been off-site migration of contamination from the above-referenced property that is enrolled by a “Volunteer” in the Brownfield Cleanup Program (BCP). This letter report provides a summary of our findings, including the results of the laboratory analysis, conclusions and recommendations.

### Background

The BCP Site is located at 1590 White Plains Road in the Borough of the Bronx, New York (BCP Site). The BCP Site is an irregularly shaped parcel, identified as Block 3952, Lots 1, 7, 8, 17 and 23 on the New York City Tax Map, as shown on Figure 1. The Site is situated on an approximately 1.493-acre area bounded by East Tremont Avenue to the north, Guerlain Street to the south, Unionport Road to the east, and White Plains Road to the west.

In May 2013, a Phase I Environmental Site Assessment (ESA) was prepared for the Site by Merritt Environmental Consulting Corp. (Merritt). The Phase I ESA identified the following Recognized Environmental Conditions (RECs) in connection with the Site:

- A gasoline station occupied the 1596 White Plains Road, a.k.a. 1880 East Tremont Avenue (Block 3952, Lot 8) portion of the Site. According to the historical sources, the gasoline station has occupied this location since approximately 1953. Our database review indicated eight (8) underground storage tanks (USTs) registered to this Site with a “closed-removed” status and six (6) USTs registered to the Site with an “in service” status. The former and current usage of the Site as a filling station constitutes a REC.
- According to sources reviewed, a dry cleaner occupied the 1597 Unionport Road portion of the Site during the years 1965-2012. The presence of a dry cleaner utilizing solvents onsite elevates the degree of concern as any improper handling, storage or disposal of these solvents may have impacts to the sub-surface conditions of the property. This constitutes a REC.

Tenen also notes that a dry cleaner was historically located at 1584 White Plains Road, based on a review of the city directories. The first of the dry cleaners is located on the property formerly owned by West Lane Realty Corp. and the second of the dry cleaners, on the property formerly owned by Park-Plains, Inc.

In August 2014, a Phase II Environmental Site Investigation (ESI) was performed at the BCP Site by D&B Engineers and Architects, P.C. (D&B) to investigate the potential for impacts to soil, groundwater and soil vapor in connection with the RECs identified in the Merritt Phase I ESA. The Phase II ESI identified the presence of volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), metals and pesticides at concentrations exceeding applicable soil cleanup objectives (SCOs) in soil at the Site, likely attributable to historic Site operations and the presence of historic fill. In addition, VOCs, specifically chlorinated solvents and petroleum-related VOCs, were detected in soil vapor and groundwater above the applicable comparison criteria, likely attributable to historic Site operations.

A Remedial Investigation (RI) was more recently conducted by Roux Associates, Inc. (Roux) and the results presented in a Remedial Investigation Report (RIR)/Remedial Action Work Plan (RAWP) dated August 2019. The results of the RI confirmed the presence of concentrations of VOCs, specifically chlorinated solvents and petroleum-related VOCs, in soil, groundwater and soil vapor at the Site above the applicable comparison criteria.

The BCP Site was remediated in accordance with a New York State Department of Environmental Conservation (NYSDEC)-approved Interim Remedial Measures Work Plan (IRMWP) dated September 2016 and the August 2019 RIR/RAWP. Subsequent to the completion of the remedial action, Roux prepared a Final Engineering Report (FER) and Site Management Plan (SMP) for the BCP Site in December 2019. A Track 4 cleanup was achieved and residual contamination remains in soil and groundwater; post-remedial soil vapor samples were not collected but residual impacts may remain. A composite cover system was installed across the BCP Site to prevent contact with residual contamination and groundwater is being monitored quarterly in accordance with the SMP. Residual contamination in groundwater and soil vapor that may be migrating off-site was assessed during this investigation.

#### Groundwater and Soil Vapor Investigation, Tenen

Groundwater and soil vapor sampling were completed by Tenen to further investigate the presence of chlorinated solvents in groundwater and soil vapor off-site to determine if there has been an off-site impact from the BCP Site. Tenen's investigation was conducted on March 24, 2021. Sampling locations are depicted on Figure 2. A community air monitoring plan (CAMP) was implemented during all boring activities; a table of readings is included in Table 3.

#### Hydrogeology

Bedrock is present at approximately six to 20 feet below grade (ft-bg) surrounding the BCP Site. Perched water is present above the bedrock at approximately nine to twelve ft-bg. Monitoring well construction logs are presented in Attachment 1.

#### Sample Collection

##### *Soil Vapor*

On March 15, 2021, AARCO Environmental Services (AARCO) installed five soil vapor points, as shown on Figure 2. Tenen collected five soil vapor samples (SV-1 through SV-5) from sidewalks surrounding the BCP Site and one ambient air sample (AA 3/24) on March 24, 2021.

**Soil Vapor Sample Designations – March 2021**

<b>Sample Name</b>	<b>Sample Type</b>	<b>Sample Location</b>
SV-1	Exterior Soil Vapor	Western sidewalk of White Plains Road, north of SV-2
SV-2	Exterior Soil Vapor	Western sidewalk of White Plains Road, south of SV-1

Sample Name	Sample Type	Sample Location
SV-3	Exterior Soil Vapor	Southern sidewalk of Guerlain Street, west of SV-4
SV-4	Exterior Soil Vapor	Southern sidewalk of Guerlain Street, east of SV-3
SV-5	Exterior Soil Vapor	Eastern sidewalk of Unionport Road
AA 3/24	Ambient Air	Northwest corner of the intersection of Guerlain Street and Archer Road

At each soil vapor sampling location, a ½-inch diameter, 6-inch long perforated soil vapor sampling probe (AMS gas vapor probe tip) was placed directly into the soil. All soil vapor sampling locations were installed with a direct push track-mounted Geoprobe®. Access to the sub-slab soil was gained by drilling through the top surface material (concrete) using a drill bit. All probes were installed at the approximate depth of the lowest occupied level based on field estimates.

The soil vapor sampling probe was connected to dedicated tubing that was extended to grade. In accordance with the New York State Department of Health (NYSDOH) October 2006 Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (Soil Vapor Guidance) protocols, a tracer gas (helium) was used to verify the integrity of the soil vapor probe. A plastic chamber was sealed above the borehole. The sampling tube was pushed through the top of the sealed chamber. The atmosphere inside the chamber was enriched with the tracer gas (helium). A portable helium monitor was attached to the sampling tube to measure a vapor sample from the probe for the presence of high concentrations (>10%) of the tracer gas.

Soil vapor was purged from the boring hole by attaching the surface end of the tubing to an air valve and then to a vacuum pump. The vacuum pump removed one to three volumes of air (volume of the sample probe and tube) prior to sample collection. The flow rate for both purging and sample collection did not exceed 0.2 liters per minute (L/min).

The soil vapor sample was first screened for organic vapors using a photoionization detector (PID). Pre-sample PID readings from the soil vapor points were non-detect at all five locations. Soil vapor samples were collected in 2.7-liter, batch-certified clean Summa canisters using two-hour regulators and analyzed for VOCs using EPA Method TO-15.

The ambient air sample was collected within the breathing zone (approximately three to five feet above the floor) in accordance with the NYSDOH Soil Vapor Guidance protocols. The sample was collected in a six-liter, batch-certified clean Summa canister using an eight-hour regulator. Samples were collected at flow rates no greater than 0.2 liters per minute and analyzed for VOCs using EPA Method TO-15.

Field notes were maintained summarizing sample identification, date and time of sample collection, sampling depth, identity of samplers, sampling methods and devices, soil vapor purge volumes, volume of the soil vapor extracted, vacuum of canisters before and after samples were collected and chain of custody protocols. Soil vapor logs are included as Attachment 2.

#### *Groundwater*

Five two-inch diameter, pre-packed permanent groundwater monitoring wells, MW-1 through MW-5, were installed via drill and drop without soil borings on March 15, 2021 using a direct push track-mounted Geoprobe®. MW-5 was installed to a depth of six ft-bg, MW-4 was installed to a depth of ten ft-bg, MW-3 was installed to a depth of 12.5 ft-bg, MW-2 was installed to a depth of 14.5 ft-bg and MW-1 was installed to a depth of 20 ft-bg.

All five monitoring wells were set to the bedrock interface. Monitoring wells MW-1, MW-2 and MW-3 were installed with ten-foot pre-packed screens and monitoring wells MW-4 and MW-5 were installed with five-foot pre-packed screens. Groundwater was measured at depths ranging from approximately 8.89 ft-bg in MW-3 to 12.38 ft-bg in MW-1.

**Monitoring Well Locations, Sample Designations, and Descriptions of Location**

Well Location	Sample Name	Description of Location
MW-1	MW-1	Western sidewalk of White Plains Road, north of MW-2
MW-2	MW-2	Western sidewalk of White Plains Road, south of MW-1
MW-3	MW-3	Southern sidewalk of Guerlain Street, west of MW-4
MW-4	MW-4	Southern sidewalk of Guerlain Street, east of MW-3
MW-5	MW-5	Eastern sidewalk of Unionport Road

Monitoring wells MW-1 and MW-3 were developed and sampled on March 24, 2021. Monitoring wells MW-2, MW-4 and MW-5 were either dry or did not contain enough water to sample (less than one inch). A PID was used to measure head-space readings in each of the wells prior to sampling. Readings ranged from 0.1 parts-per-million (ppm) in MW-4 to 0.6 ppm in MW-5. PID readings in MW-1, MW-2 and MW-3 were non-detect. Field instrumentation could not be employed to measure water temperature, pH, turbidity, and dissolved oxygen in the sampled wells due to the small water column present in the wells. Sampling was completed in MW-1 and MW-3 using a polyethylene bailer as a peristaltic pump did not draw water. No visual evidence of petroleum impacts was observed in purged groundwater.

One well, MW-1, was relocated to the south from the proposed location based on the presence of scaffolding in front of the building.

Monitoring well construction logs are included as Attachment 1.

Sample Analysis

All samples were sent under chain-of-custody documentation to Alpha Analytical, Inc. (Alpha). Alpha is certified by the NYSDOH Environmental Laboratory Approval Program (ELAP) as LABIDs 11627 and 11148. Soil vapor, ambient air and groundwater samples were analyzed for VOCs.

Analytical Results

*Soil Vapor*

Soil vapor results were compared to the NYSDOH Soil Vapor Intrusion Matrices as presented in the NYSDOH Soil Vapor Guidance, October 2006 with May 2017 updates and the Environmental Protection Agency (EPA) Vapor Intrusion Screening Limits (VISL), Residential Target Sub-Slab and Exterior Soil Gas Concentrations (TSSGC).

Soil vapor results are included in Table 1 and Figure 3. Laboratory deliverables are included in Attachment 3. The analytical results are summarized below.

One chlorinated VOC (cVOC), chloroform, was detected in exceedance of its EPA-VISL-TSSGC of 4.07 micrograms per cubic meter (ug/m3) in one soil vapor sample, SV-5 (concentration of 10.7 ug/m3). Chloroform

is a common laboratory contaminant. No other VOCs were detected in exceedance of EPA-VISL-TSSGCs in any soil vapor samples.

Low concentrations of one cVOC, tetrachloroethene (PCE), were detected in all five soil vapor samples below the EPA-VISL-TSSGC. PCE is part of NYSDOH Matrix B. PCE was detected at concentrations ranging from 5.07 ug/m<sup>3</sup> in SV-1 to 12.4 ug/m<sup>3</sup> in SV-3. Other cVOCs included on the NYSDOH Soil Vapor Intrusion Matrices, including trichloroethene (TCE), 1,1,1-trichloroethane (1,1,1-TCA), cis-1,2-dichloroethene (cis-1,2-DCE), 1,1-DCE, methylene chloride, carbon tetrachloride and vinyl chloride, were not detected in any soil vapor samples.

### *Groundwater*

The groundwater results were compared to the NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1 Class GA Water Quality Standards and Guidance Values (Class GA Standards).

Groundwater sample results are included in Table 2 and Figure 4. Laboratory deliverables are included in Attachment 3. The analytical results are summarized below.

All VOCs in well MW-3, located downgradient of the BCP Site, were detected below the Class GA Standards. Two cVOCs, PCE and TCE, were detected at low concentration in MW-3, collected from the southern sidewalk of Guerlain Street, downgradient of the BCP Site. PCE was detected below its Class GA Standard of 5 micrograms per liter (ug/l) at a concentration of 2.9 ug/l and TCE was detected below its Class GA Standard of 5 ug/l at a concentration of 0.18 ug/l.

PCE and TCE were not detected in well MW-1. A variety of petroleum-related VOCs, including benzene, toluene, p/m-xylene, 1,2,4,5-tetramethylbenzene, isopropylbenzene, n-butylbenzene, n-propylbenzene and sec-butylbenzene were detected in exceedance of Class GA Standards in MW-1, collected from the western sidewalk of White Plains Road, cross-gradient of the BCP Site. None of these compounds were detected above the Class GA Standards in any well on the BCP Site during the RI or post-remedial sampling. Benzene was detected at a concentration of 750 ug/L with a Class GA Standard of 1 ug/l; toluene was detected at a concentration of 7.6 ug/l with a Class GA Standard of 5 ug/l; p/m-xylene was detected at a concentration of 20 ug/l with a Class GA Standard of 5 ug/l; 1,2,4,5-tetramethylbenzene was detected at a concentration of 53 ug/l with a Class GA Standard of 5 ug/l; isopropylbenzene was detected at a concentration of 32 ug/l with a Class GA Standard of 5 ug/l; n-butylbenzene was detected at a concentration of 9 ug/l with a Class GA Standard of 5 ug/l; n-propylbenzene was detected at a concentration of 73 ug/l with a Class GA Standard of 5 ug/l; and sec-butylbenzene was detected at a concentration of 11 ug/l with a Class GA Standard of 5 ug/l.

Acetone was detected in MW-1 at a concentration of 53 ug/l, slightly in exceedance of its Class GA Standard of 50 ug/l. Acetone is a common laboratory artifact.

### Data Usability Summary Reports

Data Usability Summary Reports (DUSRs) were prepared by Lori Beyer at L.A.B. Validation Corp. of East Northport, NY and are included in Attachment 4.

No additional qualifiers were reported for the soil vapor samples. Qualifiers were added to the results for acetone (due to trip blank contamination); bromochloromethane (due to equipment calibrations); 1,4-dioxane (due to equipment response factors) and trans-1,4-dichloro-2-butene (due to equipment calibrations); of these, only 1,4-dioxane was considered unreliable. None of these compounds were contaminants of concern.

## Findings and Conclusions

The offsite groundwater and soil vapor investigation conducted by Tenen indicates the following:

### **Soil Vapor:**

- Only one cVOC included on the NYSDOH Soil Vapor Intrusion Matrices, PCE, was detected in all five off-site soil vapor samples. PCE was detected below its EPA-VISL-TSSGC at a maximum concentration of 12.4 ug/m<sup>3</sup>. No other cVOCs included on the NYSDOH Soil Vapor Intrusion Matrices were detected in any off-site soil vapor samples. Based upon comparison of the detected concentrations of PCE in soil vapor to applicable standards and guidance, it is unlikely that a soil vapor intrusion condition exists at off-site properties surrounding the Site.
- Chloroform was detected slightly in exceedance of its EPA-VISL-TSSGC in one off-site soil vapor sample, SV-5. Chloroform is a common laboratory contaminant.

### **Groundwater:**

- Perched groundwater was present above the bedrock and was able to be sampled in only two wells.
- cVOCs were not detected in exceedance of Class GA Standards in either of the sampled off-site wells. Groundwater results indicate that residual contamination in groundwater at the BCP Site is not migrating off-site at this time.
- A variety of petroleum-related VOCs were detected in exceedance of Class GA Standards in MW-1, located in the western sidewalk of White Plains Road, cross-gradient of the BCP Site. The concentrations of petroleum-related VOCs detected in MW-1 are attributable to an off-site source as none of the compounds were detected above the Class GA Standards on the BCP Site.

The completed sampling indicates that there is no offsite migration in groundwater or soil vapor and Tenen recommends that no further investigation be required.

Please contact us if you need any additional information.

Sincerely,  
Tenen Environmental, LLC



Matthew Carroll, P.E.  
Principal / Environmental Engineer

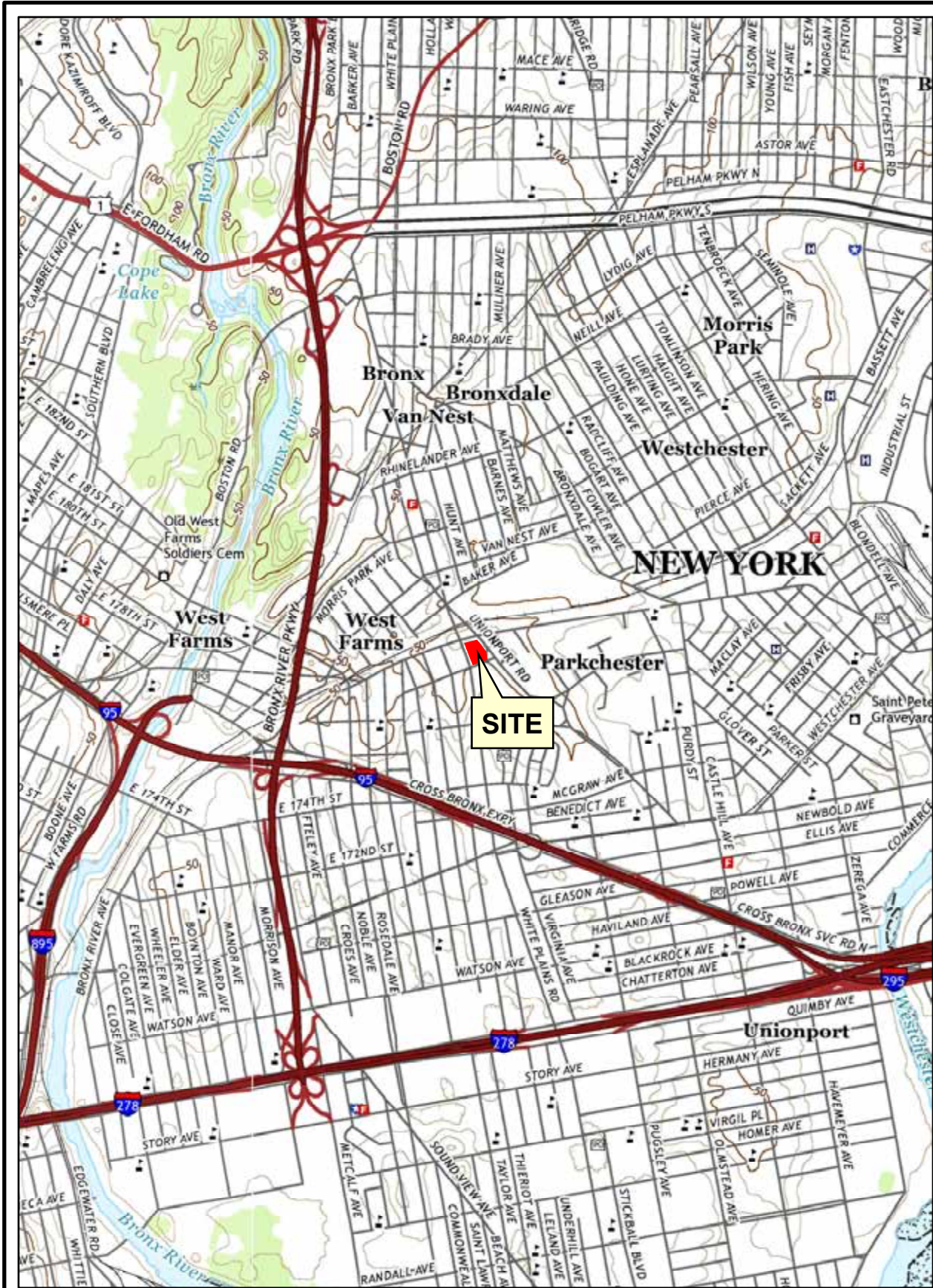
Figure 1	Site Location
Figure 2	Sample Locations
Figure 3	VOCs in Soil Vapor
Figure 4	VOCs in Groundwater

Table 1	Volatile Organic Compounds in Soil Vapor
Table 2	Volatile Organic Compounds in Groundwater
Table 3	Community Air Monitoring Plan (CAMP) Readings

Attachment 1	Monitoring Well Construction Logs
Attachment 2	Soil Vapor Logs
Attachment 3	Laboratory Deliverables
Attachment 4	<u>Data Usability Summary Reports (DUSRs)</u>

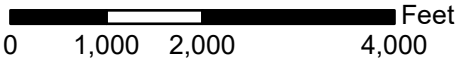
## Figures





Basemap: USGS Topographic Map, 7.5 Minute Quadrangle: Central Park, NY, 2016; Flushing, NY, 2016

Site Location



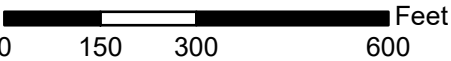
<http://gis.nyc.gov/taxmap/map.htm>

Department of Finance Digital Tax Map



Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community  
NYC Department of City Planning, Information Technology Division

Department of City Planning MapPLUTO - 2020 v6



**Parkchester Crossing**  
**1590 White Plains Road**  
**Bronx, New York**  
**Block 3952, Lots 1, 7, 8, 17 & 23**

Site



Tenen Environmental, LLC  
121 West 27th Street  
Suite 702  
New York, NY 10001  
O: (646) 606-2332  
F: (646) 606-2379

Drawn By LM

Checked By MC

Date December 2020

Scale As Noted

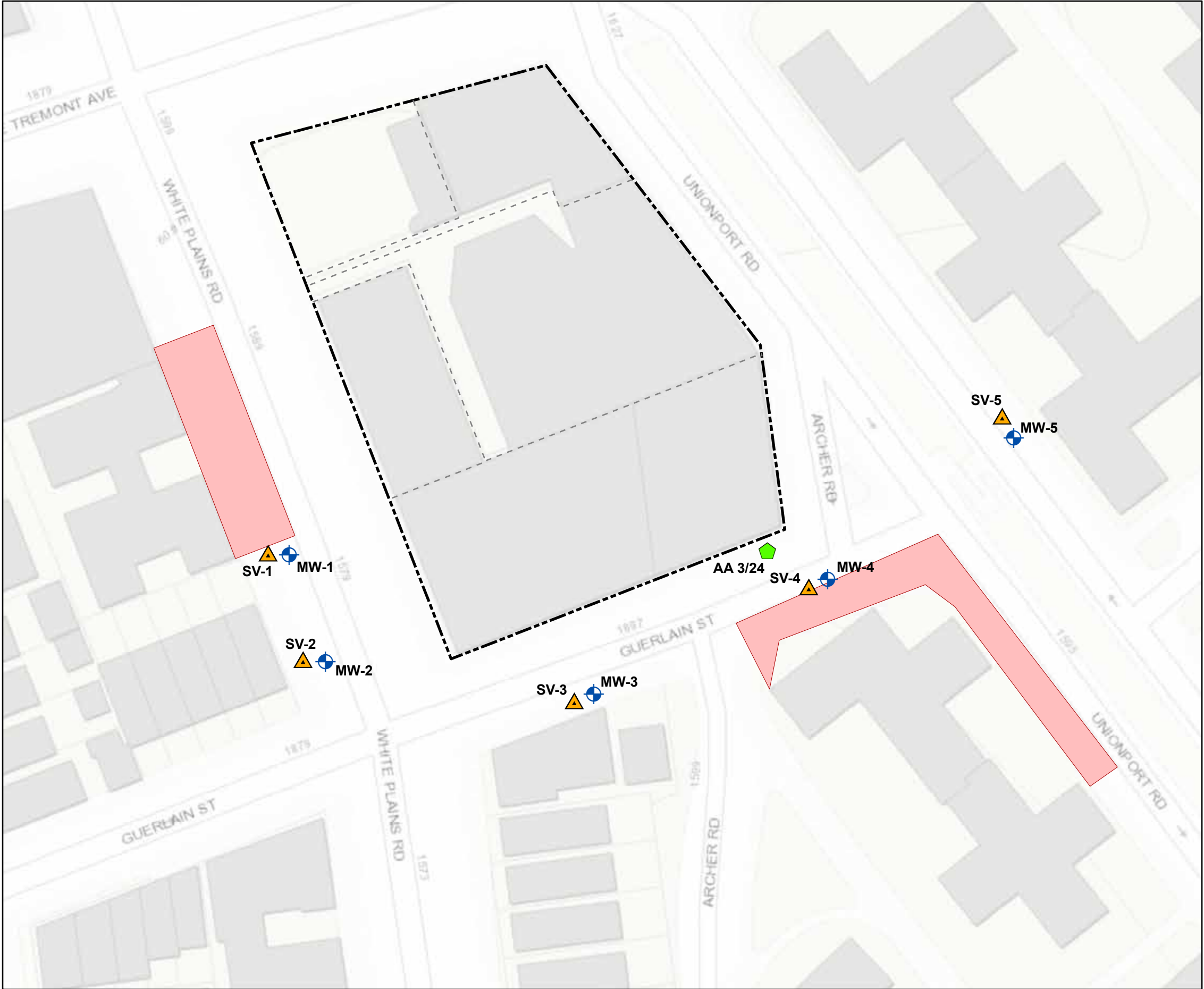
**Site Location Map**

**Figure 1**

Drawing Title

Drawing No

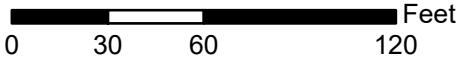




Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community  
NYC Department of City Planning, Information Technology Division

