

**Former Sep's Cleaners Site
242-288 Livonia Avenue, Brooklyn, New York**

Final Engineering Report

NYSDEC Site Number 224283

Prepared for:

Riverdale Osborne Towers Upper Management LLC

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CERTIFICATION

I, Dr. Ravi Korlipara, P.E., certify that I am currently a New York State registered professional engineer and that this Site Management Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and Green Remediation (DER-31).



Signature



Date

NYS Professional License # 070038

Note: Include PE stamp



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List of Acronyms

AS	Air Sparging
bg	Below Grade
CCR	Construction Completion Report
cfm	cubic feet per minute
D	Deep
DCE	Dichloroethylene
DER	Division of Environmental Remediation
EC	Engineering Control
EPA	Environmental Protection Agency
FER	Final Engineering Report
IC	Institutional Control
IRM	Interim Remedial Measures
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PCE	Tetrachloroethylene
PID	Photoionization Detector
PM	Pressure Monitoring
PSI	Pounds Per Square Inch
RAO	Remedial Action Objectives
RAWP	Remedial Action Work Plan
S	Shallow
SMP	Site Management Plan
SSDS	Sub-Slab Depressurization System
SVE	Soil Vapor Extraction
TCE	Trichloroethylene
ug/L	Micrograms per Liter
ug/m ³	Micrograms per Cubic Meter
VC	Vinyl Chloride
VOC	Volatile Organic Compound

SECTION 1.0

INTRODUCTION AND DESCRIPTION OF REMEDIAL PROGRAM

1.1 Introduction

This Final Engineering Report (FER) has been prepared as a portion of the remedial program at the Former Sep's Cleaners Site that was located at 242-288 Livonia Ave., Brooklyn, New York, which was within a strip mall building that contains a rear driveway (hereinafter referred to as the "Site"). The Site is approximately 0.566 acres in size and is being administered by the New York State Department of Environmental Conservation (NYSDEC). The Site location and boundaries are shown in Figure 1. The Site is located in Kings County, New York and is identified as Block 3590 and Lot 16. The Site is bounded to the north by Livonia Ave., to the west by Rockaway Ave., to the south by a parking lot, and to the east by a building occupied by The World of Creative Experiences-Head Start. The metes and bounds description of the Site is provided in Appendix A.

This FER was prepared to describe the steps taken to address both the initial and the remaining contamination in the subsurface at the Site. All reports associated with the Site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State. Reports and work plans for the Site can be found on DECInfo Locator (<https://extapps.dec.ny.gov/data/DecDocs/224283/>) for some of the documents.

The Site was remediated in accordance with Stipulation Agreement R2-20081016-500, that was executed on October 17, 2008. This Stipulation plus the Administrative Order on Consent dated January 5, 2023 required the Remedial Party, Riverdale Osborne Upper Towers Upper Management, LLC to investigate and remediate contaminated media at the Site.

This FER was prepared in accordance with the requirements in NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, and guidelines provided by the NYSDEC. This FER provides a description of the remedial system pilot testing, full scale installation, and system monitoring and sampling. Appendix B contains the Environmental Easement (CRFN: 2017000122868) including the legal description of the Site as well as the Stipulation and Administration Order No. R2-20081016-500.

1.2 Site Background

The former Sep's Cleaners unit is currently occupied by the Brownsville Deli. The deli is the westernmost unit located within a larger strip mall building that contains, from west to east, the deli, a Chinese take-out restaurant, a pizza restaurant, a check cashing business, and a supermarket. There are also individual basements beneath the deli, the Chinese restaurant, the pizza restaurant, and the supermarket.

The Site is connected to the New York City municipal water supply system and wastes are discharged to the municipal sewer system. Groundwater is not a source of drinking water on the Site.

Sep's Cleaners performed dry cleaning operations and was listed as a Resource Conservation and Recovery Act Small Quantity Generator of spent halogenated wastes. Sep's Cleaners operated at the Site until 2006. The date of its commencement of operation is not known, although it is known that the Site building was constructed in 1972.

1.3 Geologic Conditions

The geology of the Site was evaluated during previous investigations and included continuous soil borings performed in the rear driveway to the south of the building from grade (which occurs at an elevation of approximately 23 feet above mean sea level) to the water table (which occurs at approximately 20 feet below grade and flows generally to the south-southeast as shown on Figure 6). Additional geologic borings were performed prior to installing air sparging (AS) wells to determine the geology of the saturated zone from 20 to 45 feet below grade.

The Site-specific vadose zone geology generally consists of brown to dark brown medium-grained sand with occasional silt, minor and sporadic clay, and, in the shallower soil, some fill materials including brick and wood fragments. The Site-specific geology in the saturated zone generally consists of brown medium-grained sand with occasional silt and gravel.

Based on this information, there was no evidence of significant areas of low-permeability materials and, therefore, the geologic conditions were determined to be favorable for both AS and soil vapor extraction (SVE).

1.4 Summary of Remedial Investigation Findings

Based on the Site Investigation Work Plan (November 2008) and Site Investigation Report (May 2009) performed at the Site, it was found that the area beneath the former Sep's Cleaners unit and the rear parking alley contained soil and groundwater contamination comprised primarily of tetrachloroethylene (PCE) and its degradation products. Subsequent investigations found groundwater contamination was present primarily beneath the rear driveway and was migrating generally to the southeast. In addition, contaminant vapors were detected beneath the strip mall building and a downgradient building occupied by Verizon. However, no PCE vapors, or vapors of its degradation products, had been detected in the indoor air in either of the two buildings at concentrations above the New York State Department of Health (NYSDOH) Indoor Air Guidance Values contained in the "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" (2006). The results of the Verizon building investigation and sampling results were provided to NYSDEC in a report dated January 6, 2014 (see Appendix C for the Verizon report).

Figure 2 shows the Site layout and a summary of initial soil sampling results and the delineated areas of former soil contamination. Figure 3 shows a summary of the previous groundwater sampling results and the delineated area of previous groundwater contamination. It was also found that upgradient wells showed the presence of PCE and its degradation products in the groundwater (the documentation for the upgradient contamination was provided previously to NYSDEC). Therefore, there is or was an off-Site contribution of contamination in the groundwater at the Site.

The groundwater at the Site occurs in the Upper Glacial Aquifer, which is primarily within a sand and gravel formation. The depth to groundwater at the Site is approximately 20 feet below grade. The Site-specific groundwater flow direction is to the southwest.

SECTION 2.0 **REMEDIAL ACTION OBJECTIVES**

2.1 Summary of Remedial Actions

As per the Remedial Action Work Plan (RAWP) dated December 2009, that was approved by the NYSDEC on May 28, 2010, the installation of a remedial system was proposed to address the soil, soil vapor, and groundwater contamination at the Site.

The remedial system that was installed at the Site consists of SVE to address the soil and soil vapor contamination, and AS/SVE to address the groundwater contamination. The system commenced operation in 2014 and operated until November 2022. The system was recently removed from the Site. The horizontal SVE pipes that were installed in the driveway at the south of the Site had been installed to a depth of approximately three feet below grade, as well as the piping that connected the horizontal pipes to the former shed were left in place. The pipes adjacent to the former shed were cut at a depth of approximately one foot below grade and sealed with cement. All other components of the system were removed from the Site and disposed.

The primary area of soil contamination, as delineated by the Site investigation, is located in the rear driveway from the back door of the common access for the deli and Chinese restaurant, to the area of the former concrete dumpster platform (as shown in Figure 2).

2.2 Interim Remedial Measures

Prior to the installation of the AS/SVE system at the Site, an Interim Remedial Measure (IRM) action was performed at the Site. The IRM was performed to remove the most significantly contaminated soil hotspots at the Site to reduce the duration of the AS/SVE remediation. Appendix D contains the letter reports and soil disposal manifests submitted to NYSDEC regarding the IRM.

2.2.1 Contaminated Soil Excavation and Removal

The primary area of soil contamination was located in the rear driveway from the back door of the common access for the deli and Chinese restaurant, to the area of the former concrete dumpster platform. The IRM action was performed in 2009 that resulted in two phases of excavation and disposal of a total of 33 tons of soil from the area adjacent and west and northwest of the concrete platform (as shown in Figure 4).

2.2.2 End-Point Sampling

An initial shallow soil sample (prior to excavation and remediation of the soil) from the area of the dumpster platform showed a PCE concentration of 370 parts per million (ppm). Following the removal of approximately 18 cubic yards of soil (from an area that was 12 by 6 feet, and 6 feet deep), an end point sample from the north wall of the excavation showed a PCE concentration of 1,900 ppm. Therefore, a second phase of excavation of approximately 15 additional cubic yards was performed to the north of the initial excavation. The final (total) area of the excavation was 14 by 10 feet, and 7 feet deep. The end point samples from the north wall of the second area of excavation showed a PCE concentration of 31 ppm. A sample from the base of the excavation showed 65 ppm. These endpoint samples are below 6 NYCRR Part 375 Commercial use soil cleanup objectives (CSCOs) indicating that the IRM excavation was effective in removing the PCE hotspot in the alleyway. Remaining contamination was addressed by the SVE system.

The location of the excavations and end-point samples were reported in a letter report to Mr. Joseph O'Connell of NYSDEC dated May 1, 2009.

2.2.3 Soil Cover/ Backfill

Following the completion of the excavation, the excavated soil was properly disposed, and the area was backfilled with clean sand to grade. The area of the excavation, as well as the entire driveway and adjacent parking lot to the south, is now covered with an approximately four-inch layer of asphalt. The asphalt, as of July, 2023, remains in good condition.

2.2.4 Air Sparging and Soil Vapor Extraction (and Sub-Slab Depressurization System)

Following the characterization of the nature and extent of contamination of the soil, soil vapor, and groundwater at the Site, and the soil vapor within the downgradient Verizon building, and the IRM to excavate and dispose contaminated soil, it was determined that further remediation of the Site was required to achieve the remedial action objectives for the Site. Air Sparging/ Soil Vapor Extraction was selected to remedy the Site. Appendix E shows photographs of the system installation. AS/SVE was selected since it would address both the soil and groundwater contamination at the Site, while also acting as a Sub-Slab Depressurization System (SSDS) to prevent soil vapor intrusion into the on-Site building during the remediation period.

The remedial action at the Site was considered complete when monitoring indicated that the remedy had achieved the remedial action objectives RAOs. These RAOs for the Site are discussed below in Sections 2.3 to 2.7.

Following the completion of the remediation, and with the concurrence of the NYSDEC, an SSDS was installed in June 2022 in the basement of the Site building to address the potential for soil vapor intrusion with the Site building. The SSDS continues to operate at the Site to date. Following the installation of the SSDS, the indoor and outdoor air for the Site building was sampled and showed no elevated concentrations of contaminants. Results are located in Table 9 and the laboratory report is provided in Appendix F. In addition, the March, 2023 indoor air sampling results are also provided in Appendix F.

The RAOs for the Site were:

2.3 Groundwater RAOs

RAOs for Public Health Protection:

- Prevent ingestion of groundwater containing contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of, volatiles emanating from contaminated groundwater.

RAOs for Environmental Protection:

- Restore the groundwater aquifer, to the extent practicable, to pre-disposal/pre-release conditions.
- Remove the source of ground or surface water contamination.

2.4 Soil RAOs

RAOs for Public Health Protection:

- Prevent ingestion/direct contact with contaminated soil.

- Prevent inhalation of, or exposure to, contaminants volatilizing from contaminated soil.

RAOs for Environmental Protection:

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

2.5 Soil Vapor RAOs

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at the Site.

2.6 RAOs Achieved Through the AS/SVE System

The AS/SVE system at the Site contained seven withdrawal points in the rear driveway including two SVE withdrawal points (SVE-1 and SVE-2) from locations adjacent to the concrete slab of the building in the vicinity of the former Sep's Cleaners unit (Figure 5). Therefore, the SVE system was also functioning as a Sub-Slab Depressurization System (SSDS). The AS/SVE was used to reduce the concentrations of VOCs in the groundwater, reduce the concentrations of soil vapor, and reduce the levels of VOCs migrating off-Site. The use of the AS/SVE system was discontinued in November 2022 after full system installation of the SSDS was completed in October 2022. The Site groundwater monitoring wells were abandoned on May 16, 2022 and the AS/SVE shack was removed on March 5, 2025.

2.7 RAOs Achieved Through Sub-Slab Depressurization

The SSDS has been in continuous operation since October 2022. The criteria for determining that the SSDS is no longer required will be based on the NYSDOH “Guidelines for Evaluating Soil Vapor Intrusion in the State of New York” (2006) and the indoor air/sub-slab vapor matrices. The SSDS will not be discontinued until a written request to do so is approved by the NYSDEC Project Manager. Section 5.0 further discusses the effectiveness of the SSDS in mitigating the threat of soil vapor intrusion to the Site building.

SECTION 3.0 **PILOT TEST PROCEDURES AND RESULTS**

Prior to the full-scale installation of the AS/SVE system, portions of the proposed system were installed and a pilot test was performed to demonstrate the ability of the selected remedial method to address the concerns at the Site. AS and SVE wells were installed in the rear driveway, and pressure monitoring points were installed within the basement of the building. The testing included an evaluation of flow rates, withdrawal rates (Table 1), and the area of influence (Table 3) for the system to assist with the final system design.

The VOCs of primary concern in the soil, soil vapor, and groundwater include PCE and its degradation products trichloroethylene (TCE) and cis- and trans-1,2-DCE. All of the contaminants of concern are highly volatile and amenable to remediation by SVE, having Henry's Law coefficients greater than 10^{-3} atm m³/mol and vapor pressures greater than 1 mm Hg.

3.1 Pilot Test Air Sparging System Components

AS wells AS-2 and AS-3 were installed for the pilot test. In addition, sparge monitoring well SM-1 was installed in the parking lot adjacent to the Site to monitor water level and dissolved oxygen changes during the pilot test. The locations of these points are shown in Figure 5.

AS-3 was constructed of two-inch diameter Schedule 40 PVC and screened from 15 to 17.5 feet below the water table (the total depth of the well is 37.5 feet below grade). AS-2, a deeper sparging well, was screened from 21.5 to 24 feet below the water table (a total depth of 44 feet below grade) due to the deeper groundwater contamination at this location. The slot size of the sparging well screens is 0.02 inches.

SM-1 was constructed of one-inch diameter Schedule 40 PVC and screened at 15 to 25 feet below grade (five feet above, and five below, the water table). The slot size of the well screen is 0.02 inches.

3.2 Pilot Test Soil Vapor Extraction System Components

Five SVE wells (SVE-1, SVE-2, SVE-5, SVE-6, and SVE-7) were installed for the purpose of the pilot test. SVE wells SVE-5 through SVE-7 were constructed of two-inch diameter Schedule 40 PVC and screened from 3 to 16 feet below grade with 0.02-inch

slotted screens. SVE wells SVE-1 and SVE-2 included the same construction and were installed at locations adjacent to the building's rear wall and are screened from 11 to 16 feet below grade to assure that the withdrawal intervals of these wells are positioned below the level of the concrete floor of the basement (which occurs at approximately 9 feet below grade) within the Site building. The purpose of these two points is to remove soil vapor contamination below the building and to create a negative pressure (depressurization) beneath the basement floors to inhibit the potential for soil vapor intrusion into the building.

To evaluate the extent of influence of the SVE system beneath the building during the pilot test, 11 pressure monitoring points (PM-1 through PM-11) were installed at a depth of two inches into the soil below the concrete floor of the building's basement (see Figure 5 for the locations of the pressure monitoring wells).

3.3 Air Sparging System Pilot Test Procedures

A portable compressor was used for the AS pilot test. The area of influence of the AS wells was evaluated by determining changes in dissolved oxygen and water table elevation at the monitoring well while operating well AS-2. While AS-2 was operating, the influence parameters were measured in well SM-1 (located 14 feet from AS-2). Prior to the injection of air into AS-2, the dissolved oxygen and static water levels were measured in SM-1. At AS-2, testing commenced with an air injection rate of 12 pounds per square inch (psi) (the theoretical breakthrough pressure, that is, the pressure required to depress the water to the point that it intersects the screened interval and commences the delivery of air to the aquifer was calculated to be approximately 10 psi for AS-2).

3.4 Soil Vapor Extraction System Pilot Test Procedures

The SVE pilot test consisted of connecting a portable mechanical blower to well SVE-5, (the locations of the SVE wells are shown in Figure 5). withdrawing air/vapors at a specific rate, and determining the change in vadose zone vacuum using an Infiltec DM-1 digital micromanometer capable of measuring pressure changes to 0.001 inches of water that was connected with airtight polyethylene tubing connections to SVE wells SVE-2 (which is 16.5 feet from SVE-5) and SVE-6 (which is 26 feet from SVE-5). Vacuum readings were obtained at a withdrawal rate of 34 cubic feet per minute (cfm).

3.5 Air Sparging System Pilot Test Results

For the depressurization pilot testing, SVE-2 was operated at 34 cfm and vacuum reading were obtained from the eleven pressure monitoring points. Influence was defined

as vacuum readings of 0.020 inches of water or greater for the sub-slab pressure monitoring points located beneath the building, and 0.2 inches of water or greater for the SVE monitoring points in the rear alley. The compressor was started and delivered air at a rate of 12 psi. Readings obtained at SM-1 showed an increase in the elevation in the water table and an increase in dissolved oxygen concentrations. Therefore, for AS-2, the pilot test demonstrated that breakthrough was achieved at 12 psi. In addition, the radius of influence of this well was a minimum of 14 feet.

3.6 Soil Vapor Extraction System Pilot Test Results

During vapor withdrawal at SVE-5 at a rate of 34 cfm, vacuum readings were recorded at SVE wells SVE-2 and SVE-6. Also, vacuum readings were recorded at pressure monitoring points PM-1 through PM-11 located in the basement of the building.

Vacuum monitoring results recorded for SVE wells SVE-2 and SVE-6 were well above 0.2 inches of water. Therefore, the radius of influence for withdrawal well SVE-5 at a rate of 34 cfm is significantly greater than 26 feet. For the withdrawal at SVE-2, all sub-slab pressure monitoring points showed results greater than 0.020 inches of water. Therefore, for the purpose of sub-slab depressurization, the radius of influence from well SVE-2 at a withdrawal rate of 34 cfm is approximately 100 feet (which is the distance from SVE-2 to both PM-10 and PM-11) in the area beneath the building.

These radii of influence during the pilot testing for the SVE are adequate to both capture vapors and depressurize the sub-slab area beneath the building.

SECTION 4.0

AIR SPARGING/SOIL VAPOR EXTRACTION

FULL-SCALE INSTALLATION AND OPERATION

The installation of the remaining portions of the AS/SVE system was completed in 2014. The system configuration is shown in Figure 5.

The work included the installation of the remaining wells of the AS system (AS-1 and AS-4), the remaining wells of the SVE system (SVE-3 and SVE-4), and an additional sparge monitoring (SM) well (SM-2).

The additional AS wells were constructed of two-inch diameter PVC casing and screen with the screened interval extending from 15 to 17.5 feet below the water table (a total depth of 35 to 37.5 feet below grade). The sparge well screen slot size is 0.02 inches. Each AS well annulus was gravel-packed to approximately one foot above the top of the screen and the balance of the annulus was backfilled with bentonite grout to the water table. The annulus from the water table to grade was backfilled with clean soil cuttings (defined as cuttings that contain no odors or photoionization detector (PID) readings above zero).

SM-2 was installed at a distance of 14 feet from both AS-3 and AS-4. The well was installed to a depth of 25 feet below grade with its screen five feet above, and five feet below the water table to allow for monitoring of both water table changes and dissolved oxygen changes.

The SVE wells were drilled with a hollow-stem auger drill rig to a depth of 16 feet below grade (approximately four feet above the water table). SVE wells SVE-3 and SVE-4 were constructed of two-inch PVC and were screened from 3 to 16 feet below grade with 0.02-inch slotted screen. SVE wells SVE-1 and SVE-2 contain screened intervals from 11 to 16 feet below grade. For all SVE wells, No. 2 Morie gravel was placed in the boreholes opposite the screen to a depth of approximately one foot above the screened interval. Then, two feet of hydrated bentonite was placed over the gravel and clean soil cuttings were used to fill the borehole to grade.

In addition, three paired groundwater monitoring wells (MW-4S/D, MW-5S/D, and MW-6S/D) were installed in the downgradient south parking lot. The purpose of these groundwater monitoring wells was to provide data regarding baseline contaminant concentrations prior to the commencement of the remedial system operation and to provide

groundwater remedial progress data in the shallow and deeper zones of the aquifer. The shallow wells were installed with a hollow-stem auger to a depth of approximately 25 feet and contain ten-foot-lengths of 0.020-inch slotted screens. No. 2 Morie gravel was placed in the borehole to a level two feet above the screens and then two feet of hydrated bentonite was placed above the gravel. The balance of the borehole was then filled with clean soil cuttings to grade and a cap and flush-to-grade manhole was installed at grade at each well. Following installation, the wells were developed to visible clarity.

The deep wells were installed in the same manner, however, they contain five-foot screens and were installed to a depth of approximately 45 feet below grade. The deep wells are located within two feet of each of the shallow wells.

For the installation of the piping that connects the AS and SVE wells to the remediation shed containing the AS/SVE components, an 80-foot-long, four-foot-wide trench was excavated along the center of the driveway at the rear of the building.

The trench was excavated to a depth of five feet at its east and west ends, and each end of the trench slopes upward to a depth of three feet at the point where the piping turns and is directed toward the remediation compound. Photographs of the trenching and the subsurface piping are shown in Appendix E.

Each AS and SVE well pipe was then cut at a depth slightly lower than the trench and a furrow was shoveled to allow the well to be connected to the piping in the trench. The furrow allowed the piping to be pitched towards the well, and the slope of the trench allows the piping within it to also be pitched towards the well to prevent the accumulation of condensate. The wells were connected to the trench piping with PVC piping and elbows attached with PVC glue.

A wooden shed was installed in the parking lot adjacent and south of the driveway. The shed contained a Gast regenerative extraction blower (Model R6P355-50), and a Gast sparge blower (Model 6066-P102). There was also a roof fan (see Photo 1 within Appendix D to reduce the accumulation of heat within the shed, and two activated carbon drums for the removal of volatile organic compounds (VOCs) prior to discharge of the SVE system effluent to the atmosphere.

The AS and SVE piping entered the remediation compound through the base of its rear wall. The piping for the seven SVE wells runs vertically upward in the remediation compound and each pipe is connected to a manifold pipe that collects all influent air and

routes it to the blower. Each vertical section of pipe contains an air flow monitoring port and a valved sampling port. The air on the effluent side of the blower is directed to the first of two activated carbon drums. The effluent from the first drum is directed to the second drum, and the effluent from the second drum is directed upwards, through the roof, and discharges to the atmosphere at an elevation of 12 feet above grade. See section 5.6 for analysis of influent and effluent.

For the AS system, the PVC pipes for the four AS wells are connected to one-inch diameter compressor hoses and then connected to the sparge blower. Each AS well line contains a flow meter and a pressure gauge. The piping on the sparge blower is arranged such that only two AS wells will be operated at a time. An actuator is attached to the AS system and is set to alternate sparging at AS-1/AS-2 and then AS-3/AS-4 at 24-hour intervals.

The parking lot is paved with asphalt and the adjacent driveway was paved with approximately 4 inches of asphalt following the backfilling of the piping trench. Therefore, the contaminated soil is segregated from casual contact.

In addition, the electrical control panel for the system was configured such that the AS system cannot be operated unless the SVE system is also operating.

4.1 Governing Documents

The governing documents created and followed during at the Site include the following:

4.1.1 Site Specific Health & Safety Plan (HASP)

All remedial work performed under this Remedial Action Work Plan was in full compliance with governmental requirements, including Site and worker safety requirements mandated by Federal OSHA.

The Health and Safety Plan (HASP) was complied with for all remedial and invasive work performed at the Site and was derived from the Site Investigation Report (November, 2008)

4.1.2 Quality Assurance Project Plan (QAPP)

The QAPP was included as Section 5.0 of the approved November 2008 Site Investigation Report. The QAPP described the specific policies, objectives, organization,

functional activities and quality assurance/ quality control activities designed to achieve the project data quality objectives.

4.1.3 Soil/Materials Management Plan (S/MMP)

Soil/Materials Management was performed during activities that required soil and materials removal.

4.1.4 Community Air Monitoring Plan (CAMP)

A CAMP was implemented during all intrusive field activities as discussed within the Site-specific HASP that included PID monitoring in the area downgradient of any surface penetrations or excavations to determine if VOCs were present in the air as the result of the activities. The CAMP also included contingency plans for detections of VOCs at various concentrations.

Noise monitoring was performed to address potential impacts to Site workers and the surrounding community. The Health and Safety Officer performed noise monitoring periodically during the work. Noise levels were monitored with a hand-held sound level meter in decibels I the A-weighted, slow response. Noise protection was employed by all personnel with the work zone.

SECTION 5.0

SYSTEM PERFORMANCE MONITORING

Upon completion of the installation of the remedial system, its operation commenced. The system was started in July, 2012. Upon startup, monitoring was performed to confirm that the system was operating properly.

5.1 Air Sparging and Soil Vapor Extraction Flow Monitoring

Flow readings were obtained by reading the flow meters on the AS side of the system, and by inserting a digital vane anemometer into the flow monitoring port on the SVE side.

The flow readings obtained in August, 2014 are presented in Table 1. The readings show that the seven SVE wells were withdrawing and discharging 52.5 cfm of air from the subsurface.

From the flow meters on the AS side of the system, when the system is operating AS wells AS-1 and AS-2, at 6 and 12 psi, respectively (AS-2 is a deeper well and requires greater pressure to achieve breakthrough), the flow rates for AS-1 are 11 cfm, and 14 cfm for AS-2. When AS wells AS-3 and AS-4 are operating, the flow rates at 6 psi are 11 cfm for both wells. The total air injection for AS-1 and AS-2 is, therefore, 25 cfm. The total air injection for AS-3 and AS-4 is 22 cfm. Therefore, the SVE system is withdrawing 2.1 to 2.4 times the amount injected by the AS system.

5.2 Volatile Organic Compound Monitoring Results

A PID was used to obtain the concentrations of total VOCs from the sampling ports or each of the SVE legs. Sampling ports were located on both the intake and discharge sides of the granular activated carbon drums. The results for the three sets of readings obtained during August, 2014 are presented in Table 2. The results show that the highest readings were obtained in mid-August and the highest reading [437 parts per million (ppm)] was obtained from SVE-4, which is within the area where the highest soil concentrations were detected during the previous remedial investigation sampling. The VOC readings started to diminish significantly within one month of the commencement of system operation.

5.3 Basement Pressure Monitoring Points

Vacuum was measured at PM points previously installed at 11 locations within the basement of the building. The locations of the PM points in the basement are shown in Figure 5.

During the monitoring, it was found that five of the eleven points were removed, and six remained. The results of the monitoring of the six points are presented in Table 3. The results show that all vacuum readings were one to two orders of magnitude above the NYSDOH vacuum guideline for sub-slab depressurization of -0.004 inches of water. The PM point furthest from the SVE system (PM-11), which is 100 feet away from the nearest SVE well, contains a vacuum of -0.024 inches of water, which is above the NYSDOH guideline. Therefore, the SVE system provided a high level of depressurization throughout the sub-slab area of the building. The PM points have since been replaced with an array of 18 vacuum monitoring points installed to assure the radius of influence of the vacuum covers the basement of the building.

5.4 Soil Vapor Extraction Area of Influence

To determine the area of influence of the SVE system, two PM wells (PM-12 and PM-13) were installed in the south parking lot. These two PM wells differ from the points beneath the building in that they were drilled to a depth of 16 feet below grade and contain screened intervals from 3 to 16 feet below grade. In addition, two groundwater monitoring wells at the south end of the parking lot were used to measure vacuum to determine if the SVE system is creating vacuum at that distance.

The well pipe openings were sealed and readings were obtained from a brass valve and polyethylene tubing connected to the digital micromanometer. The results are presented in Table 4 and show that at a distance of 22 feet from the nearest SVE well, the vacuum was -0.315 inches of water, which is above the NYSDEC SVE vacuum guideline of -0.2 inches of water. At a distance of 43 feet, another PM well showed a vacuum of -0.103 inches of water, which is below the NYSDEC guideline.

Therefore, interpolating these two readings and distances, the area of influence (the area where the vacuum is -0.2 inches of water or greater) is at least 32 feet.

5.5 Air Sparging Area of Influence

The AS area of influence was determined by determining the pre-operation depth to water and concentrations of dissolved oxygen at SM well SM-1 prior to operating wells AS-1 and AS-2 and then obtaining post-operation readings. Well SM-1 is located 14 feet from AS-2. The same procedures were performed and the same readings were obtained for well SM-2 and then operating wells AS-3 and AS-4, which are both 14 feet from SM-2.

The results of the measurements are presented in Table 5 and show that upon operation of the system, both SM-1 and SM-2 showed increases in dissolved oxygen concentrations and the water level increased at SM-1 (no water level reading could be obtained at SM-2, however, this was likely due to bubbling within the well which caused the water level indicator to be unable to obtain an accurate reading). Based on these results, the AS system is providing a radius of influence that is at least 14 feet. Since the distance between the four AS wells ranges from 18 to 26 feet, there is overlap between the areas of influence of each of the AS wells.

5.6 Remedial System Influent and Effluent Concentrations

On August 14, 2014, vapor samples were obtained from the sampling ports on the influent (pre-treatment) and effluent (post-treatment) sides of the SVE system. The purpose of the sampling was to determine the concentrations of chemicals that were being removed from the subsurface, and then determining the concentrations that were discharged to the atmosphere following activated carbon treatment.

The samples were obtained with six-liter Summa Canisters connected to the sampling ports with polyethylene tubing over an approximately 30-second period. The samples were sent to York Analytical Laboratories, Inc. for analysis of VOCs by US Environmental Protection Agency (EPA) Method TO-15. The sample results are presented in Table 6.

The results show that several VOCs were detected in the influent sample including PCE and its degradation products. PCE was the chemical detected at the highest concentration [4,200 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$)]. In the effluent sample, relatively minor concentrations of several chemicals were detected including a decrease in the PCE concentration to 6.2 $\mu\text{g}/\text{m}^3$.

5.7 Pre-Remedial System Startup Groundwater Sampling

Prior to commencing operation of the system, the three downgradient groundwater paired (shallow and deep) monitoring wells (MW-4S/D, MW-5S/D, and MW-6S/D) were sampled to determine baseline concentrations of VOCs in the groundwater.

The depth to the water table is approximately 20 feet below grade. Each of the shallow wells was installed to a depth of five feet below the water table and contain ten-foot screened sections (five feet above, and five feet below the water table). The deep wells were installed to a depth of approximately 45 feet and contain screens from the interval from 40 to 45 feet below grade. The well locations are shown in Figure 5.

The sampling occurred on July 8, 2014 and was performed in accordance with the USEPA low-flow sampling procedures. A Mega-Monsoon low-flow submersible pump with polyethylene tubing was used to purge and sample the wells. The purge rate was approximately 0.5 liters per minute and the sample rate was 0.1 liters per minute.

Prior to sampling, each well was purged of three well casing volumes. During purging, pH, specific conductivity, and temperature were recorded following the removal of each casing volume and recorded in the hydrogeologist's field book. Groundwater sampling was performed after confirming that the final two sets of parameter readings showed agreement within 10 percent.

Each sample was transferred to laboratory-supplied glassware with proper preservatives, placed in an ice-filled cooler, and delivered to York Analytical Laboratories for analysis of VOCs by EPA Method 8260.

The results of the sampling are summarized in Table 7. The results showed detections of moderate concentrations of PCE and lower concentrations of its degradation products. Exceedances of the NYSDEC Class GA groundwater standards occurred in Wells MW-4S and MW-6S. In addition, there were no exceedances of the Standards for any VOC in any of the three deep wells.

5.8 Post-Remedial Groundwater Monitoring Wells

The AS/SVE system operated for approximately nine years. During the final round of groundwater sampling in January 2021, there were no VOCs detected above the groundwater standards. Based on this information, the concentrations of groundwater contamination were significantly reduced by the remediation system and a request to terminate groundwater monitoring was made to the NYSDEC Project Manager on April

13, 2022. This request was approved in a NYSDEC correspondence dated April 21, 2022 with a request to close out the monitoring wells in accordance with Commissioner's Policy 43 (CP-43) – Groundwater Monitoring Well Decommissioning Policy.

The groundwater monitoring wells that were used to determine the concentrations of VOCs and monitor the progress of the remediation were abandoned as per the request of the NYSDEC in 2022.

SECTION 6.0 REMAINING CONTAMINATION

The AS/SVE remedial system operated for nine years. Based on quarterly groundwater sampling results and remedial system monitoring, there was a significant decrease in the concentrations of contaminants over time.

For the groundwater, initial groundwater sampling was performed in July, 2014, just prior to the remedial system startup. Shallow (20 to 25 feet) and deep (40 to 45 feet) groundwater monitoring well pairs were installed at three locations (MW-4S/D, MW-5S/D, and MW-6S/D as shown on Figure 5). The highest initial concentration of PCE was detected at MW-4S [530 micrograms per liter (ug/L)]. The highest initial downgradient concentrations of PCE were detected at well MW-6S (250 ug/L).

The elevation of the three shallow groundwater monitoring wells was surveyed to the nearest 0.0001 inches and the depth to groundwater was measured to the nearest 0.001 inches in June 2017 to confirm the Site-specific groundwater flow direction. Based on the readings, the groundwater flow direction was consistent with the regional flow direction, which is generally to the south-southeast (see Figure 6 for calculated groundwater flow direction).

