February 25, 2021

Michael Haggerty, QEP
Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 11th Floor
Albany, NY 12233

Re: Potential CVOC Source Investigation Data Summary Letter Report
Former Acme Steel/Metal Works
95 Lombardy/46 Anthony Street, Brooklyn, NY 11222
NYSDEC Site No. 224131
Langan Project No.: 170157201

Dear Mr. Haggerty:

Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. (Langan) prepared this Potential Chlorinated Volatile Organic Compound (CVOC) Source Investigation (SI) Data Summary Letter Report, on behalf of Whitehead Company, to document the findings of sub-slab soil vapor screening and sub-slab soil vapor and air sampling at the Former Acme Steel/Metal Works property located at 95 Lombardy Street and 46 Anthony Street in Brooklyn, New York (the site). The site is a New York State Department of Environmental Conservation (NYSDEC) Class 2 Inactive Hazardous Waste Disposal Site (IHWDS) and is identified as NYSDEC Site No. 224131.

The Potential CVOC SI was performed to confirm the presence or absence of a CVOC source on site, and thereby conclude the remedial investigation phase for the site. The investigation was conducted in accordance with the NYSDEC-approved Potential CVOC SI Work Plan (referred to hereafter as the "work plan"), prepared by Langan and dated November 25, 2020. Per the work plan, an Interim Data Summary containing the results of the Potential CVOC SI was provided to you via email on January 15, 2021.

SITE LOCATION AND BACKGROUND

The site occupies an area of about 44,000 square feet at 95 Lombardy Street (Tax Block 2819, Lot 8) and 46-60 Anthony Street (Tax Block 2819, Lot 11) in Brooklyn, New York. The site is improved with three 2-story brick buildings and one 1-story brick building, and is adjoined by Anthony Street to the north, Porter Avenue to the east, Lombardy Street and warehouse buildings to the south, and Vandervoort Avenue to the west. A site location map is provided as Figure 1 and a site plan is provided as Figure 2.

The site was used for metal fabrication and painting from the 1930s until circa 2000, and is now used for kitchen cabinet fabrication and stone showrooms/warehousing and office space.

PREVIOUS ENVIRONMENTAL INVESTIGATION SUMMARY

Langan conducted a remedial investigation (RI) in 2012 and a supplemental RI (SRI) in 2017 to investigate and characterize the nature and extent of contamination in soil, groundwater, and soil vapor at the site. The following are findings from the RI and SRI:

- With the exception of a single trichloroethene (TCE) concentration of 2.3 milligrams per kilogram (mg/kg) at a depth of over 65 feet below grade surface (bgs), CVOCs (including tetrachloroethene [PCE], TCE, and their degradation products) were detected at concentrations two to three orders of magnitude less than the Unrestricted Use (UU) and Protection of Groundwater (PGW) Soil Cleanup Objectives (SCOs) in soil throughout the site.

- Hand-cleared soil boring ACME-SB-2D was completed in the northwestern part of the site, near the former dip tank (in Area of Concern [AOC] 3), during the 2012 RI. Soil recovered from 4 to 5 feet below grade in ACME-SB-2D exhibited a maximum photoionization detector (PID) reading of 160 parts per million (ppm) and contained PCE at a concentration of 0.0022 mg/kg (three orders of magnitude below the UU SCO of 1.3 mg/kg). The highest detected concentration of PCE in AOC 3 during the 2017 SRI was 0.026 mg/kg (below the UU SCO of 1.3 mg/kg) in ACME_GP-14_17-18.

- CVOCs were detected in shallow and deep overburden groundwater at concentrations above NYSDEC Division of Water Technical and Operation Guidance Series 1.1.1 Ambient Water Quality Standards for Class GA groundwater. PCE and TCE were detected in sub-slab soil vapor at concentrations above the Air Guideline Values (AGVs) during the RI. An on-site source of CVOCs was not identified.

Sample locations from the 2012 and 2017 investigations are shown in grey on Figure 2.

Based on RI and SRI findings, the NYSDEC requested that quarterly groundwater gauging and a site-wide groundwater sampling event be completed to further evaluate solvent impacts in groundwater. Site-wide groundwater gauging was performed in all four quarters of 2019 and ceased after the first quarter of 2020. Site-wide groundwater sampling was performed by Langan in December 2019. Shallow and deep groundwater PCE concentrations continued to indicate that an off-site PCE source to the south is likely affecting groundwater, while shallow and deep TCE concentrations continued to indicate the presence of an unidentified on- or off-site TCE source to the north and/or west. The NYSDEC also requested the investigation of a trench drain in the northwestern part of the site, which was performed in February 2019 (see AOC 3 description in the following section).

SUMMARY OF AREAS OF CONCERN – PRIOR SITE INVESTIGATION WORK

The following AOCs were established, investigated, and refined during previous investigations. Soil borings completed in each AOC during previous investigations have not indicated the

presence of a CVOC source in on-site unsaturated soil. CVOC-impacted groundwater and soil vapor are present beneath the site, but have not been linked to a historical on-site release.

AOC 1: Former Metal Fabrication Area

Sheet metal was shaped in the southwestern part of the 95 Lombardy Street building (Tax Lot 8) during former Acme Steel operations. An oily residue was identified during a site inspection in floor trenches that are remnants of the former metal works equipment. The floor trenches have since been sealed to grade with concrete.

AOC 2: Dry Well/Underground Injection Well

Based on a review of previous due diligence reports prepared by Impact Environmental Consulting, AOC 2 represents the area of what was labeled a dry well or underground injection well with unknown outfall located near the northwest corner of the 95 Lombardy Street building (Tax Lot 8). The RI revealed that the subject "dry well or underground injection well" is a sanitary sewer cleanout.

AOC 3: Dip Tank and Associated Piping and Floor Trench

A dip tank, drying system, and conveyor were historically used in the door-coating process and were located in the northwest corner of the 46 Anthony Street building (Tax Lot 11) and the northeast corner of the 95 Lombardy Street building (Tax Lot 8). According to the 1998 Phase I Environmental Site Assessment (ESA) and Phase II Environmental Site Investigation (ESI) reports prepared by Impact, a phosphate wash was used in the dip tanks. Several pipes that originated from the dip tank discharged to a floor drain in the loading dock area. According to the 1998 Phase I ESA report, the outfall location of the floor drain was unknown. Langan investigated the trench in February 2019 and did not identify a drain outlet. Three sediment samples collected from the trench contained PCE and TCE at concentrations at least three times lower than the UU SCOs.

AOC 4: Apparent Dry Well

Based on a review of previous due diligence reports, AOC 4 represents the area labeled "dry well or underground injection well" with unknown outfall, located in the eastern part of 60 Anthony Street (Tax Lot 11). Site reconnaissance during the RI identified an additional floor drain in the loading dock area of the 60 Anthony building, about 80 feet west of the drain investigated during the RI. This additional loading dock floor drain may have been misidentified as an "underground injection well" in the 1998 Phase I ESA Report.

POTENTIAL CVOC SI FIELD INVESTIGATION

Langan's field investigation included the following, performed between December 12 and 23, 2020:

- Completion of a New York State Department of Health (NYSDOH) Indoor Air Quality (IAQ) Questionnaire and Building Survey;
- Installation of four permanent sub-slab soil vapor points and collection of four sub-slab soil vapor samples, four co-located indoor air samples, and one outdoor ambient air sample;

- Completion of a geophysical survey to identify potential subsurface utilities and anomalies at investigation locations; and

- Installation of 61 on-site and 18 off-site (on adjoining sidewalks) temporary sub-slab soil vapor screening points.

The work described herein was performed in accordance with applicable federal, state, and city regulations. Site observation reports and a photograph log documenting the field investigation are included as Attachments A and B.

NYSDOH IAQ Questionnaire and Building Survey

Langan completed a NYSDOH IAQ Questionnaire and Building Survey on December 12, 2020. The NYSDOH IAQ Questionnaire and Building Survey consisted of a site walkthrough to document building conditions and catalogue stored chemical products. Screening of indoor air and chemical products was performed using a MultiRAE multi-gas PID equipped with a 10.6 electron volt (eV) bulb to measure total organic vapors (TOV). The purpose of the screening was to identify potential sources of volatile organic compounds (VOCs) that could interfere with or impact the analytical sampling results.

Chemical containers stored in or near the sampling areas generally included cleaning products, sealants, paints, primers, and compressor lubricants and oil used by the building tenants. The NYSDOH IAQ Questionnaire and Building Survey is provided as Attachment C.

Permanent Sub-Slab Soil Vapor Point Installation and Sampling

On December 12, 2020, a Langan field geologist installed four permanent sub-slab soil vapor points (ACME-SSV-01 through ACME-SSV-04). Each sub-slab soil vapor point was installed by using a hammer drill to drill a 1.5-inch-diameter borehole to 1.5 inches below the top of the slab, and an additional 5/8-inch-diameter hole to a depth of about one inch into the underlying soil. The points were completed with Vapor Pin assemblies, each consisting of a stainless steel barbed fitting with a silicone sleeve to seal the 5/8-inch-diameter hole. A stainless steel cap was installed at each point.

Sub-slab soil vapor samples and co-located indoor air samples (ACME-IA-01 through ACME-IA-04) were collected throughout the building, and an outdoor ambient air sample (ACME-OA-01) was collected immediately north of the building near the corner of Anthony Street and Porter Avenue. The sub-slab soil vapor, indoor air, and outdoor ambient air samples were collected concurrently, on the same day as vapor point installation. Windows and exterior doors were closed during sample collection. Indoor and outdoor air samples were collected from a height of about 4 to 5 feet above the ground surface, to represent a typical breathing zone. Sample locations are shown on Figure 2.

Sub-slab soil vapor samples were collected in accordance with Guidance for Evaluating Soil Vapor Intrusion in the State of New York (2006), with updates (hereafter referred to as "New York State Department of Health [NYSDOH] Guidance"). Before and after sampling, the seal integrity at each sampling point was confirmed using helium tracer gas. Sub-slab soil vapor samples were collected into laboratory-supplied 6-liter Summa canisters, under vacuum, with flow controllers calibrated for an 8-hour sampling period. The Summa canisters ran for the full 8-hour collection period or until the vacuum was at -5 inches of water column, whichever occurred first. After

sample collection was complete, the Summa canisters were closed, labeled and transported via courier under chain of custody protocol to York Analytical Laboratories, a NYSDOH Environmental Laboratory Approval Program (ELAP)-certified laboratory in Stratford, Connecticut and analyzed for VOCs by United States Environmental Protection Agency (USEPA) method TO-15.

Permanent sub-slab soil vapor point installation and sampling logs are provided in Attachment D.

Geophysical Survey

On December 18, 2020, NOVA used ground penetrating radar (GPR) and an electromagnetic utility locator to survey accessible portions of the site and screen sub-slab soil vapor screening locations for potential utilities or subsurface obstructions. Anomalies consistent with USTs were not identified, and proposed sub-slab soil vapor screening locations were moved as necessary (less than 3 feet) to avoid utilities, minor anomalies, and/or inaccessible parts of the site (e.g., large permanent shelving units).

The completed geophysical survey report is included as Attachment E.

Temporary Sub-Slab Soil Vapor Point Installation and Screening

Between December 18 and 23, 2020, two Langan field engineers installed a total of 79 temporary sub-slab soil vapor screening points using a hammer drill. 61 points were installed on-site (ACME-SSVS-01 through -49, including ACME-SSVS-01A through -01C, ACME-SSVS-13A through -13C, ACME-SSVS-14A through -14C, ACME-SSVS-15A, ACME-SSVS-26A, and ACME-SSVS-26B), and 18 points were installed on the adjoining sidewalks along Anthony Street, Vandervoort Avenue, and Lombardy Street (ACME-SSVS-50 through -66, including ACME-SSVS-56A).

A total of 69 temporary sub-slab soil vapor screening points were proposed in the work plan. Changes to the proposed sampling scope included:

- The addition of 13 temporary sub-slab soil vapor screening points to increase the screening density in AOC 3; and

- The removal of three sub-slab soil vapor screening point locations (ACME-SSVS-67 through -69), due to lack of pavement on the western sidewalk of Porter Avenue adjacent to the site.

Installation and screening of each sub-slab soil vapor screening point was completed as follows:

1. Each sampling point was installed by using a hammer drill to advance a 5/8-inch-diameter hole through the concrete slab to a depth about one inch into the underlying soil. Each point was completed with a Vapor Pin assembly, consisting of a stainless steel barbed fitting protruding above the slab surface and sealed with a silicone sleeve.

2. A water dam assembly (i.e., a plastic cylinder filled with water and surrounded with a bentonite seal) was installed around each point to confirm seal integrity.

3. About 200 milliliters (mL) was purged using a MultiRAE portable multi-gas monitor connected to each point with Teflon tubing, and then each point was capped and allowed to equilibrate for about one hour.

4. After at least one hour of equilibration, about 200 mL were again purged from each point. A vacuum chamber (which prevents pump-related cross-contamination) was then used in conjunction with a personal air sampling pump to fill a dedicated 3-liter Tedlar bag with sub-slab vapor.

5. Total VOC concentrations in sub-slab vapor were measured using a handheld MiniRAE 3000 PID connected to each Tedlar bag.

As per the work plan, no samples were submitted for laboratory analysis because total VOC concentrations were below 10 ppm at each temporary sub-slab soil vapor screening point.

After screening, all temporary screening points were removed and the corresponding slab penetrations were restored with caulk foam and concrete patch. A copy of the daily field equipment calibration log is included as Attachment F. Site features and sample locations are shown on Figure 2.

DATA MANAGEMENT AND VALIDATION

A Category B laboratory report for sub-slab soil vapor and air samples was provided by York and forwarded to Langan's senior chemist for review and validation in accordance with USEPA and NYSDEC validation protocols and procedures. The data were determined to be acceptable. There were no major deficiencies that significantly impacted data quality and necessitated the rejection of results. Minor deficiencies, as flagged in the attached Data Usability Summary Report (DUSR), included anomalies that directly impact data quality and necessitate qualification but did not result in unusable data. Completeness, defined as the percentage of analytical results that are judged to be valid, is 100%.

The Category B laboratory report and associated DUSR are included in Attachments G and H. Sampling data was submitted in accordance with NYSDEC's electronic data deliverable (EDD) format on February 4, 2021, and then resubmitted on February 18, 2021 to address an issue with subfacility/building address information.

ANALYTICAL AND SCREENING RESULTS

Permanent Sub-Slab Soil Vapor and Indoor Air Sampling Results

Four sub-slab soil vapor and co-located indoor sample analytical results were compared to the concentration thresholds used in the NYSDOH Guidance. The NYSDOH decision matrices address the following eight CVOCs: 1,1,1-trichloroethane (1,1,1-TCA), 1,1-dichloroethene (1,1-DCE), cis-1,2-dichloroethene (cDCE), carbon tetrachloride, methylene chloride, PCE, TCE, and vinyl chloride.

The following table presents the sub-slab soil vapor and indoor air concentration ranges of the eight CVOCs addressed by the decision matrices, presented in micrograms per cubic meter ($\mu g/m^3$).

Compound	Sub-Slab Soil Vapor Range (µg/m³)	Indoor Air Range (µg/m³)
1,1,1-TCA	10 (ACME-SSV-04) to 2,800 (ACME-SSV-02)	ND
1,1-DCE	ND (ACME-SSV-01, -03 and -04) to 6.2 (ACME-SSV-02)	ND
cDCE	ND (ACME-SSV-02, -03 and -04) to 1.1 (ACME-SSV-01)	ND
Carbon tetrachloride	ND	0.54 (ACME-IA-02) to 0.64 (ACME-IA-04)
Methylene chloride	8.6 (ACME-SSV-04) to 11 (ACME-SSV-02 and -03)	7.4 (ACME-IA-04) to 210 (ACME-IA-01)
PCE	160 (ACME-SSV-02) to 3,900 (ACME-SSV-01)	6.3 (ACME-IA-02) to 32 (ACME-IA-04)
TCE	10 (ACME-SSV-04) to 290 (ACME-SSV-02)	ND (ACME-IA-03) to 1.9 (ACME-IA-02)
Vinyl chloride	ND	ND

ND = Not Detected

Sub-slab vapor and indoor sample analytical results were compared to the concentration thresholds used in the NYSDOH Guidance, yielding the following recommendations:

- "No further action" (1,1-DCE, cDCE, carbon tetrachloride, and vinyl chloride)
- "Identify source(s) and resample or mitigate" (methylene chloride)
- "Mitigate" (1,1,1-TCA, PCE, and TCE)

Indoor air analytical results were also compared to the NYSDOH AGVs and the NYSDOH Recommended Immediate Action Levels (RIALs). Methylene chloride was detected above the AGV at a concentration of 210 µg/m^3 in sample ACME-IA-01. PCE was detected above the AGV at a concentration of 32 µg/m^3 in sample ACME-IA-04. TCE was not detected above the AGV. Detected concentrations of PCE and TCE were below the NYSDOH RIALs.

Analytical results are provided as Table 1. The analytical laboratory report is provided as Attachment G.

Temporary Sub-Slab Soil Vapor Screening Results

A total of 79 temporary sub-slab soil vapor screening points were screened during the investigation. The five highest total VOC concentrations, as measured by handheld PID, were as follows:

- 3.3 ppm, at ACME-SSVS-01A (northwestern corner of the site).
- 2.6 ppm, at ACME-SSVS-13B (northwestern corner of the site).
- 2.4 ppm, at ACME-SSVS-10 (northeast part of the site).
- 1.9 ppm, at ACME-SSVS-07 (north-central part of the site).
- 1.8 ppm, at ACME-SSVS-11 and ACME-SSVS-28 (northeast and west-central parts of the site).

PID readings above 1 ppm were generally localized. For instance, the maximum PID reading of 3.3 ppm was observed at ACME-SSVS-01A; the maximum PID reading was only 0.2 ppm at the three screening points located within 10 feet of ACME-SSVS-01A (ACME-SSVS-01, ACME-SSVS-01B, and ACME-SSVS-01C). All PID readings were well below the 10 ppm sample collection threshold set forth in the work plan.

Sub-slab soil vapor screening results are tabulated in Table 2 and plotted on Figure 3. Figure 3 depicts the PID concentration gradients using Thiessen polygons with color coding across a range of 0.0 (green) to 3.5 ppm (red). The PID concentration gradients were created in ArcGIS using an interpolation method called Natural Neighbor, which interpolates the concentration at each pixel based on the PID readings at surrounding screening points.

CONCLUSIONS AND RECOMMENDATIONS

The below conclusions and recommendations are based on qualitative and quantitative data collected during implementation of the Potential CVOC SI and previous investigations:

- The maximum PID reading (3.3 ppm) was observed at sub-slab soil vapor screening point ACME-SSVS-01A, located within AOC 3 and less than 5 feet east of 2012 RI soil boring ACME-SB-2D. Soil recovered from 4 to 5 feet below grade in ACME-SB-2D (the closest soil sample to ACME-SSVS-01A) exhibited a maximum PID reading of 160 ppm during the RI and contained PCE at a concentration of 0.0022 mg/kg - three orders of magnitude below the UU SCO of 1.3 mg/kg. Additional borings were advanced within AOC 3 during the 2017 supplemental RI, and the highest detected concentration of PCE was 0.026 mg/kg in ACME_GP-14_17-18.

- The site has been the subject of two remedial investigations to date, and soil borings completed within and around AOC 3 have not indicated the presence of a CVOC source nor exhibited concentrations of PCE exceeding the UU SCO. The distribution and relative intensity of sub-slab soil vapor PID concentrations, coupled with discrete soil sample results during previous investigations, do not indicate the presence of an on-site CVOC source.

- Sub-slab vapor and indoor air CVOC concentrations are generally consistent with those observed during the RI. CVOC concentrations in sub-slab vapor and indoor air are likely related to the site's location within the Meeker Avenue Plume Trackdown area and position above CVOC-impacted groundwater, and have not been linked to a historical on-site release.

- The site contains a continuous concrete floor slab that is larger in area than those found on most neighboring properties, which are subdivided into smaller buildings or separate tax lots. The presence of the continuous slab may allow vapor to preferentially collect beneath the site. Changes in slab elevation in several locations (including ramped loading docks along Anthony Street) may also influence the spatial distribution of contaminated soil vapor (as evidenced by the localized nature of the observed PID readings). Given the sub-slab soil vapor data and the soil vapor dynamics beneath the slab, CVOC concentrations in sub-slab vapor and indoor air warrant mitigation (likely via installation of a sub-slab depressurization system).

Based on the above, we conclude that the site is not a source of CVOC impacts and that the remedial investigation phase is complete. Please let us know by phone (646-593-0849) or email (pfarnham@langan.com) if you have any questions or would like to discuss.

Sincerely,
Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C.

Michael D. Burke, P.G., CHMM
Principal/Vice President

Patrick Farnham, P.E.
Senior Project Manager

Enclosure(s):

Figure 1	Site Location Map
Figure 2	Sample Location Plan
Figure 3	PID Concentration Gradient Map
Table 1	Analytical Results Summary
Table 2	Temporary Sub-Slab Vapor Point Screening Data Summary
Attachment A	Site Observation Reports
Attachment B	Photograph Log
Attachment C	NYSDOH IAQ Questionnaire and Building Survey
Attachment D	Sub-Slab Soil Vapor Point Installation and Sampling Logs
Attachment E	Geophysical Survey Report
Attachment F	Equipment Calibration Log
Attachment G	Laboratory Analytical Report
Attachment H	DUSR

cc: H. Dudek, P. Foster (NYSDEC)
S. McLaughlin, S. Surani, J. Nealon (NYSDOH)
J. Teich, Michael Teich, Marc Teich (Whitehead Company)
C. Leas (Sive, Paget & Riesel, P.C.)
G. Nicholls, K. Nagotko (Langan)

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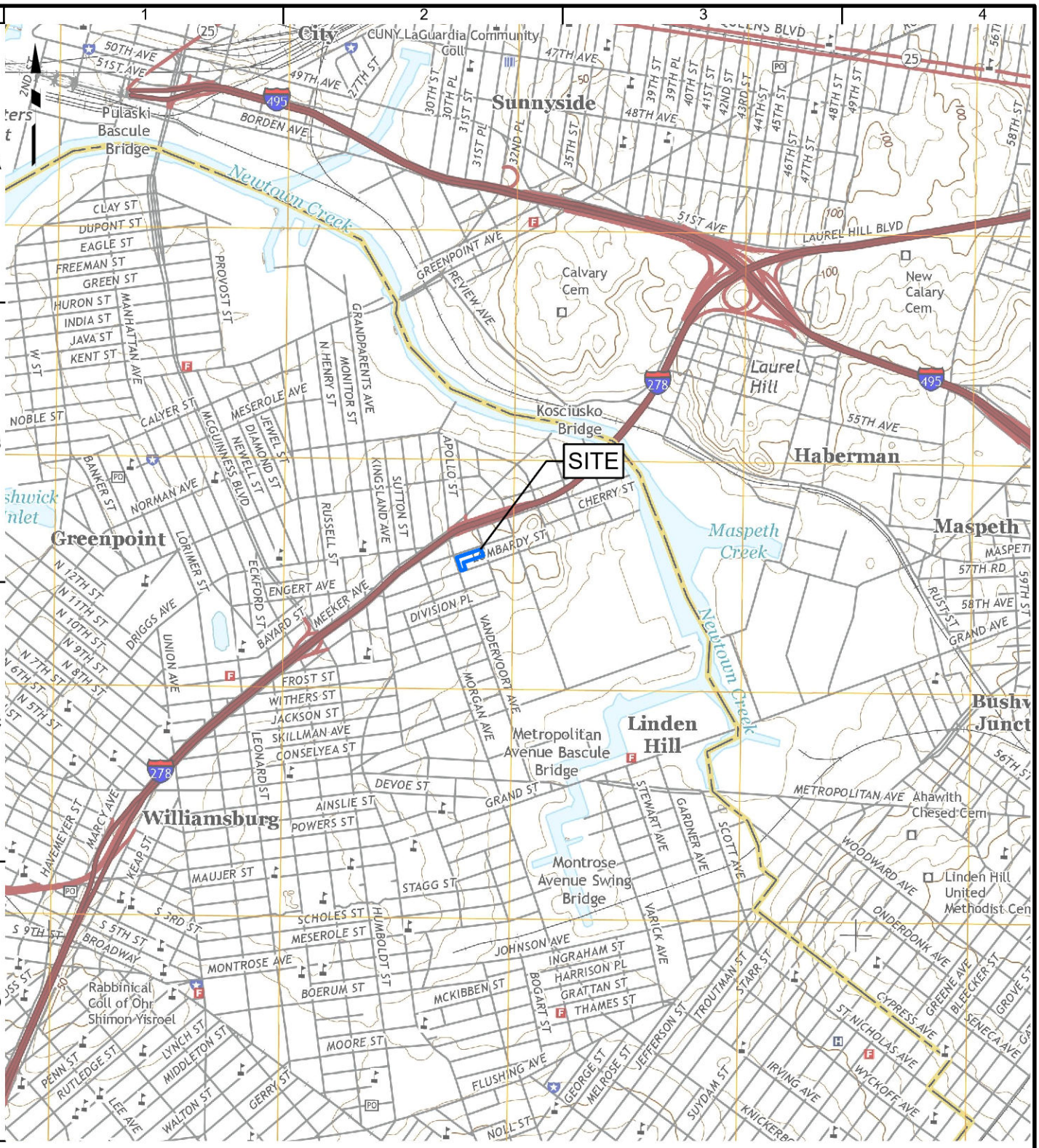
FIGURES



WARNING: IT IS A VIOLATION OF THE NYS EDUCATION LAW ARTICLE 145 FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, LAND SURVEYOR OR GEOLOGIST, TO ALTER THIS ITEM IN ANY WAY.

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SCALE IN FEET

NOTE:
1. BASEMAP ADAPTED FROM UNITED STATES GEOLOGICAL SURVEY (USGS) 7.5-MINUTE SERIES TOPOGRAPHICAL MAPS, BROOKLYN, NEW YORK, QUADRANGLE, DATED 2016.

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Langan Engineering & Environmental Services, Inc.
Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C.
Langan International LLC

Collectively known as Langan

Project
FORMER ACME STEEL/ METAL WORKS
NYSDEC SITE NO. 224131
95 LOMBARDY STREET/
46 ANTHONY STREET
BROOKLYN NEW YORK

Figure Title
SITE LOCATION MAP

Project No. 170157201	Figure No. 1
Date 1/6/2021	
Scale 1"=2,000'	
Drawn By MG	
Submission Date	

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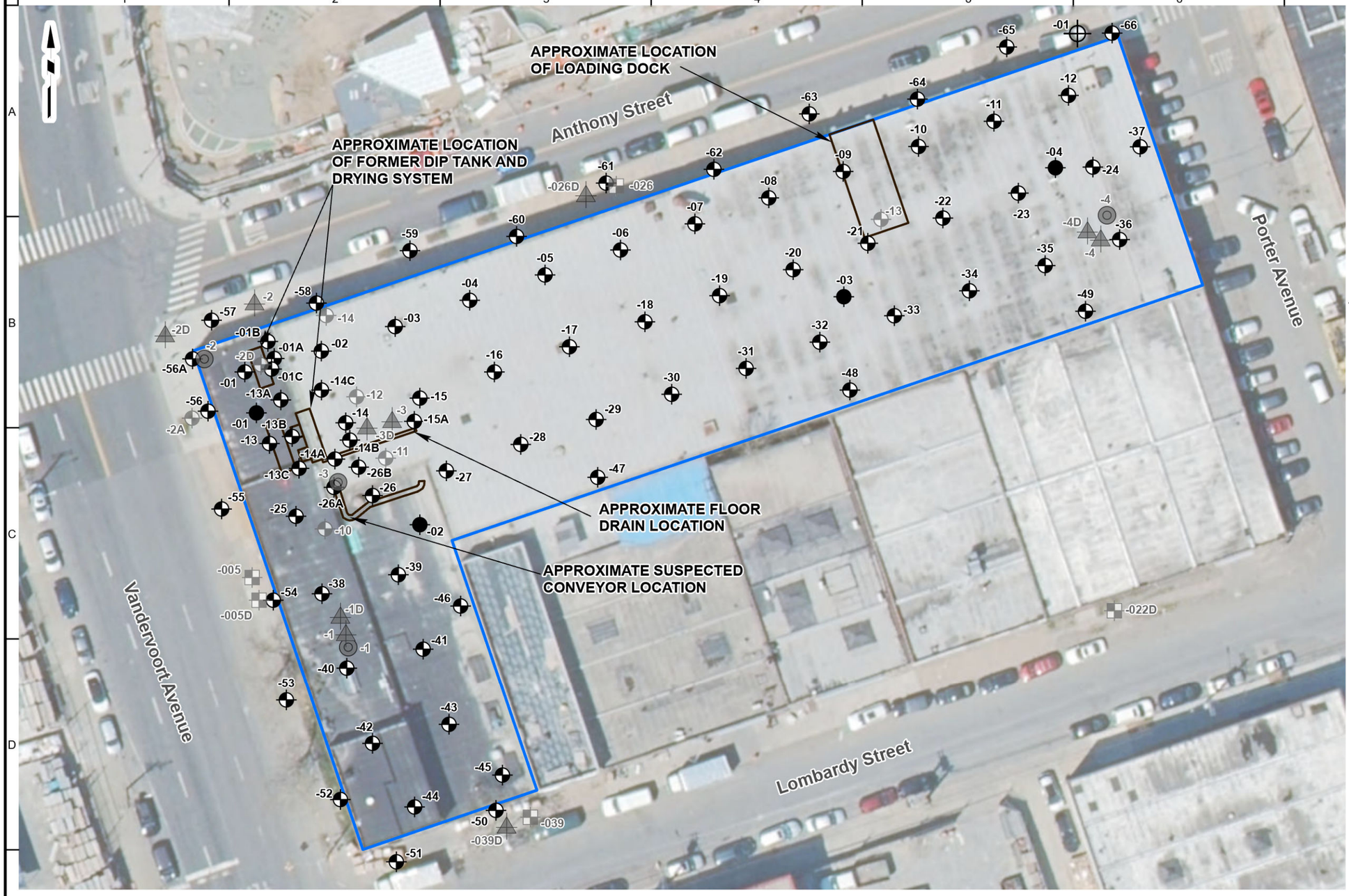

LEGEND

- -22 SUB-SLAB SOIL VAPOR SCREENING POINT LOCATION
- -04 INDOOR AIR AND CO-LOCATED SUB-SLAB SOIL VAPOR SAMPLING LOCATION
- -01 OUTDOOR AMBIENT AIR SAMPLING LOCATION
- -2A RI SOIL BORING LOCATION
- -4D RI SOIL BORING AND DEEP GROUNDWATER MONITORING WELL LOCATION
- -4 RI SHALLOW GROUNDWATER MONITORING WELL LOCATION
- -039D EXISTING DEEP GROUNDWATER MONITORING WELL LOCATION
- -039 EXISTING SHALLOW GROUNDWATER MONITORING WELL LOCATION
- -4 RI SOIL VAPOR AND INDOOR AIR SAMPLING COUPLET LOCATION
- -13 SUPPLEMENTAL RI BORING LOCATION TO GROUNDWATER
- SITE BOUNDARY

NOTES:
1. WORLD AERIAL IMAGERY BASEMAP IS PROVIDED THROUGH LANGAN'S ESRI AND ARCGIS SOFTWARE LICENSING AND ARCGIS ONLINE.
2. THE APPROXIMATE LOCATION OF THE FORMER DIP TANK AND DRYING SYSTEM IS BASED ON MAPS INCLUDED AS PART OF THE IMPACT ENVIRONMENTAL 1998 PHASE I ESA REPORT. THE DIP TANK AND DRYING SYSTEM ELEMENTS WERE NOT PRESENT AT THE TIME OF THE REMEDIAL INVESTIGATION (RI), CONDUCTED BY LANGAN BETWEEN SEPTEMBER AND DECEMBER 2012, AND THE SUPPLEMENTAL REMEDIAL INVESTIGATION (SRI), CONDUCTED BY LANGAN BETWEEN MARCH AND APRIL 2017.
3. SAMPLE LOCATION IDs ARE ABRIDGED FOR CLARITY (E.G., 2020 SUB-SLAB SOIL VAPOR SCREENING POINT ACME-SSVS-22 IS SHOWN AS "-22", EXISTING SIDEWALK MONITORING WELL DEC-005D IS SHOWN AS "-005D", ETC.)