Legend

- Groundwater Sample Location
- Soil Vapor Sample Location
- Ambient Air Sample Location
- Scaffolding, No Access
- Project Site



Site

**Parkchester Crossing**  
**1590 White Plains Road**  
**Bronx, New York**  
**Block 3952, Lots 1, 7, 8, 17 & 23**

**TENEN ENVIRONMENTAL**

Tenen Environmental, LLC  
121 West 27th Street  
Suite 702  
New York, NY 10001  
O: (646) 606-2332  
F: (646) 606-2379

Drawn By

LM

Checked By

MC

Date

April 2021

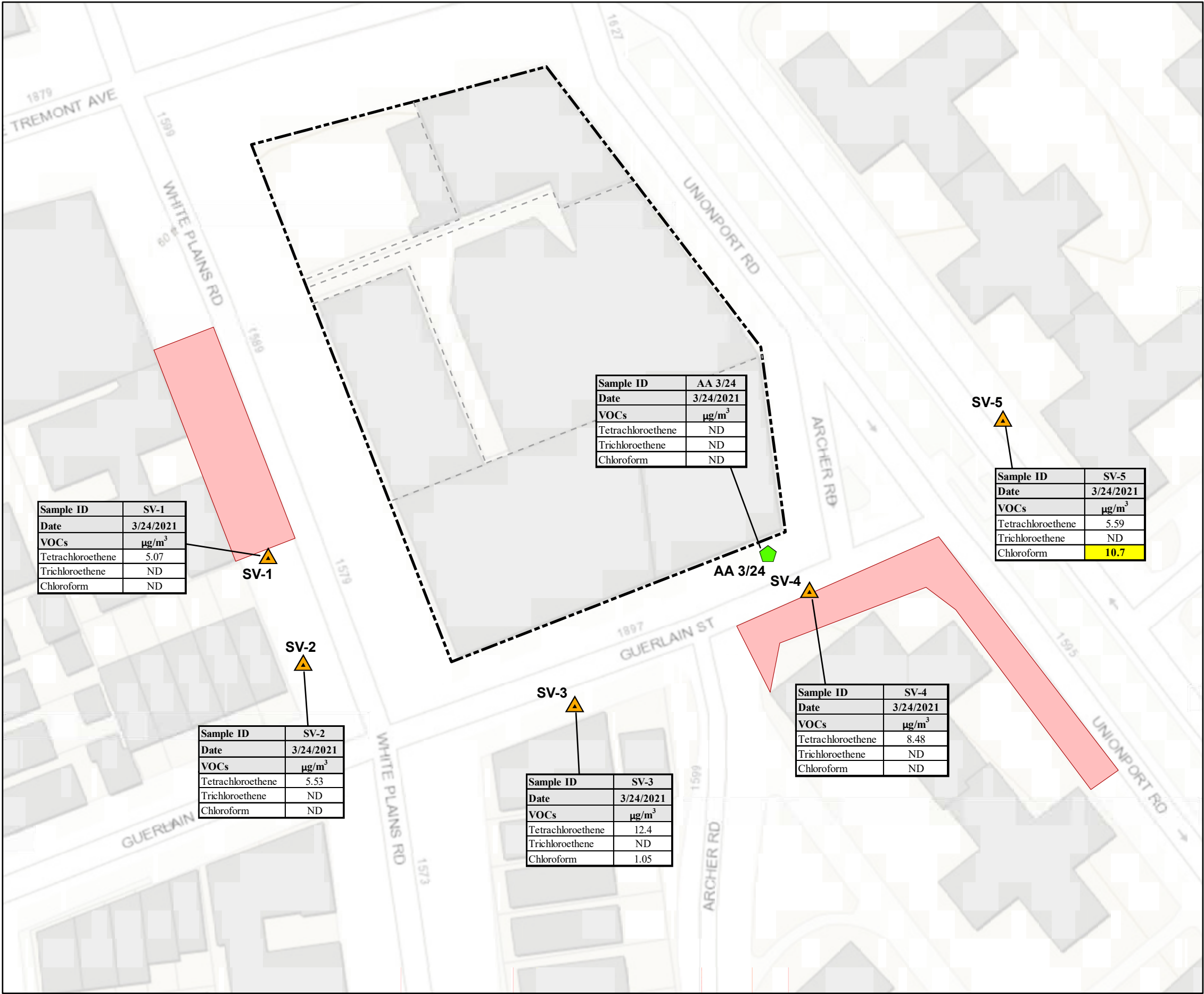
Scale

As Noted

Drawing Title  
**Exterior Soil Vapor and  
Groundwater Sample Locations**

Drawing No

**Figure 2**



Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community  
NYC Department of City Planning, Information Technology Division

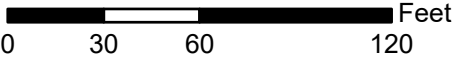


Analyte	EPA-VISL-RTSSGC
VOCs	µg/m <sup>3</sup>
Tetrachloroethene	360
Trichloroethene	15.9
Chloroform	4.07

- Notes:**
- 1. **Bold and shaded yellow value indicates concentration exceeds EPA-VISL-RTSSGC**
  - 2. EPA-VISL-RTSSGC = Environmental Protection Agency Vapor Intrusion Screening Limits, Residential Target Sub-Slab and Exterior Soil Gas Concentrations
  - 3. ND = Not detected

Legend

- Soil Vapor Sample Location
- Ambient Air Sample Location
- Scaffolding, No Access
- Project Site



Site

**Parkchester Crossing**  
**1590 White Plains Road**  
**Bronx, New York**  
**Block 3952, Lots 1, 7, 8, 17 & 23**



Tenen Environmental, LLC  
121 West 27th Street  
Suite 702  
New York, NY 10001  
O: (646) 606-2332  
F: (646) 606-2379

Drawn By

LM

Checked By

AP

Date

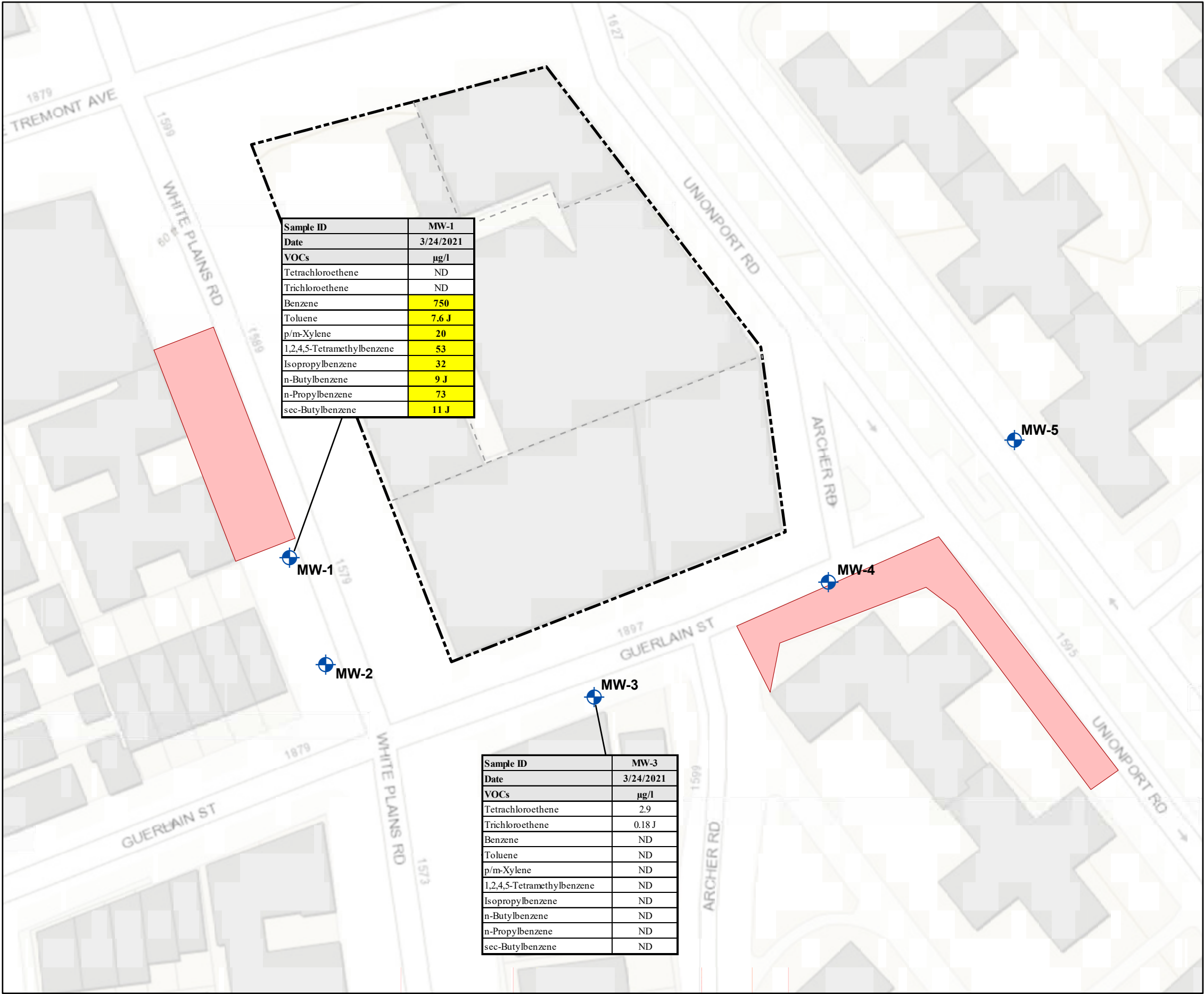
April 2021

Scale

As Noted

Drawing Title  
**Volatile Organic Compounds  
in Soil Vapor**

Drawing No  
**Figure 3**

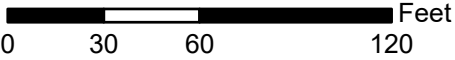


Analyte	NY-AWQS
VOCs	µg/l
Tetrachloroethene	5
Trichloroethene	5
Benzene	1
Toluene	5
p/m-Xylene	5
1,2,4,5-Tetramethylbenzene	5
Isopropylbenzene	5
n-Butylbenzene	5
n-Propylbenzene	5
sec-Butylbenzene	5

**Note:**  
Groundwater was not present in wells MW-2, MW-4 and MW-5

- Notes:**
- 1. Bold and shaded yellow value indicates concentration exceeds NY-AWQS
  - 2. NY-AWQS = NYSDEC Division of Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards (AWQS)
  - 3. J = Estimated value
  - 4. ND = Not detected
  - 5. Monitoring wells MW-2, MW-4, and MW-5 were dry and could not be sampled.

- Legend**
- Groundwater Sample Location
  - Scaffolding, No Access
  - Project Site



Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community  
NYC Department of City Planning, Information Technology Division

Site

TENEN ENVIRONMENTAL

Tenen Environmental, LLC  
121 West 27th Street  
Suite 702  
New York, NY 10001  
O: (646) 606-2332  
F: (646) 606-2379

Drawn By	LM
Checked By	AP
Date	April 2021
Scale	As Noted

Drawing Title  
**Volatile Organic Compounds  
in Groundwater**

Drawing No  
**Figure 4**

**Parkchester Crossing**  
**1590 White Plains Road**  
**Bronx, New York**  
**Block 3952, Lots 1, 7, 8, 17 & 23**

## Tables



Table 1. Volatile Organic Compounds in Soil Vapor  
Parkchester Crossing - Bronx, NY  
Groundwater and Soil Vapor Investigation Letter Report

LOCATION	EPA-VISL- RTSSGC	Units	SV-1	SV-2	SV-3	SV-4	SV-5	AA 3/24
SAMPLING DATE			3/24/2021	3/24/2021	3/24/2021	3/24/2021	3/24/2021	3/24/2021
LAB SAMPLE ID			L2114833-01	L2114833-02	L2114833-03	L2114833-04	L2114833-05	L2114833-06
			Qual	Qual	Qual	Qual	Qual	Qual
Volatile Organic Compounds								
Dichlorodifluoromethane	3480	ug/m <sup>3</sup>	2.25	2.1	1.95	2.05	ND	2.24
Chloromethane	3130	ug/m <sup>3</sup>	0.812	1.08	ND	0.801	ND	1.15
Freon-114	NS	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
Vinyl chloride	5.59	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
1,3-Butadiene	3.12	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
Bromomethane	174	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
Chloroethane	348000	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
Ethanol	NS	ug/m <sup>3</sup>	150	164	180	228	133	15.2
Vinyl bromide	6.24	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
Acetone	1070000	ug/m <sup>3</sup>	207	309	134	104	136	4.56
Trichlorofluoromethane	NS	ug/m <sup>3</sup>	1.17	ND	ND	ND	ND	ND
Isopropanol	6950	ug/m <sup>3</sup>	25.6	27.8	29	49.2	15.9	4.3
1,1-Dichloroethene	6950	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
Tertiary butyl Alcohol	NS	ug/m <sup>3</sup>	6.06	6.12	7.94	9.64	4.12	ND
Methylene chloride	3380	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
3-Chloropropene	15.6	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
Carbon disulfide	24300	ug/m <sup>3</sup>	2.37	ND	ND	ND	ND	ND
Freon-113	174000	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	NS	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	58.5	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
Methyl tert butyl ether	360	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
2-Butanone	174000	ug/m <sup>3</sup>	16.3	34.5	16.8	12.8	14.7	ND
cis-1,2-Dichloroethene	NS	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
Ethyl Acetate	2430	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
Chloroform	4.07	ug/m <sup>3</sup>	ND	ND	1.05	ND	10.7	ND
Tetrahydrofuran	69500	ug/m <sup>3</sup>	23.6	44.2	24.6	27.4	29.8	ND
1,2-Dichloroethane	3.6	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
n-Hexane	24300	ug/m <sup>3</sup>	1.74	1.18	0.796	0.712	134	ND
1,1,1-Trichloroethane	174000	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
Benzene	12	ug/m <sup>3</sup>	1.15	0.856	0.661	ND	3.8	ND
Carbon tetrachloride	15.6	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
Cyclohexane	209000	ug/m <sup>3</sup>	1.02	0.733	0.981	ND	83.6	ND
1,2-Dichloropropane	25.3	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
Bromodichloromethane	2.53	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
1,4-Dioxane	18.7	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
Trichloroethene	15.9	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
2,2,4-Trimethylpentane	NS	ug/m <sup>3</sup>	1.12	0.943	1.91	ND	105	ND
Heptane	NS	ug/m <sup>3</sup>	3	3.47	2.22	2.19	25.3	ND
cis-1,3-Dichloropropene	NS	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	104000	ug/m <sup>3</sup>	ND	2.09	ND	ND	ND	ND
trans-1,3-Dichloropropene	NS	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	5.85	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
Toluene	174000	ug/m <sup>3</sup>	5.35	7.05	6.48	6.59	6.14	1.21
2-Hexanone	1040	ug/m <sup>3</sup>	1.01	1.95	ND	ND	ND	ND
Dibromochloromethane	NS	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	0.156	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
Tetrachloroethene	360	ug/m <sup>3</sup>	5.07	5.53	12.4	8.48	5.59	ND
Chlorobenzene	1740	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
Ethylbenzene	37.4	ug/m <sup>3</sup>	2.24	3.73	2.35	2.3	3.74	ND

Table 1. Volatile Organic Compounds in Soil Vapor  
Parkchester Crossing - Bronx, NY  
Groundwater and Soil Vapor Investigation Letter Report

LOCATION	EPA-VISL-RTSSGC	Units	SV-1	SV-2	SV-3	SV-4	SV-5	AA 3/24
SAMPLING DATE			3/24/2021	3/24/2021	3/24/2021	3/24/2021	3/24/2021	3/24/2021
LAB SAMPLE ID			L2114833-01	L2114833-02	L2114833-03	L2114833-04	L2114833-05	L2114833-06
			Qual	Qual	Qual	Qual	Qual	Qual
<b>Volatile Organic Compounds</b>								
p/m-Xylene	3480	ug/m <sup>3</sup>	10.5	18	11.7	11.6	18.8	ND
Bromoform	85.1	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
Styrene	34800	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1.61	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
o-Xylene	3480	ug/m <sup>3</sup>	3.07	5.13	3.18	3.31	5.6	ND
4-Ethyltoluene	NS	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	2090	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	2090	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
Benzyl chloride	1.91	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	NS	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	8.51	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	6950	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	69.5	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	4.25	ug/m <sup>3</sup>	ND	ND	ND	ND	ND	ND

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds EPA-VISL-RTSSGC**

EPA-VISL-RTSSGC = EPA Vapor Intrusion Screening Levels, Residential Target Sub-Slab and Exterior Soil Gas Concentrations

ND = Not detected

NS = No standard

Table 2. Volatile Organic Compounds in Groundwater  
Parkchester Crossing - Bronx, NY  
Groundwater and Soil Vapor Investigation Letter Report

CLIENT SAMPLE ID	NY-AWQS	Units	MW-1	MW-3	TRIP BLANK
SAMPLING DATE			3/24/2021	3/24/2021	3/24/2021
LAB SAMPLE ID			L2114831-01	L2114831-02	L2114831-03
			Qual	Qual	Qual
Volatile Organic Compounds					
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	53	ND	ND
1,2,4-Trichlorobenzene	5	ug/l	ND	ND	ND
1,2,4-Trimethylbenzene	5	ug/l	ND	ND	ND
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	NS	ug/l	ND	ND	ND
1,2-Dichloropropane	1	ug/l	ND	ND	ND
1,3,5-Trimethylbenzene	5	ug/l	ND	ND	ND
1,3-Dichlorobenzene	3	ug/l	ND	ND	ND
1,3-Dichloropropane	5	ug/l	ND	ND	ND
1,3-Dichloropropene, Total	NS	ug/l	ND	ND	ND
1,4-Dichlorobenzene	3	ug/l	ND	ND	ND
1,4-Dioxane	NS	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	NS	ug/l	ND	ND	ND
Acetone	50	ug/l	53	8.8	2.5 J
Acrylonitrile	5	ug/l	ND	ND	ND
Benzene	1	ug/l	750	ND	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	NS	ug/l	ND	ND	ND

Table 2. Volatile Organic Compounds in Groundwater  
Parkchester Crossing - Bronx, NY  
Groundwater and Soil Vapor Investigation Letter Report

CLIENT SAMPLE ID	NY-AWQS	Units	MW-1	MW-3	TRIP BLANK
SAMPLING DATE			3/24/2021	3/24/2021	3/24/2021
LAB SAMPLE ID			L2114831-01	L2114831-02	L2114831-03
			Qual	Qual	Qual
Volatile Organic Compounds					
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	NS	ug/l	ND	ND	ND
Ethylbenzene	5	ug/l	5 J	ND	ND
Hexachlorobutadiene	0.5	ug/l	ND	ND	ND
Isopropylbenzene	5	ug/l	32	ND	ND
Methyl tert butyl ether	10	ug/l	ND	ND	ND
Methylene chloride	5	ug/l	ND	ND	ND
n-Butylbenzene	5	ug/l	9 J	ND	ND
n-Propylbenzene	5	ug/l	73	ND	ND
Naphthalene	10	ug/l	8.7 J	ND	ND
o-Chlorotoluene	5	ug/l	ND	ND	ND
o-Xylene	5	ug/l	ND	ND	ND
p-Chlorotoluene	5	ug/l	ND	ND	ND
p-Diethylbenzene	NS	ug/l	18	ND	ND
p-Ethyltoluene	NS	ug/l	5.7 J	ND	ND
p-Isopropyltoluene	5	ug/l	ND	ND	ND
p/m-Xylene	5	ug/l	20	ND	ND
sec-Butylbenzene	5	ug/l	11 J	ND	ND
Styrene	5	ug/l	ND	ND	ND
tert-Butylbenzene	5	ug/l	ND	ND	ND
Tetrachloroethene	5	ug/l	ND	2.9	ND
Toluene	5	ug/l	7.6 J	ND	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	0.18 J	ND
Trichlorofluoromethane	5	ug/l	ND	ND	ND
Vinyl acetate	NS	ug/l	ND	ND	ND
Vinyl chloride	2	ug/l	ND	ND	ND
Xylenes, Total	NS	ug/l	20	ND	ND

**Notes:**

**Bold and shaded yellow value indicates concentration exceeds NY-AWQS**

NY-AWQS = NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 Class GA Ambient Water Quality Standards

J = Estimated value

ND = Not detected

NS = No standard



Table 3  
CAMP Results  
Parkchester Crossing  
Site No. C203079A

Time	PID (ppm)	Particulates (ug/m3)
7:30	0.0	0.008
8:00	0.1	0.010
8:30	0.1	0.009
9:00	0.0	0.011
9:30	0.2	0.006
10:00	0.0	0.008
10:30	0.0	0.008
11:00	0.1	0.009
11:30	0.1	0.010
12:00	0.3	0.010
12:30	0.2	0.011
13:00	0.1	0.010