For the soil contamination, the IRM addressed the area of the soil containing the highest concentrations of contaminants. The IRM included the excavation and disposal of 33 tons of F002 hazardous soil. Following the soil excavation, an end-point sample was obtained from the base of the excavation. The sample was found to contain 65 ppm of PCE which represented the maximum residual contamination in the area of the IRM excavation. The IRM for the soil was discussed in Subsection 2.2.2 and 2.2.3.

The Soil Vapor Extraction (SVE) system had operated to remove residual VOCs from the vadose zone soil. Upon operation of the system, monitoring of the concentrations of volatile organic compounds (VOCs) was performed with a photoionization detector (PID). The PID readings during the first few months of system operation showed vapor concentrations that in some instances exceeded 500 parts per million (ppm). 2017 concentrations of soil vapor had generally been reduced to below 5 ppm. This had the

effect of both removing soil and soil vapor contamination, which reduced the potential for soil vapor intrusion.

6.1 Institutional Controls

A series of ICs were required to: (1) implement, maintain, and monitor EC systems; (2) prevent future exposure to remaining contamination; and (3) limit the use and development of the Site to commercial and industrial uses. Adherence to these ICs on the Site is required by the Environmental Easement. ICs identified in the Environmental Easement may not be discontinued without an amendment to, or extinguishment of, the Environmental Easement. These ICs include:

- The property may be used for commercial and industrial use;
- All ECs must be operated and maintained in accordance with the Site Management Plan (SMP);
- All ECs on the Site area must be inspected at a frequency and in a manner defined in the SMP;
- System monitoring and other environmental or public health monitoring will be performed;
- The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the New York City Department of Health and Mental Hygiene to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the NYSDEC;
- Data and information pertinent to Site Management of the property must be reported at the frequency and in a manner defined in the SMP;
- All future activities that may disturb remaining contaminated material must be conducted in accordance with the SMP;
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;

- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP;
- Access to the Site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement;
- The potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries, and any potential impacts that are identified must be monitored or mitigated;
- Vegetable gardens and farming on the Site are prohibited.

6.2 Engineering Controls

6.2.1 Site Cover System

Exposure to remaining contamination in soil at the Site is prevented by an approximately four-inch layer of asphalt in the driveway at the rear of the building at the Site. Also, based on previous monitoring of the total concentrations of VOCs in the SVE effluent, there appeared to be minimal remaining contamination present in the soil. In addition, there were no identified underground utilities in the area of the layout of the system or the area where the high levels of soil contamination had existed. Therefore, there are no reasonable expectations that a planned breach will be required. Also, the shallow soil contamination was removed and replaced with clean fill and, therefore, there is no reasonable expectation of exposure to contaminated soil. However, in the event of a significant breach of the asphalt for any reason, the procedures outlined in the Excavation Work Plan (EWP) found in Appendix I of the SMP will be followed.

6.2.2 Sub-Slab Depressurization System

The remaining contamination also creates the potential for soil vapor intrusion. To address this issue, a Sub-Slab Depressurization System (SSDS) was installed within the basement of the Site building in each of four basement units and the adjacent hallways. A total of 11 SSDS suction wells consisting of subsurface piping, air suction fans, and above-ground discharge piping comprise the system. The system was installed in 2022 and was

completed and commenced operation in November, 2022. Figure 7 shows a schematic diagram of a typical SSDS suction well. Figure 8 contains a schematic diagram of the layout of the SSDS suction fans and piping. Also, November, 2022 vacuum monitoring showed that all locations were well above the minimum vacuum requirement of -0.004 inches of water column and, therefore, appear to be providing a radius of influence that provides an adequate vacuum throughout the basement of the building (see Table 8 for the vacuum readings).

The AS/SVE remediation system within the shed at the Site was shut down following the full-scale operation of the SSDS. The AS/SVE components have been removed from the Site

6.3 2023 and 2024 Indoor Air and SSDS Effluent Sampling Results

To evaluate the effectiveness of the SSDS in preventing soil vapor intrusion into the Site building, indoor and outdoor air sampling was performed in March 2023 and March 2024 to determine the concentrations of VOCs. The samples were obtained with six-liter Summa Canisters with flow restrictors to obtain each sample over an eight-hour period.

The indoor and outdoor air sampling locations are shown in Figure 9 and the results for the 2023 sampling are shown in Table 9. The 2023 effluent sample results are shown in Table 10. The 2024 indoor and outdoor sampling results are shown in Table 11. The 2023 and 2024 indoor and outdoor sampling results show that the indoor air contained no detections of PCE or its degradation products. For other VOCs, there were some detections at concentrations generally slightly above the EPA building assessment survey concentrations that represent typical VOC concentrations in commercial buildings. These detected VOCs include acetone, chloroform, ethyl acetate, and styrene.

Based on these findings, there is no evidence of VOCs in the indoor air that exceed any NYSDOH health-based standards or guidelines.

Samples were also obtained from the effluent air from each of the SSDS units in May 2023. The locations of the suction wells from which the samples were derived were shown in Figure 8 and the effluent sampling results are summarized in Table 10 (samples

were not obtained from SW-1 and SW-2 since that basement was not accessible at that time). The results represent the concentrations of VOCs present in the sub-slab vapor.

The results show elevated concentrations of PCE, primarily at SW-4, beneath the Chinese restaurant, at 3,300 ug/m³. All other effluent samples contained PCE concentrations ranging from 2.0 to 310 ug/m³. At SW-4, TCE was detected at 370 ug/m³ and cis-1,2-DCE was detected at 260 ug/m³. All other detections of these VOCs were significantly lower. None of the other, non-targeted VOCs detected appeared to be present in the sub-slab vapor at elevated concentrations.

6.4 Deviations from the RAWP and FDWP

There were no significant deviations from the RAWP or the Final Design Work Plan. However, NYSDEC is requesting that annual SSDS effluent samples be performed. The effluent sampling will be performed during the annual indoor air sampling.

6.5 Community Air Monitoring and Health and Safety

During all activities at the Site including sampling, excavation, drilling, and systems installations, PID monitoring and health and safety monitoring was performed. No detections of elevated concentrations of VOCs in the air at the Site, worker or Site visitor injuries, or chemical releases occurred.

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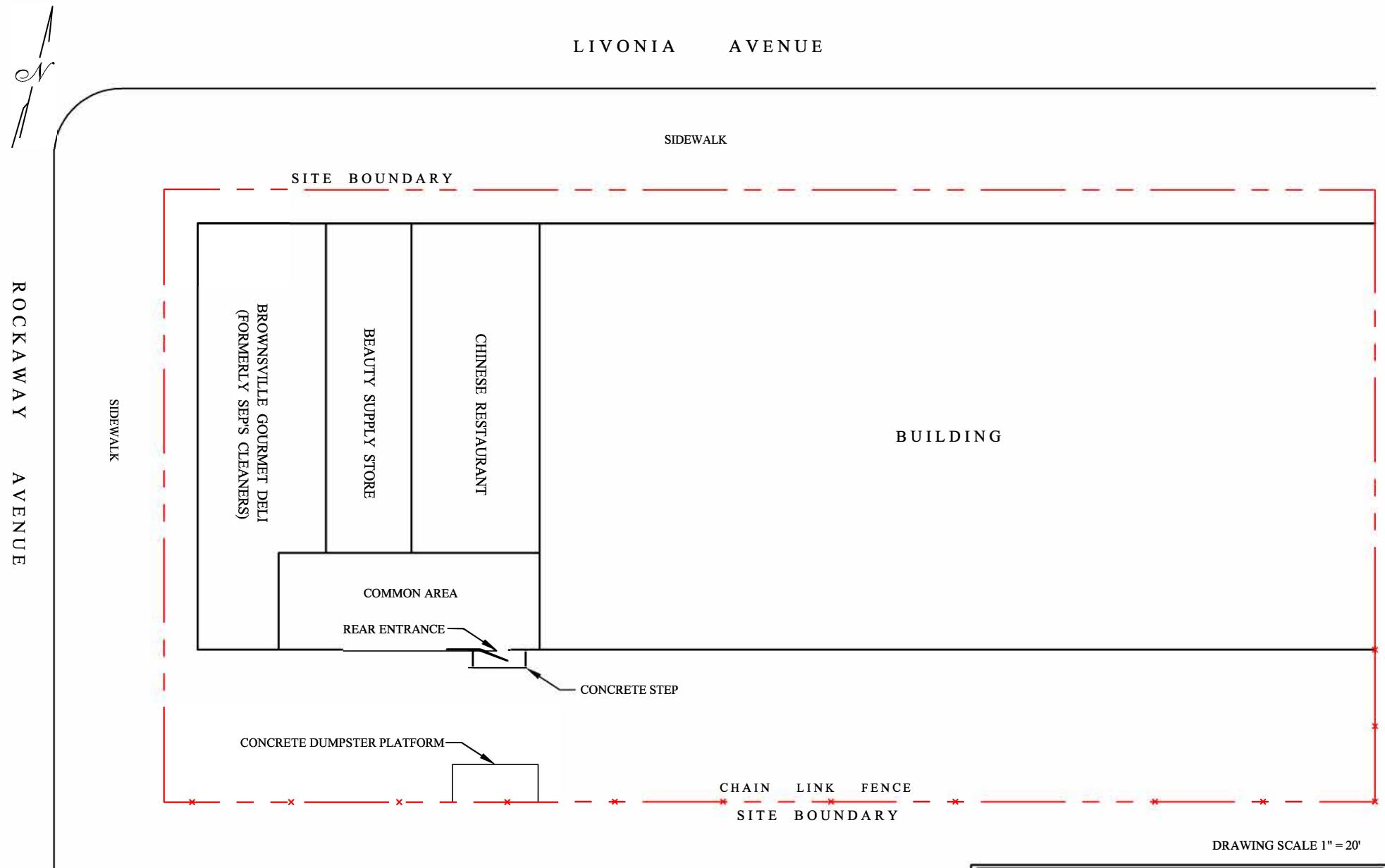
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Figures

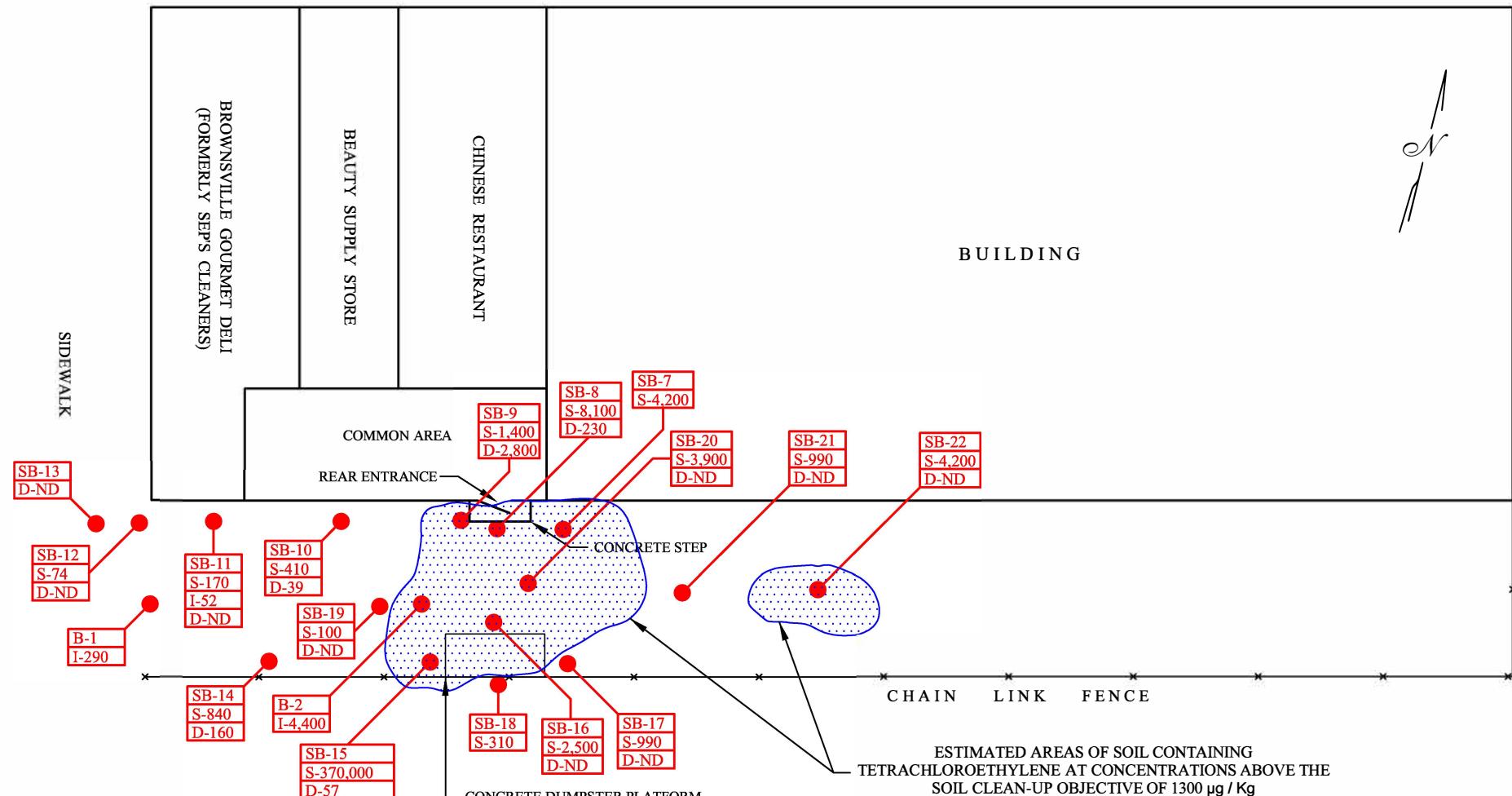


DRAWING SCALE 1" = 20'

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**FIGURE 1
SITE LOCATION AND
BOUNDARIES
250 LIVONIA AVENUE
BROOKLYN, NEW YORK**

ROCKAWAY AVENUE



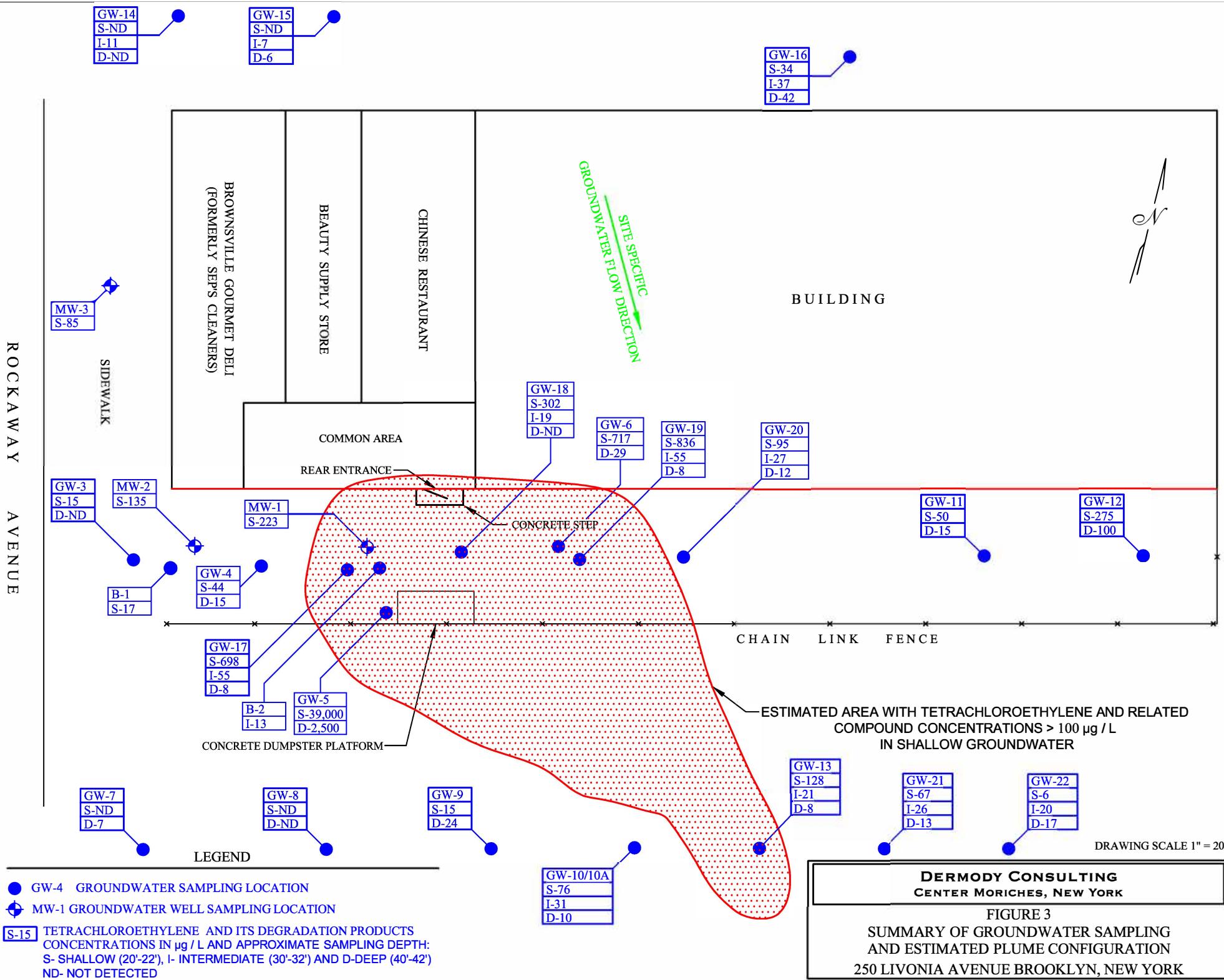
LEGEND

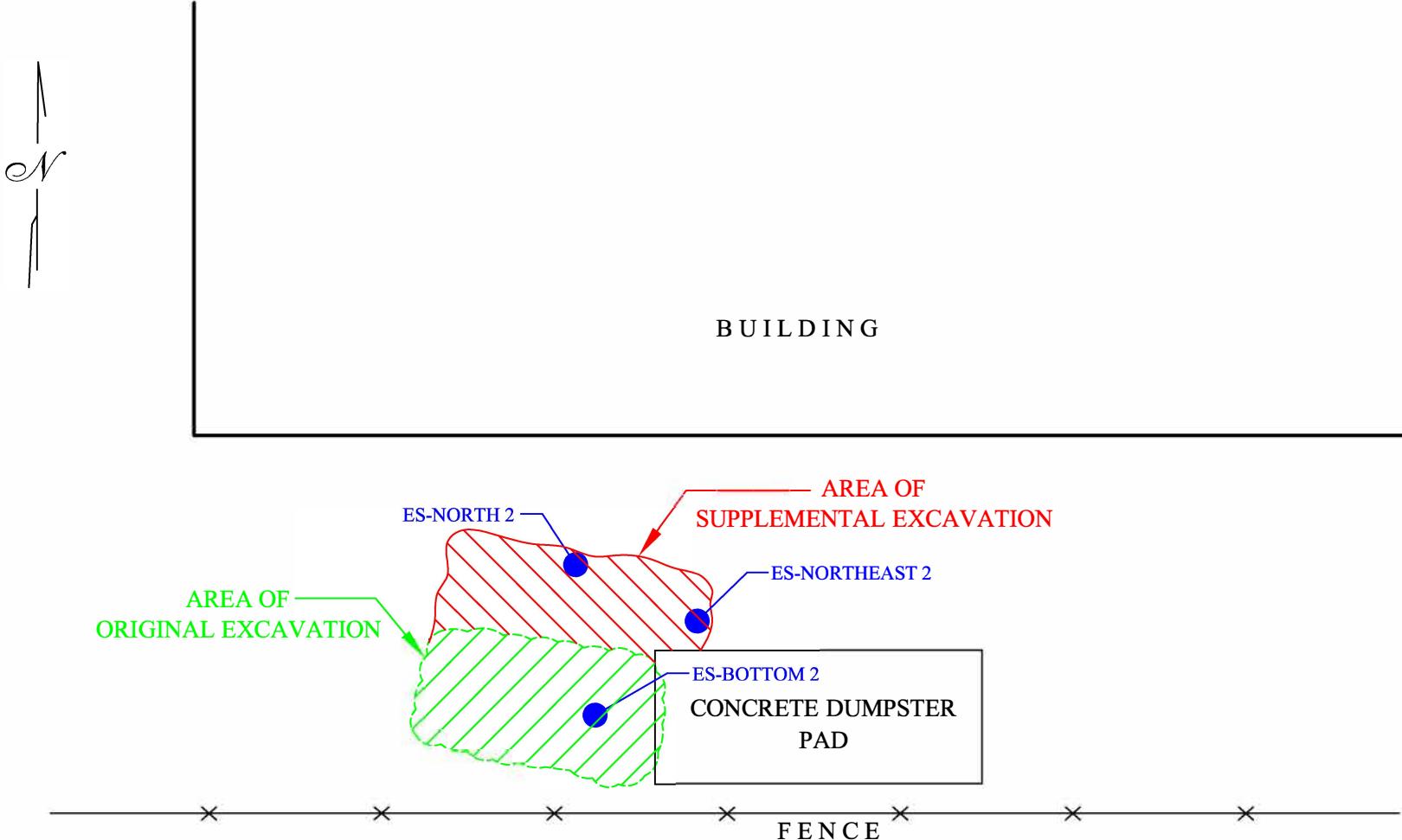
- SB-7 SOIL BORING SAMPLING LOCATION
- [S-4,200] TETRACHLOROETHYLENE CONCENTRATIONS µg / Kg AND APPROXIMATE SAMPLING DEPTH: S- SHALLOW (0'-6'), I- INTERMEDIATE (6'-16') AND D- DEEP (16'-20') ND- NOT DETECTED

DRAWING SCALE 1" = 20'

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FIGURE 2
SUMMARY OF SOIL SAMPLING AND
APPROXIMATE AREA OF CONTAMINATED SOIL
250 LIVONIA AVENUE
BROOKLYN, NEW YORK





LEGEND

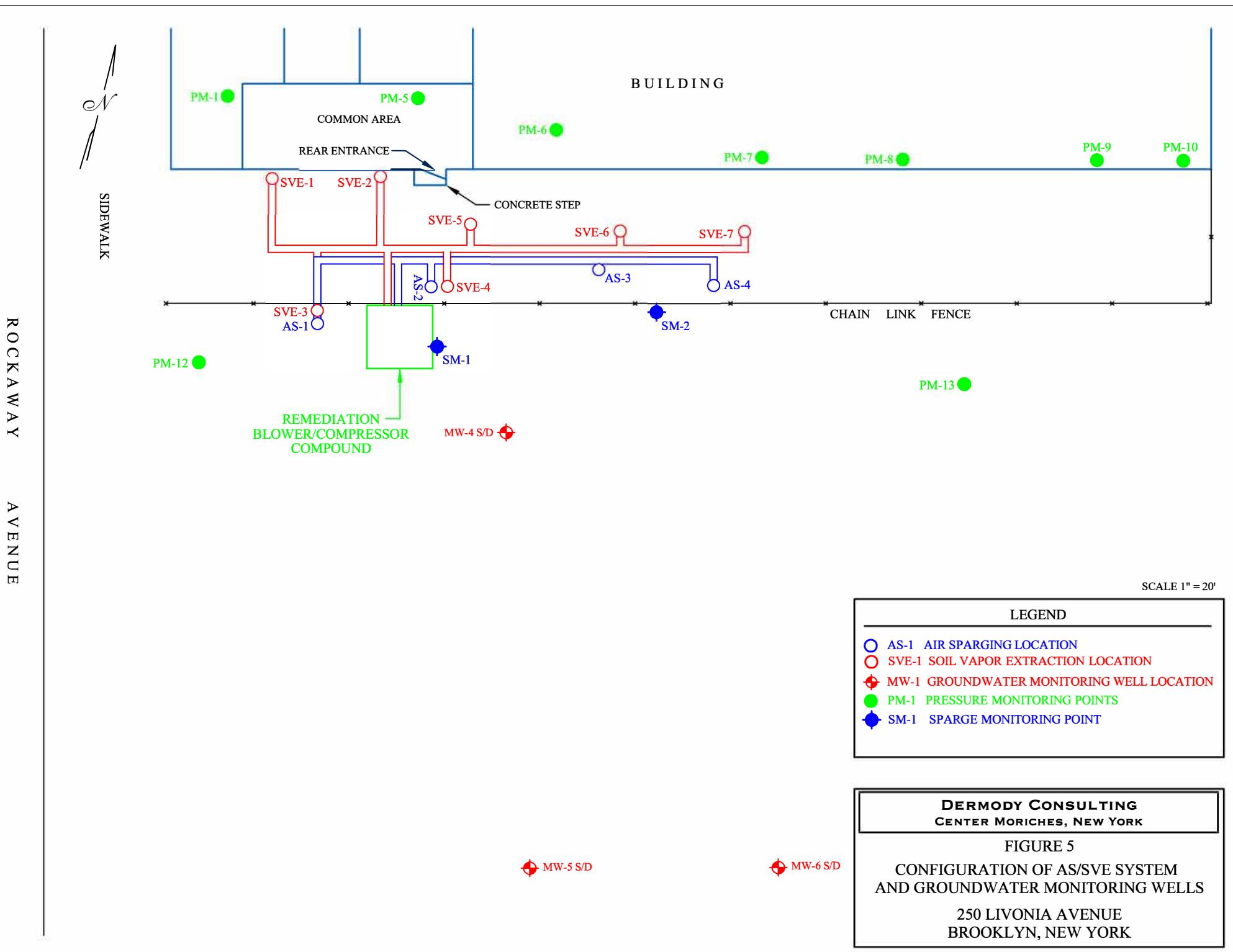
- ES-NORTH END SAMPLING LOCATIONS

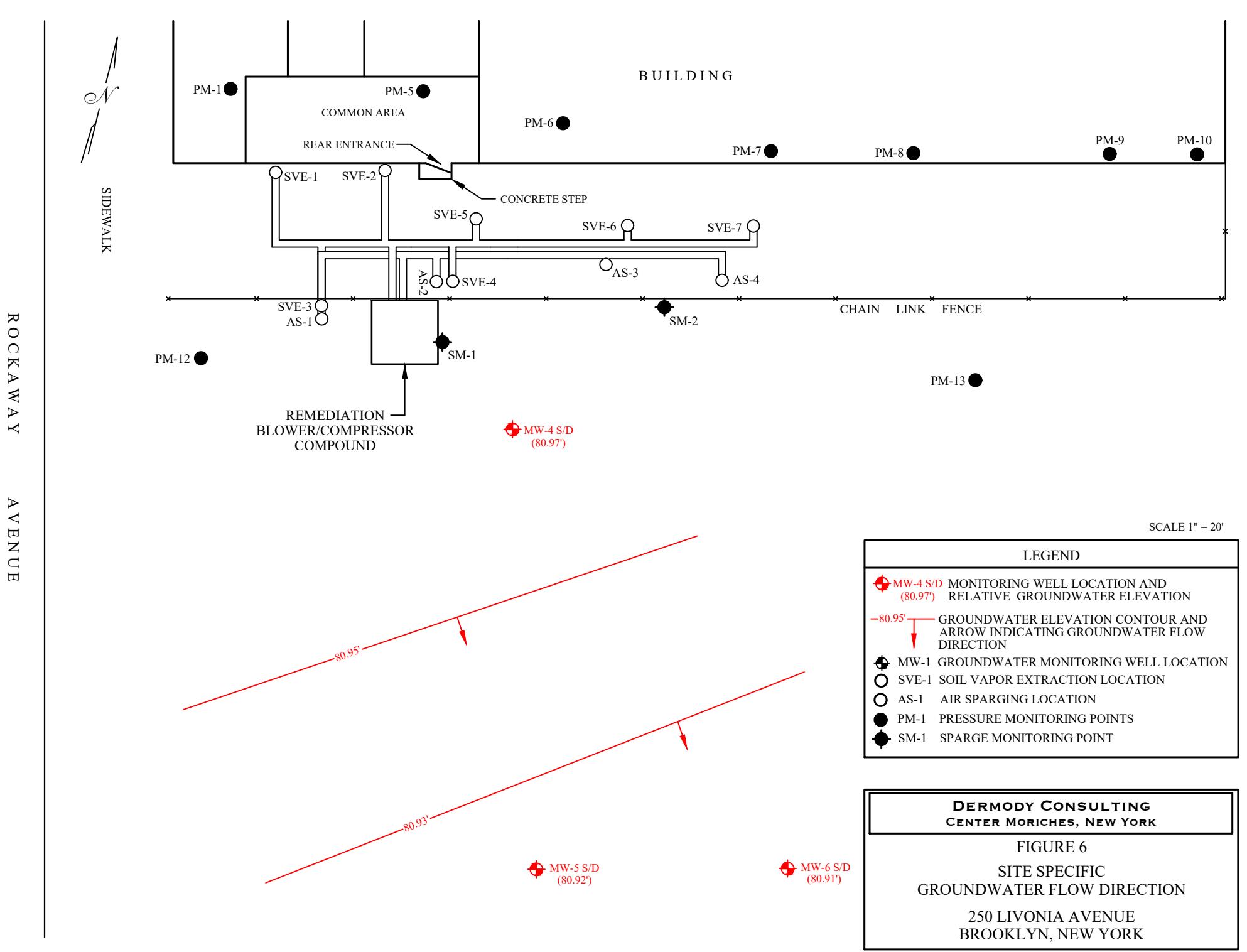
NOTE: END SAMPLES FROM THE EXCAVATION WALLS WERE
OBTAINED FROM A DEPTH OF ONE FOOT BELOW GRADE

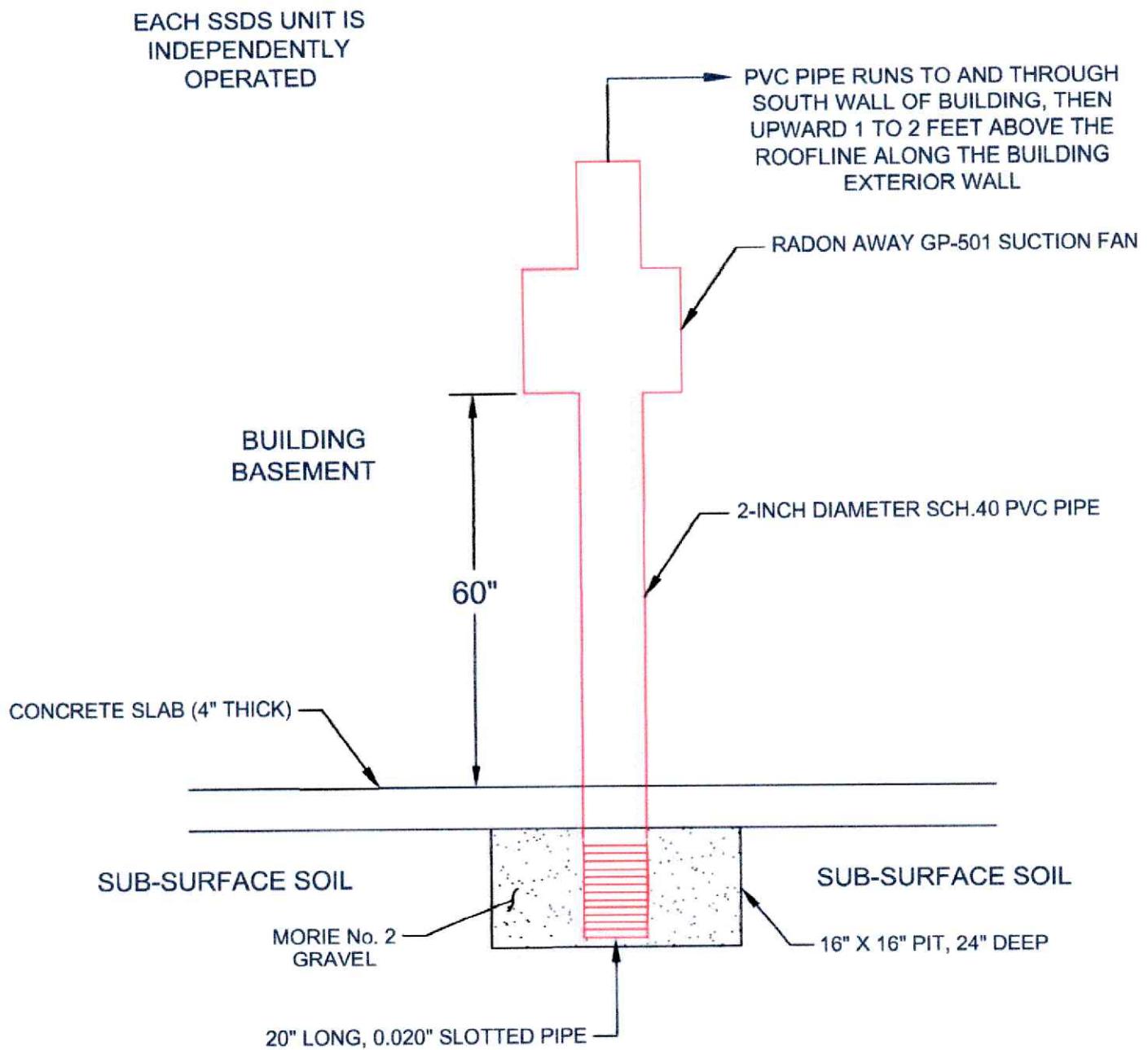
DRAWING NOT TO SCALE

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**FIGURE 4
AREA OF EXCAVATION AND
STAGE TWO END SAMPLING LOCATIONS
250 LIVONIA AVENUE
BROOKLYN, NEW YORK**







DRAWING NOT TO SCALE

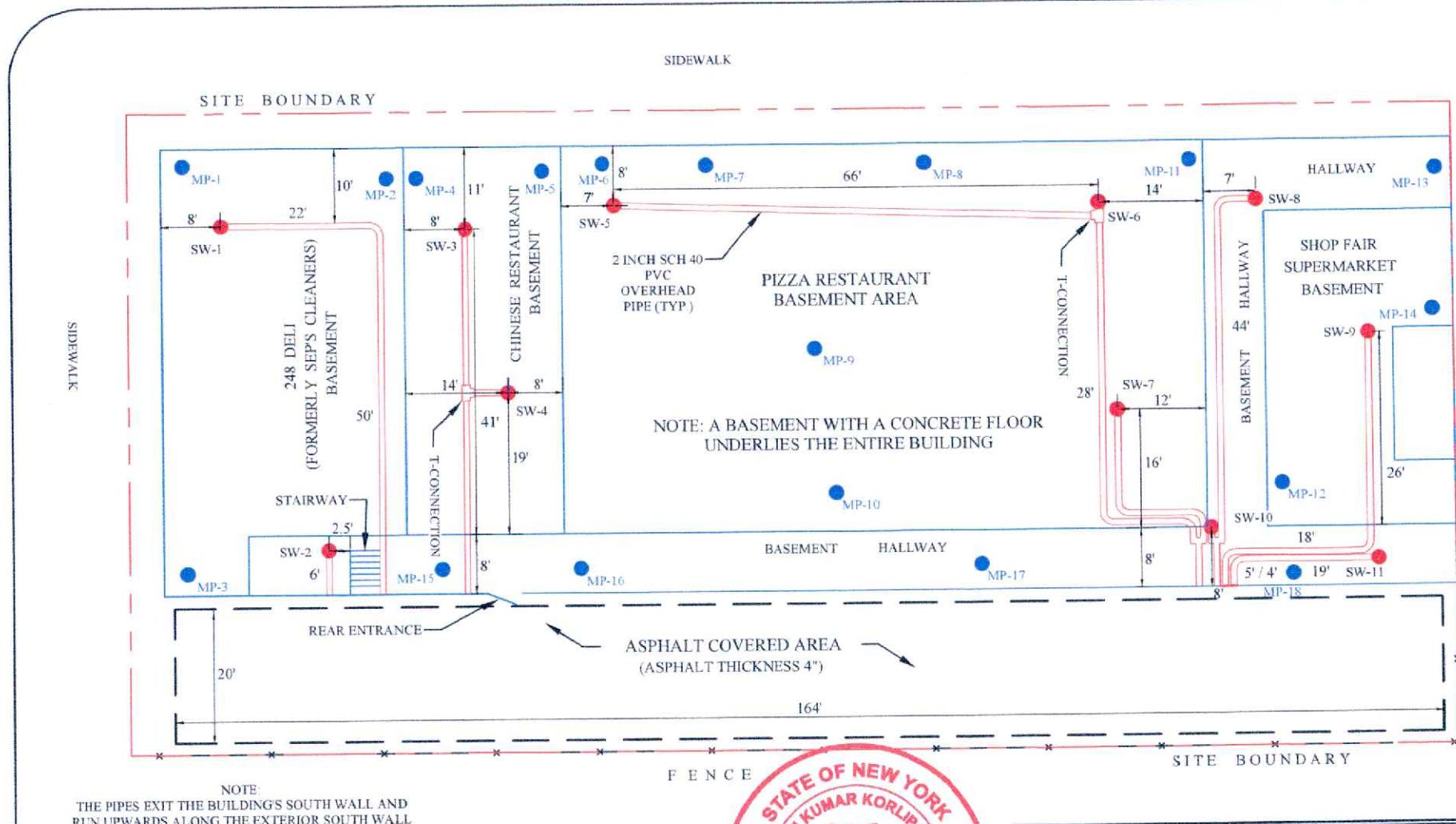
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FIGURE 7
SCHEMATIC DIAGRAM FOR
SSDS UNITS
250 LIVONIA AVENUE
BROOKLYN, NEW YORK

LIVONIA AVENUE

N

ROCKAWAY AVENUE



NOTE
THE PIPES EXIT THE BUILDING'S SOUTH WALL AND
RUN UPWARDS ALONG THE EXTERIOR SOUTH WALL
TO A HEIGHT OF APPROXIMATELY 2' FEET ABOVE THE
12-FOOT-HIGH ROOF LINE.