40 0 40
SCALE IN FEET

LANGAN
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Project
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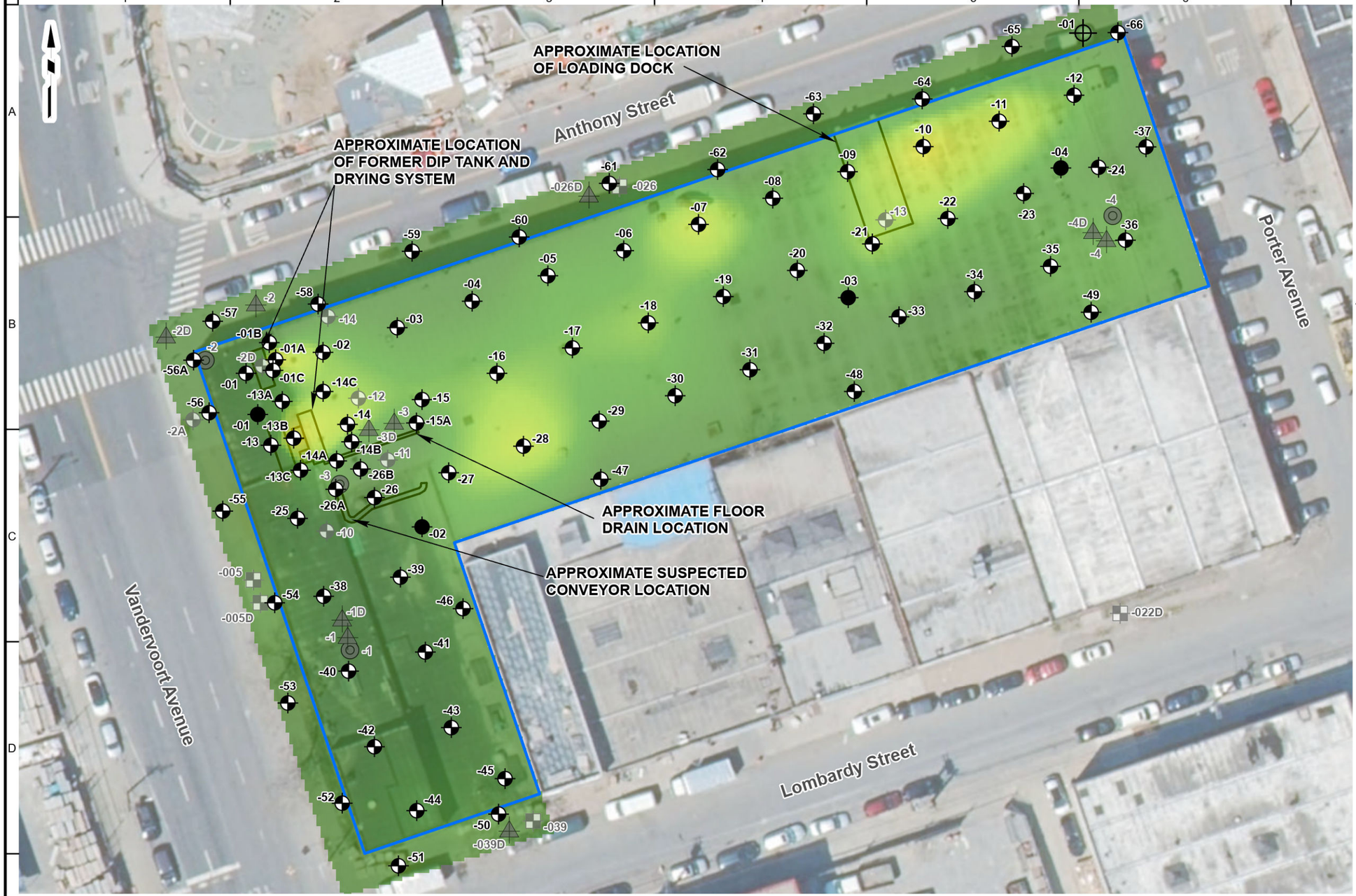
46 ANTHONY STREET
BROOKLYN NEW YORK

Figure Title
SAMPLE LOCATION PLAN

Project No. 170157201	Figure No. 2
Date 2/19/2021	
Scale 1"=40'	
Drawn By MG	

Path: C:\Users\mgeorgalas\Desktop\Remote\Offices_r\NYC\46_Anthony_Street_v2\46_Anthony_Street.aprx Date: 2/19/2021 User: mgeorgalas Time: 9:12 AM



LEGEND

- -22 SUB-SLAB SOIL VAPOR SCREENING POINT LOCATION
- -04 INDOOR AIR AND CO-LOCATED SUB-SLAB SOIL VAPOR SAMPLING LOCATION
- -01 OUTDOOR AMBIENT AIR SAMPLING LOCATION
- -2A RI SOIL BORING LOCATION
- -4D RI SOIL BORING AND DEEP GROUNDWATER MONITORING WELL LOCATION
- -4 RI SHALLOW GROUNDWATER MONITORING WELL LOCATION
- -039D EXISTING DEEP GROUNDWATER MONITORING WELL LOCATION
- -039 EXISTING SHALLOW GROUNDWATER MONITORING WELL LOCATION
- -4 RI SOIL VAPOR AND INDOOR AIR SAMPLING COUPLET LOCATION
- -13 SUPPLEMENTAL RI BORING LOCATION TO GROUNDWATER
- SITE BOUNDARY

PID READING

- 3.5 ppm
- 3 ppm
- 2 ppm
- 1 ppm
- 0 ppm

NOTES:
1. WORLD AERIAL IMAGERY BASEMAP IS PROVIDED THROUGH LANGAN'S ESRI AND ARCGIS SOFTWARE LICENSING AND ARCGIS ONLINE.
2. SAMPLE LOCATION IDs ARE ABRIDGED FOR CLARITY (E.G., 2020 SUB-SLAB SOIL VAPOR SCREENING POINT ACME-SSVS-22 IS SHOWN AS "-22", EXISTING SIDEWALK MONITORING WELL DEC-005D IS SHOWN AS "-005D", ETC.)
3. PID = PHOTOIONIZATION DETECTOR
4. PID READINGS ARE PRESENTED IN PARTS PER MILLION (ppm)
5. ONLY PID READINGS FROM TEMPORARY SUB-SLAB SOIL VAPOR SCREENING LOCATIONS WERE USED TO CREATE THE HEAT MAP.
6. THE TOTAL VOLATILE ORGANIC COMPOUND CONCENTRATION MEASURED BELOW 10 PARTS PER MILLION AT EACH SCREENING POINT.

40 0 40
SCALE IN FEET

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Project
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46 ANTHONY STREET
BROOKLYN NEW YORK

Figure Title
PID CONCENTRATION GRADIENT MAP

Project No. 170157201	Figure No. 3
Date 2/19/2021	
Scale 1"=40'	
Drawn By MG	

Path: C:\Users\mgeorgalas\Desktop\Remote\Offices_r\NYC\46_Anthony_Street_v2\46_Anthony_Street.aprx Date: 2/19/2021 User: mgeorgalas Time: 9:14 AM

TABLES

Table 1
Potential CVOC SI Data Summary Letter Report
Analytical Results Summary

46 Anthony Street / 95 Lombardy Street
Brooklyn, New York
NYSDEC Site No.: 224131
Langan Project No.: 170157201

Location Sample ID Laboratory ID Sample Date Sample Type	NYSDOH AGVs	ACME-IA-01 ACME-IA-01_121220 20L0767-02 12/12/2020 IA		ACME-SSV-01 ACME-SSV-01_121220 20L0767-01 12/12/2020 SSV		ACME-IA-02 ACME-IA-02_121220 20L0767-04 12/12/2020 IA		ACME-SSV-02 ACME-SSV-02_121220 20L0767-03 12/12/2020 SSV		ACME-IA-03 ACME-IA-03_121220 20L0767-06 12/12/2020 IA		ACME-SSV-03 ACME-SSV-03_121220 20L0767-05 12/12/2020 SSV		ACME-IA-04 ACME-IA-04_121220 20L0767-08 12/12/2020 IA		ACME-SSV-04 ACME-SSV-04_121220 20L0767-07 12/12/2020 SSV		ACME-OA-01 ACME-OA-01_121220 20L0767-09 12/12/2020 AA	
Volatile Organic Compounds (µg/m³)																			
1,1,1-Trichloroethane	~	0.48	U	45	D	0.43	U	2,800	D	0.72	U	790	D	0.46	U	10	D	0.5	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	~	0.68	U	3	U	0.66	D	12	U	1	U	2.5	U	0.78	D	4.6	U	0.7	D
1,1-Dichloroethane	~	0.36	U	1.6	U	0.32	U	16	D	0.54	U	1.3	U	0.34	U	2.4	U	0.37	U
1,1-Dichloroethene	~	0.088	U	0.39	U	0.077	U	6.2	D	0.13	U	0.32	U	0.084	U	0.6	U	0.091	U
1,2,4-Trimethylbenzene	~	2.3	D	3.1	D	2.9	D	7.7	U	3.7	D	2.5	D	3.9	D	3	U	1.5	D
1,2-Dichloropropane	~	1.3	D	1.8	U	0.36	U	7.2	U	0.61	U	1.5	U	0.39	U	2.8	U	0.42	U
1,3,5-Trimethylbenzene (Mesitylene)	~	0.74	D	1.9	U	0.77	D	7.7	U	1.2	D	1.6	U	1.1	D	3	U	0.45	D
1,3-Butadiene	~	0.59	U	2.6	U	0.62	D	10	U	1	D	2.1	U	0.6	D	8.3	D	0.61	U
1,3-Dichlorobenzene	~	0.53	U	3.5	D	0.47	U	9.4	U	0.8	U	2.9	D	0.51	U	3.6	U	0.55	U
1,4-Dichlorobenzene	~	0.53	U	2.3	U	0.47	U	9.4	U	0.8	U	1.9	U	4.2	D	3.6	U	0.55	U
2-Hexanone	~	0.73	U	11	D	0.64	U	13	U	1.1	U	2.6	U	0.69	U	5	U	0.75	U
4-Ethyltoluene	~	2.6	D	2.9	D	2.9	D	7.7	U	3.3	D	2.5	D	4.5	D	3	U	1.4	D
Acetone	~	250	D	700	D	380	D	310	D	67	D	42	D	84	D	180	D	16	D
Benzene	~	3.1	D	2.7	D	3.8	D	5	U	2.8	D	1.9	D	3.9	D	12	D	1.9	D
Bromomethane	~	0.34	U	1.5	U	0.3	U	6.1	U	0.51	U	1.2	U	0.33	U	2.3	U	0.36	D
Carbon Tetrachloride	~	0.56	D	0.61	U	0.54	D	2.5	U	0.58	D	0.5	U	0.64	D	0.95	U	0.58	D
Chloroform	~	0.43	U	3.8	D	0.61	D	13	D	0.65	U	1.6	U	0.62	D	3	U	0.45	U
Chloromethane	~	1.6	D	0.8	U	1.7	D	3.2	U	1	D	0.66	U	1.5	D	1.2	U	1.6	D
Cis-1,2-Dichloroethene	~	0.088	U	1.1	D	0.077	U	1.5	U	0.13	U	0.32	U	0.084	U	0.6	U	0.22	D
Cyclohexane	~	1	D	1.3	U	1.2	D	5.4	U	1.3	D	1.2	D	2.2	D	7.3	D	1.3	D
Dichlorodifluoromethane	~	2.6	D	5.6	D	2.8	D	14	D	2.9	D	46	D	2.9	D	3.9	D	2.5	D
Ethyl Acetate	~	1.7	D	4.5	D	1.8	D	11	U	1.7	D	6.6	D	2	D	7.8	D	1	D
Ethylbenzene	~	1.7	D	1.7	U	2.8	D	6.8	U	2.1	D	1.7	D	2.5	D	2.6	D	1.2	D
Isopropanol	~	420	DE	150	D	41	D	150	D	11	D	86	D	12	D	200	D	39	D
M,P-Xylene	~	5.3	D	5.6	D	8.2	D	14	U	7.5	D	5.9	D	7.1	D	8.4	D	4	D
Methyl Ethyl Ketone (2-Butanone)	~	3.8	D	45	D	2.8	D	12	D	2	D	3.9	D	3.3	D	18	D	1.3	D
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	~	0.95	D	7.2	D	1.2	D	6.4	U	2	D	1.3	U	0.48	D	3.7	D	0.64	D
Methyl Methacrylate	~	1.6	D	1.6	U	1.9	D	6.4	U	1.2	D	1.3	U	0.93	D	2.5	U	1.6	D
Methylene Chloride	60	**210**	D	9.7	D	54	D	11	D	9.5	D	11	D	7.4	D	8.6	D	17	D
n-Heptane	~	1.4	D	3.5	D	1.7	D	6.4	U	1.7	D	1.3	U	10	D	4.7	D	1.1	D
n-Hexane	~	2.3	D	2.3	D	2.8	D	5.5	U	2.6	D	1.6	D	4.4	D	6.6	D	1.8	D
o-Xylene (1,2-Dimethylbenzene)	~	2.3	D	2.2	D	3.2	D	6.8	U	3.2	D	2.4	D	3	D	2.9	D	1.4	D
Styrene	~	26	D	11	D	48	D	18	D	4.7	D	5.3	D	11	D	5.2	D	0.55	D
Tetrachloroethene (PCE)	30	11	D	**3,900**	D	6.3	D	**160**	D	14	D	**190**	D	**32**	D	**910**	D	1.7	D
Tetrahydrofuran	~	0.89	D	2.3	U	0.46	U	9.2	U	0.78	U	1.9	U	0.5	U	3.6	U	0.54	U
Toluene	~	7.9	D	6.2	D	8.7	D	5.9	U	11	D	7.4	D	13	D	20	D	7.2	D
Trichloroethene (TCE)	2	1.2	D	**110**	D	1.9	D	**290**	D	0.18	U	**29**	D	0.23	D	**10**	D	0.2	D
Trichlorofluoromethane	~	3.1	D	2.2	U	4	D	20	D	4.3	D	9.6	D	7.8	D	3.4	U	4.9	D

Notes:
1. Co-located sub-slab vapor and indoor air sample analytical results are evaluated using the New York State Department of Health (NYSDOH) October 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York Decision Matrices for Sub-Slab Vapor and Indoor Air and subsequent updates (2017).
2. Ambient air sample analytical results are shown for reference only.
3. NYSDOH Air Guideline Values (AGVs) as set forth in the New York State Department of Health (NYSDOH) October 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York and subsequent updates (2013, 2015) are shown as reference only.
4. Only detected analytes are shown in the table.
5. Detected analytical results above the AGVs are bolded.
6. Detected analytical results above the minimum threshold for which mitigation is recommended are shaded.
7. ~ = Regulatory limit for this analyte does not exist
8. µg/m³ = Micrograms per cubic meter
9. AA = Ambient air
10. IA = Indoor air
11. SSV = Sub-slab vapor

Qualifiers:
D = The concentration reported is a result of a diluted sample.
U = The analyte was analyzed for, but was not detected at a level greater than or equal to the Reporting Limit (RL); the value shown in the table is the RL.

Table 2
Potential CVOC SI Data Summary Letter
Temporary Sub-Slab Vapor Point Screening Data Summary

46 Anthony Street/95 Lombardy Street
Brooklyn, New York
NYSDEC Site No.: 224131
Langan Project No.: 170157201

Screening ID	Date	PID reading from Background Air (ppm)	PID Reading from Tedlar bag (ppm)
ACME-SSVS-01	12/22/2020	0.0	0.1
ACME-SSVS-01A	12/23/2020	0.0	3.3
ACME-SSVS-01B		0.0	0.0
ACME-SSVS-01C		0.0	0.2
ACME-SSVS-02	12/21/2020	0.0	1.1
ACME-SSVS-03	12/21/2020	0.0	0.3
ACME-SSVS-04	12/21/2020	0.0	0.2
ACME-SSVS-05	12/21/2020	0.0	0.7
ACME-SSVS-06	12/21/2020	0.0	0.6
ACME-SSVS-07	12/18/2020	0.1	1.9
ACME-SSVS-08	12/18/2020	0.1	0.6
ACME-SSVS-09	12/18/2020	0.1	1.0
ACME-SSVS-10	12/18/2020	0.1	2.4
ACME-SSVS-11	12/18/2020	0.1	1.8
ACME-SSVS-12	12/21/2020	0.1	0.9
ACME-SSVS-13	12/22/2020	0.0	0.0
ACME-SSVS-13A	12/23/2020	0.0	0.7
ACME-SSVS-13B		0.0	2.6
ACME-SSVS-13C		0.0	0.6
ACME-SSVS-14	12/21/2020	0.0	1.7
ACME-SSVS-14A	12/23/2020	0.0	0.5
ACME-SSVS-14B		0.0	0.3
ACME-SSVS-14C		0.0	1.1
ACME-SSVS-15	12/21/2020	0.0	1.0
ACME-SSVS-15A	12/23/2020	0.0	0.0
ACME-SSVS-16	12/21/2020	0.0	1.0
ACME-SSVS-17	12/21/2020	0.0	0.9
ACME-SSVS-18	12/21/2020	0.0	1.1
ACME-SSVS-19	12/18/2020	0.1	0.4
ACME-SSVS-20	12/18/2020	0.1	0.3
ACME-SSVS-21	12/18/2020	0.1	1.2
ACME-SSVS-22	12/18/2020	0.1	0.9
ACME-SSVS-23	12/18/2020	0.1	0.5
ACME-SSVS-24	12/21/2020	0.1	0.3
ACME-SSVS-25	12/22/2020	0.0	0.0
ACME-SSVS-26	12/21/2020	0.0	0.0
ACME-SSVS-26A	12/23/2020	0.0	0.4
ACME-SSVS-26B		0.0	0.0
ACME-SSVS-27	12/21/2020	0.0	0.9
ACME-SSVS-28	12/21/2020	0.0	1.8
ACME-SSVS-29	12/21/2020	0.0	0.6
ACME-SSVS-30	12/21/2020	0.0	0.6
ACME-SSVS-31	12/18/2020	0.1	0.3
ACME-SSVS-32	12/18/2020	0.1	0.2
ACME-SSVS-33	12/21/2020	0.1	0.2
ACME-SSVS-34	12/21/2020	0.1	0.1
ACME-SSVS-35	12/18/2020	0.1	0.6

Table 2
Potential CVOC SI Data Summary Letter
Temporary Sub-Slab Vapor Point Screening Data Summary

46 Anthony Street/95 Lombardy Street
Brooklyn, New York
NYSDEC Site No.: 224131
Langan Project No.: 170157201

Screening ID	Date	PID reading from Background Air (ppm)	PID Reading from Tedlar bag (ppm)
ACME-SSVS-36	12/21/2020	0.1	0.7
ACME-SSVS-37	12/21/2020	0.1	0.5
ACME-SSVS-38	12/22/2020	0.0	0.0
ACME-SSVS-39	12/21/2020	0.0	0.0
ACME-SSVS-40	12/22/2020	0.0	0.0
ACME-SSVS-41	12/22/2020	0.0	0.0
ACME-SSVS-42	12/22/2020	0.0	0.0
ACME-SSVS-43	12/22/2020	0.0	0.0
ACME-SSVS-44	12/22/2020	0.0	0.5
ACME-SSVS-45	12/22/2020	0.0	0.2
ACME-SSVS-46	12/21/2020	0.0	0.2
ACME-SSVS-47	12/21/2020	0.0	0.1
ACME-SSVS-48	12/21/2020	0.1	0.2
ACME-SSVS-49	12/21/2020	0.1	0.5
ACME-SSVS-50	12/22/2020	0.0	0.3
ACME-SSVS-51	12/22/2020	0.0	0.1
ACME-SSVS-52	12/22/2020	0.0	0.0
ACME-SSVS-53	12/22/2020	0.0	0.0
ACME-SSVS-54	12/22/2020	0.0	0.3
ACME-SSVS-55	12/22/2020	0.0	0.0
ACME-SSVS-56	12/22/2020	0.0	0.0
ACME-SSVS-56A	12/23/2020	0.0	0.0
ACME-SSVS-57	12/22/2020	0.0	0.0
ACME-SSVS-58	12/22/2020	0.0	0.0
ACME-SSVS-59	12/22/2020	0.0	0.0
ACME-SSVS-60	12/22/2020	0.0	0.1
ACME-SSVS-61	12/22/2020	0.0	0.1
ACME-SSVS-62	12/22/2020	0.0	0.0
ACME-SSVS-63	12/22/2020	0.0	0.1
ACME-SSVS-64	12/22/2020	0.0	0.1
ACME-SSVS-65	12/22/2020	0.0	0.0
ACME-SSVS-66	12/22/2020	0.0	0.1

Notes
1. Approximately 200 milliliters (mL) was purged from each point after installation and equilibration.
2. Seal integrity tests were performed during the purge and during sampling, and confirmed an appropriate seal had been established.
3. PID = photoionization detector
4. ppm = parts per million

ATTACHMENT A
SITE OBSERVATION REPORTS

LANGAN

SITE OBSERVATION REPORT

PROJECT No.:	170157201	**CLIENT:**	Whitehead Company	**DATE:**	12/12/2020
LOCATION:	Brooklyn, NY			**WEATHER:**	Cloudy, 50s°F
PROJECT:	Former Acme Steel/Metal Works NYSDEC Site No. 224131 46 Anthony St./95 Lombardy St. Brooklyn, New York 11222				Wind: S @ 0-5 mph
				TIME:	8:00 a.m. to 8:00 p.m.

EQUIPMENT:	**PRESENT AT SITE:**
MultiRAE Multi-Gas Monitor MGD Helium Leak Detector Hammer Drill Vapor Pin Kit	Langan: Jack Donelan *[12 hours on site]*

OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:

Langan was on site to implement the New York State Department of Environmental Conservation (NYSDEC)-approved Potential Chlorinated Volatile Organic Compound Source Investigation Work Plan, dated 25 November 2020.

Site Activities

- Langan mobilized to the site at 8:00 a.m. to install sub-slab vapor (SSV) sampling points, conduct seal integrity tests using helium shrouds, complete a chemical inventory, and collect SSV and indoor air (IA) samples.
- Langan completed a New York State Department of Health (NYSDOH) Indoor Air Quality Questionnaire and Building Survey to document the potential presence of equipment or chemicals in the building that could interfere with the air sample analytical results during SSV and IA sampling. Building spaces and chemical containers were screened using a MultiRAE multi-gas monitor during the survey.
- Langan installed four permanent Vapor Pin® SSV sampling points (ACME-SSV-01 through ACME-SSV-04) through the concrete building slab. The sampling points were completed using a hammer drill by drilling a 5/8-inch diameter hole through the concrete slab to a depth of about one inch into the underlying soil. The sampling points were then completed with Vapor Pin assemblies consisting of a stainless-steel barbed fitting and silicone sleeve sealing the 5/8-inch-diameter hole. The tops of the sampling points were sealed with silicone caps, and the sampling points were completed with stainless-steel flush-mounted covers to match the surrounding grade.
- Seal integrity tests were performed at each SSV sampling point using helium shrouds before and after sample collection.
- Langan collected four SSV samples (ACME-SSV-01_121220 through ACME-SSV-04_121220), four co-located IA samples (ACME-IA-01_121220 through ACME-IA-04_121220) and one outdoor ambient air (OA) sample (ACME-OA-01_121220) into 6-liter Summa canisters, with regulators calibrated for 8-hour sampling periods.
    - All doors and windows were closed during SSV and IA air sample collection.
- Langan demobilized from the site at 8:00 p.m.

Anticipated Activities

- Langan will begin high-density SSV screening on Friday, 12/18/2020.

To:	Jack Teich, Marc Teich, Michael Teich, Michael Haggerty, Shaun Surani, and Christine Leas	**By:**	Jack Donelan Langan

SITE OBSERVATION REPORT

PROJECT No.:	170157201	**CLIENT:**	Whitehead Company	**DATE:**	12/12/2020
LOCATION:	Brooklyn, NY			**WEATHER:**	Cloudy, 50s°F
PROJECT:	Former Acme Steel/Metal Works NYSDEC Site No. 224131 46 Anthony St./95 Lombardy St. Brooklyn, New York 11222				Wind: S @ 0-5 mph
				TIME:	8:00 a.m. to 8:00 p.m.

SITE PHOTOGRAPHS:

Photo 1:

ACME-SSV-04 and ACME-IA-04 sample collection (facing northeast).

Photo 2:

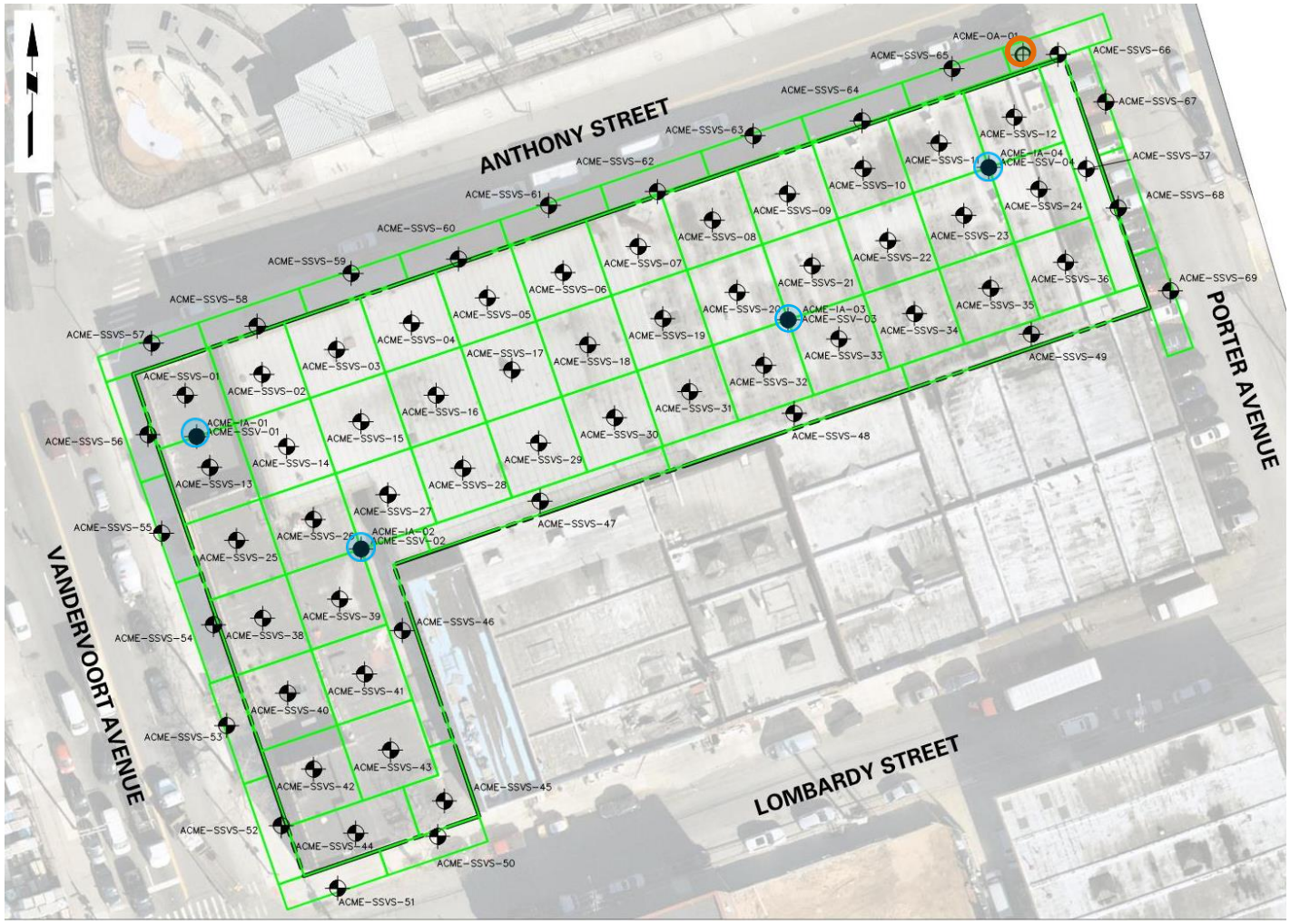
Helium shroud test at ACME-SSV-01.

To:	Jack Teich, Marc Teich, Michael Teich, Michael Haggerty, Shaun Surani, and Christine Leas	**By:**	Jack Donelan Langan

SITE OBSERVATION REPORT

PROJECT No.:	170157201	**CLIENT:**	Whitehead Company	**DATE:**	12/12/2020
LOCATION:	Brooklyn, NY			**WEATHER:**	Cloudy, 50s°F Wind: S @ 0-5 mph
PROJECT:	Former Acme Steel/Metal Works NYSDEC Site No. 224131 46 Anthony St./95 Lombardy St. Brooklyn, New York 11222			**TIME:**	8:00 a.m. to 8:00 p.m.

SITE PLAN:



Legend:

- Site Boundary
- Approximate location of SSV sampling, co-located indoor air sampling, and seal integrity testing
- Approximate location of outdoor ambient air sample

Notes:

1. Drawing background is based on Potential CVOC Source Investigation Work Plan "Figure 3 – Proposed Screening Point and Sample Location Plan", prepared by Langan and dated 25 November 2020.

To:	Jack Teich, Marc Teich, Michael Teich, Michael Haggerty, Shaun Surani, and Christine Leas	**By:**	Jack Donelan Langan

SITE OBSERVATION REPORT

PROJECT No.:	170157201	**CLIENT:**	**DATE:**	12/18/2020
LOCATION:	Brooklyn, NY	Whitehead Company	**WEATHER:**	Cloudy, 30s°F Wind: N @ 5-10 mph
PROJECT:	Former Acme Steel/Metal Works NYSDEC Site No. 224131 46 Anthony St./95 Lombardy St. Brooklyn, New York 11222		**TIME:**	7:00 a.m. to 5:00 p.m.

EQUIPMENT:	**PRESENT AT SITE:**
MiniRAE Photoionization Detector Gilian GilAir Plus Air Sampling Pump Vacuum Chamber MultiRAE Multi-Gas Monitor Hammer Drill Vapor Pin Kit	Langan: Lexi Haley and Farielle Brazier *[10 hours onsite],* and Jack Donelan *[5 hours onsite]* NOVA Geophysical Services (NOVA): Chris Steinley [*4 hours onsite*]

OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:

Langan was on site to implement the New York State Department of Environmental Conservation (NYSDEC)-approved Potential Chlorinated Volatile Organic Compound (CVOC) Source Investigation Work Plan, dated 25 November 2020.

Site Activities

- Langan mobilized to the site at 7:00 a.m. to oversee a geophysical survey, install temporary sub-slab vapor (SSV) screening points, conduct seal integrity tests using water dams, and screen sub-slab vapor for potential CVOC impacts.
- At the start of the day, Langan calibrated the handheld MiniRae photoionization detectors (PIDs) and MultiRAE multi-gas monitors. Fresh air was used to zero the instruments, and calibration gas containing 100 parts per million (ppm) of isobutylene gas was used to calibrate the sensor. Calibration results were within the acceptable range, indicating that the equipment was suitable for use.
- NOVA performed a geophysical survey across the site to SSV screening locations for potential utilities or subsurface obstructions. Survey equipment included ground penetrating radar (GPR) and an electromagnetic utility locator.
- Langan installed 13 temporary Vapor Pin® SSV screening points (ACME-SSVS-07 through ACME-SSV-11, ACME-SSVS-19 through ACME-SSVS-23, ACME-SSVS-31, ACME-SSVS-32 and ACME-SSVS-35) through the concrete building slab.
    - Each sampling point was installed using a hammer drill, by drilling a 5/8-inch diameter hole through the concrete slab to a depth of about one inch into the underlying soil. Each screening point was then completed with a Vapor Pin assembly consisting of a stainless-steel barbed fitting and silicone sleeve sealing the 5/8-inch-diameter hole.
    - Seal integrity tests were performed at each SSV screening location using a water dam during purging and sampling. The water dam was sealed to the underlying concrete slab with hydrated bentonite, and filled with water to check for leaks and prevent short-circuiting. One to three volumes were purged from each SSV screening point, after which each point was capped and allowed to equilibrate for about one hour.
    - After equilibration, each point was purged again before being connected to a vacuum chamber, which in turn was connected to a personal air sampling pump. The pump and vacuum chamber were used to fill a dedicated 3-liter Tedlar bag with vapor from each screening point. A PID with a 10.6 electron volt (eV) lamp was used to screen the collected vapor from each Tedlar bag and measure total volatile organic compounds (VOCs).

To:	Jack Teich, Marc Teich, Michael Teich, Michael Haggerty, Shaun Surani, and Christine Leas	**By:**	Lexi Haley and Farielle Brazier Langan

SITE OBSERVATION REPORT

PROJECT No.:	170157201	**CLIENT:**	Whitehead Company	**DATE:**	12/18/2020
LOCATION:	Brooklyn, NY			**WEATHER:**	Cloudy, 30s°F Wind: N @ 5-10 mph
PROJECT:	Former Acme Steel/Metal Works NYSDEC Site No. 224131 46 Anthony St./95 Lombardy St. Brooklyn, New York 11222			**TIME:**	7:00 a.m. to 5:00 p.m.

- Total VOC concentrations were below 10 ppm at each screening point.
- At the end of the day, each temporary screening point was removed and the corresponding slab penetrations were restored using foam caulk, bentonite, and liquid concrete crack sealant.
- Langan demobilized from the site at 5:00 p.m.

Anticipated Activities

- Langan will continue high-density SSV screening on Monday, 12/21/2020.

To:	Jack Teich, Marc Teich, Michael Teich, Michael Haggerty, Shaun Surani, and Christine Leas	**By:**	Lexi Haley and Farielle Brazier Langan

SITE OBSERVATION REPORT

PROJECT No.:	170157201	**CLIENT:**	Whitehead Company	**DATE:**	12/18/2020
LOCATION:	Brooklyn, NY			**WEATHER:**	Cloudy, 30s°F Wind: N @ 5-10 mph
PROJECT:	Former Acme Steel/Metal Works NYSDEC Site No. 224131 46 Anthony St./95 Lombardy St. Brooklyn, New York 11222			**TIME:**	7:00 a.m. to 5:00 p.m.

SITE PHOTOGRAPHS:

Photo 1:

View of NOVA marking underground utilities with tape (facing west)

Photo 2:

View of Langan installing SSV screening point ACME-SSVS-22 (facing north)

To:	Jack Teich, Marc Teich, Michael Teich, Michael Haggerty, Shaun Surani, and Christine Leas	**By:**	Lexi Haley and Farielle Brazier Langan

SITE OBSERVATION REPORT

PROJECT No.:	170157201	**CLIENT:**	Whitehead Company	**DATE:**	12/18/2020
LOCATION:	Brooklyn, NY			**WEATHER:**	Cloudy, 30s°F Wind: N @ 5-10 mph
PROJECT:	Former Acme Steel/Metal Works NYSDEC Site No. 224131 46 Anthony St./95 Lombardy St. Brooklyn, New York 11222			**TIME:**	7:00 a.m. to 5:00 p.m.

SITE PHOTOGRAPHS:

Photo 3:

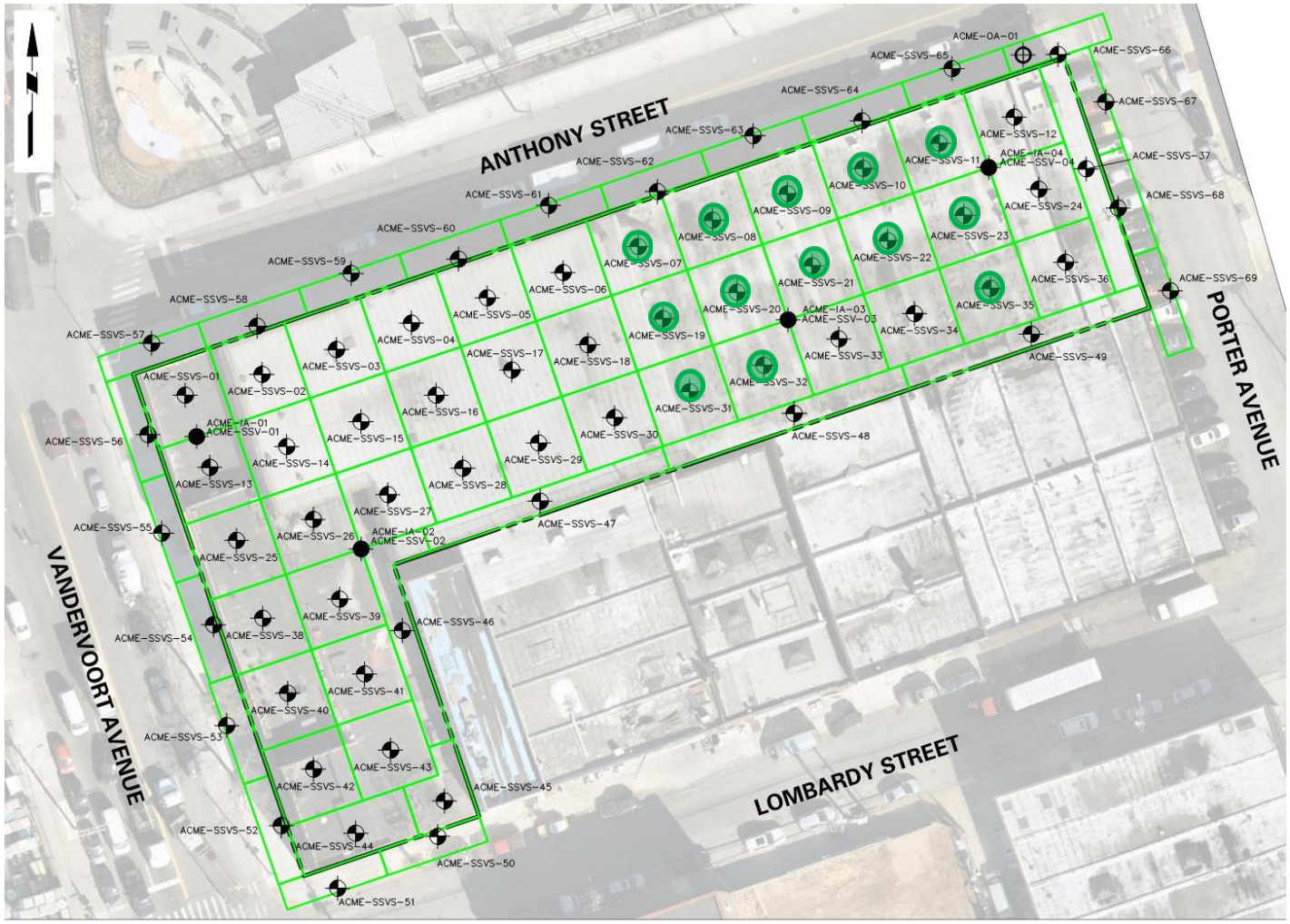
General view of site, within the 60 Anthony building (facing west)

To:	Jack Teich, Marc Teich, Michael Teich, Michael Haggerty, Shaun Surani, and Christine Leas	**By:**	Lexi Haley and Farielle Brazier Langan

SITE OBSERVATION REPORT

PROJECT No.:	170157201	**CLIENT:**	Whitehead Company	**DATE:**	12/18/2020
LOCATION:	Brooklyn, NY			**WEATHER:**	Cloudy, 30s°F Wind: N @ 5-10 mph
PROJECT:	Former Acme Steel/Metal Works NYSDEC Site No. 224131 46 Anthony St./95 Lombardy St. Brooklyn, New York 11222			**TIME:**	7:00 a.m. to 5:00 p.m.