PID readings are total

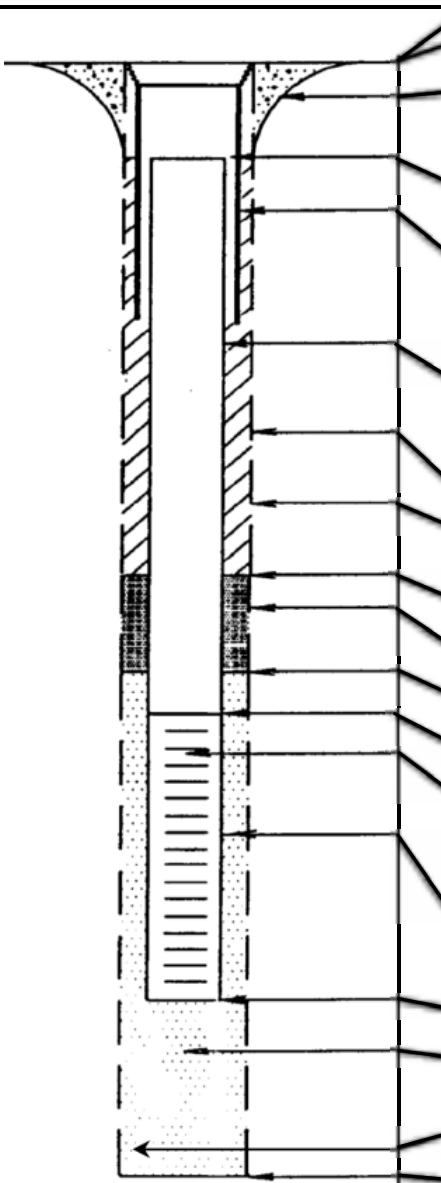
Particulate readings are 15-minute TWA

ppm - parts per million

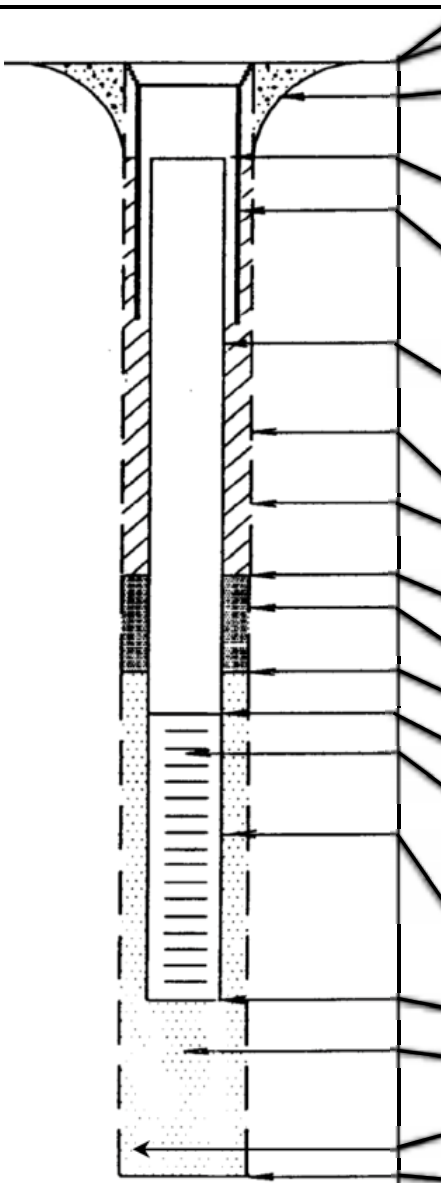
ug/m3 - micrograms per cubic meter

Attachment 1  
*Monitoring Well Construction Logs*

## MONITORING WELL CONSTRUCTION DIAGRAM

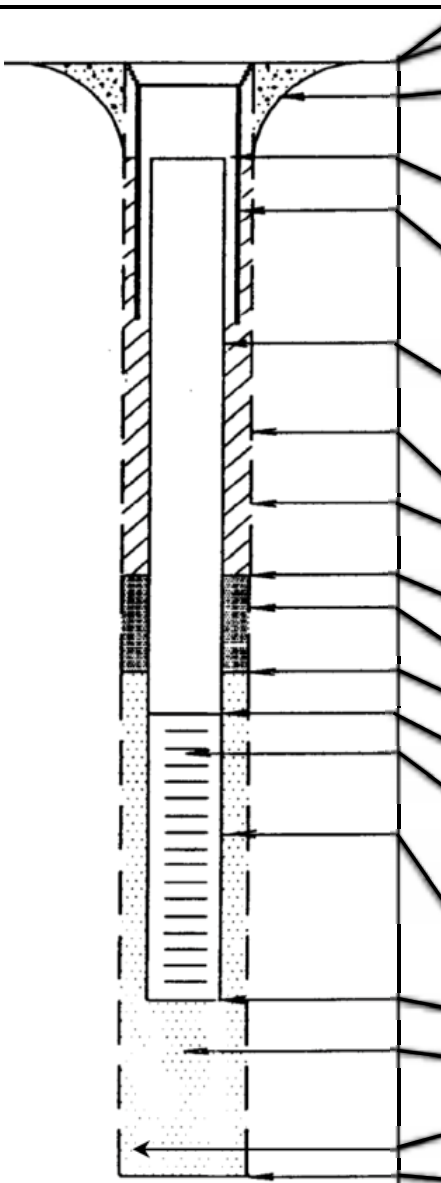
Monitoring Well Construction Diagram (Flush Mount)		
<b>Project:</b> Parkchester Crossing - Off-Site <b>Field Geologist:</b> Mark Accetturi <b>Driller:</b> AARCO <b>Drilling Method:</b> Geoprobe <b>Development Method:</b> Peristaltic Pump <b>Sump Installed? (Y/N)</b> N <b>Sump Length (Ft):</b> N/A	<b>Well Number: MW-1</b> <b>Date Started:</b> 3/15/2021 <b>Date Completed:</b> 3/15/2021 <b>Elevation Datum:</b> <b>Weather:</b> Sunny, 30s <b>Boring Number:</b> N/A	
	<div style="display: flex; justify-content: space-between;"> <div style="width: 80%;"> <p>Ground Surface</p> <p>Elevation of Top of Surface Casing</p> <p>Type of Surface Plug</p> <p>Depth of Surface Plug (ft-bgs)</p> <p>Diameter of Surface Plug (ft)</p> <p>Riser Pipe</p> <p>Depth of Top of Riser Pipe (ft-bg)</p> <p>Elevation of Top of Riser Pipe</p> <p>I.D. of Surface Casing (in)</p> <p>Type of Surface Casing</p> <p>Depth of Surface Casing (ft-bg)</p> <p>I.D. of Riser (in)</p> <p>Type of Riser</p> <p>Borehole Diameter (in)</p> <p>Type of Backfill</p> <p>Backfill - Tremied? (Y/N)</p> <p>Depth of Top of Seal (ft-bg)</p> <p>Elevation of Top of Seal</p> <p>Type of Seal</p> <p>Seal - Tremied? (Y/N)</p> <p>Depth of Top of Filter Pack (ft-bg)</p> <p>Depth of Top of Screen (ft-bg)</p> <p>Elevation of Top of Screen</p> <p>Type of Screen</p> <p>I.D. of Screen (in)</p> <p>Slot Size of Screen (in)</p> <p>Length of Screen (ft)</p> <p>Type of Filter Pack</p> <p>Filter Pack - Tremied? (Y/N)</p> <p>Depth of Bottom of Screen (ft-bg)</p> <p>Depth of Bottom of Filter Pack (ft-bg)</p> <p>Elevation of Bottom of Filter Pack</p> <p>Type of Backfill Below Filter Pack</p> <p>Depth of Bottom of Hole (ft-bg)</p> <p>Elevation of Bottom of Hole</p> </div> <div style="width: 15%; border-left: 1px solid black; padding-left: 5px;"> <p>Concrete</p> <p>N/A</p> <p>Concrete</p> <p>1</p> <p>N/A</p> <p>0.5</p> <p>N/A</p> <p>12</p> <p>Manhole cover</p> <p>1</p> <p>2</p> <p>Schedule 40 PVC</p> <p>4</p> <p>Clean Sand</p> <p>N</p> <p>8</p> <p>N/A</p> <p>Bentonite Pellets</p> <p>N</p> <p>10</p> <p>10</p> <p>N/A</p> <p>Schedule 40 PVC</p> <p>2</p> <p>0.02</p> <p>10</p> <p>Sand</p> <p>N</p> <p>20</p> <p>20</p> <p>N/A</p> <p>N/A (Bedrock)</p> <p>20</p> <p>N/A</p> </div> </div>	
<b>Comments:</b>		

## MONITORING WELL CONSTRUCTION DIAGRAM

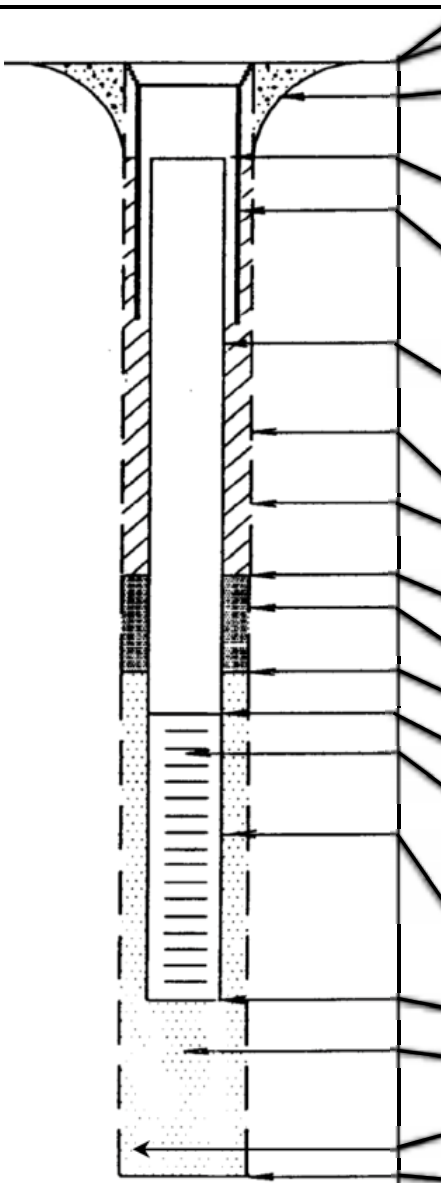
Monitoring Well Construction Diagram (Flush Mount)																																																																								
<b>Project:</b> Parkchester Crossing - Off-Site <b>Field Geologist:</b> Mark Accetturi <b>Driller:</b> AARCO <b>Drilling Method:</b> Geoprobe <b>Development Method:</b> Peristaltic Pump <b>Sump Installed? (Y/N)</b> N <b>Sump Length (Ft):</b> N/A	<b>Well Number: MW-2</b> <b>Date Started:</b> 3/15/2021 <b>Date Completed:</b> 3/15/2021 <b>Elevation Datum:</b> <b>Weather:</b> Sunny, 30s <b>Boring Number:</b> N/A																																																																							
<div style="display: flex; align-items: center;">  <table style="width: 60%; border-collapse: collapse;"> <tr><td style="border: none;">Ground Surface</td><td style="border: none;">Concrete</td></tr> <tr><td style="border: none;">Elevation of Top of Surface Casing</td><td style="border: none;">N/A</td></tr> <tr><td style="border: none;">Type of Surface Plug</td><td style="border: none;">Concrete</td></tr> <tr><td style="border: none;">Depth of Surface Plug (ft-bgs)</td><td style="border: none;">1</td></tr> <tr><td style="border: none;">Diameter of Surface Plug (ft)</td><td style="border: none;">N/A</td></tr> <tr><td style="border: none;">Riser Pipe</td><td style="border: none;"></td></tr> <tr><td style="border: none;">Depth of Top of Riser Pipe (ft-bg)</td><td style="border: none;">0.5</td></tr> <tr><td style="border: none;">Elevation of Top of Riser Pipe</td><td style="border: none;">N/A</td></tr> <tr><td style="border: none;">I.D. of Surface Casing (in)</td><td style="border: none;">12</td></tr> <tr><td style="border: none;">Type of Surface Casing</td><td style="border: none;">Manhole cover</td></tr> <tr><td style="border: none;">Depth of Surface Casing (ft-bg)</td><td style="border: none;">1</td></tr> <tr><td style="border: none;">I.D. of Riser (in)</td><td style="border: none;">2</td></tr> <tr><td style="border: none;">Type of Riser</td><td style="border: none;">Schedule 40 PVC</td></tr> <tr><td style="border: none;">Borehole Diameter (in)</td><td style="border: none;">4</td></tr> <tr><td style="border: none;">Type of Backfill</td><td style="border: none;">Clean Sand</td></tr> <tr><td style="border: none;">Backfill - Tremied? (Y/N)</td><td style="border: none;">N</td></tr> <tr><td style="border: none;">Depth of Top of Seal (ft-bg)</td><td style="border: none;">2.5</td></tr> <tr><td style="border: none;">Elevation of Top of Seal</td><td style="border: none;">N/A</td></tr> <tr><td style="border: none;">Type of Seal</td><td style="border: none;">Bentonite Pellets</td></tr> <tr><td style="border: none;">Seal - Tremied? (Y/N)</td><td style="border: none;">N</td></tr> <tr><td style="border: none;">Depth of Top of Filter Pack (ft-bg)</td><td style="border: none;">4.5</td></tr> <tr><td style="border: none;">Depth of Top of Screen (ft-bg)</td><td style="border: none;">4.5</td></tr> <tr><td style="border: none;">Elevation of Top of Screen</td><td style="border: none;">N/A</td></tr> <tr><td style="border: none;">Type of Screen</td><td style="border: none;">Schedule 40 PVC</td></tr> <tr><td style="border: none;">I.D. of Screen (in)</td><td style="border: none;">2</td></tr> <tr><td style="border: none;">Slot Size of Screen (in)</td><td style="border: none;">0.02</td></tr> <tr><td style="border: none;">Length of Screen (ft)</td><td style="border: none;">10</td></tr> <tr><td style="border: none;">Type of Filter Pack</td><td style="border: none;">Sand</td></tr> <tr><td style="border: none;">Filter Pack - Tremied? (Y/N)</td><td style="border: none;">N</td></tr> <tr><td style="border: none;">Depth of Bottom of Screen (ft-bg)</td><td style="border: none;">14.5</td></tr> <tr><td style="border: none;">Depth of Bottom of Filter Pack (ft-bg)</td><td style="border: none;">14.5</td></tr> <tr><td style="border: none;">Elevation of Bottom of Filter Pack</td><td style="border: none;">N/A</td></tr> <tr><td style="border: none;">Type of Backfill Below Filter Pack</td><td style="border: none;">N/A (Bedrock)</td></tr> <tr><td style="border: none;">Depth of Bottom of Hole (ft-bg)</td><td style="border: none;">14.5</td></tr> <tr><td style="border: none;">Elevation of Bottom of Hole</td><td style="border: none;">N/A</td></tr> </table> </div>			Ground Surface	Concrete	Elevation of Top of Surface Casing	N/A	Type of Surface Plug	Concrete	Depth of Surface Plug (ft-bgs)	1	Diameter of Surface Plug (ft)	N/A	Riser Pipe		Depth of Top of Riser Pipe (ft-bg)	0.5	Elevation of Top of Riser Pipe	N/A	I.D. of Surface Casing (in)	12	Type of Surface Casing	Manhole cover	Depth of Surface Casing (ft-bg)	1	I.D. of Riser (in)	2	Type of Riser	Schedule 40 PVC	Borehole Diameter (in)	4	Type of Backfill	Clean Sand	Backfill - Tremied? (Y/N)	N	Depth of Top of Seal (ft-bg)	2.5	Elevation of Top of Seal	N/A	Type of Seal	Bentonite Pellets	Seal - Tremied? (Y/N)	N	Depth of Top of Filter Pack (ft-bg)	4.5	Depth of Top of Screen (ft-bg)	4.5	Elevation of Top of Screen	N/A	Type of Screen	Schedule 40 PVC	I.D. of Screen (in)	2	Slot Size of Screen (in)	0.02	Length of Screen (ft)	10	Type of Filter Pack	Sand	Filter Pack - Tremied? (Y/N)	N	Depth of Bottom of Screen (ft-bg)	14.5	Depth of Bottom of Filter Pack (ft-bg)	14.5	Elevation of Bottom of Filter Pack	N/A	Type of Backfill Below Filter Pack	N/A (Bedrock)	Depth of Bottom of Hole (ft-bg)	14.5	Elevation of Bottom of Hole	N/A
Ground Surface	Concrete																																																																							
Elevation of Top of Surface Casing	N/A																																																																							
Type of Surface Plug	Concrete																																																																							
Depth of Surface Plug (ft-bgs)	1																																																																							
Diameter of Surface Plug (ft)	N/A																																																																							
Riser Pipe																																																																								
Depth of Top of Riser Pipe (ft-bg)	0.5																																																																							
Elevation of Top of Riser Pipe	N/A																																																																							
I.D. of Surface Casing (in)	12																																																																							
Type of Surface Casing	Manhole cover																																																																							
Depth of Surface Casing (ft-bg)	1																																																																							
I.D. of Riser (in)	2																																																																							
Type of Riser	Schedule 40 PVC																																																																							
Borehole Diameter (in)	4																																																																							
Type of Backfill	Clean Sand																																																																							
Backfill - Tremied? (Y/N)	N																																																																							
Depth of Top of Seal (ft-bg)	2.5																																																																							
Elevation of Top of Seal	N/A																																																																							
Type of Seal	Bentonite Pellets																																																																							
Seal - Tremied? (Y/N)	N																																																																							
Depth of Top of Filter Pack (ft-bg)	4.5																																																																							
Depth of Top of Screen (ft-bg)	4.5																																																																							
Elevation of Top of Screen	N/A																																																																							
Type of Screen	Schedule 40 PVC																																																																							
I.D. of Screen (in)	2																																																																							
Slot Size of Screen (in)	0.02																																																																							
Length of Screen (ft)	10																																																																							
Type of Filter Pack	Sand																																																																							
Filter Pack - Tremied? (Y/N)	N																																																																							
Depth of Bottom of Screen (ft-bg)	14.5																																																																							
Depth of Bottom of Filter Pack (ft-bg)	14.5																																																																							
Elevation of Bottom of Filter Pack	N/A																																																																							
Type of Backfill Below Filter Pack	N/A (Bedrock)																																																																							
Depth of Bottom of Hole (ft-bg)	14.5																																																																							
Elevation of Bottom of Hole	N/A																																																																							
<b>Comments:</b>																																																																								



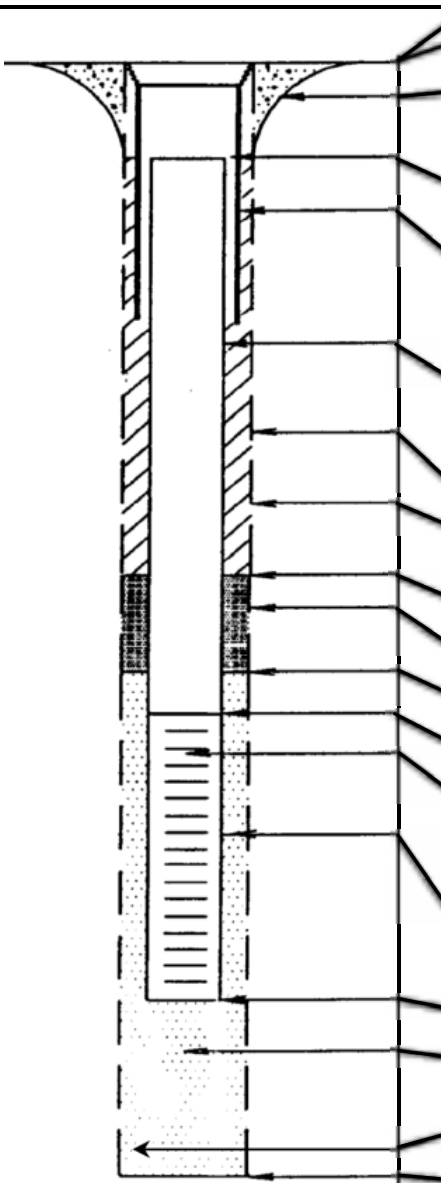
## MONITORING WELL CONSTRUCTION DIAGRAM

Monitoring Well Construction Diagram (Flush Mount)		
<b>Project:</b> Parkchester Crossing - Off-Site <b>Field Geologist:</b> Mark Accetturi <b>Driller:</b> AARCO <b>Drilling Method:</b> Geoprobe <b>Development Method:</b> Peristaltic Pump <b>Sump Installed? (Y/N)</b> N <b>Sump Length (Ft):</b> N/A	<b>Well Number: MW-3</b> <b>Date Started:</b> 3/15/2021 <b>Date Completed:</b> 3/15/2021 <b>Elevation Datum:</b> <b>Weather:</b> Sunny, 30s <b>Boring Number:</b> N/A	
	Ground Surface Elevation of Top of Surface Casing Type of Surface Plug Depth of Surface Plug (ft-bgs) Diameter of Surface Plug (ft) Riser Pipe Depth of Top of Riser Pipe (ft-bg) Elevation of Top of Riser Pipe I.D. of Surface Casing (in) Type of Surface Casing Depth of Surface Casing (ft-bg) I.D. of Riser (in) Type of Riser Borehole Diameter (in) Type of Backfill Backfill - Tremied? (Y/N) Depth of Top of Seal (ft-bg) Elevation of Top of Seal Type of Seal Seal - Tremied? (Y/N) Depth of Top of Filter Pack (ft-bg) Depth of Top of Screen (ft-bg) Elevation of Top of Screen Type of Screen I.D. of Screen (in) Slot Size of Screen (in) Length of Screen (ft) Type of Filter Pack Filter Pack - Tremied? (Y/N) Depth of Bottom of Screen (ft-bg) Depth of Bottom of Filter Pack (ft-bg) Elevation of Bottom of Filter Pack Type of Backfill Below Filter Pack Depth of Bottom of Hole (ft-bg) Elevation of Bottom of Hole	Concrete N/A Concrete 1 N/A 0.5 N/A 12 Manhole cover 1 2 Schedule 40 PVC 4 Clean Sand N 1 N/A Bentonite Pellets N 2.5 2.5 N/A Schedule 40 PVC 2 0.02 10 Sand N 12.5 12.5 N/A N/A (Bedrock) 12.5 N/A
<b>Comments:</b>		

## MONITORING WELL CONSTRUCTION DIAGRAM

Monitoring Well Construction Diagram (Flush Mount)																																																																								
<b>Project:</b> Parkchester Crossing - Off-Site <b>Field Geologist:</b> Mark Accetturi <b>Driller:</b> AARCO <b>Drilling Method:</b> Geoprobe <b>Development Method:</b> Peristaltic Pump <b>Sump Installed? (Y/N)</b> N <b>Sump Length (Ft):</b> N/A	<b>Well Number: MW-4</b> <b>Date Started:</b> 3/15/2021 <b>Date Completed:</b> 3/15/2021 <b>Elevation Datum:</b> <b>Weather:</b> Sunny, 30s <b>Boring Number:</b> N/A																																																																							
<div style="display: flex; align-items: center;">  <table style="width: 60%; border-collapse: collapse;"> <tr><td style="border: none;">Ground Surface</td><td style="border: none;">Concrete</td></tr> <tr><td style="border: none;">Elevation of Top of Surface Casing</td><td style="border: none;">N/A</td></tr> <tr><td style="border: none;">Type of Surface Plug</td><td style="border: none;">Concrete</td></tr> <tr><td style="border: none;">Depth of Surface Plug (ft-bgs)</td><td style="border: none;">1</td></tr> <tr><td style="border: none;">Diameter of Surface Plug (ft)</td><td style="border: none;">N/A</td></tr> <tr><td style="border: none;">Riser Pipe</td><td style="border: none;"></td></tr> <tr><td style="border: none;">Depth of Top of Riser Pipe (ft-bg)</td><td style="border: none;">0.5</td></tr> <tr><td style="border: none;">Elevation of Top of Riser Pipe</td><td style="border: none;">N/A</td></tr> <tr><td style="border: none;">I.D. of Surface Casing (in)</td><td style="border: none;">12</td></tr> <tr><td style="border: none;">Type of Surface Casing</td><td style="border: none;">Manhole cover</td></tr> <tr><td style="border: none;">Depth of Surface Casing (ft-bg)</td><td style="border: none;">1</td></tr> <tr><td style="border: none;">I.D. of Riser (in)</td><td style="border: none;">2</td></tr> <tr><td style="border: none;">Type of Riser</td><td style="border: none;">Schedule 40 PVC</td></tr> <tr><td style="border: none;">Borehole Diameter (in)</td><td style="border: none;">4</td></tr> <tr><td style="border: none;">Type of Backfill</td><td style="border: none;">Clean Sand</td></tr> <tr><td style="border: none;">Backfill - Tremied? (Y/N)</td><td style="border: none;">N</td></tr> <tr><td style="border: none;">Depth of Top of Seal (ft-bg)</td><td style="border: none;">3</td></tr> <tr><td style="border: none;">Elevation of Top of Seal</td><td style="border: none;">N/A</td></tr> <tr><td style="border: none;">Type of Seal</td><td style="border: none;">Bentonite Pellets</td></tr> <tr><td style="border: none;">Seal - Tremied? (Y/N)</td><td style="border: none;">N</td></tr> <tr><td style="border: none;">Depth of Top of Filter Pack (ft-bg)</td><td style="border: none;">5</td></tr> <tr><td style="border: none;">Depth of Top of Screen (ft-bg)</td><td style="border: none;">5</td></tr> <tr><td style="border: none;">Elevation of Top of Screen</td><td style="border: none;">N/A</td></tr> <tr><td style="border: none;">Type of Screen</td><td style="border: none;">Schedule 40 PVC</td></tr> <tr><td style="border: none;">I.D. of Screen (in)</td><td style="border: none;">2</td></tr> <tr><td style="border: none;">Slot Size of Screen (in)</td><td style="border: none;">0.02</td></tr> <tr><td style="border: none;">Length of Screen (ft)</td><td style="border: none;">5</td></tr> <tr><td style="border: none;">Type of Filter Pack</td><td style="border: none;">Sand</td></tr> <tr><td style="border: none;">Filter Pack - Tremied? (Y/N)</td><td style="border: none;">N</td></tr> <tr><td style="border: none;">Depth of Bottom of Screen (ft-bg)</td><td style="border: none;">10</td></tr> <tr><td style="border: none;">Depth of Bottom of Filter Pack (ft-bg)</td><td style="border: none;">10</td></tr> <tr><td style="border: none;">Elevation of Bottom of Filter Pack</td><td style="border: none;">N/A</td></tr> <tr><td style="border: none;">Type of Backfill Below Filter Pack</td><td style="border: none;">N/A (Bedrock)</td></tr> <tr><td style="border: none;">Depth of Bottom of Hole (ft-bg)</td><td style="border: none;">10</td></tr> <tr><td style="border: none;">Elevation of Bottom of Hole</td><td style="border: none;">N/A</td></tr> </table> </div>			Ground Surface	Concrete	Elevation of Top of Surface Casing	N/A	Type of Surface Plug	Concrete	Depth of Surface Plug (ft-bgs)	1	Diameter of Surface Plug (ft)	N/A	Riser Pipe		Depth of Top of Riser Pipe (ft-bg)	0.5	Elevation of Top of Riser Pipe	N/A	I.D. of Surface Casing (in)	12	Type of Surface Casing	Manhole cover	Depth of Surface Casing (ft-bg)	1	I.D. of Riser (in)	2	Type of Riser	Schedule 40 PVC	Borehole Diameter (in)	4	Type of Backfill	Clean Sand	Backfill - Tremied? (Y/N)	N	Depth of Top of Seal (ft-bg)	3	Elevation of Top of Seal	N/A	Type of Seal	Bentonite Pellets	Seal - Tremied? (Y/N)	N	Depth of Top of Filter Pack (ft-bg)	5	Depth of Top of Screen (ft-bg)	5	Elevation of Top of Screen	N/A	Type of Screen	Schedule 40 PVC	I.D. of Screen (in)	2	Slot Size of Screen (in)	0.02	Length of Screen (ft)	5	Type of Filter Pack	Sand	Filter Pack - Tremied? (Y/N)	N	Depth of Bottom of Screen (ft-bg)	10	Depth of Bottom of Filter Pack (ft-bg)	10	Elevation of Bottom of Filter Pack	N/A	Type of Backfill Below Filter Pack	N/A (Bedrock)	Depth of Bottom of Hole (ft-bg)	10	Elevation of Bottom of Hole	N/A
Ground Surface	Concrete																																																																							
Elevation of Top of Surface Casing	N/A																																																																							
Type of Surface Plug	Concrete																																																																							
Depth of Surface Plug (ft-bgs)	1																																																																							
Diameter of Surface Plug (ft)	N/A																																																																							
Riser Pipe																																																																								
Depth of Top of Riser Pipe (ft-bg)	0.5																																																																							
Elevation of Top of Riser Pipe	N/A																																																																							
I.D. of Surface Casing (in)	12																																																																							
Type of Surface Casing	Manhole cover																																																																							
Depth of Surface Casing (ft-bg)	1																																																																							
I.D. of Riser (in)	2																																																																							
Type of Riser	Schedule 40 PVC																																																																							
Borehole Diameter (in)	4																																																																							
Type of Backfill	Clean Sand																																																																							
Backfill - Tremied? (Y/N)	N																																																																							
Depth of Top of Seal (ft-bg)	3																																																																							
Elevation of Top of Seal	N/A																																																																							
Type of Seal	Bentonite Pellets																																																																							
Seal - Tremied? (Y/N)	N																																																																							
Depth of Top of Filter Pack (ft-bg)	5																																																																							
Depth of Top of Screen (ft-bg)	5																																																																							
Elevation of Top of Screen	N/A																																																																							
Type of Screen	Schedule 40 PVC																																																																							
I.D. of Screen (in)	2																																																																							
Slot Size of Screen (in)	0.02																																																																							
Length of Screen (ft)	5																																																																							
Type of Filter Pack	Sand																																																																							
Filter Pack - Tremied? (Y/N)	N																																																																							
Depth of Bottom of Screen (ft-bg)	10																																																																							
Depth of Bottom of Filter Pack (ft-bg)	10																																																																							
Elevation of Bottom of Filter Pack	N/A																																																																							
Type of Backfill Below Filter Pack	N/A (Bedrock)																																																																							
Depth of Bottom of Hole (ft-bg)	10																																																																							
Elevation of Bottom of Hole	N/A																																																																							
<b>Comments:</b>																																																																								