LEGEND

SCALE: 1" = 20'
● SW-1 SUCTION WELL LOCATION
● MP-1 APPROXIMATE LOCATIONS OF PRESSURE MONITORING POINTS



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FIGURE 8

SITE COVER AND

COLLECTOR'S
LAYOUT
250 LIVONIA AVENUE
BROOKLYN, NEW YORK

FIGURE 8

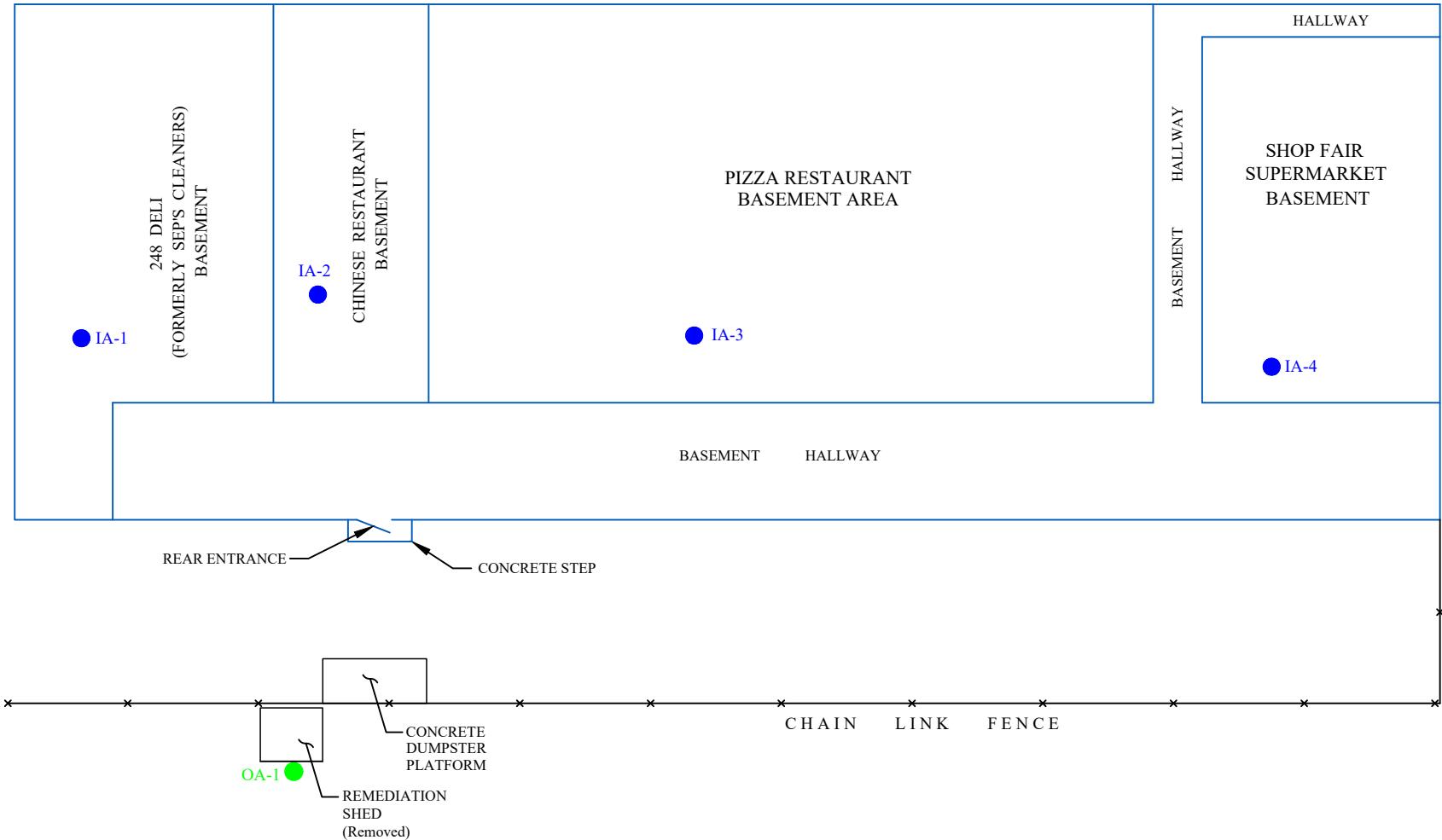
SITE COVER AND SSDS

LAYOUT

250 LIVONIA AVENUE
BROOKLYN, NEW YORK

ROCKAWAY AVENUE

SIDEWALK



LEGEND

- IA-1 INDOOR AIR SAMPLE LOCATION
- OA-1 OUTDOOR AIR SAMPLE LOCATION

DRAWING SCALE 1" = 20'

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FIGURE 9
BASEMENT AND OUTDOOR
SOIL VAPOR INTRUSION SAMPLING LOCATIONS
250 LIVONIA AVENUE
BROOKLYN, NEW YORK

Tables

Table 1
Soil Vapor Extraction Flow Readings
250 Livonia Avenue
Brooklyn, New York

SVE Leg	Date
	August 26, 2014
Flow (in cubic feet per minute)	
SVE-1	5.0
SVE-2	4.9
SVE-3	8.5
SVE-4	8.5
SVE-5	8.6
SVE-6	8.3
SVE-7	6.0
Drum Influent	53.5
Drum Effluent	52.5

Table 2
Photoionization Detector Volatile Organic Compounds Monitoring Results
250 Livonia Avenue
Brooklyn, New York

SVE Leg	Date		
	August 1, 2014	August 14, 2014	August 26, 2014
PID VOC Monitoring Result (in parts per million)			
SVE-1	164	166	12
SVE-2	161	68	13
SVE-3	97	353	221
SVE-4	181	437	77
SVE-5	126	267	35
SVE-6	91	387	28
SVE-7	118	215	5.1
Drum Influent	NR	398	15
Drum Effluent	NR	2.3	0.3

Notes:

NR = No Reading
 PID = Photoionization Detector
 VOC = Volatile Organic Compound

Table 3
Vacuum Monitoring Points
250 Livonia Avenue
Brooklyn, New York

Pressure Monitoring Point	Date
	August 26, 2014
Vacuum (in inches of water)	
PM-1	-0.312
PM-6	-0.332
PM-7	-0.545
PM-8	-0.107
PM-9	-0.146
PM-11	-0.024

Note:

Pressure Monitoring Points located in the basement of the building.

Table 4
Soil Vapor Extraction Radius Of Influence Readings
250 Livonia Avenue
Brooklyn, New York

Location	Distance From Nearest SVE Well (in feet)	Vacuum (in inches of water)
PM-12	22	-0.315
PM-13	43	-0.103
MW-5S	95	-0.012
MW-6S	94	-0.006

Notes:

PM= pressure monitoring point in south parking lot

MW-S= shallow groundwater monitoring well with screen five feet above the water table.

Table 5
AS Radius of Influence Measurements
250 Livonia Avenue
Brooklyn, New York
August, 2014

Well	Pre-System Operation		During Operation	
	DTW <i>(in feet below grade)</i>	DO <i>(in milligrams per liter)</i>	DTW <i>(in feet below grade)</i>	DO <i>(in milligrams per liter)</i>
SM-1	18.64	1.79	18.45	3.23
SM-2	18.82	1.78	NR	4.65

Notes:

DTW = Depth to Water
DO = Dissolved Oxygen
NR = No Reading

Table 6
Influent and Effluent Air Chemical Analytical Results
250 Livonia Avenue
Brooklyn, New York
August, 2014

Sample ID	I-1	E-1
Volatile Organic Compounds (in micrograms per cubic meter)		
Acetone	43	46
Benzene	ND	1.9
2-Butanone (MEK)	750	3.0
Carbon Tetrachloride	ND	0.38
Chloroform	27	ND
Chloromethane	ND	1.2
Dichlorodifluoromethane	ND	2.1
cis-1,2-Dichloroethylene	760	0.40
trans-1,2-Dichloroethylene	30	ND
Ethyl Acetate	ND	0.86
p-Ethyltoluene	ND	0.88
n-Hexane	ND	12
Isopropanol	ND	14
Methylene Chloride	ND	26
Tetrachloroethylene	4,200	6.2
Tetrahydrofuran	740	ND
Toluene	ND	1.6
Trichloroethylene	910	0.38
Trichlorofluoromethane	ND	1.7
1,2,4-Trimethylbenzene	ND	0.93
m&p-Xylenes	ND	0.96

Notes:

Only detected analytes are reported.

ND = Not Detected

Table 7
Groundwater Chemical Analytical Results
250 Livonia Avenue
Brooklyn, New York
July 8, 2014

Sample ID	MW-4S	MW-4D	MW-5S	MW-5D	MW-6S	MW-6D	NYSDEC Class GA Ambient Water Quality Standards
Volatile Organic Compounds (in milligrams per liter)							
cis-1,2-Dichloroethylene	190	ND	ND	ND	82	ND	5*
trans-1,2-Dichloroethylene	3.7 J	ND	ND	ND	ND	ND	5*
Tetrachloroethylene	530	2.8 J	4.2 J	ND	250	2.6 J	5*
Trichloroethylene	95	ND	ND	ND	42	ND	5*

Notes:

Only detected analytes are reported.

ND = Not Detected

J = The concentration is estimated.

Bolded values indicate an exceedance of the New York State Department of Environmental Conservation (NYSDEC) Class GA Ambient Water Quality Standards.

Table 8
Building Subslab Vacuum Readings
250 Livonia Avenue
Brooklyn, New York
November 9, 2022

Pressure Monitoring Point	Vacuum in Inches Water Column
MP-1	-0.186
MP-2	-0.099
MP-3	-0.144
MP-4	-0.107
MP-5	-0.096
MP-6	-0.170
MP-7	-0.212
MP-8	-0.066
MP-9	-0.218
MP-10	-0.281
MP-11	-0.089
MP-12	-0.081
MP-13	-0.131
MP-14	-0.121
MP-15	-0.184
MP-16	-0.380

Table 9
2023 Volatile Organic Compounds
Indoor and Outdoor Air Chemical Analytical Results
Former Sep's Cleaners, Brooklyn, New York

Sample ID	IA-1	IA-2	IA-3	IA-4	OA-1	EPA 90 th Percentile/ NYSDOH Values
Sample Date	3-31-23	3-31-23	3-31-23	3-31-23	3-31-23	
1,4-Dichlorobenzene	ND	ND	1.2	ND	ND	5.5
1,2,4-Trimethylbenzene	ND	0.82	ND	ND	ND	14
2-Butanone	1.5	3.3	7.1	4.8	0.82	12
Acetone	14	45	83	120	39	98.9
Benzene	1.3	2.9	1.4	ND	0.83	9.4
Carbon tetrachloride	0.47	0.95	1.1	0.86	0.70	<1.3
Chloroform	0.6	2.1	12	2.4	ND	1.1
Chloromethane	1.1	2.4	2.5	2.5	2.4	3.7
Cyclohexane	0.35	0.83	ND	0.59	ND	NL
Dichlorodifluoromethane	1.9	4.4	4.0	4.0	3.9	16.5
*Ethyl acetate	0.41	3.2	6.3	6.9	ND	5.4
Isopropanol	7.9	27	64	65	3.4	NL
Methylene chloride	1.0	1.9	2.7	1.9	2.1	60
n-Heptane	1.2	4.8	6.4	11	ND	NL
n-Hexane	0.99	2.1	1.3	1.0	ND	10.2
o-Xylene	0.57	1.7	1.5	0.89	ND	7.9
p- & m- Xylenes	1.4	3.9	2.9	1.9	ND	NL

Table 9 (continued)
Volatile Organic Compounds
Indoor Air Chemical Analytical Results
Former Sep's Cleaners, Brooklyn, New York

Sample ID	IA-1	IA-2	IA-3	IA-4	OA-1	EPA 90 th Percentile/ NYSDOH Values
Sample Date	3-31-23	3-31-23	3-31-23	3-31-23	3-31-23	
*p-Ethyltoluene	0.89	1.9	ND	ND	ND	NL
Styrene	1.2	ND	1.9	2.1	ND	1.9
Tetrachloroethylene	ND	ND	ND	ND	ND	30
*Tetrahydrofuran	3.4	ND	ND	ND	ND	NL
Toluene	15	19	19	35	1.1	43
Trichloroethylene	ND	ND	ND	ND	5.1	2
Trichlorofluoromethane (Freon 11)	2.4	2.5	2.5	2.8	2.2	18.1

Notes:

All results reported in micrograms per cubic meter.

Only detected analytes are reported.

NL – not listed in EPA Building Assessment and Survey (BASE) database or NYSDOH standards.

ND - Not Detected.

B – analyte is found in analysis blank.

* - Analyte is not certified, or the state of the sample's origination does not offer certification for the analyte.

TO-CCV - The value reported is estimated for this compound due to its behavior during continuing calibration verification (>30% Difference from initial calibration).

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.

The 90th percentile EPA BASE values are used with the exception of the bold values in this column which are the NYSDOH values from the Guidance for Evaluating Soil Vapor Intrusion in the State Of New York.

ND - Not Detected: the analyte is not detected at the reported level (LOQ/RL or LOD/MDL).

Bolded analytical results values indicate an exceedance of the 90th percentile EPA BASE values and/or the NYSDOH values from the "Guidance for Evaluating Soil Vapor Intrusion in the State Of New York."

Table 10
2023 Volatile Organic Compounds
SSDS Effluent Chemical Analytical Results
Former Sep's Cleaners, Brooklyn, New York

Sample ID	SW-3	SW-4	SW-5	SW-6	SW-7	SW-8	SW-9	SW-10	SW-11
Sample Date	5-25-23	5-25-23	5-25-23	5-25-23	5-25-23	5-25-23	5-25-23	5-25-23	5-25-23
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	0.78	ND	ND	ND
2-Butanone	0.56	ND	1.8	1.6	0.99	5.7	1.1	10	2.1
Acetone	16	26	57	50	25	59 B	74 B	20 B	39 B
Benzene	ND	ND	ND	ND	ND	ND	ND	1.0	ND
Carbon tetrachloride	ND	ND	0.43	0.44	ND	0.50	0.70	0.42	0.81
Chloroform	9.8	14	10	12	10	4.8	9.7	1.1	12
Chloromethane	0.45 TO-CCV, TO-LCS-H	ND	0.98 TO-CCV, TO-LCs-H	1.1 TO-CCV, TO-LCS-H	0.65 TO-CCV, TO-LCS-H	1.1	0.72	1.3	0.49
cis-1,2-Dichloroethylene	6.1	260	2.2	0.69	15	ND	0.82	ND	1.2
Cyclohexane	ND	ND	ND	ND	ND	0.55	ND	0.68	
Dichlorodifluoromethane	1.4	ND	2.3	2.3	2.5	2.4	3.6	2.4	3.8
*Ethyl acetate	1.4	ND	2.2	2.4	ND	3.8	5.1	ND	2.2
Isopropanol	9.7 B	19 B	13 B	13 B	7.7 B	17 B	21 B	4.7 B	8.3 B
n-Heptane	0.90	ND	2.1	2.0	1.0	3.5	7.9	2.2	4.6
n-Hexane	0.46	ND	0.60	ND	ND	1.8	0.73	1.7	ND
o-Xylene	ND	ND	ND	ND	ND	0.69	ND	1.2	ND
p- & m- Xylenes	ND	ND	ND	ND	ND	1.8	ND	3.6	ND

Table 10 (continued)
Volatile Organic Compounds
Indoor Air Chemical Analytical Results
Former Sep's Cleaners, Brooklyn, New York

Sample ID	SW-3	SW-4	SW-5	SW-6	SW-7	SW-8	SW-9	SW-10	SW-11
Sample Date	5-25-23	5-25-23	5-25-23	5-25-23	5-25-23	5-25-23	5-25-23	5-25-23	5-25-23
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	1.3	ND
Tetrachloroethylene	310	3,300	82	34	310	2.0	16	3.7	21
*Tetrahydrofuran	ND	ND	ND	ND	ND	4.1	ND	5.8	ND
Toluene	3.7	5.1	9.0	8.6	4.5	11	29	7.8	17
trans-1,2-Dichloroethylene	0.63	11	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	14	370	6.0	1.7	12	ND	0.51		0.79
Trichlorofluoromethane (Freon 11)	0.73	ND	1.4	1.4	1.4	1.3	2.2	1.3	2.3
1,2-Dichlorotetrafluoroethane	ND	ND	1.3 TO-CCV, TO-LCS-H	1.8 TO-CCV, TO-LCS-H	1.2 TO-CCV, TO-LCS-H	ND	ND	ND	ND

Notes:

All results reported in micrograms per cubic meter.

Only detected analytes are reported.

B – analyte is found in analysis blank.

* - Analyte is not certified, or the state of the sample's origination does not offer certification for the analyte.

TO-CCV - The value reported is estimated for this compound due to its behavior during continuing calibration verification (>30% Difference from initial calibration).

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 less 70% of the expected value.

ND - Not Detected: the analyte is not detected at the reported level (LOQ/RL or LOD/MDL).

Table 11
2024 Volatile Organic Compounds
Indoor and Outdoor Air Chemical Analytical Results
Former Sep's Cleaners, Brooklyn, New York

Sample ID	IA-1	IA-2	IA-3	IA-4	OA-1	Indoor EPA 95 th Percentile/ NYSDOH Values
Sample Date	3-30-24	3-30-24	3-30-24	3-30-24	3-30-24	
1,4-Dichlorobenzene	0.48	ND	0.66	0.58	ND	12.5
1,2,4-Trimethylbenzene	0.70	0.45	0.62	0.52	ND	13.7
2-Butanone	2.1	2.5	4.0	3.5	1.2	12
2-Hexanone	1.6	ND	1.6	0.72	ND	--
4-Methyl-2-pentanone	0.82	ND	ND	ND	ND	8.1
Acetone	66	63	550	470	23	120.2
Acrylonitrile	0.19	0.78	0.72	4.4	0.63	--
Benzene	1.5	7.9	1.6	1.4	1.2	12.5
Carbon tetrachloride	0.50	0.63	0.99	1.2	0.42	0.7
Chloroform	2.4	7.0	5.5	11	ND	1.4
Chloromethane	0.89	16 TO-CCV, TO-LCS-H	3.8 TO-CCV, TO-LCS-H	5.2 TO-CCV, TO-LCS-H	4.4 TO-CCV, TO-LCS-H	4.4
Cyclohexane	0.49	ND	0.57	0.48	0.28	NL
Dichlorodifluoromethane	2.3	2.3	2.9	2.8	2.2	16.5
Ethylbenzene	0.73	0.44	0.72	0.61	0.36	5.7
*Ethyl acetate	2.0	1.6	4.5	ND	ND	5.4
Isopropanol	31	410 E, TO- IPA	18	27	4.3	NL
Methylene chloride	1.6	1.3	1.8	1.5		60
n-Heptane	2.1	1.4	6.3	3.7	0.61	NL
n-Hexane	1.4	0.84	1.6	1.4	0.96	10.2

Table 11 (cont.)
2024 Volatile Organic Compounds
Indoor and Outdoor Air Chemical Analytical Results
Former Sep's Cleaners, Brooklyn, New York

Sample ID	IA-1	IA-2	IA-3	IA-4	OA-1	Indoor EPA BASE 95 th Percentile/ NYSDOH Values
Sample Date	3-30-24	3-30-24	3-30-24	3-30-24	3-30-24	--
o-Xylene	0.90	0.44	0.82	0.72	ND	7.9
p- & m- Xylenes	2.4	1.2	2.1	1.8	0.86	NL
p-Ethyltoluene	0.67	ND	ND	0.47	ND	NL
Styrene	0.51	ND	ND	0.60	ND	1.9
Tetrachloroethylene	1.7	0.62	0.64	1.6	0.56	15.9
Tetrahydrofuran	0.61	ND	ND	4.9	ND	NL
Toluene	9.9	6.4	30	17	1.4	43.0
Trichlorofluoromethane	1.0	1.4	1.7	1.6	1.3	18.1
2,2,4- Trimethylpentane*	ND	0.728	1.44	1.47	0.656	NL

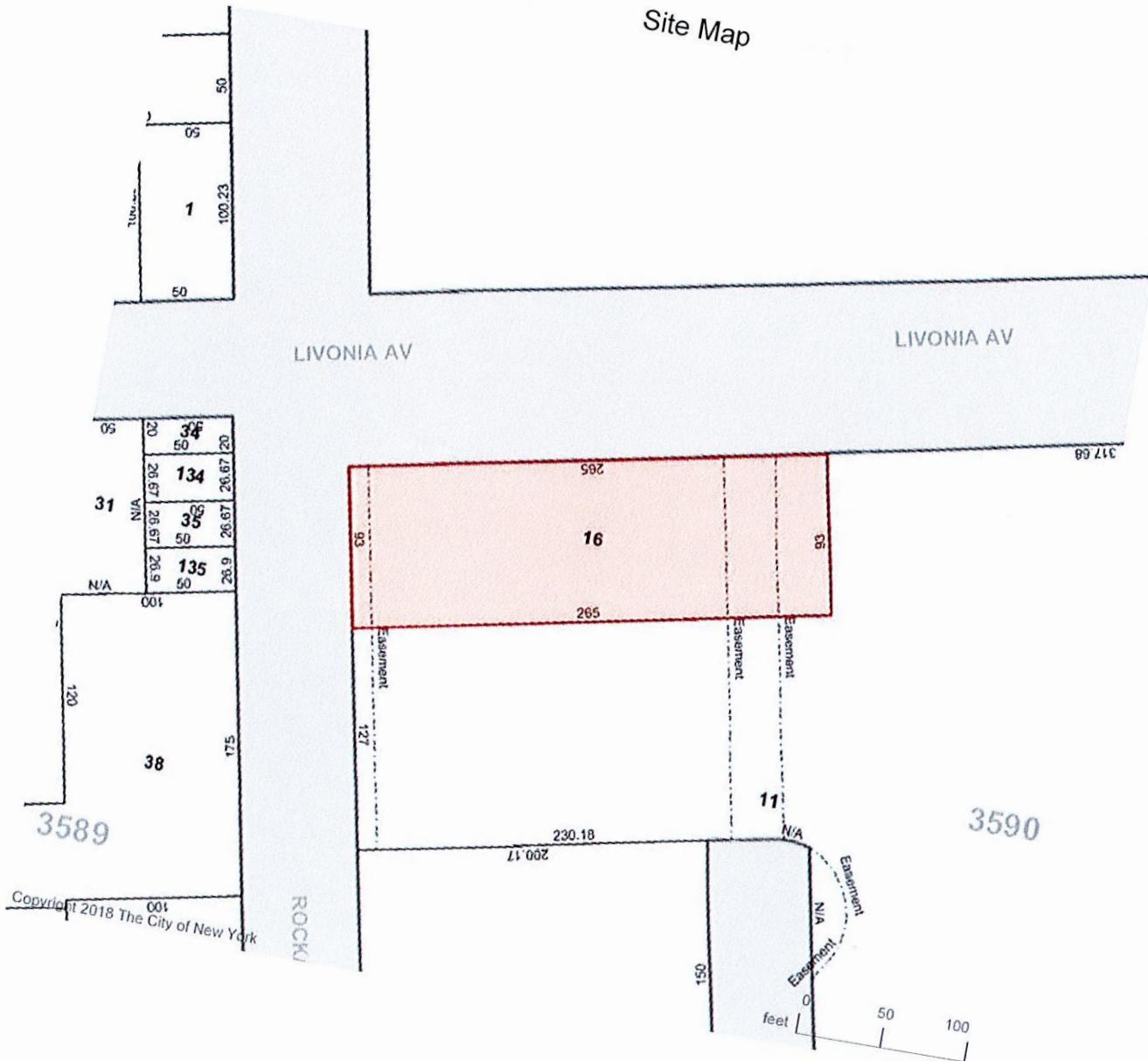
Appendix A

Metes and Bounds

Site Map

EXHIBIT "A"

Site Map



SCHEDULE "A" PROPERTY DESCRIPTION

**Environmental Easement and
Legal Description**

Tax Map No. 3590.16

ALL those plots, pieces or parcels of real property situate, lying and being in the Borough of Brooklyn, City and State of New York, bounded and described as follows:

BEGINNING at a corner formed by the intersection of the easterly side of Rockaway Avenue with the southerly side of Livonia Avenue, as shown on the map showing a change in the street system, dated July 23, 1970 (V-2061), adopted by the Board of Estimate, on October 29, 1970.

RUNNING THENCE, easterly, along said southerly side of Livonia Avenue, a distance of 265.00 feet, to a point;

THENCE southerly, along a line which is parallel to said easterly side of Rockaway Avenue, a distance of 93.00 feet, to a point;

THENCE westerly, along a line which is parallel to said southerly side of Livonia Avenue, a distance of 265.00 feet, to said easterly side of Rockaway Avenue;

THENCE northerly, along said easterly side of Rockaway Avenue, a distance of 93.00 feet, to a point or place of BEGINNING, to a point or place of BEGINNING.

NOTE: Description matches recorded deed (CRFN #2009000254706).

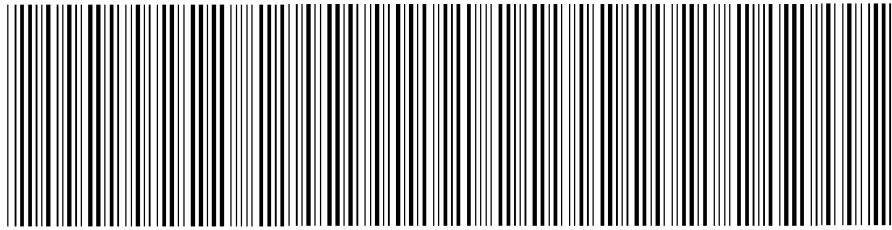
The above described parcel having an area of 24,645 square feet or 0.56577 acre.

Appendix B

Environmental Easement

**NYC DEPARTMENT OF FINANCE
OFFICE OF THE CITY REGISTER**

This page is part of the instrument. The City Register will rely on the information provided by you on this page for purposes of indexing this instrument. The information on this page will control for indexing purposes in the event of any conflict with the rest of the document.



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RECORDING AND ENDORSEMENT COVER PAGE

PAGE 1 OF 10

Document ID: 2017030101426001

Document Date: 01-30-2017

Preparation Date: 03-01-2017

Document Type: EASEMENT

Document Page Count: 9

PRESENTER:

MIT NATIONAL LAND SERVICES
ONE PENN PLAZA, 34TH FLOOR
PICK UP MICHAEL DANTZLER
NEW YORK, NY 10119
646-647-2688
MITCR183911K

RETURN TO:

CERTILMAN BALIN ADLER & HYMAN LLP
90 MERRICK AVENUE
9TH FLOOR
NEW YORK, NY 11554

PROPERTY DATA			
Borough	Block	Lot	Unit
BROOKLYN	3590	16	Entire Lot
250 LIVONIA AVENUE			

Property Type: COMMERCIAL REAL ESTATE

CROSS REFERENCE DATA

CRFN _____ or DocumentID _____ or _____ Year _____ Reel _____ Page _____ or File Number _____

PARTIES

GRANTOR/SELLER:

RIVERDALE OSBORNE TOWERS COMMERCIAL LLC
C/O CPC RESOURCES, INC., 28 EAST 28TH STREET
NEW YORK, NY 10016

GRANTEE/BUYER:

PEOPLE OF THE STATE OF NEW YORK
625 BROADWAY
ALBANY, NY 12233

FEES AND TAXES

Mortgage :

Mortgage Amount:	\$ 0.00	Filing Fee:	\$ 100.00
Taxable Mortgage Amount:	\$ 0.00	NYC Real Property Transfer Tax:	\$ 0.00
Exemption:			
TAXES: County (Basic):	\$ 0.00	NYS Real Estate Transfer Tax:	\$ 0.00
City (Additional):	\$ 0.00		
Spec (Additional):	\$ 0.00		
TASF:	\$ 0.00		
MTA:	\$ 0.00		
NYCTA:	\$ 0.00		
Additional MRT:	\$ 0.00		
TOTAL:	\$ 0.00		
Recording Fee:	\$ 82.00		
Affidavit Fee:	\$ 0.00		

**RECORDED OR FILED IN THE OFFICE
OF THE CITY REGISTER OF THE**

CITY OF NEW YORK

Recorded/Filed 03-30-2017 10:47
City Register File No.(CRFN):
2017000122868



City Register Official Signature

**ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36
OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW**

95 of
THIS INDENTURE made this 30th day of January, 2017, between Owner(s) Riverdale Osborne Towers Commercial LLC, having an office at c/o CPC Resources, Inc., 28 East 28th Street, New York, New York 10016, County of New York, State of New York (the "Grantor"), and The People of the State of New York (the "Grantee."), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of Environmental Easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and the restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

WHEREAS, the Legislature of the State of New York has declared that Environmental Easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and

WHEREAS, Grantor, is the owner of real property located at the address of 242-288 Livonia Avenue in the City of New York, County of Kings and State of New York, known and designated on the tax map of the New York City Department of Finance as tax map parcel number: Block 3590 Lot 16, being the same as that property conveyed to Grantor by deed dated August 5, 2009 and recorded in the City Register of the City of New York as CRFN # 2009000254706. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 0.56577 +/- acres, and is hereinafter more fully described in the Land Title Survey dated August 9, 2016 prepared by Bartlett, Ludlam & Dill Associates, which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

WHEREAS, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation

established for the Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36; and

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of the Stipulation between Riverdale Osborne Towers Upper Manager LLC and the New York State Department of Environmental Conservation dated October 10, 2008 and having an Index Number: R2-20081016-500, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement")

1. **Purposes.** Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. **Institutional and Engineering Controls.** The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.