SITE PLAN:



Legend:

Site Boundary

Approximate location of completed SSV screening point exhibiting a total VOC Concentration (as measured via PID) below 10 ppm

Note:

1. Drawing background is based on Potential CVOC Source Investigation Work Plan "Figure 3 – Proposed Screening Point and Sample Location Plan", prepared by Langan and dated 25 November 2020.

To:	Jack Teich, Marc Teich, Michael Teich, Michael Haggerty, Shaun Surani, and Christine Leas	**By:**	Lexi Haley and Farielle Brazier Langan

SITE OBSERVATION REPORT

PROJECT No.:	170157201	**CLIENT:**	Whitehead Company	**DATE:**	12/21/2020
LOCATION:	Brooklyn, NY			**WEATHER:**	Cloudy, 40s°F
PROJECT:	Former Acme Steel/Metal Works NYSDEC Site No. 224131 46 Anthony St./95 Lombardy St. Brooklyn, New York 11222				Wind: N @ 0-5 mph
				TIME:	7:00 a.m. to 5:45 p.m.

EQUIPMENT:

MiniRAE Photoionization Detector
Gilian GilAir Plus Air Sampling Pump
Vacuum Chamber
MultiRAE Multi-Gas Monitor
Hammer Drill
Vapor Pin Kit

PRESENT AT SITE:

Langan: Lexi Haley and Farielle Brazier *[10.75 hours onsite]*

OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:

Langan was on site to implement the New York State Department of Environmental Conservation (NYSDEC)-approved Potential Chlorinated Volatile Organic Compound (CVOC) Source Investigation Work Plan, dated 25 November 2020.

Site Activities

- Langan mobilized to the site at 7:00 a.m. to install temporary sub-slab vapor (SSV) screening points, conduct seal integrity tests using water dams, and screen sub-slab vapor for potential CVOC impacts.
- At the start of the day, Langan calibrated the handheld MiniRae photoionization detectors (PIDs) and MultiRAE multi-gas monitors. Fresh air was used to zero the instruments, and calibration gas containing 100 parts per million (ppm) of isobutylene gas was used to calibrate the sensor. Calibration results were within the acceptable range, indicating that the equipment was suitable for use.
- Langan installed 26 temporary Vapor Pin® SSV screening points (ACME-SSVS-02 through ACME-SSV-06, ACME-SSVS-12, ACME-SSVS-14 through ACME-SSVS-18, ACME-SSVS-24, ACME-SSVS-26 through ACME-SSVS-30, ACME-SSVS-33, ACME-SSVS-34, ACME-SSVS-36, ACME-SSVS-37, ACME-SSVS-39, and ACME SSVS-46 through ACME-SSVS-49) through the concrete building slab.
    - Each sampling point was installed using a hammer drill, by drilling a 5/8-inch diameter hole through the concrete slab to a depth of about one inch into the underlying soil. Each screening point was then completed with a Vapor Pin assembly consisting of a stainless-steel barbed fitting and silicone sleeve sealing the 5/8-inch-diameter hole.
    - Seal integrity tests were performed at each SSV screening location using a water dam during purging and sampling. The water dam was sealed to the underlying concrete slab with hydrated bentonite, and filled with water to check for leaks and prevent short-circuiting. One to three volumes were purged from each SSV screening point, after which each point was capped and allowed to equilibrate for about one hour.
    - After equilibration, each point was purged again before being connected to a vacuum chamber, which in turn was connected to a personal air sampling pump. The pump and vacuum chamber were used to fill a dedicated 3-liter Tedlar bag with vapor from each screening point. A PID with a 10.6 electron volt (eV) lamp was used to screen the collected vapor from each Tedlar bag and measure total volatile organic compounds (VOCs).
- Total VOC concentrations were below 10 ppm at each screening point.
- At the end of the day, each temporary screening point was removed and the corresponding slab penetrations were restored using foam caulk, bentonite, and liquid concrete crack sealant.

To:	Jack Teich, Marc Teich, Michael Teich, Michael Haggerty, Shaun Surani, and Christine Leas	**By:**	Lexi Haley and Farielle Brazier Langan

SITE OBSERVATION REPORT

PROJECT No.:	170157201	**CLIENT:**	Whitehead Company	**DATE:**	12/21/2020
LOCATION:	Brooklyn, NY			**WEATHER:**	Cloudy, 40s°F Wind: N @ 0-5 mph
PROJECT:	Former Acme Steel/Metal Works NYSDEC Site No. 224131 46 Anthony St./95 Lombardy St. Brooklyn, New York 11222			**TIME:**	7:00 a.m. to 5:45 p.m.

- Langan demobilized from the site at 5:45 p.m.

Anticipated Activities

- Langan will continue high-density SSV screening on Tuesday, 12/22/2020.

To:	Jack Teich, Marc Teich, Michael Teich, Michael Haggerty, Shaun Surani, and Christine Leas	**By:**	Lexi Haley and Farielle Brazier Langan

SITE OBSERVATION REPORT

PROJECT No.:	170157201	**CLIENT:**	Whitehead Company	**DATE:**	12/21/2020
LOCATION:	Brooklyn, NY			**WEATHER:**	Cloudy, 40s°F Wind: N @ 0-5 mph
PROJECT:	Former Acme Steel/Metal Works NYSDEC Site No. 224131 46 Anthony St./95 Lombardy St. Brooklyn, New York 11222			**TIME:**	7:00 a.m. to 5:45 p.m.

SITE PHOTOGRAPHS:

Photo 1:

View of Langan installing SSV screening point ACME-SSVS-12 (facing east).

Photo 2:

View of seal integrity test using a water dam at SSV screening point ACME-SSVS-48 during purging process.

To:	Jack Teich, Marc Teich, Michael Teich, Michael Haggerty, Shaun Surani, and Christine Leas	**By:**	Lexi Haley and Farielle Brazier Langan

SITE OBSERVATION REPORT

PROJECT No.:	170157201	**CLIENT:**	Whitehead Company	**DATE:**	12/21/2020
LOCATION:	Brooklyn, NY			**WEATHER:**	Cloudy, 40s°F Wind: N @ 0-5 mph
PROJECT:	Former Acme Steel/Metal Works NYSDEC Site No. 224131 46 Anthony St./95 Lombardy St. Brooklyn, New York 11222			**TIME:**	7:00 a.m. to 5:45 p.m.

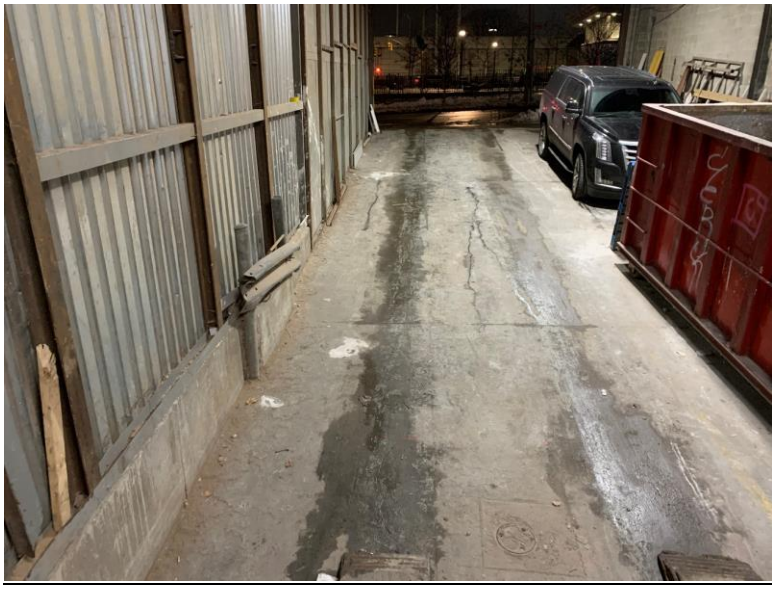
SITE PHOTOGRAPHS:

Photo 3:

View of vacuum chamber setup at SSV screening point ACME-SSVS-48 (facing southeast).

Photo 4:

View of the restored SSV screening points ACME-SSVS-02 and ACME-SSVS-14 in a loading dock at 46 Anthony Street (facing north).



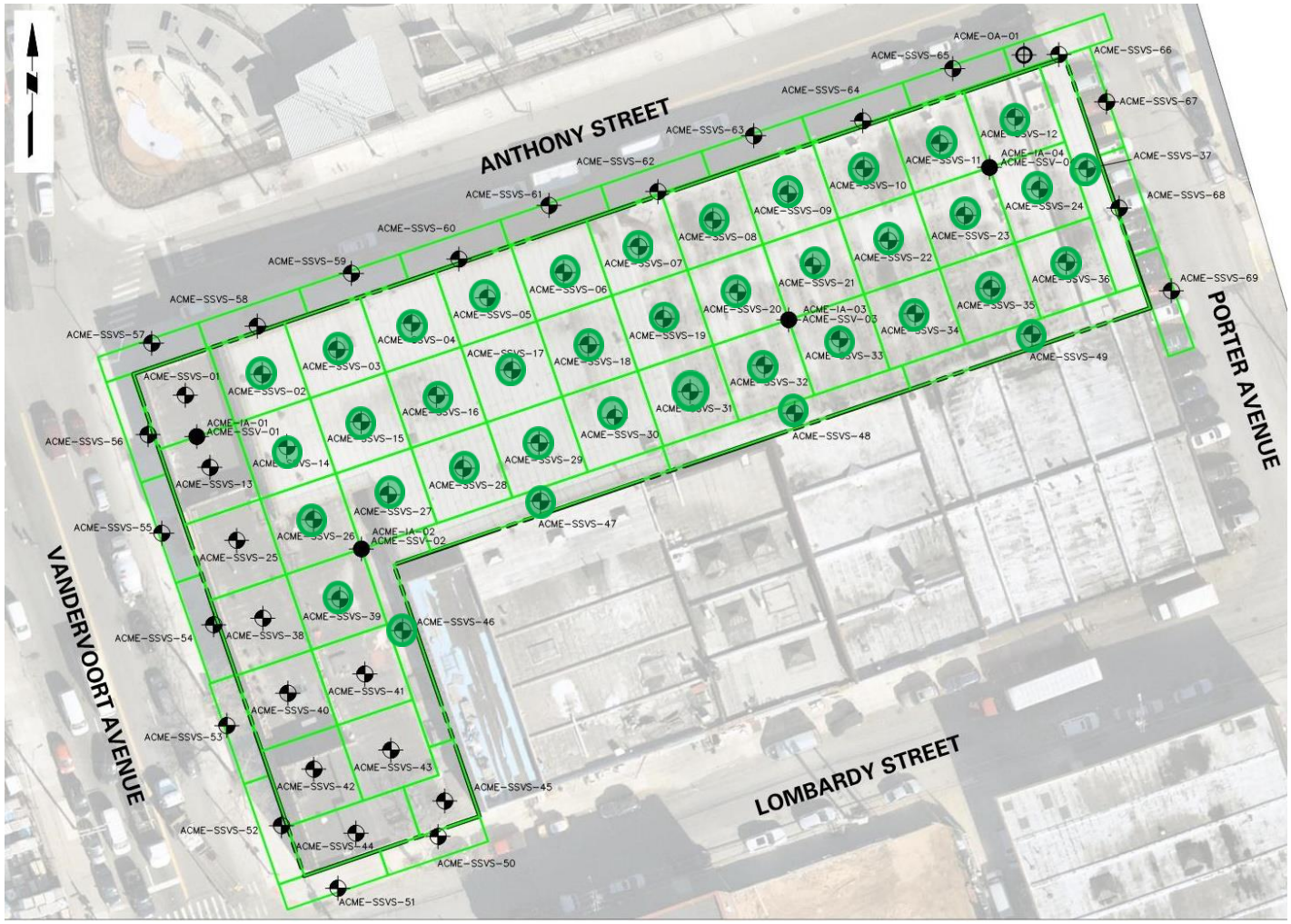
To:	Jack Teich, Marc Teich, Michael Teich, Michael Haggerty, Shaun Surani, and Christine Leas	**By:**	Lexi Haley and Farielle Brazier Langan

LANGAN

SITE OBSERVATION REPORT

PROJECT No.:	170157201	**CLIENT:**	Whitehead Company	**DATE:**	12/21/2020
LOCATION:	Brooklyn, NY			**WEATHER:**	Cloudy, 40s°F Wind: N @ 0-5 mph
PROJECT:	Former Acme Steel/Metal Works NYSDEC Site No. 224131 46 Anthony St./95 Lombardy St. Brooklyn, New York 11222			**TIME:**	7:00 a.m. to 5:45 p.m.

SITE PLAN:



Legend:

Site Boundary

Approximate location of completed SSV screening point exhibiting a total VOC Concentration (as measured via PID) below 10 ppm

Note:

1. Drawing background is based on Potential CVOC Source Investigation Work Plan "Figure 3 – Proposed Screening Point and Sample Location Plan", prepared by Langan and dated 25 November 2020.

To:	Jack Teich, Marc Teich, Michael Teich, Michael Haggerty, Shaun Surani, and Christine Leas	**By:**	Lexi Haley and Farielle Brazier Langan

SITE OBSERVATION REPORT

PROJECT No.:	170157201	**CLIENT:**	Whitehead Company	**DATE:**	12/22/2020
LOCATION:	Brooklyn, NY			**WEATHER:**	Cloudy, 40s °F Wind: N @ 8-23 mph
PROJECT:	Former Acme Steel/Metal Works NYSDEC Site No. 224131 46 Anthony St./95 Lombardy St. Brooklyn, New York 11222			**TIME:**	7:30 a.m. to 5:45 p.m.

EQUIPMENT:	**PRESENT AT SITE:**
MiniRAE Photoionization Detector Gilian GilAir Plus Air Sampling Pump Vacuum Chamber MultiRAE Multi-Gas Monitor Hammer Drill Vapor Pin Kit	Langan: Lexi Haley and Farielle Brazier *[10.25 hours onsite]*

OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:

Langan was on site to implement the New York State Department of Environmental Conservation (NYSDEC)-approved Potential Chlorinated Volatile Organic Compound (CVOC) Source Investigation Work Plan, dated 25 November 2020.

Site Activities

- Langan mobilized to the site at 7:30 a.m. to install temporary sub-slab vapor (SSV) screening points, conduct seal integrity tests using water dams, and screen sub-slab vapor for potential CVOC impacts.
- At the start of the day, Langan calibrated the handheld MiniRae photoionization detectors (PIDs) and MultiRAE multi-gas monitors. Fresh air was used to zero the instruments, and calibration gas containing 100 parts per million (ppm) of isobutylene gas was used to calibrate the sensor. Calibration results were within the acceptable range, indicating that the equipment was suitable for use.
- Langan installed 27 temporary Vapor Pin® SSV screening points (ACME-SSVS-01, ACME-SSV-13, ACME-SSVS-25, ACME-SSVS-38, ACME-SSVS-40 through ACME-SSVS-45, and ACME-SSVS-50 through ACME-SSVS-66) through the concrete building slab.
    - Each sampling point was installed using a hammer drill, by drilling a 5/8-inch diameter hole through the concrete slab to a depth of about one inch into the underlying soil. Each screening point was then completed with a Vapor Pin assembly consisting of a stainless-steel barbed fitting and silicone sleeve sealing the 5/8-inch-diameter hole.
    - Seal integrity tests were performed at each SSV screening location using a water dam during purging and sampling. The water dam was sealed to the underlying concrete slab with hydrated bentonite, and filled with water to check for leaks and prevent short-circuiting. One to three volumes were purged from each SSV screening point, after which each point was capped and allowed to equilibrate for about one hour.
    - After equilibration, each point was purged again before being connected to a vacuum chamber, which in turn was connected to a personal air sampling pump. The pump and vacuum chamber were used to fill a dedicated 3-liter Tedlar bag with vapor from each screening point. A PID with a 10.6 electron volt (eV) lamp was used to screen the collected vapor from each Tedlar bag and measure total volatile organic compounds (VOCs).
- Total VOC concentrations were below 10 ppm at each screening point.
- At the end of the day, each temporary screening point was removed and the corresponding slab penetrations were restored using foam caulk, bentonite, and liquid concrete crack sealant.
- Langan demobilized from the site at 5:45 p.m.

To:	Jack Teich, Marc Teich, Michael Teich, Michael Haggerty, Shaun Surani, and Christine Leas	**By:**	Lexi Haley and Farielle Brazier Langan

SITE OBSERVATION REPORT

PROJECT No.:	170157201	**CLIENT:**	Whitehead Company	**DATE:**	12/22/2020
LOCATION:	Brooklyn, NY			**WEATHER:**	Cloudy, 40s °F Wind: N @ 8-23 mph
PROJECT:	Former Acme Steel/Metal Works NYSDEC Site No. 224131 46 Anthony St./95 Lombardy St. Brooklyn, New York 11222			**TIME:**	7:30 a.m. to 5:45 p.m.

Anticipated Activities

- Langan will complete the investigation by installing and screening 13 additional SSV points on Wednesday, 12/23/2020.

To:	Jack Teich, Marc Teich, Michael Teich, Michael Haggerty, Shaun Surani, and Christine Leas	**By:**	Lexi Haley and Farielle Brazier Langan

SITE OBSERVATION REPORT

PROJECT No.:	170157201	**CLIENT:**	Whitehead Company	**DATE:**	12/22/2020
LOCATION:	Brooklyn, NY			**WEATHER:**	Cloudy, 40s °F Wind: N @ 8-23 mph
PROJECT:	Former Acme Steel/Metal Works NYSDEC Site No. 224131 46 Anthony St./95 Lombardy St. Brooklyn, New York 11222			**TIME:**	7:30 a.m. to 5:45 p.m.

SITE PHOTOGRAPHS:

Photo 1:

View of pre-purge screening at SSV screening point ACME-SSVS-40 (facing east).

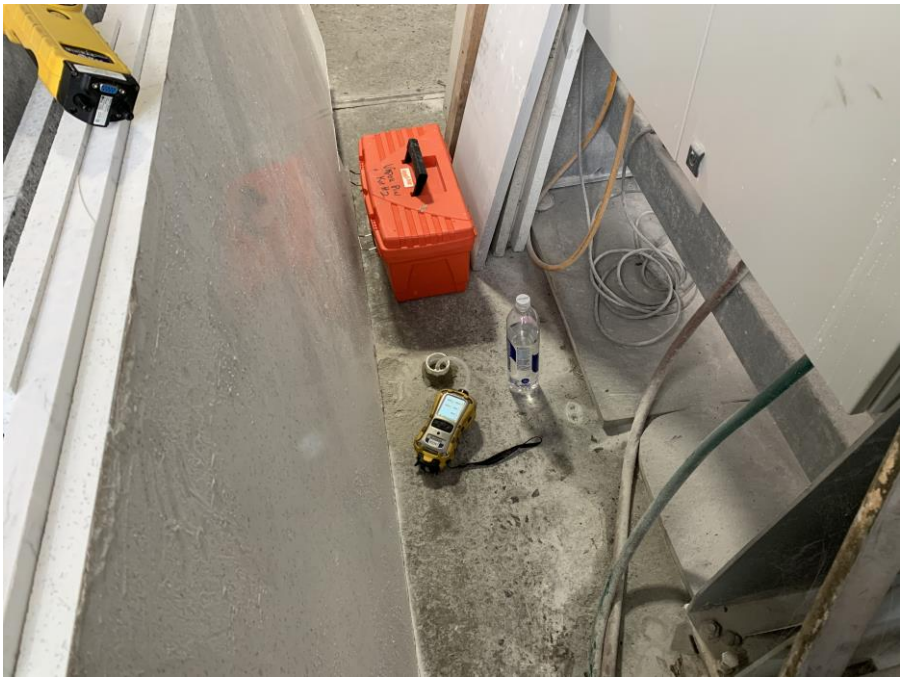
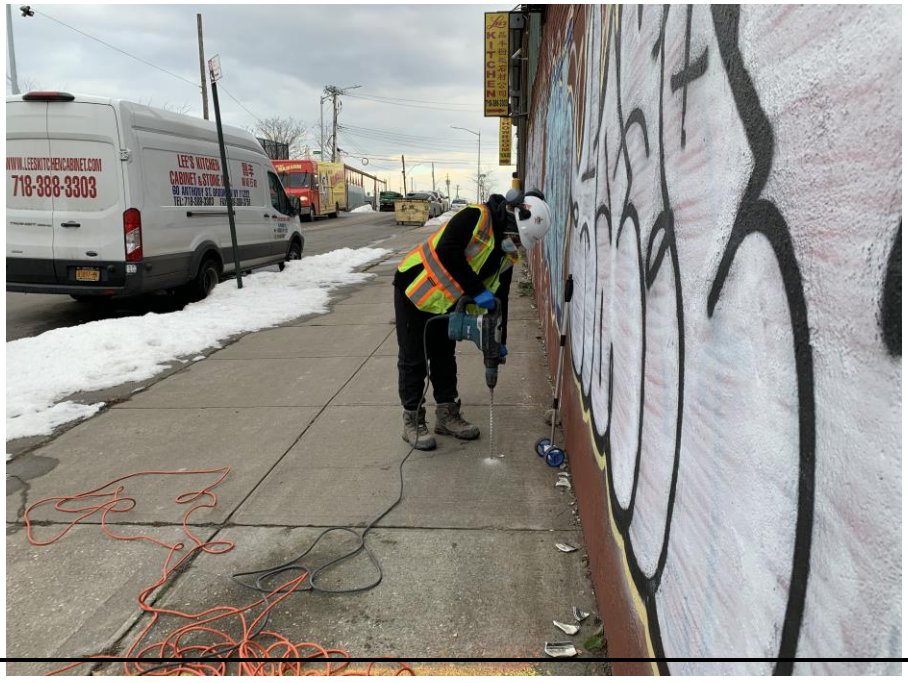


Photo 2:

View of Langan installing a vapor pin at SSV screening point ACME-SSVS-62 (facing east).



To:	Jack Teich, Marc Teich, Michael Teich, Michael Haggerty, Shaun Surani, and Christine Leas	**By:**	Lexi Haley and Farielle Brazier Langan

SITE OBSERVATION REPORT

PROJECT No.:	170157201	**CLIENT:**	Whitehead Company	**DATE:**	12/22/2020
LOCATION:	Brooklyn, NY			**WEATHER:**	Cloudy, 40s °F Wind: N @ 8-23 mph
PROJECT:	Former Acme Steel/Metal Works NYSDEC Site No. 224131 46 Anthony St./95 Lombardy St. Brooklyn, New York 11222			**TIME:**	7:30 a.m. to 5:45 p.m.

Photo 3:

View of vacuum chamber setup at SSV screening point ACME-SSV-40 (facing west).

Photo 4:

View of the restored SSV screening point ACME-SSVS-51 in the Lombardy Street sidewalk (facing northwest).

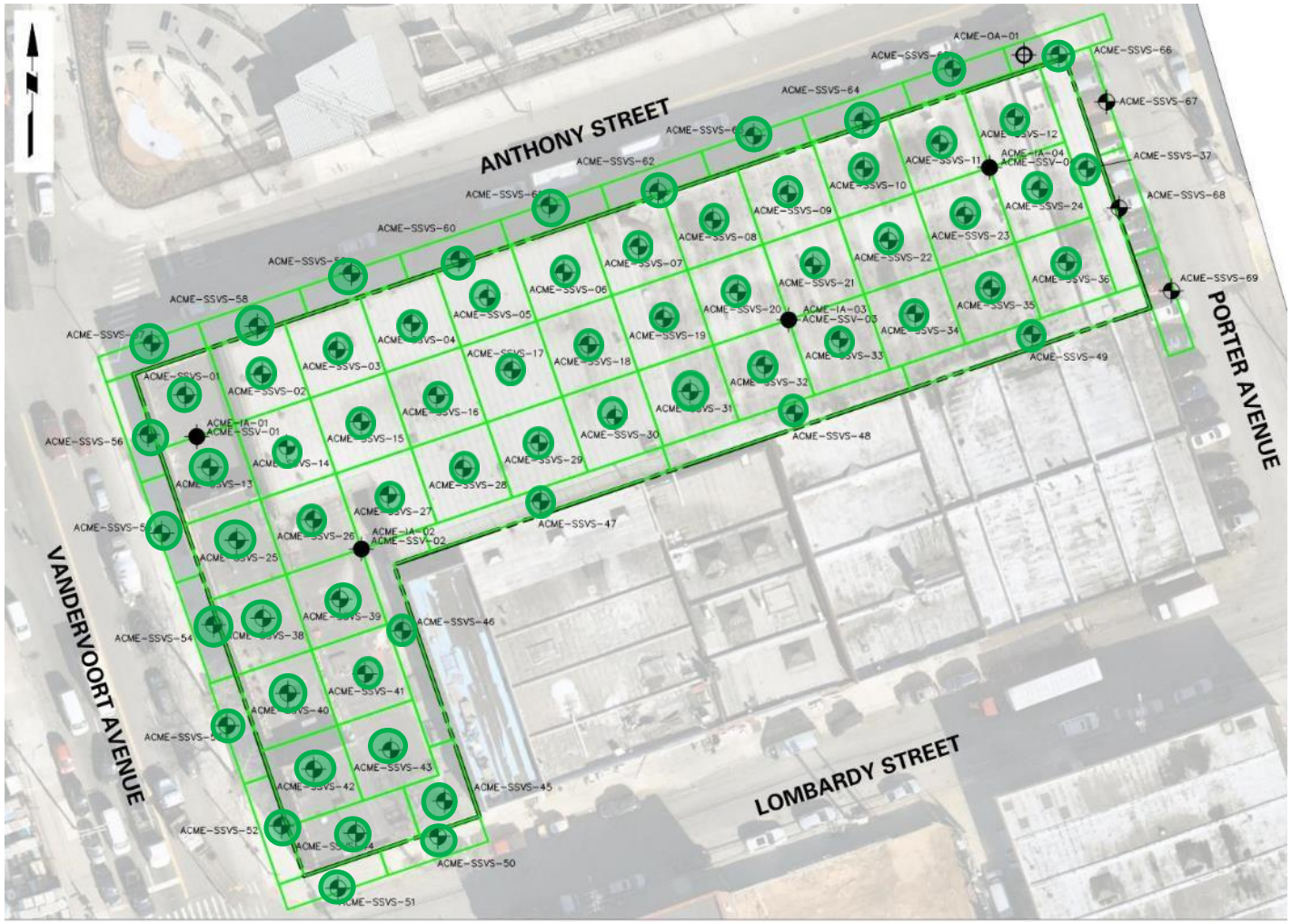
To:	Jack Teich, Marc Teich, Michael Teich, Michael Haggerty, Shaun Surani, and Christine Leas	**By:**	Lexi Haley and Farielle Brazier Langan

LANGAN

SITE OBSERVATION REPORT

PROJECT No.:	170157201	**CLIENT:**	Whitehead Company	**DATE:**	12/22/2020
LOCATION:	Brooklyn, NY			**WEATHER:**	Cloudy, 40s °F Wind: N @ 8-23 mph
PROJECT:	Former Acme Steel/Metal Works NYSDEC Site No. 224131 46 Anthony St./95 Lombardy St. Brooklyn, New York 11222			**TIME:**	7:30 a.m. to 5:45 p.m.

SITE PLAN:



Legend:

Site Boundary

Approximate location of completed SSV screening point exhibiting a total VOC Concentration (as measured via PID) below 10 ppm

Note:

1. Drawing background is based on Potential CVOC Source Investigation Work Plan "Figure 3 – Proposed Screening Point and Sample Location Plan", prepared by Langan and dated 25 November 2020.

To:	Jack Teich, Marc Teich, Michael Teich, Michael Haggerty, Shaun Surani, and Christine Leas	**By:**	Lexi Haley and Farielle Brazier Langan

LANGAN

SITE OBSERVATION REPORT

PROJECT No.:	170157201	**CLIENT:**	Whitehead Company	**DATE:**	12/23/2020
LOCATION:	Brooklyn, NY			**WEATHER:**	Cloudy, 42 °F
PROJECT:	Former Acme Steel/Metal Works NYSDEC Site No. 224131 46 Anthony St./95 Lombardy St. Brooklyn, New York 11222				Wind: N @ 0-9 mph
				TIME:	8:00 a.m. to 5:30 p.m.

EQUIPMENT:	**PRESENT AT SITE:**
MiniRAE Photoionization Detector Gilian GilAir Plus Air Sampling Pump Vacuum Chamber MultiRAE Multi-Gas Monitor Hammer Drill Vapor Pin Kit	Langan: Lucy Bevan *[4 hours onsite]* and Farielle Brazier *[9.5 hours onsite]*

OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:

Langan was on site to implement the New York State Department of Environmental Conservation (NYSDEC)-approved Potential Chlorinated Volatile Organic Compound (CVOC) Source Investigation Work Plan, dated 25 November 2020.

Site Activities

- Langan mobilized to the site at 8:00 a.m. to install temporary sub-slab vapor (SSV) screening points, conduct seal integrity tests using water dams, and screen sub-slab vapor for potential CVOC impacts.
- At the start of the day, Langan calibrated the handheld MiniRae photoionization detectors (PIDs) and MultiRAE multi-gas monitors. Fresh air was used to zero the instruments, and calibration gas containing 100 parts per million (ppm) of isobutylene gas was used to calibrate the sensor. Calibration results were within the acceptable range, indicating that the equipment was suitable for use.
- Langan installed 13 temporary Vapor Pin® SSV screening points (ACME SSVS-01A through ACME-SSV-01C, ACME-SSVS-13A through ACME-SSVS-13C, ACME-SSVS-14A through ACME-SSVS-14C, ACME-SSVS-15A, ACME_SSVS-26A, ACME-SSVS-26B, and ACME_SSVS-56A) through the concrete building slab or the adjoining sidewalk.
    - Each sampling point was installed using a hammer drill, by drilling a 5/8-inch diameter hole through the concrete slab to a depth of about one inch into the underlying soil. Each screening point was then completed with a Vapor Pin assembly consisting of a stainless-steel barbed fitting and silicone sleeve sealing the 5/8-inch-diameter hole.
    - Seal integrity tests were performed at each SSV screening location using a water dam during purging and sampling. The water dam was sealed to the underlying concrete slab with hydrated bentonite, and filled with water to check for leaks and prevent short-circuiting. One to three volumes were purged from each SSV screening point, after which each point was capped and allowed to equilibrate for about one hour.
    - After equilibration, each point was purged again before being connected to a vacuum chamber, which in turn was connected to a personal air sampling pump. The pump and vacuum chamber were used to fill a dedicated 3-liter Tedlar bag with vapor from each screening point. A PID with a 10.6 electron volt (eV) lamp was used to screen the collected vapor from each Tedlar bag and measure total volatile organic compounds (VOCs).
- Total VOC concentrations were below 10 ppm at each screening point.
- At the end of the day, each temporary screening point was removed and the corresponding slab penetrations were restored using foam caulk, bentonite, and liquid concrete crack sealant.

To:	Jack Teich, Marc Teich, Michael Teich, Michael Haggerty, Shaun Surani, and Christine Leas	**By:**	Lucy Bevan and Farielle Brazier Langan

SITE OBSERVATION REPORT

PROJECT No.:	170157201	**CLIENT:**	**DATE:**	12/23/2020
LOCATION:	Brooklyn, NY	Whitehead Company	**WEATHER:**	Cloudy, 42 °F
PROJECT:	Former Acme Steel/Metal Works NYSDEC Site No. 224131 46 Anthony St./95 Lombardy St. Brooklyn, New York 11222			Wind: N @ 0-9 mph
			TIME:	8:00 a.m. to 5:30 p.m.

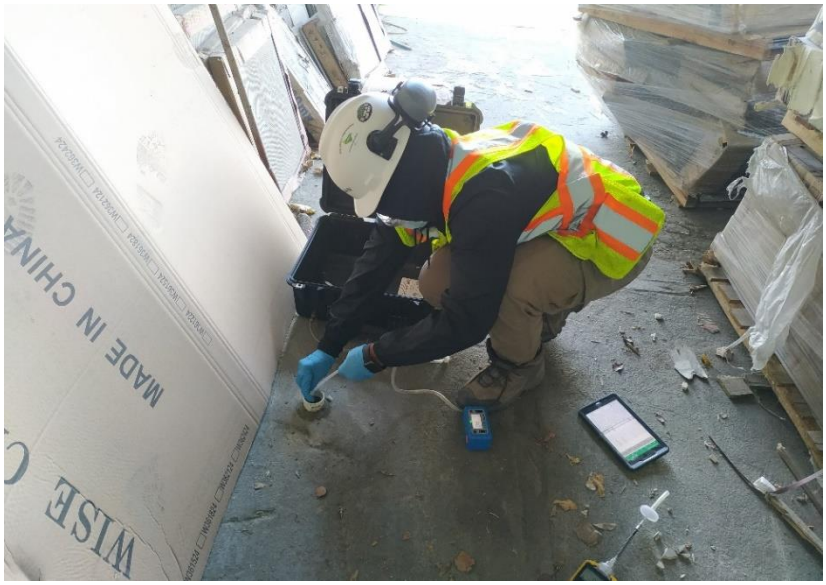
SITE PHOTOGRAPHS:

Photo 1:

View of Tedlar bag screening at SSV screening point ACME-SSVS-26B (facing east).