## MONITORING WELL CONSTRUCTION DIAGRAM

Monitoring Well Construction Diagram (Flush Mount)																																																																								
<b>Project:</b> Parkchester Crossing - Off-Site <b>Field Geologist:</b> Mark Accetturi <b>Driller:</b> AARCO <b>Drilling Method:</b> Geoprobe <b>Development Method:</b> Peristaltic Pump <b>Sump Installed? (Y/N)</b> N <b>Sump Length (Ft):</b> N/A	<b>Well Number: MW-5</b> <b>Date Started:</b> 3/15/2021 <b>Date Completed:</b> 3/15/2021 <b>Elevation Datum:</b> <b>Weather:</b> Sunny, 30s <b>Boring Number:</b> N/A																																																																							
<div style="display: flex; align-items: center;">  <table style="width: 60%; border-collapse: collapse;"> <tr><td style="border: none;">Ground Surface</td><td style="border: none;">Concrete</td></tr> <tr><td style="border: none;">Elevation of Top of Surface Casing</td><td style="border: none;">N/A</td></tr> <tr><td style="border: none;">Type of Surface Plug</td><td style="border: none;">Concrete</td></tr> <tr><td style="border: none;">Depth of Surface Plug (ft-bgs)</td><td style="border: none;">0.5</td></tr> <tr><td style="border: none;">Diameter of Surface Plug (ft)</td><td style="border: none;">N/A</td></tr> <tr><td style="border: none;">Riser Pipe</td><td style="border: none;"></td></tr> <tr><td style="border: none;">Depth of Top of Riser Pipe (ft-bg)</td><td style="border: none;">0.5</td></tr> <tr><td style="border: none;">Elevation of Top of Riser Pipe</td><td style="border: none;">N/A</td></tr> <tr><td style="border: none;">I.D. of Surface Casing (in)</td><td style="border: none;">12</td></tr> <tr><td style="border: none;">Type of Surface Casing</td><td style="border: none;">Manhole cover</td></tr> <tr><td style="border: none;">Depth of Surface Casing (ft-bg)</td><td style="border: none;">1</td></tr> <tr><td style="border: none;">I.D. of Riser (in)</td><td style="border: none;">2</td></tr> <tr><td style="border: none;">Type of Riser</td><td style="border: none;">Schedule 40 PVC</td></tr> <tr><td style="border: none;">Borehole Diameter (in)</td><td style="border: none;">4</td></tr> <tr><td style="border: none;">Type of Backfill</td><td style="border: none;">Clean Sand</td></tr> <tr><td style="border: none;">Backfill - Tremied? (Y/N)</td><td style="border: none;">N</td></tr> <tr><td style="border: none;">Depth of Top of Seal (ft-bg)</td><td style="border: none;">0.5</td></tr> <tr><td style="border: none;">Elevation of Top of Seal</td><td style="border: none;">N/A</td></tr> <tr><td style="border: none;">Type of Seal</td><td style="border: none;">Bentonite Pellets</td></tr> <tr><td style="border: none;">Seal - Tremied? (Y/N)</td><td style="border: none;">N</td></tr> <tr><td style="border: none;">Depth of Top of Filter Pack (ft-bg)</td><td style="border: none;">1</td></tr> <tr><td style="border: none;">Depth of Top of Screen (ft-bg)</td><td style="border: none;">1</td></tr> <tr><td style="border: none;">Elevation of Top of Screen</td><td style="border: none;">N/A</td></tr> <tr><td style="border: none;">Type of Screen</td><td style="border: none;">Schedule 40 PVC</td></tr> <tr><td style="border: none;">I.D. of Screen (in)</td><td style="border: none;">2</td></tr> <tr><td style="border: none;">Slot Size of Screen (in)</td><td style="border: none;">0.02</td></tr> <tr><td style="border: none;">Length of Screen (ft)</td><td style="border: none;">5</td></tr> <tr><td style="border: none;">Type of Filter Pack</td><td style="border: none;">Sand</td></tr> <tr><td style="border: none;">Filter Pack - Tremied? (Y/N)</td><td style="border: none;">N</td></tr> <tr><td style="border: none;">Depth of Bottom of Screen (ft-bg)</td><td style="border: none;">6</td></tr> <tr><td style="border: none;">Depth of Bottom of Filter Pack (ft-bg)</td><td style="border: none;">6</td></tr> <tr><td style="border: none;">Elevation of Bottom of Filter Pack</td><td style="border: none;">N/A</td></tr> <tr><td style="border: none;">Type of Backfill Below Filter Pack</td><td style="border: none;">N/A (Bedrock)</td></tr> <tr><td style="border: none;">Depth of Bottom of Hole (ft-bg)</td><td style="border: none;">6</td></tr> <tr><td style="border: none;">Elevation of Bottom of Hole</td><td style="border: none;">N/A</td></tr> </table> </div>			Ground Surface	Concrete	Elevation of Top of Surface Casing	N/A	Type of Surface Plug	Concrete	Depth of Surface Plug (ft-bgs)	0.5	Diameter of Surface Plug (ft)	N/A	Riser Pipe		Depth of Top of Riser Pipe (ft-bg)	0.5	Elevation of Top of Riser Pipe	N/A	I.D. of Surface Casing (in)	12	Type of Surface Casing	Manhole cover	Depth of Surface Casing (ft-bg)	1	I.D. of Riser (in)	2	Type of Riser	Schedule 40 PVC	Borehole Diameter (in)	4	Type of Backfill	Clean Sand	Backfill - Tremied? (Y/N)	N	Depth of Top of Seal (ft-bg)	0.5	Elevation of Top of Seal	N/A	Type of Seal	Bentonite Pellets	Seal - Tremied? (Y/N)	N	Depth of Top of Filter Pack (ft-bg)	1	Depth of Top of Screen (ft-bg)	1	Elevation of Top of Screen	N/A	Type of Screen	Schedule 40 PVC	I.D. of Screen (in)	2	Slot Size of Screen (in)	0.02	Length of Screen (ft)	5	Type of Filter Pack	Sand	Filter Pack - Tremied? (Y/N)	N	Depth of Bottom of Screen (ft-bg)	6	Depth of Bottom of Filter Pack (ft-bg)	6	Elevation of Bottom of Filter Pack	N/A	Type of Backfill Below Filter Pack	N/A (Bedrock)	Depth of Bottom of Hole (ft-bg)	6	Elevation of Bottom of Hole	N/A
Ground Surface	Concrete																																																																							
Elevation of Top of Surface Casing	N/A																																																																							
Type of Surface Plug	Concrete																																																																							
Depth of Surface Plug (ft-bgs)	0.5																																																																							
Diameter of Surface Plug (ft)	N/A																																																																							
Riser Pipe																																																																								
Depth of Top of Riser Pipe (ft-bg)	0.5																																																																							
Elevation of Top of Riser Pipe	N/A																																																																							
I.D. of Surface Casing (in)	12																																																																							
Type of Surface Casing	Manhole cover																																																																							
Depth of Surface Casing (ft-bg)	1																																																																							
I.D. of Riser (in)	2																																																																							
Type of Riser	Schedule 40 PVC																																																																							
Borehole Diameter (in)	4																																																																							
Type of Backfill	Clean Sand																																																																							
Backfill - Tremied? (Y/N)	N																																																																							
Depth of Top of Seal (ft-bg)	0.5																																																																							
Elevation of Top of Seal	N/A																																																																							
Type of Seal	Bentonite Pellets																																																																							
Seal - Tremied? (Y/N)	N																																																																							
Depth of Top of Filter Pack (ft-bg)	1																																																																							
Depth of Top of Screen (ft-bg)	1																																																																							
Elevation of Top of Screen	N/A																																																																							
Type of Screen	Schedule 40 PVC																																																																							
I.D. of Screen (in)	2																																																																							
Slot Size of Screen (in)	0.02																																																																							
Length of Screen (ft)	5																																																																							
Type of Filter Pack	Sand																																																																							
Filter Pack - Tremied? (Y/N)	N																																																																							
Depth of Bottom of Screen (ft-bg)	6																																																																							
Depth of Bottom of Filter Pack (ft-bg)	6																																																																							
Elevation of Bottom of Filter Pack	N/A																																																																							
Type of Backfill Below Filter Pack	N/A (Bedrock)																																																																							
Depth of Bottom of Hole (ft-bg)	6																																																																							
Elevation of Bottom of Hole	N/A																																																																							
<b>Comments:</b>																																																																								

## Attachment 2

### *Soil Vapor Logs*



<b>TEN ENVIRONMENTAL</b>								
<b>Site:</b>	<b>Parkchester Crossing - Off-Site</b>							
<b>Weather:</b>	<b>40°F, Overcast</b>							
<b>Date:</b>	<b>3/24/2021</b>							
<b>Observers:</b>	<b>K. Malnati &amp; M. Accetturi</b>							
<b>Sample ID</b>	<b>He (ppm)</b>	<b>PID (ppm)</b>	<b>Can ID</b>	<b>Flow ID</b>	<b>Initial Time</b>	<b>Final Time</b>	<b>Initial Pressure (in-Hg)</b>	<b>Final Pressure (in-Hg)</b>
<b>SV-1</b>	0	0	3206	01785	8:45	11:09	-79.50	N/A
<b>SV-2</b>	0	0	2386	01166	8:45	11:08	-30.65	-2.88
<b>SV-3</b>	0	0	202	02095	7:56	11:00	-30.70	-0.09
<b>SV-4</b>	0	0	3213	01526	8:08	10:57	-30.51	-0.36
<b>SV-5</b>	0	0	2185	1806	8:49	11:15	-70.76	N/A
<b>AA 3/24</b>	N/A	N/A	590	01449	7:32	16:46	-32.03	-8.45
<b>Note: SV-1 &amp; SV-5 flow controllers had error messages &amp; could not give a final vacuum</b> ppm: parts per million                      in-Hg: inches mercury								

## Attachment 3

### *Laboratory Deliverables*



## ANALYTICAL REPORT

Lab Number:	L2114833
Client:	Tenen Environmental, LLC 121 West 27th Street Suite 702 New York City, NY 10001
ATTN:	Matthew Carroll
Phone:	(646) 606-2332
Project Name:	PARK CHESTER CROSSING
Project Number:	PARK CHESTER CROSSIN
Report Date:	03/31/21

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:** PARK CHESTER CROSSING  
**Project Number:** PARK CHESTER CROSSIN

**Lab Number:** L2114833  
**Report Date:** 03/31/21

<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>
L2114833-01	SV1	SOIL_VAPOR	1585 WHITE PLAINS RD.	03/24/21 11:09	03/24/21
L2114833-02	SV2	SOIL_VAPOR	1585 WHITE PLAINS RD.	03/24/21 11:08	03/24/21
L2114833-03	SV3	SOIL_VAPOR	1585 WHITE PLAINS RD.	03/24/21 11:00	03/24/21
L2114833-04	SV4	SOIL_VAPOR	1585 WHITE PLAINS RD.	03/24/21 10:57	03/24/21
L2114833-05	SV5	SOIL_VAPOR	1585 WHITE PLAINS RD.	03/24/21 11:15	03/24/21
L2114833-06	AA 3/24	AIR	1585 WHITE PLAINS RD.	03/24/21 16:46	03/24/21

**Project Name:** PARK CHESTER CROSSING  
**Project Number:** PARK CHESTER CROSSIN

**Lab Number:** L2114833  
**Report Date:** 03/31/21

### Case Narrative

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

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

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

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

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

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

---

**Project Name:** PARK CHESTER CROSSING**Lab Number:** L2114833**Project Number:** PARK CHESTER CROSSIN**Report Date:** 03/31/21**Case Narrative (continued)**

Volatile Organics in Air

Canisters were released from the laboratory on March 24, 2021. 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: 03/31/21

**AIR**



**Project Name:** PARK CHESTER CROSSING**Lab Number:** L2114833**Project Number:** PARK CHESTER CROSSIN**Report Date:** 03/31/21**SAMPLE RESULTS**

Lab ID: L2114833-01

Client ID: SV1

Sample Location: 1585 WHITE PLAINS RD.

Date Collected: 03/24/21 11:09

Date Received: 03/24/21

Field Prep: Not Specified

Sample Depth:

Matrix: Soil\_Vapor

Analytical Method: 48,TO-15

Analytical Date: 03/30/21 20:24

Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.456	0.200	--	2.25	0.989	--		1
Chloromethane	0.393	0.200	--	0.812	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	79.5	5.00	--	150	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	87.2	1.00	--	207	2.38	--		1
Trichlorofluoromethane	0.208	0.200	--	1.17	1.12	--		1
Isopropanol	10.4	0.500	--	25.6	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	2.00	0.500	--	6.06	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	0.760	0.200	--	2.37	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	5.53	0.500	--	16.3	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



**Project Name:** PARK CHESTER CROSSING**Lab Number:** L2114833**Project Number:** PARK CHESTER CROSSIN**Report Date:** 03/31/21**SAMPLE RESULTS**

Lab ID: L2114833-01

Client ID: SV1

Sample Location: 1585 WHITE PLAINS RD.

Date Collected: 03/24/21 11:09

Date Received: 03/24/21

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	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	8.01	0.500	--	23.6	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.495	0.200	--	1.74	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.361	0.200	--	1.15	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	0.297	0.200	--	1.02	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	0.239	0.200	--	1.12	0.934	--		1
Heptane	0.733	0.200	--	3.00	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	1.42	0.200	--	5.35	0.754	--		1
2-Hexanone	0.246	0.200	--	1.01	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	0.747	0.200	--	5.07	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.515	0.200	--	2.24	0.869	--		1



**Project Name:** PARK CHESTER CROSSING**Lab Number:** L2114833**Project Number:** PARK CHESTER CROSSIN**Report Date:** 03/31/21**SAMPLE RESULTS**

Lab ID: L2114833-01

Client ID: SV1

Sample Location: 1585 WHITE PLAINS RD.

Date Collected: 03/24/21 11:09

Date Received: 03/24/21

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								
p/m-Xylene	2.42	0.400	--	10.5	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	0.706	0.200	--	3.07	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	91		60-140
chlorobenzene-d5	95		60-140



**Project Name:** PARK CHESTER CROSSING**Lab Number:** L2114833**Project Number:** PARK CHESTER CROSSIN**Report Date:** 03/31/21**SAMPLE RESULTS**

Lab ID: L2114833-02

Client ID: SV2

Sample Location: 1585 WHITE PLAINS RD.

Date Collected: 03/24/21 11:08

Date Received: 03/24/21

Field Prep: Not Specified

Sample Depth:

Matrix: Soil\_Vapor

Analytical Method: 48,TO-15

Analytical Date: 03/30/21 21:41

Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.424	0.200	--	2.10	0.989	--		1
Chloromethane	0.521	0.200	--	1.08	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	86.8	5.00	--	164	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	130	1.00	--	309	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	11.3	0.500	--	27.8	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	2.02	0.500	--	6.12	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	11.7	0.500	--	34.5	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



**Project Name:** PARK CHESTER CROSSING**Lab Number:** L2114833**Project Number:** PARK CHESTER CROSSIN**Report Date:** 03/31/21**SAMPLE RESULTS**

Lab ID: L2114833-02

Client ID: SV2

Sample Location: 1585 WHITE PLAINS RD.

Date Collected: 03/24/21 11:08

Date Received: 03/24/21

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	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	15.0	0.500	--	44.2	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.335	0.200	--	1.18	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.268	0.200	--	0.856	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	0.213	0.200	--	0.733	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	0.202	0.200	--	0.943	0.934	--		1
Heptane	0.847	0.200	--	3.47	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	0.511	0.500	--	2.09	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	1.87	0.200	--	7.05	0.754	--		1
2-Hexanone	0.477	0.200	--	1.95	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	0.815	0.200	--	5.53	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.858	0.200	--	3.73	0.869	--		1



**Project Name:** PARK CHESTER CROSSING**Lab Number:** L2114833**Project Number:** PARK CHESTER CROSSIN**Report Date:** 03/31/21**SAMPLE RESULTS**

Lab ID: L2114833-02

Client ID: SV2

Sample Location: 1585 WHITE PLAINS RD.

Date Collected: 03/24/21 11:08

Date Received: 03/24/21

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								
p/m-Xylene	4.15	0.400	--	18.0	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	1.18	0.200	--	5.13	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

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



**Project Name:** PARK CHESTER CROSSING**Lab Number:** L2114833**Project Number:** PARK CHESTER CROSSIN**Report Date:** 03/31/21**SAMPLE RESULTS**

Lab ID: L2114833-03

Client ID: SV3

Sample Location: 1585 WHITE PLAINS RD.

Date Collected: 03/24/21 11:00

Date Received: 03/24/21

Field Prep: Not Specified

Sample Depth:

Matrix: Soil\_Vapor

Analytical Method: 48,TO-15

Analytical Date: 03/30/21 22:20

Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.394	0.200	--	1.95	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	95.5	5.00	--	180	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	56.3	1.00	--	134	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	11.8	0.500	--	29.0	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	2.62	0.500	--	7.94	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	5.71	0.500	--	16.8	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1





**Project Name:** PARK CHESTER CROSSING**Lab Number:** L2114833**Project Number:** PARK CHESTER CROSSIN**Report Date:** 03/31/21**SAMPLE RESULTS**

Lab ID: L2114833-03

Date Collected: 03/24/21 11:00

Client ID: SV3

Date Received: 03/24/21

Sample Location: 1585 WHITE PLAINS RD.

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	0.500	--	ND	1.80	--		1
Chloroform	0.215	0.200	--	1.05	0.977	--		1
Tetrahydrofuran	8.35	0.500	--	24.6	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.226	0.200	--	0.796	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.207	0.200	--	0.661	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		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
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	0.408	0.200	--	1.91	0.934	--		1
Heptane	0.541	0.200	--	2.22	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	1.72	0.200	--	6.48	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	1.83	0.200	--	12.4	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.541	0.200	--	2.35	0.869	--		1



**Project Name:** PARK CHESTER CROSSING**Lab Number:** L2114833**Project Number:** PARK CHESTER CROSSIN**Report Date:** 03/31/21**SAMPLE RESULTS**

Lab ID: L2114833-03

Date Collected: 03/24/21 11:00

Client ID: SV3

Date Received: 03/24/21

Sample Location: 1585 WHITE PLAINS RD.

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								
p/m-Xylene	2.69	0.400	--	11.7	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	0.732	0.200	--	3.18	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

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



**Project Name:** PARK CHESTER CROSSING**Lab Number:** L2114833**Project Number:** PARK CHESTER CROSSIN**Report Date:** 03/31/21**SAMPLE RESULTS**

Lab ID: L2114833-04

Client ID: SV4

Sample Location: 1585 WHITE PLAINS RD.

Date Collected: 03/24/21 10:57

Date Received: 03/24/21

Field Prep: Not Specified

Sample Depth:

Matrix: Soil\_Vapor

Analytical Method: 48,TO-15

Analytical Date: 03/30/21 22:59

Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.414	0.200	--	2.05	0.989	--		1
Chloromethane	0.388	0.200	--	0.801	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	121	5.00	--	228	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	43.7	1.00	--	104	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	20.0	0.500	--	49.2	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	3.18	0.500	--	9.64	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	4.35	0.500	--	12.8	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



**Project Name:** PARK CHESTER CROSSING**Lab Number:** L2114833**Project Number:** PARK CHESTER CROSSIN**Report Date:** 03/31/21**SAMPLE RESULTS**

Lab ID: L2114833-04

Client ID: SV4

Sample Location: 1585 WHITE PLAINS RD.

Date Collected: 03/24/21 10:57

Date Received: 03/24/21

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	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	9.29	0.500	--	27.4	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.202	0.200	--	0.712	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.535	0.200	--	2.19	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	1.75	0.200	--	6.59	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	1.25	0.200	--	8.48	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.530	0.200	--	2.30	0.869	--		1



**Project Name:** PARK CHESTER CROSSING**Lab Number:** L2114833**Project Number:** PARK CHESTER CROSSIN**Report Date:** 03/31/21**SAMPLE RESULTS**

Lab ID: L2114833-04

Client ID: SV4

Sample Location: 1585 WHITE PLAINS RD.

Date Collected: 03/24/21 10:57

Date Received: 03/24/21

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								
p/m-Xylene	2.66	0.400	--	11.6	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	0.761	0.200	--	3.31	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	98		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	98		60-140



**Project Name:** PARK CHESTER CROSSING**Lab Number:** L2114833**Project Number:** PARK CHESTER CROSSIN**Report Date:** 03/31/21**SAMPLE RESULTS**

Lab ID: L2114833-05

Client ID: SV5

Sample Location: 1585 WHITE PLAINS RD.

Date Collected: 03/24/21 11:15

Date Received: 03/24/21

Field Prep: Not Specified

Sample Depth:

Matrix: Soil\_Vapor

Analytical Method: 48,TO-15

Analytical Date: 03/30/21 23:37

Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	70.8	5.00	--	133	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	57.3	1.00	--	136	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	6.48	0.500	--	15.9	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	1.36	0.500	--	4.12	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	4.99	0.500	--	14.7	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



**Project Name:** PARK CHESTER CROSSING**Lab Number:** L2114833**Project Number:** PARK CHESTER CROSSIN**Report Date:** 03/31/21**SAMPLE RESULTS**

Lab ID: L2114833-05

Client ID: SV5

Sample Location: 1585 WHITE PLAINS RD.

Date Collected: 03/24/21 11:15

Date Received: 03/24/21

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	0.500	--	ND	1.80	--		1
Chloroform	2.20	0.200	--	10.7	0.977	--		1
Tetrahydrofuran	10.1	0.500	--	29.8	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	37.9	0.200	--	134	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	1.19	0.200	--	3.80	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	24.3	0.200	--	83.6	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	22.5	0.200	--	105	0.934	--		1
Heptane	6.17	0.200	--	25.3	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	1.63	0.200	--	6.14	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	0.824	0.200	--	5.59	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.862	0.200	--	3.74	0.869	--		1





**Project Name:** PARK CHESTER CROSSING**Lab Number:** L2114833**Project Number:** PARK CHESTER CROSSIN**Report Date:** 03/31/21**SAMPLE RESULTS**

Lab ID: L2114833-05

Date Collected: 03/24/21 11:15

Client ID: SV5

Date Received: 03/24/21

Sample Location: 1585 WHITE PLAINS RD.