A. (1) The Controlled Property may be used for:

Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv)

(2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);

(3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP;

(4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the New York City Department of Health and Mental Hygiene to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;

(5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;

(6) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;

(7) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

(8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;

(9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP;

(10) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.

B. The Controlled Property shall not be used for Residential or Restricted Residential purposes as defined in 6NYCRR 375-1.8(g)(2)(i) and (ii), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, New York 12233
Phone: (518) 402-9553

D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.

E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an Environmental Easement held

**by the New York State Department of Environmental Conservation
pursuant to Title 36 of Article 71 of the Environmental Conservation
Law.**

F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

G. Grantor covenants and agrees that it shall, at such time as NYSDEC may require, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:

(1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).

(2) the institutional controls and/or engineering controls employed at such site:

(i) are in-place;

(ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved by the NYSDEC and that all controls are in the Department-approved format; and

(iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;

(3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;

(4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;

(5) the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

(6) to the best of his/her knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and

(7) the information presented is accurate and complete.

3. **Right to Enter and Inspect.** Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. **Reserved Grantor's Rights.** Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:

A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;

5. Enforcement

A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.

6. Notice. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to: Spill Number: 0712821
Office of General Counsel
NYSDEC
625 Broadway
Albany New York 12233-5500

With a copy to: Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, NY 12233

And a Copy to Grantor:

CPC Resources, Inc.
Attn: General Counsel
28 East 28th Street, 9th Floor
New York, New York 10016

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

7. **Recordation.** Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. **Amendment.** Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. **Extinguishment.** This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. **Joint Obligation.** If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

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IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

Riverdale Osborne Towers Commercial LLC:

By: Elizabeth Propp

Print Name: Elizabeth PROPP

Title: Sr. Vice President Date: 1-13-2017

Grantor's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF NY)

On the 13 day of January, in the year 2017, before me, the undersigned, personally appeared Elizabeth PROPP, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Catherine Kelly
Notary Public - State of New York

CATHERINE ANNE KELLY
NOTARY PUBLIC-STATE OF NEW YORK
No. 01KE6312619
Qualified in Kings County
Commission Expires October 06, 2018

SEAL

**THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE
PEOPLE OF THE STATE OF NEW YORK, Acting By and Through the Department of
Environmental Conservation as Designee of the Commissioner.**

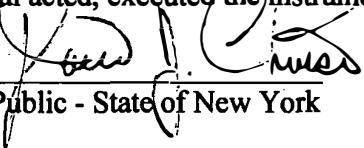
By: 

Robert W. Schick, Director
Division of Environmental Remediation

Grantee's Acknowledgment

STATE OF NEW YORK)
)
) ss:
COUNTY OF ALBANY)

On the 30th day of January, in the year 2017, before me, the undersigned, personally appeared Robert W. Schick, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.


Notary Public - State of New York

David J. Chiusano
Notary Public, State of New York
No. 01CH5032146
Qualified in Schenectady County
Commission Expires August 22, 2018

SEAL

SCHEDULE "A" PROPERTY DESCRIPTION

**Environmental Easement and
Legal Description**

Tax Map No. 3590.16

ALL those plots, pieces or parcels of real property situate, lying and being in the Borough of Brooklyn, City and State of New York, bounded and described as follows:

BEGINNING at a corner formed by the intersection of the easterly side of Rockaway Avenue with the southerly side of Livonia Avenue, as shown on the map showing a change in the street system, dated July 23, 1970 (V-2061), adopted by the Board of Estimate, on October 29, 1970.

RUNNING THENCE, easterly, along said southerly side of Livonia Avenue, a distance of 265.00 feet, to a point;

THENCE southerly, along a line which is parallel to said easterly side of Rockaway Avenue, a distance of 93.00 feet, to a point;

THENCE westerly, along a line which is parallel to said southerly side of Livonia Avenue, a distance of 265.00 feet, to said easterly side of Rockaway Avenue;

THENCE northerly, along said easterly side of Rockaway Avenue, a distance of 93.00 feet, to a point or place of BEGINNING, to a point or place of BEGINNING.

NOTE: Description matches recorded deed (CRFN #2009000254706).

The above described parcel having an area of 24,645 square feet or 0.56577 acre.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
STATE SUPERFUND PROGRAM
ECL § 27-1301 et seq.

In the Matter of a Remedial Program for

**ORDER ON CONSENT AND
ADMINISTRATIVE SETTLEMENT
Index No. R2-20081016-500**

DEC Site Name: Former Sep's Cleaners

DEC Site No. 224283

Site Address: 242-288 Livonia Avenue
Brooklyn, NY 11212

Hereinafter referred to as "Site"

by: Riverdale Osborne Towers Commercial LLC

Hereinafter referred to as "Respondent"

1. A. The New York State Department of Environmental Conservation ("DEC" or "Department") is responsible for inactive hazardous waste disposal site remedial programs pursuant to Article 27, Title 13 of the New York State Environmental Conservation Law ("ECL") and Part 375 of Title 6 of the Official Compilation of Codes, Rules, and Regulations of the State of New York ("6 NYCRR") and may issue orders consistent with the authority granted to the Commissioner by the ECL.

B. The Department is responsible for carrying out the policy of the state of New York to conserve, improve, and protect its natural resources and environment and control water, land, and air pollution consistent with the authority granted to the Department and the Commissioner by Article 1, Title 3 of the ECL.

C. This Order is issued pursuant to the Department's authority under, *inter alia*, ECL Article 27, Title 13 and ECL § 3-0301 and resolves Respondent's liability to the state of New York as provided at 6 NYCRR § 375-1.5(b)(5).

2. The Site is currently not listed in the Registry of Inactive Hazardous Waste Disposal Sites in New York State, and is instead identified as a "P" or potential site with a Site Number of 224283.

3. On October 17, 2008, Respondent and the Department entered into a stipulation regarding spill number 0712821. The stipulation required Respondent to conduct certain investigation and remediation work at the Site. Respondent has completed the aforementioned work. Respondent and the Department agree that no further investigation or remediation work is necessary.

4. Respondent and the Department agree that the Site requires continued management of the Site's engineering controls. Respondent and the Department agree that the primary goal of this Order is to provide a mechanism for Respondent to implement such site management.

5. Respondent consents to the issuance of this Order without (i) an admission or finding of liability, fault, wrongdoing, or violation of any law, regulation, permit, order, requirement, or standard of care of any kind whatsoever; (ii) an acknowledgment that there has been a release or threatened release of hazardous waste at or from the Site; and/or (iii) an acknowledgment that a release or threatened release of hazardous waste at or from the Site constitutes a significant threat to the public health or environment.

6. Solely with regard to the matters set forth below, Respondent hereby waives any right to a hearing as may be provided by law, consents to the issuance and entry of this Order, and agrees to be bound by its terms. Respondent consents to and agrees not to contest the authority or jurisdiction of the Department to issue or enforce this Order, and agrees not to contest the validity of this Order or its terms or the validity of data submitted to the Department by Respondent pursuant to this Order.

NOW, having considered this matter and being duly advised, **IT IS ORDERED THAT:**

I. Real Property

The Site subject to this Order has been assigned number 224283, consists of approximately 0.566 acres, and is as follows:

Subject Property Description (A Map of the Site is attached as Exhibit "A")

Tax Map/Parcel No.: Kings County Block 3590, Lot 16
Owner: Riverdale Osborne Towers Commercial LLC

II. Work Plans and Reports

A Site Management Plan shall be submitted to the Department by Respondent within sixty (60) days after the effective date of this Order.

Respondent shall submit a final engineering report documenting all work done to date, and which includes as-built drawings of systems installed, both previously (AS/SVE) and current (SSDS, once complete) within ninety (90) days of completion of SSDS or within ninety (90) days after the effective date of this Order, whichever is later.

III. Payment of State Costs

Invoices shall be sent to Respondent at the following address:

Daniel Parcerisas
Asset Manager, Housing Investments
The Community Preservation Corporation
220 East 42nd Street, 16th Floor
New York, NY 10017
DParcerisas@communityp.com

In addition to the requirement to pay future State Costs as set forth in Appendix "A", within forty-five (45) Days after the effective date of this Consent Order, Respondent shall pay to the Department the sum set forth on Exhibit "C", which shall represent reimbursement for past State Costs incurred prior to the effective date of this Consent Order. Respondent acknowledges that all past State Costs are not itemized on the cost summary and that additional charges may be billed at a later date for State Costs incurred prior to the effective date of this Consent Order.

IV. Communications

A. All written communications required by this Order shall be transmitted by United States Postal Service, private courier service, hand delivery, or electronic mail.

1. Communication from Respondent shall be sent to:

Shaun Bollers, Project Manager (1 hard copy & 1 electronic copy)
New York State Department of Environmental Conservation
Division of Environmental Remediation
47-49 21st Street
Long Island City, NY 11101
shaun.bollers@dec.ny.gov

Scarlett McLaughlin (electronic copy only)
New York State Department of Health
Bureau of Environmental Exposure Investigation
Empire State Plaza
Corning Tower Room 1787
Albany, N.Y. 12237
beei@health.ny.gov

2. Communication from the Department to Respondent shall be sent to:

Daniel Parcerisas
Asset Manager, Housing Investments
The Community Preservation Corporation
220 East 42nd Street, 16th Floor
New York, NY 10017

DParcerisas@communityp.com

Barry S. Cohen
Certilman Balin Adler & Hyman, LLP
90 Merrick Avenue 9th Floor
East Meadow, NY 11554
bcohen@certilmanbalin.com

B. The Department and Respondent reserve the right to designate additional or different addressees for communication upon written notice to the other. Additionally, the Department reserves the right to request that Respondent provide more than one paper copy of any work plan or report.

C. Each party shall notify the other within ninety (90) days after any change in the addresses listed in this paragraph.

V. Certificate of Completion/No Further Action/Satisfactory Completion

If, after the completion of any required investigations and/or interim remedial actions, the Department determines that the Site will not be listed in the *Registry of Inactive Hazardous Waste Disposal Sites in New York State*, the Department will not issue a Certificate of Completion but will issue a No Further Action/Satisfactory Completion Letter to Respondent reflecting the Department's determination that, other than implementation of the Site Management Plan, no further remedial action at the Site is presently necessary. The Letter's form and substance shall be materially similar to the attached Exhibit D.

Miscellaneous

A. Appendix A - "Standard Clauses for All New York State, State Superfund Orders" is attached to and hereby made a part of this Order as if set forth fully herein.

i. The requirement to submit a Citizen Participation Plan (CPP) referenced in Standard Clause I and the Records Search Report referenced in Standard Clause II is waived as these documents were prepared under the Amended Order and remain applicable.

B. In the event of a conflict between the main body of this Order (including any and all attachments thereto and amendments thereof) and the terms of Appendix A, the main body of this Order shall control.

C. The effective date of this Order is the 10th day after it is signed by the Commissioner or the Commissioner's designee.

DATED: 1/14/2023

BASIL SEGGOS
COMMISSIONER
NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION

By: Andrew Guglielmi

Andrew Guglielmi, Director
Division of Environmental Remediation

CONSENT BY RESPONDENT

Respondent hereby consents to the issuing and entering of this Order, waives Respondent's right to a hearing herein as provided by law, and agrees to be bound by this Order.

Riverdale Osborne Towers Commercial LLC

By: Daniel J. Parcerisas
Title: Authorized signatory
Date: 1/15/23

STATE OF NEW YORK)
) ss:
COUNTY OF)

On the 5th day of January in the year 2023, before me, the undersigned, personally appeared Daniel Parcerisas (full name) personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her capacity, and that by his/her signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

Acknowledgment by a corporation, in New York State:

On the 5th day of January in the year 2023, before me, the undersigned, personally appeared Daniel Parcerisas (full name) personally known to me who, being duly sworn, did depose and say that he/she/they reside at 220 E 42nd st NY NY 10017 (full mailing address) and that he/she/they is (are) the an authorized signatory (president or other officer or director or attorney in fact duly appointed) of the Riverdale Osborne Towers Commercial LLC (full legal name of corporation), the corporation described in and which executed the above instrument; and that he/she/they signed his/her/their name(s) thereto by the authority of the board of directors of said corporation.

Helene S. Rudolph
Notary Public, State of New York

HELENE S RUDOLPH
Notary Public, State of New York
No. 02RU4995410
Qualified in New York County
My Commission Expires April 20, 2026

EXHIBIT "A"

Site Map

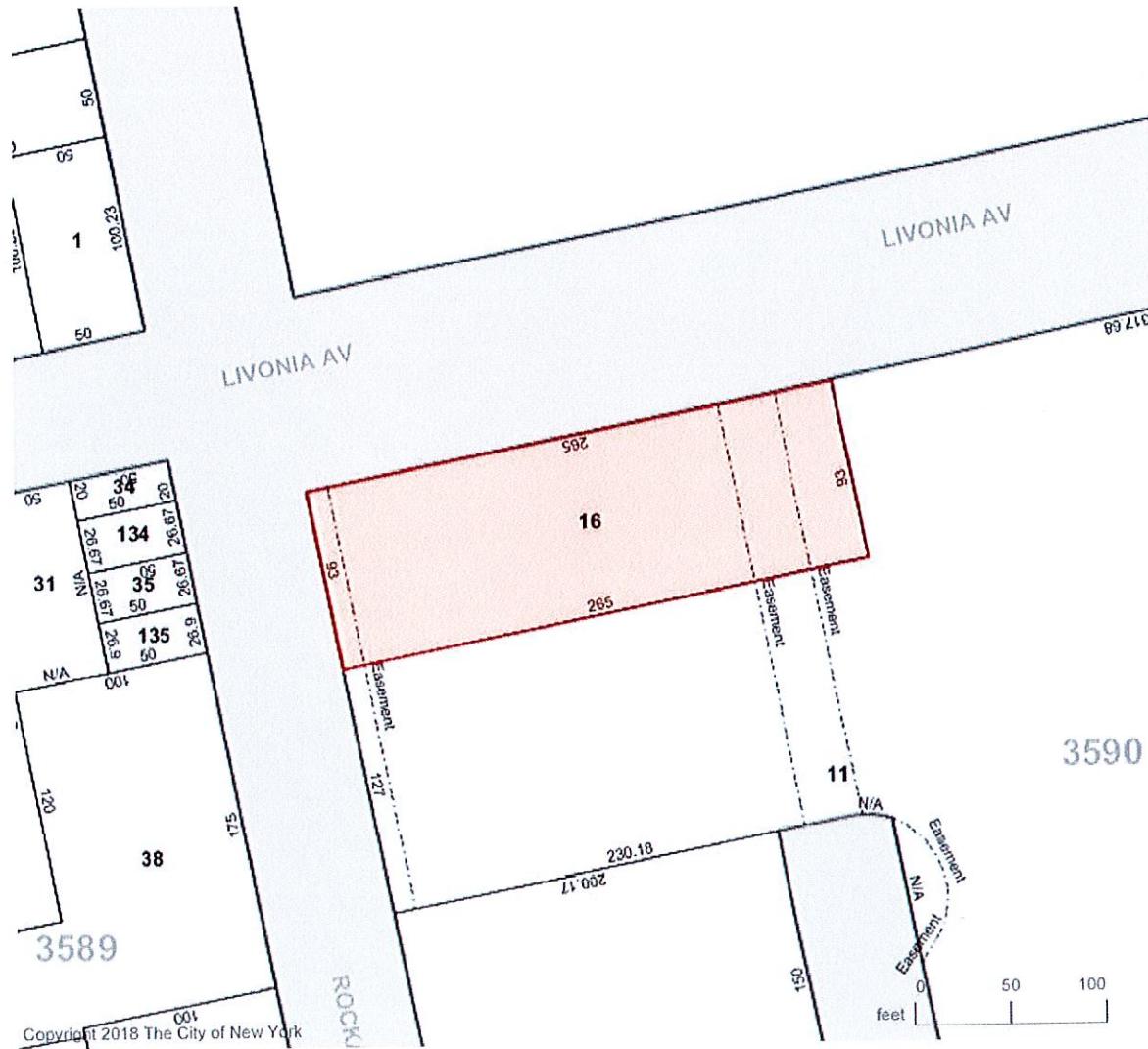


EXHIBIT "B"

RECORDS SEARCH REPORT

Not applicable.

EXHIBIT "C"

Cost Summary

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Bureau of Program Management
625 Broadway, 12th Floor, Albany, NY 12233-7012
P: (518) 402-9764 | F: (518) 402-9722
www.dec.ny.gov

Transmitted via E-Mail
MEMORANDUM

TO: James Simpson, Office of General Counsel, Region 2
FROM: Karen Diligent, Director, Bureau of Program Management, DER *KBD*
SUBJECT: Cost Summary – 224283 – Former Sep's Cleaners – P-Site
DATE: November 7, 2022

This cost recovery summary has been prepared in response to your October 12, 2022 request. The following summarizes costs incurred by the New York State Department of Environmental Conservation (DEC) to date. There may be additional future costs associated with this site that are not included in this summary. Please contact the project manager to determine if additional future costs are anticipated.

The total unreimbursed costs incurred by DEC in association with the Former Sep's Cleaners Site are \$14,418.08. This amount includes emergency response costs incurred at the site by a hazardous material spill, if any. Please note that if the site involves a petroleum spill, any costs incurred by the Oil Spill Fund would be recovered separately by the Office of the State Comptroller and are not included in this summary.

DEC costs for this site have been included through June 22, 2022 (the latest available data). Department of Health costs are not readily available. Please note that there are no open contracts for this site for which we have outstanding obligations.

Please contact Nicole Morgan at (518) 402-9753, if you have any questions on this summary.

Attachments

cc: S. Bollers
Cris-Sandra Maycock

EXHIBIT I

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
BUREAU OF PROGRAM MANAGEMENT

COST SUMMARY

SITE NAME: Former Sep's Cleaners

SITE NO.: 224283

TIME FRAME: Life - 6/22/2022

COST CATEGORY	AMOUNTS	EXHIBIT NO.
DIRECT PERSONAL SERVICES	\$6,676.51	
FRINGE	\$4,231.89	
INDIRECT	<u>\$3,509.68</u>	
<i>PERSONAL SERVICES SUBTOTAL</i>	\$14,418.08	II
CONTRACTUAL	\$0.00	
TRAVEL	\$0.00	
OTHER NPS	\$0.00	
<i>NON-PERSONAL SERVICES SUBTOTAL</i>	\$0.00	
DEC TOTAL	\$14,418.08	
DOH TOTAL	N/A	
MINUS PREVIOUSLY REIMBURSED AMOUNT (IF APPLICABLE)	<u>N/A</u>	
<i>DEC & DOH TOTAL</i>	\$14,418.08	
COST CAP (IF APPLICABLE)	<u>N/A</u>	
GRAND TOTAL	\$14,418.08	

Cost Query - Ad Hoc

Criteria: Timecard Begin Date 09/06/2018 And Timecard End Date 06/22/2022 And Task Code 73310

Leave Charges: Included

Cost Indicator: Direct

Rate Type: Non-Federal

[Download Excel Report](#)[Print](#)Jump To Employee: [All](#) [▼](#)

Pay Period	Pay Period Dates	Check Date	Cost Center	Variable	Budget Year	Employee	Title Description	Work Location Code	Work Location Description	Billable Hourly Rate	State Fringe	State Indirect	Hours	Cost
Task: 73310 - HW 224283 - FORMER SEP'S CLEANERS														
2018/12	09/06/2018 - 09/19/2018	10/03/2018	685135	LS	2018	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	52.34	33.44	32.29	1.00	52.34
2018/13	09/20/2018 - 10/03/2018	10/17/2018	685135	LS	2018	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	52.34	66.88	64.58	2.00	104.68
2018/15	10/18/2018 - 10/31/2018	11/14/2018	685135	LS	2018	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	52.34	8.36	8.07	0.25	13.09
2018/19	12/13/2018 - 12/26/2018	01/09/2019	685135	LS	2018	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	52.34	16.72	16.14	0.50	26.17
2018/21	01/10/2019 - 01/23/2019	02/06/2019	685135	LS	2018	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	52.34	33.44	32.29	1.00	52.34
2018/22	01/24/2019 - 02/06/2019	02/20/2019	685135	LS	2018	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	52.34	50.16	48.43	1.50	78.51
2018/24	02/21/2019 - 03/06/2019	03/20/2019	685135	LS	2018	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	52.34	16.72	16.14	0.50	26.17
2018/25	03/07/2019 - 03/20/2019	04/03/2019	685135	LS	2018	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	52.34	50.16	48.43	1.50	78.51
2018/26	03/21/2019 - 04/03/2019	04/17/2019	685135	LS	2019	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	52.34	117.04	113.01	3.50	183.19
2019/1	04/04/2019 - 04/17/2019	05/01/2019	685135	LS	2019	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	51.91	116.03	100.90	3.50	181.69
2019/2	04/18/2019 - 05/01/2019	05/15/2019	685135	LS	2019	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	51.91	24.86	21.62	0.75	38.93
2019/3	05/02/2019 - 05/15/2019	05/29/2019	685135	LS	2019	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	51.91	66.30	57.65	2.00	103.82
2019/4	05/16/2019 - 05/29/2019	06/12/2019	685135	LS	2019	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	51.91	16.58	14.42	0.50	25.96
2019/5	05/30/2019 - 06/12/2019	06/26/2019	685135	LS	2019	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	51.91	49.73	43.24	1.50	77.87
2019/6	06/13/2019 - 06/26/2019	07/10/2019	685135	LS	2019	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	51.91	8.29	7.21	0.25	12.98
2019/7	06/27/2019 - 07/10/2019	07/24/2019	685135	LS	2019	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	51.91	16.58	14.42	0.50	25.96
2019/8	07/11/2019 - 07/24/2019	08/07/2019	685135	LS	2019	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	51.91	33.15	28.83	1.00	51.91
2019/10	08/08/2019 - 08/21/2019	09/04/2019	685135	LS	2019	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	51.91	8.29	7.21	0.25	12.98
2019/12	09/05/2019 - 09/18/2019	10/02/2019	685135	LS	2019	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	51.91	99.45	86.48	3.00	155.73
2019/13	09/19/2019 - 10/02/2019	10/16/2019	685135	LS	2019	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	51.91	8.29	7.21	0.25	12.98
2019/14	10/03/2019 - 10/16/2019	10/30/2019	685135	LS	2019	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	51.91	49.73	43.24	1.50	77.87
2019/16	10/31/2019 - 11/13/2019	11/27/2019	685135	LS	2019	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	51.91	16.58	14.42	0.50	25.96
2019/18	11/28/2019 - 12/11/2019	12/24/2019	685135	LS	2019	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	51.91	91.16	79.27	2.75	142.75
2019/20	12/26/2019 - 01/08/2020	01/22/2020	685135	LS	2019	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	51.91	8.29	7.21	0.25	12.98
2019/21	01/09/2020 - 01/22/2020	02/05/2020	685135	LS	2019	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	51.91	99.45	86.48	3.00	155.73
2019/22	01/23/2020 - 02/05/2020	02/19/2020	685135	LS	2019	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	51.91	49.73	43.24	1.50	77.87
2019/24	02/20/2020 - 03/04/2020	03/18/2020	685135	LS	2019	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	51.91	16.58	14.42	0.50	25.96
2019/25	03/05/2020 - 03/18/2020	04/01/2020	685135	LS	2019	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	51.91	33.15	28.83	1.00	51.91
2019/26	03/19/2020 - 04/01/2020	04/15/2020	685135	LS	2020	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	51.91	99.45	86.48	3.00	155.73
2020/1	04/02/2020 - 04/15/2020	04/29/2020	685135	LS	2020	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	51.96	8.10	6.59	0.25	12.99
2020/6	06/11/2020 - 06/24/2020	07/08/2020	685135	LS	2020	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	51.96	16.21	13.19	0.50	25.98
2020/9	07/23/2020 - 08/05/2020	08/19/2020	685135	LS	2020	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	51.96	32.42	26.38	1.00	51.96
2020/15	10/15/2020 - 10/28/2020	11/10/2020	685135	LS	2020	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	51.96	105.36	85.72	3.25	168.87
2020/18	11/26/2020 - 12/09/2020	12/23/2020	685135	LS	2020	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	51.96	8.10	6.59	0.25	12.99
2020/19	12/10/2020 - 12/23/2020	01/06/2021	685135	LS	2020	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	51.96	48.63	39.57	1.50	77.94
2020/21	01/07/2021 - 01/20/2021	02/03/2021	685135	LS	2020	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	51.96	16.21	13.19	0.50	25.98
2020/22	01/21/2021 - 02/03/2021	02/17/2021	685135	LS	2020	Bollers, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	51.96	32.42	26.38	1.00	51.96

2020/23	02/04/2021 - 02/17/2021	03/03/2021	685135	LS	2020	Bolles, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	51.96	48.63	39.57	1.50	77.94
2020/24	02/18/2021 - 03/03/2021	03/17/2021	685135	LS	2020	Bolles, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	51.96	16.21	13.19	0.50	25.98
2020/25	03/18/2021 - 03/31/2021	04/14/2021	685135	LS	2020	Bolles, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	51.96	8.10	6.59	0.25	12.99
2021/5	05/27/2021 - 06/09/2021	06/23/2021	685135	LS	2021	Bolles, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	53.17	8.33	6.35	0.25	13.29
2021/6	06/10/2021 - 06/23/2021	07/07/2021	685135	LS	2021	Bolles, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	53.17	33.34	25.43	1.00	53.17
2021/8	07/08/2021 - 07/21/2021	08/04/2021	685135	LS	2021	Bolles, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	53.17	41.67	31.78	1.25	66.46
2021/9	07/22/2021 - 08/04/2021	08/18/2021	685135	LS	2021	Bolles, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	53.17	16.67	12.71	0.50	26.59
2021/10	08/05/2021 - 08/18/2021	09/01/2021	685135	LS	2021	Bolles, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	53.17	8.33	6.35	0.25	13.29
2021/11	08/19/2021 - 09/01/2021	09/15/2021	685135	LS	2021	Bolles, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	53.17	16.67	12.71	0.50	26.59
2021/12	09/02/2021 - 09/15/2021	09/29/2021	685135	LS	2021	Bolles, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	53.17	8.33	6.35	0.25	13.29
2021/13	09/16/2021 - 09/29/2021	10/13/2021	685135	LS	2021	Bolles, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	53.17	125.02	95.34	3.75	199.39
2021/14	09/30/2021 - 10/13/2021	10/27/2021	685135	LS	2021	Bolles, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	53.17	8.33	6.35	0.25	13.29
2021/15	10/14/2021 - 10/27/2021	11/10/2021	685135	LS	2021	Bolles, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	56.42	8.85	6.75	0.25	14.11
2021/16	10/28/2021 - 11/10/2021	11/24/2021	685135	LS	2021	Bolles, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	56.42	141.50	107.91	4.00	225.68
2021/17	11/11/2021 - 11/23/2021	12/08/2021	685135	LS	2021	Bolles, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	56.42	8.85	6.75	0.25	14.11
2021/18	11/25/2021 - 12/08/2021	12/22/2021	685135	LS	2021	Bolles, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	56.42	35.38	26.98	1.00	56.42
2021/19	12/09/2021 - 12/22/2021	01/05/2022	685135	LS	2021	Bolles, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	56.42	70.75	53.96	2.00	112.84
2021/20	12/23/2021 - 01/05/2022	01/19/2022	685135	LS	2021	Bolles, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	56.42	8.85	6.75	0.25	14.11
2021/22	01/20/2022 - 02/02/2022	02/16/2022	685135	LS	2021	Bolles, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	56.42	8.85	6.75	0.25	14.11
2021/23	02/03/2022 - 02/16/2022	03/02/2022	685135	LS	2021	Bolles, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	56.42	61.91	47.22	1.75	98.74
2021/24	02/17/2022 - 03/02/2022	03/16/2022	685135	LS	2021	Bolles, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	56.42	176.88	134.89	5.00	282.10
2021/25	03/03/2022 - 03/16/2022	03/30/2022	685135	LS	2021	Bolles, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	56.42	203.41	155.13	5.75	324.42
2021/26	03/17/2022 - 03/30/2022	04/13/2022	685135	LS	2021	Bolles, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	56.42	70.75	53.96	2.00	112.84
2022/1	03/31/2022 - 04/13/2022	04/27/2022	685135	LS	2021	Bolles, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	59.22	47.34	37.55	1.25	74.03
2022/2	04/14/2022 - 04/27/2022	05/11/2022	685135	LS	2021	Bolles, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	59.22	246.16	195.26	6.50	384.93
2022/3	04/18/2022 - 05/11/2022	05/25/2022	685135	LS	2021	Bolles, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	59.22	94.68	75.10	2.50	148.05
2022/4	05/12/2022 - 05/25/2022	06/08/2022	685135	LS	2021	Bolles, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	59.22	56.81	45.06	1.50	88.83
2022/5	05/26/2022 - 06/09/2022	06/22/2022	685135	LS	2022	Bolles, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	59.22	18.94	15.02	0.50	29.61
2022/6	06/09/2022 - 06/22/2022	07/06/2022	685135	LS	2022	Bolles, Nicholas	ASSISTANT ENGINEER (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	59.22	217.76	172.73	5.75	340.52
2018/26	03/21/2019 - 04/03/2019	04/17/2019	430328	L6	2019	O'Connell, Jane	Professional Geologist 2	43730	R2 - New York City - Regional HQ	72.97	46.62	45.01	1.00	72.97
2019/1	04/04/2019 - 04/17/2019	05/01/2019	430328	L6	2019	O'Connell, Jane	Professional Geologist 2	43730	R2 - New York City - Regional HQ	72.52	69.56	60.49	1.50	108.93
2019/3	05/02/2019 - 05/15/2019	05/29/2019	430328	L6	2019	O'Connell, Jane	Professional Geologist 2	43730	R2 - New York City - Regional HQ	69.83	22.30	19.39	0.50	34.92
2020/15	10/15/2020 - 10/28/2020	11/10/2020	430328	L6	2020	O'Connell, Jane	PROFESSIONAL GEOLOGIST 3	43730	R2 - New York City - Regional HQ	80.59	25.14	20.46	0.50	40.30
2021/13	09/16/2021 - 09/29/2021	10/13/2021	430328	L6	2021	O'Connell, Jane	PROFESSIONAL GEOLOGIST 3	43730	R2 - New York City - Regional HQ	87.39	54.79	41.79	1.00	87.39
2021/25	03/01/2022 - 03/16/2022	03/30/2022	430328	L6	2021	O'Connell, Jane	PROFESSIONAL GEOLOGIST 3	43730	R2 - New York City - Regional HQ	86.40	54.17	41.31	1.00	86.40
2023/1	03/31/2022 - 04/13/2022	04/27/2022	430328	L6	2022	O'Connell, Jane	PROFESSIONAL GEOLOGIST 3	43730	R2 - New York City - Regional HQ	90.08	28.80	22.85	0.50	45.04
2018/26	03/21/2019 - 04/03/2019	04/17/2019	430328	LS	2019	YAU, MAN TSZ	PROFESSIONAL ENGINEER 1 (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	56.27	17.98	17.36	0.50	28.14
2019/1	04/04/2019 - 04/17/2019	05/01/2019	430328	LS	2019	YAU, MAN TSZ	PROFESSIONAL ENGINEER 1 (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	55.81	106.92	92.98	3.00	157.43
2019/3	05/02/2019 - 05/15/2019	05/29/2019	430328	LS	2019	YAU, MAN TSZ	PROFESSIONAL ENGINEER 1 (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	55.81	26.73	23.25	0.75	41.86
2019/5	05/30/2019 - 06/12/2019	06/26/2019	430328	LS	2019	YAU, MAN TSZ	PROFESSIONAL ENGINEER 1 (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	55.81	8.91	7.75	0.25	13.95
2019/6	06/13/2019 - 06/26/2019	07/10/2019	430328	LS	2019	YAU, MAN TSZ	PROFESSIONAL ENGINEER 1 (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	55.81	8.91	7.75	0.25	13.95
2019/7	06/27/2019 - 07/10/2019	07/24/2019	430328	LS	2019	YAU, MAN TSZ	PROFESSIONAL ENGINEER 1 (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	55.81	8.91	7.75	0.25	13.95
2019/12	09/05/2019 - 09/18/2019	10/02/2019	430328	L6	2019	YAU, MAN TSZ	PROFESSIONAL ENGINEER 1 (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	55.81	8.91	7.75	0.25	13.95
2019/14	10/03/2019 - 10/16/2019	10/30/2019	430328	L6	2019	YAU, MAN TSZ	PROFESSIONAL ENGINEER 1 (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	55.81	8.91	7.75	0.25	13.95
2019/16	10/31/2019 - 11/13/2019	11/27/2019	430328	L6	2019	YAU, MAN TSZ	PROFESSIONAL ENGINEER 1 (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	55.81	17.82	15.50	0.50	27.91
2019/18	11/20/2019 - 12/13/2019	12/24/2019	430328	L6	2019	YAU, MAN TSZ	PROFESSIONAL ENGINEER 1 (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	55.81	89.10	77.48	2.50	139.53
2019/21	01/08/2020 - 01/22/2020	02/05/2020	430328	L6	2019	YAU, MAN TSZ	PROFESSIONAL ENGINEER 1 (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	55.81	8.91	7.75	0.25	13.95
2019/23	02/08/2020 - 02/19/2020	03/04/2020	430328	L6	2019	YAU, MAN TSZ	PROFESSIONAL ENGINEER 1 (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	55.81	8.91	7.75	0.25	13.95
2019/25	03/05/2020 - 03/18/2020	04/01/2020	430328	L6	2019	YAU, MAN TSZ	PROFESSIONAL ENGINEER 1 (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	55.81	17.82	15.50	0.50	27.91
2019/26	03/19/2020 - 04/01/2020	04/15/2020	430328	L6	2020	YAU, MAN TSZ	PROFESSIONAL ENGINEER 1 (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	55.81	26.73	23.25	0.75	41.86

2020/14	10/01/2020 - 10/14/2020	10/28/2020	430328	L6	2020	YAU, MAN TSZ	PROFESSIONAL ENGINEER 1 (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	57.48	8.97	7.30	0.25	14.37
2020/15	10/15/2020 - 10/28/2020	11/10/2020	430328	L6	2020	YAU, MAN TSZ	PROFESSIONAL ENGINEER 1 (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	57.48	17.93	14.59	0.50	28.74
2020/22	01/21/2021 - 02/03/2021	02/17/2021	430328	L6	2020	YAU, MAN TSZ	PROFESSIONAL ENGINEER 1 (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	57.48	8.97	7.30	0.25	14.37
2020/23	02/04/2021 - 02/17/2021	03/03/2021	430328	L6	2020	YAU, MAN TSZ	PROFESSIONAL ENGINEER 1 (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	57.48	26.90	21.89	0.75	43.11
2021/13	09/15/2021 - 09/29/2021	10/13/2021	430328	L6	2021	YAU, MAN TSZ	PROFESSIONAL ENGINEER 1 (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	60.47	28.43	21.68	0.75	45.35
2021/25	03/03/2022 - 03/15/2022	03/30/2022	430328	L6	2021	YAU, MAN TSZ	PROFESSIONAL ENGINEER 1 (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	64.17	30.19	23.02	0.75	48.13
2021/26	03/17/2022 - 03/30/2022	04/13/2022	430328	L6	2021	YAU, MAN TSZ	PROFESSIONAL ENGINEER 1 (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	64.17	10.06	7.67	0.25	16.04
2022/1	03/31/2022 - 04/13/2022	04/27/2022	430328	L6	2022	YAU, MAN TSZ	PROFESSIONAL ENGINEER 1 (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	69.19	22.13	17.55	0.50	34.60
2022/2	04/14/2022 - 04/27/2022	05/11/2022	430328	L6	2022	YAU, MAN TSZ	PROFESSIONAL ENGINEER 1 (ENVIRONMENTAL)	43730	R2 - New York City - Regional HQ	69.19	22.13	17.55	0.50	34.60
										Task 73310 Sub Total:	4,231.89	3,509.68	119.00	6,676.51
										Report Total:	4,231.89	3,509.68	119.00	6,676.51

[Close](#)

State Direct \$6,676.51
 State Fringe \$4,231.89
 State Indirect \$3,509.68

Report Total \$14,418.08

EXHIBIT "D"

[date]

[Respondent name and address]

RE: Satisfactory Completion Letter/No Further Action Letter
Site No.:
Site Name:

Dear Respondent:

This letter is sent to notify Respondent that it has satisfactorily completed the **Site Management Plan** and submitted the **Final Engineering Report** of the remediation project that Respondent undertook under the Consent Order Index No. [REDACTED] for Address, Town and Village of, County, New York (Tax Map/Parcel No. [REDACTED]) ("Site"). The New York State Department of Environmental Conservation ("Department") has determined, subject to the Department's reservation of rights outlined below, contained in the Consent Order, or existing at law, based upon our inspection of the above-referenced Site and upon our review of the documents you have submitted, that you completed the project in accordance with the terms and conditions of the above-referenced Order and no further remedial action (other than implementation of the Site Management Plan if required) is necessary. As a result, the Department is issuing this Satisfactory Completion/No Further Action Letter for the project.

