Final Engineering Report
for the
Former Sep's Cleaners Site
250 Livonia Avenue, Brooklyn

Prepared for:

Riverdale Osborne Towers Upper Management LLC

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CERTIFICATION

I, Dr. Ravi Korlipara, P.E., am currently a registered professional engineer licensed by the State of New York I had oversight responsibility for the implementation of the remedial program activities, and I certify that the Remedial Action Work Plan and the Final Design was implemented and that all construction activities were completed in substantial conformance with the Department-approved Remedial Action Work Plan and the Remedial Design.

I certify that the data submitted to the Department with this Final Engineering Report demonstrates that the remediation requirements set forth in the Remedial Action Work Plan the Remedial Design and in all applicable statutes and regulations have been or will be achieved in accordance with the time frames, if any, established for the remedy.

I certify that all use restrictions, Institutional Controls, Engineering Controls, and/or any operation and maintenance requirements applicable to the Site are contained in an environmental easement created and recorded pursuant ECL 71-3605 and that all affected local governments, as defined in ECL 71-3603, have been notified that such easement has been recorded.

I certify that a Site Management Plan has been submitted for the continual and proper operation, maintenance, and monitoring of all Engineering Controls employed at the Site, including the proper maintenance of all remaining monitoring wells, and that such plan has been approved by the Department.

I certify that all documents generated in support of this report have been submitted in accordance with the DER's electronic submission protocols and have been accepted by the Department.

I certify that all data generated in support of this report have been submitted in accordance with the Department's electronic data deliverable protocols and have been accepted by the Department.

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class “A” misdemeanor,

pursuant to Section 210.45 of the Penal Law. I, Dr. Ravi Korlipara P.E., of Korlipara Engineering am certifying as a Designated Site Representative of the owner of the site.

Dr. Ravi Korlipara, P.E.

_____ _____

NYS Professional Engineer #070038 Date

LIST OF ACRONYMS

AS	Air Sparging
CCR	Construction Completion Report
D	Deep
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
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
TO	Toxic Organic
UG/L	Micrograms Per Cubic Meter
VOC	Volatile Organic Compound

TABLE OF CONTENTS

TABLE OF CONTENTS *(continued)*

Figures

Tables

Appendices

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 250 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 0.57 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. Appendix A contains the Environmental Easement including the legal description of the Site.

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.

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. The remedial system at the Site was discontinued in November, 2022 when a Sub-Slab Depressurization System (SSDS) was installed to address the remaining contamination.

1.2 Site Background

The former Sep's Cleaners unit is currently occupied by the Brownsville Gourmet 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. The Site building was constructed in 1972.

Sep's Cleaners performed dry cleaning operations and was listed as a Resource Conservation and Recovery Act Small Quantity Generator of spent halogenated wastes.

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 to the water table (which occurs at approximately 20 feet below grade). 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

Soil contamination consisting primarily of tetrachloroethylene was found to be present in the soil in the driveway at the rear of the building. Subsequent investigations found that in addition to soil contamination, 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 tetrachloroethylene 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).

Figure 2 shows the Site layout and a summary of previous 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 tetrachloroethylene 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.

1.5 Summary of Remedial Actions

As per the Remedial Action Work Plan (RAWP), 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 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 (as shown in Figure 2).

1.6 Interim Remedial Measures

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

1.6.1 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).

1.6.2 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 tetrachloroethylene concentration of 370,000 ug/kg. Following the removal of approximately 18 cubic yards of soil, an end point sample from the north wall of the excavation showed a tetrachloroethylene concentration of 1,900,000 ug/kg. Therefore, a second phase of excavation of approximately 15 additional cubic yards was performed to the north of the initial excavation. The end point samples from the north wall of the second area of excavation showed a tetrachloroethylene concentration of 31,000 ug/kg. A sample from the base of the excavation showed 65,000 ug/kg. This remaining contamination was addressed by the SVE system.

1.6.3 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 remains in good condition.

SECTION 2.0
REMEDIAL ACTION OBJECTIVES

The remedial action at the Site was to be considered complete when monitoring indicated that the remedy had achieved the remedial action objectives RAOs.

The RAOs for the Site were:

2.1 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.

2.2 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.

2.3 Soil Vapor RAOs

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

2.4 RAOs Achieved Through the AS/SVE System

The AS/SVE system achieved its remedial goals and its operation was discontinued in November, 2022 with written approval from the NYSDEC. Section 5.0 provides details on the effectiveness of the AS/SVE system in remediating the Site.

2.5 RAOs Achieved Through Sub-Slab Depressurization

The AS/SVE system has been discontinued and had 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. Therefore, the SVE system was also functioning as a Sub-Slab Depressurization System (SSDS).