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								
p/m-Xylene	4.32	0.400	--	18.8	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	1.29	0.200	--	5.60	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	104		60-140
Bromochloromethane	106		60-140
chlorobenzene-d5	102		60-140



**Project Name:** PARK CHESTER CROSSING**Lab Number:** L2114833**Project Number:** PARK CHESTER CROSSIN**Report Date:** 03/31/21**SAMPLE RESULTS**

Lab ID: L2114833-06

Client ID: AA 3/24

Sample Location: 1585 WHITE PLAINS RD.

Date Collected: 03/24/21 16:46

Date Received: 03/24/21

Field Prep: Not Specified

Sample Depth:

Matrix: Air

Analytical Method: 48,TO-15

Analytical Date: 03/30/21 17:06

Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.454	0.200	--	2.24	0.989	--		1
Chloromethane	0.557	0.200	--	1.15	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	8.05	5.00	--	15.2	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	1.92	1.00	--	4.56	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	1.75	0.500	--	4.30	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



**Project Name:** PARK CHESTER CROSSING**Lab Number:** L2114833**Project Number:** PARK CHESTER CROSSIN**Report Date:** 03/31/21**SAMPLE RESULTS**

Lab ID: L2114833-06

Client ID: AA 3/24

Sample Location: 1585 WHITE PLAINS RD.

Date Collected: 03/24/21 16:46

Date Received: 03/24/21

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	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
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.321	0.200	--	1.21	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1



**Project Name:** PARK CHESTER CROSSING**Lab Number:** L2114833**Project Number:** PARK CHESTER CROSSIN**Report Date:** 03/31/21**SAMPLE RESULTS**

Lab ID: L2114833-06

Client ID: AA 3/24

Sample Location: 1585 WHITE PLAINS RD.

Date Collected: 03/24/21 16:46

Date Received: 03/24/21

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								
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	95		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	92		60-140



**Project Name:** PARK CHESTER CROSSING**Lab Number:** L2114833**Project Number:** PARK CHESTER CROSSIN**Report Date:** 03/31/21

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 03/30/21 15:07

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-06 Batch: WG1480534-4								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1



**Project Name:** PARK CHESTER CROSSING**Lab Number:** L2114833**Project Number:** PARK CHESTER CROSSIN**Report Date:** 03/31/21

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 03/30/21 15:07

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-06 Batch: WG1480534-4								
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1



**Project Name:** PARK CHESTER CROSSING**Lab Number:** L2114833**Project Number:** PARK CHESTER CROSSIN**Report Date:** 03/31/21

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 03/30/21 15:07

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-06 Batch: WG1480534-4								
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1





## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** PARK CHESTER CROSSING

**Lab Number:** L2114833

**Project Number:** PARK CHESTER CROSSIN

**Report Date:** 03/31/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-06 Batch: WG1480534-3								
Dichlorodifluoromethane	98		-		70-130	-		
Chloromethane	105		-		70-130	-		
Freon-114	104		-		70-130	-		
Vinyl chloride	102		-		70-130	-		
1,3-Butadiene	103		-		70-130	-		
Bromomethane	103		-		70-130	-		
Chloroethane	103		-		70-130	-		
Ethanol	98		-		40-160	-		
Vinyl bromide	106		-		70-130	-		
Acetone	94		-		40-160	-		
Trichlorofluoromethane	100		-		70-130	-		
Isopropanol	91		-		40-160	-		
1,1-Dichloroethene	104		-		70-130	-		
Tertiary butyl Alcohol	102		-		70-130	-		
Methylene chloride	100		-		70-130	-		
3-Chloropropene	123		-		70-130	-		
Carbon disulfide	96		-		70-130	-		
Freon-113	110		-		70-130	-		
trans-1,2-Dichloroethene	109		-		70-130	-		
1,1-Dichloroethane	114		-		70-130	-		
Methyl tert butyl ether	104		-		70-130	-		
2-Butanone	114		-		70-130	-		
cis-1,2-Dichloroethene	118		-		70-130	-		

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** PARK CHESTER CROSSING

**Lab Number:** L2114833

**Project Number:** PARK CHESTER CROSSIN

**Report Date:** 03/31/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-06 Batch: WG1480534-3								
Ethyl Acetate	106		-		70-130	-		
Chloroform	105		-		70-130	-		
Tetrahydrofuran	118		-		70-130	-		
1,2-Dichloroethane	113		-		70-130	-		
n-Hexane	102		-		70-130	-		
1,1,1-Trichloroethane	108		-		70-130	-		
Benzene	93		-		70-130	-		
Carbon tetrachloride	104		-		70-130	-		
Cyclohexane	103		-		70-130	-		
1,2-Dichloropropane	114		-		70-130	-		
Bromodichloromethane	103		-		70-130	-		
1,4-Dioxane	111		-		70-130	-		
Trichloroethene	107		-		70-130	-		
2,2,4-Trimethylpentane	107		-		70-130	-		
Heptane	111		-		70-130	-		
cis-1,3-Dichloropropene	108		-		70-130	-		
4-Methyl-2-pentanone	116		-		70-130	-		
trans-1,3-Dichloropropene	95		-		70-130	-		
1,1,2-Trichloroethane	112		-		70-130	-		
Toluene	104		-		70-130	-		
2-Hexanone	127		-		70-130	-		
Dibromochloromethane	113		-		70-130	-		
1,2-Dibromoethane	106		-		70-130	-		

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** PARK CHESTER CROSSING

**Lab Number:** L2114833

**Project Number:** PARK CHESTER CROSSIN

**Report Date:** 03/31/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-06 Batch: WG1480534-3								
Tetrachloroethene	104		-		70-130	-		
Chlorobenzene	102		-		70-130	-		
Ethylbenzene	112		-		70-130	-		
p/m-Xylene	111		-		70-130	-		
Bromoform	113		-		70-130	-		
Styrene	108		-		70-130	-		
1,1,2,2-Tetrachloroethane	111		-		70-130	-		
o-Xylene	113		-		70-130	-		
4-Ethyltoluene	100		-		70-130	-		
1,3,5-Trimethylbenzene	103		-		70-130	-		
1,2,4-Trimethylbenzene	110		-		70-130	-		
Benzyl chloride	112		-		70-130	-		
1,3-Dichlorobenzene	108		-		70-130	-		
1,4-Dichlorobenzene	108		-		70-130	-		
1,2-Dichlorobenzene	108		-		70-130	-		
1,2,4-Trichlorobenzene	114		-		70-130	-		
Hexachlorobutadiene	109		-		70-130	-		

# Lab Duplicate Analysis

## Batch Quality Control

Project Name: PARK CHESTER CROSSING

Project Number: PARK CHESTER CROSSIN

Lab Number: L2114833

Report Date: 03/31/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG1480534-5 QC Sample: L2114833-01 Client ID: SV1						
Dichlorodifluoromethane	0.456	0.425	ppbV	7		25
Chloromethane	0.393	0.378	ppbV	4		25
Freon-114	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
Ethanol	79.5	85.1	ppbV	7		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	87.2	84.1	ppbV	4		25
Trichlorofluoromethane	0.208	0.208	ppbV	0		25
Isopropanol	10.4	10.2	ppbV	2		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
Tertiary butyl Alcohol	2.00	1.94	ppbV	3		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	0.760	0.752	ppbV	1		25
Freon-113	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

# **Lab Duplicate Analysis** Batch Quality Control

**Project Name:** PARK CHESTER CROSSING

**Project Number:** PARK CHESTER CROSSIN

**Lab Number:** L2114833

**Report Date:** 03/31/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG1480534-5 QC Sample: L2114833-01 Client ID: SV1						
2-Butanone	5.53	5.41	ppbV	2		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
Ethyl Acetate	ND	ND	ppbV	NC		25
Chloroform	ND	ND	ppbV	NC		25
Tetrahydrofuran	8.01	7.80	ppbV	3		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	0.495	0.508	ppbV	3		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Benzene	0.361	0.362	ppbV	0		25
Carbon tetrachloride	ND	ND	ppbV	NC		25
Cyclohexane	0.297	0.295	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
Trichloroethene	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	0.239	0.235	ppbV	2		25
Heptane	0.733	0.749	ppbV	2		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

# **Lab Duplicate Analysis** Batch Quality Control

**Project Name:** PARK CHESTER CROSSING

**Project Number:** PARK CHESTER CROSSIN

**Lab Number:** L2114833

**Report Date:** 03/31/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG1480534-5 QC Sample: L2114833-01 Client ID: SV1						
Toluene	1.42	1.40	ppbV	1		25
2-Hexanone	0.246	0.246	ppbV	0		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Tetrachloroethene	0.747	0.741	ppbV	1		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	0.515	0.526	ppbV	2		25
p/m-Xylene	2.42	2.44	ppbV	1		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	0.706	0.706	ppbV	0		25
4-Ethyltoluene	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
1,3-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

**Project Name:** PARK CHESTER CROSSING

Serial\_No:03312114:59  
**Lab Number:** L2114833

**Project Number:** PARK CHESTER CROSSIN

**Report Date:** 03/31/21

**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
L2114833-01	SV1	01785	Flow 3	03/24/21	346598		-	-	-	Pass	18.0	0.5	189
L2114833-01	SV1	3206	2.7L Can	03/24/21	346598	L2113738-01	Pass	-29.7	0.0	-	-	-	-
L2114833-02	SV2	01166	Flow 3	03/24/21	346598		-	-	-	Pass	18.0	15.9	12
L2114833-02	SV2	2386	2.7L Can	03/24/21	346598	L2113738-01	Pass	-29.5	-1.1	-	-	-	-
L2114833-03	SV3	02095	Flow 3	03/24/21	346598		-	-	-	Pass	18.0	17.0	6
L2114833-03	SV3	202	2.7L Can	03/24/21	346598	L2113738-01	Pass	-29.4	1.8	-	-	-	-
L2114833-04	SV4	01526	Flow 3	03/24/21	346598		-	-	-	Pass	18.0	17.1	5
L2114833-04	SV4	3213	2.7L Can	03/24/21	346598	L2113738-01	Pass	-29.4	1.7	-	-	-	-
L2114833-05	SV5	01806	Flow 3	03/24/21	346598		-	-	-	Pass	18.0	16.8	7
L2114833-05	SV5	2185	2.7L Can	03/24/21	346598	L2113738-01	Pass	-29.5	0.0	-	-	-	-
L2114833-06	AA 3/24	01449	Flow 4	03/24/21	346598		-	-	-	Pass	10.0	9.4	6
L2114833-06	AA 3/24	590	6.0L Can	03/24/21	346598	L2114053-04	Pass	-29.4	-3.5	-	-	-	-

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

**Lab Number:** L2113738  
**Report Date:** 03/31/21

### Air Canister Certification Results

**Lab ID:** L2113738-01  
**Client ID:** CAN 2079 SHELF 7  
**Sample Location:**

**Date Collected:** 03/18/21 16:00  
**Date Received:** 03/19/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Air  
**Analytical Method:** 48,TO-15  
**Analytical Date:** 03/19/21 18:41  
**Analyst:** TS

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





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

**Lab Number:** L2113738  
**Report Date:** 03/31/21

### Air Canister Certification Results

**Lab ID:** L2113738-01  
**Client ID:** CAN 2079 SHELF 7  
**Sample Location:**

**Date Collected:** 03/18/21 16:00  
**Date Received:** 03/19/21  
**Field Prep:** Not Specified

**Sample Depth:**

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



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

**Lab Number:** L2113738  
**Report Date:** 03/31/21

### Air Canister Certification Results

**Lab ID:** L2113738-01  
**Client ID:** CAN 2079 SHELF 7  
**Sample Location:**

**Date Collected:** 03/18/21 16:00  
**Date Received:** 03/19/21  
**Field Prep:** Not Specified

**Sample Depth:**

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



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

**Lab Number:** L2113738  
**Report Date:** 03/31/21

### Air Canister Certification Results

**Lab ID:** L2113738-01  
**Client ID:** CAN 2079 SHELF 7  
**Sample Location:**

**Date Collected:** 03/18/21 16:00  
**Date Received:** 03/19/21  
**Field Prep:** Not Specified

**Sample Depth:**

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



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

**Lab Number:** L2113738  
**Report Date:** 03/31/21

### Air Canister Certification Results

Lab ID: L2113738-01  
 Client ID: CAN 2079 SHELF 7  
 Sample Location:

Date Collected: 03/18/21 16:00  
 Date Received: 03/19/21  
 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	91		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	89		60-140



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

**Lab Number:** L2113738  
**Report Date:** 03/31/21

### Air Canister Certification Results

**Lab ID:** L2113738-01  
**Client ID:** CAN 2079 SHELF 7  
**Sample Location:**

**Date Collected:** 03/18/21 16:00  
**Date Received:** 03/19/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Air  
**Analytical Method:** 48,TO-15-SIM  
**Analytical Date:** 03/19/21 18:41  
**Analyst:** TS

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



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

**Lab Number:** L2113738  
**Report Date:** 03/31/21

### Air Canister Certification Results

**Lab ID:** L2113738-01  
**Client ID:** CAN 2079 SHELF 7  
**Sample Location:**

**Date Collected:** 03/18/21 16:00  
**Date Received:** 03/19/21  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	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-Trimethybenzene	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



**Project Name:** BATCH CANISTER CERTIFICATION**Lab Number:** L2113738**Project Number:** CANISTER QC BAT**Report Date:** 03/31/21**Air Canister Certification Results**

Lab ID: L2113738-01

Date Collected: 03/18/21 16:00

Client ID: CAN 2079 SHELF 7

Date Received: 03/19/21

Sample Location:

Field Prep: Not Specified

Sample Depth:

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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	91		60-140
bromochloromethane	94		60-140
chlorobenzene-d5	89		60-140



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

**Lab Number:** L2114053  
**Report Date:** 03/31/21

### Air Canister Certification Results

**Lab ID:** L2114053-04  
**Client ID:** CAN 2487 SHELF 41  
**Sample Location:**

**Date Collected:** 03/20/21 08:00  
**Date Received:** 03/20/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Air  
**Analytical Method:** 48,TO-15  
**Analytical Date:** 03/21/21 18:47  
**Analyst:** TS

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





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

**Lab Number:** L2114053  
**Report Date:** 03/31/21

### Air Canister Certification Results

**Lab ID:** L2114053-04  
**Client ID:** CAN 2487 SHELF 41  
**Sample Location:**

**Date Collected:** 03/20/21 08:00  
**Date Received:** 03/20/21  
**Field Prep:** Not Specified

**Sample Depth:**

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



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

**Lab Number:** L2114053  
**Report Date:** 03/31/21

### Air Canister Certification Results

**Lab ID:** L2114053-04  
**Client ID:** CAN 2487 SHELF 41  
**Sample Location:**

**Date Collected:** 03/20/21 08:00  
**Date Received:** 03/20/21  
**Field Prep:** Not Specified

**Sample Depth:**

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



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

**Lab Number:** L2114053  
**Report Date:** 03/31/21

### Air Canister Certification Results

**Lab ID:** L2114053-04  
**Client ID:** CAN 2487 SHELF 41  
**Sample Location:**

**Date Collected:** 03/20/21 08:00  
**Date Received:** 03/20/21  
**Field Prep:** Not Specified

**Sample Depth:**

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



**Project Name:** BATCH CANISTER CERTIFICATION**Lab Number:** L2114053**Project Number:** CANISTER QC BAT**Report Date:** 03/31/21**Air Canister Certification Results**

Lab ID: L2114053-04

Date Collected: 03/20/21 08:00

Client ID: CAN 2487 SHELF 41

Date Received: 03/20/21

Sample Location:

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	85		60-140
Bromochloromethane	89		60-140
chlorobenzene-d5	86		60-140



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

**Lab Number:** L2114053  
**Report Date:** 03/31/21

### Air Canister Certification Results

**Lab ID:** L2114053-04  
**Client ID:** CAN 2487 SHELF 41  
**Sample Location:**

**Date Collected:** 03/20/21 08:00  
**Date Received:** 03/20/21  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Air  
**Analytical Method:** 48,TO-15-SIM  
**Analytical Date:** 03/21/21 18:47  
**Analyst:** TS

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



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

**Lab Number:** L2114053  
**Report Date:** 03/31/21

### Air Canister Certification Results

**Lab ID:** L2114053-04  
**Client ID:** CAN 2487 SHELF 41  
**Sample Location:**

**Date Collected:** 03/20/21 08:00  
**Date Received:** 03/20/21  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	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-Trimethybenzene	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



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

**Lab Number:** L2114053  
**Report Date:** 03/31/21

### Air Canister Certification Results

**Lab ID:** L2114053-04  
**Client ID:** CAN 2487 SHELF 41  
**Sample Location:**

**Date Collected:** 03/20/21 08:00  
**Date Received:** 03/20/21  
**Field Prep:** Not Specified

**Sample Depth:**

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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	86		60-140
bromochloromethane	89		60-140
chlorobenzene-d5	85		60-140



**Project Name:** PARK CHESTER CROSSING**Lab Number:** L2114833**Project Number:** PARK CHESTER CROSSIN**Report Date:** 03/31/21**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>
L2114833-01A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L2114833-02A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L2114833-03A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L2114833-04A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L2114833-05A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L2114833-06A	Canister - 6 Liter	N/A	NA			Y	Absent		TO15-LL(30)



**Project Name:** PARK CHESTER CROSSING**Lab Number:** L2114833**Project Number:** PARK CHESTER CROSSIN**Report Date:** 03/31/21

## GLOSSARY

### Acronyms

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

*Report Format: Data Usability Report*

**Project Name:** PARK CHESTER CROSSING  
**Project Number:** PARK CHESTER CROSSIN

**Lab Number:** L2114833  
**Report Date:** 03/31/21

### Footnotes

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

### Terms

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

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

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

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

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

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

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

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

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

### Data Qualifiers

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

**Report Format:** Data Usability Report



**Project Name:** PARK CHESTER CROSSING  
**Project Number:** PARK CHESTER CROSSIN

**Lab Number:** L2114833  
**Report Date:** 03/31/21

**Data Qualifiers**

the identification is based on a mass spectral library search.

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.

**Project Name:** PARK CHESTER CROSSING  
**Project Number:** PARK CHESTER CROSSIN

**Lab Number:** L2114833  
**Report Date:** 03/31/21

## 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.



**Alpha Analytical, Inc.**Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 18

Published Date: 2/16/2021 5:32:02 PM

Page 1 of 1

**Certification Information**

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

**Westborough Facility****EPA 624/624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 8260C/8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D/8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.**Mansfield Facility****SM 2540D:** TSS**EPA 8082A:** NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

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

**Biological Tissue Matrix:** EPA 3050B

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

**Westborough Facility:****Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**Ammonia-N, **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, SM9222D.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.**EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1** Hg.**SM2340B**

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







## ANALYTICAL REPORT

Lab Number:	L2114831
Client:	Tenen Environmental, LLC 121 West 27th Street Suite 702 New York City, NY 10001
ATTN:	Matthew Carroll
Phone:	(646) 606-2332
Project Name:	PARKCHESTER CROSSING
Project Number:	PARKCHESTER CROSSING
Report Date:	03/31/21

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:** PARKCHESTER CROSSING  
**Project Number:** PARKCHESTER CROSSING

**Lab Number:** L2114831  
**Report Date:** 03/31/21

<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>
L2114831-01	MW 1	WATER	1585 WHITE PLAINS RD	03/24/21 12:01	03/24/21
L2114831-02	MW 3	WATER	1585 WHITE PLAINS RD	03/24/21 11:45	03/24/21
L2114831-03	TRIP BLANK	TRIP BLANK (AQUEOUS)	1585 WHITE PLAINS RD	03/24/21 00:00	03/24/21



**Project Name:** PARKCHESTER CROSSING  
**Project Number:** PARKCHESTER CROSSING

**Lab Number:** L2114831  
**Report Date:** 03/31/21

### Case Narrative

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

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

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

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

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

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

---

**Project Name:** PARKCHESTER CROSSING  
**Project Number:** PARKCHESTER CROSSING

**Lab Number:** L2114831  
**Report Date:** 03/31/21

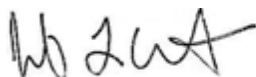
**Case Narrative (continued)**

Report Submission

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

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:



Jennifer L. Clements

Title: Technical Director/Representative

Date: 03/31/21

# ORGANICS

# VOLATILES

**Project Name:** PARKCHESTER CROSSING**Lab Number:** L2114831**Project Number:** PARKCHESTER CROSS**Report Date:** 03/31/21**SAMPLE RESULTS**

Lab ID: L2114831-01 D  
 Client ID: MW 1  
 Sample Location: 1585 WHITE PLAINS RD

Date Collected: 03/24/21 12:01  
 Date Received: 03/24/21  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 03/29/21 13:05  
 Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	12	3.5	5
1,1-Dichloroethane	ND		ug/l	12	3.5	5
Chloroform	ND		ug/l	12	3.5	5
Carbon tetrachloride	ND		ug/l	2.5	0.67	5
1,2-Dichloropropane	ND		ug/l	5.0	0.68	5
Dibromochloromethane	ND		ug/l	2.5	0.74	5
1,1,2-Trichloroethane	ND		ug/l	7.5	2.5	5
Tetrachloroethene	ND		ug/l	2.5	0.90	5
Chlorobenzene	ND		ug/l	12	3.5	5
Trichlorofluoromethane	ND		ug/l	12	3.5	5
1,2-Dichloroethane	ND		ug/l	2.5	0.66	5
1,1,1-Trichloroethane	ND		ug/l	12	3.5	5
Bromodichloromethane	ND		ug/l	2.5	0.96	5
trans-1,3-Dichloropropene	ND		ug/l	2.5	0.82	5
cis-1,3-Dichloropropene	ND		ug/l	2.5	0.72	5
1,3-Dichloropropene, Total	ND		ug/l	2.5	0.72	5
1,1-Dichloropropene	ND		ug/l	12	3.5	5
Bromoform	ND		ug/l	10	3.2	5
1,1,2,2-Tetrachloroethane	ND		ug/l	2.5	0.84	5
Benzene	750		ug/l	2.5	0.80	5
Toluene	7.6	J	ug/l	12	3.5	5
Ethylbenzene	5.0	J	ug/l	12	3.5	5
Chloromethane	ND		ug/l	12	3.5	5
Bromomethane	ND		ug/l	12	3.5	5
Vinyl chloride	ND		ug/l	5.0	0.36	5
Chloroethane	ND		ug/l	12	3.5	5
1,1-Dichloroethene	ND		ug/l	2.5	0.84	5
trans-1,2-Dichloroethene	ND		ug/l	12	3.5	5



**Project Name:** PARKCHESTER CROSSING**Lab Number:** L2114831**Project Number:** PARKCHESTER CROSS**Report Date:** 03/31/21**SAMPLE RESULTS**

Lab ID: L2114831-01 D

Date Collected: 03/24/21 12:01

Client ID: MW 1

Date Received: 03/24/21

Sample Location: 1585 WHITE PLAINS RD

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	2.5	0.88	5
1,2-Dichlorobenzene	ND		ug/l	12	3.5	5
1,3-Dichlorobenzene	ND		ug/l	12	3.5	5
1,4-Dichlorobenzene	ND		ug/l	12	3.5	5
Methyl tert butyl ether	ND		ug/l	12	3.5	5
p/m-Xylene	20		ug/l	12	3.5	5
o-Xylene	ND		ug/l	12	3.5	5
Xylenes, Total	20		ug/l	12	3.5	5
cis-1,2-Dichloroethene	ND		ug/l	12	3.5	5
1,2-Dichloroethene, Total	ND		ug/l	12	3.5	5
Dibromomethane	ND		ug/l	25	5.0	5
1,2,3-Trichloropropane	ND		ug/l	12	3.5	5
Acrylonitrile	ND		ug/l	25	7.5	5
Styrene	ND		ug/l	12	3.5	5
Dichlorodifluoromethane	ND		ug/l	25	5.0	5
Acetone	53		ug/l	25	7.3	5
Carbon disulfide	ND		ug/l	25	5.0	5
2-Butanone	ND		ug/l	25	9.7	5
Vinyl acetate	ND		ug/l	25	5.0	5
4-Methyl-2-pentanone	ND		ug/l	25	5.0	5
2-Hexanone	ND		ug/l	25	5.0	5
Bromochloromethane	ND		ug/l	12	3.5	5
2,2-Dichloropropane	ND		ug/l	12	3.5	5
1,2-Dibromoethane	ND		ug/l	10	3.2	5
1,3-Dichloropropane	ND		ug/l	12	3.5	5
1,1,1,2-Tetrachloroethane	ND		ug/l	12	3.5	5
Bromobenzene	ND		ug/l	12	3.5	5
n-Butylbenzene	9.0	J	ug/l	12	3.5	5
sec-Butylbenzene	11	J	ug/l	12	3.5	5
tert-Butylbenzene	ND		ug/l	12	3.5	5
o-Chlorotoluene	ND		ug/l	12	3.5	5
p-Chlorotoluene	ND		ug/l	12	3.5	5
1,2-Dibromo-3-chloropropane	ND		ug/l	12	3.5	5
Hexachlorobutadiene	ND		ug/l	12	3.5	5
Isopropylbenzene	32		ug/l	12	3.5	5
p-Isopropyltoluene	ND		ug/l	12	3.5	5
Naphthalene	8.7	J	ug/l	12	3.5	5