Notwithstanding that the Department has determined that no further remedial action is necessary with the respect to the Site, the Department reserves any and all rights and authority, including rights concerning any claim for natural resource damages or the authority to engage in or require any further investigation or remediation the Department deems necessary. The Department retains all its respective rights concerning circumstances where Respondent, their lessees, sublessees, successors, or assigns cause or permit a Release or threat of Release at the site of any hazardous substance (as that term is defined at 42 USC 9601[14]) or petroleum (as that term is defined in Navigation Law § 172[15]).

Additionally, with respect to the site, nothing contained in this letter shall be construed to:

- preclude the State of New York on behalf of the New York State Environmental Protection and Spill Compensation Fund from recovering a claim of any kind or nature against any party;
- prejudice any rights of the Department to take any investigatory action or remediation or corrective measures it may deem necessary if Respondent fails to comply with the Order or if contamination other than contamination within the present knowledge of the Department is encountered at the Site;
- prohibit the Commissioner or his duly authorized representative from exercising any summary abatement powers.

In conclusion, the Department is pleased to be part of this effort to return the site to productive use and benefit to the entire community.

If you have any questions, please do not hesitate to contact [project manager], site project manager, at [telephone number].

Sincerely,

Andrew Guglielmi
Director
Division of Environmental Remediation

ec: [list appropriate staff]

APPENDIX "A"

STANDARD CLAUSES FOR ALL NEW YORK STATE STATE SUPERFUND ORDERS

The parties to the State Superfund Order (hereinafter "Order") agree to be bound by the following clauses which are hereby made a part of the Order. The word "Respondent" herein refers to any party to the Order, other than the New York State Department of Environmental Conservation (hereinafter "Department").

I. Citizen Participation Plan

Within twenty (20) days after the effective date of this Order, Respondent shall submit for review and approval a written citizen participation plan prepared in accordance with the requirements of ECL §27-1417 and 6 NYCRR sections 375-1.10 and 375-3.10. Upon approval, the Citizen Participation Plan shall be deemed to be incorporated into and made a part of this Order.

II. Initial Submittal

Within thirty (30) days after the effective date of this Order, Respondent shall submit to the Department a Records Search Report prepared in accordance with Exhibit "B" attached to the Order. The Records Search Report can be limited if the Department notifies Respondent that prior submissions satisfy specific items required for the Records Search Report.

III. Development, Performance, and Reporting of Work Plans

A. Work Plan Requirements

All activities at the Site that comprise any element of an Inactive Hazardous Waste Disposal Site Remedial Program shall be conducted pursuant to one or more Department-approved work plans ("Work Plan" or "Work Plans") and this Order and all activities shall be consistent with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 C.F.R. Part 300, as required under CERCLA, 42 U.S.C. § 9600 *et seq.* The Work Plan(s) under this Order shall address both on-Site and off-Site conditions and shall be developed and implemented in accordance with 6 NYCRR § 375-

1.6(a), 375-3.6, and 375-6. All Department-approved Work Plans shall be incorporated into and become enforceable parts of this Order. Upon approval of a Work Plan by the Department, Respondent shall implement such Work Plan in accordance with the schedule contained therein. Nothing in this Subparagraph shall mandate that any particular Work Plan be submitted.

The Work Plans shall be captioned as follows:

1. Site Characterization ("SC") Work Plan: a Work Plan which provides for the identification of the presence of any hazardous waste disposal at the Site;
2. Remedial Investigation/Feasibility Study ("RI/FS") Work Plan: a Work Plan which provides for the investigation of the nature and extent of contamination within the boundaries of the Site and emanating from such Site and a study of remedial alternatives to address such on-site and off-site contamination;
3. Remedial Design/Remedial Action ("RD/RA") Work Plan: a Work Plan which provides for the development and implementation of final plans and specifications for implementing the remedial alternative set forth in the ROD;
4. "IRM Work Plan" if the Work Plan provides for an interim remedial measure;
5. "Site Management Plan" if the Work Plan provides for the identification and implementation of institutional and/or engineering controls as well as any necessary monitoring and/or operation and maintenance of the remedy; or
6. "Supplemental" if additional work plans other than those set forth in II.A.1-5 are required to be prepared and implemented.

B. Submission/Implementation of Work Plans

1. Respondent may opt to propose one or more additional or supplemental Work Plans (including one or more IRM Work Plans) at any time, which the Department shall review for appropriateness and technical sufficiency.

2. Any proposed Work Plan shall be submitted for the Department's review and approval and shall include, at a minimum, a chronological description of the anticipated activities, a schedule for performance of those activities, and sufficient detail to allow the Department to evaluate that Work Plan.

i. The Department shall notify Respondent in writing if the Department determines that any element of a Department-approved Work Plan needs to be modified in order to achieve the objectives of the Work Plan as set forth in Subparagraph III.A or to ensure that the Remedial Program otherwise protects human health and the environment. Upon receipt of such notification, Respondent shall, subject to dispute resolution pursuant to Paragraph XV, modify the Work Plan.

ii. The Department may request, subject to dispute resolution pursuant to Paragraph XV, that Respondent submit additional or supplemental Work Plans for the Site to complete the current remedial phase within thirty (30) Days after the Department's written request.

3. A Site Management Plan, if necessary, shall be submitted in accordance with the schedule set forth in the IRM Work Plan or Remedial Work Plan.

4. During all field activities conducted under a Department-approved Work Plan, Respondent shall have on-Site a representative who is qualified to supervise the activities undertaken in accordance with the provisions of 6 NYCRR 375-1.6(a)(3).

5. A Professional Engineer licensed and registered in New York State must stamp and sign all Work Plans other than SC or RI/FS Work Plans.

C. Submission of Final Reports and Periodic Reports

I. In accordance with the schedule contained in a Work Plan, Respondent shall submit a final report as provided at 6 NYCRR 375-1.6(b) and

a final engineering report as provided at 6 NYCRR 375-1.6(c).

2. Any final report or final engineering report that includes construction activities shall include "as built" drawings showing any changes made to the remedial design or the IRM.

3. In the event that the final engineering report for the Site requires Site management, Respondent shall submit an initial periodic report by in accordance with the schedule in the Site Management Plan and thereafter in accordance with a schedule determined by the Department. Such periodic report shall be signed by a Professional Engineer or by such other qualified environmental professional as the Department may find acceptable and shall contain a certification as provided at 6 NYCRR 375-1.8(h)(3). Respondent may petition the Department for a determination that the institutional and/or engineering controls may be terminated. Such petition must be supported by a statement by a Professional Engineer that such controls are no longer necessary for the protection of public health and the environment. The Department shall not unreasonably withhold its approval of such petition.

4. Within sixty (60) days of the Department's approval of a Final Report, Respondent shall submit such additional Work Plans as is required by the Department in its approval letter of such Final Report. Failure to submit any additional Work Plans within such period shall be a violation of this Order.

D. Review of Submittals

1. The Department shall make a good faith effort to review and respond in writing to each submittal Respondent makes pursuant to this Order within sixty (60) Days. The Department's response shall include, in accordance with 6 NYCRR 375-1.6(d), an approval, modification request, or disapproval of the submittal, in whole or in part.

i. Upon the Department's written approval of a Work Plan, such Department-approved Work Plan shall be deemed to be incorporated into and made a part of this Order and shall be implemented in accordance with the schedule contained therein.

ii. If the Department modifies or requests modifications to a submittal, it shall specify the reasons for such modification(s). Within fifteen

(15) Days after the date of the Department's written notice that Respondent's submittal has been disapproved, Respondent shall notify the Department of its election in accordance with 6 NYCRR 375-1.6(d)(3). If Respondent elects to modify or accept the Department's modifications to the submittal, Respondent shall make a revised submittal that incorporates all of the Department's modifications to the first submittal in accordance with the time period set forth in 6 NYCRR 375-1.6(d)(3). In the event that Respondent's revised submittal is disapproved, the Department shall set forth its reasons for such disapproval in writing and Respondent shall be in violation of this Order unless it invokes dispute resolution pursuant to Paragraph XV and its position prevails. Failure to make an election or failure to comply with the election is a violation of this Order.

iii. If the Department disapproves a submittal, it shall specify the reasons for its disapproval. Within fifteen (15) Days after the date of the Department's written notice that Respondent's submittal has been disapproved, Respondent shall notify the Department of its election in accordance with 6 NYCRR 375-1.6(d)(4). If Respondent elects to modify the submittal, Respondent shall make a revised submittal that addresses all of the Department's stated reasons for disapproving the first submittal in accordance with the time period set forth in 6 NYCRR 375-1.6(d)(4). In the event that Respondent's revised submittal is disapproved, the Department shall set forth its reasons for such disapproval in writing and Respondent shall be in violation of this Order unless it invokes dispute resolution pursuant to Paragraph XV and its position prevails. Failure to make an election or failure to comply with the election is a violation of this Order.

2. Within thirty (30) Days after the Department's approval of a final report, Respondent shall submit such final report, as well as all data gathered and drawings and submittals made pursuant to such Work Plan, in an electronic format acceptable to the Department. If any document cannot be converted into electronic format, Respondent shall submit such document in an alternative format acceptable to the Department.

E. Department's Issuance of a ROD

1. Respondent shall cooperate with the Department and provide reasonable assistance, consistent with the Citizen Participation Plan, in soliciting public comment on the proposed remedial action plan ("PRAP"), if any. After the close of the

public comment period, the Department shall select a final remedial alternative for the Site in a ROD. Nothing in this Order shall be construed to abridge any rights of Respondent, as provided by law, to judicially challenge the Department's ROD.

2. Respondent shall have 60 days from the date of the Department's issuance of the ROD to notify the Department in writing whether it will implement the remedial activities required by such ROD. If the Respondent elects not to implement the required remedial activities, then this order shall terminate in accordance with Paragraph XIV.A. Failure to make an election or failure to comply with the election is a violation of this Order.

F. Institutional/Engineering Control Certification

In the event that the remedy for the Site, if any, or any Work Plan for the Site, requires institutional or engineering controls, Respondent shall submit a written certification in accordance with 6 NYCRR 375-1.8(h)(3) and 375-3.8(h)(2).

IV. Penalties

A. 1. Respondent's failure to comply with any term of this Order constitutes a violation of this Order, the ECL, and 6 NYCRR 375-2.11(a)(4). Nothing herein abridges Respondent's right to contest any allegation that it has failed to comply with this Order.

2. Payment of any penalties shall not in any way alter Respondent's obligations under this Order.

B. 1. Respondent shall not suffer any penalty or be subject to any proceeding or action in the event it cannot comply with any requirement of this Order as a result of any Force Majeure Event as provided at 6 NYCRR 375-1.5(b)(4). Respondent must use best efforts to anticipate the potential Force Majeure Event, best efforts to address any such event as it is occurring, and best efforts following the Force Majeure Event to minimize delay to the greatest extent possible. "Force Majeure" does not include Respondent's economic inability to comply with any obligation, the failure of Respondent to make complete and timely application for any required approval or permit, and non-attainment of the goals, standards, and requirements of this Order.

2. Respondent shall notify the Department in writing within five (5) Days of the onset of any Force Majeure Event. Failure to give such notice within such five (5) Day period constitutes a waiver of any claim that a delay is not subject to penalties. Respondent shall be deemed to know of any circumstance which it, any entity controlled by it, or its contractors knew or should have known.

3. Respondent shall have the burden of proving by a preponderance of the evidence that (i) the delay or anticipated delay has been or will be caused by a Force Majeure Event; (ii) the duration of the delay or the extension sought is warranted under the circumstances; (iii) best efforts were exercised to avoid and mitigate the effects of the delay; and (iv) Respondent complied with the requirements of Subparagraph IV.B.2 regarding timely notification.

4. If the Department agrees that the delay or anticipated delay is attributable to a Force Majeure Event, the time for performance of the obligations that are affected by the Force Majeure Event shall be extended for a period of time equivalent to the time lost because of the Force majeure event, in accordance with 375-1.5(4).

5. If the Department rejects Respondent's assertion that an event provides a defense to non-compliance with this Order pursuant to Subparagraph IV.B, Respondent shall be in violation of this Order unless it invokes dispute resolution pursuant to Paragraph XV and Respondent's position prevails.

V. Entry upon Site

A. Respondent hereby consents, upon reasonable notice under the circumstances presented, to entry upon the Site (or areas in the vicinity of the Site which may be under the control of Respondent) by any duly designated officer or employee of the Department or any State agency having jurisdiction with respect to matters addressed pursuant to this Order, and by any agent, consultant, contractor, or other person so authorized by the Commissioner, all of whom shall abide by the health and safety rules in effect for the Site, for inspecting, sampling, copying records related to the contamination at the Site, testing, and any other activities necessary to ensure Respondent's compliance with this Order. Upon request, Respondent shall (i) provide the Department with suitable work space at the Site, including access to a telephone, to the extent available, and (ii) permit the Department full access to all non-privileged records relating to matters addressed by this Order.

Raw data is not considered privileged and that portion of any privileged document containing raw data must be provided to the Department. In the event Respondent is unable to obtain any authorization from third-party property owners necessary to perform its obligations under this Order, the Department may, consistent with its legal authority, assist in obtaining such authorizations.

B. The Department shall have the right to take its own samples and scientific measurements and the Department and Respondent shall each have the right to obtain split samples, duplicate samples, or both, of all substances and materials sampled. The Department shall make the results of any such sampling and scientific measurements available to Respondent.

VI. Payment of State Costs

A. Within forty-five (45) days after receipt of an itemized invoice from the Department, Respondent shall pay to the Department a sum of money which shall represent reimbursement for State Costs as provided by 6 NYCRR 375-1.5 (b)(3)(i). Failure to timely pay any invoice will be subject to late payment charge and interest at a rate of 9% from the date the payment is due until the date the payment is made.

B. Costs shall be documented as provided by 6 NYCRR 375-1.5(b)(3). The Department shall not be required to provide any other documentation of costs, provided however, that the Department's records shall be available consistent with, and in accordance with, Article 6 of the Public Officers Law.

C. Each such payment shall be made payable to the New York State Department of Environmental Conservation and shall be sent to:

Director, Bureau of Program Management
Division of Environmental Remediation
New York State Department of Environmental
Conservation
625 Broadway
Albany, New York 12233-7012

D. The Department shall provide written notification to the Respondent of any change in the foregoing addresses.

E. If Respondent objects to any invoiced costs under this Order, the provisions of 6 NYCRR 375-1.5 (b)(3)(v) and (vi) shall apply. Objections shall be

sent to the Department as provided under subparagraph VI.C above.

F. In the event of non-payment of any invoice within the 45 days provided herein, the Department may seek enforcement of this provision pursuant to Paragraph IV or the Department may commence an enforcement action for non-compliance with ECL '27-1423 and ECL 71-4003.

VII. Release and Covenant Not to Sue

Upon the Department's issuance of a Certificate of Completion as provided at 6 NYCRR 375-1.9 and 375-2.9, Respondent shall obtain the benefits conferred by such provisions, subject to the terms and conditions described therein.

VIII. Reservation of Rights

A. Except as provided at 6 NYCRR 375-1.9 and 375-2.9, nothing contained in this Order shall be construed as barring, diminishing, adjudicating, or in any way affecting any of the Department's rights or authorities, including, but not limited to, the right to require performance of further investigations and/or response action(s), to recover natural resource damages, and/or to exercise any summary abatement powers with respect to any person, including Respondent.

B. Except as otherwise provided in this Order, Respondent specifically reserves all rights and defenses under applicable law respecting any Departmental assertion of remedial liability and/or natural resource damages against Respondent, and further reserves all rights respecting the enforcement of this Order, including the rights to notice, to be heard, to appeal, and to any other due process. The existence of this Order or Respondent's compliance with it shall not be construed as an admission of liability, fault, wrongdoing, or breach of standard of care by Respondent, and shall not give rise to any presumption of law or finding of fact, or create any rights, or grant any cause of action, which shall inure to the benefit of any third party. Further, Respondent reserves such rights as it may have to seek and obtain contribution, indemnification, and/or any other form of recovery from its insurers and from other potentially responsible parties or their insurers for past or future response and/or cleanup costs or such other costs or damages arising from the contamination at the Site as may be provided by law, including but not limited to rights of contribution

under section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B).

IX. Indemnification

Respondent shall indemnify and hold the Department, the State of New York, the Trustee of the State's natural resources, and their representatives and employees harmless as provided by 6 NYCRR 375-2.5(a)(3)(i).

X. Public Notice

A. Within thirty (30) Days after the effective date of this Order, Respondent shall provide notice as required by 6 NYCRR 375-1.5(a). Within sixty (60) Days of such filing, Respondent shall provide the Department with a copy of such instrument certified by the recording officer to be a true and faithful copy.

B. If Respondent proposes to transfer by sale or lease the whole or any part of Respondent's interest in the Site, or becomes aware of such transfer, Respondent shall, not fewer than forty-five (45) Days before the date of transfer, or within forty-five (45) Days after becoming aware of such conveyance, notify the Department in writing of the identity of the transferee and of the nature and proposed or actual date of the conveyance, and shall notify the transferee in writing, with a copy to the Department, of the applicability of this Order. However, such obligation shall not extend to a conveyance by means of a corporate reorganization or merger or the granting of any rights under any mortgage, deed, trust, assignment, judgment, lien, pledge, security agreement, lease, or any other right accruing to a person not affiliated with Respondent to secure the repayment of money or the performance of a duty or obligation.

XI. Change of Use

Applicant shall notify the Department at least sixty (60) days in advance of any change of use, as defined in 6 NYCRR 375-2.2(a), which is proposed for the Site, in accordance with the provisions of 6 NYCRR 375-1.11(d). In the event the Department determines that the proposed change of use is prohibited, the Department shall notify Applicant of such determination within forty-five (45) days of receipt of such notice.

XII. Environmental Easement

A. If a Record of Decision for the Site relies upon one or more institutional and/or engineering controls, Respondent (or the owner of the Site) shall submit to the Department for approval an Environmental Easement to run with the land in favor of the State which complies with the requirements of ECL Article 71, Title 36, and 6 NYCRR 375-1.8(h)(2). Upon acceptance of the Environmental Easement by the State, Respondent shall comply with the requirements of 6 NYCRR 375-1.8(h)(2).

B. If the ROD provides for no action other than implementation of one or more institutional controls, Respondent shall cause an environmental easement to be recorded under the provisions of Subparagraph XII.A.

C. If Respondent does not cause such environmental easement to be recorded in accordance with 6 NYCRR 375-1.8(h)(2), Respondent will not be entitled to the benefits conferred by 6 NYCRR 375-1.9 and 375-2.9 and the Department may file an Environmental Notice on the site.

XIII. Progress Reports

Respondent shall submit a written progress report of its actions under this Order to the parties identified in Subparagraph IV.A.1 of the Order by the 10th day of each month commencing with the month subsequent to the approval of the first Work Plan and ending with the Termination date as set forth in Paragraph XIV, unless a different frequency is set forth in a Work Plan. Such reports shall, at a minimum, include: all actions relative to the Site during the previous reporting period and those anticipated for the next reporting period; all approved activity modifications (changes of work scope and/or schedule); all results of sampling and tests and all other data received or generated by or on behalf of Respondent in connection with this Site, whether under this Order or otherwise, in the previous reporting period, including quality assurance/quality control information; information regarding percentage of completion; unresolved delays encountered or anticipated that may affect the future schedule and efforts made to mitigate such delays; and information regarding activities undertaken in support of the Citizen Participation Plan during the previous reporting period and those anticipated for the next reporting period.

XIV. Termination of Order

A. This Order will terminate upon the earlier of the following events:

1. Respondent's election in accordance with Paragraph III.E.2 not to implement the remedial activities required pursuant to the ROD. In the event of termination in accordance with this Subparagraph, this Order shall terminate effective the 5th Day after the Department's receipt of the written notification, provided, however, that if there are one or more Work Plan(s) for which a final report has not been approved at the time of Respondent's notification of its election not to implement the remedial activities in accordance with the ROD, Respondent shall complete the activities required by such previously approved Work Plan(s) consistent with the schedules contained therein. Thereafter, this Order shall terminate effective the 5th Day after the Department's approval of the final report for all previously approved Work Plans; or

2. The Department's written determination that Respondent has completed all phases of the Remedial Program (including Site Management), in which event the termination shall be effective on the 5th Day after the date of the Department's letter stating that all phases of the remedial program have been completed.

B. Notwithstanding the foregoing, the provisions contained in Paragraphs VI and IX shall survive the termination of this Order and any violation of such surviving Paragraphs shall be a violation of this Order, the ECL, and 6 NYCRR 375-2.11(a)(4), subjecting Respondent to penalties as provided under Paragraph IV so long as such obligations accrued on or prior to the Termination Date.

C. If the Order is terminated pursuant to Subparagraph XIV.A.1, neither this Order nor its termination shall affect any liability of Respondent for remediation of the Site and/or for payment of State Costs, including implementation of removal and remedial actions, interest, enforcement, and any and all other response costs as defined under CERCLA, nor shall it affect any defenses to such liability that may be asserted by Respondent. Respondent shall also ensure that it does not leave the Site in a condition, from the perspective of human health and environmental protection, worse than that which existed before any activities under this Order were commenced. Further, the Department's efforts in obtaining and overseeing compliance with this Order shall constitute reasonable efforts under law to obtain

a voluntary commitment from Respondent for any further activities to be undertaken as part of a Remedial Program for the Site.

XV. Dispute Resolution

A. In the event disputes arise under this Order, Respondent may, within fifteen (15) Days after Respondent knew or should have known of the facts which are the basis of the dispute, initiate dispute resolution in accordance with the provisions of 6 NYCRR 375-1.5(b)(2).

B. All cost incurred by the Department associated with dispute resolution are State costs subject to reimbursement pursuant to this Order.

C. Nothing contained in this Order shall be construed to authorize Respondent to invoke dispute resolution with respect to the remedy selected by the Department in the ROD or any element of such remedy, nor to impair any right of Respondent to seek judicial review of the Department's selection of any remedy.

XVI. Miscellaneous

A. Respondent agrees to comply with and be bound by the provisions of 6 NYCRR Subparts 375-1 and 375-2; the provisions of such Subparts that are referenced herein are referenced for clarity and convenience only and the failure of this Order to specifically reference any particular regulatory provision is not intended to imply that such provision is not applicable to activities performed under this Order.

B. The Department may exempt Respondent from the requirement to obtain any state or local permit or other authorization for any activity conducted pursuant to this Order in accordance with 6 NYCRR 375-1.12(b), (c), and (d).

C. 1. Respondent shall use best efforts to obtain all Site access, permits, easements, approvals, institutional controls, and/or authorizations necessary to perform Respondent's obligations under this Order, including all Department-approved Work Plans and the schedules contained therein. If, despite Respondent's best efforts, any access, permits, easements, approvals, institutional controls, or authorizations cannot be obtained, Respondent shall promptly notify the Department and include a summary of the steps taken. The Department may, as

it deems appropriate and within its authority, assist Respondent in obtaining same.

2. If an interest in property is needed to implement an institutional control required by a Work Plan and such interest cannot be obtained, the Department may require Respondent to modify the Work Plan pursuant to 6 NYCRR 375-1.6(d)(3) to reflect changes necessitated by Respondent's inability to obtain such interest.

D. The paragraph headings set forth in this Order are included for convenience of reference only and shall be disregarded in the construction and interpretation of any provisions of this Order.

E. 1. The terms of this Order shall constitute the complete and entire agreement between the Department and Respondent concerning the implementation of the activities required by this Order. No term, condition, understanding, or agreement purporting to modify or vary any term of this Order shall be binding unless made in writing and subscribed by the party to be bound. No informal advice, guidance, suggestion, or comment by the Department shall be construed as relieving Respondent of Respondent's obligation to obtain such formal approvals as may be required by this Order. In the event of a conflict between the terms of this Order and any Work Plan submitted pursuant to this Order, the terms of this Order shall control over the terms of the Work Plan(s). Respondent consents to and agrees not to contest the authority and jurisdiction of the Department to enter into or enforce this Order.

2. i. Except as set forth herein, if Respondent desires that any provision of this Order be changed, Respondent shall make timely written application to the Commissioner with copies to the parties listed in Subparagraph IV.A.1.

ii. If Respondent seeks to modify an approved Work Plan, a written request shall be made to the Department's project manager, with copies to the parties listed in Subparagraph IV.A.1.

iii. Requests for a change to a time frame set forth in this Order shall be made in writing to the Department's project attorney and project manager; such requests shall not be unreasonably denied and a written response to such requests shall be sent to Respondent promptly.

F. 1. If there are multiple parties signing this Order, the term "Respondent" shall be read in the plural, the obligations of each such party under this Order are joint and several, and the insolvency of or failure by any Respondent to implement any obligations under this Order shall not affect the obligations of the remaining Respondent(s) under this Order.

2. If Respondent is a partnership, the obligations of all general partners (including limited partners who act as general partners) under this Order are joint and several and the insolvency or failure of any general partner to implement any obligations under this Order shall not affect the obligations of the remaining partner(s) under this Order.

3. Notwithstanding the foregoing

Subparagraphs XVI.F.1 and 2, if multiple parties sign this Order as Respondents but not all of the signing parties elect to implement a Work Plan, all Respondents are jointly and severally liable for each and every obligation under this Order through the completion of activities in such Work Plan that all such parties consented to; thereafter, only those Respondents electing to perform additional work shall be jointly and severally liable under this Order for the obligations and activities under such additional Work Plan(s). The parties electing not to implement the additional Work Plan(s) shall have no obligations under this Order relative to the activities set forth in such Work Plan(s). Further, only those Respondents electing to implement such additional Work Plan(s) shall be eligible to receive the release and covenant not to sue referenced in Paragraph VII.

G. Respondent shall be entitled to receive contribution protection and/or to seek contribution to the extent authorized by ECL 27-1421(6) and 6 NYCRR 375-1.5(b)(5).

H. Unless otherwise expressly provided herein, terms used in this Order which are defined in ECL Article 27 or in regulations promulgated thereunder shall have the meaning assigned to them under said statute or regulations.

I. Respondent's obligations under this Order represent payment for or reimbursement of response costs, and shall not be deemed to constitute any type of fine or penalty.

J. Respondent and Respondent's successors and assigns shall be bound by this Order. Any change in ownership or corporate status of

Respondent shall in no way alter Respondent's responsibilities under this Order.

K. This Order may be executed for the convenience of the parties hereto, individually or in combination, in one or more counterparts, each of which shall be deemed to have the status of an executed original and all of which shall together constitute one and the same

Appendix C
Verizon Building
Indoor Air Report

Dermody Consulting
Geologists and Environmental Scientists
32 Chichester Avenue, Center Moriches, NY 11934
Tel 631.878.3510 Fax 631.878.3560

April 29, 2009

Mr. Joseph O'Connell
New York State Department
of Environmental Conservation
Division of Environmental Remediation
Hunters Point Plaza
47-40 21st St.
Long Island City, NY 11101

Re: **250 Livonia Avenue**
Brooklyn, New York

Dear Mr. O'Connell:

Dermody Consulting has completed the further investigation of the soil and groundwater at the above-referenced property. The purpose of the investigation was to provide additional information regarding the eastern extent of soil and groundwater contamination for the purpose of preparing a plan for the site's remediation. In addition to the further investigation, additional soil was excavated from the area of significantly elevated contamination to the west of the concrete dumpster platform.

Alleyway Soil Sampling

One additional soil boring was performed in the eastern half of the alleyway to assist in the delineation of the corridor of contamination that was previously found to exist in the soil from the back door of the common area to the concrete dumpster platform during the previous investigation. Figure 1 shows the soil sampling location. The soil sampling location, SB-22, was selected to be approximately 20 feet to the east of the formerly easternmost sample, SB-21 (at which low levels of tetrachloroethylene were detected in the shallow soil).

The samples were obtained with a Geoprobe sampling rig continuously from the ground surface to the water table (which occurs at a depth of approximately 20 feet). Photoionization detector (PID) readings were obtained for each five-foot core (see Attachment A for the soil boring log and PID readings). Two soil samples were obtained from the boring: from 0 to 1 foot, and from 18 to 20 feet below grade.

The results of the soil sampling are summarized in Table 1 (the laboratory report for all analyses for this investigation is presented in Attachment A) and show that the shallow

soil, which was expected to show little or no contamination, was found to contain 4,200 ug/kg of tetrachloroethylene. The deeper sample showed no detection of tetrachloroethylene.

Based on this finding, it appears that relatively minor amounts of tetrachloroethylene appear to be present in the eastern portion of the alleyway. It is not expected that there is a significant source of tetrachloroethylene in this area since the two easternmost samples (SB-21 and SB-22) showed relatively minor concentrations of tetrachloroethylene 990 and 4200 ug/kg, respectively) in the shallow soil, and no PID readings or laboratory detections in the deeper soil. In addition, there is no evidence of significant groundwater contamination downgradient of this area. Since the former Sep's Cleaners was located at the west end of the alleyway, and the corridor of known significant contamination is generally confined to the area from the back door to the dumpster, the presence of tetrachloroethylene at the eastern half of the alley is unexplained. However, since the contamination seems to be limited to the shallow soil, it does not appear to represent a source area of groundwater contamination.

Groundwater Sampling

A total of nine additional groundwater samples were obtained from three locations to assist in the delineation of the eastern limits of the groundwater contamination. The groundwater sample locations are shown in Figure 1. At each location, groundwater samples were obtained from depth intervals of 20 to 22, 30 to 32, and 40 to 42 feet below grade. Samples were obtained with dedicated polyethylene tubing with a check valve. The samples were transferred to vials with Teflon septa with zero headspace.