The criteria for determining that the current 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.

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, and the area of influence for the system to assist with the final system design.

The VOCs of primary concern in the soil, soil vapor, and groundwater include tetrachloroethylene and its degradation products trichloroethylene and cis- and trans-1,2-dichloroethylene. 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 m^3/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.

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, 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).

For the depressurization pilot testing, SVE-2 was operated at 34 cfm and vacuum readings 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.

3.5 Air Sparging System Pilot Test Results

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 were 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 [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 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 is 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 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 compound, an 80-foot-long, four-foot-wide trench was excavated along the center of the driveway at the rear of the building.

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.

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.

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.

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.

A wooden shed was installed in the parking lot adjacent and south of the driveway. The shed contains a Gast regenerative extraction blower (Model R6P355-50), and a Gast sparge blower (Model 6066-P102). There is also a roof fan 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 enters 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.

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.

SECTION 5.0
SYSTEM PERFORMANCE MONITORING

Upon completion of the installation of the remedial system, its operation commenced. 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 are 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 in each of the SVE legs. 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 Vacuum 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 is providing a high level of depressurization throughout the sub-slab area of the building. During the next round of readings at these points, the removed brass tubes and valves will be replaced and readings will be obtained from all eleven points.

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 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 0.004 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 tetrachloroethylene and its degradation products. Tetrachloroethylene was the chemical detected at the highest concentration [4,200 micrograms per cubic meter (mcg/m3)]. In the effluent sample, relatively minor concentrations of several chemicals were detected including a decrease in the tetrachloroethylene concentration to 6.2 mcg/m3.

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 pre-remedial 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 tetrachloroethylene 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.

The AS/SVE system operated for approximately eight 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.

SECTION 6.0
REMAINING CONTAMINATION

The AS/SVE remedial system operated for eight 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, intital 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 tetrachloroethylene was detected at MW-4S [530 micrograms per liter (ug/l)]. The highest initial downgradient concentrations of tetrachloroethylene 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 65,000 ug/kg of tetrachloroethylene which represented the maximum residual contamination in the area of the IRM excavation.

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.
- 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 must be reported.
- 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.
- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed.

- 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

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 following procedures will be followed:

- The driveway entrance will be barricaded along Rockaway Avenue (the driveway is accessible only from this location) with plywood to prevent access to the area of the breach. A vehicle may be used to seal access to the driveway until the plywood can be affixed along the access point of the driveway. In addition, the workers in each of the units will be instructed to refrain from using their back doors that exit to the driveway.
- The Site owner and NYSDEC will be notified.

- The Health and Safety Plan and Community Air Monitoring Plan (as provided in the SMP) will be implemented during all activities associated with the repair of the breach.
- Clean sand will be used to fill the breach as necessary.
- The asphalt breach will be repaired with either asphalt patch or hot asphalt, dependent upon the size of the breach.
- Upon completion of the repairs to the asphalt, an inspection will be performed weekly for one month to assure that there is no evidence that the asphalt repair has failed and soil is again exposed.
- Following the completion of the repair and weekly inspections, a written report will be submitted to NYSDEC that documents the repairs and provides monitoring readings and photographs.

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 units 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. Sub-slab vacuum monitoring points were installed at that time. Figure 7 shows the locations of the SSDS suction wells and vacuum monitoring points. Figure 8 shows a schematic diagram of the suction point construction. Table 8 contains vacuum monitoring point monitoring results and shows that all locations were well above the current 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.

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 shed and components remain at the Site.

6.3 2023 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 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 sampling results are shown in Table 9. The laboratory report is provided in Appendix C. The results show that the indoor air contained no detections of tetrachloroethylene or its degradation products. The outdoor air contained a concentration of trichloroethylene of 5.1 ug/m3. 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.