**Project Name:** PARKCHESTER CROSSING**Lab Number:** L2114831**Project Number:** PARKCHESTER CROSS**Report Date:** 03/31/21**SAMPLE RESULTS**

Lab ID: L2114831-01 D

Date Collected: 03/24/21 12:01

Client ID: MW 1

Date Received: 03/24/21

Sample Location: 1585 WHITE PLAINS RD

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	73		ug/l	12	3.5	5
1,2,3-Trichlorobenzene	ND		ug/l	12	3.5	5
1,2,4-Trichlorobenzene	ND		ug/l	12	3.5	5
1,3,5-Trimethylbenzene	ND		ug/l	12	3.5	5
1,2,4-Trimethylbenzene	ND		ug/l	12	3.5	5
1,4-Dioxane	ND		ug/l	1200	300	5
p-Diethylbenzene	18		ug/l	10	3.5	5
p-Ethyltoluene	5.7	J	ug/l	10	3.5	5
1,2,4,5-Tetramethylbenzene	53		ug/l	10	2.7	5
Ethyl ether	ND		ug/l	12	3.5	5
trans-1,4-Dichloro-2-butene	ND		ug/l	12	3.5	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	94		70-130



**Project Name:** PARKCHESTER CROSSING**Lab Number:** L2114831**Project Number:** PARKCHESTER CROSS**Report Date:** 03/31/21**SAMPLE RESULTS**

Lab ID: L2114831-02  
 Client ID: MW 3  
 Sample Location: 1585 WHITE PLAINS RD

Date Collected: 03/24/21 11:45  
 Date Received: 03/24/21  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 03/29/21 13:33  
 Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
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	2.9		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
1,1,2,2-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:** PARKCHESTER CROSSING**Lab Number:** L2114831**Project Number:** PARKCHESTER CROSS**Report Date:** 03/31/21**SAMPLE RESULTS**

Lab ID: L2114831-02

Date Collected: 03/24/21 11:45

Client ID: MW 3

Date Received: 03/24/21

Sample Location: 1585 WHITE PLAINS RD

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	0.18	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	8.8		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:** PARKCHESTER CROSSING**Lab Number:** L2114831**Project Number:** PARKCHESTER CROSS**Report Date:** 03/31/21**SAMPLE RESULTS****Lab ID:** L2114831-02**Date Collected:** 03/24/21 11:45**Client ID:** MW 3**Date Received:** 03/24/21**Sample Location:** 1585 WHITE PLAINS RD**Field Prep:** Not Specified**Sample Depth:**

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	98		70-130

**Project Name:** PARKCHESTER CROSSING**Lab Number:** L2114831**Project Number:** PARKCHESTER CROSS**Report Date:** 03/31/21**SAMPLE RESULTS**

Lab ID: L2114831-03  
 Client ID: TRIP BLANK  
 Sample Location: 1585 WHITE PLAINS RD

Date Collected: 03/24/21 00:00  
 Date Received: 03/24/21  
 Field Prep: Not Specified

Sample Depth:

Matrix: Trip Blank (Aqueous)  
 Analytical Method: 1,8260C  
 Analytical Date: 03/29/21 14:00  
 Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
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
1,1,2,2-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:** PARKCHESTER CROSSING**Lab Number:** L2114831**Project Number:** PARKCHESTER CROSS**Report Date:** 03/31/21**SAMPLE RESULTS**

Lab ID: L2114831-03

Date Collected: 03/24/21 00:00

Client ID: TRIP BLANK

Date Received: 03/24/21

Sample Location: 1585 WHITE PLAINS RD

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	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	2.5	J	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:** PARKCHESTER CROSSING**Lab Number:** L2114831**Project Number:** PARKCHESTER CROSS**Report Date:** 03/31/21**SAMPLE RESULTS****Lab ID:** L2114831-03**Date Collected:** 03/24/21 00:00**Client ID:** TRIP BLANK**Date Received:** 03/24/21**Sample Location:** 1585 WHITE PLAINS RD**Field Prep:** Not Specified**Sample Depth:**

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	122		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	99		70-130

**Project Name:** PARKCHESTER CROSSING**Lab Number:** L2114831**Project Number:** PARKCHESTER CROSSING**Report Date:** 03/31/21

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C  
 Analytical Date: 03/29/21 09:28  
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1480206-5					
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:** PARKCHESTER CROSSING**Lab Number:** L2114831**Project Number:** PARKCHESTER CROSSING**Report Date:** 03/31/21

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C  
 Analytical Date: 03/29/21 09:28  
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1480206-5					
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	2.1	J	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: PARKCHESTER CROSSING

Lab Number: L2114831

Project Number: PARKCHESTER CROSSING

Report Date: 03/31/21

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C  
 Analytical Date: 03/29/21 09:28  
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1480206-5					
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	96		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	99		70-130





# **Lab Control Sample Analysis** Batch Quality Control

**Project Name:** PARKCHESTER CROSSING

**Lab Number:** L2114831

**Project Number:** PARKCHESTER CROSSING

**Report Date:** 03/31/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1480206-3 WG1480206-4								
Methylene chloride	110		110		70-130	0		20
1,1-Dichloroethane	120		110		70-130	9		20
Chloroform	110		110		70-130	0		20
Carbon tetrachloride	110		110		63-132	0		20
1,2-Dichloropropane	110		110		70-130	0		20
Dibromochloromethane	97		110		63-130	13		20
1,1,2-Trichloroethane	96		120		70-130	22	Q	20
Tetrachloroethene	98		110		70-130	12		20
Chlorobenzene	100		110		75-130	10		20
Trichlorofluoromethane	110		110		62-150	0		20
1,2-Dichloroethane	100		100		70-130	0		20
1,1,1-Trichloroethane	110		110		67-130	0		20
Bromodichloromethane	110		110		67-130	0		20
trans-1,3-Dichloropropene	94		110		70-130	16		20
cis-1,3-Dichloropropene	100		110		70-130	10		20
1,1-Dichloropropene	100		110		70-130	10		20
Bromoform	88		100		54-136	13		20
1,1,2,2-Tetrachloroethane	97		120		67-130	21	Q	20
Benzene	100		110		70-130	10		20
Toluene	100		110		70-130	10		20
Ethylbenzene	99		110		70-130	11		20
Chloromethane	120		110		64-130	9		20
Bromomethane	80		87		39-139	8		20

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** PARKCHESTER CROSSING

**Lab Number:** L2114831

**Project Number:** PARKCHESTER CROSSING

**Report Date:** 03/31/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1480206-3 WG1480206-4								
Vinyl chloride	110		100		55-140	10		20
Chloroethane	110		100		55-138	10		20
1,1-Dichloroethene	110		110		61-145	0		20
trans-1,2-Dichloroethene	110		110		70-130	0		20
Trichloroethene	98		100		70-130	2		20
1,2-Dichlorobenzene	100		110		70-130	10		20
1,3-Dichlorobenzene	100		120		70-130	18		20
1,4-Dichlorobenzene	100		120		70-130	18		20
Methyl tert butyl ether	95		110		63-130	15		20
p/m-Xylene	100		115		70-130	14		20
o-Xylene	100		110		70-130	10		20
cis-1,2-Dichloroethene	110		110		70-130	0		20
Dibromomethane	110		110		70-130	0		20
1,2,3-Trichloropropane	92		110		64-130	18		20
Acrylonitrile	110		110		70-130	0		20
Styrene	105		115		70-130	9		20
Dichlorodifluoromethane	110		110		36-147	0		20
Acetone	120		120		58-148	0		20
Carbon disulfide	110		110		51-130	0		20
2-Butanone	93		99		63-138	6		20
Vinyl acetate	120		140	Q	70-130	15		20
4-Methyl-2-pentanone	93		110		59-130	17		20
2-Hexanone	92		110		57-130	18		20

# **Lab Control Sample Analysis** Batch Quality Control

**Project Name:** PARKCHESTER CROSSING

**Lab Number:** L2114831

**Project Number:** PARKCHESTER CROSSING

**Report Date:** 03/31/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1480206-3 WG1480206-4								
Bromochloromethane	120		110		70-130	9		20
2,2-Dichloropropane	110		110		63-133	0		20
1,2-Dibromoethane	93		110		70-130	17		20
1,3-Dichloropropane	96		110		70-130	14		20
1,1,1,2-Tetrachloroethane	97		110		64-130	13		20
Bromobenzene	100		120		70-130	18		20
n-Butylbenzene	110		120		53-136	9		20
sec-Butylbenzene	100		120		70-130	18		20
tert-Butylbenzene	100		120		70-130	18		20
o-Chlorotoluene	100		120		70-130	18		20
p-Chlorotoluene	100		110		70-130	10		20
1,2-Dibromo-3-chloropropane	83		100		41-144	19		20
Hexachlorobutadiene	110		120		63-130	9		20
Isopropylbenzene	99		120		70-130	19		20
p-Isopropyltoluene	110		120		70-130	9		20
Naphthalene	85		120		70-130	34	Q	20
n-Propylbenzene	100		120		69-130	18		20
1,2,3-Trichlorobenzene	96		120		70-130	22	Q	20
1,2,4-Trichlorobenzene	100		120		70-130	18		20
1,3,5-Trimethylbenzene	100		110		64-130	10		20
1,2,4-Trimethylbenzene	110		120		70-130	9		20
1,4-Dioxane	82		88		56-162	7		20
p-Diethylbenzene	110		120		70-130	9		20

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** PARKCHESTER CROSSING

**Lab Number:** L2114831

**Project Number:** PARKCHESTER CROSSING

**Report Date:** 03/31/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1480206-3 WG1480206-4								
p-Ethyltoluene	100		120		70-130	18		20
1,2,4,5-Tetramethylbenzene	110		120		70-130	9		20
Ethyl ether	99		110		59-134	11		20
trans-1,4-Dichloro-2-butene	65	Q	87		70-130	29	Q	20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	108		99		70-130
Toluene-d8	103		105		70-130
4-Bromofluorobenzene	103		104		70-130
Dibromofluoromethane	110		98		70-130

**Project Name:** PARKCHESTER CROSSING**Lab Number:** L2114831**Project Number:** PARKCHESTER CROSSING**Report Date:** 03/31/21**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>
L2114831-01A	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2114831-01B	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2114831-01C	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2114831-02A	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2114831-02B	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2114831-02C	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2114831-03A	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2114831-03B	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)

**Project Name:** PARKCHESTER CROSSING**Lab Number:** L2114831**Project Number:** PARKCHESTER CROSSING**Report Date:** 03/31/21

## GLOSSARY

### Acronyms

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

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

**Project Name:** PARKCHESTER CROSSING**Lab Number:** L2114831**Project Number:** PARKCHESTER CROSSING**Report Date:** 03/31/21**Footnotes**

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

**Terms**

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

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

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

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

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

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

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

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

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

**Data Qualifiers**

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

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



**Project Name:** PARKCHESTER CROSSING**Lab Number:** L2114831**Project Number:** PARKCHESTER CROSSING**Report Date:** 03/31/21**Data Qualifiers**

- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.

---

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



**Project Name:** PARKCHESTER CROSSING  
**Project Number:** PARKCHESTER CROSSING

**Lab Number:** L2114831  
**Report Date:** 03/31/21

## REFERENCES

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

## LIMITATION OF LIABILITIES

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

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



**Alpha Analytical, Inc.**Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 18

Published Date: 2/16/2021 5:32:02 PM

Page 1 of 1

**Certification Information**

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

**Westborough Facility****EPA 624/624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 8260C/8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D/8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.**Mansfield Facility****SM 2540D:** TSS**EPA 8082A:** NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

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

**Biological Tissue Matrix:** EPA 3050B

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

**Westborough Facility:****Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**Ammonia-N, **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, SM9222D.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.**EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1** Hg.**SM2340B**

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

Page 29 of 29

## Attachment 4

### *Data Usability Summary Reports*

**DATA USABILITY SUMMARY REPORT (DUSR)**

**ORGANIC ANALYSIS**

**EPA Compendium Method TO-15  
LOW LEVEL VOLATILES BY GC/MS  
For Soil Vapor and Ambient Air Samples  
Collected March 24, 2021  
From 1585 White Plains Road, Bronx, New York  
Park Chester Crossing  
by Tenen Environmental**

**SAMPLE DELIVERY GROUP NUMBER:  
L2114833  
Alpha Analytical (ELAP #11148)**

**SUBMITTED TO:**

**Ms. Claire Zaccheo  
Tenen Environmental  
121 West 27<sup>th</sup> Street, Suite 702  
New York, NY 10001**

**June 05, 2021**

**PREPARED BY:**

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

*Lori A. Beyer*

1585 White Plains Road, Bronx, New York; March 2021  
Data Validation Report: Volatile Organics by EPA Method TO15

**Table of Contents:**

	Introduction
	Data Qualifier Definitions
	Sample Receipt
1.0	Volatile Organics by GC/MS EPA Compendium Method TO-15
1.1	Holding Time
1.2	Surrogate Standards
1.3	Matrix Spikes (MS), Matrix Spike Duplicates (MSD), Laboratory Duplicate, Field Duplicate Analysis
1.4	Laboratory Control Sample
1.5	Blank Contamination
1.6	GC/MS Instrument Performance Check
1.7	Initial and Continuing Calibrations
1.8	Internal Standards
1.9	Target Compound List Identification
1.10	Tentatively Identified Compounds
1.11	Compound Quantification and Reported Detection Limits
1.12	Overall System Performance

**APPENDICES:**

- A. Chain of Custody Document and Sample Receipt Checklist
- B. Case Narrative
- C. Data Summary Form Is with Qualifications

**Introduction:**

A validation was performed on soil vapor and ambient air samples for Volatile Organic analysis collected by Tenen Environmental and submitted to Alpha Analytical for subsequent analysis under chain of custody documentation. This report contains the laboratory and validation results for the field samples itemized below. The samples were collected on March 24, 2021.

The samples were analyzed by Alpha Analytical utilizing EPA Method TO-15 and in accordance with NYSDEC Analytical Services Protocol (2005) and submitted under NYSDEC ASP Category B equivalent deliverable requirements for the associated analytical methodology employed. The analytical testing consisted of the full TO-15 Compound List.

The data was evaluated in accordance with the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (Publication 9240.1-05), EPA SOP #HW31 (Revision 6-Updated September 2016) and in conjunction with the analytical methodology for which the samples were analyzed, where applicable and relevant.

The data validation report pertains to the following field air samples:

Sample Identification	Laboratory Identification	Sample Matrix (Air Type)	Collection Date
SV1	L2114833-01	Soil Vapor	03/24/2021
SV2	L2114833-02	Soil Vapor	03/24/2021
SV3	L2114833-03	Soil Vapor	03/24/2021
SV4	L2114833-04	Soil Vapor	03/24/2021
SV5	L2114833-05	Soil Vapor	03/24/2021
AA 3/24	L2114833-06	Ambient Air	03/24/2021

**Data Qualifier Definitions:**

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

- U** - The analyte was analyzed for but was not detected above the reported sample quantitation limit.
- J** - The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- J+** - The result is an estimated quantity, but the result may be biased high.
- J-** - The result is an estimated quantity, but the result may be biased low.
- NJ** - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
- UJ** - The analyte was analyzed for but not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
- R** - The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.
- D** - Analyte concentration was obtained from diluted analysis.

**Sample Receipt:**

The Chain of Custody document indicates that the air samples were received following completion of the sampling event via laboratory courier. Sample login notes and the chain of custody indicate that at the Validated Time of Sample Receipt (VTSR) at the laboratory no discrepancies were notated and therefore the integrity of the summa canister samples is assumed to be good.

Summa Canisters were leak tested prior to collection of each sample. Initial pressure gauge is recorded on the chain of custody and is required to be approximately 30 psi with zero air. Acceptable canister pressure was observed for these samples. All canisters pass the leak check requirements.

The data summary Form I's included in Appendix C includes all usable (qualified) and unusable (rejected) results for the samples identified above and summarize the detailed narrative section of the report. Data validation qualifications have been reported on the Form I's for ease of review and verification.

**NOTE:**

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



## **1.0 Volatile Organics by EPA Compendium Method TO-15**

The following method criteria were reviewed: holding times, surrogate standards, LCS, Blanks, Laboratory Duplicate, Tunes, Calibrations, Internal Standards, Target Component Identification and Quantitation, Reported Quantitation Limits and Overall System Performance. The volatile results are valid and useable as noted on the data summary Form I's in Appendix C and within the following text:

### **1.1 Holding Time**

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

**Air samples pertaining to this SDG were performed within the method and technical required holding times of thirty (30) days from sample collection for analysis. No qualifications were required based upon holding time criteria.**

### **1.2 Surrogate Standards**

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

**Samples were not spiked with surrogate standards. Method TO15 does not mandate the addition of surrogate standards.**

### **1.3 Matrix Spikes (MS)/ Matrix Spike Duplicates (MSD)/Laboratory Duplicate /Field Duplicate Analysis**

The MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices.

**Matrix Spike/Matrix Spike Duplicate analysis was not performed on samples pertaining to this SDG.**

**Laboratory duplicate was performed on SV1. Precision is acceptable and all detected analytes are below laboratory criteria of 25%. No qualifications are required based on laboratory duplicate analysis.**

**Field Duplicate analysis was not required for this sampling event. When performed, acceptable precision for air samples is 25%. The following criteria are utilized for Field/Lab Duplicate analysis when performed:**

Criteria	Detected Compounds	Non-Detected Compounds
The RPD is within the limits of 0 and 25%	No qualification	No qualification
The RPD >25%	J in the parent and duplicate samples	Not applicable
The RPD could not be calculated since the compound was only detected in either the parent or duplicate sample. However, the detected concentration was $\leq 2x$ the reporting limit	No qualification	No qualification
The RPD could not be calculated since the compound was only detected in either the parent or duplicate sample. However, the detected concentration was $> 2x$ the reporting limit.	J in the parent and duplicate sample	UJ in the parent of duplicate sample

**No qualifications to the data were applied based on MS/MSD/Laboratory Duplicate or Field Duplicate analysis.**

#### **1.4 Laboratory Control Sample**

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

The following table summarizes the LCS criteria and the data qualification guidelines for all associated field samples.

LCS	NOT QUALIFIED	J	R
% Recovery:			
Detects	70-130%	<70%, >130%	
Non-Detects	$\geq 130\%$	50-69%	<50%
Absolute RT of LCS Compounds:			
LCS Compounds in samples RT: (min)	$\pm 0.33$		$\geq 0.33$

**Acceptable LCS was analyzed with this SDG pertaining to these sampling events. Recovery values for all spiked compounds was determined to be >70%-<130% for all analytes.**

#### **1.5 Blank Contamination**

Quality assurance (QA) blanks, i.e., method, trip and field blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field blanks measure cross-contamination of samples during field operations. Storage blanks measure cross-contamination during sample storage of the field samples and are not required for TO15 analysis. Canister blanks measure cross-contamination from the sampling media.

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

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

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

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

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

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

The table below is utilized to qualify samples with target compound results also present in certification blanks:

Certification Contamination	Sample Result	Action for Sample
>=detect limit	>5x certification contamination	No qualification required
>=detect limit	<detect limit	Detection limit "U"
>=detect limit	>=detect limit and <= 5x certification contamination level	5x certification contamination "U"
<detect limit	<=detection limit and >= detection limit	No qualification

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

**A) Method Blank Contamination:**

**Method and Canister blanks were determined to be free of any contamination.**

*\*Acetone and 2-Butanone are common laboratory contaminants. The end user should proceed with caution when making decisions based on these detections since these are common solvents utilized in the organic extraction laboratory and could not be negated due to lack of presence in the corresponding blanks.*

**B) Field Blank Contamination:**

**Field Blank analysis was not required.**

**C) Trip Blank Contamination:**

**Trip Blank analysis was not required.**

### **1.6 GC/MS Instrument Performance Check**

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

**Instrument performance was generated within acceptable limits and frequency (24 hours) for Bromofluorobenzene (BFB) for all analyses.**

### **1.7 Initial and Continuing Calibrations**

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

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

The response factor measures the instrument's response to specific chemical compounds. The response factor for all compounds must be  $\geq 0.05$  in both initial and continuing calibrations. A value  $< 0.05$  indicates a serious detection and quantitation problem (poor sensitivity). Analytes detected in the sample will be qualified as estimated, "J". All non-detects for that compound in the corresponding samples will be rejected, "R".

The following compounds can be  $> 0.01$  without qualification:

2-Butanone  
Carbon Disulfide  
Chloroethane  
Chloromethane  
1,2-Dibromoethane  
1,2-Dichloropropane  
1,4-Dioxane  
1,2-Dibromo-3-chloropropane  
Methylene Chloride

**Response factors for the target analytes reported were found to be within acceptable limits ( $\geq 0.05$ ) [or  $\geq 0.01$  for the 9 compounds above] and remaining analytes, for the initial and continuing calibrations.**

B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D): Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentrations. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Percent RSD must be <30% and %D must be <30%. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects are flagged "UJ". If %RSD and %D grossly exceed QC criteria (>90%), non-detect data may be qualified, "R", unusable. Additionally, in cases where the %RSD is >30% and eliminating either the high or the low point of the curve does not restore the %RSD to less than or equal to 30% then positive results are qualified, "J". In cases where removal of either the low or high point restores the linearity, then only low or high-level results will be qualified, "J" in the portion of the curve where non-linearity exists. Acceptable ICV was analyzed.

**Initial Calibrations: The initial calibrations provided and the %RSD was within acceptable limits (30%) and (40%) for poor responders for all requested target compounds. Initial calibration verification standard met QC requirements.**

**Continuing Calibrations: The continuing calibrations provided and the %D was within acceptable limits (30%) and (40%) for poor responders for all reported compounds.**

### **1.8 Internal Standards**

Internal Standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must not vary by more than a factor of 2 (-40% to +40%) from the associated continuing calibration standard. The retention time of the internal standard must not vary more than +/-20 seconds from the associated continuing calibration standard. If the area count is outside the (-40% to +40%) range of the associated standard, all positive results for compounds quantitated using that IS are qualified as estimated, "J", and all non-detects as "UJ", or "R" if there is a severe loss of sensitivity.

If an internal standard retention time varies by more than 20 seconds, professional judgment will be used to determine either partial or total rejection of the data for that sample fraction.

**Internal Standard area responses met QC requirements for all analysis pertaining to this data set as compared to the continuing calibration.**

### **1.9 Target Compound List Identification**

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

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

### **1.10 Tentatively Identified Compounds (TICs)**

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

**TICs were not required with this data set. Sample chromatograms for SV1, SV2, SV3, SV4 and SV5 demonstrate late eluting non-target peaks that are most likely gasoline range organic hydrocarbons.**

### **1.11 Compound Quantification and Reported Detection Limits**

GC/MS quantitative analysis are acceptable. Correct internal standards and response factors and air volumes were used to calculate final concentrations.