Photo 2:

View of Langan connecting SSV screening point ACME-SSVS-01A to a vacuum chamber for screening (facing north).



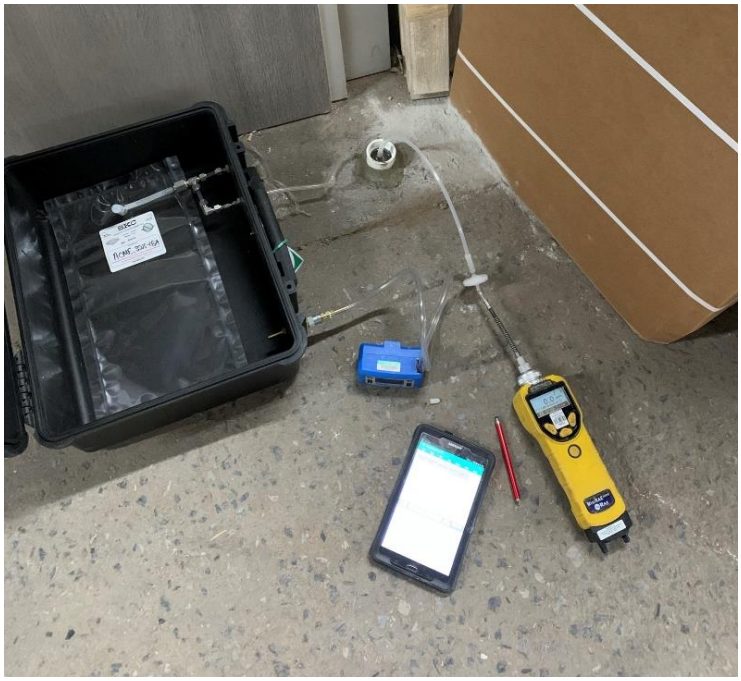
To:	Jack Teich, Marc Teich, Michael Teich, Michael Haggerty, Shaun Surani, and Christine Leas	**By:**	Lucy Bevan and Farielle Brazier Langan

SITE OBSERVATION REPORT

PROJECT No.:	170157201	**CLIENT:**	Whitehead Company	**DATE:**	12/23/2020
LOCATION:	Brooklyn, NY			**WEATHER:**	Cloudy, 42 °F Wind: N @ 0-9 mph
PROJECT:	Former Acme Steel/Metal Works NYSDEC Site No. 224131 46 Anthony St./95 Lombardy St. Brooklyn, New York 11222			**TIME:**	8:00 a.m. to 5:30 p.m.

Photo 3:

View of purging at SSV screening point ACME-SSVS-15A (facing north).



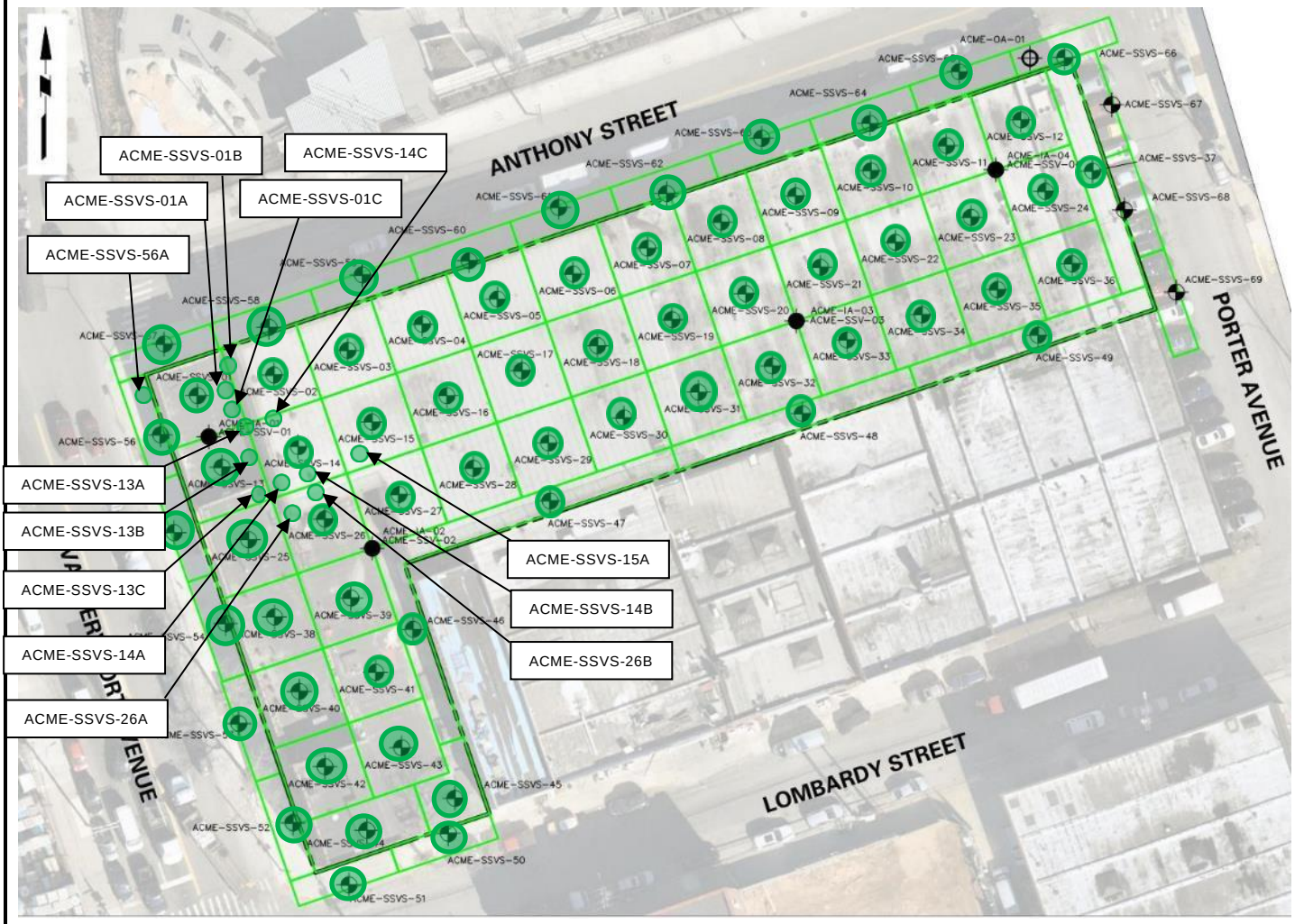
To:	Jack Teich, Marc Teich, Michael Teich, Michael Haggerty, Shaun Surani, and Christine Leas	**By:**	Lucy Bevan and Farielle Brazier Langan

LANGAN

SITE OBSERVATION REPORT

PROJECT No.:	170157201	**CLIENT:**	Whitehead Company	**DATE:**	12/23/2020
LOCATION:	Brooklyn, NY			**WEATHER:**	Cloudy, 42 °F Wind: N @ 0-9 mph
PROJECT:	Former Acme Steel/Metal Works NYSDEC Site No. 224131 46 Anthony St./95 Lombardy St. Brooklyn, New York 11222			**TIME:**	8:00 a.m. to 5:30 p.m.

SITE PLAN:



Legend:

Site Boundary

Approximate location of completed SSV screening point exhibiting a total VOC Concentration (as measured via PID) below 10 ppm

Note:

1. Drawing background is based on Potential CVOC Source Investigation Work Plan "Figure 3 – Proposed Screening Point and Sample Location Plan", prepared by Langan and dated 25 November 2020.

To:	Jack Teich, Marc Teich, Michael Teich, Michael Haggerty, Shaun Surani, and Christine Leas	**By:**	Lucy Bevan and Farielle Brazier Langan

ATTACHMENT B
PHOTOGRAPH LOG

Attachment B – Photograph Log
95 Lombardy / 46 Anthony Street, Brooklyn, New York
Langan Project No. 170157201
Site No. 224131

Photo 1: View of seal integrity testing on permanent sub-slab soil vapor point SSV-01 (12/12/2020)

Photo 2: View of sub-slab soil vapor and co-located indoor air sampling at ACME-SSV-04 and ACME-IA-04, facing east (12/12/2020)

Photo 3: View of NOVA marking out underground utility lines using an electromagnetic detector and tape, facing west (12/18/2020)

Photo 4: View of Langan installing sub-slab soil vapor screening point ACME-SSVS-22, facing north (12/18/2020)

Photo 5: View of seal integrity test using a water dam at sub-slab soil vapor screening point ACME-SSVS-48 during purging process (12/21/2020)

Photo 6: View of vacuum chamber setup at sub-slab soil vapor screening point ACME-SSVS-02, facing west (12/21/2020)

Photo 7: View of vacuum chamber setup at sub-slab soil vapor screening point ACME-SSVS-48, facing southeast (12/21/2020)

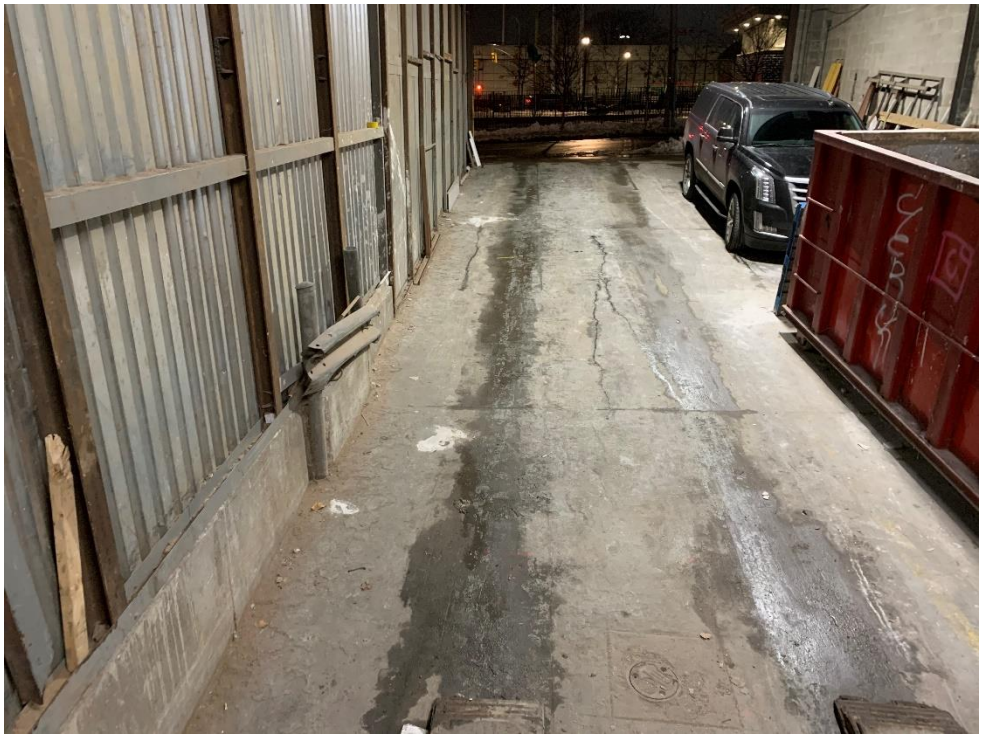


Photo 8: View of the restored sub-slab soil vapor screening points ACME-SSVS-02 and ACME-SSVS-14 in a loading dock at 46 Anthony Street, facing north (12/21/2020)

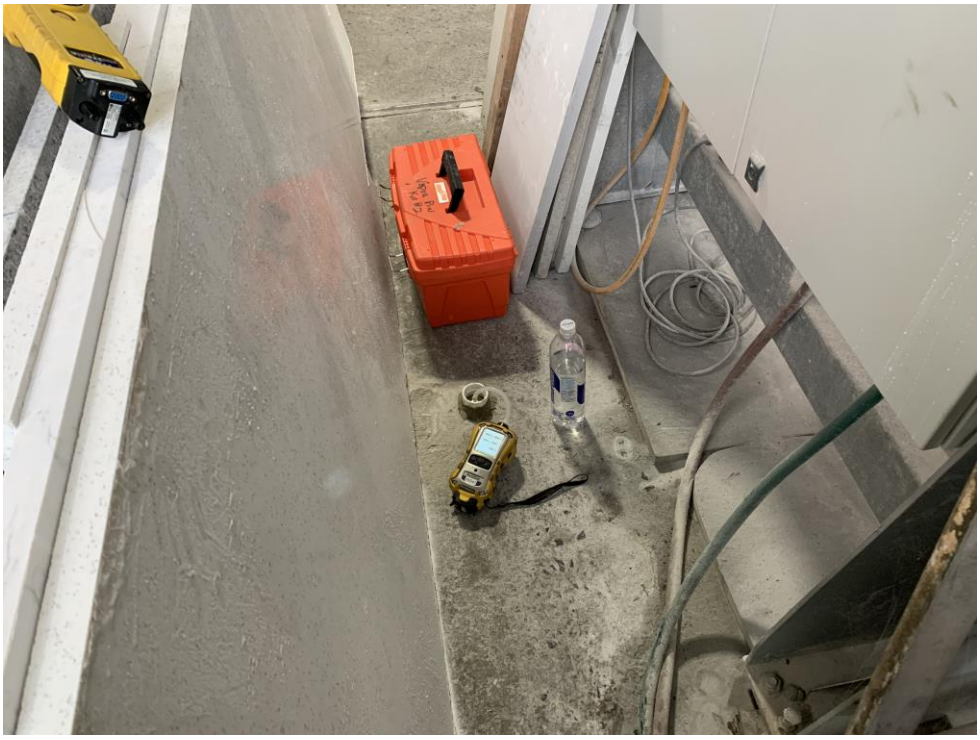


Photo 9: View of pre-purge screening at sub-slab soil vapor screening point ACME-SSVS-40, facing east (12/22/2020)

Photo 10: View of vacuum chamber setup at sub-slab soil vapor screening point ACME-SSVS-40, facing west (12/23/2020)

Attachment B – Photograph Log
95 Lombardy / 46 Anthony Street, Brooklyn, New York
Langan Project No. 170157201
Site No. 224131

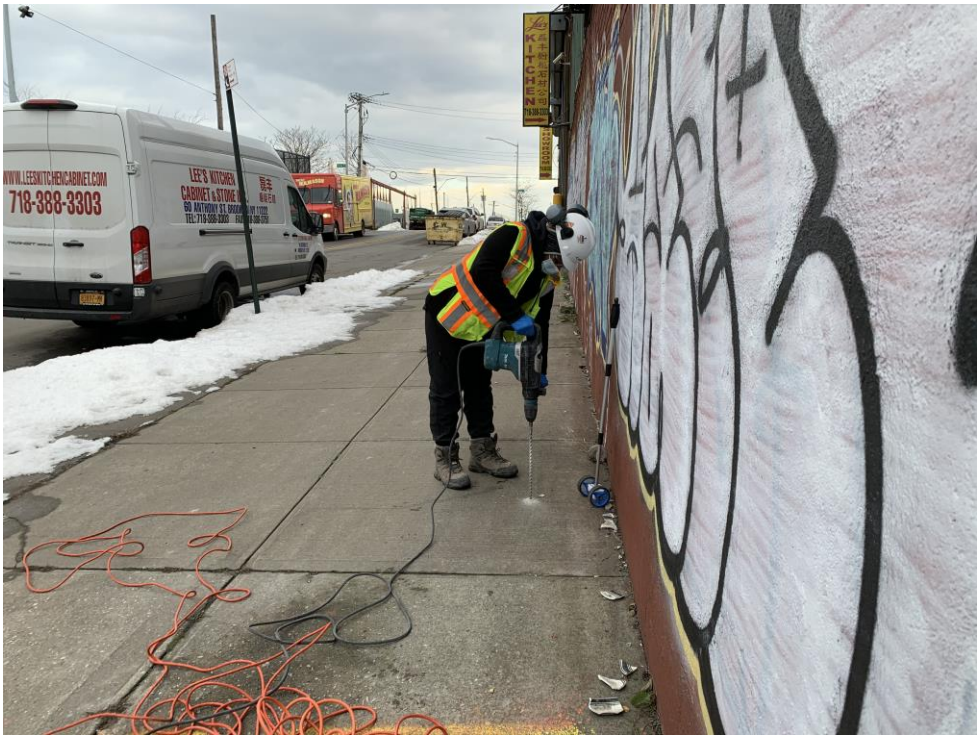


Photo 11: View of Langan installing a temporary vapor pin at sub-slab soil vapor screening point ACME-SSVS-62, facing east (12/22/2020)

Photo 12: View of vacuum chamber setups at sub-slab soil vapor points ACME-SSVS-54 and ACME-SSVS-42 along Vandervoort Avenue, facing southeast (12/22/2020)

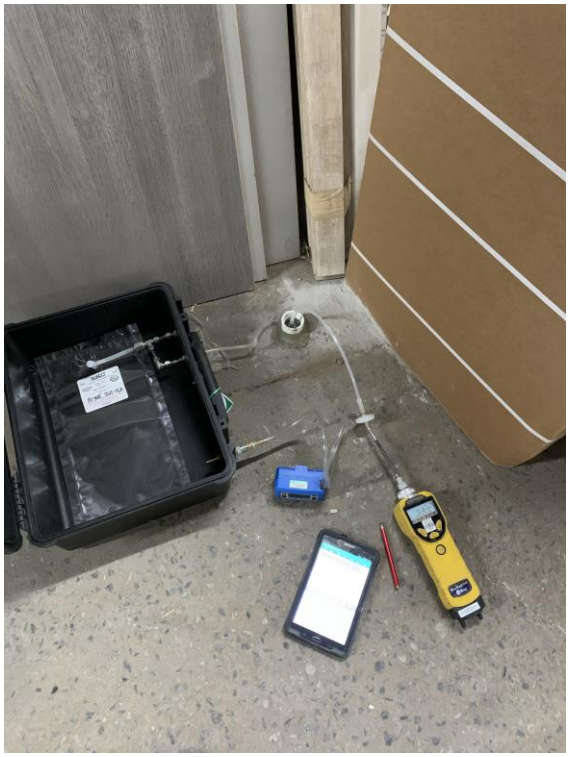


Photo 13: View of purging at sub-slab soil vapor screening point ACME-SSVS-15A, facing north (12/23/2020)

Photo 14: View of Tedlar bag screening at sub-slab soil vapor screening point ACME-SSVS-26B (12/23/2020)

ATTACHMENT C
NYSDOH IAQ QUESTIONNAIRE AND BUILDING SURVEY

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Jack Donelan Date/Time Prepared 12/12/2020

Preparer's Affiliation Inspector Phone No. 845-596-7316

Purpose of Investigation Remedial Investigation

1. OCCUPANT:

Interviewed: (Y)/ N

Last Name: Chen First Name: Alan

Address: 46 Anthony Street

County: Kings

Home Phone: _____ Office Phone: _____

Number of Occupants/persons at this location 25 Age of Occupants ~20-70 years old

2. OWNER OR LANDLORD: (Check if same as occupant ___)

Interviewed: Y /(N)

Last Name: Teich First Name: Jack

Address: 251 Lombardy Street

County: Brooklyn

Home Phone: _____ Office Phone: 718-384-7800

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential	School	(Commercial/Multi-use)
Industrial	Church	Other: _____

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

If multiple units, how many? _____

If the property is commercial, type?

Business Type(s) Manufacturing/sales

Does it include residences (i.e., multi-use)? Y / (N) If yes, how many? _____

Other characteristics:

Number of floors 1 Building age 71

Is the building insulated? Y / (N) How air tight? Tight / Average / (Not Tight)

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

N/A

Airflow near source

N/A

Outdoor air infiltration

Infiltration through open bay doors, egress points (doorways)

Infiltration into air ducts

N/A

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	wood frame	(concrete)	stone	(brick)
b. Basement type:	full	crawlspace	slab	other N/A
c. Basement floor:	concrete	dirt	stone	other _____
d. Basement floor:	uncovered	covered	covered with _____	
e. Concrete floor:	(unsealed)	sealed	sealed with _____	
f. Foundation walls:	poured	block	stone	other _____
g. Foundation walls:	unsealed	sealed	sealed with _____	
h. The basement is:	wet	damp	dry	moldy
i. The basement is:	finished	unfinished	partially finished	
j. Sump present?	Y / (N)			
k. Water in sump?	Y / N / (not applicable)			

Basement/Lowest level depth below grade: 0 (feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

Drains in bathrooms and loading docks

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation	Heat pump	Hot water baseboard	
(Space Heaters)	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

(Natural Gas)	Fuel Oil	Kerosene
(Electric)	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: Natural gas

Boiler/furnace located in: Basement Outdoors (Main Floor) Other_____

Air conditioning: Central Air (Window units) Open Windows None

Are there air distribution ducts present? Y / (N)

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

Window and wall mounted air conditioning and heating units in showrooms only.

Warehouse spaces free of HVAC ductwork.

7. OCCUPANCY

Is basement/lowest level occupied? (Full-time) Occasionally Seldom Almost Never

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	N/A
1st Floor	Warehouse/manufacturing at counter tops, cabinets, sales/showroom space
2nd Floor	N/A
3rd Floor	N/A
4th Floor	N/A

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Whole building is garage/warehouse — (Y) / N

b. Does the garage have a separate heating unit? Y / (N) / NA

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) — (Y) / N / NA. Please specify Forklifts

d. Has the building ever had a fire? Y / (N) When?_____

e. Is a kerosene or unvented gas space heater present? Y / (N) Where?_____

f. Is there a workshop or hobby/craft area? (Y) / N Where & Type? _____

g. Is there smoking in the building? Y / (N) How frequently? _____

h. Have cleaning products been used recently? Y / (N) When & Type? _____

i. Have cosmetic products been used recently? Y / (N) When & Type? _____

j. Has painting/staining been done in the last 6 months? Y /(N) Where & When? _____

k. Is there new carpet, drapes or other textiles? Y /(N) Where & When? _____

l. Have air fresheners been used recently? Y /(N) When & Type? _____

m. Is there a kitchen exhaust fan? Y /(N) If yes, where vented?_____

n. Is there a bathroom exhaust fan? Y /(N) If yes, where vented?_____

o. Is there a clothes dryer? Y /(N) If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y /(N) When & Type?_____

Are there odors in the building? (Y)/ N
If yes, please describe: Smokey odor

Do any of the building occupants use solvents at work? Y /(N)
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Y /(N)

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) (No)
Yes, use dry-cleaning infrequently (monthly or less) Unknown
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y /(N) Date of Installation: _____
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply: (Public Water) Drilled Well Driven Well Dug Well Other: _____

Sewage Disposal: (Public Sewer) Septic Tank Leach Field Dry Well Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:

N/A

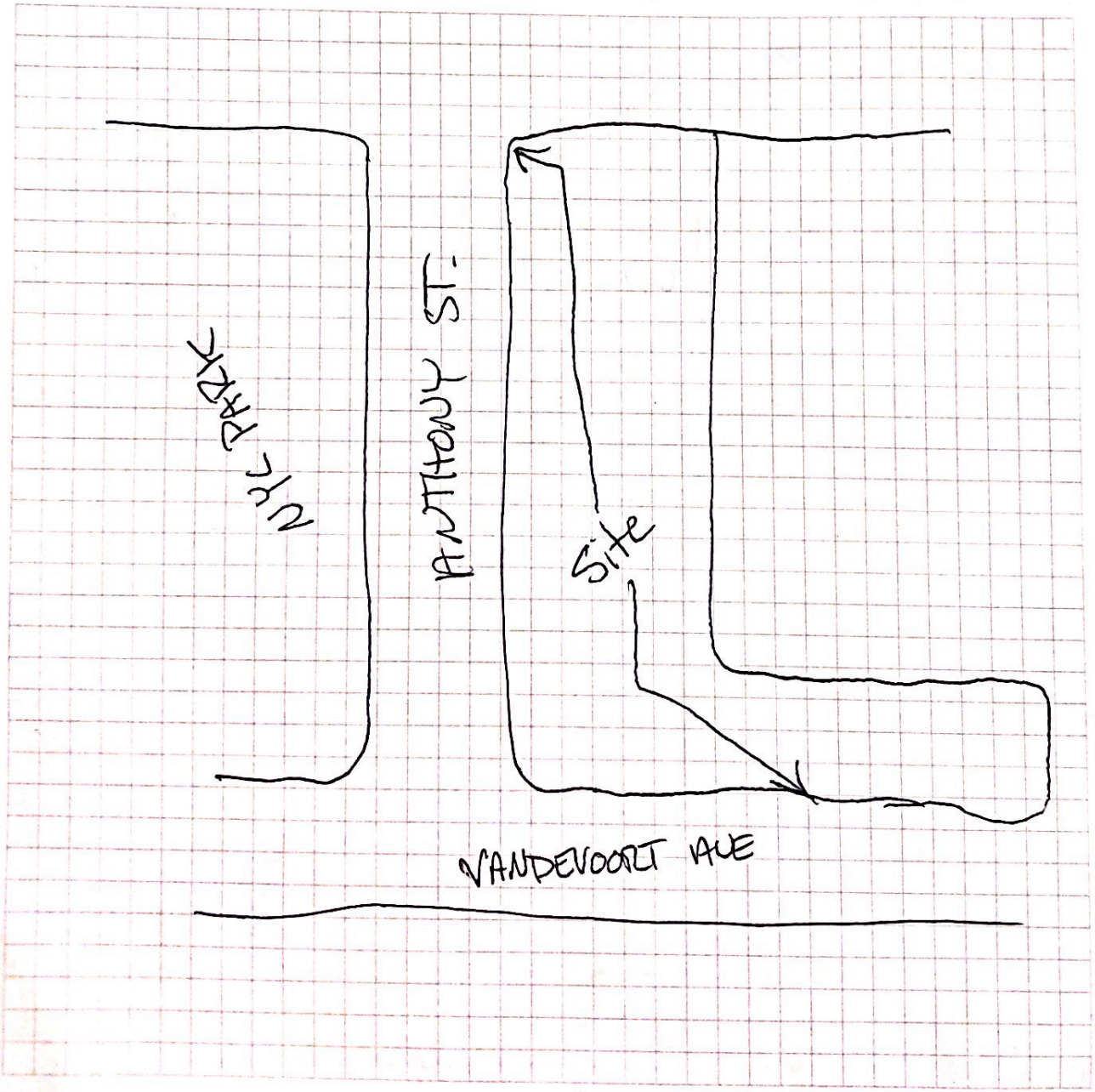
First Floor:

See sample location Plan

12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: MultiRAE

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
46 - 60 Anthony	Silicone sealant		Box only		N/A	Y
46 - 60 Anthony	SS-30 compressor lube	1 qt	UO/U		0.1	Y
46 - 60 Anthony	Compressor oil	32 oz	U		0.1	Y
46 - 60 Anthony	Benjamin Moore paint	5 gal	U		0.0	Y
46 - 60 Anthony	Silicone sealant		UO		0.0	Y

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

ATTACHMENT D
SUB-SLAB SOIL VAPOR POINT INSTALLATION AND SAMPLING LOGS

LANGAN

SOIL VAPOR SAMPLING LOG SHEET

Sample Number: ACME-SSV-01_121220

PROJECT: 46 Anthony Street		**PROJECT NO.:** 170157201	
LOCATION: Brooklyn, NY		**SURFACE ELEVATION AND DATUM:** NA	
DRILLING FIRM OR LANGAN INSTALLER: Langan Installer		**INSTALLATION DATE STARTED:** 12/12/2020	**DATE FINISHED:** 12/12/2020
INSTALLATION FOREMAN: Jack Donelan		**SAMPLE DATE STARTED:** 12/12/2020	**DATE FINISHED:** 12/12/2020
INSTALLATION EQUIPMENT: Rotary Hammer Drill		**TYPE OF SAMPLING DEVICE:** 6-Liter Summa Canister	
INSPECTOR: Jack Donelan		**SAMPLER:** Jack Donelan	
POTENTIAL SAMPLE INTERFERENCES: None		**WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.):**	
		Temp:	52-60°F
		Wind:	5-10 mph Northwest
		Precipitation:	Rain in AM 9:30-11:30
		Pressure:	30.06 in Hg

METHOD OF INSTALLATION AND PURGING:
Langan installed the sub-slab soil vapor sampling point using a handheld rotary hammer drill to drill a 1.5-inch-diameter hole into the concrete slab. A drilling guide was then used to drill 5/8-inch borehole through remaining concrete slab to a depth of about one inch into underlying soil. The sampling point was then completed with a Vapor Pin assembly, consisting of a steel barb fitting with a silicone sleeve sealing the 5/8-inch-diameter hole. Tubing was connected to the vapor pin and the point was purged using a MultiRae. The sub-slab soil vapor sampling point was completed with stainless steel cover flush at slab grade.

TUBING TYPE/DIAMETER: 1/4-Inch Teflon-lined Polyethylene Tubing	**TYPE OF MATERIAL ABOVE SEAL:** NA
IMPLANT SCREEN TYPE/LENGTH/DIAMETER: Vapor Pin	**SEAL MATERIAL (Bentonite, Beeswax, Modeling Clay, etc.):** NA
BOREHOLE DIAMETER: 5/8-inch diameter	**FILTER PACK MATERIAL (Sand or Glass Beads):** None

PURGE VOLUME (L):	0.2	
PURGE FLOW RATE (ML/MIN):	200	
PID AFTER PURGE (PPM):	2.4	

HELIUM TESTS	Pre-sampling	Post-sampling
HELIUM TEST IN BUCKET(%):	13.3%	24.1%
HELIUM TEST IN TUBE (PPM):	0.0	0.0

SAMPLE START TIME:	11:54
SAMPLE STOP TIME:	19:54
TOTAL SAMPLE TIME (MIN):	480
REGULATOR FLOW RATE (L/MIN):	0.0125
VOLUME OF SAMPLE (LITERS):	6
PID AFTER SAMPLE (PPM):	0.2
SAMPLE MOISTURE CONTENT:	N/A
CAN SERIAL NUMBER:	28884
REGULATOR SERIAL NUMBER:	Y11
CAN START VACUUM PRESS. (" HG):	-29.8
CAN STOP VACUUM PRESS. (" HG):	-10

IMPLANT/PROBE DETAILS (SEAL, FILTER, ETC.)	**DEPTH (FEET FROM SURFACE)**	**NOTES**
Top of Slab	0	
Bottom of Slab	0.70	
Bottom of Borehole	0.75	

SAMPLE LOCATION SKETCH

See Sample Location Plan

NOTES

Sample ID: ACME-SSV-01_121220
Co-located Sample ID: ACME-IA-01_121220

Langan Engineering, Environmental, Surveying, Landscape Architecture, and Geology D.P.C.
21 Penn Plaza, 360 West 31st Street, 8th Floor, New York, New York 10001-2727

AIR SAMPLING LOG SHEET

Sample Number: ACME-IA-01_121220

PROJECT: 46 Anthony Street	**PROJECT NO.:** 170157201	
LOCATION: Brooklyn, NY	**SURFACE ELEVATION AND DATUM:** N/A	
SAMPLER: Jack Donelan	**SAMPLE DATE STARTED:** 12/12/2020	**DATE FINISHED:** 12/12/2020
INSPECTOR: Jack Donelan	**TYPE OF SAMPLING DEVICE:** 6-Liter Summa Canister	
POTENTIAL SAMPLE INTERFERENCES: Presence of chemicals, as detailed in the IAQ.	**WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.):**	
	Temp:	52-60°F
	Wind:	5-10 mph Northwest
	Precipitation:	Rain in AM 9:30-11:30
	Pressure:	30.06 inHg

METHOD OF INSTALLATION AND SAMPLING:

Langan field screened the sample location with a MultiRAE photoionization detector prior to sampling. Sample consisted of 6L Summa canister fitted with an 8-hour flow control valve. The flow controller was zeroed and valve opened to initiate the 8-hour sample collection. The sample and flow controller were checked during sampling to ensure proper operation.

SAMPLE DETAILS

HEIGHT ABOVE GROUND (FT):	4
PID BEFORE SAMPLE (PPM):	0.1
SAMPLE START TIME:	10:28
SAMPLE STOP TIME:	18:28
TOTAL SAMPLE TIME (MIN):	480
REGULATOR FLOW RATE (L/MIN):	0.0125
VOLUME OF SAMPLE (LITERS):	6
PID AFTER SAMPLE (PPM):	0.1
SAMPLE MOISTURE CONTENT:	N/A
CAN SERIAL NUMBER:	37799
REGULATOR SERIAL NUMBER:	6872
CAN START VACUUM PRESS. (" HG):	-29.93
CAN STOP VACUUM PRESS. (" HG):	-8

SAMPLE LOCATION SKETCH

See Sample Location Plan

NOTES

Sample ID: ACME-IA-01_121220

Co-located Sample ID: ACME-SSV-01_121220

Langan Engineering, Environmental, Surveying, Landscape Architecture, and Geology D.P.C.

21 Penn Plaza, 360 West 31st Street, 8th Floor, New York, New York 10001-2727

SOIL VAPOR SAMPLING LOG SHEET

Sample Number: ACME-SSV-02_121220

PROJECT: 46 Anthony Street		**PROJECT NO.:** 170157201	
LOCATION: Brooklyn, NY		**SURFACE ELEVATION AND DATUM:** NA	
DRILLING FIRM OR LANGAN INSTALLER: Langan Installer		**INSTALLATION DATE STARTED:** 12/12/2020	**DATE FINISHED:** 12/12/2020
INSTALLATION FOREMAN: Jack Donelan		**SAMPLE DATE STARTED:** 12/12/2020	**DATE FINISHED:** 12/12/2020
INSTALLATION EQUIPMENT: Rotary Hammer Drill		**TYPE OF SAMPLING DEVICE:** 6-Liter Summa Canister	
INSPECTOR: Jack Donelan		**SAMPLER:** Jack Donelan	
POTENTIAL SAMPLE INTERFERENCES: None		**WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.):**	
		Temp:	54-60°F
		Wind:	7-14 mph Northwest
		Precipitation:	Rain in AM 9:30-11:30
		Pressure:	30.06 in Hg

METHOD OF INSTALLATION AND PURGING:
Langan installed the sub-slab soil vapor sampling point using a handheld rotary hammer drill to drill a 1.5-inch-diameter hole into the concrete slab. A drilling guide was then used to drill 5/8-inch borehole through remaining concrete slab to a depth of about one inch into underlying soil. The sampling point was then completed with a Vapor Pin assembly, consisting of a steel barb fitting with a silicone sleeve sealing the 5/8-inch-diameter hole. Tubing was connected to the vapor pin and the point was purged using a MultiRae. The sub-slab soil vapor sampling point was completed with stainless steel cover flush at slab grade.