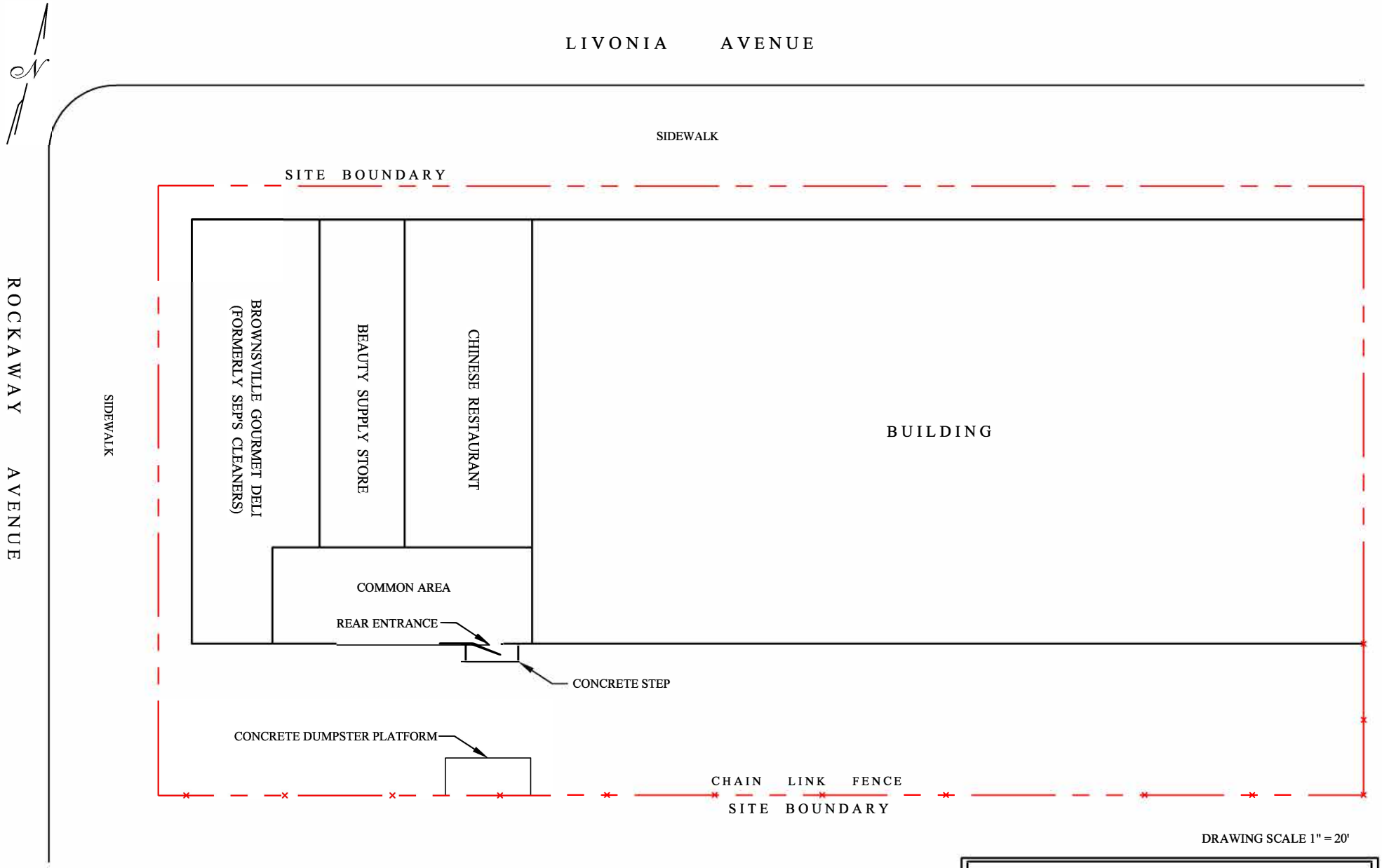
Based on these findings, there is no evidence of VOCs in the indoor air that exceed any NYSDOH health-based standards or guidelines.

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 7 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 laboratory report is provided in Appendix C. The results represent the concentrations of VOCs present in the sub-slab vapor.

The results show elevated concentrations of tetrachloroethylene, primarily at SW-4, beneath the Chinese restaurant, at 3,300 mcg/m3. All other effluent samples contained tetrachloroethylene concentrations ranging from 2.0 to 310 mcg/m3. Also at SW-4, trichloroethylene was detected at 370 mcg/m3 and cis-1,2-dichloroethylene was detected at 260 mcg/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.



DRAWING SCALE 1" = 20'