The results of the groundwater sampling are summarized in Table 2. The results show that tetrachloroethylene was detected at all locations at relatively low concentrations. As was shown during prior groundwater sampling, the results show that the most impacted groundwater is generally confined to the shallow zone and concentrations generally decrease with depth. However, since there is upgradient contamination known to be present at low to moderate concentrations in the intermediate and deeper zones (as discussed in our previous report), it appears that the contamination in the intermediate and deeper zones at the site is emanating wholly or in part from upgradient, off-site sources. The eastern extent of groundwater contamination in the alleyway is considered to be the area at GP-20 (since the maximum concentration of tetrachloroethylene was 69 ug/l), and the eastern extent of the plume in the south parking area is considered to be the area of GP-21 (since the maximum concentration of tetrachloroethylene was 62 ug/l). Since there is known upgradient, off-site contamination, it does not appear to be possible to locate the exact position where the two plumes intersect.

Supplemental Soil Excavation

As stated in our March 10, 2009 letter report, contaminated soil was removed from the area adjacent and west of the concrete dumpster platform in the alleyway at the rear of the site. The purpose of the project was to remove the most significantly contaminated soil since this would likely reduce the duration and cost of future anticipated soil vapor extraction. Although significantly contaminated soil was removed, the end sampling

results indicated that additional significantly contaminated soil remained. Therefore, the excavation was revisited and additional soil was removed from the north and northeast walls, as well as the base of the initial excavation.

The additional soil excavation was performed on April 8, 2009. Prior to commencing the excavation, weather conditions were recorded with a Davis weather station. The temperature was 43 degrees, the barometric pressure was 29.76 inches of Hg, and the wind direction was east to west at speeds that varied between 0 and 5.6 miles per hour. After determination of the prevailing wind direction, an MIE PDR-1000AN dust monitor was zeroed in the upwind area and then placed approximately 30 feet downwind of the excavation location. A Photovac 2020 photoionization detector (PID) was calibrated on site to a 100 parts per million (ppm) isobutylene standard. The upwind pre-excavation PID reading was 0 ppm.

The first step was to excavate the clean fill that was placed in the excavation following the previous soil removal. The removed backfill soil was placed on plastic.

Upon removal of the backfilled sand, tetrachloroethylene odors were noted. The PID reading at four feet above the north rim of the excavation fluctuated between 0 and 5 parts per million (ppm) and one foot below the north rim, the readings were up to 585 ppm. The downwind PID readings were all zero for the duration of the excavation. Also, the dust particulate concentrations were 0.000 micrograms per cubic meter (ug/m³). No visible dust was generated during the excavation.

The original area of excavation of 12 by 6 feet, and 6 feet deep, was expanded to 14 by 10 feet, and a depth of 7 feet (see Figure 2). Approximately 15 additional cubic yards of contaminated soil were removed from the excavation and placed on a plastic liner in the area to the south of the concrete dumpster platform, in the parking area. The soil was covered with heavy-gage plastic sheeting and then eight wooden pallets were placed over the plastic to keep it in place.

Three end samples were obtained from the areas where the excavation was expanded: the north wall, the northeast wall, and the base of the excavation. The samples were sent for laboratory analysis for volatile organic compounds by US Environmental Protection Agency Method 8260. The results are summarized in Table 3 and show that the second round of excavation significantly reduced the concentrations of tetrachloroethylene remaining in the soil in this area. The additional excavation along the north wall reduced the tetrachloroethylene concentrations from 1,900,000 ug/kg following the first excavation, to 31,000 ug/kg. The end sample from the base of the excavation was reduced from 290,000 to 65,000 ug/kg. Therefore, the soil excavation is considered to be complete and the remaining soil contamination will be addressed in the Remediation Work Plan.

Following the completion of the excavation, the previous backfill was replaced in the excavation and additional clean backfill was placed in the excavation. For the excavated contaminant soil pile, a waste characterization sample was obtained and analyzed to

provide to the disposal facility. The contaminated soil is expected to be removed within a few days.

Summary

As a result of the series of investigations that have been performed at the site, the nature and extent of contamination in the soil, groundwater, and soil vapor have been sufficiently delineated to allow for the preparation of a Remedial Work Plan.

The Remedial Work Plan would include a summary of all previous investigations including site drawings showing the concentrations of contaminants at each sampling locations as well as a graphical representation of the limits of the contamination in the soil and groundwater.

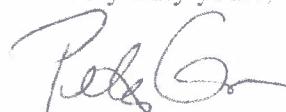
Since all geological information regarding the characteristics of the soil at the site has indicated that the subsurface conditions are sufficiently permeable, the report will consist of a plan for the remediation of the site using soil vapor extraction (SVE) and air sparging (AS). The AS system will be designed to remove contaminants from the groundwater and transfer them to the vadose zone. The SVE system will be designed to remove contamination from the soil, including the contaminated vapors generated by the AS system. The SVE system will be designed to assure that vapors from beneath the western portion of the building are collected, as well as the corridor of soil contamination from the back door to the dumpster platform. In addition, since there appears to be sporadic limited areas of relatively minor contamination in the shallow soil in the eastern half of the alleyway, the SVE system will be designed to address this area as well.

Finally, as discussed previously, two permanent groundwater monitoring wells will be installed in the south parking area to monitor the progress of the remediation.

Upon your approval, Dermody Consulting will commence preparation of the Remedial Work Plan.

Should you have any questions, please do not hesitate to contact me.

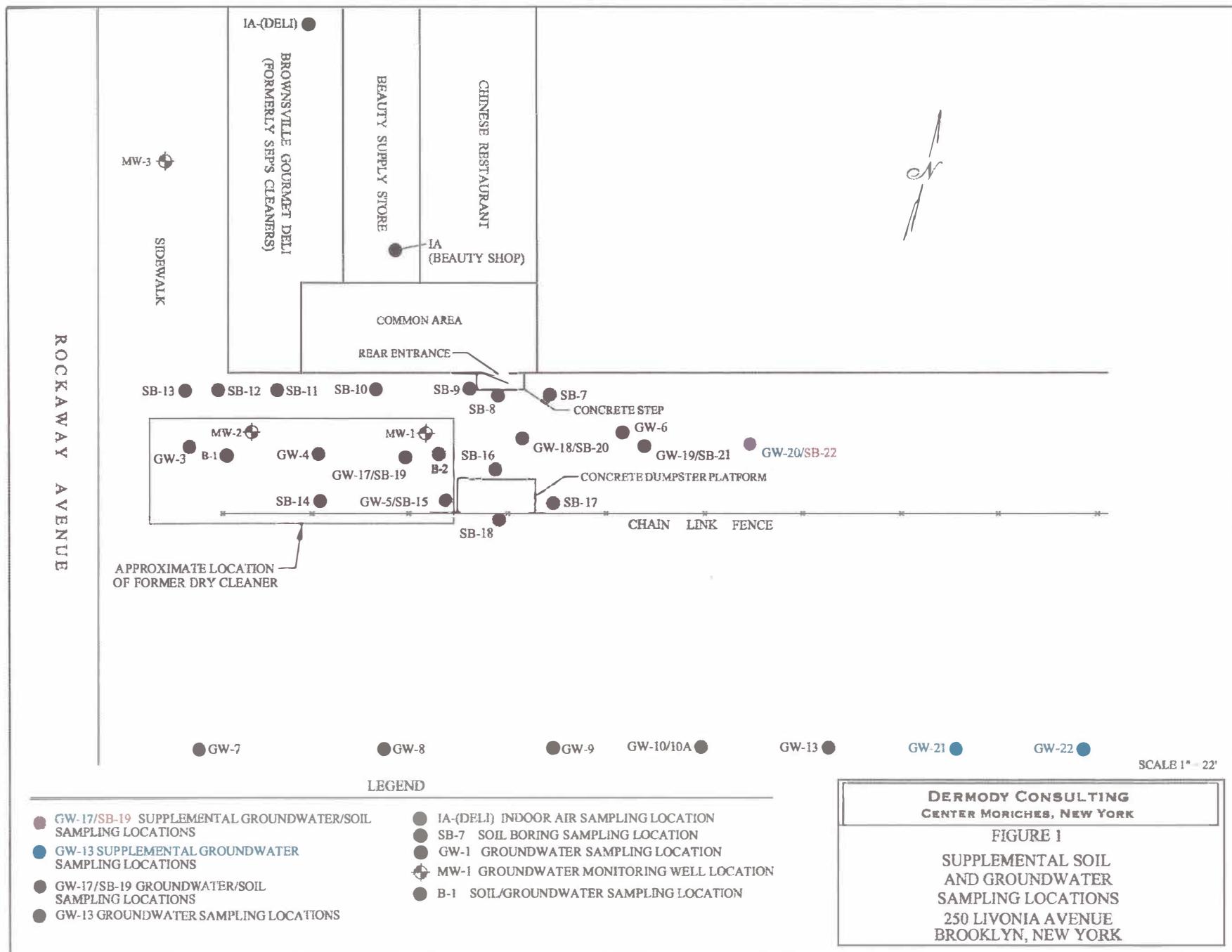
Very truly yours,

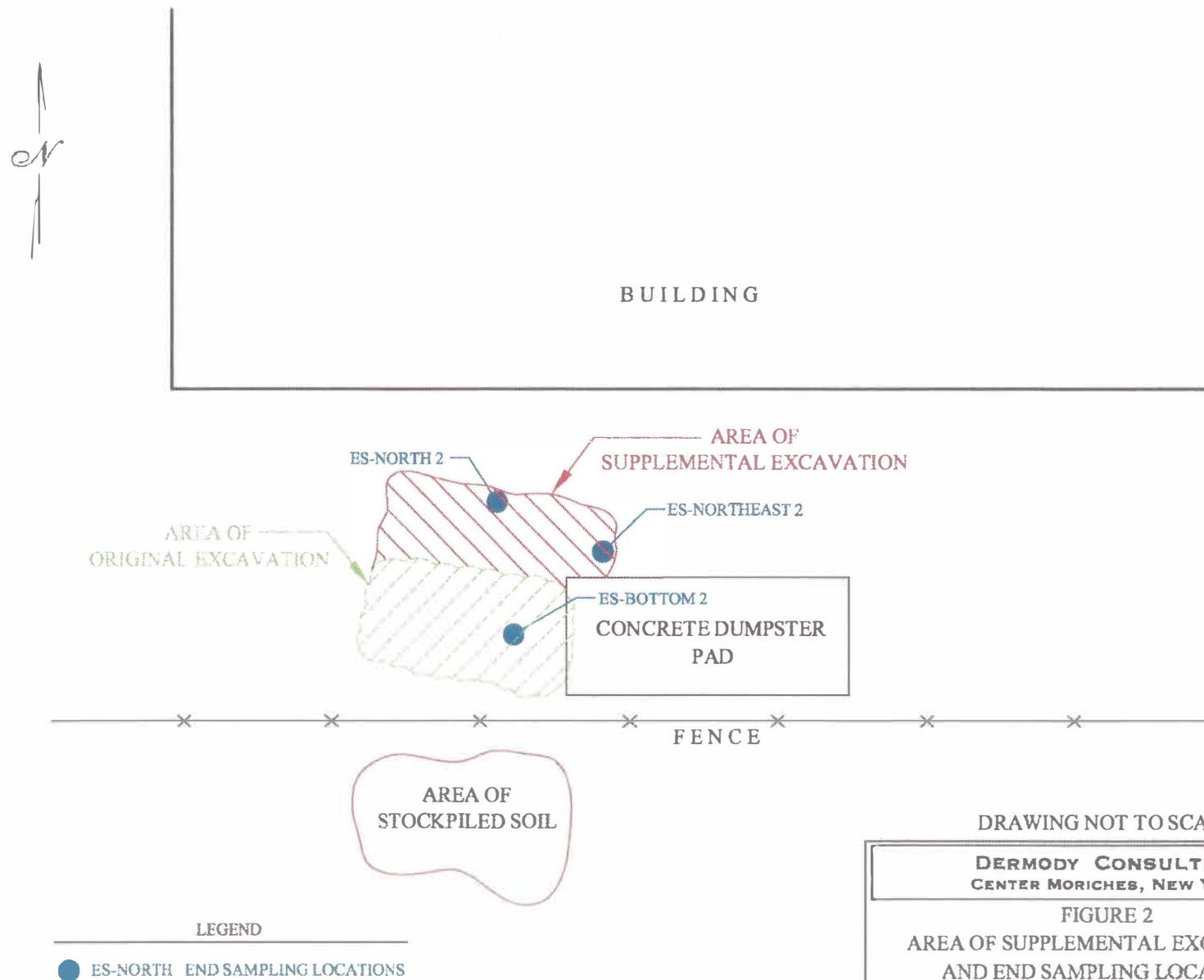


Peter Dermody, C.P.G.
Principal Hydrogeologist

enclosures

cc: Deborah Widerkehr
Barry Light
Barry S. Cohen





DRAWING NOT TO SCALE

DERMODY CONSULTING
Center Moriches, New York

FIGURE 2
AREA OF SUPPLEMENTAL EXCAVATION
AND END SAMPLING LOCATIONS
250 LIVONIA AVENUE
BROOKLYN, NEW YORK

Table 1
Soil Chemical Analytical Results
250 Livonia Avenue
Brooklyn, New York

April 2009

Sample ID	SB-22		NYSDEC Restricted Use Soil Cleanup Objectives
Sample Depth (in feet below grade)	0 - 1	18 - 20	
Volatile Organic Compounds (in micrograms per kilogram)			
Tetrachloroethylene	4,200	ND	1,300

Notes:

Only detected analytes are reported.

ND = Not Detected

Bolded values indicate an exceedance of the New York State Department of Environmental Conservation (NYSDEC) Restricted Use soil Cleanup Objectives for the Protection of Groundwater as per Subpart 375-6.

Table 2
Groundwater Chemical Analytical Results
250 Livonia Avenue
Brooklyn, New York

April 2009

Sample ID	GP-20			GP-21			GP-22			NYSDEC Restricted Use Soil Cleanup Objectives
Sample Depth (in feet below grade)	20-22	30-32	40-42	20-22	30-32	40-42	20-22	30-32	40-42	
Volatile Organic Compounds (in micrograms per liter)										
cis-1,2-Dichloroethylene	15	ND	ND	ND	ND	ND	ND	ND	ND	5*
Tetrachloroethylene	69	27	12	62	26	13	6	20	17	5*
Trichloroethylene	11	ND	ND	5	ND	ND	ND	ND	ND	5*

Notes:

Only detected analytes are reported.

ND = Not Detected

* = The Principal Organic Contaminant applies.

Bolded values indicate an exceedance of the New York State Department of Environmental Conservation (NYSDEC) Restricted Use Soil Cleanup Objectives for the Protection of Groundwater as per Subpart 375-6.

Table 3
Soil Chemical Analytical Results
250 Livonia Avenue
Brooklyn, New York

April 2009

Sample ID	ES-North 2	ES-Northeast 2	ES-Bottom 2	NYSDEC Restricted Use Soil Cleanup Objectives
Volatile Organic Compounds (in micrograms per kilogram)				
cis-1,2-Dichloroethylene	ND	ND	8,100	250
Tetrachloroethylene	31,000	450	65,000	1,300
Trichloroethylene	ND	ND	9,300	470

Notes:

Only detected analytes are reported.

ND = Not Detected

Bolded values indicate an exceedance of the New York State Department of Environmental Conservation (NYSDEC) Restricted Use soil Cleanup Objectives for the Protection of Groundwater as per Subpart 375-6.

Appendix D

Reports and Waste

Disposal Documentation for IRM

Dermody Consulting
Geologists and Environmental Scientists
32 Chichester Avenue, Center Moriches, NY 11934
Tel 631.878.3510 Fax 631.878.3560

July 9, 2009

Mr. Joseph O'Connell
New York State Department
of Environmental Conservation
Division of Environmental Remediation
Hunters Point Plaza
47-40 21st St.
Long Island City, NY 11101

**Re: 250 Livonia Avenue
Brooklyn, New York**

Dear Mr. O'Connell:

Please find the enclosed disposal manifests for the 32.65 tons of F002 hazardous soil that were removed from the above-referenced site.

Should you have any questions, please do not hesitate to contact me.

Very truly yours,



Peter Dermody, C.P.G.
Principal Hydrogeologist

enclosure

cc: Barry Light
Deborah Widerkehr
Barry S. Cohen

Wayne Disposal, Inc.
49350 North I-94 Service Drive, Belleville, Michigan 48111

Receipt

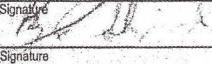
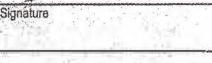
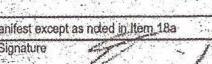
PEI DISPOSAL GROUP INC
2545 HEMPSTEAD PIKE
E MEADOW, NY 11554

Receipt ID: 1173691
EQ Account #: 11927
Manifest / BOL: 002815441JK
Transporter: HORWITH
Date: 06/15/2009
Time In: 2:38 PM
Time Out: 4:33 PM

Line	Description	Qty. Unit
	Generator	
1 - A	F091043WDI - F002 Soil Hazardous Surcharge Ton NYD093769354 BROWNSVILLE DELI	8.930 TONS 8.930 TONS
	Gross: 48,360 Tare: 30,500 Net: 17,860	

NO SALVAGING ON PREMISES

Page 1 of 1

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number NYD093769354	2. Page 1 of 1	3. Emergency Response Phone (516) 605-2110	4. Manifest Tracking Number 002815441 JJK	
5. Generator's Name and Mailing Address BROWNSVILLE DELI C/O CPG RESOURCES INC. 28 EAST 38TH STREET, 9TH FLOOR NEW YORK, NY 10016		Generator's Site Address (if different than mailing address) 256 LIVONIA AVENUE BROOKLYN, NY 11212				
6. Transporter 1 Company Name HORWITZ TRUCKS, INC.		U.S. EPA ID Number PAD146714878				
7. Transporter 2 Company Name		U.S. EPA ID Number				
8. Designated Facility Name and Site Address WAYNE DISPOSAL, INC. SITE 2 LANDFILL 49350 N I-94 SERVICE DRIVE BELLEVILLE, MI 48111		U.S. EPA ID Number MID048900633				
Facility's Phone: (800) 592-5489						
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) X NA3077, Hazardous waste solid, n.o.s., 9, PGIII	10. Containers No. XX1	11. Total Quantity DT	12. Unit Wt./Vol. F002	13. Waste Codes
	1.					
	2.					
	3.					
	4.					
14. Special Handling Instructions and Additional Information P091043 WDI						
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.						
Generator's/Officer's Printed/Typed Name John Tornach		Signature 		Month 11	Day 12	Year 2009
TRANSPORTER INT'L	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.	Port of entry/exit: _____ Date leaving U.S.: _____				
	17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name John Tornach	Signature 		Month 11	Day 12	Year 2009
	Transporter 2 Printed/Typed Name 	Signature 		Month 	Day 	Year
DESIGNATED FACILITY	18. Discrepancy 18a. Discrepancy Indication Space 100% CERTIFIED	<input type="checkbox"/> Quantity	<input type="checkbox"/> Type	<input type="checkbox"/> Residue	<input type="checkbox"/> Partial Rejection	<input type="checkbox"/> Full Rejection
	Manifest Reference Number: BU 1509					
	18b. Alternate Facility (or Generator) Facility's Phone: 	U.S. EPA ID Number				
18c. Signature of Alternate Facility (or Generator) David Tornach	Signature 					
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) 1. 1132 2. 3. 4.						
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a Printed/typed Name David Tornach	Signature 					

EPA Form 8700-22 (Rev. 3-05). Previous editions are obsolete.

TRANSPORTER'S COPY

Wayne Disposal, Inc.
49350 North I-94 Service Drive, Belleville, Michigan 48111

Receipt

PEI DISPOSAL GROUP INC
2545 HEMPSTEAD PIKE
E MEADOW, NY 11554

Receipt ID: 1173689
EQ Account #: 11927
Manifest / BOL: 002815440JJK
Transporter: HORWITH
Date: 06/15/2009
Time In: 12:57 PM
Time Out: 2:06 PM

Line	Description	Qty. Unit
	Generator	
1 - A	F091043WDI - F002 Soil Hazardous Surcharge Ton NYD093769354 BROWNSVILLE DELI	23.720 TONS 23.720 TONS
	Gross: 77,240	Tare: 29,800
		Net: 47,440

forrest P
62335
592

NO SALVAGING ON PREMISES
Page 1 of 1

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
UNIFORM HAZARDOUS WASTE MANIFEST	NYD093769354	1 (516) 605-2110	002815440 JJK
5. Generator's Name and Mailing Address		Generator's Site Address (different than mailing address)	
C/O CPG RESOURCES INC. 28 EAST 38TH STREET, 9TH FLOOR NEW YORK, NY 10016 (212) 869-5300		258 LIVONIA AVENUE BROOKLYN, NY 11212	
6. Transporter 1 Company Name		U.S. EPA ID Number	
HORWITZ TRUCKS, INC.		PAD146714878	
7. Transporter 2 Company Name		U.S. EPA ID Number	
8. Designated Facility Name and Site Address		U.S. EPA ID Number	
WAYNE DISPOSAL, INC. SITE 2 LANDFILL 4350 N I-94 SERVICE DRIVE BELLEVILLE, MI 48111		MID048090633	
Facility's Phone:		(800) 592-5489	
9a. HM		9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	
1.		10. Containers	11. Total Quantity
X NA3077, Hazardous waste solid, n.o.s., 9, PGITI		XXI DT	4/8000 P
2.			
3.			
4.			
14. Special Handling Instructions and Additional Information		F091043 WDI	
15. GENERATOR/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.			
Generator/Offeror's Printed/Typed Name		Signature	
MICHAEL OELIN		16 17 09	
16. International Shipments		Import to U.S. <input type="checkbox"/> Export from U.S. <input type="checkbox"/>	
Transporter signature (for exports only):		Port of entry/exit: Date leaving U.S.:	
17. Transporter's Acknowledgment of Receipt of Materials		Signature	
Transporter 1 Printed/Typed Name		16 17 09	
Forrest Joner		Signature	
Transporter 2 Printed/Typed Name		16 17 09	
18. Discrepancy		Signature	
18a. Discrepancy Indication Space		18b. Alternate Facility (or Generator)	
<input type="checkbox"/> Quantity		<input type="checkbox"/> Type	
<input type="checkbox"/> Residue		<input type="checkbox"/> Partial Rejection	
<input type="checkbox"/> Full Rejection		Manifest Reference Number:	
Facility's Phone:		U.S. EPA ID Number	
18c. Signature of Alternate Facility (or Generator)		Month Day Year	
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)			
1. 1132		2. 3. 4.	
20. Designated Facility-Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a			
Printed/Typed Name		Signature	
Nathaniel Enright		Nathaniel Enright 06 15 09	



Photo 1: The remediation shed containing the AS/SVE components. The shed is located in the parking lot adjacent and south of both the Site building and rear driveway.

Appendix E

Site Photographs



Photo 2: View of east end of the trench and piping and connections to wells AS-3 and AS-4 to the right, and wells SVE-6 and SVE-7 to the left. The trench was underlain with four inches of clean sand prior to installing the pipes.



Photo 3: The piping at the lower left of the photo runs in from the east end of the trench, then turns south toward the parking lot, and then upwards, above ground, for connection to the remediation compound.

Appendix F

Laboratory Reports



Technical Report

prepared for:

Dermody Consulting, Inc.
32 Chichester Ave., 2nd Floor
Center Moriches NY, 11934
Attention: Peter Dermody

Report Date: 04/22/2024
Client Project ID: Livonia Ave
York Project (SDG) No.: 24D0236

Stratford, CT Laboratory IDs:
NY:10854, NJ: CT005, PA: 68-0440, CT: PH-0723



Richmond Hill, NY Laboratory IDs:
NY:12058, NJ: NY037, CT: PH-0721, NH: 2097,
EPA: NY01600

120 RESEARCH DRIVE
www.YORKLAB.com

STRATFORD, CT 06615
(203) 325-1371

■
132-02 89th AVENUE
FAX (203) 357-0166

RICHMOND HILL, NY 11418
ClientServices@yorklab.com

Report Date: 04/22/2024
Client Project ID: Livonia Ave
York Project (SDG) No.: 24D0236

Dermody Consulting, Inc.
32 Chichester Ave., 2nd Floor
Center Moriches NY, 11934
Attention: Peter Dermody

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 April 03, 2024 and listed below. The project was identified as your project: **Livonia Ave.**

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.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
24D0236-01	GD (IA-1)	Indoor Ambient Air	03/30/2024	04/03/2024
24D0236-02	PZ (IA-2)	Indoor Ambient Air	03/30/2024	04/03/2024
24D0236-03	SM (IA-3)	Indoor Ambient Air	03/30/2024	04/03/2024
24D0236-04	CR (IA-4)	Indoor Ambient Air	03/30/2024	04/03/2024
24D0236-05	OA (OA-1)	Outdoor Ambient Air	03/30/2024	04/03/2024

General Notes for York Project (SDG) No.: 24D0236

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, NJ Cert No. CT005, PA Cert No. 68-04440, CT Cert No. PH-0723; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058, NJ Cert No. NY037, CT Cert No. PH-0721, NH Cert No. 2097, EPA Cert No. NY01600.

Approved By:



Date: 04/22/2024

Cassie L. Mosher
Laboratory Manager





Sample Information

Client Sample ID: **GD (IA-1)**

York Sample ID: **24D0236-01**

York Project (SDG) No.
24D0236

Client Project ID
Livonia Ave

Matrix
Indoor Ambient Air

Collection Date/Time
March 30, 2024 9:00 am

Date Received
04/03/2024

VOA, TO15 Isooctane (2,2,4-TMP) Add On

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
540-84-1	* 2,2,4-Trimethylpentane	ND		ug/m ³	0.186	0.796	EPA TO-15 Certifications:	04/16/2024 10:00	04/16/2024 22:48	VH

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/m ³	0.55	0.796	EPA TO-15 Certifications:	04/16/2024 10:00	04/16/2024 22:48	VH
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	0.43	0.796	EPA TO-15 Certifications:	04/16/2024 10:00	04/16/2024 22:48	VH
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	0.55	0.796	EPA TO-15 Certifications:	04/16/2024 10:00	04/16/2024 22:48	VH
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	0.61	0.796	EPA TO-15 Certifications:	04/16/2024 10:00	04/16/2024 22:48	VH
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.43	0.796	EPA TO-15 Certifications:	04/16/2024 10:00	04/16/2024 22:48	VH
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.32	0.796	EPA TO-15 Certifications:	04/16/2024 10:00	04/16/2024 22:48	VH
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.079	0.796	EPA TO-15 Certifications:	04/16/2024 10:00	04/16/2024 22:48	VH
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	0.59	0.796	EPA TO-15 Certifications:	04/16/2024 10:00	04/16/2024 22:48	VH
95-63-6	1,2,4-Trimethylbenzene	0.70		ug/m ³	0.39	0.796	EPA TO-15 Certifications:	04/16/2024 10:00	04/16/2024 22:48	VH
106-93-4	1,2-Dibromoethane	ND		ug/m ³	0.61	0.796	EPA TO-15 Certifications:	04/16/2024 10:00	04/16/2024 22:48	VH
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.48	0.796	EPA TO-15 Certifications:	04/16/2024 10:00	04/16/2024 22:48	VH
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.32	0.796	EPA TO-15 Certifications:	04/16/2024 10:00	04/16/2024 22:48	VH
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.37	0.796	EPA TO-15 Certifications:	04/16/2024 10:00	04/16/2024 22:48	VH
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	0.56	0.796	EPA TO-15 Certifications:	04/16/2024 10:00	04/16/2024 22:48	VH
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m ³	0.39	0.796	EPA TO-15 Certifications:	04/16/2024 10:00	04/16/2024 22:48	VH



Sample Information

Client Sample ID: **GD (IA-1)**

York Sample ID: **24D0236-01**

York Project (SDG) No.

24D0236

Client Project ID

Livonia Ave

Matrix

Indoor Ambient Air

Collection Date/Time

March 30, 2024 9:00 am

Date Received

04/03/2024

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
106-99-0	1,3-Butadiene	ND		ug/m ³	0.53	0.796	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/16/2024 10:00	04/16/2024 22:48	VH
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.48	0.796	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/16/2024 10:00	04/16/2024 22:48	VH
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	0.37	0.796	EPA TO-15 Certifications:	04/16/2024 10:00	04/16/2024 22:48	VH
106-46-7	1,4-Dichlorobenzene	0.48		ug/m ³	0.48	0.796	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/16/2024 10:00	04/16/2024 22:48	VH
123-91-1	1,4-Dioxane	ND		ug/m ³	0.57	0.796	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/16/2024 10:00	04/16/2024 22:48	VH
78-93-3	2-Butanone	2.1		ug/m ³	0.23	0.796	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/16/2024 10:00	04/16/2024 22:48	VH
591-78-6	* 2-Hexanone	1.6		ug/m ³	0.65	0.796	EPA TO-15 Certifications:	04/16/2024 10:00	04/16/2024 22:48	VH
107-05-1	3-Chloropropene	ND		ug/m ³	1.2	0.796	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/16/2024 10:00	04/16/2024 22:48	VH
108-10-1	4-Methyl-2-pentanone	0.82		ug/m ³	0.33	0.796	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/16/2024 10:00	04/16/2024 22:48	VH
67-64-1	Acetone	66		ug/m ³	1.8	1.494	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/16/2024 10:00	04/19/2024 18:55	YR
107-13-1	Acrylonitrile	0.19		ug/m ³	0.17	0.796	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/16/2024 10:00	04/16/2024 22:48	VH
71-43-2	Benzene	1.5		ug/m ³	0.25	0.796	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/16/2024 10:00	04/16/2024 22:48	VH
100-44-7	Benzyl chloride	ND		ug/m ³	0.41	0.796	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/16/2024 10:00	04/16/2024 22:48	VH
75-27-4	Bromodichloromethane	ND		ug/m ³	0.53	0.796	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/16/2024 10:00	04/16/2024 22:48	VH
75-25-2	Bromoform	ND		ug/m ³	0.82	0.796	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/16/2024 10:00	04/16/2024 22:48	VH
74-83-9	Bromomethane	ND		ug/m ³	0.31	0.796	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/16/2024 10:00	04/16/2024 22:48	VH
75-15-0	Carbon disulfide	ND		ug/m ³	0.25	0.796	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/16/2024 10:00	04/16/2024 22:48	VH
56-23-5	Carbon tetrachloride	0.50		ug/m ³	0.13	0.796	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/16/2024 10:00	04/16/2024 22:48	VH
108-90-7	Chlorobenzene	ND		ug/m ³	0.37	0.796	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/16/2024 10:00	04/16/2024 22:48	VH
75-00-3	Chloroethane	ND		ug/m ³	0.21	0.796	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/16/2024 10:00	04/16/2024 22:48	VH



Sample Information

Client Sample ID: **GD (IA-1)**

York Sample ID: **24D0236-01**

York Project (SDG) No.

24D0236

Client Project ID

Livonia Ave

Matrix

Indoor Ambient Air

Collection Date/Time

March 30, 2024 9:00 am

Date Received

04/03/2024

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
67-66-3	Chloroform	2.4		ug/m ³	0.39	0.796	EPA TO-15	04/16/2024 10:00	04/16/2024 22:48	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
74-87-3	Chloromethane	0.89		ug/m ³	0.16	0.796	EPA TO-15	04/16/2024 10:00	04/16/2024 22:48	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.079	0.796	EPA TO-15	04/16/2024 10:00	04/16/2024 22:48	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.36	0.796	EPA TO-15	04/16/2024 10:00	04/16/2024 22:48	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
110-82-7	Cyclohexane	0.49		ug/m ³	0.27	0.796	EPA TO-15	04/16/2024 10:00	04/16/2024 22:48	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
124-48-1	Dibromochloromethane	ND		ug/m ³	0.68	0.796	EPA TO-15	04/16/2024 10:00	04/16/2024 22:48	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
75-71-8	Dichlorodifluoromethane	2.3		ug/m ³	0.39	0.796	EPA TO-15	04/16/2024 10:00	04/16/2024 22:48	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
141-78-6	* Ethyl acetate	2.0		ug/m ³	0.57	0.796	EPA TO-15	04/16/2024 10:00	04/16/2024 22:48	VH
							Certifications:			
100-41-4	Ethyl Benzene	0.73		ug/m ³	0.35	0.796	EPA TO-15	04/16/2024 10:00	04/16/2024 22:48	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
87-68-3	Hexachlorobutadiene	ND		ug/m ³	0.85	0.796	EPA TO-15	04/16/2024 10:00	04/16/2024 22:48	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
67-63-0	Isopropanol	31		ug/m ³	0.98	0.796	EPA TO-15	04/16/2024 10:00	04/16/2024 22:48	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.33	0.796	EPA TO-15	04/16/2024 10:00	04/16/2024 22:48	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.29	0.796	EPA TO-15	04/16/2024 10:00	04/16/2024 22:48	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
75-09-2	Methylene chloride	1.6		ug/m ³	0.55	0.796	EPA TO-15	04/16/2024 10:00	04/16/2024 22:48	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
91-20-3	* Naphthalene	ND		ug/m ³	0.83	0.796	EPA TO-15	04/16/2024 10:00	04/16/2024 22:48	VH
							Certifications:	NJDEP-NY037		
142-82-5	n-Heptane	2.1		ug/m ³	0.33	0.796	EPA TO-15	04/16/2024 10:00	04/16/2024 22:48	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
110-54-3	n-Hexane	1.4		ug/m ³	0.28	0.796	EPA TO-15	04/16/2024 10:00	04/16/2024 22:48	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
95-47-6	o-Xylene	0.90		ug/m ³	0.35	0.796	EPA TO-15	04/16/2024 10:00	04/16/2024 22:48	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
179601-23-1	p- & m- Xylenes	2.4		ug/m ³	0.69	0.796	EPA TO-15	04/16/2024 10:00	04/16/2024 22:48	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
622-96-8	* p-Ethyltoluene	0.67		ug/m ³	0.39	0.796	EPA TO-15	04/16/2024 10:00	04/16/2024 22:48	VH
							Certifications:			



Sample Information

Client Sample ID: **GD (IA-1)**

York Sample ID: **24D0236-01**

York Project (SDG) No.