TUBING TYPE/DIAMETER: 1/4-Inch Teflon-lined Polyethylene Tubing	**TYPE OF MATERIAL ABOVE SEAL:** NA
IMPLANT SCREEN TYPE/LENGTH/DIAMETER: Vapor Pin	**SEAL MATERIAL (Bentonite, Beeswax, Modeling Clay, etc.):** NA
BOREHOLE DIAMETER: 5/8-inch diameter	**FILTER PACK MATERIAL (Sand or Glass Beads):** None

PURGE VOLUME (L):	0.2	
PURGE FLOW RATE (ML/MIN):	200	
PID AFTER PURGE (PPM):	0.4	

HELIUM TESTS	Pre-sampling	Post-sampling
HELIUM TEST IN BUCKET(%):	17.8%	14.5%
HELIUM TEST IN TUBE (PPM):	0.0	0.0

SAMPLE START TIME:	11:46
SAMPLE STOP TIME:	19:04
TOTAL SAMPLE TIME (MIN):	438
REGULATOR FLOW RATE (L/MIN):	0.0137
VOLUME OF SAMPLE (LITERS):	6
PID AFTER SAMPLE (PPM):	0.1
SAMPLE MOISTURE CONTENT:	N/A
CAN SERIAL NUMBER:	37012
REGULATOR SERIAL NUMBER:	Y-43
CAN START VACUUM PRESS. (" HG):	-30
CAN STOP VACUUM PRESS. (" HG):	-3

IMPLANT/PROBE DETAILS (SEAL, FILTER, ETC.)	**DEPTH (FEET FROM SURFACE)**	**NOTES**
Top of Slab	0	
Bottom of Slab	0.70	
Bottom of Borehole	0.75	

SAMPLE LOCATION SKETCH

See Sample Location Plan

NOTES

Sample ID: ACME-SSV-02_121220
Co-located Sample ID: ACME-IA-02_121220

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21 Penn Plaza, 360 West 31st Street, 8th Floor, New York, New York 10001-2727

AIR SAMPLING LOG SHEET

Sample Number: ACME-IA-02_121220

PROJECT: 46 Anthony Street		**PROJECT NO.:** 170157201	
LOCATION: Brooklyn, NY		**SURFACE ELEVATION AND DATUM:** N/A	
SAMPLER: Jack Donelan		**SAMPLE DATE STARTED:** 12/12/2020	**DATE FINISHED:** 12/12/2020
INSPECTOR: Jack Donelan		**TYPE OF SAMPLING DEVICE:** 6-Liter Summa Canister	
POTENTIAL SAMPLE INTERFERENCES: Presence of chemicals, as detailed in the IAQ.		**WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.):**	
		Temp:	54-60°F
		Wind:	5-10 mph Northwest
		Precipitation:	Rain in AM 9:30-11:30
		Pressure:	30.06 inHg

METHOD OF INSTALLATION AND SAMPLING:

Langan field screened the sample location with a MultiRAE photoionization detector prior to sampling. Sample consisted of 6L Summa canister fitted with an 8-hour flow control valve. The flow controller was zeroed and valve opened to initiate the 8-hour sample collection. The sample and flow controller were checked during sampling to ensure proper operation.

SAMPLE DETAILS

HEIGHT ABOVE GROUND (FT):	4
PID BEFORE SAMPLE (PPM):	0.1
SAMPLE START TIME:	10:34
SAMPLE STOP TIME:	17:14
TOTAL SAMPLE TIME (MIN):	400
REGULATOR FLOW RATE (L/MIN):	0.016
VOLUME OF SAMPLE (LITERS):	6
PID AFTER SAMPLE (PPM):	0.1
SAMPLE MOISTURE CONTENT:	N/A
CAN SERIAL NUMBER:	37319
REGULATOR SERIAL NUMBER:	5116
CAN START VACUUM PRESS. (" HG):	-30
CAN STOP VACUUM PRESS. (" HG):	-3

SAMPLE LOCATION SKETCH

See Sample Location Plan

NOTES

Sample ID: ACME-IA-02_121220

Co-located Sample ID: ACME-SSV-02_121220

Langan Engineering, Environmental, Surveying, Landscape Architecture, and Geology D.P.C.

21 Penn Plaza, 360 West 31st Street, 8th Floor, New York, New York 10001-2727

SOIL VAPOR SAMPLING LOG SHEET

Sample Number: ACME-SSV-03_121220

PROJECT: 46 Anthony Street		**PROJECT NO.:** 170157201	
LOCATION: Brooklyn, NY		**SURFACE ELEVATION AND DATUM:** NA	
DRILLING FIRM OR LANGAN INSTALLER: Langan Installer		**INSTALLATION DATE STARTED:** 12/12/2020	**DATE FINISHED:** 12/12/2020
INSTALLATION FOREMAN: Jack Donelan		**SAMPLE DATE STARTED:** 12/12/2020	**DATE FINISHED:** 12/12/2020
INSTALLATION EQUIPMENT: Rotary Hammer Drill		**TYPE OF SAMPLING DEVICE:** 6-Liter Summa Canister	
INSPECTOR: Jack Donelan		**SAMPLER:** Jack Donelan	
POTENTIAL SAMPLE INTERFERENCES: None		**WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.):**	
		Temp:	54-60°F
		Wind:	7-14 mph Northwest
		Precipitation:	Rain in AM 9:30-11:30
		Pressure:	30.06 in Hg

METHOD OF INSTALLATION AND PURGING:
Langan installed the sub-slab soil vapor sampling point using a handheld rotary hammer drill to drill a 1.5-inch-diameter hole into the concrete slab. A drilling guide was then used to drill 5/8-inch borehole through remaining concrete slab to a depth of about one inch into underlying soil. The sampling point was then completed with a Vapor Pin assembly, consisting of a steel barb fitting with a silicone sleeve sealing the 5/8-inch-diameter hole. Tubing was connected to the vapor pin and the point was purged using a MultiRae. The sub-slab soil vapor sampling point was completed with stainless steel cover flush at slab grade.

TUBING TYPE/DIAMETER: 1/4-Inch Teflon-lined Polyethylene Tubing	**TYPE OF MATERIAL ABOVE SEAL:** NA
IMPLANT SCREEN TYPE/LENGTH/DIAMETER: Vapor Pin	**SEAL MATERIAL (Bentonite, Beeswax, Modeling Clay, etc.):** NA
BOREHOLE DIAMETER: 5/8-inch diameter	**FILTER PACK MATERIAL (Sand or Glass Beads):** None

PURGE VOLUME (L):	0.2	
PURGE FLOW RATE (ML/MIN):	200	
PID AFTER PURGE (PPM):	0.4	

HELIUM TESTS	Pre-sampling	Post-sampling
HELIUM TEST IN BUCKET(%):	16.8%	17.5%
HELIUM TEST IN TUBE (PPM):	0.0	0.0

SAMPLE START TIME:	11:33
SAMPLE STOP TIME:	19:33
TOTAL SAMPLE TIME (MIN):	480
REGULATOR FLOW RATE (L/MIN):	0.0125
VOLUME OF SAMPLE (LITERS):	6
PID AFTER SAMPLE (PPM):	0.1
SAMPLE MOISTURE CONTENT:	N/A
CAN SERIAL NUMBER:	23798
REGULATOR SERIAL NUMBER:	Y30
CAN START VACUUM PRESS. (" HG):	-30
CAN STOP VACUUM PRESS. (" HG):	-5

SAMPLE LOCATION SKETCH

See Sample Location Plan

IMPLANT/PROBE DETAILS (SEAL, FILTER, ETC.)	**DEPTH (FEET FROM SURFACE)**	**NOTES**
Top of Slab	0	
Bottom of Slab	0.70	
Bottom of Borehole	0.75	

NOTES

Sample ID: ACME-SSV-03_121220
Co-located Sample ID: ACME-IA-03_121220

Langan Engineering, Environmental, Surveying, Landscape Architecture, and Geology D.P.C.
21 Penn Plaza, 360 West 31st Street, 8th Floor, New York, New York 10001-2727

AIR SAMPLING LOG SHEET

Sample Number: ACME-IA-03_121220

PROJECT: 46 Anthony Street	**PROJECT NO.:** 170157201	
LOCATION: Brooklyn, NY	**SURFACE ELEVATION AND DATUM:** N/A	
SAMPLER: Jack Donelan	**SAMPLE DATE STARTED:** 12/12/2020	**DATE FINISHED:** 12/12/2020
INSPECTOR: Jack Donelan	**TYPE OF SAMPLING DEVICE:** 6-Liter Summa Canister	
POTENTIAL SAMPLE INTERFERENCES: Presence of chemicals, as detailed in the IAQ, and fork lift operation nearby.	**WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.):**	
	Temp:	54-60°F
	Wind:	5-10 mph Northwest
	Precipitation:	Rain in AM 9:30-11:30
	Pressure:	30.06 inHg

METHOD OF INSTALLATION AND SAMPLING:

Langan field screened the sample location with a MultiRAE photoionization detector prior to sampling. Sample consisted of 6L Summa canister fitted with an 8-hour flow control valve. The flow controller was zeroed and valve opened to initiate the 8-hour sample collection. The sample and flow controller were checked during sampling to ensure proper operation.

SAMPLE DETAILS

HEIGHT ABOVE GROUND (FT):	4
PID BEFORE SAMPLE (PPM):	0.0
SAMPLE START TIME:	10:46
SAMPLE STOP TIME:	18:46
TOTAL SAMPLE TIME (MIN):	480
REGULATOR FLOW RATE (L/MIN):	0.0125
VOLUME OF SAMPLE (LITERS):	6
PID AFTER SAMPLE (PPM):	0.2
SAMPLE MOISTURE CONTENT:	N/A
CAN SERIAL NUMBER:	18297
REGULATOR SERIAL NUMBER:	Y24
CAN START VACUUM PRESS. (" HG):	-30
CAN STOP VACUUM PRESS. (" HG):	-14

SAMPLE LOCATION SKETCH

See Sample Location Plan

NOTES

Sample ID: ACME-IA-03_121220

Co-located Sample ID: ACME-SSV-03_121220

Langan Engineering, Environmental, Surveying, Landscape Architecture, and Geology D.P.C.
21 Penn Plaza, 360 West 31st Street, 8th Floor, New York, New York 10001-2727

SOIL VAPOR SAMPLING LOG SHEET

Sample Number: ACME-SSV-04_121220

PROJECT: 46 Anthony Street		**PROJECT NO.:** 170157201	
LOCATION: Brooklyn, NY		**SURFACE ELEVATION AND DATUM:** NA	
DRILLING FIRM OR LANGAN INSTALLER: Langan Installer		**INSTALLATION DATE STARTED:** 12/12/2020	**DATE FINISHED:** 12/12/2020
INSTALLATION FOREMAN: Jack Donelan		**SAMPLE DATE STARTED:** 12/12/2020	**DATE FINISHED:** 12/12/2020
INSTALLATION EQUIPMENT: Rotary Hammer Drill		**TYPE OF SAMPLING DEVICE:** 6-Liter Summa Canister	
INSPECTOR: Jack Donelan		**SAMPLER:** Jack Donelan	
POTENTIAL SAMPLE INTERFERENCES: None		**WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.):**	
		Temp:	54-60°F
		Wind:	7-14 mph Northwest
		Precipitation:	Rain in AM 9:30-11:30
		Pressure:	30.06 in Hg

METHOD OF INSTALLATION AND PURGING:
Langan installed the sub-slab soil vapor sampling point using a handheld rotary hammer drill to drill a 1.5-inch-diameter hole into the concrete slab. A drilling guide was then used to drill 5/8-inch borehole through remaining concrete slab to a depth of about one inch into underlying soil. The sampling point was then completed with a Vapor Pin assembly, consisting of a steel barb fitting with a silicone sleeve sealing the 5/8-inch-diameter hole. Tubing was connected to the vapor pin and the point was purged using a MultiRae. The sub-slab soil vapor sampling point was completed with stainless steel cover flush at slab grade.

TUBING TYPE/DIAMETER: 1/4-Inch Teflon-lined Polyethylene Tubing	**TYPE OF MATERIAL ABOVE SEAL:** NA
IMPLANT SCREEN TYPE/LENGTH/DIAMETER: Vapor Pin	**SEAL MATERIAL (Bentonite, Beeswax, Modeling Clay, etc.):** NA
BOREHOLE DIAMETER: 0.2	**FILTER PACK MATERIAL (Sand or Glass Beads):** None

PURGE VOLUME (L):	0.2	
PURGE FLOW RATE (ML/MIN):	200	
PID AFTER PURGE (PPM):	1.6	
HELIUM TESTS	Pre-sampling	Post-sampling
HELIUM TEST IN BUCKET(%):	13.3%	17.6%
HELIUM TEST IN TUBE (PPM):	0.0	0.0
SAMPLE START TIME:	11:18	
SAMPLE STOP TIME:	17:59	
TOTAL SAMPLE TIME (MIN):	401	
REGULATOR FLOW RATE (L/MIN):	0.01496	
VOLUME OF SAMPLE (LITERS):	6	
PID AFTER SAMPLE (PPM):	0.4	
SAMPLE MOISTURE CONTENT:	N/A	
CAN SERIAL NUMBER:	28301	
REGULATOR SERIAL NUMBER:	Y16	
CAN START VACUUM PRESS. (" HG):	-28	
CAN STOP VACUUM PRESS. (" HG):	-3	

IMPLANT/PROBE DETAILS (SEAL, FILTER, ETC.)	**DEPTH (FEET FROM SURFACE)**	**NOTES**
Top of Slab	0	
Bottom of Slab	0.70	
Bottom of Borehole	0.75	

SAMPLE LOCATION SKETCH

See Sample Location Plan

NOTES

Sample ID: ACME-SSV-04_121220
Co-located Sample ID: ACME-IA-04_121220

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21 Penn Plaza, 360 West 31st Street, 8th Floor, New York, New York 10001-2727

AIR SAMPLING LOG SHEET

Sample Number: ACME-IA-04_121220

PROJECT: 46 Anthony Street		**PROJECT NO.:** 170157201	
LOCATION: Brooklyn, NY		**SURFACE ELEVATION AND DATUM:** N/A	
SAMPLER: Jack Donelan		**SAMPLE DATE STARTED:** 12/12/2020	**DATE FINISHED:** 12/12/2020
INSPECTOR: Jack Donelan		**TYPE OF SAMPLING DEVICE:** 6-Liter Summa Canister	
POTENTIAL SAMPLE INTERFERENCES: Presence of chemicals, as detailed in the IAQ.		**WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.):**	
		Temp:	54-60°F
		Wind:	5-10 mph Northwest
		Precipitation:	Rain in AM 9:30-11:30
		Pressure:	30.06 inHg

METHOD OF INSTALLATION AND SAMPLING:

Langan field screened the sample location with a MultiRAE photoionization detector prior to sampling. Sample consisted of 6L Summa canister fitted with an 8-hour flow control valve. The flow controller was zeroed and valve opened to initiate the 8-hour sample collection. The sample and flow controller were checked during sampling to ensure proper operation.

SAMPLE DETAILS

HEIGHT ABOVE GROUND (FT):	4
PID BEFORE SAMPLE (PPM):	0.1
SAMPLE START TIME:	10:40
SAMPLE STOP TIME:	18:20
TOTAL SAMPLE TIME (MIN):	460
REGULATOR FLOW RATE (L/MIN):	0.0130
VOLUME OF SAMPLE (LITERS):	6
PID AFTER SAMPLE (PPM):	0.3
SAMPLE MOISTURE CONTENT:	N/A
CAN SERIAL NUMBER:	36411
REGULATOR SERIAL NUMBER:	7268
CAN START VACUUM PRESS. (" HG):	-29
CAN STOP VACUUM PRESS. (" HG):	-4

SAMPLE LOCATION SKETCH

See Sample Location Plan

NOTES

Sample ID: ACME-IA-04_121220

Co-located Sample ID: ACME-SSV-04_121220

Langan Engineering, Environmental, Surveying, Landscape Architecture, and Geology D.P.C.

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AIR SAMPLING LOG SHEET

Sample Number: ACME-OA-01_121220

PROJECT: 46 Anthony Street		**PROJECT NO.:** 170157201	
LOCATION: Brooklyn, NY		**SURFACE ELEVATION AND DATUM:** N/A	
SAMPLER: Jack Donelan		**SAMPLE DATE STARTED:** 12/12/2020	**DATE FINISHED:** 12/12/2020
INSPECTOR: Jack Donelan		**TYPE OF SAMPLING DEVICE:** 6-Liter Summa Canister	
POTENTIAL SAMPLE INTERFERENCES: Vehicular traffic.		**WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.):**	
		Temp:	54-60°F
		Wind:	5-10 mph Northwest
		Precipitation:	Rain in AM 9:30-11:30
		Pressure:	30.06 inHg

METHOD OF INSTALLATION AND SAMPLING:

Langan field screened the sample location with a MultiRAE photoionization detector prior to sampling. Sample consisted of 6L Summa canister fitted with an 8-hour flow control valve. The flow controller was zeroed and valve opened to initiate sample collection. The sample and flow controller were checked during sampling to ensure proper operation.

SAMPLE DETAILS

HEIGHT ABOVE GROUND (FT):	3.5
PID BEFORE SAMPLE (PPM):	0.0
SAMPLE START TIME:	10:55
SAMPLE STOP TIME:	18:55
TOTAL SAMPLE TIME (MIN):	480
REGULATOR FLOW RATE (L/MIN):	0.0125
VOLUME OF SAMPLE (LITERS):	6
PID AFTER SAMPLE (PPM):	0.0
SAMPLE MOISTURE CONTENT:	N/A
CAN SERIAL NUMBER:	Y64
REGULATOR SERIAL NUMBER:	Y39
CAN START VACUUM PRESS. (" HG):	-29
CAN STOP VACUUM PRESS. (" HG):	-7

SAMPLE LOCATION SKETCH

See Sample Location Plan

NOTES

Sample ID: ACME-OA-01_121220

Langan Engineering, Environmental, Surveying, Landscape Architecture, and Geology D.P.C.
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ATTACHMENT E
GEOPHYSICAL SURVEY REPORT

LANGAN

GEOPHYSICAL ENGINEERING SURVEY REPORT

Industrial Property
46 Anthony Street,
Brooklyn, New York 11222

NOVA PROJECT NUMBER:
20-1945

DATED:
December 23, 2020

PREPARED FOR:

LANGAN

21 Penn Plaza
360 West 31st Street, 8th Floor
New York, New York 10001-2727

PREPARED BY:

NOVA
GEOPHYSICAL
ENGINEERING
Subsurface Mapping Solutions
56-01 Marathon Parkway # 765
Douglaston, New York 11362
347-556-7787 (PHONE)
718-261-1527(FAX)
www.nova-gsi.com

NOVA GEOPHYSICAL SERVICES

SUBSURFACE MAPPING SOLUTIONS
56-01 Marathon Parkway #765, Douglaston, New York 11362
Ph. 347-556-7787 Fax. 718-261-1527
www.novagsi.com

December 23, 2020

Kimberly Nagotko, GIT, LEED Green Associate
Senior Staff Geologist
LANGAN
21 Penn Plaza
360 West 31st Street, 8th Floor
New York, New York 10001-2727
P: 212.479.5400 x5635 | E:knagotko@langan.com

Re: Geophysical Engineering Survey (GES) Report
Industrial Property
46 Anthony Street,
Brooklyn, New York 11222

Dear Ms. Nagotko,

Nova Geophysical Services (NOVA) is pleased to provide the findings of the geophysical engineering survey (GES) at the above referenced project site: 46 Anthony Street, Brooklyn, New York 11222 (the "Site").

INTRODUCTION TO GEOPHYSICAL ENGINEERING SURVEY (GES)

NOVA performed a geophysical engineering survey (GES) consisting of a Ground Penetrating Radar (GPR) and Electromagnetic (EM) survey at the site. The purpose of this survey is to locate and identify utilities, underground storage tanks and other substructures on December 18th, 2020.

The equipment selected for this investigation was a Sensors and Software Noggin 250 MHz ground penetrating radar (GPR) with a shielded antenna and a RadioDetection RD7100 Electromagnetic utility locator.

A GPR system consists of a radar control unit, control cable, and transducer (antenna). The control unit transmits a trigger pulse at a normal repetition rate of 250 MHz. The trigger pulse is sent to the transmitter electronics in the transduce via the control cable. The transmitter electronics amplify the trigger pulse into bipolar pulses that are radiated to the surface. The transformed pulses vary in shape and frequency according to the transducer used. In the subsurface, variations of the signal occur at boundaries where there is a dielectric contrast (void, steel, soil type, etc.). Signal reflections travel back to the control unit and are represented as color graphic images for interpolation.

A typical electromagnetic (EM) utility locating system consists of a transmitter unit and a receiver unit. The receiver unit can be used independently of the transmitter unit in order to detect utility lines with an inherent EM signature (electric utility lines, water lines, etc.). If needed a current at a specific frequency can also be placed on a utility that is being located. This can be done via the transmitter unit by either direct connection or induction via an EM field varying at specific frequency. The receiver unit is then set to the selected frequency and the electromagnetic field created by the current running through the utility can be located allowing the utility to be marked.

GEOPHYSICAL METHODS

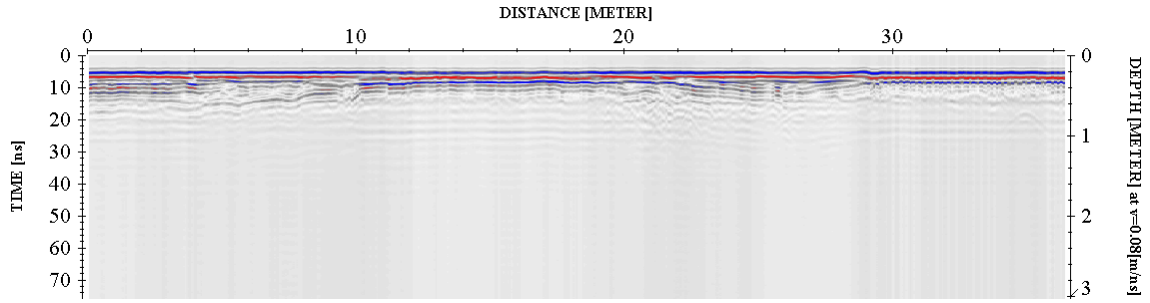
The project site was screened using GPR to search the specified area and inspected for reflections, which could be indicative of substructures and utilities within the subsurface. An EM utility locator was used to help determine the locations of utilities within the survey area.

EM data was collected and interpreted on site and suspected utilities marked as needed. GPR data profiles were collected for the areas of the Site specified by the client and processed as specified below.

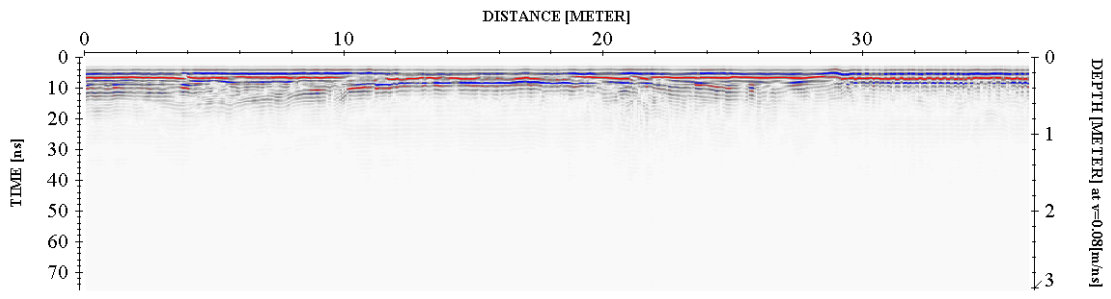
DATA PROCESSING

In order to improve the quality of the results and to better identify anomalies NOVA processed the collected data. The processing workflow is briefly described in this section.

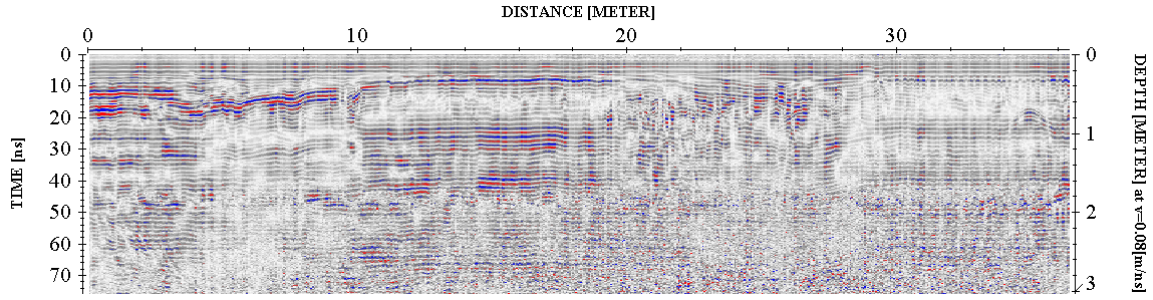
Step 1. Import Raw RAMAC data to standard processing format



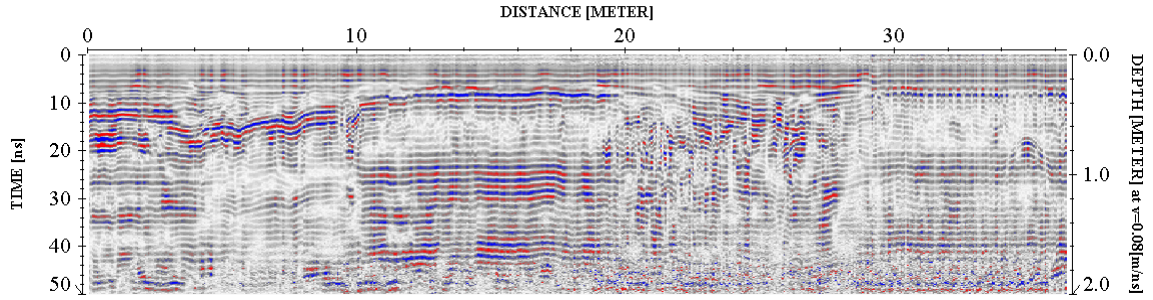
Step 2. Remove instrument noise *(dewow)*



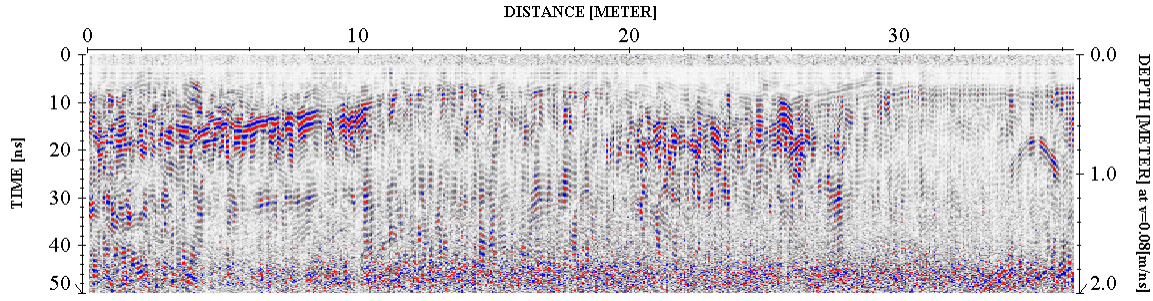
Step 3. Correct for attenuation losses *(energy decay function)*



Step 4. Remove static from bottom of profile *(time cut)*



Step 5. Mute horizontal ringing/noise *(subtracting average)*



The above example shows the significance of data processing. The last image (step 5) has higher resolution than the starting image (raw data – step 1) and represents the subsurface anomalies much more accurately.

PHYSICAL SETTINGS

NOVA observed the following physical conditions at the time of the survey.

Weather: Clear

Temperature: 40° F

Surface: Snow, Concrete

Survey Parameters: A GPR grid scan of the survey area, as shown in the survey plan, was completed with an approximate line spacing of two to four feet. Additional traces were collected in areas identified as having features of interest and in the vicinity of proposed boring locations during the grid scan. An EM utility locator was used in conjunction with the GPR throughout the survey area.

Limitations: The geophysical noise level (GNL) was **high** at the site. The noise was a result of the site being in an urban environment. Large portions of the site were covered with debris, shelving, heavy metallic equipment creating excessive geophysical noises or other warehouse materials and could not be effectively grid scanned. The eastern sidewalk was covered with cars and drifted snow at the time of the GES and could not be surveyed.

RESULTS

The results of the geophysical engineering survey (GES) identified the following at the project site:

- Anomalies resembling potential subsurface utilities (such as water, electric, sewer, telecom and gas) were identified during the GES. The approximate locations are shown in the survey plan.
- No large geophysical anomalies resembling a potential underground storage tank (UST) were identified during the GES.
- All cleared boring locations are shown in the survey plan.

If you have any questions, please do not hesitate to contact the undersigned.

Sincerely,

NOVA Geophysical Services

Levent Eskicakit, P.G., E.P.

Project Engineer

Attachments:

Location Map

Survey Plan

Geophysical Images

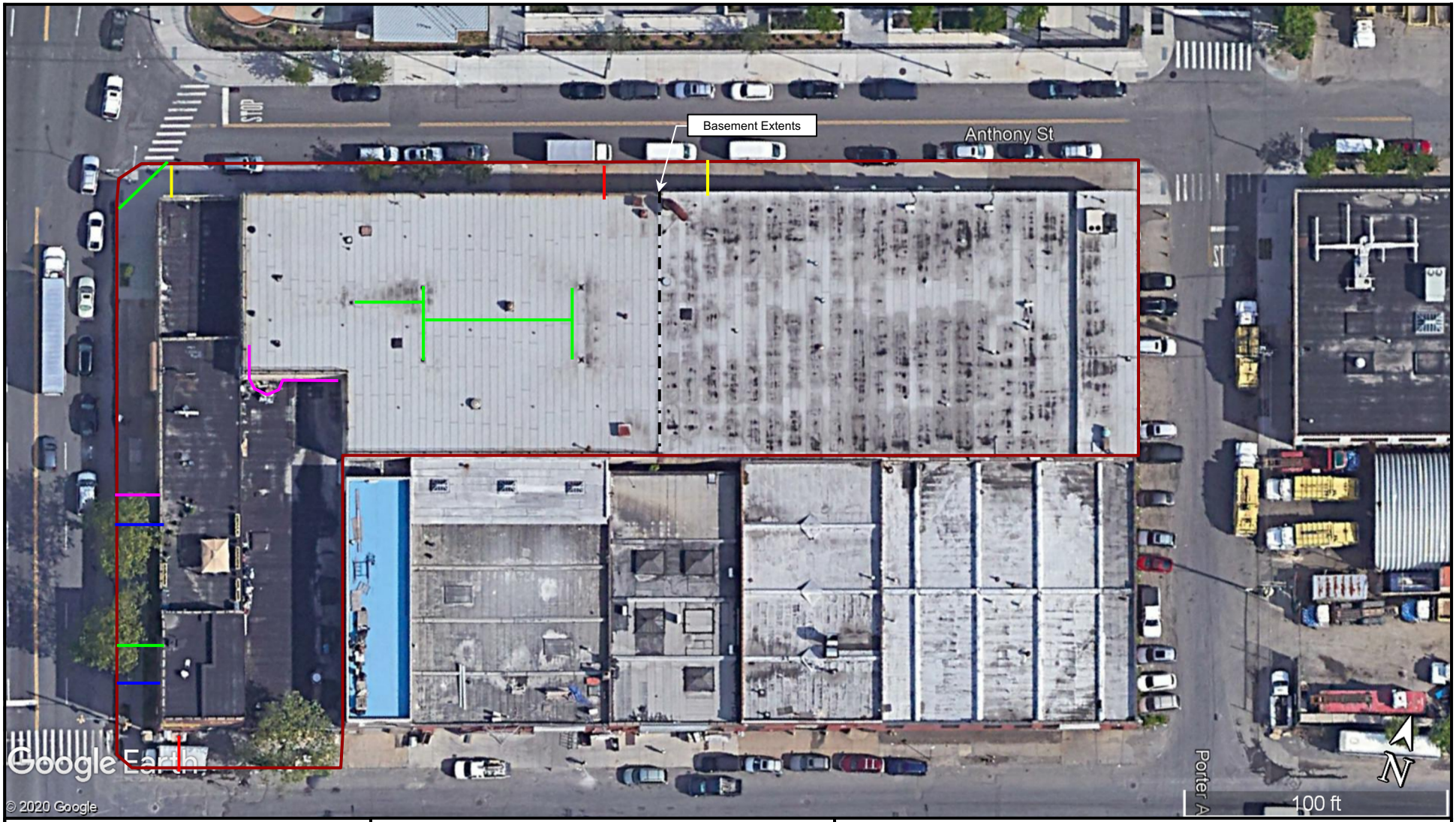
NOVA Geophysical Services

Subsurface Mapping Solutions
56-01 Marathon Parkway, # 765
Douglaston, New York 11362
Phone (347) 556-7787 * Fax (718) 261-1527
www.novagsi.com

Location Map

SITE:	**Industrial Property** 46 Anthony Street, Brooklyn, New York 11222
CLIENT:	Langan
DATE:	December 18th, 2020
AUTH:	Chris Steinley

LEGEND



NOVA

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SURVEY PLAN

SITE:	**Industrial Property** 46 Anthony Street, Brooklyn, New York 11222
CLIENT:	Langan
DATE:	December 18th, 2020
AUTH:	Chris Steinley

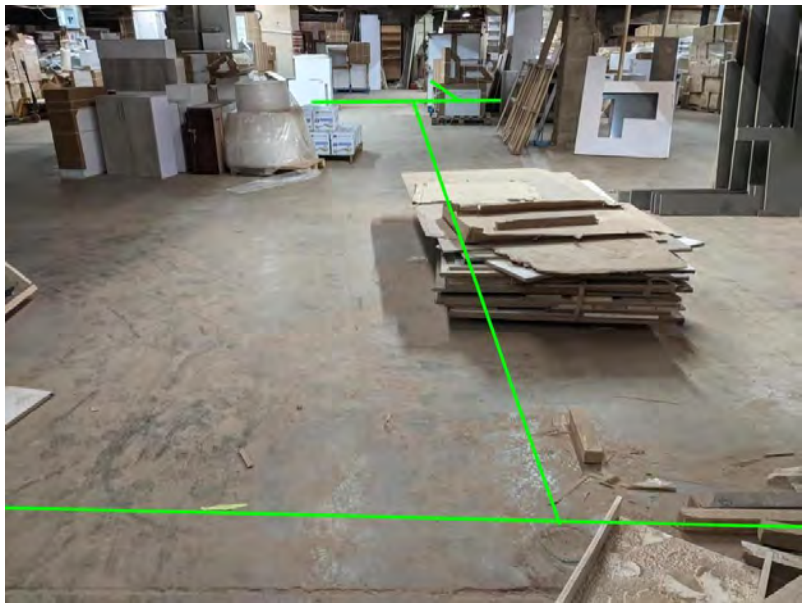
LEGEND

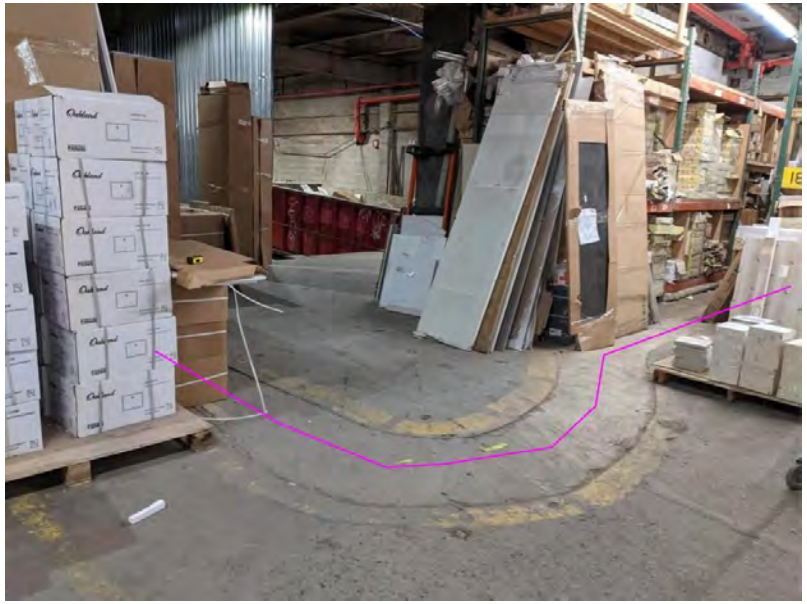
- Survey Area
- Water
- Sewer
- Gas
- Electric
- Unknown