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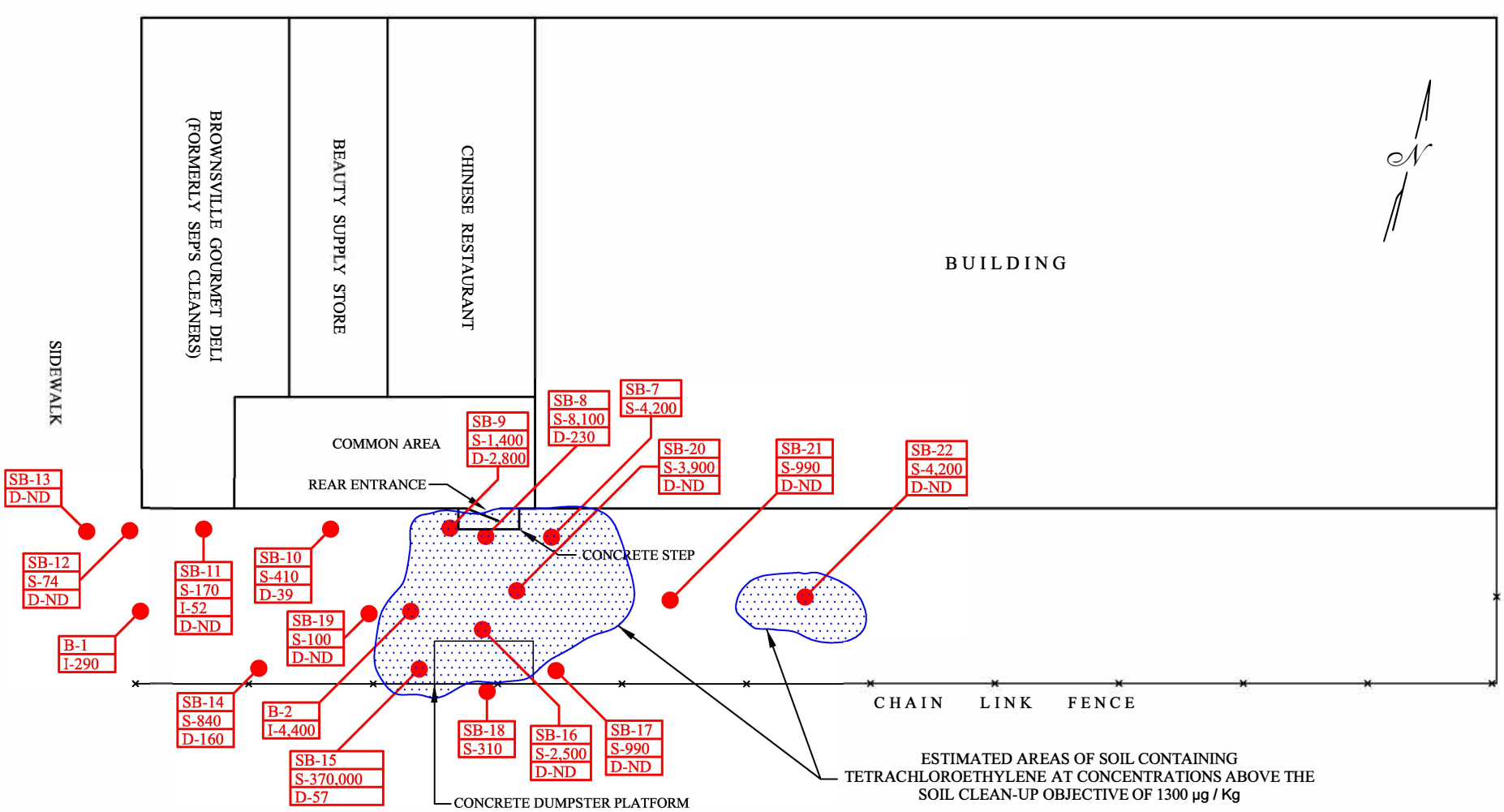
FIGURE 1
SITE LOCATION AND BOUNDARIES
250 LIVONIA AVENUE
BROOKLYN, NEW YORK