24D0236

Client Project ID

Livonia Ave

Matrix

Indoor Ambient Air

Collection Date/Time

March 30, 2024 9:00 am

Date Received

04/03/2024

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
115-07-1	* Propylene	ND		ug/m³	0.14	0.796	EPA TO-15 Certifications:	04/16/2024 10:00	04/16/2024 22:48	VH
100-42-5	Styrene	0.51		ug/m³	0.34	0.796	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/16/2024 10:00	04/16/2024 22:48	VH
127-18-4	Tetrachloroethylene	1.7		ug/m³	0.54	0.796	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/16/2024 10:00	04/16/2024 22:48	VH
109-99-9	* Tetrahydrofuran	0.61		ug/m³	0.47	0.796	EPA TO-15 Certifications:	04/16/2024 10:00	04/16/2024 22:48	VH
108-88-3	Toluene	9.9		ug/m³	0.30	0.796	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/16/2024 10:00	04/16/2024 22:48	VH
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.32	0.796	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/16/2024 10:00	04/16/2024 22:48	VH
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.36	0.796	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/16/2024 10:00	04/16/2024 22:48	VH
79-01-6	Trichloroethylene	ND		ug/m³	0.11	0.796	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/16/2024 10:00	04/16/2024 22:48	VH
75-69-4	Trichlorofluoromethane (Freon 11)	1.0		ug/m³	0.45	0.796	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/16/2024 10:00	04/16/2024 22:48	VH
108-05-4	Vinyl acetate	ND		ug/m³	0.28	0.796	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/16/2024 10:00	04/16/2024 22:48	VH
593-60-2	Vinyl bromide	ND		ug/m³	0.35	0.796	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/16/2024 10:00	04/16/2024 22:48	VH
75-01-4	Vinyl Chloride	ND		ug/m³	0.10	0.796	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/16/2024 10:00	04/16/2024 22:48	VH

Sample Information

Client Sample ID: **PZ (IA-2)**

York Sample ID: **24D0236-02**

York Project (SDG) No.

24D0236

Client Project ID

Livonia Ave

Matrix

Indoor Ambient Air

Collection Date/Time

March 30, 2024 9:00 am

Date Received

04/03/2024

VOA, TO15 Isooctane (2,2,4-TMP) Add On

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
540-84-1	* 2,2,4-Trimethylpentane	0.728		ug/m³	0.214	0.917	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 20:57	VH

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:



Sample Information

Client Sample ID: **PZ (IA-2)**

York Sample ID: **24D0236-02**

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
24D0236	Livonia Ave	Indoor Ambient Air	March 30, 2024 9:00 am	04/03/2024

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/m ³	0.63	0.917	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 20:57	VH
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	0.50	0.917	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 20:57	VH
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	0.63	0.917	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 20:57	VH
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	0.70	0.917	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 20:57	VH
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.50	0.917	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 20:57	VH
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.37	0.917	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 20:57	VH
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.091	0.917	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 20:57	VH
120-82-1	1,2,4-Trichlorobenzene	ND	ICVE	ug/m ³	0.68	0.917	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 20:57	VH
95-63-6	1,2,4-Trimethylbenzene	0.45		ug/m ³	0.45	0.917	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 20:57	VH
106-93-4	1,2-Dibromoethane	ND		ug/m ³	0.70	0.917	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 20:57	VH
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.55	0.917	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 20:57	VH
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.37	0.917	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 20:57	VH
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.42	0.917	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 20:57	VH
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	0.64	0.917	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 20:57	VH
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m ³	0.45	0.917	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 20:57	VH
106-99-0	1,3-Butadiene	ND		ug/m ³	0.61	0.917	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 20:57	VH
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.55	0.917	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 20:57	VH
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	0.42	0.917	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 20:57	VH
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	0.55	0.917	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 20:57	VH
123-91-1	1,4-Dioxane	ND		ug/m ³	0.66	0.917	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 20:57	VH



Sample Information

Client Sample ID: **PZ (IA-2)**

York Sample ID: **24D0236-02**

York Project (SDG) No.

24D0236

Client Project ID

Livonia Ave

Matrix

Indoor Ambient Air

Collection Date/Time

March 30, 2024 9:00 am

Date Received

04/03/2024

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
78-93-3	2-Butanone	2.5		ug/m ³	0.27	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
591-78-6	* 2-Hexanone	ND		ug/m ³	0.75	0.917	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 20:57	VH
107-05-1	3-Chloropropene	ND		ug/m ³	1.4	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	0.38	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
67-64-1	Acetone	63		ug/m ³	1.7	1.442	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/18/2024 18:17	VH
107-13-1	Acrylonitrile	0.78		ug/m ³	0.20	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
71-43-2	Benzene	7.9		ug/m ³	0.29	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
100-44-7	Benzyl chloride	ND		ug/m ³	0.47	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
75-27-4	Bromodichloromethane	ND		ug/m ³	0.61	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
75-25-2	Bromoform	ND		ug/m ³	0.95	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
74-83-9	Bromomethane	ND		ug/m ³	0.36	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
75-15-0	Carbon disulfide	ND		ug/m ³	0.29	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
56-23-5	Carbon tetrachloride	0.63		ug/m ³	0.14	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
108-90-7	Chlorobenzene	ND		ug/m ³	0.42	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
75-00-3	Chloroethane	ND		ug/m ³	0.24	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
67-66-3	Chloroform	7.0		ug/m ³	0.45	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
74-87-3	Chloromethane	16	TO-CC V, TO-LC S-H	ug/m ³	0.19	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.091	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.42	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH



Sample Information

Client Sample ID: **PZ (IA-2)**

York Sample ID: **24D0236-02**

York Project (SDG) No.

24D0236

Client Project ID

Livonia Ave

Matrix

Indoor Ambient Air

Collection Date/Time

March 30, 2024 9:00 am

Date Received

04/03/2024

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

<u>CAS No.</u>	<u>Parameter</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>Reported to LOQ</u>	<u>Dilution</u>	<u>Reference Method</u>	<u>Date/Time Prepared</u>	<u>Date/Time Analyzed</u>	<u>Analyst</u>
110-82-7	Cyclohexane	ND		ug/m ³	0.32	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
124-48-1	Dibromochloromethane	ND		ug/m ³	0.78	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
75-71-8	Dichlorodifluoromethane	2.3		ug/m ³	0.45	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
141-78-6	* Ethyl acetate	1.6		ug/m ³	0.66	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
100-41-4	Ethyl Benzene	0.44		ug/m ³	0.40	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
87-68-3	Hexachlorobutadiene	ND		ug/m ³	0.98	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
67-63-0	Isopropanol	410	E, TO-IPA	ug/m ³	1.8	1.442	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/18/2024 18:17	VH
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.38	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.33	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
75-09-2	Methylene chloride	1.3		ug/m ³	0.64	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
91-20-3	* Naphthalene	ND	ICVE	ug/m ³	0.96	0.917	EPA TO-15 Certifications: NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
142-82-5	n-Heptane	1.4		ug/m ³	0.38	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
110-54-3	n-Hexane	0.84		ug/m ³	0.32	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
95-47-6	o-Xylene	0.44		ug/m ³	0.40	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
179601-23-1	p- & m- Xylenes	1.2		ug/m ³	0.80	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
622-96-8	* p-Ethyltoluene	ND		ug/m ³	0.45	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
115-07-1	* Propylene	ND		ug/m ³	0.16	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
100-42-5	Styrene	ND		ug/m ³	0.39	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
127-18-4	Tetrachloroethylene	0.62		ug/m ³	0.62	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH
109-99-9	* Tetrahydrofuran	ND		ug/m ³	0.54	0.917	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 20:57	VH



Sample Information

Client Sample ID: **PZ (IA-2)**

York Sample ID: **24D0236-02**

York Project (SDG) No.

24D0236

Client Project ID

Livonia Ave

Matrix

Indoor Ambient Air

Collection Date/Time

March 30, 2024 9:00 am

Date Received

04/03/2024

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-88-3	Toluene	6.4		ug/m³	0.35	0.917	EPA TO-15	04/17/2024 07:00	04/17/2024 20:57	VH
					Certifications:		NELAC-NY12058,NJDEP-NY037			
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.36	0.917	EPA TO-15	04/17/2024 07:00	04/17/2024 20:57	VH
					Certifications:		NELAC-NY12058,NJDEP-NY037			
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.42	0.917	EPA TO-15	04/17/2024 07:00	04/17/2024 20:57	VH
					Certifications:		NELAC-NY12058,NJDEP-NY037			
79-01-6	Trichloroethylene	ND		ug/m³	0.12	0.917	EPA TO-15	04/17/2024 07:00	04/17/2024 20:57	VH
					Certifications:		NELAC-NY12058,NJDEP-NY037			
75-69-4	Trichlorofluoromethane (Freon 11)	1.4		ug/m³	0.52	0.917	EPA TO-15	04/17/2024 07:00	04/17/2024 20:57	VH
					Certifications:		NELAC-NY12058,NJDEP-NY037			
108-05-4	Vinyl acetate	ND		ug/m³	0.32	0.917	EPA TO-15	04/17/2024 07:00	04/17/2024 20:57	VH
					Certifications:		NELAC-NY12058,NJDEP-NY037			
593-60-2	Vinyl bromide	ND		ug/m³	0.40	0.917	EPA TO-15	04/17/2024 07:00	04/17/2024 20:57	VH
					Certifications:		NELAC-NY12058,NJDEP-NY037			
75-01-4	Vinyl Chloride	ND		ug/m³	0.12	0.917	EPA TO-15	04/17/2024 07:00	04/17/2024 20:57	VH
					Certifications:		NELAC-NY12058,NJDEP-NY037			

Sample Information

Client Sample ID: **SM (IA-3)**

York Sample ID: **24D0236-03**

York Project (SDG) No.

24D0236

Client Project ID

Livonia Ave

Matrix

Indoor Ambient Air

Collection Date/Time

March 30, 2024 9:00 am

Date Received

04/03/2024

VOA, TO15 Isooctane (2,2,4-TMP) Add On

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
540-84-1	* 2,2,4-Trimethylpentane	1.44		ug/m³	0.184	0.788	EPA TO-15	04/17/2024 07:00	04/17/2024 21:57	VH
					Certifications:					

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

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	0.788	EPA TO-15	04/17/2024 07:00	04/17/2024 21:57	VH
					Certifications:					
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.43	0.788	EPA TO-15	04/17/2024 07:00	04/17/2024 21:57	VH
					Certifications:		NELAC-NY12058,NJDEP-NY037			



Sample Information

Client Sample ID: SM (IA-3)

York Sample ID: 24D0236-03

York Project (SDG) No.

24D0236

Client Project ID

Livonia Ave

Matrix

Indoor Ambient Air

Collection Date/Time

March 30, 2024 9:00 am

Date Received

04/03/2024

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
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	0.54	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	0.60	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.43	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.32	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.078	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
120-82-1	1,2,4-Trichlorobenzene	ND	ICVE	ug/m ³	0.58	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
95-63-6	1,2,4-Trimethylbenzene	0.62		ug/m ³	0.39	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
106-93-4	1,2-Dibromoethane	ND		ug/m ³	0.61	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.47	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.32	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.36	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	0.55	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m ³	0.39	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
106-99-0	1,3-Butadiene	ND		ug/m ³	0.52	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.47	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	0.36	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
106-46-7	1,4-Dichlorobenzene	0.66		ug/m ³	0.47	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
123-91-1	1,4-Dioxane	ND		ug/m ³	0.57	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
78-93-3	2-Butanone	4.0		ug/m ³	0.23	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH



Sample Information

Client Sample ID: SM (IA-3)

York Sample ID: 24D0236-03

York Project (SDG) No.

24D0236

Client Project ID

Livonia Ave

Matrix

Indoor Ambient Air

Collection Date/Time

March 30, 2024 9:00 am

Date Received

04/03/2024

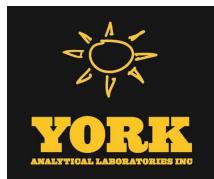
Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	* 2-Hexanone	1.6		ug/m ³	0.65	0.788	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 21:57	VH
107-05-1	3-Chloropropene	ND		ug/m ³	1.2	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	0.32	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
67-64-1	Acetone	550		ug/m ³	8.8	7.4	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/18/2024 19:04	VH
107-13-1	Acrylonitrile	0.72		ug/m ³	0.17	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
71-43-2	Benzene	1.6		ug/m ³	0.25	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
100-44-7	Benzyl chloride	ND		ug/m ³	0.41	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
75-27-4	Bromodichloromethane	ND		ug/m ³	0.53	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
75-25-2	Bromoform	ND		ug/m ³	0.81	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
74-83-9	Bromomethane	ND		ug/m ³	0.31	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
75-15-0	Carbon disulfide	ND		ug/m ³	0.25	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
56-23-5	Carbon tetrachloride	0.99		ug/m ³	0.12	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
108-90-7	Chlorobenzene	ND		ug/m ³	0.36	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
75-00-3	Chloroethane	ND		ug/m ³	0.21	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
67-66-3	Chloroform	5.5		ug/m ³	0.38	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
74-87-3	Chloromethane	3.8	TO-CC V, TO-LC S-H	ug/m ³	0.16	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.078	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.36	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
110-82-7	Cyclohexane	0.57		ug/m ³	0.27	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH



Sample Information

Client Sample ID: SM (IA-3)

York Sample ID: 24D0236-03

York Project (SDG) No.

24D0236

Client Project ID

Livonia Ave

Matrix

Indoor Ambient Air

Collection Date/Time

March 30, 2024 9:00 am

Date Received

04/03/2024

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
124-48-1	Dibromochloromethane	ND		ug/m ³	0.67	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
75-71-8	Dichlorodifluoromethane	2.9		ug/m ³	0.39	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
141-78-6	* Ethyl acetate	4.5		ug/m ³	0.57	0.788	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 21:57	VH
100-41-4	Ethyl Benzene	0.72		ug/m ³	0.34	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
87-68-3	Hexachlorobutadiene	ND		ug/m ³	0.84	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
67-63-0	Isopropanol	18		ug/m ³	0.97	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.32	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.28	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
75-09-2	Methylene chloride	1.8		ug/m ³	0.55	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
91-20-3	* Naphthalene	ND	ICVE	ug/m ³	0.83	0.788	EPA TO-15 Certifications: NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
142-82-5	n-Heptane	6.3		ug/m ³	0.32	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
110-54-3	n-Hexane	1.6		ug/m ³	0.28	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
95-47-6	o-Xylene	0.82		ug/m ³	0.34	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
179601-23-1	p- & m- Xylenes	2.1		ug/m ³	0.68	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
622-96-8	* p-Ethyltoluene	0.54		ug/m ³	0.39	0.788	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 21:57	VH
115-07-1	* Propylene	ND		ug/m ³	0.14	0.788	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 21:57	VH
100-42-5	Styrene	1.1		ug/m ³	0.34	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
127-18-4	Tetrachloroethylene	0.64		ug/m ³	0.53	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
109-99-9	* Tetrahydrofuran	ND		ug/m ³	0.46	0.788	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 21:57	VH
108-88-3	Toluene	30		ug/m ³	0.30	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH



Sample Information

Client Sample ID: SM (IA-3)

York Sample ID: 24D0236-03

York Project (SDG) No.

24D0236

Client Project ID

Livonia Ave

Matrix

Indoor Ambient Air

Collection Date/Time

March 30, 2024 9:00 am

Date Received

04/03/2024

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.31	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.36	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
79-01-6	Trichloroethylene	ND		ug/m³	0.11	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
75-69-4	Trichlorofluoromethane (Freon 11)	1.7		ug/m³	0.44	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
108-05-4	Vinyl acetate	ND		ug/m³	0.28	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
593-60-2	Vinyl bromide	ND		ug/m³	0.34	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH
75-01-4	Vinyl Chloride	ND		ug/m³	0.10	0.788	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 21:57	VH

Sample Information

Client Sample ID: CR (IA-4)

York Sample ID: 24D0236-04

York Project (SDG) No.

24D0236

Client Project ID

Livonia Ave

Matrix

Indoor Ambient Air

Collection Date/Time

March 30, 2024 9:00 am

Date Received

04/03/2024

VOA, TO15 Isooctane (2,2,4-TMP) Add On

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
540-84-1	* 2,2,4-Trimethylpentane	1.47		ug/m³	0.204	0.875	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 22:57	VH

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

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	0.60	0.875	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 22:57	VH
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.48	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.60	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH



Sample Information

Client Sample ID: CR (IA-4)

York Sample ID: 24D0236-04

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
24D0236	Livonia Ave	Indoor Ambient Air	March 30, 2024 9:00 am	04/03/2024

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	0.67	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.48	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.35	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.087	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
120-82-1	1,2,4-Trichlorobenzene	ND	ICVE	ug/m ³	0.65	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
95-63-6	1,2,4-Trimethylbenzene	0.52		ug/m ³	0.43	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
106-93-4	1,2-Dibromoethane	ND		ug/m ³	0.67	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.53	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.35	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.40	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	0.61	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m ³	0.43	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
106-99-0	1,3-Butadiene	ND		ug/m ³	0.58	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.53	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	0.40	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
106-46-7	1,4-Dichlorobenzene	0.58		ug/m ³	0.53	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
123-91-1	1,4-Dioxane	ND		ug/m ³	0.63	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
78-93-3	2-Butanone	3.5		ug/m ³	0.26	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
591-78-6	* 2-Hexanone	0.72		ug/m ³	0.72	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH



Sample Information

Client Sample ID: CR (IA-4)

York Sample ID: 24D0236-04

York Project (SDG) No.

24D0236

Client Project ID

Livonia Ave

Matrix

Indoor Ambient Air

Collection Date/Time

March 30, 2024 9:00 am

Date Received

04/03/2024

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/m ³	1.4	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	0.36	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
67-64-1	Acetone	470		ug/m ³	9.8	8.215	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/18/2024 19:52	VH
107-13-1	Acrylonitrile	4.4		ug/m ³	0.19	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
71-43-2	Benzene	1.4		ug/m ³	0.28	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
100-44-7	Benzyl chloride	ND		ug/m ³	0.45	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
75-27-4	Bromodichloromethane	ND		ug/m ³	0.59	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
75-25-2	Bromoform	ND		ug/m ³	0.90	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
74-83-9	Bromomethane	ND		ug/m ³	0.34	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
75-15-0	Carbon disulfide	ND		ug/m ³	0.27	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
56-23-5	Carbon tetrachloride	1.2		ug/m ³	0.14	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
108-90-7	Chlorobenzene	ND		ug/m ³	0.40	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
75-00-3	Chloroethane	ND		ug/m ³	0.23	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
67-66-3	Chloroform	11		ug/m ³	0.43	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
74-87-3	Chloromethane	5.2	TO-CC V, TO-LC S-H	ug/m ³	0.18	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.087	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.40	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
110-82-7	Cyclohexane	0.48		ug/m ³	0.30	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
124-48-1	Dibromochloromethane	ND		ug/m ³	0.75	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH



Sample Information

Client Sample ID: CR (IA-4)

York Sample ID: 24D0236-04

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
24D0236	Livonia Ave	Indoor Ambient Air	March 30, 2024 9:00 am	04/03/2024

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
75-71-8	Dichlorodifluoromethane	2.8		ug/m³	0.43	0.875	EPA TO-15	04/17/2024 07:00	04/17/2024 22:57	VH
					Certifications:		NELAC-NY12058,NJDEP-NY037			
141-78-6	* Ethyl acetate	4.2		ug/m³	0.63	0.875	EPA TO-15	04/17/2024 07:00	04/17/2024 22:57	VH
					Certifications:					
100-41-4	Ethyl Benzene	0.61		ug/m³	0.38	0.875	EPA TO-15	04/17/2024 07:00	04/17/2024 22:57	VH
					Certifications:		NELAC-NY12058,NJDEP-NY037			
87-68-3	Hexachlorobutadiene	ND		ug/m³	0.93	0.875	EPA TO-15	04/17/2024 07:00	04/17/2024 22:57	VH
					Certifications:		NELAC-NY12058,NJDEP-NY037			
67-63-0	Isopropanol	27		ug/m³	1.1	0.875	EPA TO-15	04/17/2024 07:00	04/17/2024 22:57	VH
					Certifications:		NELAC-NY12058,NJDEP-NY037			
80-62-6	Methyl Methacrylate	ND		ug/m³	0.36	0.875	EPA TO-15	04/17/2024 07:00	04/17/2024 22:57	VH
					Certifications:		NELAC-NY12058,NJDEP-NY037			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.32	0.875	EPA TO-15	04/17/2024 07:00	04/17/2024 22:57	VH
					Certifications:		NELAC-NY12058,NJDEP-NY037			
75-09-2	Methylene chloride	1.5		ug/m³	0.61	0.875	EPA TO-15	04/17/2024 07:00	04/17/2024 22:57	VH
					Certifications:		NELAC-NY12058,NJDEP-NY037			
91-20-3	* Naphthalene	ND	ICVE	ug/m³	0.92	0.875	EPA TO-15	04/17/2024 07:00	04/17/2024 22:57	VH
					Certifications:		NJDEP-NY037			
142-82-5	n-Heptane	3.7		ug/m³	0.36	0.875	EPA TO-15	04/17/2024 07:00	04/17/2024 22:57	VH
					Certifications:		NELAC-NY12058,NJDEP-NY037			
110-54-3	n-Hexane	1.4		ug/m³	0.31	0.875	EPA TO-15	04/17/2024 07:00	04/17/2024 22:57	VH
					Certifications:		NELAC-NY12058,NJDEP-NY037			
95-47-6	o-Xylene	0.72		ug/m³	0.38	0.875	EPA TO-15	04/17/2024 07:00	04/17/2024 22:57	VH
					Certifications:		NELAC-NY12058,NJDEP-NY037			
179601-23-1	p- & m- Xylenes	1.8		ug/m³	0.76	0.875	EPA TO-15	04/17/2024 07:00	04/17/2024 22:57	VH
					Certifications:		NELAC-NY12058,NJDEP-NY037			
622-96-8	* p-Ethyltoluene	0.47		ug/m³	0.43	0.875	EPA TO-15	04/17/2024 07:00	04/17/2024 22:57	VH
					Certifications:					
115-07-1	* Propylene	ND		ug/m³	0.15	0.875	EPA TO-15	04/17/2024 07:00	04/17/2024 22:57	VH
					Certifications:					
100-42-5	Styrene	0.60		ug/m³	0.37	0.875	EPA TO-15	04/17/2024 07:00	04/17/2024 22:57	VH
					Certifications:		NELAC-NY12058,NJDEP-NY037			
127-18-4	Tetrachloroethylene	1.6		ug/m³	0.59	0.875	EPA TO-15	04/17/2024 07:00	04/17/2024 22:57	VH
					Certifications:		NELAC-NY12058,NJDEP-NY037			
109-99-9	* Tetrahydrofuran	4.9		ug/m³	0.52	0.875	EPA TO-15	04/17/2024 07:00	04/17/2024 22:57	VH
					Certifications:					
108-88-3	Toluene	17		ug/m³	0.33	0.875	EPA TO-15	04/17/2024 07:00	04/17/2024 22:57	VH
					Certifications:		NELAC-NY12058,NJDEP-NY037			
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.35	0.875	EPA TO-15	04/17/2024 07:00	04/17/2024 22:57	VH
					Certifications:		NELAC-NY12058,NJDEP-NY037			



Sample Information

Client Sample ID: CR (IA-4)

York Sample ID: 24D0236-04

York Project (SDG) No.

24D0236

Client Project ID

Livonia Ave

Matrix

Indoor Ambient Air

Collection Date/Time

March 30, 2024 9:00 am

Date Received

04/03/2024

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.40	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
79-01-6	Trichloroethylene	ND		ug/m³	0.12	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
75-69-4	Trichlorofluoromethane (Freon 11)	1.6		ug/m³	0.49	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
108-05-4	Vinyl acetate	ND		ug/m³	0.31	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
593-60-2	Vinyl bromide	ND		ug/m³	0.38	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH
75-01-4	Vinyl Chloride	ND		ug/m³	0.11	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 22:57	VH

Sample Information

Client Sample ID: OA (OA-1)

York Sample ID: 24D0236-05

York Project (SDG) No.

24D0236

Client Project ID

Livonia Ave

Matrix

Outdoor Ambient Air

Collection Date/Time

March 30, 2024 9:00 am

Date Received

04/03/2024

VOA, TO15 Isooctane (2,2,4-TMP) Add On

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
540-84-1	* 2,2,4-Trimethylpentane	0.656		ug/m³	0.193	0.826	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 23:56	VH

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

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	0.57	0.826	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 23:56	VH
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.45	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.57	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.63	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH



Sample Information

Client Sample ID: OA (OA-1)

York Sample ID: 24D0236-05

York Project (SDG) No.

24D0236

Client Project ID

Livonia Ave

Matrix

Outdoor Ambient Air

Collection Date/Time

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Date Received

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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
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.45	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.33	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.082	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
120-82-1	1,2,4-Trichlorobenzene	ND	ICVE	ug/m ³	0.61	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m ³	0.41	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
106-93-4	1,2-Dibromoethane	ND		ug/m ³	0.63	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.50	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.33	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.38	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	0.58	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m ³	0.41	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
106-99-0	1,3-Butadiene	ND		ug/m ³	0.55	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.50	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	0.38	0.826	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 23:56	VH
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	0.50	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
123-91-1	1,4-Dioxane	ND		ug/m ³	0.60	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
78-93-3	2-Butanone	1.2		ug/m ³	0.24	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
591-78-6	* 2-Hexanone	ND		ug/m ³	0.68	0.826	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 23:56	VH
107-05-1	3-Chloropropene	ND		ug/m ³	1.3	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH



Sample Information

Client Sample ID: OA (OA-1)

York Sample ID: 24D0236-05

York Project (SDG) No.

24D0236

Client Project ID

Livonia Ave

Matrix

Outdoor Ambient Air

Collection Date/Time

March 30, 2024 9:00 am

Date Received

04/03/2024

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
108-10-1	4-Methyl-2-pentanone	0.37		ug/m ³	0.34	0.826	EPA TO-15	04/17/2024 07:00	04/17/2024 23:56	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
67-64-1	Acetone	23		ug/m ³	0.98	0.826	EPA TO-15	04/17/2024 07:00	04/17/2024 23:56	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
107-13-1	Acrylonitrile	0.63		ug/m ³	0.18	0.826	EPA TO-15	04/17/2024 07:00	04/17/2024 23:56	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
71-43-2	Benzene	1.2		ug/m ³	0.26	0.826	EPA TO-15	04/17/2024 07:00	04/17/2024 23:56	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
100-44-7	Benzyl chloride	ND		ug/m ³	0.43	0.826	EPA TO-15	04/17/2024 07:00	04/17/2024 23:56	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
75-27-4	Bromodichloromethane	ND		ug/m ³	0.55	0.826	EPA TO-15	04/17/2024 07:00	04/17/2024 23:56	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
75-25-2	Bromoform	ND		ug/m ³	0.85	0.826	EPA TO-15	04/17/2024 07:00	04/17/2024 23:56	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
74-83-9	Bromomethane	ND		ug/m ³	0.32	0.826	EPA TO-15	04/17/2024 07:00	04/17/2024 23:56	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
75-15-0	Carbon disulfide	ND		ug/m ³	0.26	0.826	EPA TO-15	04/17/2024 07:00	04/17/2024 23:56	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
56-23-5	Carbon tetrachloride	0.42		ug/m ³	0.13	0.826	EPA TO-15	04/17/2024 07:00	04/17/2024 23:56	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
108-90-7	Chlorobenzene	ND		ug/m ³	0.38	0.826	EPA TO-15	04/17/2024 07:00	04/17/2024 23:56	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
75-00-3	Chloroethane	ND		ug/m ³	0.22	0.826	EPA TO-15	04/17/2024 07:00	04/17/2024 23:56	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
67-66-3	Chloroform	ND		ug/m ³	0.40	0.826	EPA TO-15	04/17/2024 07:00	04/17/2024 23:56	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
74-87-3	Chloromethane	4.4	TO-CC V, TO-LC S-H	ug/m ³	0.17	0.826	EPA TO-15	04/17/2024 07:00	04/17/2024 23:56	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.082	0.826	EPA TO-15	04/17/2024 07:00	04/17/2024 23:56	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.37	0.826	EPA TO-15	04/17/2024 07:00	04/17/2024 23:56	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
110-82-7	Cyclohexane	0.28		ug/m ³	0.28	0.826	EPA TO-15	04/17/2024 07:00	04/17/2024 23:56	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
124-48-1	Dibromochloromethane	ND		ug/m ³	0.70	0.826	EPA TO-15	04/17/2024 07:00	04/17/2024 23:56	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		
75-71-8	Dichlorodifluoromethane	2.2		ug/m ³	0.41	0.826	EPA TO-15	04/17/2024 07:00	04/17/2024 23:56	VH
							Certifications:	NELAC-NY12058,NJDEP-NY037		



Sample Information

Client Sample ID: OA (OA-1)

York Sample ID: 24D0236-05

York Project (SDG) No.

24D0236

Client Project ID

Livonia Ave

Matrix

Outdoor Ambient Air

Collection Date/Time

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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	ND		ug/m ³	0.60	0.826	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 23:56	VH
100-41-4	Ethyl Benzene	0.36		ug/m ³	0.36	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
87-68-3	Hexachlorobutadiene	ND		ug/m ³	0.88	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
67-63-0	Isopropanol	4.3		ug/m ³	1.0	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.34	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.30	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
75-09-2	Methylene chloride	ND		ug/m ³	0.57	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
91-20-3	* Naphthalene	ND	ICVE	ug/m ³	0.87	0.826	EPA TO-15 Certifications: NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
142-82-5	n-Heptane	0.61		ug/m ³	0.34	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
110-54-3	n-Hexane	0.96		ug/m ³	0.29	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
95-47-6	o-Xylene	ND		ug/m ³	0.36	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
179601-23-1	p- & m- Xylenes	0.86		ug/m ³	0.72	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
622-96-8	* p-Ethyltoluene	ND		ug/m ³	0.41	0.826	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 23:56	VH
115-07-1	* Propylene	ND		ug/m ³	0.14	0.826	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 23:56	VH
100-42-5	Styrene	ND		ug/m ³	0.35	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
127-18-4	Tetrachloroethylene	0.56		ug/m ³	0.56	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
109-99-9	* Tetrahydrofuran	ND		ug/m ³	0.49	0.826	EPA TO-15 Certifications:	04/17/2024 07:00	04/17/2024 23:56	VH
108-88-3	Toluene	1.4		ug/m ³	0.31	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	0.33	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	0.37	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH



Sample Information

Client Sample ID: OA (OA-1)

York Sample ID: 24D0236-05

York Project (SDG) No.

24D0236

Client Project ID

Livonia Ave

Matrix

Outdoor Ambient Air

Collection Date/Time

March 30, 2024 9:00 am

Date Received

04/03/2024

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
79-01-6	Trichloroethylene	ND		ug/m ³	0.11	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
75-69-4	Trichlorofluoromethane (Freon 11)	1.3		ug/m ³	0.46	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
108-05-4	Vinyl acetate	ND		ug/m ³	0.29	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
593-60-2	Vinyl bromide	ND		ug/m ³	0.36	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH
75-01-4	Vinyl Chloride	ND		ug/m ³	0.11	0.826	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-NY037	04/17/2024 07:00	04/17/2024 23:56	VH





Sample and Data Qualifiers Relating to This Work Order

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).

ICVE The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration verification (recovery exceeded 30% of expected value).

E The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.

B Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants.

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 current NELAC/TNI 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.



Technical Report

prepared for:

Dermody Consulting, Inc.
32 Chichester Ave., 2nd Floor
Center Moriches NY, 11934
Attention: Peter Dermody

Report Date: 04/14/2023

Client Project ID: Livonia Ave.
York Project (SDG) No.: 23D0020

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

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RICHMOND HILL, NY 11418
ClientServices@yorklab.com

Report Date: 04/14/2023
Client Project ID: Livonia Ave.
York Project (SDG) No.: 23D0020

Dermody Consulting, Inc.
32 Chichester Ave., 2nd Floor
Center Moriches NY, 11934
Attention: Peter Dermody

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 April 03, 2023 and listed below. The project was identified as your project: **Livonia Ave..**

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.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
23D0020-01	IA-1	Indoor Ambient Air	03/31/2023	04/03/2023
23D0020-02	IA-2	Indoor Ambient Air	03/31/2023	04/03/2023
23D0020-03	IA-3	Indoor Ambient Air	03/31/2023	04/03/2023
23D0020-04	IA-4	Indoor Ambient Air	03/31/2023	04/03/2023
23D0020-05	OA-1	Outdoor Ambient Air	03/31/2023	04/03/2023

General Notes for York Project (SDG) No.: 23D0020

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: *Cassie L. Mosher*

Date: 04/14/2023

Cassie L. Mosher
Laboratory Manager





Sample Information

Client Sample ID: IA-1

York Sample ID: 23D0020-01

York Project (SDG) No.
23D0020

Client Project ID
Livonia Ave.