GEOPHYSICAL IMAGES

Industrial Site

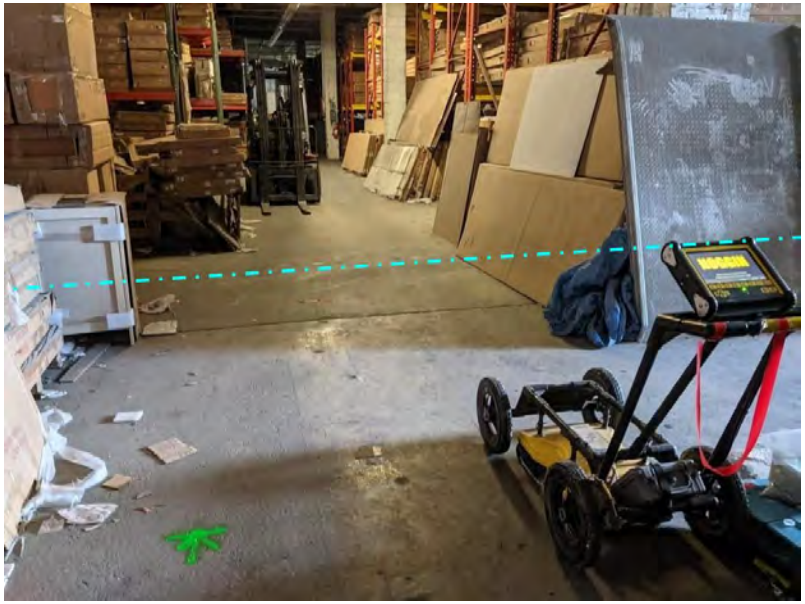
46 Anthony Street,
Brooklyn, New York 11222
December 18th, 2020

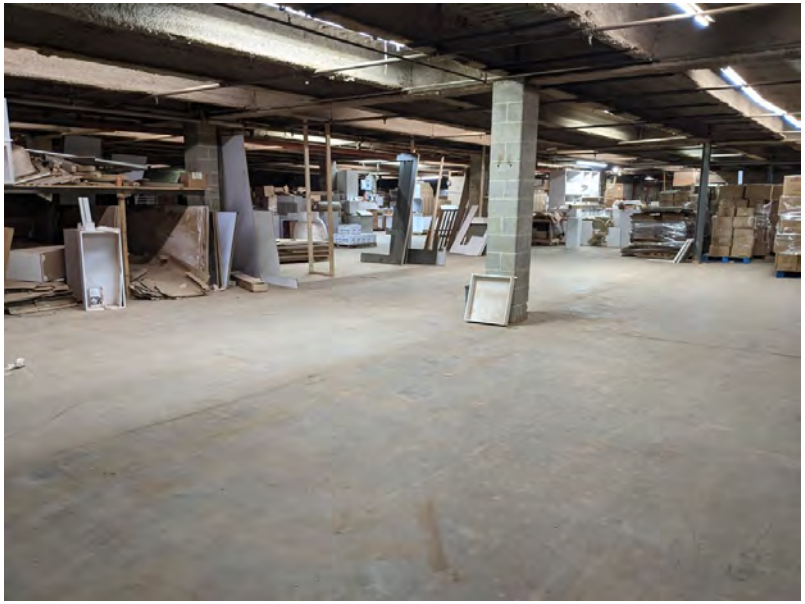




GEOPHYSICAL IMAGES

Industrial Site
46 Anthony Street,
Brooklyn, New York 11222
December 18th, 2020





GEOPHYSICAL IMAGES

Industrial Site
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December 18th, 2020

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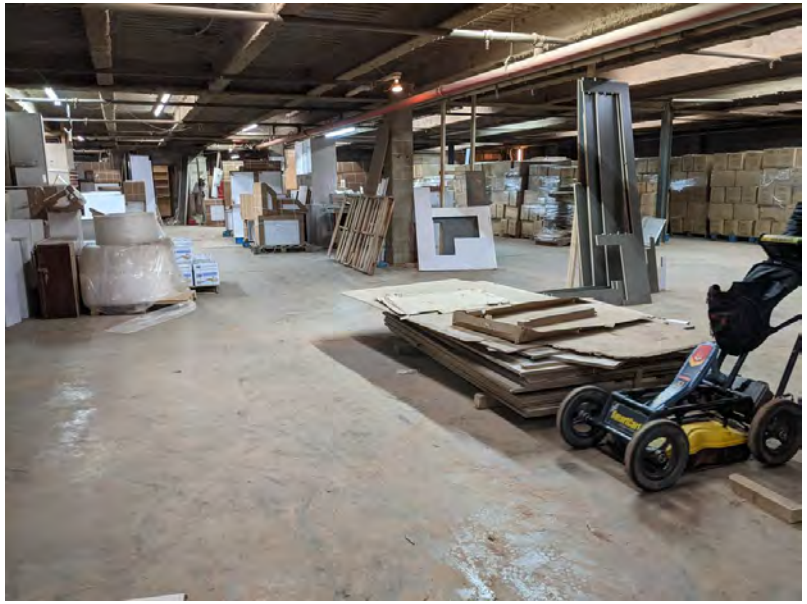

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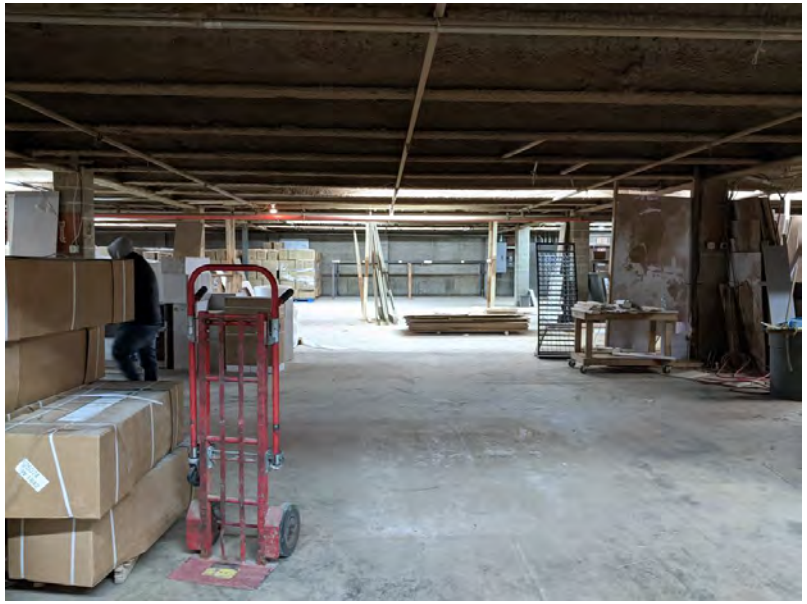

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Industrial Site
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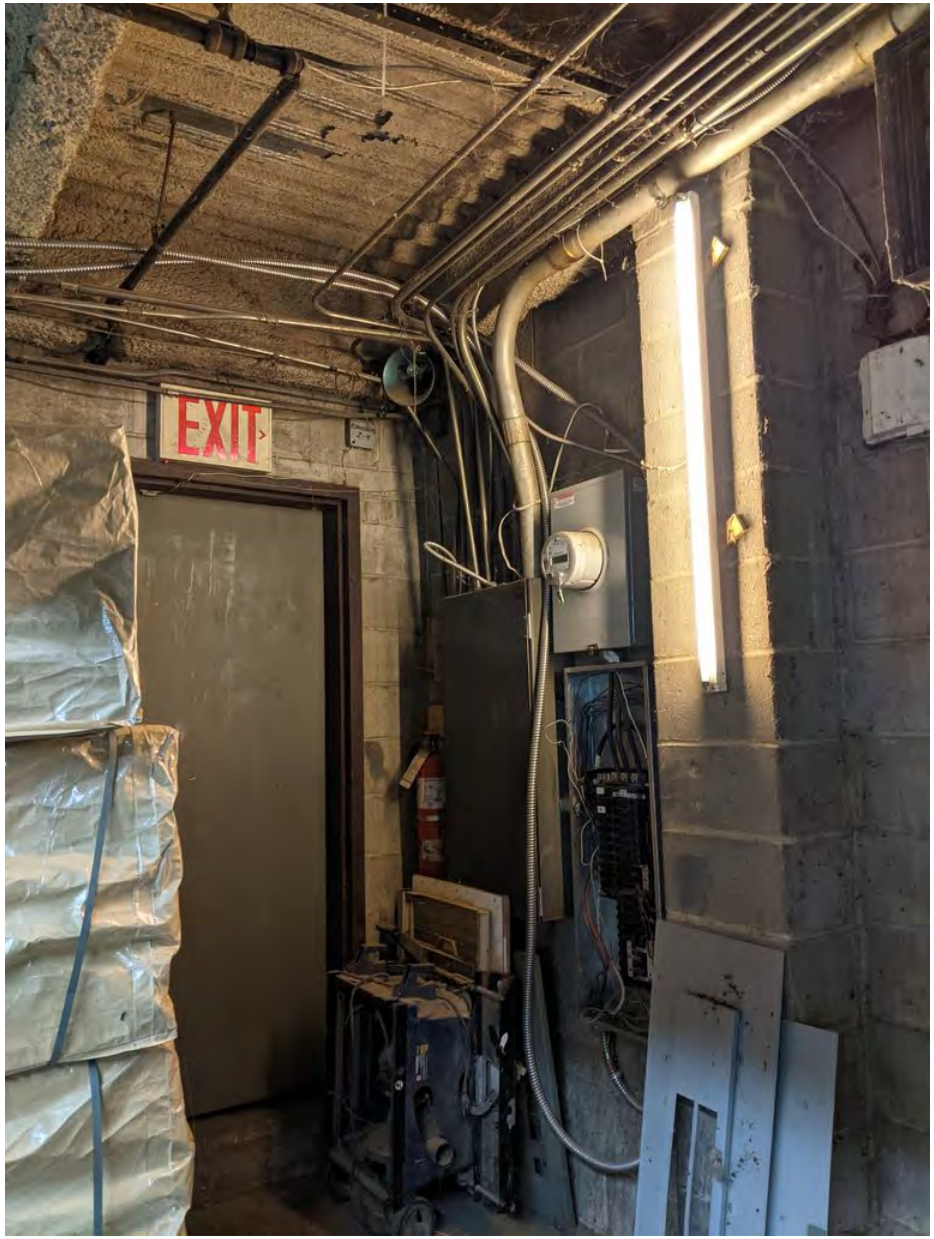

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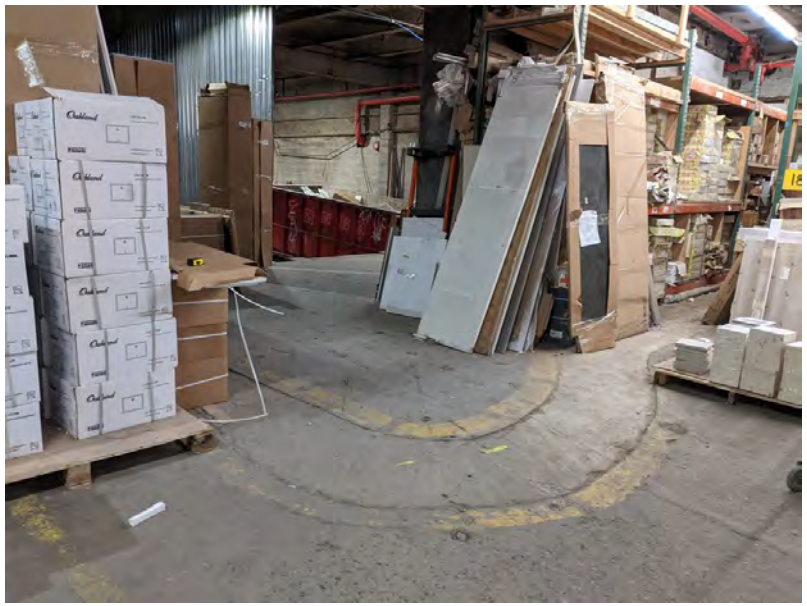

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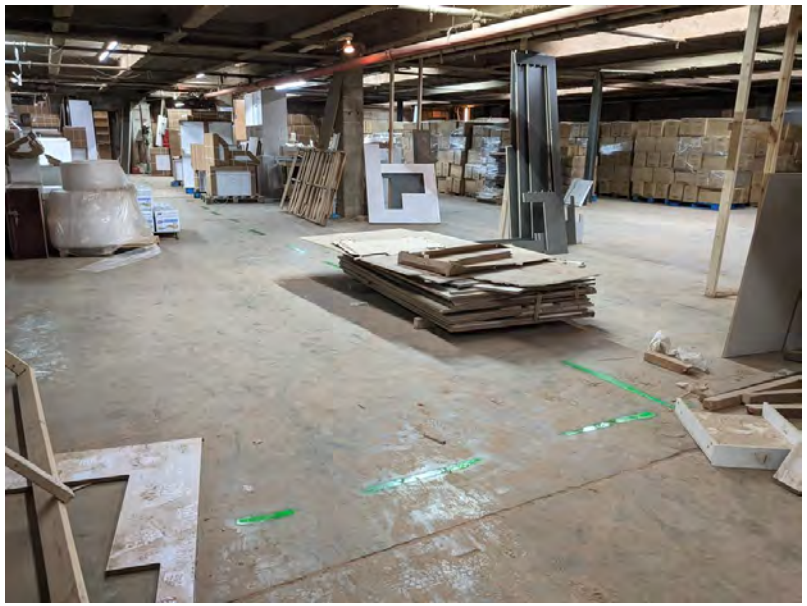

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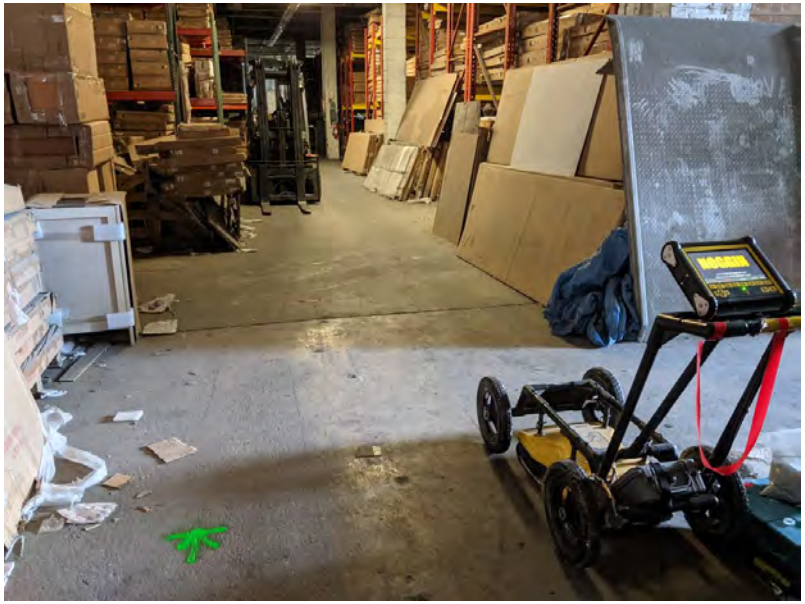

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Industrial Site
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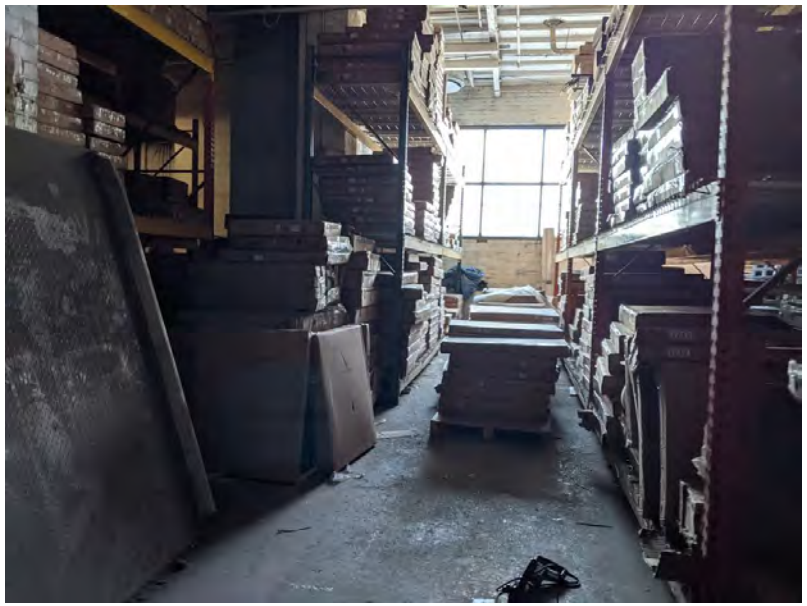

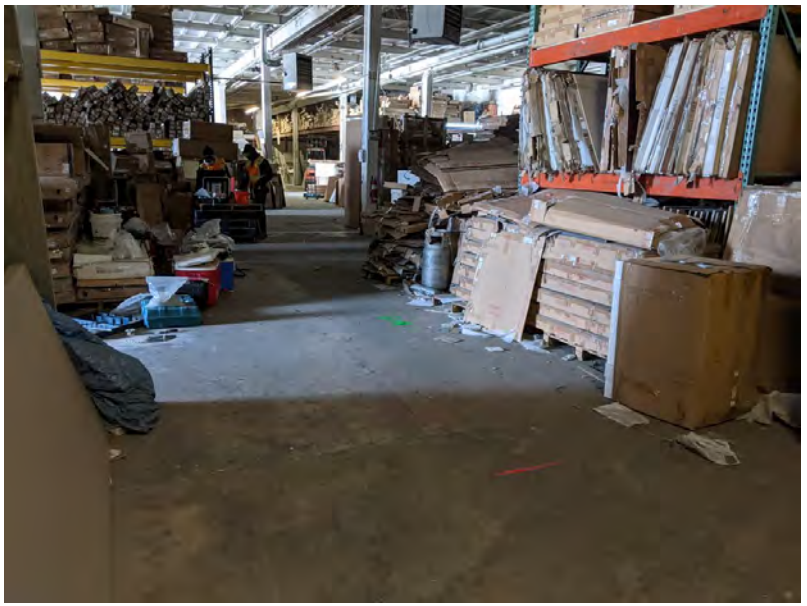

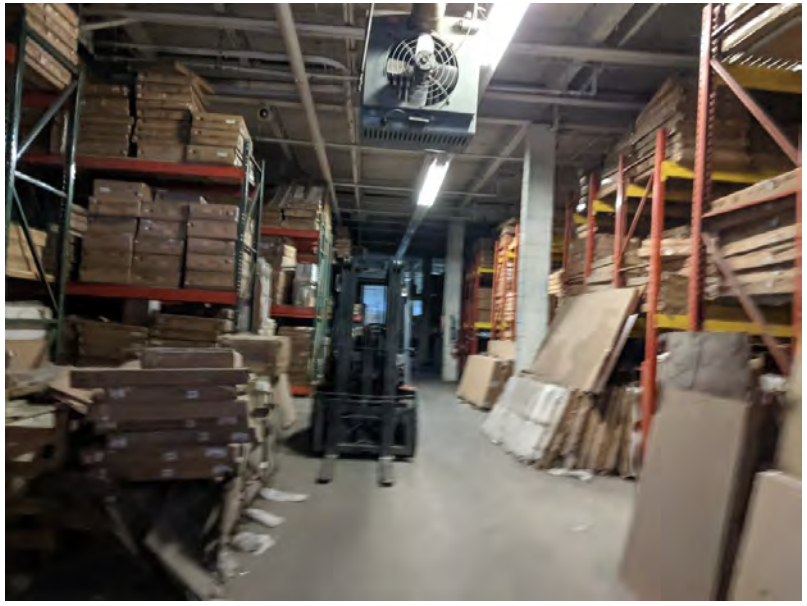

ATTACHMENT F
EQUIPMENT CALIBRATION LOG

Attachment F - Equipment Calibration Log
Potential CVOC SI Data Summary Letter

95 Lombardy Street/46 Anthony Street
Brooklyn, New York
NYSDEC Site No.: 224131
Langan Project No.: 170157201

INSTRUMENT CALIBRATION LOG					
DATE	**TIME**	**INSTRUMENT**	**SERIAL No.**	**FRESH AIR**	**CALIBRATION GAS**
12/18/2020	10:00	MultiRAE	45048	Pass	Pass (Multi & VOCs)
	10:03	MultiRAE	45047	Pass	Pass (Multi & VOCs)
	10:05	MiniRAE 3000	19052	0.0	100.2
	10:07	MiniRAE 3000	43993	0.0	100.1
12/21/2020	7:20	MultiRAE	45048	Pass	Pass (Multi & VOCs)
	7:24	MultiRAE	45047	Pass	Pass (Multi & VOCs)
	7:26	MiniRAE 3000	19052	0.0	100.1
	7:39	MiniRAE 3000	43993	0.0	100.0
12/22/2020	8:05	MultiRAE	45048	Pass	Pass (Multi & VOCs)
	8:08	MultiRAE	45047	Pass	Pass (Multi & VOCs)
	8:15	MiniRAE 3000	19052	0.0	100.3
	8:17	MiniRAE 3000	43993	0.0	100.1
12/23/2020	8:20	MultiRAE	45047	0.0	Pass (Multi & VOCs)
	8:25	MiniRAE 3000	19052	0.0	100.2

Notes:

1. Daily equipment use included the following instruments: MiniRAE 3000 photoionization detector (MiniRAE 3000), MultiRAE multi-gas detector (MultiRAE), Gilian Gil-Air 5 personal air sampling pump, and a vacuum chamber.
2. The Gilian Gil-Air 5 personal air sampling pump was pre-calibrated by the equipment vendor to a flow rate of 0.2 liters per minute.
3. Isobutylene was used as the calibration gas for the MiniRAE 3000s.
4. VOCs = volatile organic compounds

ATTACHMENT G
LABORATORY ANALYTICAL REPORT

LANGAN

Technical Report

prepared for:

Langan Engineering & Environmental Services (NYC)
21 Penn Plaza, 360 West 31st Street
New York NY, 10001
Attention: Patrick Farnham

Report Date: 12/22/2020
Client Project ID: 170157201
York Project (SDG) No.: 20L0767

Report Date: 12/22/2020
Client Project ID: 170157201
York Project (SDG) No.: 20L0767

Langan Engineering & Environmental Services (NYC)
21 Penn Plaza, 360 West 31st Street
New York NY, 10001
Attention: Patrick Farnham

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on December 14, 2020 and listed below. The project was identified as your project: **170157201**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
20L0767-01	ACME-SSV-01_121220	Soil Vapor	12/12/2020	12/14/2020
20L0767-02	ACME-IA-01_121220	Indoor Ambient Air	12/12/2020	12/14/2020
20L0767-03	ACME-SSV-02_121220	Soil Vapor	12/12/2020	12/14/2020
20L0767-04	ACME-IA-02_121220	Indoor Ambient Air	12/12/2020	12/14/2020
20L0767-05	ACME-SSV-03_121220	Soil Vapor	12/12/2020	12/14/2020
20L0767-06	ACME-IA-03_121220	Indoor Ambient Air	12/12/2020	12/14/2020
20L0767-07	ACME-SSV-04_121220	Soil Vapor	12/12/2020	12/14/2020
20L0767-08	ACME-IA-04_121220	Indoor Ambient Air	12/12/2020	12/14/2020
20L0767-09	ACME-OA-01_121220	Outdoor Ambient Air	12/12/2020	12/14/2020

General Notes for York Project (SDG) No.: 20L0767

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

Approved By:  **Date:** 12/22/2020

Benjamin Gulizia
Laboratory Director

Sample Information

Client Sample ID: ACME-SSV-01_121220 **York Sample ID:** 20L0767-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Soil Vapor	December 12, 2020 7:54 pm	12/14/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	2.7	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:			
71-55-6	**1,1,1-Trichloroethane**	**45**		ug/m³	2.1	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	2.7	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	3.0	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	2.1	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-34-3	1,1-Dichloroethane	ND		ug/m³	1.6	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.39	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	2.9	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-63-6	**1,2,4-Trimethylbenzene**	**3.1**		ug/m³	1.9	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-93-4	1,2-Dibromoethane	ND		ug/m³	3.0	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	2.3	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-06-2	1,2-Dichloroethane	ND		ug/m³	1.6	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-87-5	1,2-Dichloropropane	ND		ug/m³	1.8	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	2.7	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	1.9	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-99-0	1,3-Butadiene	ND		ug/m³	2.6	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
541-73-1	**1,3-Dichlorobenzene**	**3.5**		ug/m³	2.3	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	1.8	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:			
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	2.3	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
123-91-1	1,4-Dioxane	ND		ug/m³	2.8	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-93-3	**2-Butanone**	**45**		ug/m³	1.1	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: ACME-SSV-01_121220 **York Sample ID:** 20L0767-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Soil Vapor	December 12, 2020 7:54 pm	12/14/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	*** 2-Hexanone**	**11**		ug/m³	3.2	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:			
107-05-1	3-Chloropropene	ND		ug/m³	6.1	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-10-1	**4-Methyl-2-pentanone**	**7.2**	TO-CCV, TO-LCS-L	ug/m³	1.6	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-64-1	**Acetone**	**700**		ug/m³	18	38.92	EPA TO-15	12/21/2020 09:00	12/22/2020 00:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-13-1	Acrylonitrile	ND		ug/m³	0.85	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
71-43-2	**Benzene**	**2.7**		ug/m³	1.2	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
100-44-7	Benzyl chloride	ND		ug/m³	2.0	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-27-4	Bromodichloromethane	ND		ug/m³	2.6	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-25-2	Bromoform	ND		ug/m³	4.0	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-83-9	Bromomethane	ND		ug/m³	1.5	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-15-0	Carbon disulfide	ND		ug/m³	1.2	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
56-23-5	Carbon tetrachloride	ND		ug/m³	0.61	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-90-7	Chlorobenzene	ND		ug/m³	1.8	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-00-3	Chloroethane	ND		ug/m³	1.0	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-66-3	**Chloroform**	**3.8**		ug/m³	1.9	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-87-3	Chloromethane	ND		ug/m³	0.80	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-59-2	**cis-1,2-Dichloroethylene**	**1.1**		ug/m³	0.39	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	1.8	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-82-7	Cyclohexane	ND		ug/m³	1.3	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
124-48-1	Dibromochloromethane	ND		ug/m³	3.3	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-71-8	**Dichlorodifluoromethane**	**5.6**		ug/m³	1.9	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: ACME-SSV-01_121220 **York Sample ID:** 20L0767-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Soil Vapor	December 12, 2020 7:54 pm	12/14/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
141-78-6	*** Ethyl acetate**	**4.5**		ug/m³	2.8	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:			
100-41-4	Ethyl Benzene	ND		ug/m³	1.7	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
87-68-3	Hexachlorobutadiene	ND		ug/m³	4.2	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-63-0	**Isopropanol**	**150**		ug/m³	1.9	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
80-62-6	Methyl Methacrylate	ND		ug/m³	1.6	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	1.4	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-09-2	**Methylene chloride**	**9.7**		ug/m³	2.7	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-82-5	**n-Heptane**	**3.5**		ug/m³	1.6	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-54-3	**n-Hexane**	**2.3**		ug/m³	1.4	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-47-6	**o-Xylene**	**2.2**		ug/m³	1.7	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
179601-23-1	**p- & m- Xylenes**	**5.6**		ug/m³	3.4	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
622-96-8	*** p-Ethyltoluene**	**2.9**		ug/m³	1.9	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:			
115-07-1	* Propylene	ND		ug/m³	0.67	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:			
100-42-5	**Styrene**	**11**		ug/m³	1.7	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
127-18-4	**Tetrachloroethylene**	**3900**		ug/m³	26	38.92	EPA TO-15	12/21/2020 09:00	12/22/2020 00:42	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
109-99-9	* Tetrahydrofuran	ND		ug/m³	2.3	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:			
108-88-3	**Toluene**	**6.2**		ug/m³	1.5	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	1.5	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	1.8	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-01-6	**Trichloroethylene**	**110**		ug/m³	0.52	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m³	2.2	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-05-4	Vinyl acetate	ND		ug/m³	1.4	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: ACME-SSV-01_121220 **York Sample ID:** 20L0767-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Soil Vapor	December 12, 2020 7:54 pm	12/14/2020

Volatile Organics, EPA TO15 Full List **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
593-60-2	Vinyl bromide	ND		ug/m³	1.7	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-01-4	Vinyl Chloride	ND		ug/m³	0.50	3.898	EPA TO-15	12/21/2020 09:00	12/21/2020 23:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: ACME-IA-01_121220 **York Sample ID:** 20L0767-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Indoor Ambient Air	December 12, 2020 6:28 pm	12/14/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.61	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:			
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.48	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.61	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.68	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.48	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.36	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.088	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.66	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-63-6	**1,2,4-Trimethylbenzene**	**2.3**		ug/m³	0.44	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.68	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.53	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.36	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-87-5	**1,2-Dichloropropane**	**1.3**	TO-CCV, TO-LCS-L	ug/m³	0.41	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.62	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-67-8	**1,3,5-Trimethylbenzene**	**0.74**		ug/m³	0.44	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-99-0	1,3-Butadiene	ND		ug/m³	0.59	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.53	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.41	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:			
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.53	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
123-91-1	1,4-Dioxane	ND		ug/m³	0.64	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-93-3	**2-Butanone**	**3.8**		ug/m³	0.26	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: ACME-IA-01_121220 **York Sample ID:** 20L0767-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Indoor Ambient Air	December 12, 2020 6:28 pm	12/14/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	* 2-Hexanone	ND		ug/m³	0.73	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:			
107-05-1	3-Chloropropene	ND		ug/m³	1.4	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-10-1	**4-Methyl-2-pentanone**	**0.95**	TO-CCV, TO-LCS-L	ug/m³	0.36	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-64-1	**Acetone**	**250**		ug/m³	1.6	3.332	EPA TO-15	12/21/2020 09:00	12/22/2020 04:56	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-13-1	Acrylonitrile	ND		ug/m³	0.19	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
71-43-2	**Benzene**	**3.1**		ug/m³	0.28	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
100-44-7	Benzyl chloride	ND		ug/m³	0.46	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-27-4	Bromodichloromethane	ND		ug/m³	0.59	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-25-2	Bromoform	ND		ug/m³	0.92	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-83-9	Bromomethane	ND		ug/m³	0.34	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-15-0	Carbon disulfide	ND		ug/m³	0.28	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
56-23-5	**Carbon tetrachloride**	**0.56**		ug/m³	0.14	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-90-7	Chlorobenzene	ND		ug/m³	0.41	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-00-3	Chloroethane	ND		ug/m³	0.23	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-66-3	Chloroform	ND		ug/m³	0.43	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-87-3	**Chloromethane**	**1.6**	TO-CCV	ug/m³	0.18	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.088	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.40	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-82-7	**Cyclohexane**	**1.0**		ug/m³	0.31	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
124-48-1	Dibromochloromethane	ND		ug/m³	0.76	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-71-8	**Dichlorodifluoromethane**	**2.6**		ug/m³	0.44	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: ACME-IA-01_121220 **York Sample ID:** 20L0767-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Indoor Ambient Air	December 12, 2020 6:28 pm	12/14/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
141-78-6	*** Ethyl acetate**	**1.7**		ug/m³	0.64	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:			
100-41-4	**Ethyl Benzene**	**1.7**		ug/m³	0.39	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
87-68-3	Hexachlorobutadiene	ND		ug/m³	0.95	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-63-0	**Isopropanol**	**420**	TO-IPA, E	ug/m³	1.6	3.332	EPA TO-15	12/21/2020 09:00	12/22/2020 04:56	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
80-62-6	**Methyl Methacrylate**	**1.6**		ug/m³	0.36	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.32	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-09-2	**Methylene chloride**	**210**		ug/m³	2.3	3.332	EPA TO-15	12/21/2020 09:00	12/22/2020 04:56	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-82-5	**n-Heptane**	**1.4**		ug/m³	0.36	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-54-3	**n-Hexane**	**2.3**		ug/m³	0.31	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-47-6	**o-Xylene**	**2.3**		ug/m³	0.39	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
179601-23-1	**p- & m- Xylenes**	**5.3**		ug/m³	0.77	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
622-96-8	*** p-Ethyltoluene**	**2.6**		ug/m³	0.44	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:			
115-07-1	* Propylene	ND		ug/m³	0.15	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:			
100-42-5	**Styrene**	**26**		ug/m³	0.38	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
127-18-4	**Tetrachloroethylene**	**11**		ug/m³	0.60	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
109-99-9	*** Tetrahydrofuran**	**0.89**		ug/m³	0.52	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:			
108-88-3	**Toluene**	**7.9**		ug/m³	0.33	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.35	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.40	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-01-6	**Trichloroethylene**	**1.2**		ug/m³	0.12	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-69-4	**Trichlorofluoromethane (Freon 11)**	**3.1**		ug/m³	0.50	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-05-4	Vinyl acetate	ND		ug/m³	0.31	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: ACME-IA-01_121220 **York Sample ID:** 20L0767-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Indoor Ambient Air	December 12, 2020 6:28 pm	12/14/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
593-60-2	Vinyl bromide	ND		ug/m³	0.39	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-01-4	Vinyl Chloride	ND		ug/m³	0.11	0.888	EPA TO-15	12/21/2020 09:00	12/22/2020 04:06	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: ACME-SSV-02_121220 **York Sample ID:** 20L0767-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Soil Vapor	December 12, 2020 7:04 pm	12/14/2020