**Sample results have been presented in ug/m3 as well as ppbv on the laboratory reporting forms. Samples were analyzed undiluted at 250mls.**

### **1.12 Overall System Performance**

**GC/MS analytical methodology was acceptable for this analysis. The data reported agrees with the raw data provided in the final report. The laboratory provided complete data package and reported all data using acceptable protocols and laboratory qualifiers as defined in the report package.**

Reviewer's Signature Lois A. Bly Date 06/05/2021

**Appendix A  
Chain of Custody Document  
And Sample Receipt Checklist**

320 Forbes Blvd, Maryland MA 02948  
TEL 508-822-3300 FAX 508-822-3288

**Client Information**

Client: *Tenex*

Address:

Project Name: *Site Remediation*

Project Location: *02000, 555 Atlantic Ave*

Project #: *20000000000000000000*

Project Manager: *M. Carney*

ALPHA Quote #

☐ FAX

☐ ADE

Criteria Checker

(Default) Submit on Analytical Certificate (checked)

Other Formats:

☐ E-MAIL (standard pdf report)

☐ Additional Deliverables

Report to: *John Doe (Project Manager)*

**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:

Project-Specific Target Compound List: ☐

**All Columns Below Must Be Filled Out**

ALPHA Lab ID (Lab Use Only)	Sample ID	End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix	Sample Size	Can	IG	ID	Pin	Fixed Gases	Sample Comments (ie. PID)
--------------------------------	-----------	----------	------------	----------	----------------	--------------	---------------	-------------	-----	----	----	-----	-------------	---------------------------

14253-01	SV1	3/24	08:45	11:00	-760	ND	air	100	905	100	01785	X		
02	SV2	"	08:45	11:08	-3065	-285	"	"	"	"	0386	01166	X	
03	SV3	"	07:50	11:00	-3070	-009	"	"	"	"	200	02005	X	
04	SV4	"	08:08	10:57	-3051	-036	"	"	"	"	377	01006	X	
05	SV5	"	08:49	11:15	-788	ND	"	"	"	"	215	1806	X	
06	AA 3/24	"	07:37	16:46	-3203	-045	"	"	"	"	64	500	01049	X

**\*SAMPLE MATRIX CODES**

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

Requested By:

Date/Time

Received By:

Date/Time

Container Type

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





## Sample Delivery Group Summary

Alpha Job Number : L2114833

Received : 24-MAR-2021

Reviewer : Kelly O'Neill

Account Name : Tenen Environmental, LLC

Project Number : PARK CHESTER CROSSIN

Project Name : PARK CHESTER CROSSING

### Delivery Information

Samples Delivered By : Alpha Courier

Chain of Custody : Present

### Cooler Information

Cooler Seal/Seal#  
N/A Absent/

Preservation

Temperature(°C) Additional Information

### Condition Information

- |  |     |
|--|-----|
| 1) All samples on COC received?                                  | YES |
| 2) Extra samples received?                                       | NO  |
| 3) Are there any sample container discrepancies?                 | NO  |
| 4) Are there any discrepancies between sample labels & COC?      | NO  |
| 5) Are samples in appropriate containers for requested analysis? | YES |
| 6) Are samples properly preserved for requested analysis?        | YES |
| 7) Are samples within holding time for requested analysis?       | YES |
| 8) All sampling equipment returned?                              | YES |

### Volatile Organics/VPH

- |  |    |
|--|----|
| 1) Reagent Water Vials Frozen by Client? | NA |
|--|----|

**Appendix B**  
**Case Narrative**

**Project Name:** PARK CHESTER CROSSING  
**Project Number:** PARK CHESTER CROSSIN

**Lab Number:** L2114833  
**Report Date:** 03/31/21

### 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:** PARK CHESTER CROSSING  
**Project Number:** PARK CHESTER CROSSIN

**Lab Number:** L2114833  
**Report Date:** 03/31/21

**Case Narrative (continued)**

Volatile Organics in Air

Canisters were released from the laboratory on March 24, 2021. 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*

Report Date: 03/31/21

Title: Technical Director/Representative

*for 6/3/21*

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

# Results Summary Form 1 Volatile Organics in Air

Client : Tenen Environmental, LLC  
Project Name : PARK CHESTER CROSSING  
Lab ID : L2114833-01  
Client ID : SV1  
Sample Location : 1585 WHITE PLAINS RD.  
Sample Matrix : SOIL\_VAPOR  
Analytical Method : 48,TO-15  
Lab File ID : R1623110  
Sample Amount : 250 ml

Lab Number : L2114833  
Project Number : PARK CHESTER CROSSIN  
Date Collected : 03/24/21 11:09  
Date Received : 03/24/21  
Date Analyzed : 03/30/21 20:24  
Dilution Factor : 1  
Analyst : TS  
Instrument ID : AIRLAB16  
GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.456	0.200	--	2.25	0.989	--	
74-87-3	Chloromethane	0.393	0.200	--	0.812	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
75-01-4	VInyl chloride	ND	0.200	--	ND	0.511	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	79.5	5.00	--	150	9.42	--	
593-60-2	VInyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	87.2	1.00	--	207	2.38	--	
75-69-4	Trichlorofluoromethane	0.208	0.200	--	1.17	1.12	--	
67-63-0	Isopropanol	10.4	0.500	--	25.6	1.23	--	
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertlary butyl Alcohol	2.00	0.500	--	6.06	1.52	--	
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	0.760	0.200	--	2.37	0.623	--	
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	5.53	0.500	--	16.3	1.47	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	8.01	0.500	--	23.6	1.47	--	



# Results Summary Form 1 Volatile Organics in Air

Client : Tenen Environmental, LLC  
 Project Name : PARK CHESTER CROSSING  
 Lab ID : L2114833-01  
 Client ID : SV1  
 Sample Location : 1585 WHITE PLAINS RD.  
 Sample Matrix : SOIL\_VAPOR  
 Analytical Method : 48,TO-15  
 Lab File ID : R1623110  
 Sample Amount : 250 ml

Lab Number : L2114833  
 Project Number : PARK CHESTER CROSSIN  
 Date Collected : 03/24/21 11:09  
 Date Received : 03/24/21  
 Date Analyzed : 03/30/21 20:24  
 Dilution Factor : 1  
 Analyst : TS  
 Instrument ID : AIRLAB16  
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	0.495	0.200	--	1.74	0.705	--	
71-55-6	1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	U
71-43-2	Benzene	0.361	0.200	--	1.15	0.639	--	
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	0.297	0.200	--	1.02	0.688	--	
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
79-01-6	Trichloroethene	ND	0.200	--	ND	1.07	--	U
540-84-1	2,2,4-Trimethylpentane	0.239	0.200	--	1.12	0.934	--	
142-82-5	Heptane	0.733	0.200	--	3.00	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	1.42	0.200	--	5.35	0.754	--	
591-78-6	2-Hexanone	0.246	0.200	--	1.01	0.820	--	
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
127-18-4	Tetrachloroethene	0.747	0.200	--	5.07	1.36	--	
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	0.515	0.200	--	2.24	0.869	--	
179601-23-1	p/m-Xylene	2.42	0.400	--	10.5	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U



# Results Summary Form 1 Volatile Organics in Air

**Client** : Tenen Environmental, LLC  
**Project Name** : PARK CHESTER CROSSING  
**Lab ID** : L2114833-01  
**Client ID** : SV1  
**Sample Location** : 1585 WHITE PLAINS RD.  
**Sample Matrix** : SOIL\_VAPOR  
**Analytical Method** : 48,TO-15  
**Lab File ID** : R1623110  
**Sample Amount** : 250 ml

**Lab Number** : L2114833  
**Project Number** : PARK CHESTER CROSSIN  
**Date Collected** : 03/24/21 11:09  
**Date Received** : 03/24/21  
**Date Analyzed** : 03/30/21 20:24  
**Dilution Factor** : 1  
**Analyst** : TS  
**Instrument ID** : AIRLAB16  
**GC Column** : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	0.706	0.200	--	3.07	0.869	--	
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U





# Results Summary Form 1 Volatile Organics in Air

Client : Tenen Environmental, LLC  
 Project Name : PARK CHESTER CROSSING  
 Lab ID : L2114833-02  
 Client ID : SV2  
 Sample Location : 1585 WHITE PLAINS RD.  
 Sample Matrix : SOIL\_VAPOR  
 Analytical Method : 48,TO-15  
 Lab File ID : R1623112  
 Sample Amount : 250 ml

Lab Number : L2114833  
 Project Number : PARK CHESTER CROSSIN  
 Date Collected : 03/24/21 11:08  
 Date Received : 03/24/21  
 Date Analyzed : 03/30/21 21:41  
 Dilution Factor : 1  
 Analyst : TS  
 Instrument ID : AIRLAB16  
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.424	0.200	--	2.10	0.989	--	
74-87-3	Chloromethane	0.521	0.200	--	1.08	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	86.8	5.00	--	164	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	130	1.00	--	309	2.38	--	
75-69-4	Trichlorofluoromethane	ND	0.200	--	ND	1.12	--	U
67-63-0	Isopropanol	11.3	0.500	--	27.8	1.23	--	
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	2.02	0.500	--	6.12	1.52	--	
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	11.7	0.500	--	34.5	1.47	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	15.0	0.500	--	44.2	1.47	--	



# Results Summary Form 1 Volatile Organics in Air

Client : Tenen Environmental, LLC  
 Project Name : PARK CHESTER CROSSING  
 Lab ID : L2114833-02  
 Client ID : SV2  
 Sample Location : 1585 WHITE PLAINS RD.  
 Sample Matrix : SOIL\_VAPOR  
 Analytical Method : 48,TO-15  
 Lab File ID : R1623112  
 Sample Amount : 250 ml

Lab Number : L2114833  
 Project Number : PARK CHESTER CROSSIN  
 Date Collected : 03/24/21 11:08  
 Date Received : 03/24/21  
 Date Analyzed : 03/30/21 21:41  
 Dilution Factor : 1  
 Analyst : TS  
 Instrument ID : AIRLAB16  
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	0.335	0.200	--	1.18	0.705	--	
71-55-6	1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	U
71-43-2	Benzene	0.268	0.200	--	0.856	0.639	--	
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	0.213	0.200	--	0.733	0.688	--	
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
79-01-6	Trichloroethene	ND	0.200	--	ND	1.07	--	U
540-84-1	2,2,4-Trimethylpentane	0.202	0.200	--	0.943	0.934	--	
142-82-5	Heptane	0.847	0.200	--	3.47	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	0.511	0.500	--	2.09	2.05	--	
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	1.87	0.200	--	7.05	0.754	--	
591-78-6	2-Hexanone	0.477	0.200	--	1.95	0.820	--	
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
127-18-4	Tetrachloroethene	0.815	0.200	--	5.53	1.36	--	
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	0.858	0.200	--	3.73	0.869	--	
179601-23-1	p/m-Xylene	4.15	0.400	--	18.0	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U



# Results Summary Form 1 Volatile Organics in Air

**Client** : Tenen Environmental, LLC  
**Project Name** : PARK CHESTER CROSSING  
**Lab ID** : L2114833-02  
**Client ID** : SV2  
**Sample Location** : 1585 WHITE PLAINS RD.  
**Sample Matrix** : SOIL\_VAPOR  
**Analytical Method** : 48,TO-15  
**Lab File ID** : R1623112  
**Sample Amount** : 250 ml

**Lab Number** : L2114833  
**Project Number** : PARK CHESTER CROSSIN  
**Date Collected** : 03/24/21 11:08  
**Date Received** : 03/24/21  
**Date Analyzed** : 03/30/21 21:41  
**Dilution Factor** : 1  
**Analyst** : TS  
**Instrument ID** : AIRLAB16  
**GC Column** : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	1.18	0.200	--	5.13	0.869	--	
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U



# Results Summary Form 1 Volatile Organics in Air

Client : Tenen Environmental, LLC  
 Project Name : PARK CHESTER CROSSING  
 Lab ID : L2114833-03  
 Client ID : SV3  
 Sample Location : 1585 WHITE PLAINS RD.  
 Sample Matrix : SOIL VAPOR  
 Analytical Method : 48,TO-15  
 Lab File ID : R1623113  
 Sample Amount : 250 ml

Lab Number : L2114833  
 Project Number : PARK CHESTER CROSSIN  
 Date Collected : 03/24/21 11:00  
 Date Received : 03/24/21  
 Date Analyzed : 03/30/21 22:20  
 Dilution Factor : 1  
 Analyst : TS  
 Instrument ID : AIRLAB16  
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.394	0.200	--	1.95	0.989	--	
74-87-3	Chloromethane	ND	0.200	--	ND	0.413	--	U
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	95.5	5.00	--	180	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	56.3	1.00	--	134	2.38	--	
75-69-4	Trichlorofluoromethane	ND	0.200	--	ND	1.12	--	U
67-63-0	Isopropanol	11.8	0.500	--	29.0	1.23	--	
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	2.62	0.500	--	7.94	1.52	--	
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	5.71	0.500	--	16.8	1.47	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	0.215	0.200	--	1.05	0.977	--	
109-99-9	Tetrahydrofuran	8.35	0.500	--	24.6	1.47	--	



# Results Summary Form 1 Volatile Organics in Air

**Client** : Tenen Environmental, LLC  
**Project Name** : PARK CHESTER CROSSING  
**Lab ID** : L2114833-03  
**Client ID** : SV3  
**Sample Location** : 1585 WHITE PLAINS RD.  
**Sample Matrix** : SOIL\_VAPOR  
**Analytical Method** : 48,TO-15  
**Lab File ID** : R1623113  
**Sample Amount** : 250 ml

**Lab Number** : L2114833  
**Project Number** : PARK CHESTER CROSSIN  
**Date Collected** : 03/24/21 11:00  
**Date Received** : 03/24/21  
**Date Analyzed** : 03/30/21 22:20  
**Dilution Factor** : 1  
**Analyst** : TS  
**Instrument ID** : AIRLAB16  
**GC Column** : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	0.226	0.200	--	0.796	0.705	--	
71-55-6	1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	U
71-43-2	Benzene	0.207	0.200	--	0.661	0.639	--	
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	0.285	0.200	--	0.981	0.688	--	
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
79-01-6	Trichloroethene	ND	0.200	--	ND	1.07	--	U
540-84-1	2,2,4-Trimethylpentane	0.408	0.200	--	1.91	0.934	--	
142-82-5	Heptane	0.541	0.200	--	2.22	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	1.72	0.200	--	6.48	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
127-18-4	Tetrachloroethene	1.83	0.200	--	12.4	1.36	--	
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	0.541	0.200	--	2.35	0.869	--	
179601-23-1	p/m-Xylene	2.69	0.400	--	11.7	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U



# Results Summary Form 1 Volatile Organics in Air

**Client** : Tenen Environmental, LLC  
**Project Name** : PARK CHESTER CROSSING  
**Lab ID** : L2114833-03  
**Client ID** : SV3  
**Sample Location** : 1585 WHITE PLAINS RD.  
**Sample Matrix** : SOIL\_VAPOR  
**Analytical Method** : 48,TO-15  
**Lab File ID** : R1623113  
**Sample Amount** : 250 ml

**Lab Number** : L2114833  
**Project Number** : PARK CHESTER CROSSIN  
**Date Collected** : 03/24/21 11:00  
**Date Received** : 03/24/21  
**Date Analyzed** : 03/30/21 22:20  
**Dilution Factor** : 1  
**Analyst** : TS  
**Instrument ID** : AIRLAB16  
**GC Column** : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	0.732	0.200	--	3.18	0.869	--	
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U



# Results Summary Form 1 Volatile Organics in Air

Client : Tenen Environmental, LLC  
 Project Name : PARK CHESTER CROSSING  
 Lab ID : L2114833-04  
 Client ID : SV4  
 Sample Location : 1585 WHITE PLAINS RD.  
 Sample Matrix : SOIL\_VAPOR  
 Analytical Method : 48,TO-15  
 Lab File ID : R1623114  
 Sample Amount : 250 ml

Lab Number : L2114833  
 Project Number : PARK CHESTER CROSSIN  
 Date Collected : 03/24/21 10:57  
 Date Received : 03/24/21  
 Date Analyzed : 03/30/21 22:59  
 Dilution Factor : 1  
 Analyst : TS  
 Instrument ID : AIRLAB16  
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.414	0.200	--	2.05	0.989	--	
74-87-3	Chloromethane	0.388	0.200	--	0.801	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	121	5.00	--	228	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	43.7	1.00	--	104	2.38	--	
75-69-4	Trichlorofluoromethane	ND	0.200	--	ND	1.12	--	U
67-63-0	Isopropanol	20.0	0.500	--	49.2	1.23	--	
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	3.18	0.500	--	9.64	1.52	--	
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	4.35	0.500	--	12.8	1.47	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	9.29	0.500	--	27.4	1.47	--	



# Results Summary Form 1 Volatile Organics in Air

Client : Tenen Environmental, LLC  
 Project Name : PARK CHESTER CROSSING  
 Lab ID : L2114833-04  
 Client ID : SV4  
 Sample Location : 1585 WHITE PLAINS RD.  
 Sample Matrix : SOIL\_VAPOR  
 Analytical Method : 48,TO-15  
 Lab File ID : R1623114  
 Sample Amount : 250 ml

Lab Number : L2114833  
 Project Number : PARK CHESTER CROSSIN  
 Date Collected : 03/24/21 10:57  
 Date Received : 03/24/21  
 Date Analyzed : 03/30/21 22:59  
 Dilution Factor : 1  
 Analyst : TS  
 Instrument ID : AIRLAB16  
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	0.202	0.200	--	0.712	0.705	--	
71-55-6	1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	U
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
79-01-6	Trichloroethene	ND	0.200	--	ND	1.07	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	0.535	0.200	--	2.19	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	1.75	0.200	--	6.59	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
127-18-4	Tetrachloroethene	1.25	0.200	--	8.48	1.36	--	
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	0.530	0.200	--	2.30	0.869	--	
179601-23-1	p/m-Xylene	2.66	0.400	--	11.6	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U





# Results Summary Form 1 Volatile Organics in Air

**Client** : Tenen Environmental, LLC  
**Project Name** : PARK CHESTER CROSSING  
**Lab ID** : L2114833-04  
**Client ID** : SV4  
**Sample Location** : 1585 WHITE PLAINS RD.  
**Sample Matrix** : SOIL\_VAPOR  
**Analytical Method** : 48,TO-15  
**Lab File ID** : R1623114  
**Sample Amount** : 250 ml

**Lab Number** : L2114833  
**Project Number** : PARK CHESTER CROSSIN  
**Date Collected** : 03/24/21 10:57  
**Date Received** : 03/24/21  
**Date Analyzed** : 03/30/21 22:59  
**Dilution Factor** : 1  
**Analyst** : TS  
**Instrument ID** : AIRLAB16  
**GC Column** : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	0.761	0.200	--	3.31	0.869	--	
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U



# Results Summary Form 1 Volatile Organics in Air

Client : Tenen Environmental, LLC  
 Project Name : PARK CHESTER CROSSING  
 Lab ID : L2114833-05  
 Client ID : SV5  
 Sample Location : 1585 WHITE PLAINS RD.  
 Sample Matrix : SOIL\_VAPOR  
 Analytical Method : 48,TO-15  
 Lab File ID : R1623115  
 Sample Amount : 250 ml

Lab Number : L2114833  
 Project Number : PARK CHESTER CROSSIN  
 Date Collected : 03/24/21 11:15  
 Date Received : 03/24/21  
 Date Analyzed : 03/30/21 23:37  
 Dilution Factor : 1  
 Analyst : TS  
 Instrument ID : AIRLAB16  
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--	U
74-87-3	Chloromethane	ND	0.200	--	ND	0.413	--	U
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	70.8	5.00	--	133	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	57.3	1.00	--	136	2.38	--	
75-69-4	Trichlorofluoromethane	ND	0.200	--	ND	1.12	--	U
67-63-0	Isopropanol	6.48	0.500	--	15.9	1.23	--	
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	1.36	0.500	--	4.12	1.52	--	
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	4.99	0.500	--	14.7	1.47	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	2.20	0.200	--	10.7	0.977	--	
109-99-9	Tetrahydrofuran	10.1	0.500	--	29.8	1.47	--	



# Results Summary Form 1 Volatile Organics in Air

Client : Tenen Environmental, LLC  
Project Name : PARK CHESTER CROSSING  
Lab ID : L2114833-05  
Client ID : SV5  
Sample Location : 1585 WHITE PLAINS RD.  
Sample Matrix : SOIL\_VAPOR  
Analytical Method : 48,TO-15  
Lab File ID : R1623115  
Sample Amount : 250 ml

Lab Number : L2114833  
Project Number : PARK CHESTER CROSSIN  
Date Collected : 03/24/21 11:15  
Date Received : 03/24/21  
Date Analyzed : 03/30/21 23:37  
Dilution Factor : 1  
Analyst : TS  
Instrument ID : AIRLAB16  
GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	37.9	0.200	--	134	0.705	--	
71-55-6	1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	U
71-43-2	Benzene	1.19	0.200	--	3.80	0.639	--	
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	24.3	0.200	--	83.6	0.688	--	
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
79-01-6	Trichloroethene	ND	0.200	--	ND	1.07	--	U
540-84-1	2,2,4-Trimethylpentane	22.5	0.200	--	105	0.934	--	
142-82-5	Heptane	6.17	0.200	--	25.3	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	1.63	0.200	--	6.14	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
127-18-4	Tetrachloroethene	0.824	0.200	--	5.59	1.36	--	
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	0.862	0.200	--	3.74	0.869	--	
179601-23-1	p/m-Xylene	4.32	0.400	--	18.8	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.652	--	U



# Results Summary

## Form 1

### Volatile Organics in Air

**Client** : Tenen Environmental, LLC  
**Project Name** : PARK CHESTER CROSSING  
**Lab ID** : L2114833-05  
**Client ID** : SV5  
**Sample Location** : 1585 WHITE PLAINS RD.  
**Sample Matrix** : SOIL VAPOR  
**Analytical Method** : 48,TO-15  
**Lab File ID** : R1623115  
**Sample Amount** : 250 ml

**Lab Number** : L2114833  
**Project Number** : PARK CHESTER CROSSIN  
**Date Collected** : 03/24/21 11:15  
**Date Received** : 03/24/21  
**Date Analyzed** : 03/30/21 23:37  
**Dilution Factor** : 1  
**Analyst** : TS  
**Instrument ID** : AIRLAB16  
**GC Column** : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	1.29	0.200	--	5.60	0.869	--	
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U



# Results Summary Form 1 Volatile Organics in Air

Client : Tenen Environmental, LLC  
Project Name : PARK CHESTER CROSSING  
Lab ID : L2114833-06  
Client ID : AA 3/24  
Sample Location : 1585 WHITE PLAINS RD.  
Sample Matrix : AIR  
Analytical Method : 48,TO-15  
Lab File ID : R1623105  
Sample Amount : 250 ml

Lab Number : L2114833  
Project Number : PARK CHESTER CROSSIN  
Date Collected : 03/24/21 16:46  
Date Received : 03/24/21  
Date Analyzed : 03/30/21 17:06  
Dilution Factor : 1  
Analyst : TS  
Instrument ID : AIRLAB16  
GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.454	0.200	--	2.24	0.989	--	
74-87-3	Chloromethane	0.557	0.200	--	1.15	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	8.05	5.00	--	15.2	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	1.92	1.00	--	4.56	2.38	--	
75-69-4	Trichlorofluoromethane	ND	0.200	--	ND	1.12	--	U
67-63-0	Isopropanol	1.75	0.500	--	4.30	1.23	--	
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U



# Results Summary Form 1 Volatile Organics in Air

Client : Tenen Environmental, LLC  
Project Name : PARK CHESTER CROSSING  
Lab ID : L2114833-06  
Client ID : AA 3/24  
Sample Location : 1585 WHITE PLAINS RD.  
Sample Matrix : AIR  
Analytical Method : 48,TO-15  
Lab File ID : R1623105  
Sample Amount : 250 ml

Lab Number : L2114833  
Project Number : PARK CHESTER CROSSIN  
Date Collected : 03/24/21 16:46  
Date Received : 03/24/21  
Date Analyzed : 03/30/21 17:06  
Dilution Factor : 1  
Analyst : TS  
Instrument ID : AIRLAB16  
GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	ND	0.200	--	ND	0.705	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	U
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
79-01-6	Trichloroethene	ND	0.200	--	ND	1.07	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	0.321	0.200	--	1.21	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
127-18-4	Tetrachloroethene	ND	0.200	--	ND	1.36	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	ND	0.400	--	ND	1.74	--	U
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U



# Results Summary Form 1 Volatile Organics in Air

Client : Tenen Environmental, LLC  
 Project Name : PARK CHESTER CROSSING  
 Lab ID : L2114833-06  
 Client ID : AA 3/24  
 Sample Location : 1585 WHITE PLAINS RD.  
 Sample Matrix : AIR  
 Analytical Method : 48,TO-15  
 Lab File ID : R1623105  
 Sample Amount : 250 ml

Lab Number : L2114833  
 Project Number : PARK CHESTER CROSSIN  
 Date Collected : 03/24/21 16:46  
 Date Received : 03/24/21  
 Date Analyzed : 03/30/21 17:06  
 Dilution Factor : 1  
 Analyst : TS  
 Instrument ID : AIRLAB16  
 GC Column : RTX-1

CAS NO.	Parameter	Results	ppbV		Results	ug/m3		Qualifier
			RL	MDL		RL	MDL	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	ND	0.200	--	ND	0.869	--	U
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U



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

**ORGANIC ANALYSES  
VOLATILES BY GC/MS**

**For Groundwater Samples  
Collected March 24, 2021  
From 1585 White Plains Road, Bronx, New York  
Park Chester Crossing  
by Tenen Environmental**

**SAMPLE DELIVERY GROUP NUMBER:  
L2114831**

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

**SUBMITTED TO:**

**Ms. Claire Zaccheo  
Tenen Environmental  
121 West 27<sup>th</sup> Street, Suite 702  
New York, NY 10001**

**June 05, 2021**

**PREPARED BY:**

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

A handwritten signature in cursive script, reading "Lori A. Beyer", is written over the printed name and title of the preparer.