Matrix
Indoor Ambient Air

Collection Date/Time
March 31, 2023 3:00 pm

Date Received
04/03/2023

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/m ³	0.64	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	0.51	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	0.64	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	0.72	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.51	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.38	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.093	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
120-82-1	1,2,4-Trichlorobenzene	ND	TO-CC V, TO-LC S-L	ug/m ³	0.69	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m ³	0.46	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
106-93-4	1,2-Dibromoethane	ND		ug/m ³	0.72	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.56	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.38	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.43	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	0.65	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m ³	0.46	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
106-99-0	1,3-Butadiene	ND		ug/m ³	0.62	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.56	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH



Sample Information

Client Sample ID: IA-1

York Sample ID: 23D0020-01

York Project (SDG) No.

23D0020

Client Project ID

Livonia Ave.

Matrix

Indoor Ambient Air

Collection Date/Time

March 31, 2023 3:00 pm

Date Received

04/03/2023

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
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	0.43	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	0.56	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
123-91-1	1,4-Dioxane	ND		ug/m ³	0.67	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
78-93-3	2-Butanone	1.5		ug/m ³	0.28	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
591-78-6	* 2-Hexanone	ND		ug/m ³	0.77	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
107-05-1	3-Chloropropene	ND		ug/m ³	1.5	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	0.38	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
67-64-1	Acetone	14		ug/m ³	0.44	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
107-13-1	Acrylonitrile	ND		ug/m ³	0.20	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
71-43-2	Benzene	1.3		ug/m ³	0.30	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
100-44-7	Benzyl chloride	ND	TO-LC S-L	ug/m ³	0.48	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
75-27-4	Bromodichloromethane	ND		ug/m ³	0.63	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
75-25-2	Bromoform	ND		ug/m ³	0.97	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
74-83-9	Bromomethane	ND		ug/m ³	0.36	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
75-15-0	Carbon disulfide	ND		ug/m ³	0.29	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
56-23-5	Carbon tetrachloride	0.47		ug/m ³	0.15	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
108-90-7	Chlorobenzene	ND		ug/m ³	0.43	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
75-00-3	Chloroethane	ND		ug/m ³	0.25	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
67-66-3	Chloroform	0.82		ug/m ³	0.46	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH



Sample Information

Client Sample ID: IA-1

York Sample ID: 23D0020-01

York Project (SDG) No.

23D0020

Client Project ID

Livonia Ave.

Matrix

Indoor Ambient Air

Collection Date/Time

March 31, 2023 3:00 pm

Date Received

04/03/2023

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-87-3	Chloromethane	1.1		ug/m ³	0.19	0.934	EPA TO-15	04/13/2023 10:00	04/13/2023 22:29	VH
					Certifications:		NELAC-NY12058,NJDEP-Queens			
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.093	0.934	EPA TO-15	04/13/2023 10:00	04/13/2023 22:29	VH
					Certifications:		NELAC-NY12058,NJDEP-Queens			
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.42	0.934	EPA TO-15	04/13/2023 10:00	04/13/2023 22:29	VH
					Certifications:		NELAC-NY12058,NJDEP-Queens			
110-82-7	Cyclohexane	0.35		ug/m ³	0.32	0.934	EPA TO-15	04/13/2023 10:00	04/13/2023 22:29	VH
					Certifications:		NELAC-NY12058,NJDEP-Queens			
124-48-1	Dibromochloromethane	ND		ug/m ³	0.80	0.934	EPA TO-15	04/13/2023 10:00	04/13/2023 22:29	VH
					Certifications:		NELAC-NY12058,NJDEP-Queens			
75-71-8	Dichlorodifluoromethane	1.9		ug/m ³	0.46	0.934	EPA TO-15	04/13/2023 10:00	04/13/2023 22:29	VH
					Certifications:		NELAC-NY12058,NJDEP-Queens			
141-78-6	* Ethyl acetate	0.67		ug/m ³	0.67	0.934	EPA TO-15	04/13/2023 10:00	04/13/2023 22:29	VH
					Certifications:					
100-41-4	Ethyl Benzene	0.41		ug/m ³	0.41	0.934	EPA TO-15	04/13/2023 10:00	04/13/2023 22:29	VH
					Certifications:		NELAC-NY12058,NJDEP-Queens			
87-68-3	Hexachlorobutadiene	ND	TO-LC S-L	ug/m ³	1.0	0.934	EPA TO-15	04/13/2023 10:00	04/13/2023 22:29	VH
					Certifications:		NELAC-NY12058,NJDEP-Queens			
67-63-0	Isopropanol	7.9		ug/m ³	0.46	0.934	EPA TO-15	04/13/2023 10:00	04/13/2023 22:29	VH
					Certifications:		NELAC-NY12058,NJDEP-Queens			
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.38	0.934	EPA TO-15	04/13/2023 10:00	04/13/2023 22:29	VH
					Certifications:		NELAC-NY12058,NJDEP-Queens			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.34	0.934	EPA TO-15	04/13/2023 10:00	04/13/2023 22:29	VH
					Certifications:		NELAC-NY12058,NJDEP-Queens			
75-09-2	Methylene chloride	1.0		ug/m ³	0.65	0.934	EPA TO-15	04/13/2023 10:00	04/13/2023 22:29	VH
					Certifications:		NELAC-NY12058,NJDEP-Queens			
142-82-5	n-Heptane	1.2		ug/m ³	0.38	0.934	EPA TO-15	04/13/2023 10:00	04/13/2023 22:29	VH
					Certifications:		NELAC-NY12058,NJDEP-Queens			
110-54-3	n-Hexane	0.99		ug/m ³	0.33	0.934	EPA TO-15	04/13/2023 10:00	04/13/2023 22:29	VH
					Certifications:		NELAC-NY12058,NJDEP-Queens			
95-47-6	o-Xylene	0.57		ug/m ³	0.41	0.934	EPA TO-15	04/13/2023 10:00	04/13/2023 22:29	VH
					Certifications:		NELAC-NY12058,NJDEP-Queens			
179601-23-1	p- & m- Xylenes	1.4		ug/m ³	0.81	0.934	EPA TO-15	04/13/2023 10:00	04/13/2023 22:29	VH
					Certifications:		NELAC-NY12058,NJDEP-Queens			
622-96-8	* p-Ethyltoluene	ND		ug/m ³	0.46	0.934	EPA TO-15	04/13/2023 10:00	04/13/2023 22:29	VH
					Certifications:					
115-07-1	* Propylene	ND		ug/m ³	0.16	0.934	EPA TO-15	04/13/2023 10:00	04/13/2023 22:29	VH
					Certifications:					
100-42-5	Styrene	ND		ug/m ³	0.40	0.934	EPA TO-15	04/13/2023 10:00	04/13/2023 22:29	VH
					Certifications:		NELAC-NY12058,NJDEP-Queens			



Sample Information

Client Sample ID: IA-1

York Sample ID: 23D0020-01

York Project (SDG) No.

23D0020

Client Project ID

Livonia Ave.

Matrix

Indoor Ambient Air

Collection Date/Time

March 31, 2023 3:00 pm

Date Received

04/03/2023

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
127-18-4	Tetrachloroethylene	ND		ug/m ³	0.63	0.934	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/13/2023 22:29	VH
109-99-9	* Tetrahydrofuran	ND		ug/m ³	0.55	0.934	EPA TO-15 Certifications:	04/13/2023 10:00	04/13/2023 22:29	VH
108-88-3	Toluene	4.2		ug/m ³	0.35	0.934	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/13/2023 22:29	VH
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	0.37	0.934	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/13/2023 22:29	VH
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	0.42	0.934	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/13/2023 22:29	VH
79-01-6	Trichloroethylene	ND		ug/m ³	0.13	0.934	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/13/2023 22:29	VH
75-69-4	Trichlorofluoromethane (Freon 11)	1.2		ug/m ³	0.52	0.934	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/13/2023 22:29	VH
108-05-4	Vinyl acetate	ND		ug/m ³	0.33	0.934	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/13/2023 22:29	VH
593-60-2	Vinyl bromide	ND		ug/m ³	0.41	0.934	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/13/2023 22:29	VH
75-01-4	Vinyl Chloride	ND		ug/m ³	0.12	0.934	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/13/2023 22:29	VH

Sample Information

Client Sample ID: IA-2

York Sample ID: 23D0020-02

York Project (SDG) No.

23D0020

Client Project ID

Livonia Ave.

Matrix

Indoor Ambient Air

Collection Date/Time

March 31, 2023 3:00 pm

Date Received

04/03/2023

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

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/m ³	1.0	1.512	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 02:48	VH
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	0.83	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	1.0	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH



Sample Information

Client Sample ID: IA-2

York Sample ID: 23D0020-02

York Project (SDG) No.

23D0020

Client Project ID

Livonia Ave.

Matrix

Indoor Ambient Air

Collection Date/Time

March 31, 2023 3:00 pm

Date Received

04/03/2023

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	1.2	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.83	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.61	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.15	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
120-82-1	1,2,4-Trichlorobenzene	ND	TO-CC V, TO-LC S-L	ug/m ³	1.1	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
95-63-6	1,2,4-Trimethylbenzene	0.82		ug/m ³	0.74	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
106-93-4	1,2-Dibromoethane	ND		ug/m ³	1.2	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.91	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.61	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.70	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	1.1	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m ³	0.74	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
106-99-0	1,3-Butadiene	ND		ug/m ³	1.0	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.91	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	0.70	1.512	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 02:48	VH
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	0.91	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
123-91-1	1,4-Dioxane	ND		ug/m ³	1.1	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
78-93-3	2-Butanone	3.3		ug/m ³	0.45	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH



Sample Information

Client Sample ID: IA-2

York Sample ID: 23D0020-02

York Project (SDG) No.

23D0020

Client Project ID

Livonia Ave.

Matrix

Indoor Ambient Air

Collection Date/Time

March 31, 2023 3:00 pm

Date Received

04/03/2023

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/m ³	1.2	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
107-05-1	3-Chloropropene	ND		ug/m ³	2.4	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	0.62	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
67-64-1	Acetone	45		ug/m ³	0.72	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
107-13-1	Acrylonitrile	ND		ug/m ³	0.33	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
71-43-2	Benzene	2.9		ug/m ³	0.48	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
100-44-7	Benzyl chloride	ND	TO-LC S-L	ug/m ³	0.78	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
75-27-4	Bromodichloromethane	ND		ug/m ³	1.0	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
75-25-2	Bromoform	ND		ug/m ³	1.6	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
74-83-9	Bromomethane	ND		ug/m ³	0.59	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
75-15-0	Carbon disulfide	ND		ug/m ³	0.47	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
56-23-5	Carbon tetrachloride	0.95		ug/m ³	0.24	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
108-90-7	Chlorobenzene	ND		ug/m ³	0.70	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
75-00-3	Chloroethane	ND		ug/m ³	0.40	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
67-66-3	Chloroform	2.1		ug/m ³	0.74	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
74-87-3	Chloromethane	2.4		ug/m ³	0.31	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.15	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.69	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
110-82-7	Cyclohexane	0.83		ug/m ³	0.52	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH



Sample Information

Client Sample ID: IA-2

York Sample ID: 23D0020-02

York Project (SDG) No.

23D0020

Client Project ID

Livonia Ave.

Matrix

Indoor Ambient Air

Collection Date/Time

March 31, 2023 3:00 pm

Date Received

04/03/2023

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
124-48-1	Dibromochloromethane	ND		ug/m ³	1.3	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
75-71-8	Dichlorodifluoromethane	4.4		ug/m ³	0.75	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
141-78-6	* Ethyl acetate	3.2		ug/m ³	1.1	1.512	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 02:48	VH
100-41-4	Ethyl Benzene	1.1		ug/m ³	0.66	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
87-68-3	Hexachlorobutadiene	ND	TO-LC S-L	ug/m ³	1.6	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
67-63-0	Isopropanol	27		ug/m ³	0.74	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.62	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.55	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
75-09-2	Methylene chloride	1.9		ug/m ³	1.1	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
142-82-5	n-Heptane	4.8		ug/m ³	0.62	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
110-54-3	n-Hexane	2.1		ug/m ³	0.53	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
95-47-6	o-Xylene	1.7		ug/m ³	0.66	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
179601-23-1	p- & m- Xylenes	3.9		ug/m ³	1.3	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
622-96-8	* p-Ethyltoluene	0.89		ug/m ³	0.74	1.512	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 02:48	VH
115-07-1	* Propylene	ND		ug/m ³	0.26	1.512	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 02:48	VH
100-42-5	Styrene	1.2		ug/m ³	0.64	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
127-18-4	Tetrachloroethylene	ND		ug/m ³	1.0	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
109-99-9	* Tetrahydrofuran	3.4		ug/m ³	0.89	1.512	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 02:48	VH
108-88-3	Toluene	15		ug/m ³	0.57	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	0.60	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH



Sample Information

Client Sample ID: IA-2

York Sample ID: 23D0020-02

York Project (SDG) No.
23D0020

Client Project ID
Livonia Ave.

Matrix
Indoor Ambient Air

Collection Date/Time
March 31, 2023 3:00 pm

Date Received
04/03/2023

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.69	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
79-01-6	Trichloroethylene	ND		ug/m³	0.20	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
75-69-4	Trichlorofluoromethane (Freon 11)	2.4		ug/m³	0.85	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
108-05-4	Vinyl acetate	ND		ug/m³	0.53	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
593-60-2	Vinyl bromide	ND		ug/m³	0.66	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH
75-01-4	Vinyl Chloride	ND		ug/m³	0.19	1.512	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 02:48	VH

Sample Information

Client Sample ID: IA-3

York Sample ID: 23D0020-03

York Project (SDG) No.
23D0020

Client Project ID
Livonia Ave.

Matrix
Indoor Ambient Air

Collection Date/Time
March 31, 2023 3:00 pm

Date Received
04/03/2023

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

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	1.3	1.872	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 03:58	VH
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	1.0	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	1.3	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.4	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	1.0	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.76	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.19	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH



Sample Information

Client Sample ID: IA-3

York Sample ID: 23D0020-03

York Project (SDG) No.

23D0020

Client Project ID

Livonia Ave.

Matrix

Indoor Ambient Air

Collection Date/Time

March 31, 2023 3:00 pm

Date Received

04/03/2023

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
120-82-1	1,2,4-Trichlorobenzene	ND	TO-CC V, TO-LC S-L	ug/m ³	1.4	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m ³	0.92	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
106-93-4	1,2-Dibromoethane	ND		ug/m ³	1.4	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	1.1	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.76	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.87	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	1.3	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m ³	0.92	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
106-99-0	1,3-Butadiene	ND		ug/m ³	1.2	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	1.1	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	0.87	1.872	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 03:58	VH
106-46-7	1,4-Dichlorobenzene	1.2		ug/m ³	1.1	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
123-91-1	1,4-Dioxane	ND		ug/m ³	1.3	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
78-93-3	2-Butanone	7.1		ug/m ³	0.55	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
591-78-6	* 2-Hexanone	ND		ug/m ³	1.5	1.872	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 03:58	VH
107-05-1	3-Chloropropene	ND		ug/m ³	2.9	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	0.77	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
67-64-1	Acetone	83		ug/m ³	0.89	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
107-13-1	Acrylonitrile	ND		ug/m ³	0.41	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH



Sample Information

Client Sample ID: IA-3

York Sample ID: 23D0020-03

York Project (SDG) No.

23D0020

Client Project ID

Livonia Ave.

Matrix

Indoor Ambient Air

Collection Date/Time

March 31, 2023 3:00 pm

Date Received

04/03/2023

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
71-43-2	Benzene	1.4		ug/m ³	0.60	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
100-44-7	Benzyl chloride	ND	TO-LC S-L	ug/m ³	0.97	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
75-27-4	Bromodichloromethane	ND		ug/m ³	1.3	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
75-25-2	Bromoform	ND		ug/m ³	1.9	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
74-83-9	Bromomethane	ND		ug/m ³	0.73	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
75-15-0	Carbon disulfide	ND		ug/m ³	0.58	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
56-23-5	Carbon tetrachloride	1.1		ug/m ³	0.29	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
108-90-7	Chlorobenzene	ND		ug/m ³	0.86	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
75-00-3	Chloroethane	ND		ug/m ³	0.49	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
67-66-3	Chloroform	12		ug/m ³	0.91	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
74-87-3	Chloromethane	2.5		ug/m ³	0.39	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.19	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.85	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
110-82-7	Cyclohexane	ND		ug/m ³	0.64	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
124-48-1	Dibromochloromethane	ND		ug/m ³	1.6	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
75-71-8	Dichlorodifluoromethane	4.0		ug/m ³	0.93	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
141-78-6	* Ethyl acetate	6.3		ug/m ³	1.3	1.872	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 03:58	VH
100-41-4	Ethyl Benzene	ND		ug/m ³	0.81	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
87-68-3	Hexachlorobutadiene	ND	TO-LC S-L	ug/m ³	2.0	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
67-63-0	Isopropanol	64		ug/m ³	0.92	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH



Sample Information

Client Sample ID: IA-3

York Sample ID: 23D0020-03

York Project (SDG) No.
23D0020

Client Project ID
Livonia Ave.

Matrix
Indoor Ambient Air

Collection Date/Time
March 31, 2023 3:00 pm

Date Received
04/03/2023

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
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.77	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.67	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
75-09-2	Methylene chloride	2.7		ug/m ³	1.3	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
142-82-5	n-Heptane	6.4		ug/m ³	0.77	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
110-54-3	n-Hexane	1.3		ug/m ³	0.66	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
95-47-6	o-Xylene	1.5		ug/m ³	0.81	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
179601-23-1	p- & m- Xylenes	2.9		ug/m ³	1.6	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
622-96-8	* p-Ethyltoluene	ND		ug/m ³	0.92	1.872	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 03:58	VH
115-07-1	* Propylene	ND		ug/m ³	0.32	1.872	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 03:58	VH
100-42-5	Styrene	1.9		ug/m ³	0.80	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
127-18-4	Tetrachloroethylene	1.7		ug/m ³	1.3	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
109-99-9	* Tetrahydrofuran	ND		ug/m ³	1.1	1.872	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 03:58	VH
108-88-3	Toluene	19		ug/m ³	0.71	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	0.74	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	0.85	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
79-01-6	Trichloroethylene	ND		ug/m ³	0.25	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
75-69-4	Trichlorofluoromethane (Freon 11)	2.5		ug/m ³	1.1	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
108-05-4	Vinyl acetate	ND		ug/m ³	0.66	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
593-60-2	Vinyl bromide	ND		ug/m ³	0.82	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH
75-01-4	Vinyl Chloride	ND		ug/m ³	0.24	1.872	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 03:58	VH



Sample Information

Client Sample ID: IA-3

York Sample ID: 23D0020-03

York Project (SDG) No.

23D0020

Client Project ID

Livonia Ave.

Matrix

Indoor Ambient Air

Collection Date/Time

March 31, 2023 3:00 pm

Date Received

04/03/2023

Sample Information

Client Sample ID: IA-4

York Sample ID: 23D0020-04

York Project (SDG) No.

23D0020

Client Project ID

Livonia Ave.

Matrix

Indoor Ambient Air

Collection Date/Time

March 31, 2023 3:00 pm

Date Received

04/03/2023

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/m ³	1.2	1.704	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 05:08	VH
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	0.93	1.704	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 05:08	VH
NELAC-NY12058,NJDEP-Queens										
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	1.2	1.704	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 05:08	VH
NELAC-NY12058,NJDEP-Queens										
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	1.3	1.704	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 05:08	VH
NELAC-NY12058,NJDEP-Queens										
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.93	1.704	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 05:08	VH
NELAC-NY12058,NJDEP-Queens										
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.69	1.704	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 05:08	VH
NELAC-NY12058,NJDEP-Queens										
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.17	1.704	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 05:08	VH
NELAC-NY12058,NJDEP-Queens										
120-82-1	1,2,4-Trichlorobenzene	ND	TO-CC V, TO-LC S-L	ug/m ³	1.3	1.704	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 05:08	VH
NELAC-NY12058,NJDEP-Queens										
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m ³	0.84	1.704	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 05:08	VH
NELAC-NY12058,NJDEP-Queens										
106-93-4	1,2-Dibromoethane	ND		ug/m ³	1.3	1.704	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 05:08	VH
NELAC-NY12058,NJDEP-Queens										
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	1.0	1.704	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 05:08	VH
NELAC-NY12058,NJDEP-Queens										
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.69	1.704	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 05:08	VH
NELAC-NY12058,NJDEP-Queens										
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.79	1.704	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 05:08	VH
NELAC-NY12058,NJDEP-Queens										
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	1.2	1.704	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 05:08	VH
NELAC-NY12058,NJDEP-Queens										
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m ³	0.84	1.704	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 05:08	VH
NELAC-NY12058,NJDEP-Queens										



Sample Information

Client Sample ID: IA-4

York Sample ID: 23D0020-04

York Project (SDG) No.

23D0020

Client Project ID

Livonia Ave.

Matrix

Indoor Ambient Air

Collection Date/Time

March 31, 2023 3:00 pm

Date Received

04/03/2023

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
106-99-0	1,3-Butadiene	ND		ug/m ³	1.1	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	1.0	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	0.79	1.704	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 05:08	VH
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	1.0	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
123-91-1	1,4-Dioxane	ND		ug/m ³	1.2	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
78-93-3	2-Butanone	4.8		ug/m ³	0.50	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
591-78-6	* 2-Hexanone	ND		ug/m ³	1.4	1.704	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 05:08	VH
107-05-1	3-Chloropropene	ND		ug/m ³	2.7	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	0.70	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
67-64-1	Acetone	120		ug/m ³	0.81	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
107-13-1	Acrylonitrile	ND		ug/m ³	0.37	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
71-43-2	Benzene	ND		ug/m ³	0.54	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
100-44-7	Benzyl chloride	ND	TO-LC S-L	ug/m ³	0.88	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
75-27-4	Bromodichloromethane	ND		ug/m ³	1.1	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
75-25-2	Bromoform	ND		ug/m ³	1.8	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
74-83-9	Bromomethane	ND		ug/m ³	0.66	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
75-15-0	Carbon disulfide	ND		ug/m ³	0.53	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
56-23-5	Carbon tetrachloride	0.86		ug/m ³	0.27	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
108-90-7	Chlorobenzene	ND		ug/m ³	0.78	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH



Sample Information

Client Sample ID: IA-4

York Sample ID: 23D0020-04

York Project (SDG) No.
23D0020

Client Project ID
Livonia Ave.

Matrix
Indoor Ambient Air

Collection Date/Time
March 31, 2023 3:00 pm

Date Received
04/03/2023

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
75-00-3	Chloroethane	ND		ug/m³	0.45	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
67-66-3	Chloroform	2.4		ug/m³	0.83	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
74-87-3	Chloromethane	2.5		ug/m³	0.35	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.17	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.77	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
110-82-7	Cyclohexane	0.59		ug/m³	0.59	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
124-48-1	Dibromochloromethane	ND		ug/m³	1.5	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
75-71-8	Dichlorodifluoromethane	4.0		ug/m³	0.84	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
141-78-6	* Ethyl acetate	6.9		ug/m³	1.2	1.704	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 05:08	VH
100-41-4	Ethyl Benzene	ND		ug/m³	0.74	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
87-68-3	Hexachlorobutadiene	ND	TO-LC S-L	ug/m³	1.8	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
67-63-0	Isopropanol	65		ug/m³	0.84	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
80-62-6	Methyl Methacrylate	ND		ug/m³	0.70	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.61	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
75-09-2	Methylene chloride	1.9		ug/m³	1.2	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
142-82-5	n-Heptane	11		ug/m³	0.70	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
110-54-3	n-Hexane	1.0		ug/m³	0.60	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
95-47-6	o-Xylene	0.89		ug/m³	0.74	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
179601-23-1	p- & m- Xylenes	1.9		ug/m³	1.5	1.704	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 05:08	VH
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.84	1.704	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 05:08	VH



Sample Information

Client Sample ID: IA-4

York Sample ID: 23D0020-04

York Project (SDG) No.

23D0020

Client Project ID

Livonia Ave.

Matrix

Indoor Ambient Air

Collection Date/Time

March 31, 2023 3:00 pm

Date Received

04/03/2023

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
115-07-1	* Propylene	ND		ug/m³	0.29	1.704	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 05:08	VH
100-42-5	Styrene	2.1		ug/m³	0.73	1.704	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 05:08	VH
127-18-4	Tetrachloroethylene	ND		ug/m³	1.2	1.704	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 05:08	VH
109-99-9	* Tetrahydrofuran	ND		ug/m³	1.0	1.704	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 05:08	VH
108-88-3	Toluene	35		ug/m³	0.64	1.704	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 05:08	VH
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.68	1.704	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 05:08	VH
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.77	1.704	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 05:08	VH
79-01-6	Trichloroethylene	ND		ug/m³	0.23	1.704	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 05:08	VH
75-69-4	Trichlorofluoromethane (Freon 11)	2.8		ug/m³	0.96	1.704	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 05:08	VH
108-05-4	Vinyl acetate	ND		ug/m³	0.60	1.704	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 05:08	VH
593-60-2	Vinyl bromide	ND		ug/m³	0.75	1.704	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 05:08	VH
75-01-4	Vinyl Chloride	ND		ug/m³	0.22	1.704	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 05:08	VH

Sample Information

Client Sample ID: OA-1

York Sample ID: 23D0020-05

York Project (SDG) No.

23D0020

Client Project ID

Livonia Ave.

Matrix

Outdoor Ambient Air

Collection Date/Time

March 31, 2023 3:00 pm

Date Received

04/03/2023

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

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	1.3	1.846	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 06:18	VH



Sample Information

Client Sample ID: OA-1

York Sample ID: 23D0020-05

York Project (SDG) No.

23D0020

Client Project ID

Livonia Ave.

Matrix

Outdoor Ambient Air

Collection Date/Time

March 31, 2023 3:00 pm

Date Received

04/03/2023

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	1.0	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	1.3	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	1.4	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	1.0	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.75	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.18	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
120-82-1	1,2,4-Trichlorobenzene	ND	TO-CC V, TO-LC S-L	ug/m ³	1.4	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m ³	0.91	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
106-93-4	1,2-Dibromoethane	ND		ug/m ³	1.4	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	1.1	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.75	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.85	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	1.3	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m ³	0.91	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
106-99-0	1,3-Butadiene	ND		ug/m ³	1.2	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	1.1	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	0.85	1.846	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 06:18	VH
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	1.1	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH



Sample Information

Client Sample ID: OA-1

York Sample ID: 23D0020-05

York Project (SDG) No.

23D0020

Client Project ID

Livonia Ave.

Matrix

Outdoor Ambient Air

Collection Date/Time

March 31, 2023 3:00 pm

Date Received

04/03/2023

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
123-91-1	1,4-Dioxane	ND		ug/m ³	1.3	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
78-93-3	2-Butanone	0.82		ug/m ³	0.54	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
591-78-6	* 2-Hexanone	ND		ug/m ³	1.5	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
107-05-1	3-Chloropropene	ND		ug/m ³	2.9	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	0.76	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
67-64-1	Acetone	39		ug/m ³	0.88	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
107-13-1	Acrylonitrile	ND		ug/m ³	0.40	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
71-43-2	Benzene	0.83		ug/m ³	0.59	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
100-44-7	Benzyl chloride	ND	TO-LC S-L	ug/m ³	0.96	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
75-27-4	Bromodichloromethane	ND		ug/m ³	1.2	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
75-25-2	Bromoform	ND		ug/m ³	1.9	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
74-83-9	Bromomethane	ND		ug/m ³	0.72	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
75-15-0	Carbon disulfide	ND		ug/m ³	0.57	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
56-23-5	Carbon tetrachloride	0.70		ug/m ³	0.29	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
108-90-7	Chlorobenzene	ND		ug/m ³	0.85	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
75-00-3	Chloroethane	ND		ug/m ³	0.49	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
67-66-3	Chloroform	ND		ug/m ³	0.90	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
74-87-3	Chloromethane	2.4		ug/m ³	0.38	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.18	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH



Sample Information

Client Sample ID: OA-1

York Sample ID: 23D0020-05

York Project (SDG) No.
23D0020

Client Project ID
Livonia Ave.

Matrix
Outdoor Ambient Air

Collection Date/Time
March 31, 2023 3:00 pm

Date Received
04/03/2023

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.84	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
110-82-7	Cyclohexane	ND		ug/m ³	0.64	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
124-48-1	Dibromochloromethane	ND		ug/m ³	1.6	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
75-71-8	Dichlorodifluoromethane	3.9		ug/m ³	0.91	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
141-78-6	* Ethyl acetate	ND		ug/m ³	1.3	1.846	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 06:18	VH
100-41-4	Ethyl Benzene	ND		ug/m ³	0.80	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
87-68-3	Hexachlorobutadiene	ND	TO-LC S-L	ug/m ³	2.0	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
67-63-0	Isopropanol	3.4		ug/m ³	0.91	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.76	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.67	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
75-09-2	Methylene chloride	2.1		ug/m ³	1.3	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
142-82-5	n-Heptane	ND		ug/m ³	0.76	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
110-54-3	n-Hexane	ND		ug/m ³	0.65	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
95-47-6	o-Xylene	ND		ug/m ³	0.80	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
179601-23-1	p- & m- Xylenes	ND		ug/m ³	1.6	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
622-96-8	* p-Ethyltoluene	ND		ug/m ³	0.91	1.846	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 06:18	VH
115-07-1	* Propylene	ND		ug/m ³	0.32	1.846	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 06:18	VH
100-42-5	Styrene	ND		ug/m ³	0.79	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
127-18-4	Tetrachloroethylene	ND		ug/m ³	1.3	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH



Sample Information

Client Sample ID: OA-1

York Sample ID: 23D0020-05

York Project (SDG) No.
23D0020

Client Project ID
Livonia Ave.

Matrix
Outdoor Ambient Air

Collection Date/Time
March 31, 2023 3:00 pm

Date Received
04/03/2023

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
109-99-9	* Tetrahydrofuran	ND		ug/m ³	1.1	1.846	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 06:18	VH
108-88-3	Toluene	1.1		ug/m ³	0.70	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	0.73	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	0.84	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
79-01-6	Trichloroethylene	5.1		ug/m ³	0.25	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
75-69-4	Trichlorofluoromethane (Freon 11)	2.2		ug/m ³	1.0	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
108-05-4	Vinyl acetate	ND		ug/m ³	0.65	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
593-60-2	Vinyl bromide	ND		ug/m ³	0.81	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH
75-01-4	Vinyl Chloride	ND		ug/m ³	0.24	1.846	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/14/2023 06:18	VH





Sample and Data Qualifiers Relating to This Work Order

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-CCV The value reported is ESTIMATED for this compound due to its behavior during continuing calibration verification (>30% Difference from initial calibration).

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 current NELAC/TNI 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.



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ANALYTICAL LABORATORIES INC.

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NY 11418

YORK Project No.
2300020

Page **1** of **1**

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.
Signature binds you to YORK's Standard Terms & Conditions.

YOUR Information		Report To:	Invoice To:	YOUR Project Number	Turn-Around Time
Company: Peter Demmoy	Address: Consulting	Company: Peter Demmoy	Address: Same		RUSH - Next Day
Phone: 	Contact: 	Phone: 	Contact: 		RUSH - Two Day
Email: 	E-mail: 				RUSH - Three Day
				YOUR Project Name Livonia Ave.	RUSH - Four Day
					Standard (5-7 Day)
				YOUR POR: 	
				Report / EDD Type (circle selections)	YORK Reg. Comp.
				CT RCP <input checked="" type="checkbox"/> Summary Report <input type="checkbox"/> QA Report <input type="checkbox"/> NY ASP A Package <input type="checkbox"/> NY ASP B Package <input type="checkbox"/> Other	Compared to the following Regulation(s): (please fill in)
				Standard Excel EDD <input type="checkbox"/> EQuIS (Standard) <input type="checkbox"/> NJDEP Reduced Deliv. <input type="checkbox"/> NJDKQP	NYSDEC EQuIS <input type="checkbox"/> NJDEP SRP HazSite
				Reporting Units: ug/m ³ <input checked="" type="checkbox"/> ppbv <input type="checkbox"/> ppmv <input type="checkbox"/>	
Please enter the following REQUIRED Field Data					
Sample Identification	Date/Time Sampled	Air Matrix	Canister Vacuum Before Sampling (in Hg)	Canister ID	Flow Cont. ID
TA-1	3/31/23	AI	30	36988	17896
TA-2		AI	30	22076	16415
TA-3	4	AI	30	36983	16421
TA-4		AI	30	8	16956
TA- OA-1		AO	30	10	16417
				28899	16419
Comments:					
Samples Relinquished by / Company Peter		Date/Time 4/3/23, 9:00 AM	Samples Received by / Company Walter	Date/Time 4/3/23, 9:00 AM	Detection Limits Required ≤ 1 ug/m³ <input checked="" type="checkbox"/> NYSDEC V1 Limits <input type="checkbox"/> Other
Samples Relinquished by / Company Walter D. York		Date/Time 4/3/23, 10:35	Samples Received by / Company Walter D. York	Date/Time 4/3/23, 10:45	Sampling Media 6 Liter Canister <input checked="" type="checkbox"/> Tedlar Bag <input type="checkbox"/>
Samples Relinquished by / Company Walter D. York		Date/Time 4/3/23, 10:35	Samples Received by / Company Walter D. York	Date/Time 4/3/23, 10:45	
Samples Relinquished by / Company Walter D. York		Date/Time 4/3/23, 10:35	Samples Received by / Company Walter D. York	Date/Time 4/3/23, 10:45	