Volatile Organics, EPA TO15 Full List **Log-in Notes:** **Sample Notes:** TO-VAC

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	11	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:			
71-55-6	**1,1,1-Trichloroethane**	**2800**		ug/m³	8.5	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	11	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	12	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	8.5	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-34-3	**1,1-Dichloroethane**	**16**		ug/m³	6.3	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-35-4	**1,1-Dichloroethylene**	**6.2**		ug/m³	1.5	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	12	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	7.7	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-93-4	1,2-Dibromoethane	ND		ug/m³	12	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	9.4	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-06-2	1,2-Dichloroethane	ND		ug/m³	6.3	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-87-5	1,2-Dichloropropane	ND		ug/m³	7.2	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	11	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	7.7	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-99-0	1,3-Butadiene	ND		ug/m³	10	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	9.4	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	7.2	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:			
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	9.4	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
123-91-1	1,4-Dioxane	ND		ug/m³	11	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-93-3	**2-Butanone**	**12**		ug/m³	4.6	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
591-78-6	* 2-Hexanone	ND		ug/m³	13	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:			

Sample Information

Client Sample ID: ACME-SSV-02_121220 **York Sample ID:** 20L0767-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Soil Vapor	December 12, 2020 7:04 pm	12/14/2020

Volatile Organics, EPA TO15 Full List **Log-in Notes:** **Sample Notes:** TO-VAC

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-05-1	3-Chloropropene	ND		ug/m³	24	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	6.4	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-64-1	**Acetone**	**310**		ug/m³	7.4	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-13-1	Acrylonitrile	ND		ug/m³	3.4	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
71-43-2	Benzene	ND		ug/m³	5.0	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
100-44-7	Benzyl chloride	ND		ug/m³	8.1	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-27-4	Bromodichloromethane	ND		ug/m³	10	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-25-2	Bromoform	ND		ug/m³	16	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-83-9	Bromomethane	ND		ug/m³	6.1	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-15-0	Carbon disulfide	ND		ug/m³	4.9	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
56-23-5	Carbon tetrachloride	ND		ug/m³	2.5	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-90-7	Chlorobenzene	ND		ug/m³	7.2	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-00-3	Chloroethane	ND		ug/m³	4.1	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-66-3	**Chloroform**	**13**		ug/m³	7.6	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-87-3	Chloromethane	ND		ug/m³	3.2	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	1.5	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	7.1	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-82-7	Cyclohexane	ND		ug/m³	5.4	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
124-48-1	Dibromochloromethane	ND		ug/m³	13	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-71-8	**Dichlorodifluoromethane**	**14**		ug/m³	7.7	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
141-78-6	* Ethyl acetate	ND		ug/m³	11	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:			
100-41-4	Ethyl Benzene	ND		ug/m³	6.8	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: ACME-SSV-02_121220 **York Sample ID:** 20L0767-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Soil Vapor	December 12, 2020 7:04 pm	12/14/2020

Volatile Organics, EPA TO15 Full List **Log-in Notes:** **Sample Notes:** TO-VAC

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
87-68-3	Hexachlorobutadiene	ND		ug/m³	17	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-63-0	**Isopropanol**	**150**		ug/m³	7.7	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
80-62-6	Methyl Methacrylate	ND		ug/m³	6.4	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	5.6	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-09-2	**Methylene chloride**	**11**		ug/m³	11	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-82-5	n-Heptane	ND		ug/m³	6.4	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-54-3	n-Hexane	ND		ug/m³	5.5	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-47-6	o-Xylene	ND		ug/m³	6.8	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
179601-23-1	p- & m- Xylenes	ND		ug/m³	14	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
622-96-8	* p-Ethyltoluene	ND		ug/m³	7.7	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:			
115-07-1	* Propylene	ND		ug/m³	2.7	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:			
100-42-5	**Styrene**	**18**		ug/m³	6.7	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
127-18-4	**Tetrachloroethylene**	**160**		ug/m³	11	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
109-99-9	* Tetrahydrofuran	ND		ug/m³	9.2	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:			
108-88-3	Toluene	ND		ug/m³	5.9	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	6.2	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	7.1	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-01-6	**Trichloroethylene**	**290**		ug/m³	2.1	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-69-4	**Trichlorofluoromethane (Freon 11)**	**20**		ug/m³	8.8	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-05-4	Vinyl acetate	ND		ug/m³	5.5	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
593-60-2	Vinyl bromide	ND		ug/m³	6.8	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-01-4	Vinyl Chloride	ND		ug/m³	2.0	15.62	EPA TO-15	12/21/2020 09:00	12/21/2020 21:32	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: **ACME-SSV-02_121220** **York Sample ID:** **20L0767-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Soil Vapor	December 12, 2020 7:04 pm	12/14/2020

Sample Information

Client Sample ID: ACME-IA-02_121220 **York Sample ID:** 20L0767-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Indoor Ambient Air	December 12, 2020 5:14 pm	12/14/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.54	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:			
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.43	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.54	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-13-1	**1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)**	**0.66**		ug/m³	0.60	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.43	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.32	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.077	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.58	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-63-6	**1,2,4-Trimethylbenzene**	**2.9**		ug/m³	0.38	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.60	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.47	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.32	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.36	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.55	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-67-8	**1,3,5-Trimethylbenzene**	**0.77**		ug/m³	0.38	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-99-0	**1,3-Butadiene**	**0.62**		ug/m³	0.52	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.47	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.36	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:			
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.47	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
123-91-1	1,4-Dioxane	ND		ug/m³	0.56	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-93-3	**2-Butanone**	**2.8**		ug/m³	0.23	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
591-78-6	* 2-Hexanone	ND		ug/m³	0.64	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:			

Sample Information

Client Sample ID: ACME-IA-02_121220 **York Sample ID:** 20L0767-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Indoor Ambient Air	December 12, 2020 5:14 pm	12/14/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-05-1	3-Chloropropene	ND		ug/m³	1.2	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-10-1	**4-Methyl-2-pentanone**	**1.2**	TO-CCV, TO-LCS-L	ug/m³	0.32	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-64-1	**Acetone**	**380**		ug/m³	3.5	7.32	EPA TO-15	12/22/2020 09:00	12/22/2020 16:22	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
107-13-1	Acrylonitrile	ND		ug/m³	0.17	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
71-43-2	**Benzene**	**3.8**		ug/m³	0.25	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
100-44-7	Benzyl chloride	ND		ug/m³	0.40	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-27-4	Bromodichloromethane	ND		ug/m³	0.52	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-25-2	Bromoform	ND		ug/m³	0.81	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
74-83-9	Bromomethane	ND		ug/m³	0.30	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-15-0	Carbon disulfide	ND		ug/m³	0.24	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
56-23-5	**Carbon tetrachloride**	**0.54**		ug/m³	0.12	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-90-7	Chlorobenzene	ND		ug/m³	0.36	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-00-3	Chloroethane	ND		ug/m³	0.21	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-66-3	**Chloroform**	**0.61**		ug/m³	0.38	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
74-87-3	**Chloromethane**	**1.7**	TO-CCV	ug/m³	0.16	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.077	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.35	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
110-82-7	**Cyclohexane**	**1.2**		ug/m³	0.27	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
124-48-1	Dibromochloromethane	ND		ug/m³	0.66	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-71-8	**Dichlorodifluoromethane**	**2.8**		ug/m³	0.39	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
141-78-6	*** Ethyl acetate**	**1.8**		ug/m³	0.56	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:			

Sample Information

Client Sample ID: ACME-IA-02_121220 **York Sample ID:** 20L0767-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Indoor Ambient Air	December 12, 2020 5:14 pm	12/14/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	**Ethyl Benzene**	**2.8**		ug/m³	0.34	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
87-68-3	Hexachlorobutadiene	ND		ug/m³	0.83	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-63-0	**Isopropanol**	**41**		ug/m³	0.38	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
80-62-6	**Methyl Methacrylate**	**1.9**		ug/m³	0.32	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.28	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-09-2	**Methylene chloride**	**54**		ug/m³	0.54	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-82-5	**n-Heptane**	**1.7**		ug/m³	0.32	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-54-3	**n-Hexane**	**2.8**		ug/m³	0.27	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-47-6	**o-Xylene**	**3.2**		ug/m³	0.34	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
179601-23-1	**p- & m- Xylenes**	**8.2**		ug/m³	0.68	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
622-96-8	*** p-Ethyltoluene**	**2.9**		ug/m³	0.38	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:			
115-07-1	* Propylene	ND		ug/m³	0.13	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:			
100-42-5	**Styrene**	**48**		ug/m³	0.33	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
127-18-4	**Tetrachloroethylene**	**6.3**		ug/m³	0.53	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.46	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:			
108-88-3	**Toluene**	**8.7**		ug/m³	0.29	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.31	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.35	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-01-6	**Trichloroethylene**	**1.9**		ug/m³	0.10	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-69-4	**Trichlorofluoromethane (Freon 11)**	**4.0**		ug/m³	0.44	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-05-4	Vinyl acetate	ND		ug/m³	0.27	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
593-60-2	Vinyl bromide	ND		ug/m³	0.34	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: ACME-IA-02_121220 **York Sample ID:** 20L0767-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Indoor Ambient Air	December 12, 2020 5:14 pm	12/14/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m³	0.10	0.78	EPA TO-15	12/21/2020 09:00	12/22/2020 05:55	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: ACME-SSV-03_121220 **York Sample ID:** 20L0767-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Soil Vapor	December 12, 2020 7:33 pm	12/14/2020

Volatile Organics, EPA TO15 Full List **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	2.2	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:			
71-55-6	**1,1,1-Trichloroethane**	**790**		ug/m³	1.8	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	2.2	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	2.5	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	1.8	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-34-3	1,1-Dichloroethane	ND		ug/m³	1.3	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.32	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	2.4	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-63-6	**1,2,4-Trimethylbenzene**	**2.5**		ug/m³	1.6	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-93-4	1,2-Dibromoethane	ND		ug/m³	2.5	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	1.9	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-06-2	1,2-Dichloroethane	ND		ug/m³	1.3	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-87-5	1,2-Dichloropropane	ND		ug/m³	1.5	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	2.2	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	1.6	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-99-0	1,3-Butadiene	ND		ug/m³	2.1	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
541-73-1	**1,3-Dichlorobenzene**	**2.9**		ug/m³	1.9	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	1.5	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:			
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	1.9	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
123-91-1	1,4-Dioxane	ND		ug/m³	2.3	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-93-3	**2-Butanone**	**3.9**		ug/m³	0.95	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
591-78-6	* 2-Hexanone	ND		ug/m³	2.6	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:			

Sample Information

Client Sample ID: ACME-SSV-03_121220 **York Sample ID:** 20L0767-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Soil Vapor	December 12, 2020 7:33 pm	12/14/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-05-1	3-Chloropropene	ND		ug/m³	5.0	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	1.3	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-64-1	**Acetone**	**42**		ug/m³	1.5	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
107-13-1	Acrylonitrile	ND		ug/m³	0.70	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
71-43-2	**Benzene**	**1.9**		ug/m³	1.0	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
100-44-7	Benzyl chloride	ND		ug/m³	1.7	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-27-4	Bromodichloromethane	ND		ug/m³	2.1	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-25-2	Bromoform	ND		ug/m³	3.3	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
74-83-9	Bromomethane	ND		ug/m³	1.2	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-15-0	Carbon disulfide	ND		ug/m³	1.0	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
56-23-5	Carbon tetrachloride	ND		ug/m³	0.50	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-90-7	Chlorobenzene	ND		ug/m³	1.5	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-00-3	Chloroethane	ND		ug/m³	0.85	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-66-3	Chloroform	ND		ug/m³	1.6	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
74-87-3	Chloromethane	ND		ug/m³	0.66	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.32	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	1.5	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
110-82-7	**Cyclohexane**	**1.2**		ug/m³	1.1	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
124-48-1	Dibromochloromethane	ND		ug/m³	2.7	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-71-8	**Dichlorodifluoromethane**	**46**		ug/m³	1.6	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
141-78-6	*** Ethyl acetate**	**6.6**		ug/m³	2.3	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:			
100-41-4	**Ethyl Benzene**	**1.7**		ug/m³	1.4	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			

Sample Information

Client Sample ID: ACME-SSV-03_121220 **York Sample ID:** 20L0767-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Soil Vapor	December 12, 2020 7:33 pm	12/14/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
87-68-3	Hexachlorobutadiene	ND		ug/m³	3.4	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-63-0	**Isopropanol**	**86**		ug/m³	1.6	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
80-62-6	Methyl Methacrylate	ND		ug/m³	1.3	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	1.2	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-09-2	**Methylene chloride**	**11**		ug/m³	2.2	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-82-5	n-Heptane	ND		ug/m³	1.3	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-54-3	**n-Hexane**	**1.6**		ug/m³	1.1	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-47-6	**o-Xylene**	**2.4**		ug/m³	1.4	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
179601-23-1	**p- & m- Xylenes**	**5.9**		ug/m³	2.8	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
622-96-8	*** p-Ethyltoluene**	**2.5**		ug/m³	1.6	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:			
115-07-1	* Propylene	ND		ug/m³	0.55	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:			
100-42-5	**Styrene**	**5.3**		ug/m³	1.4	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
127-18-4	**Tetrachloroethylene**	**190**		ug/m³	2.2	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
109-99-9	* Tetrahydrofuran	ND		ug/m³	1.9	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:			
108-88-3	**Toluene**	**7.4**		ug/m³	1.2	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	1.3	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	1.5	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-01-6	**Trichloroethylene**	**29**		ug/m³	0.43	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-69-4	**Trichlorofluoromethane (Freon 11)**	**9.6**		ug/m³	1.8	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-05-4	Vinyl acetate	ND		ug/m³	1.1	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
593-60-2	Vinyl bromide	ND		ug/m³	1.4	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-01-4	Vinyl Chloride	ND		ug/m³	0.41	3.208	EPA TO-15	12/21/2020 09:00	12/22/2020 02:19	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: **ACME-SSV-03_121220** **York Sample ID:** **20L0767-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Soil Vapor	December 12, 2020 7:33 pm	12/14/2020

Sample Information

Client Sample ID: ACME-IA-03_121220 **York Sample ID:** 20L0767-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Indoor Ambient Air	December 12, 2020 6:46 pm	12/14/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.91	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:			
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.72	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.91	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.0	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.72	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.54	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.13	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.98	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-63-6	**1,2,4-Trimethylbenzene**	**3.7**		ug/m³	0.65	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.0	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.80	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.54	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.61	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.93	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-67-8	**1,3,5-Trimethylbenzene**	**1.2**		ug/m³	0.65	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-99-0	**1,3-Butadiene**	**1.0**		ug/m³	0.88	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.80	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.61	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:			
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.80	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
123-91-1	1,4-Dioxane	ND		ug/m³	0.95	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-93-3	**2-Butanone**	**2.0**		ug/m³	0.39	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
591-78-6	* 2-Hexanone	ND		ug/m³	1.1	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:			

Sample Information

Client Sample ID: ACME-IA-03_121220 **York Sample ID:** 20L0767-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Indoor Ambient Air	December 12, 2020 6:46 pm	12/14/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-05-1	3-Chloropropene	ND		ug/m³	2.1	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-10-1	**4-Methyl-2-pentanone**	**2.0**	TO-CCV	ug/m³	0.54	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-64-1	**Acetone**	**67**		ug/m³	0.63	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-13-1	Acrylonitrile	ND		ug/m³	0.29	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
71-43-2	**Benzene**	**2.8**		ug/m³	0.42	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
100-44-7	Benzyl chloride	ND		ug/m³	0.69	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-27-4	Bromodichloromethane	ND		ug/m³	0.89	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-25-2	Bromoform	ND		ug/m³	1.4	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-83-9	Bromomethane	ND		ug/m³	0.51	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-15-0	Carbon disulfide	ND		ug/m³	0.41	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
56-23-5	**Carbon tetrachloride**	**0.58**		ug/m³	0.21	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-90-7	Chlorobenzene	ND		ug/m³	0.61	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-00-3	Chloroethane	ND		ug/m³	0.35	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-66-3	Chloroform	ND		ug/m³	0.65	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-87-3	**Chloromethane**	**1.0**	TO-CCV	ug/m³	0.27	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.13	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.60	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-82-7	**Cyclohexane**	**1.3**		ug/m³	0.46	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
124-48-1	Dibromochloromethane	ND		ug/m³	1.1	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-71-8	**Dichlorodifluoromethane**	**2.9**		ug/m³	0.66	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
141-78-6	*** Ethyl acetate**	**1.7**		ug/m³	0.95	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:			
100-41-4	**Ethyl Benzene**	**2.1**		ug/m³	0.58	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: ACME-IA-03_121220 **York Sample ID:** 20L0767-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Indoor Ambient Air	December 12, 2020 6:46 pm	12/14/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.4	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-63-0	**Isopropanol**	**11**		ug/m³	0.65	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
80-62-6	**Methyl Methacrylate**	**1.2**		ug/m³	0.54	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.48	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-09-2	**Methylene chloride**	**9.5**		ug/m³	0.92	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-82-5	**n-Heptane**	**1.7**		ug/m³	0.54	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-54-3	**n-Hexane**	**2.6**		ug/m³	0.47	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-47-6	**o-Xylene**	**3.2**		ug/m³	0.58	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
179601-23-1	**p- & m- Xylenes**	**7.5**		ug/m³	1.2	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
622-96-8	*** p-Ethyltoluene**	**3.3**		ug/m³	0.65	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:			
115-07-1	* Propylene	ND		ug/m³	0.23	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:			
100-42-5	**Styrene**	**4.7**		ug/m³	0.56	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
127-18-4	**Tetrachloroethylene**	**14**		ug/m³	0.90	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.78	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:			
108-88-3	**Toluene**	**11**		ug/m³	0.50	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.53	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.60	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-01-6	Trichloroethylene	ND		ug/m³	0.18	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-69-4	**Trichlorofluoromethane (Freon 11)**	**4.3**		ug/m³	0.74	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-05-4	Vinyl acetate	ND		ug/m³	0.47	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
593-60-2	Vinyl bromide	ND		ug/m³	0.58	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-01-4	Vinyl Chloride	ND		ug/m³	0.17	1.325	EPA TO-15	12/21/2020 09:00	12/22/2020 06:54	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: **ACME-IA-03_121220** **York Sample ID:** **20L0767-06**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Indoor Ambient Air	December 12, 2020 6:46 pm	12/14/2020

Sample Information

Client Sample ID: ACME-SSV-04_121220 **York Sample ID:** 20L0767-07

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Soil Vapor	December 12, 2020 5:59 pm	12/14/2020

Volatile Organics, EPA TO15 Full List **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	4.2	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications:			
71-55-6	**1,1,1-Trichloroethane**	**10**		ug/m³	3.3	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	4.2	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	4.6	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	3.3	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-34-3	1,1-Dichloroethane	ND		ug/m³	2.4	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.60	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	4.5	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	3.0	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-93-4	1,2-Dibromoethane	ND		ug/m³	4.6	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	3.6	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-06-2	1,2-Dichloroethane	ND		ug/m³	2.4	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-87-5	1,2-Dichloropropane	ND		ug/m³	2.8	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	4.2	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	3.0	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-99-0	**1,3-Butadiene**	**8.3**		ug/m³	4.0	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	3.6	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	2.8	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications:			
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	3.6	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
123-91-1	1,4-Dioxane	ND		ug/m³	4.4	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-93-3	**2-Butanone**	**18**		ug/m³	1.8	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
591-78-6	* 2-Hexanone	ND		ug/m³	5.0	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications:			

Sample Information

Client Sample ID: ACME-SSV-04_121220 **York Sample ID:** 20L0767-07

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Soil Vapor	December 12, 2020 5:59 pm	12/14/2020

Volatile Organics, EPA TO15 Full List **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-05-1	3-Chloropropene	ND		ug/m³	9.5	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-10-1	**4-Methyl-2-pentanone**	**3.7**	TO-CCV	ug/m³	2.5	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-64-1	**Acetone**	**180**		ug/m³	2.9	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
107-13-1	Acrylonitrile	ND		ug/m³	1.3	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
71-43-2	**Benzene**	**12**		ug/m³	1.9	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
100-44-7	Benzyl chloride	ND		ug/m³	3.1	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-27-4	Bromodichloromethane	ND		ug/m³	4.1	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-25-2	Bromoform	ND		ug/m³	6.3	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
74-83-9	Bromomethane	ND		ug/m³	2.3	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-15-0	Carbon disulfide	ND		ug/m³	1.9	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
56-23-5	Carbon tetrachloride	ND		ug/m³	0.95	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-90-7	Chlorobenzene	ND		ug/m³	2.8	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-00-3	Chloroethane	ND		ug/m³	1.6	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-66-3	Chloroform	ND		ug/m³	3.0	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
74-87-3	Chloromethane	ND		ug/m³	1.2	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.60	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	2.7	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
110-82-7	**Cyclohexane**	**7.3**		ug/m³	2.1	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
124-48-1	Dibromochloromethane	ND		ug/m³	5.2	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-71-8	**Dichlorodifluoromethane**	**3.9**		ug/m³	3.0	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
141-78-6	*** Ethyl acetate**	**7.8**		ug/m³	4.4	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications:			
100-41-4	**Ethyl Benzene**	**2.6**		ug/m³	2.6	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			

Sample Information

Client Sample ID: ACME-SSV-04_121220 **York Sample ID:** 20L0767-07

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Soil Vapor	December 12, 2020 5:59 pm	12/14/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
87-68-3	Hexachlorobutadiene	ND		ug/m³	6.5	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-63-0	**Isopropanol**	**200**		ug/m³	3.0	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
80-62-6	Methyl Methacrylate	ND		ug/m³	2.5	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	2.2	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-09-2	**Methylene chloride**	**8.6**		ug/m³	4.2	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
142-82-5	**n-Heptane**	**4.7**		ug/m³	2.5	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
110-54-3	**n-Hexane**	**6.6**		ug/m³	2.1	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
95-47-6	**o-Xylene**	**2.9**		ug/m³	2.6	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
179601-23-1	**p- & m- Xylenes**	**8.4**		ug/m³	5.3	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
622-96-8	* p-Ethyltoluene	ND		ug/m³	3.0	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications:			
115-07-1	* Propylene	ND		ug/m³	1.0	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications:			
100-42-5	**Styrene**	**5.2**		ug/m³	2.6	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
127-18-4	**Tetrachloroethylene**	**910**		ug/m³	4.1	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
109-99-9	* Tetrahydrofuran	ND		ug/m³	3.6	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications:			
108-88-3	**Toluene**	**20**		ug/m³	2.3	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	2.4	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	2.7	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
79-01-6	**Trichloroethylene**	**10**		ug/m³	0.81	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m³	3.4	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-05-4	Vinyl acetate	ND		ug/m³	2.1	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
593-60-2	Vinyl bromide	ND		ug/m³	2.6	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-01-4	Vinyl Chloride	ND		ug/m³	0.77	6.048	EPA TO-15	12/21/2020 09:00	12/22/2020 03:07	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			

Sample Information

Client Sample ID: **ACME-SSV-04_121220** **York Sample ID:** **20L0767-07**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Soil Vapor	December 12, 2020 5:59 pm	12/14/2020

Sample Information

Client Sample ID: ACME-IA-04_121220 **York Sample ID:** 20L0767-08

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Indoor Ambient Air	December 12, 2020 6:20 pm	12/14/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.58	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:			
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.46	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.58	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-13-1	**1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)**	**0.78**		ug/m³	0.65	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.46	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.34	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.084	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.63	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-63-6	**1,2,4-Trimethylbenzene**	**3.9**		ug/m³	0.42	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.65	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.51	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.34	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.39	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.59	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-67-8	**1,3,5-Trimethylbenzene**	**1.1**		ug/m³	0.42	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-99-0	**1,3-Butadiene**	**0.60**		ug/m³	0.56	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.51	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.39	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:			
106-46-7	**1,4-Dichlorobenzene**	**4.2**		ug/m³	0.51	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
123-91-1	1,4-Dioxane	ND		ug/m³	0.61	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-93-3	**2-Butanone**	**3.3**		ug/m³	0.25	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
591-78-6	* 2-Hexanone	ND		ug/m³	0.69	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:			

Sample Information

Client Sample ID: ACME-IA-04_121220 **York Sample ID:** 20L0767-08

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Indoor Ambient Air	December 12, 2020 6:20 pm	12/14/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-05-1	3-Chloropropene	ND		ug/m³	1.3	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-10-1	**4-Methyl-2-pentanone**	**0.48**	TO-CCV	ug/m³	0.35	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-64-1	**Acetone**	**84**		ug/m³	0.40	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
107-13-1	Acrylonitrile	ND		ug/m³	0.18	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
71-43-2	**Benzene**	**3.9**		ug/m³	0.27	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
100-44-7	Benzyl chloride	ND		ug/m³	0.44	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-27-4	Bromodichloromethane	ND		ug/m³	0.57	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-25-2	Bromoform	ND		ug/m³	0.87	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
74-83-9	Bromomethane	ND		ug/m³	0.33	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-15-0	Carbon disulfide	ND		ug/m³	0.26	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
56-23-5	**Carbon tetrachloride**	**0.64**		ug/m³	0.13	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-90-7	Chlorobenzene	ND		ug/m³	0.39	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-00-3	Chloroethane	ND		ug/m³	0.22	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-66-3	**Chloroform**	**0.62**		ug/m³	0.41	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
74-87-3	**Chloromethane**	**1.5**	TO-CCV	ug/m³	0.17	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.084	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.38	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
110-82-7	**Cyclohexane**	**2.2**		ug/m³	0.29	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
124-48-1	Dibromochloromethane	ND		ug/m³	0.72	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-71-8	**Dichlorodifluoromethane**	**2.9**		ug/m³	0.42	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
141-78-6	*** Ethyl acetate**	**2.0**		ug/m³	0.61	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:			
100-41-4	**Ethyl Benzene**	**2.5**		ug/m³	0.37	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			

Sample Information

Client Sample ID: ACME-IA-04_121220 **York Sample ID:** 20L0767-08

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Indoor Ambient Air	December 12, 2020 6:20 pm	12/14/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
87-68-3	Hexachlorobutadiene	ND		ug/m³	0.90	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-63-0	**Isopropanol**	**12**		ug/m³	0.42	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
80-62-6	**Methyl Methacrylate**	**0.93**		ug/m³	0.35	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.30	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-09-2	**Methylene chloride**	**7.4**		ug/m³	0.59	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-82-5	**n-Heptane**	**10**		ug/m³	0.35	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-54-3	**n-Hexane**	**4.4**		ug/m³	0.30	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-47-6	**o-Xylene**	**3.0**		ug/m³	0.37	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
179601-23-1	**p- & m- Xylenes**	**7.1**		ug/m³	0.73	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
622-96-8	*** p-Ethyltoluene**	**4.5**		ug/m³	0.42	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:			
115-07-1	* Propylene	ND		ug/m³	0.15	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:			
100-42-5	**Styrene**	**11**		ug/m³	0.36	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
127-18-4	**Tetrachloroethylene**	**32**		ug/m³	0.57	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.50	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:			
108-88-3	**Toluene**	**13**		ug/m³	0.32	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.34	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.38	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-01-6	**Trichloroethylene**	**0.23**		ug/m³	0.11	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-69-4	**Trichlorofluoromethane (Freon 11)**	**7.8**		ug/m³	0.47	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-05-4	Vinyl acetate	ND		ug/m³	0.30	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
593-60-2	Vinyl bromide	ND		ug/m³	0.37	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-01-4	Vinyl Chloride	ND		ug/m³	0.11	0.845	EPA TO-15	12/21/2020 09:00	12/22/2020 07:53	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: **ACME-IA-04_121220** **York Sample ID:** **20L0767-08**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Indoor Ambient Air	December 12, 2020 6:20 pm	12/14/2020

Sample Information

Client Sample ID: ACME-OA-01_121220 **York Sample ID:** 20L0767-09

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Outdoor Ambient Air	December 12, 2020 6:55 pm	12/14/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.63	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:			
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.50	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.63	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-13-1	**1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)**	**0.70**		ug/m³	0.70	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.50	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.37	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.091	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.68	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-63-6	**1,2,4-Trimethylbenzene**	**1.5**		ug/m³	0.45	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.71	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.55	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.37	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.42	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.64	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-67-8	**1,3,5-Trimethylbenzene**	**0.45**		ug/m³	0.45	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-99-0	1,3-Butadiene	ND		ug/m³	0.61	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.55	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.42	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:			
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.55	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
123-91-1	1,4-Dioxane	ND		ug/m³	0.66	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-93-3	**2-Butanone**	**1.3**		ug/m³	0.27	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
591-78-6	* 2-Hexanone	ND		ug/m³	0.75	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:			

Sample Information

Client Sample ID: ACME-OA-01_121220 **York Sample ID:** 20L0767-09

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Outdoor Ambient Air	December 12, 2020 6:55 pm	12/14/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-05-1	3-Chloropropene	ND		ug/m³	1.4	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-10-1	**4-Methyl-2-pentanone**	**0.64**	TO-CCV	ug/m³	0.38	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-64-1	**Acetone**	**16**		ug/m³	0.44	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
107-13-1	Acrylonitrile	ND		ug/m³	0.20	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
71-43-2	**Benzene**	**1.9**		ug/m³	0.29	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
100-44-7	Benzyl chloride	ND		ug/m³	0.48	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-27-4	Bromodichloromethane	ND		ug/m³	0.62	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-25-2	Bromoform	ND		ug/m³	0.95	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
74-83-9	**Bromomethane**	**0.36**		ug/m³	0.36	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-15-0	Carbon disulfide	ND		ug/m³	0.29	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
56-23-5	**Carbon tetrachloride**	**0.58**		ug/m³	0.14	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-90-7	Chlorobenzene	ND		ug/m³	0.42	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-00-3	Chloroethane	ND		ug/m³	0.24	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-66-3	Chloroform	ND		ug/m³	0.45	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
74-87-3	**Chloromethane**	**1.6**	TO-CCV	ug/m³	0.19	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
156-59-2	**cis-1,2-Dichloroethylene**	**0.22**		ug/m³	0.091	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.42	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
110-82-7	**Cyclohexane**	**1.3**		ug/m³	0.32	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
124-48-1	Dibromochloromethane	ND		ug/m³	0.78	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-71-8	**Dichlorodifluoromethane**	**2.5**		ug/m³	0.45	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
141-78-6	*** Ethyl acetate**	**1.0**		ug/m³	0.66	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:			
100-41-4	**Ethyl Benzene**	**1.2**		ug/m³	0.40	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			

Sample Information

Client Sample ID: ACME-OA-01_121220 **York Sample ID:** 20L0767-09

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Outdoor Ambient Air	December 12, 2020 6:55 pm	12/14/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
87-68-3	Hexachlorobutadiene	ND		ug/m³	0.98	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-63-0	**Isopropanol**	**39**		ug/m³	0.45	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
80-62-6	**Methyl Methacrylate**	**1.6**		ug/m³	0.38	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.33	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-09-2	**Methylene chloride**	**17**		ug/m³	0.64	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-82-5	**n-Heptane**	**1.1**		ug/m³	0.38	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-54-3	**n-Hexane**	**1.8**		ug/m³	0.32	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-47-6	**o-Xylene**	**1.4**		ug/m³	0.40	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
179601-23-1	**p- & m- Xylenes**	**4.0**		ug/m³	0.80	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
622-96-8	*** p-Ethyltoluene**	**1.4**		ug/m³	0.45	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:			
115-07-1	* Propylene	ND		ug/m³	0.16	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:			
100-42-5	**Styrene**	**0.55**		ug/m³	0.39	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
127-18-4	**Tetrachloroethylene**	**1.7**		ug/m³	0.62	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.54	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:			
108-88-3	**Toluene**	**7.2**		ug/m³	0.35	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.36	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.42	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-01-6	**Trichloroethylene**	**0.20**		ug/m³	0.12	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-69-4	**Trichlorofluoromethane (Freon 11)**	**4.9**		ug/m³	0.52	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-05-4	Vinyl acetate	ND		ug/m³	0.32	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
593-60-2	Vinyl bromide	ND		ug/m³	0.40	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-01-4	Vinyl Chloride	ND		ug/m³	0.12	0.919	EPA TO-15	12/21/2020 09:00	12/22/2020 09:51	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: **ACME-OA-01_121220** **York Sample ID:** **20L0767-09**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20L0767	170157201	Outdoor Ambient Air	December 12, 2020 6:55 pm	12/14/2020

Analytical Batch Summary

Batch ID: BL01057 **Preparation Method:** EPA TO15 PREP **Prepared By:** AS

YORK Sample ID	Client Sample ID	Preparation Date
20L0767-01	ACME-SSV-01_121220	12/21/20
20L0767-01RE1	ACME-SSV-01_121220	12/21/20
20L0767-02	ACME-IA-01_121220	12/21/20
20L0767-02RE1	ACME-IA-01_121220	12/21/20
20L0767-03	ACME-SSV-02_121220	12/21/20
20L0767-04	ACME-IA-02_121220	12/21/20
20L0767-05	ACME-SSV-03_121220	12/21/20
20L0767-06	ACME-IA-03_121220	12/21/20
20L0767-07	ACME-SSV-04_121220	12/21/20
20L0767-08	ACME-IA-04_121220	12/21/20
20L0767-09	ACME-OA-01_121220	12/21/20
BL01057-BLK1	Blank	12/21/20
BL01057-BS1	LCS	12/21/20
BL01057-DUP1	Duplicate	12/21/20

Batch ID: BL01254 **Preparation Method:** EPA TO15 PREP **Prepared By:** AS

YORK Sample ID	Client Sample ID	Preparation Date
20L0767-04RE1	ACME-IA-02_121220	12/22/20
BL01254-BLK1	Blank	12/22/20
BL01254-BS1	LCS	12/22/20

Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL01057 - EPA TO15 PREP											
Blank (BL01057-BLK1) Blank									Prepared & Analyzed: 12/21/2020		
1,1,1,2-Tetrachloroethane	ND	0.69	ug/m³								
1,1,1-Trichloroethane	ND	0.55	"								
1,1,2,2-Tetrachloroethane	ND	0.69	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.77	"								
1,1,2-Trichloroethane	ND	0.55	"								
1,1-Dichloroethane	ND	0.40	"								
1,1-Dichloroethylene	ND	0.099	"								
1,2,4-Trichlorobenzene	ND	0.74	"								
1,2,4-Trimethylbenzene	ND	0.49	"								
1,2-Dibromoethane	ND	0.77	"								
1,2-Dichlorobenzene	ND	0.60	"								
1,2-Dichloroethane	ND	0.40	"								
1,2-Dichloropropane	ND	0.46	"								
1,2-Dichlorotetrafluoroethane	ND	0.70	"								
1,3,5-Trimethylbenzene	ND	0.49	"								
1,3-Butadiene	ND	0.66	"								
1,3-Dichlorobenzene	ND	0.60	"								
1,3-Dichloropropane	ND	0.46	"								
1,4-Dichlorobenzene	ND	0.60	"								
1,4-Dioxane	ND	0.72	"								
2-Butanone	ND	0.29	"								
2-Hexanone	ND	0.82	"								
3-Chloropropene	ND	1.6	"								
4-Methyl-2-pentanone	ND	0.41	"								
Acetone	ND	0.48	"								
Acrylonitrile	ND	0.22	"								
Benzene	ND	0.32	"								
Benzyl chloride	ND	0.52	"								
Bromodichloromethane	ND	0.67	"								
Bromoform	ND	1.0	"								
Bromomethane	ND	0.39	"								
Carbon disulfide	ND	0.31	"								
Carbon tetrachloride	ND	0.16	"								
Chlorobenzene	ND	0.46	"								
Chloroethane	ND	0.26	"								
Chloroform	ND	0.49	"								
Chloromethane	ND	0.21	"								
cis-1,2-Dichloroethylene	ND	0.099	"								
cis-1,3-Dichloropropylene	ND	0.45	"								
Cyclohexane	ND	0.34	"								
Dibromochloromethane	ND	0.85	"								
Dichlorodifluoromethane	ND	0.49	"								
Ethyl acetate	ND	0.72	"								
Ethyl Benzene	ND	0.43	"								
Hexachlorobutadiene	ND	1.1	"								
Isopropanol	ND	0.49	"								
Methyl Methacrylate	ND	0.41	"								
Methyl tert-butyl ether (MTBE)	ND	0.36	"								
Methylene chloride	ND	0.69	"								
n-Heptane	ND	0.41	"								

Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL01057 - EPA TO15 PREP											
Blank (BL01057-BLK1) Blank								Prepared & Analyzed: 12/21/2020			
n-Hexane	ND	0.35	ug/m³								
o-Xylene	ND	0.43	"								
p- & m- Xylenes	ND	0.87	"								
p-Ethyltoluene	ND	0.49	"								
Propylene	ND	0.17	"								
Styrene	ND	0.43	"								
Tetrachloroethylene	ND	0.68	"								
Tetrahydrofuran	ND	0.59	"								
Toluene	ND	0.38	"								
trans-1,2-Dichloroethylene	ND	0.40	"								
trans-1,3-Dichloropropylene	ND	0.45	"								
Trichloroethylene	ND	0.13	"								
Trichlorofluoromethane (Freon 11)	ND	0.56	"								
Vinyl acetate	ND	0.35	"								
Vinyl bromide	ND	0.44	"								
Vinyl Chloride	ND	0.13	"								
LCS (BL01057-BS1) LCS								Prepared & Analyzed: 12/21/2020			
1,1,1,2-Tetrachloroethane	8.70		ppbv	10.0		87.0	70-130				
1,1,1-Trichloroethane	11.4		"	10.0		114	70-130				
1,1,2,2-Tetrachloroethane	7.68		"	10.0		76.8	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.2		"	10.0		112	70-130				
1,1,2-Trichloroethane	8.09		"	10.0		80.9	70-130				
1,1-Dichloroethane	9.25		"	10.0		92.5	70-130				
1,1-Dichloroethylene	9.32		"	10.0		93.2	70-130				
1,2,4-Trichlorobenzene	8.81		"	10.0		88.1	70-130				
1,2,4-Trimethylbenzene	8.93		"	10.0		89.3	70-130				
1,2-Dibromoethane	8.66		"	10.0		86.6	70-130				
1,2-Dichlorobenzene	10.2		"	10.0		102	70-130				
1,2-Dichloroethane	9.82		"	10.0		98.2	70-130				
1,2-Dichloropropane	6.75		"	10.0		67.5	70-130	Low Bias			
1,2-Dichlorotetrafluoroethane	11.4		"	10.0		114	70-130				
1,3,5-Trimethylbenzene	8.69		"	10.0		86.9	70-130				
1,3-Butadiene	11.6		"	10.0		116	70-130				
1,3-Dichlorobenzene	10.7		"	10.0		107	70-130				
1,3-Dichloropropane	7.45		"	10.0		74.5	70-130				
1,4-Dichlorobenzene	11.1		"	10.0		111	70-130				
1,4-Dioxane	7.94		"	10.0		79.4	70-130				
2-Butanone	8.45		"	10.0		84.5	70-130				
2-Hexanone	7.09		"	10.0		70.9	70-130				
3-Chloropropene	8.65		"	10.0		86.5	70-130				
4-Methyl-2-pentanone	6.37		"	10.0		63.7	70-130	Low Bias			
Acetone	10.4		"	10.0		104	70-130				
Acrylonitrile	8.71		"	10.0		87.1	70-130				
Benzene	10.0		"	10.0		100	70-130				
Benzyl chloride	8.17		"	10.0		81.7	70-130				
Bromodichloromethane	7.74		"	10.0		77.4	70-130				
Bromoform	10.5		"	10.0		105	70-130				
Bromomethane	10.1		"	10.0		101	70-130				
Carbon disulfide	10.2		"	10.0		102	70-130				
Carbon tetrachloride	12.6		"	10.0		126	70-130				

Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL01057 - EPA TO15 PREP											
LCS (BL01057-BS1) LCS							Prepared & Analyzed: 12/21/2020				
Chlorobenzene	8.42		ppbv	10.0		84.2	70-130				
Chloroethane	9.36		"	10.0		93.6	70-130				
Chloroform	10.5		"	10.0		105	70-130				
Chloromethane	12.9		"	10.0		129	70-130				
cis-1,2-Dichloroethylene	9.20		"	10.0		92.0	70-130				
cis-1,3-Dichloropropylene	7.77		"	10.0		77.7	70-130				
Cyclohexane	9.16		"	10.0		91.6	70-130				
Dibromochloromethane	9.07		"	10.0		90.7	70-130				
Dichlorodifluoromethane	10.0		"	10.0		100	70-130				
Ethyl acetate	8.42		"	10.0		84.2	70-130				
Ethyl Benzene	8.16		"	10.0		81.6	70-130				
Hexachlorobutadiene	10.5		"	10.0		105	70-130				
Isopropanol	9.96		"	10.0		99.6	70-130				
Methyl Methacrylate	7.50		"	10.0		75.0	70-130				
Methyl tert-butyl ether (MTBE)	10.6		"	10.0		106	70-130				
Methylene chloride	10.5		"	10.0		105	70-130				
n-Heptane	9.12		"	10.0		91.2	70-130				
n-Hexane	9.29		"	10.0		92.9	70-130				
o-Xylene	8.28		"	10.0		82.8	70-130				
p- & m- Xylenes	16.6		"	20.0		82.9	70-130				
p-Ethyltoluene	9.17		"	10.0		91.7	70-130				
Propylene	8.20		"	10.0		82.0	70-130				
Styrene	9.09		"	10.0		90.9	70-130				
Tetrachloroethylene	8.78		"	10.0		87.8	70-130				
Tetrahydrofuran	8.64		"	10.0		86.4	70-130				
Toluene	7.83		"	10.0		78.3	70-130				
trans-1,2-Dichloroethylene	9.59		"	10.0		95.9	70-130				
trans-1,3-Dichloropropylene	7.84		"	10.0		78.4	70-130				
Trichloroethylene	8.29		"	10.0		82.9	70-130				
Trichlorofluoromethane (Freon 11)	11.1		"	10.0		111	70-130				
Vinyl acetate	8.11		"	10.0		81.1	70-130				
Vinyl bromide	12.1		"	10.0		121	70-130				
Vinyl Chloride	12.1		"	10.0		121	70-130				

Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL01057 - EPA TO15 PREP											
Duplicate (BL01057-DUP1) Duplicate	*Source sample: 20L0767-08 (ACME-IA-04_121220)								Prepared: 12/21/2020 Analyzed: 12/22/2020		
1,1,1,2-Tetrachloroethane	ND	0.58	ug/m³		ND					25	
1,1,1-Trichloroethane	0.55	0.46	"		ND					25	
1,1,2,2-Tetrachloroethane	ND	0.58	"		ND					25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.84	0.65	"		0.78				8.00	25	
1,1,2-Trichloroethane	ND	0.46	"		ND					25	
1,1-Dichloroethane	ND	0.34	"		ND					25	
1,1-Dichloroethylene	ND	0.084	"		ND					25	
1,2,4-Trichlorobenzene	ND	0.63	"		ND					25	
1,2,4-Trimethylbenzene	4.1	0.42	"		3.9				5.18	25	
1,2-Dibromoethane	ND	0.65	"		ND					25	
1,2-Dichlorobenzene	ND	0.51	"		ND					25	
1,2-Dichloroethane	ND	0.34	"		ND					25	
1,2-Dichloropropane	ND	0.39	"		ND					25	
1,2-Dichlorotetrafluoroethane	ND	0.59	"		ND					25	
1,3,5-Trimethylbenzene	1.1	0.42	"		1.1				3.77	25	
1,3-Butadiene	0.56	0.56	"		0.60				6.45	25	
1,3-Dichlorobenzene	ND	0.51	"		ND					25	
1,3-Dichloropropane	ND	0.39	"		ND					25	
1,4-Dichlorobenzene	4.4	0.51	"		4.2				5.92	25	
1,4-Dioxane	ND	0.61	"		ND					25	
2-Butanone	3.4	0.25	"		3.3				0.743	25	
2-Hexanone	ND	0.69	"		ND					25	
3-Chloropropene	ND	1.3	"		ND					25	
4-Methyl-2-pentanone	0.59	0.35	"		0.48				19.4	25	
Acetone	85	0.40	"		84				1.80	25	
Acrylonitrile	ND	0.18	"		ND					25	
Benzene	3.9	0.27	"		3.9				0.687	25	
Benzyl chloride	ND	0.44	"		ND					25	
Bromodichloromethane	ND	0.57	"		ND					25	
Bromoform	ND	0.87	"		ND					25	
Bromomethane	ND	0.33	"		ND					25	
Carbon disulfide	ND	0.26	"		ND					25	
Carbon tetrachloride	0.58	0.13	"		0.64				8.70	25	
Chlorobenzene	ND	0.39	"		ND					25	
Chloroethane	ND	0.22	"		ND					25	
Chloroform	0.70	0.41	"		0.62				12.5	25	
Chloromethane	1.5	0.17	"		1.5				2.33	25	
cis-1,2-Dichloroethylene	0.13	0.084	"		ND					25	
cis-1,3-Dichloropropylene	ND	0.38	"		ND					25	
Cyclohexane	2.2	0.29	"		2.2				1.34	25	
Dibromochloromethane	ND	0.72	"		ND					25	
Dichlorodifluoromethane	2.8	0.42	"		2.9				1.46	25	
Ethyl acetate	2.1	0.61	"		2.0				1.48	25	
Ethyl Benzene	2.6	0.37	"		2.5				7.19	25	
Hexachlorobutadiene	ND	0.90	"		ND					25	
Isopropanol	12	0.42	"		12				2.29	25	
Methyl Methacrylate	0.86	0.35	"		0.93				7.69	25	
Methyl tert-butyl ether (MTBE)	ND	0.30	"		ND					25	
Methylene chloride	7.4	0.59	"		7.4				0.398	25	
n-Heptane	10	0.35	"		10				2.34	25	
n-Hexane	4.6	0.30	"		4.4				3.30	25	

Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL01057 - EPA TO15 PREP											
Duplicate (BL01057-DUP1) Duplicate	*Source sample: 20L0767-08 (ACME-IA-04_121220)								Prepared: 12/21/2020 Analyzed: 12/22/2020		
o-Xylene	3.3	0.37	ug/m³		3.0				8.19	25	
p- & m- Xylenes	7.6	0.73	"		7.1				6.52	25	
p-Ethyltoluene	4.7	0.42	"		4.5				5.41	25	
Propylene	ND	0.15	"		ND					25	
Styrene	11	0.36	"		11				6.22	25	
Tetrachloroethylene	33	0.57	"		32				4.38	25	
Tetrahydrofuran	ND	0.50	"		ND					25	
Toluene	14	0.32	"		13				4.55	25	
trans-1,2-Dichloroethylene	ND	0.34	"		ND					25	
trans-1,3-Dichloropropylene	ND	0.38	"		ND					25	
Trichloroethylene	0.23	0.11	"		0.23				0.00	25	
Trichlorofluoromethane (Freon 11)	8.0	0.47	"		7.8				2.41	25	
Vinyl acetate	ND	0.30	"		ND					25	
Vinyl bromide	ND	0.37	"		ND					25	
Vinyl Chloride	ND	0.11	"		ND					25	
Batch BL01254 - EPA TO15 PREP											
Blank (BL01254-BLK1) Blank									Prepared & Analyzed: 12/22/2020		
1,1,1,2-Tetrachloroethane	ND	0.69	ug/m³								
1,1,1-Trichloroethane	ND	0.55	"								
1,1,2,2-Tetrachloroethane	ND	0.69	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.77	"								
1,1,2-Trichloroethane	ND	0.55	"								
1,1-Dichloroethane	ND	0.40	"								
1,1-Dichloroethylene	ND	0.099	"								
1,2,4-Trichlorobenzene	ND	0.74	"								
1,2,4-Trimethylbenzene	ND	0.49	"								
1,2-Dibromoethane	ND	0.77	"								
1,2-Dichlorobenzene	ND	0.60	"								
1,2-Dichloroethane	ND	0.40	"								
1,2-Dichloropropane	ND	0.46	"								
1,2-Dichlorotetrafluoroethane	ND	0.70	"								
1,3,5-Trimethylbenzene	ND	0.49	"								
1,3-Butadiene	ND	0.66	"								
1,3-Dichlorobenzene	ND	0.60	"								
1,3-Dichloropropane	ND	0.46	"								
1,4-Dichlorobenzene	ND	0.60	"								
1,4-Dioxane	ND	0.72	"								
2-Butanone	ND	0.29	"								
2-Hexanone	ND	0.82	"								
3-Chloropropene	ND	1.6	"								
4-Methyl-2-pentanone	ND	0.41	"								
Acetone	ND	0.48	"								
Acrylonitrile	ND	0.22	"								
Benzene	ND	0.32	"								
Benzyl chloride	ND	0.52	"								
Bromodichloromethane	ND	0.67	"								
Bromoform	ND	1.0	"								
Bromomethane	ND	0.39	"								
Carbon disulfide	ND	0.31	"								

Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL01254 - EPA TO15 PREP											
Blank (BL01254-BLK1) Blank									Prepared & Analyzed: 12/22/2020		
Carbon tetrachloride	ND	0.16	ug/m³								
Chlorobenzene	ND	0.46	"								
Chloroethane	ND	0.26	"								
Chloroform	ND	0.49	"								
Chloromethane	ND	0.21	"								
cis-1,2-Dichloroethylene	ND	0.099	"								
cis-1,3-Dichloropropylene	ND	0.45	"								
Cyclohexane	ND	0.34	"								
Dibromochloromethane	ND	0.85	"								
Dichlorodifluoromethane	ND	0.49	"								
Ethyl acetate	ND	0.72	"								
Ethyl Benzene	ND	0.43	"								
Hexachlorobutadiene	ND	1.1	"								
Isopropanol	ND	0.49	"								
Methyl Methacrylate	ND	0.41	"								
Methyl tert-butyl ether (MTBE)	ND	0.36	"								
Methylene chloride	ND	0.69	"								
n-Heptane	ND	0.41	"								
n-Hexane	ND	0.35	"								
o-Xylene	ND	0.43	"								
p- & m- Xylenes	ND	0.87	"								
p-Ethyltoluene	ND	0.49	"								
Propylene	ND	0.17	"								
Styrene	ND	0.43	"								
Tetrachloroethylene	ND	0.68	"								
Tetrahydrofuran	ND	0.59	"								
Toluene	ND	0.38	"								
trans-1,2-Dichloroethylene	ND	0.40	"								
trans-1,3-Dichloropropylene	ND	0.45	"								
Trichloroethylene	ND	0.13	"								
Trichlorofluoromethane (Freon 11)	ND	0.56	"								
Vinyl acetate	ND	0.35	"								
Vinyl bromide	ND	0.44	"								
Vinyl Chloride	ND	0.13	"								

Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL01254 - EPA TO15 PREP											
LCS (BL01254-BS1) LCS								Prepared & Analyzed: 12/22/2020			
1,1,1,2-Tetrachloroethane	8.50		ppbv	10.0		85.0	70-130				
1,1,1-Trichloroethane	11.1		"	10.0		111	70-130				
1,1,2,2-Tetrachloroethane	7.60		"	10.0		76.0	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.0		"	10.0		110	70-130				
1,1,2-Trichloroethane	7.89		"	10.0		78.9	70-130				
1,1-Dichloroethane	9.09		"	10.0		90.9	70-130				
1,1-Dichloroethylene	9.23		"	10.0		92.3	70-130				
1,2,4-Trichlorobenzene	8.53		"	10.0		85.3	70-130				
1,2,4-Trimethylbenzene	8.74		"	10.0		87.4	70-130				
1,2-Dibromoethane	8.44		"	10.0		84.4	70-130				
1,2-Dichlorobenzene	9.96		"	10.0		99.6	70-130				
1,2-Dichloroethane	9.44		"	10.0		94.4	70-130				
1,2-Dichloropropane	6.63		"	10.0		66.3	70-130	Low Bias			
1,2-Dichlorotetrafluoroethane	11.3		"	10.0		113	70-130				
1,3,5-Trimethylbenzene	8.47		"	10.0		84.7	70-130				
1,3-Butadiene	12.0		"	10.0		120	70-130				
1,3-Dichlorobenzene	10.4		"	10.0		104	70-130				
1,3-Dichloropropane	7.28		"	10.0		72.8	70-130				
1,4-Dichlorobenzene	10.8		"	10.0		108	70-130				
1,4-Dioxane	7.88		"	10.0		78.8	70-130				
2-Butanone	8.25		"	10.0		82.5	70-130				
2-Hexanone	6.93		"	10.0		69.3	70-130	Low Bias			
3-Chloropropene	8.64		"	10.0		86.4	70-130				
4-Methyl-2-pentanone	6.18		"	10.0		61.8	70-130	Low Bias			
Acetone	10.1		"	10.0		101	70-130				
Acrylonitrile	8.63		"	10.0		86.3	70-130				
Benzene	9.95		"	10.0		99.5	70-130				
Benzyl chloride	8.00		"	10.0		80.0	70-130				
Bromodichloromethane	7.57		"	10.0		75.7	70-130				
Bromoform	10.2		"	10.0		102	70-130				
Bromomethane	10.1		"	10.0		101	70-130				
Carbon disulfide	10.3		"	10.0		103	70-130				
Carbon tetrachloride	12.2		"	10.0		122	70-130				
Chlorobenzene	8.31		"	10.0		83.1	70-130				
Chloroethane	9.33		"	10.0		93.3	70-130				
Chloroform	10.4		"	10.0		104	70-130				
Chloromethane	13.0		"	10.0		130	70-130				
cis-1,2-Dichloroethylene	9.17		"	10.0		91.7	70-130				
cis-1,3-Dichloropropylene	7.72		"	10.0		77.2	70-130				
Cyclohexane	9.13		"	10.0		91.3	70-130				
Dibromochloromethane	8.83		"	10.0		88.3	70-130				
Dichlorodifluoromethane	9.79		"	10.0		97.9	70-130				
Ethyl acetate	8.25		"	10.0		82.5	70-130				
Ethyl Benzene	8.03		"	10.0		80.3	70-130				
Hexachlorobutadiene	10.1		"	10.0		101	70-130				
Isopropanol	9.94		"	10.0		99.4	70-130				
Methyl Methacrylate	7.44		"	10.0		74.4	70-130				
Methyl tert-butyl ether (MTBE)	10.5		"	10.0		105	70-130				
Methylene chloride	10.3		"	10.0		103	70-130				
n-Heptane	9.01		"	10.0		90.1	70-130				
n-Hexane	9.25		"	10.0		92.5	70-130				

Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL01254 - EPA TO15 PREP											
LCS (BL01254-BS1) LCS							Prepared & Analyzed: 12/22/2020				
o-Xylene	8.20		ppbv	10.0		82.0	70-130				
p- & m- Xylenes	16.3		"	20.0		81.6	70-130				
p-Ethyltoluene	8.97		"	10.0		89.7	70-130				
Propylene	7.95		"	10.0		79.5	70-130				
Styrene	9.01		"	10.0		90.1	70-130				
Tetrachloroethylene	8.45		"	10.0		84.5	70-130				
Tetrahydrofuran	8.38		"	10.0		83.8	70-130				
Toluene	7.65		"	10.0		76.5	70-130				
trans-1,2-Dichloroethylene	9.50		"	10.0		95.0	70-130				
trans-1,3-Dichloropropylene	7.69		"	10.0		76.9	70-130				
Trichloroethylene	8.15		"	10.0		81.5	70-130				
Trichlorofluoromethane (Freon 11)	10.8		"	10.0		108	70-130				
Vinyl acetate	8.19		"	10.0		81.9	70-130				
Vinyl bromide	12.1		"	10.0		121	70-130				
Vinyl Chloride	12.6		"	10.0		126	70-130				

Sample and Data Qualifiers Relating to This Work Order

TO-VAC	The final vacuum in the canister was less than -2 inches Hg vacuum. The time integrated sampling may be affected and not reflect proper sampling over the time period. The data user should take note.
TO-LCS-L	The result reported for this compound may be biased low due to its behavior in the analysis batch LCS where it recovered less 70% of the expected value.
TO-LCS-H	The result reported for this compound may be biased high due to its behavior in the analysis batch LCS where it recovered greater than 130% of the expected value.
TO-IPA	The value for isopropanol is estimated. Dilutions are not conducted for this species as not to preclude actionable analytes by dilution.
TO-CCV	The value reported is ESTIMATED for this compound due to its behavior during continuing calibration verification (>30% Difference from initial calibration).
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.

Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

York Analytical Laboratories, Inc.
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132-02 89th Ave Queens, NY 11418
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Field Chain-of-Custody Record - AIR

NOTE: YORK's Standard Terms & Conditions are listed on the back side of this document. This document serves as your written authorization for YORK to proceed with the analyses requested below. Your signature binds you to YORK's Standard Terms & Conditions.

YORK Project No. 20L0767

YOUR Information	Report To:	Invoice To:
Company: LANGAN DPC	Company: "	Company: "
Address:	Address:	Address:
Phone.:	Phone.:	Phone.:
Contact: PATRICK FARNHAM	Contact: KIM NAGOTKO	Contact:
E-mail: PFARNHAM@LANGANLOM	E-mail: KNAGOTKO@LANGAN.COM	E-mail:

YOUR Project Number: 170157201

YOUR Project Name: ACME

YOUR PO#:

Turn-Around Time

- RUSH - Next Day
- RUSH - Two Day
- RUSH - Three Day
- RUSH - Four Day
- Standard (5-7 Day) X

Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.

JACK DONELAN

Samples Collected by: (print your name above and sign below)

Air Matrix Codes

- AI - Indoor Ambient Air
- AO - Outdoor Amb. Air
- AE - Vapor Extraction Well/ Process Gas/Effluent
- AS - Soil Vapor/Sub-Slab

Samples From

- New York X
- New Jersey
- Connecticut
- Pennsylvania
- Other

Report / EDD Type (circle selections)

Summary Report	CT RCP	Standard Excel EDD
QA Report	CT RCP DQA/DUE	EQuIS (Standard)
NY ASP A Package	NJDEP Reduced Deliv.	NYSDEC EQuIS
NY ASP B Package	NJDKQP	NJDEP SRP HazSite
Other:		

YORK Reg. Comp.

Compared to the following Regulation(s): (please fill in)

Certified Canisters: Batch ___ Individual ___

Please enter the following REQUIRED Field Data

Reporting Units: ug/m³ ✓ ppbv ___ ppmv ___

Sample Identification	Date/Time Sampled	Air Matrix	Canister Vacuum Before Sampling (in Hg)	Canister Vacuum After Sampling (in Hg)	Canister ID	Flow Cont. ID	Analysis Requested	PID (PPM)
ACME-SSV-01_121220	12/12/20 1954	AS	-29.80	-10	28884	Y11	TO-15 VOCs	2.4
ACME-IA-01_121220	1828	AI	-29.93	-8	37799	6872		0.1
ACME-SSV-02_121220	1904	AS	-30	-3	37012	Y-43		0.4
ACME-IA-02_121220	1714	AI	-30	-3	37319	5116		0.1
ACME-SSV-03_121220	1933	AS	-30	-5	23798	Y30		0.4
ACME-IA-03_121220	1846	AI	-30.17	-14	18297	Y24		0.1
ACME-SSV-04_121220	1759	AS	-28.55	-3	28301	Y16		1.6
ACME-IA-04_121220	1820	AI	-29.58	-4.39	36411	7268		0.1
ACME-OA-01_121220	1855	AO	-29.53	-7	Y64	Y39		0.0

Comments:
* ACME-SSV-03 has two mechanical gauges reading different Pressures. Other gauge reads -8.5 inHg.
* ACME-IA-04_121220 Mechanical gauge reading -4

Detection Limits Required

≤ 1 ug/m³ ___ NYSDEC V1 Limits ___
Routine Survey ___ Other ___

Sampling Media

- 6 Liter Canister
- Tedlar Bag

Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time
LANGAN	12/14/20 1630	York	12/14/20 16:30	York	
Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time
Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Received in LAB by	Date/Time
					12/14/20 5:50PM

ATTACHMENT H
DATA USABILITY SUMMARY REPORT

LANGAN

LANGAN
ENGINEERING & ENVIRONMENTAL SERVICES

Technical Memorandum

1818 Market Street, Suite 3300 Philadelphia, PA 19103 T: 215.845.8900 F: 215.845.8901
Mailing Address: 1818 Market Street, Suite 3300 Philadelphia, PA 19103

To: Kimberly Nagotko, Langan Senior Staff Geologist

From: Joe Conboy, Langan Staff Chemist

Date: January 11, 2021

Re: Data Usability Summary Report
Former Acme Steel/Metal Works
95 Lombardy/46 Anthony Street, Brooklyn, NY 11222
NYSDEC Site No. 224131
December 2020 Vapor Samples
Langan Project No.: 170157201

This memorandum presents the findings of an analytical data validation of the data generated from the analysis of air samples collected in December 2020 by Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C ("Langan") at the Acme Site 224131 site ("the site"). The samples were analyzed by York Analytical Laboratories, Inc. (NYSDOH NELAP registration # 10854 and 12058) for volatile organic compounds (VOCs) by the methods specified below.

- VOCs by USEPA Method TO-15

Table 1, below, summarizes the laboratory and client sample identification numbers, sample collection dates, and analytical parameters subject to review.

TABLE 1: SAMPLE SUMMARY

SDG	*Lab Sample ID*	*Client Sample ID*	*Sample Date*	*Analytical Parameters*
20L0767	20L0767-02R	ACME-IA-01_121220	12/12/2020	VOCs by TO-15
20L0767	20L0767-04	ACME-IA-02_121220	12/12/2020	VOCs by TO-15
20L0767	20L0767-06	ACME-IA-03_121220	12/12/2020	VOCs by TO-15
20L0767	20L0767-08	ACME-IA-04_121220	12/12/2020	VOCs by TO-15
20L0767	20L0767-09	ACME-OA-01_121220	12/12/2020	VOCs by TO-15
20L0767	20L0767-01	ACME-SSV-01_121220	12/12/2020	VOCs by TO-15
20L0767	20L0767-03	ACME-SSV-02_121220	12/12/2020	VOCs by TO-15
20L0767	20L0767-05	ACME-SSV-03_121220	12/12/2020	VOCs by TO-15
20L0767	20L0767-07	ACME-SSV-04_121220	12/12/2020	VOCs by TO-15

Validation Overview

This data validation was performed in accordance with USEPA Region II Standard Operating Procedure (SOP) #HW-31, "Analysis of Volatile Organic Compounds in Air Contained in Canisters by Method TO-15" (September 2016, Revision 6), the USEPA Contract Laboratory Program "National Functional Guidelines for Organic Superfund Methods Data Review" (EPA-540-R-2017-002, January 2017), and the specifics of the methods employed.

Validation includes review of the analytical data to verify that data are easily traceable and sufficiently complete to permit logical reconstruction by a qualified individual other than the originator. Items subject to review in this memorandum include holding times, sample preservation, instrument tuning, instrument calibration, laboratory blanks, laboratory control samples, internal standard area counts, target compound identification and quantification, chromatograms, and overall system performance.

As a result of the review process, the following qualifiers may be assigned to the data in accordance with the USEPA's guidelines and best professional judgment:

- **R –** The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
- **J –** The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
- **UJ –** The analyte was not detected at a level greater than or equal to the reporting limit (RL); however, the reported RL is approximate and may be inaccurate or imprecise.
- **U –** The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.
- **NJ –** The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

If any validation qualifiers are assigned these qualifiers should supersede any laboratory-applied qualifiers. Data that is not qualified as a result of this data validation is considered acceptable on the basis of the items specified for review. Data that is qualified as "R" are not sufficiently valid and technically supportable to be used for data interpretation. Data that is otherwise qualified due to minor data quality anomalies are usable, as qualified.

TABLE 2: VALIDATOR-APPLIED QUALIFICATION

Client Sample ID	*Analysis*	*CAS #*	*Analyte*	*Validator Qualifier*
ACME-IA-01_121220	TO15	108-10-1	4-Methyl-2-Pentanone	J
ACME-IA-01_121220	TO15	74-87-3	Chloromethane	J
ACME-IA-01_121220	TO15	75-01-4	Vinyl Chloride	UJ
ACME-IA-01_121220	TO15	78-87-5	1,2-Dichloropropane	J
ACME-IA-01_121220	TO15	67-63-0	Isopropanol	J
ACME-IA-02_121220	TO15	108-10-1	4-Methyl-2-Pentanone	J
ACME-IA-02_121220	TO15	591-78-6	2-Hexanone	UJ
ACME-IA-02_121220	TO15	74-87-3	Chloromethane	J
ACME-IA-02_121220	TO15	75-01-4	Vinyl Chloride	UJ
ACME-IA-02_121220	TO15	78-87-5	1,2-Dichloropropane	UJ
ACME-IA-03_121220	TO15	108-10-1	4-Methyl-2-Pentanone	J
ACME-IA-03_121220	TO15	74-87-3	Chloromethane	J
ACME-IA-03_121220	TO15	75-01-4	Vinyl Chloride	UJ
ACME-IA-03_121220	TO15	78-87-5	1,2-Dichloropropane	UJ
ACME-IA-04_121220	TO15	108-10-1	4-Methyl-2-Pentanone	J
ACME-IA-04_121220	TO15	74-87-3	Chloromethane	J
ACME-IA-04_121220	TO15	75-01-4	Vinyl Chloride	UJ
ACME-IA-04_121220	TO15	78-87-5	1,2-Dichloropropane	UJ
ACME-OA-01_121220	TO15	108-10-1	4-Methyl-2-Pentanone	J
ACME-OA-01_121220	TO15	74-87-3	Chloromethane	J
ACME-OA-01_121220	TO15	75-01-4	Vinyl Chloride	UJ
ACME-OA-01_121220	TO15	78-87-5	1,2-Dichloropropane	UJ
ACME-SSV-01_121220	TO15	108-10-1	4-Methyl-2-Pentanone	J
ACME-SSV-01_121220	TO15	74-87-3	Chloromethane	UJ
ACME-SSV-01_121220	TO15	75-01-4	Vinyl Chloride	UJ

Client Sample ID	*Analysis*	*CAS #*	*Analyte*	*Validator Qualifier*
ACME-SSV-01_121220	TO15	78-87-5	1,2-Dichloropropane	UJ
ACME-SSV-02_121220	TO15	108-10-1	4-Methyl-2-Pentanone	UJ
ACME-SSV-02_121220	TO15	74-87-3	Chloromethane	UJ
ACME-SSV-02_121220	TO15	75-01-4	Vinyl Chloride	UJ
ACME-SSV-02_121220	TO15	78-87-5	1,2-Dichloropropane	UJ
ACME-SSV-03_121220	TO15	108-10-1	4-Methyl-2-Pentanone	UJ
ACME-SSV-03_121220	TO15	74-87-3	Chloromethane	UJ
ACME-SSV-03_121220	TO15	75-01-4	Vinyl Chloride	UJ
ACME-SSV-03_121220	TO15	78-87-5	1,2-Dichloropropane	UJ
ACME-SSV-04_121220	TO15	108-10-1	4-Methyl-2-Pentanone	J
ACME-SSV-04_121220	TO15	74-87-3	Chloromethane	UJ
ACME-SSV-04_121220	TO15	75-01-4	Vinyl Chloride	UJ
ACME-SSV-04_121220	TO15	78-87-5	1,2-Dichloropropane	UJ

MAJOR DEFICIENCIES:

Major deficiencies include those that grossly impact data quality and necessitate the rejection of results. No major deficiencies were identified.

MINOR DEFICIENCIES:

Minor deficiencies include anomalies that directly impact data quality and necessitate qualification, but do not result in unusable data. The section below describes the minor deficiencies that were identified.

VOCs by USEPA Method TO-15:

20L0767

The laboratory control sample (LCS) for batch BL01057 exhibited percent recoveries below the lower control limit (LCL) for 1,2-dichloropropane (67.5%) and 4-methyl-2-pentanone (63.7%). The associated results in sample ACME-IA-01_121220, ACME-IA-02_121220, ACME-IA-03_121220, ACME-IA-04_121220, ACME-OA-01_121220, ACME-SSV-01_121220, ACME-SSV-02_121220, ACME-SSV-03_121220, and ACME-SSV-04_121220 are qualified as "J" or "UJ" based on potential low bias.

The LCS for batch BL01254 exhibited percent recoveries below the LCL for 1,2-dichloropropane (66.3%), 2-hexanone (69.3%), and 4-methyl-2-pentanone (61.8%). The associated results in sample ACME-IA-02_121220 are qualified as "UJ" based on potential low bias.

The continuing calibration verification (CCV) analyzed on 12/21/2020 at 11:44 exhibited percent drifts (%Ds) above the control limit for 1,2-dichloropropane (-33.9%), 4-methyl-2-pentanone (-37.9%), chloromethane (36.3%), and vinyl chloride (31.1%). The associated results in sample ACME-IA-01_121220, ACME-IA-02_121220, ACME-IA-03_121220, ACME-IA-04_121220, ACME-OA-01_121220, ACME-SSV-01_121220, ACME-SSV-02_121220, ACME-SSV-03_121220, and ACME-SSV-04_121220 are qualified as "J" or "UJ" based on potential indeterminate bias.

OTHER DEFICIENCIES:

Other deficiencies include anomalies that do not directly impact data quality and do not necessitate qualification. The section below describes the other deficiencies that were identified.

VOCs by USEPA Method TO-15:

20L0767

The method blank (MB) for batch BL01057 exhibited a detection of methylene chloride (0.69 ug/m3). The associated results are >10X the contamination. No qualification is necessary.

The MB for batch BL01254 exhibited a detection of methylene chloride (0.69 ug/m3). The associated results are >10X the contamination. No qualification is necessary.

The CCV analyzed on 12/22/2020 at 13:01 exhibited %Ds above the control limit for 1,2-dichloropropane (-33.5%), 4-methyl-2-pentanone (-37%), chloromethane (50.8%), and vinyl chloride (36.7%). The associated results were previously qualified. No further action is necessary.

COMMENTS:

On the basis of this evaluation, the laboratory appears to have followed the specified analytical methods with the exception of errors discussed above. If a given fraction is not mentioned above, that means that all specified criteria were met for that parameter. All of the data packages met ASP Category B requirements.

All data are considered usable, as qualified. In addition, completeness, defined as the percentage of analytical results that are judged to be valid, is 100%.

Signed:

Joe Conboy
Staff Chemist