1585 White Plains Road, Bronx, NY – Groundwater Sampling  
Data Usability Summary Report (Data Validation):  
March 2021 Groundwater Sampling Event; -Volatiles

Table of Contents:

	Introduction
	Data Qualifier Definitions
	Sample Receipt
1.0	Volatile Organics by GC/MS SW846 Method 8260C
1.1	Holding Time
1.2	System Monitoring Compound (Surrogate) Recovery
1.3	Matrix Spikes (MS), Matrix Spike Duplicates (MSD)
1.4	Laboratory Control Sample/Laboratory Control Duplicate
1.5	Blank Contamination
1.6	GC/MS Instrument Performance Check (Tuning)
1.7	Initial and Continuing Calibrations
1.8	Internal Standards
1.9	Field Duplicates
1.10	Target Compound List Identification
1.11	Compound Quantification and Reported Detection Limits
1.12	Overall System Performance

**APPENDICES:**

- A. Chain of Custody Document and Sample Receipt Checklist
- B. Case Narrative
- C. Data Summary Form Is with Qualifications

### **Introduction:**

A validation was performed on groundwater samples and the associated quality control (Trip Blank) for organic analysis for samples collected under chain of custody documentation by Tenen Environmental and submitted to Alpha Analytical for subsequent analysis. This report contains the laboratory and validation results for the field samples itemized below.

The samples were analyzed by Alpha Analytical, utilizing SW846 and EPA Methods and submitted under NYSDEC ASP Category B equivalent deliverable requirements for the associated analytical methodologies employed. The analytical testing and data review for groundwater samples consisted of the full compound analyte list for Volatile Organics. The data was evaluated in accordance with EPA Region II National Functional Guidelines for Organic Data Review and EPA Region II SOPs for 8260C and in conjunction with the analytical methodologies for which the samples were analyzed, where applicable and relevant.

Sample ID	Lab ID	Analysis	Date Collected/Received
MW-1	L2114831-01	Volatile Organics by 8260C	03/24/2021
MW-3	L2114831-02	Volatile Organics by 8260C	03/24/2021
Trip Blank	L2114831-03	Volatile Organics by 8260C	03/24/2021

### **Data Qualifier Definitions:**

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

- U** - The analyte was analyzed for but was not detected above the reported sample quantitation limit.
- J** - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ** - The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
- R** - The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.
- N** - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."
- NJ** - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate quantity.
- J+** - The result is an estimated quantity, but the result may be biased high.
- J-** - The result is an estimated quantity, but the result may be biased low.
- D** - Analyte concentration is from diluted analysis.

**Sample Receipt:**

The Chain of Custody document indicates that the samples were received at Alpha Analytical via laboratory courier upon completion of the sampling event. Sample login notes were generated. The cooler temperature for sample receipts was recorded upon receipt and determined to be acceptable (< 6 degrees C). The actual temperature (2.5 degrees C) is recorded on the sample receipt checklist provided in Appendix A of this report. No problems and/or discrepancies were noted, consequently, the integrity of the samples has been assumed to be good.

The data summary Form I's included in Appendix C include all usable (qualified) and unusable (rejected) results for the samples identified above. The Form I's summarize the detailed narrative section of the report. All data validation qualifications have been reported on the Form I's for ease of review and verification.

**NOTE:**

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

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

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

**1.1 Holding Time**

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

**Samples pertaining to this SDG were analyzed within the method required holding times as well as the technical holding times for data validation of 14 days from collection for HCL preserved vials. No data validation qualifiers were required based upon holding time.**

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

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

**Surrogate recoveries (%R) for Dibromofluoromethane, 1,2-Dichloroethane-d4, Toluene-d8 and 4-Bromofluorobenzene were found to be within acceptable limits for surrogate compounds for all analyses.**

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

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

**MS/MSD data was not provided in the lab report.**

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

## **1.4 Laboratory Control Sample/Laboratory Control Duplicate**

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

**Acceptable LCS/Blank Spike and LCS/LCS Duplicate was analyzed. Acceptable recovery values were observed with the exception of Vinyl Acetate which recovered above limits at 140% in the LCS Duplicate and low trans-1,4-Dichloro-2-butene at 65% in the LCS. Since Vinyl Acetate was not detected in associated samples, no qualifications to the data were required. High recovery does not support any potential loss of detection and/or result bias. Non-detects for trans-1,4-Dichloro-2-butene have been qualified, “UJ.” RPD for Naphthalene (34%), 1,2,3-Trichlorobenzene (22%), trans-1,4-Dichloro-2-butene (29%), 1,1,2-Trichloroethane (22%) and 1,1,2,2-Tetrachloroethane (21%) was outside laboratory criteria of 20%. Data was not qualified based on RPD outliers.**

## **1.5 Blank Contamination**

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

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

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

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

\*\*Qualifications based on instrument blank results affect only the sample analyzed immediately after the sample that has target compounds that exceed the calibration range or non-target compounds that exceed 100 ug/L. Below is a summary of the compounds in the sample and the associated qualifications that have been applied:

**A) Method Blank Contamination:**

**No target analytes were detected in the method blank associated with sample analysis.**

**B) Field Blank Contamination:**

**Field Blank was not required.**

**C) Trip Blank Contamination:**

**Acetone was detected in the Trip Blank at 2.5 ug/L. The laboratory reported concentration of Acetone (53 ug/L) in MW1 at a 1:5 dilution has been qualified, "J+" biased high based on professional judgement since the reported value when corrected for dilution is slightly >2x the CRQL and could not be negated. The laboratory reported result in MW3 (8.8 ug/L) has been negated, "U" since the detection is less than 2x the CRQL (5 ug/L).**

## **1.6 GC/MS Instrument Performance Check**

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

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

### 1.7 Initial and Continuing Calibrations

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

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

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

**Response factors for the target analytes reported were found to be within acceptable limits ( $\geq 0.05$ ) and ( $\geq 0.01$  for poor responders) and minimum response criteria in Table 4 of Method 8260C, for the initial and continuing calibrations for all reported analytes except for 1,4-Dioxane (0.001). Non-detects in MW1, MW3 and Trip Blank must be considered unreliable and have been rejected, "R."**

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

linearity exists. Closing CCV must meet 30% criteria. Poor responders must be  $\leq$  40%.

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

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

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

**CCAL GONZO 3/29/21 – Bromochloromethane – 21.9%, trans-1,4-Dichloro-2-butene – 34.6%; “UJ” non-detects in MW1, MW3 and the Trip Blank.**

### **1.8 Internal Standards**

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

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

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

### **1.9 Field Duplicates**

Field duplicate samples are collected and analyzed as an indication of overall precision. These results are expected to have more variability than laboratory duplicate samples. Acceptable RPD for groundwater is 25%. Field Duplicate was not required for this sampling event.

#### **1.10 Target Compound List Identification**

TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards.

For the results to be a positive hit, the sample peak must be within  $\pm 0.06$ RRT units of the standard compound and have an ion spectrum which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound.

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

#### **1.11 Compound Quantification and Reported Detection Limits**

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

As required, the laboratory reported "J" values between the reporting limits (RL) and Method Detection Limits (MDLs). This is consistent with common laboratory practices and a requirement of the National Environmental Laboratory Approval Program (NELAP). Groundwater sample MW3 and the Trip Blank were analyzed undiluted at 10mls. MW1 was analyzed at 2ml (1:5 dilution). Reporting limits have been adjusted accordingly. Dilution is acceptable based on review of the raw data and raw concentrations within the upper half of the instruments' linear calibration range.

#### **1.12 Overall System Performance**

Good resolution and chromatographic performance were observed.

Reviewer's Signature Paul A. Beyer Date 06/05/2021



**Appendix A  
Chain of Custody Document  
And Sample Receipt Checklist**





## Sample Delivery Group Summary

Alpha Job Number : L2114831

Received : 24-MAR-2021

Reviewer : Craig Green

Account Name : Tenen Environmental, LLC

Project Number : PARKCHESTER CROSSING

Project Name : PARKCHESTER CROSSING

### Delivery Information

Samples Delivered By : Alpha Courier

Chain of Custody : Present

### Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	2.5	

### Condition Information

- |  |     |
|--|-----|
| 1) All samples on COC received?                                  | YES |
| 2) Extra samples received?                                       | NO  |
| 3) Are there any sample container discrepancies?                 | NO  |
| 4) Are there any discrepancies between sample labels & COC?      | NO  |
| 5) Are samples in appropriate containers for requested analysis? | YES |
| 6) Are samples properly preserved for requested analysis?        | YES |
| 7) Are samples within holding time for requested analysis?       | YES |
| 8) All sampling equipment returned?                              | NA  |

### Volatile Organics/VPH

- |  |    |
|--|----|
| 1) Reagent Water Vials Frozen by Client? | NO |
|--|----|

**Appendix B  
Case Narrative**

**Project Name:** PARKCHESTER CROSSING  
**Project Number:** PARKCHESTER CROSSING

**Lab Number:** L2114831  
**Report Date:** 03/31/21

### 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:** PARKCHESTER CROSSING  
**Project Number:** PARKCHESTER CROSSING

**Lab Number:** L2114831  
**Report Date:** 03/31/21

**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.

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: 

Report Date: 03/31/21



Title: Technical Director/Representative

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

# Results Summary

## Form 1

### Volatile Organics by GC/MS

Client : Tenen Environmental, LLC  
 Project Name : PARKCHESTER CROSSING  
 Lab ID : L2114831-01D  
 Client ID : MW 1  
 Sample Location : 1585 WHITE PLAINS RD  
 Sample Matrix : WATER  
 Analytical Method : 1,8260C  
 Lab File ID : VG210329A12  
 Sample Amount : 2 ml  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2114831  
 Project Number : PARKCHESTER CROSSING  
 Date Collected : 03/24/21 12:01  
 Date Received : 03/24/21  
 Date Analyzed : 03/29/21 13:05  
 Dilution Factor : 5  
 Analyst : AJK  
 Instrument ID : GONZO  
 GC Column : RTX-502.2  
 %Solids : N/A  
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-09-2	Methylene chloride	ND	12	3.5	U
75-34-3	1,1-Dichloroethane	ND	12	3.5	U
67-66-3	Chloroform	ND	12	3.5	U
56-23-5	Carbon tetrachloride	ND	2.5	0.67	U
78-87-5	1,2-Dichloropropane	ND	5.0	0.68	U
124-48-1	Dibromochloromethane	ND	2.5	0.74	U
79-00-5	1,1,2-Trichloroethane	ND	7.5	2.5	U
127-18-4	Tetrachloroethene	ND	2.5	0.90	U
108-90-7	Chlorobenzene	ND	12	3.5	U
75-69-4	Trichlorofluoromethane	ND	12	3.5	U
107-06-2	1,2-Dichloroethane	ND	2.5	0.66	U
71-55-6	1,1,1-Trichloroethane	ND	12	3.5	U
75-27-4	Bromodichloromethane	ND	2.5	0.96	U
10061-02-6	trans-1,3-Dichloropropene	ND	2.5	0.82	U
10061-01-5	cis-1,3-Dichloropropene	ND	2.5	0.72	U
542-75-6	1,3-Dichloropropene, Total	ND	2.5	0.72	U
563-58-6	1,1-Dichloropropene	ND	12	3.5	U
75-25-2	Bromoform	ND	10	3.2	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.5	0.84	U
71-43-2	Benzene	750	2.5	0.80	
108-88-3	Toluene	7.6	12	3.5	J
100-41-4	Ethylbenzene	5.0	12	3.5	J
74-87-3	Chloromethane	ND	12	3.5	U
74-83-9	Bromomethane	ND	12	3.5	U
75-01-4	Vinyl chloride	ND	5.0	0.36	U





# Results Summary Form 1 Volatile Organics by GC/MS

Client : Tenen Environmental, LLC  
Project Name : PARKCHESTER CROSSING  
Lab ID : L2114831-01D  
Client ID : MW 1  
Sample Location : 1585 WHITE PLAINS RD  
Sample Matrix : WATER  
Analytical Method : 1,8260C  
Lab File ID : VG210329A12  
Sample Amount : 2 ml  
Level : LOW  
Extract Volume (MeOH) : N/A

Lab Number : L2114831  
Project Number : PARKCHESTER CROSSING  
Date Collected : 03/24/21 12:01  
Date Received : 03/24/21  
Date Analyzed : 03/29/21 13:05  
Dilution Factor : 5  
Analyst : AJK  
Instrument ID : GONZO  
GC Column : RTX-502.2  
%Solids : N/A  
Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-00-3	Chloroethane	ND	12	3.5	U
75-35-4	1,1-Dichloroethene	ND	2.5	0.84	U
156-60-5	trans-1,2-Dichloroethene	ND	12	3.5	U
79-01-6	Trichloroethene	ND	2.5	0.88	U
95-50-1	1,2-Dichlorobenzene	ND	12	3.5	U
541-73-1	1,3-Dichlorobenzene	ND	12	3.5	U
106-46-7	1,4-Dichlorobenzene	ND	12	3.5	U
1634-04-4	Methyl tert butyl ether	ND	12	3.5	U
179601-23-1	p/m-Xylene	20	12	3.5	
95-47-6	o-Xylene	ND	12	3.5	U
1330-20-7	Xylenes, Total	20	12	3.5	
156-59-2	cis-1,2-Dichloroethene	ND	12	3.5	U
540-59-0	1,2-Dichloroethene, Total	ND	12	3.5	U
74-95-3	Dibromomethane	ND	25	5.0	U
96-18-4	1,2,3-Trichloropropane	ND	12	3.5	U
107-13-1	Acrylonitrile	ND	25	7.5	U
100-42-5	Styrene	ND	12	3.5	U
75-71-8	Dichlorodifluoromethane	ND	25	5.0	U
67-64-1	Acetone	53	25	7.3	J+
75-15-0	Carbon disulfide	ND	25	5.0	U
78-93-3	2-Butanone	ND	25	9.7	U
108-05-4	Vinyl acetate	ND	25	5.0	U
108-10-1	4-Methyl-2-pentanone	ND	25	5.0	U
591-78-6	2-Hexanone	ND	25	5.0	U
74-97-5	Bromochloromethane	ND	12	3.5	-U J

for 6/3/21



# Results Summary Form 1 Volatile Organics by GC/MS

Client : Tenen Environmental, LLC  
Project Name : PARKCHESTER CROSSING  
Lab ID : L2114831-01D  
Client ID : MW 1  
Sample Location : 1585 WHITE PLAINS RD  
Sample Matrix : WATER  
Analytical Method : 1,8260C  
Lab File ID : VG210329A12  
Sample Amount : 2 ml  
Level : LOW  
Extract Volume (MeOH) : N/A

Lab Number : L2114831  
Project Number : PARKCHESTER CROSSING  
Date Collected : 03/24/21 12:01  
Date Received : 03/24/21  
Date Analyzed : 03/29/21 13:05  
Dilution Factor : 5  
Analyst : AJK  
Instrument ID : GONZO  
GC Column : RTX-502.2  
%Solids : N/A  
Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
594-20-7	2,2-Dichloropropane	ND	12	3.5	U
106-93-4	1,2-Dibromoethane	ND	10	3.2	U
142-28-9	1,3-Dichloropropane	ND	12	3.5	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	12	3.5	U
108-86-1	Bromobenzene	ND	12	3.5	U
104-51-8	n-Butylbenzene	9.0	12	3.5	J
135-98-8	sec-Butylbenzene	11	12	3.5	J
98-06-6	tert-Butylbenzene	ND	12	3.5	U
95-49-8	o-Chlorotoluene	ND	12	3.5	U
106-43-4	p-Chlorotoluene	ND	12	3.5	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	12	3.5	U
87-68-3	Hexachlorobutadiene	ND	12	3.5	U
98-82-8	Isopropylbenzene	32	12	3.5	
99-87-6	p-Isopropyltoluene	ND	12	3.5	U
91-20-3	Naphthalene	8.7	12	3.5	J
103-65-1	n-Propylbenzene	73	12	3.5	
87-61-6	1,2,3-Trichlorobenzene	ND	12	3.5	U
120-82-1	1,2,4-Trichlorobenzene	ND	12	3.5	U
108-67-8	1,3,5-Trimethylbenzene	ND	12	3.5	U
95-63-6	1,2,4-Trimethylbenzene	ND	12	3.5	U
123-91-1	1,4-Dioxane	ND	1200	300	<del>U</del> R
105-05-5	p-Diethylbenzene	18	10	3.5	
622-96-8	p-Ethyltoluene	5.7	10	3.5	J
95-93-2	1,2,4,5-Tetramethylbenzene	53	10	2.7	
60-29-7	Ethyl ether	ND	12	3.5	U

*Jan 6/3/21*



# Results Summary

## Form 1

### Volatile Organics by GC/MS

Client	: Tenen Environmental, LLC	Lab Number	: L2114831
Project Name	: PARKCHESTER CROSSING	Project Number	: PARKCHESTER CROSSING
Lab ID	: L2114831-01D	Date Collected	: 03/24/21 12:01
Client ID	: MW 1	Date Received	: 03/24/21
Sample Location	: 1585 WHITE PLAINS RD	Date Analyzed	: 03/29/21 13:05
Sample Matrix	: WATER	Dilution Factor	: 5
Analytical Method	: 1,8260C	Analyst	: AJK
Lab File ID	: VG210329A12	Instrument ID	: GONZO
Sample Amount	: 2 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	12	3.5	UJ

for 6/3/21



# Results Summary Form 1 Volatile Organics by GC/MS

Client : Tenen Environmental, LLC  
 Project Name : PARKCHESTER CROSSING  
 Lab ID : L2114831-02  
 Client ID : MW 3  
 Sample Location : 1585 WHITE PLAINS RD  
 Sample Matrix : WATER  
 Analytical Method : 1,8260C  
 Lab File ID : VG210329A13  
 Sample Amount : 10 ml  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2114831  
 Project Number : PARKCHESTER CROSSING  
 Date Collected : 03/24/21 11:45  
 Date Received : 03/24/21  
 Date Analyzed : 03/29/21 13:33  
 Dilution Factor : 1  
 Analyst : AJK  
 Instrument ID : GONZO  
 GC Column : RTX-502.2  
 %Solids : N/A  
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	2.9	0.50	0.18	
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U



# Results Summary Form 1 Volatile Organics by GC/MS

Client : Tenen Environmental, LLC  
Project Name : PARKCHESTER CROSSING  
Lab ID : L2114831-02  
Client ID : MW 3  
Sample Location : 1585 WHITE PLAINS RD  
Sample Matrix : WATER  
Analytical Method : 1,8260C  
Lab File ID : VG210329A13  
Sample Amount : 10 ml  
Level : LOW  
Extract Volume (MeOH) : N/A

Lab Number : L2114831  
Project Number : PARKCHESTER CROSSING  
Date Collected : 03/24/21 11:45  
Date Received : 03/24/21  
Date Analyzed : 03/29/21 13:33  
Dilution Factor : 1  
Analyst : AJK  
Instrument ID : GONZO  
GC Column : RTX-502.2  
%Solids : N/A  
Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	0.18	0.50	0.18	J
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	8.8	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U

# Results Summary Form 1 Volatile Organics by GC/MS

Client : Tenen Environmental, LLC  
Project Name : PARKCHESTER CROSSING  
Lab ID : L2114831-02  
Client ID : MW 3  
Sample Location : 1585 WHITE PLAINS RD  
Sample Matrix : WATER  
Analytical Method : 1,8260C  
Lab File ID : VG210329A13  
Sample Amount : 10 ml  
Level : LOW  
Extract Volume (MeOH) : N/A

Lab Number : L2114831  
Project Number : PARKCHESTER CROSSING  
Date Collected : 03/24/21 11:45  
Date Received : 03/24/21  
Date Analyzed : 03/29/21 13:33  
Dilution Factor : 1  
Analyst : AJK  
Instrument ID : GONZO  
GC Column : RTX-502.2  
%Solids : N/A  
Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	U <i>R</i>
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U

*for 6/3/21*



**Results Summary**  
**Form 1**  
**Volatile Organics by GC/MS**

Client : Tenen Environmental, LLC  
Project Name : PARKCHESTER CROSSING  
Lab ID : L2114831-02  
Client ID : MW 3  
Sample Location : 1585 WHITE PLAINS RD  
Sample Matrix : WATER  
Analytical Method : 1,8260C  
Lab File ID : VG210329A13  
Sample Amount : 10 ml  
Level : LOW  
Extract Volume (MeOH) : N/A

Lab Number : L2114831  
Project Number : PARKCHESTER CROSSING  
Date Collected : 03/24/21 11:45  
Date Received : 03/24/21  
Date Analyzed : 03/29/21 13:33  
Dilution Factor : 1  
Analyst : AJK  
Instrument ID : GONZO  
GC Column : RTX-502.2  
%Solids : N/A  
Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	UJ

for  
6/3/21



# Results Summary

## Form 1

### Volatile Organics by GC/MS

Client : Tenen Environmental, LLC  
 Project Name : PARKCHESTER CROSSING  
 Lab ID : L2114831-03  
 Client ID : TRIP BLANK  
 Sample Location : 1585 WHITE PLAINS RD  
 Sample Matrix : Trip Blank (aqueous)  
 Analytical Method : 1,8260C  
 Lab File ID : VG210329A14  
 Sample Amount : 10 ml  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2114831  
 Project Number : PARKCHESTER CROSSING  
 Date Collected : 03/24/21 00:00  
 Date Received : 03/24/21  
 Date Analyzed : 03/29/21 14:00  
 Dilution Factor : 1  
 Analyst : AJK  
 Instrument ID : GONZO  
 GC Column : RTX-502.2  
 %Solids : N/A  
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U





# Results Summary Form 1 Volatile Organics by GC/MS

Client : Tenen Environmental, LLC  
Project Name : PARKCHESTER CROSSING  
Lab ID : L2114831-03  
Client ID : TRIP BLANK  
Sample Location : 1585 WHITE PLAINS RD  
Sample Matrix : Trip Blank (aqueous)  
Analytical Method : 1,8260C  
Lab File ID : VG210329A14  
Sample Amount : 10 ml  
Level : LOW  
Extract Volume (MeOH) : N/A

Lab Number : L2114831  
Project Number : PARKCHESTER CROSSING  
Date Collected : 03/24/21 00:00  
Date Received : 03/24/21  
Date Analyzed : 03/29/21 14:00  
Dilution Factor : 1  
Analyst : AJK  
Instrument ID : GONZO  
GC Column : RTX-502.2  
%Solids : N/A  
Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	2.5	5.0	1.5	J
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U

8/8/21  
AJK  
ALPHA ANALYTICAL

# Results Summary Form 1 Volatile Organics by GC/MS

Client : Tenen Environmental, LLC  
Project Name : PARKCHESTER CROSSING  
Lab ID : L2114831-03  
Client ID : TRIP BLANK  
Sample Location : 1585 WHITE PLAINS RD  
Sample Matrix : Trip Blank (aqueous)  
Analytical Method : 1,8260C  
Lab File ID : VG210329A14  
Sample Amount : 10 ml  
Level : LOW  
Extract Volume (MeOH) : N/A

Lab Number : L2114831  
Project Number : PARKCHESTER CROSSING  
Date Collected : 03/24/21 00:00  
Date Received : 03/24/21  
Date Analyzed : 03/29/21 14:00  
Dilution Factor : 1  
Analyst : AJK  
Instrument ID : GONZO  
GC Column : RTX-502.2  
%Solids : N/A  
Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	<del>U</del> R
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U

for  
6/3/24



# Results Summary

## Form 1

### Volatile Organics by GC/MS

Client : Tenen Environmental, LLC  
 Project Name : PARKCHESTER CROSSING  
 Lab ID : L2114831-03  
 Client ID : TRIP BLANK  
 Sample Location : 1585 WHITE PLAINS RD  
 Sample Matrix : Trip Blank (aqueous)  
 Analytical Method : 1,8260C  
 Lab File ID : VG210329A14  
 Sample Amount : 10 ml  
 Level : LOW  
 Extract Volume (MeOH) : N/A

Lab Number : L2114831  
 Project Number : PARKCHESTER CROSSING  
 Date Collected : 03/24/21 00:00  
 Date Received : 03/24/21  
 Date Analyzed : 03/29/21 14:00  
 Dilution Factor : 1  
 Analyst : AJK  
 Instrument ID : GONZO  
 GC Column : RTX-502.2  
 %Solids : N/A  
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	<del>U</del> UJ

8/16/3/21