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

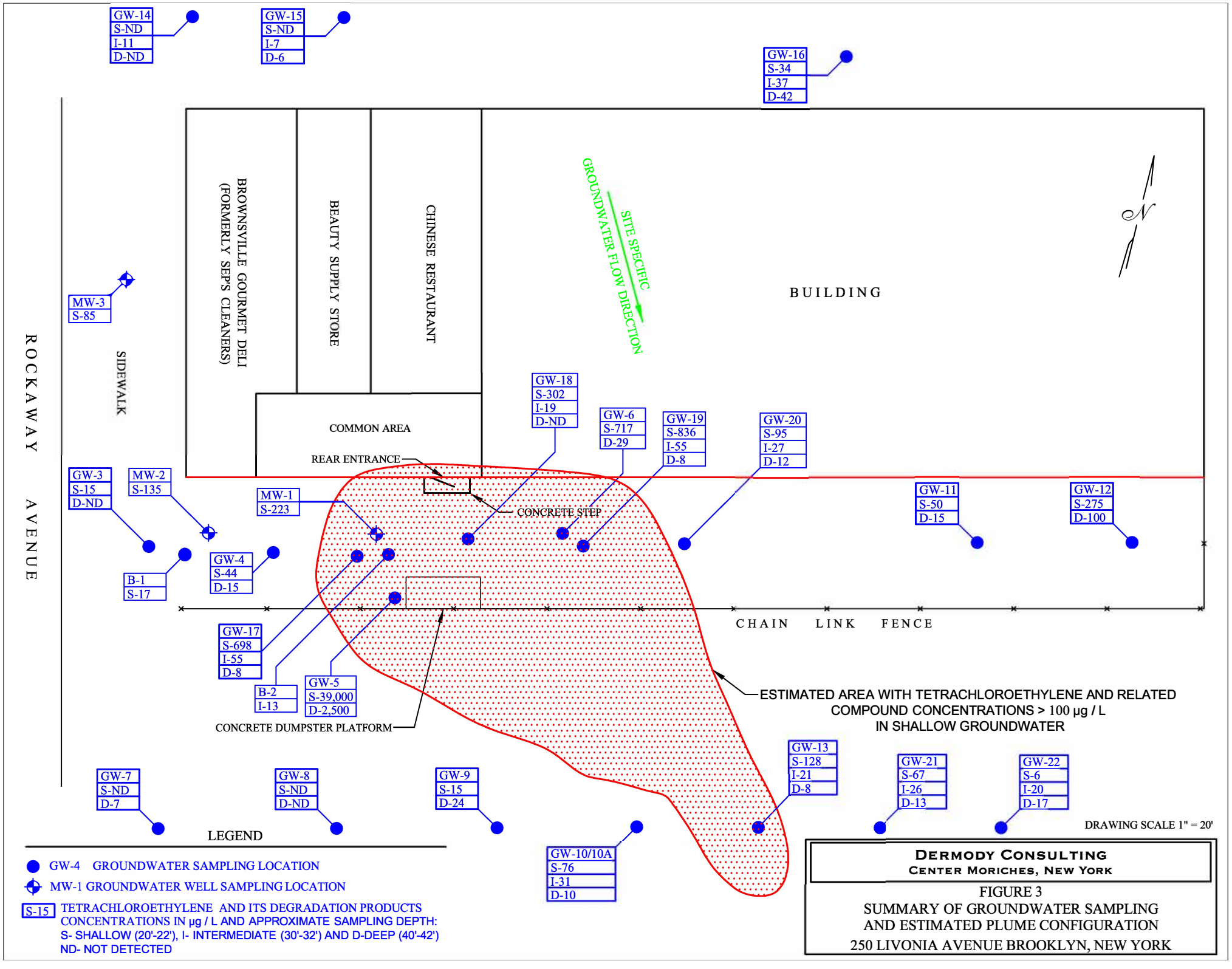
GW-14
S-ND
I-11
D-ND
GW-15
S-ND
I-7
D-6
GW-16
S-34
I-37
D-42
BROWNSVILLE GOURMET DELI
(FORMERLY SEPS CLEANERS)
BEAUTY SUPPLY STORE
CHINESE RESTAURANT
BUILDING
GROUNDWATER FLOW DIRECTION
SITE SPECIFIC
N
MW-3
S-85
SIDEWALK
ROCKAWAY AVENUE
COMMON AREA
REAR ENTRANCE
CONCRETE STEP
GW-18
S-302
I-19
D-ND
GW-6
S-717
D-29
GW-19
S-836
I-55
D-8
GW-20
S-95
I-27
D-12
GW-3
S-15
D-ND
MW-2
S-135
MW-1
S-223
GW-11
S-50
D-15
GW-12
S-275
D-100
B-1
S-17
GW-4
S-44
D-15
CHAIN LINK FENCE
GW-17
S-698
I-55
D-8
B-2
I-13
GW-5
S-39,000
D-2,500
CONCRETE DUMPSTER PLATFORM
ESTIMATED AREA WITH TETRACHLOROETHYLENE AND RELATED
COMPOUND CONCENTRATIONS > 100 µg / L
IN SHALLOW GROUNDWATER
GW-13
S-128
I-21
D-8
GW-21
S-67
I-26
D-13
GW-22
S-6
I-20
D-17
GW-7
S-ND
D-7
GW-8
S-ND
D-ND
GW-9
S-15
D-24
GW-10/10A
S-76
I-31
D-10
DRAWING SCALE 1" = 20'
LEGEND
GW-4 GROUNDWATER SAMPLING LOCATION
MW-1 GROUNDWATER WELL SAMPLING LOCATION
S-15 TETRACHLOROETHYLENE AND ITS DEGRADATION PRODUCTS
CONCENTRATIONS IN µg / L AND APPROXIMATE SAMPLING DEPTH:
S- SHALLOW (20'-22'), I- INTERMEDIATE (30'-32') AND D-DEEP (40'-42')
ND- NOT DETECTED
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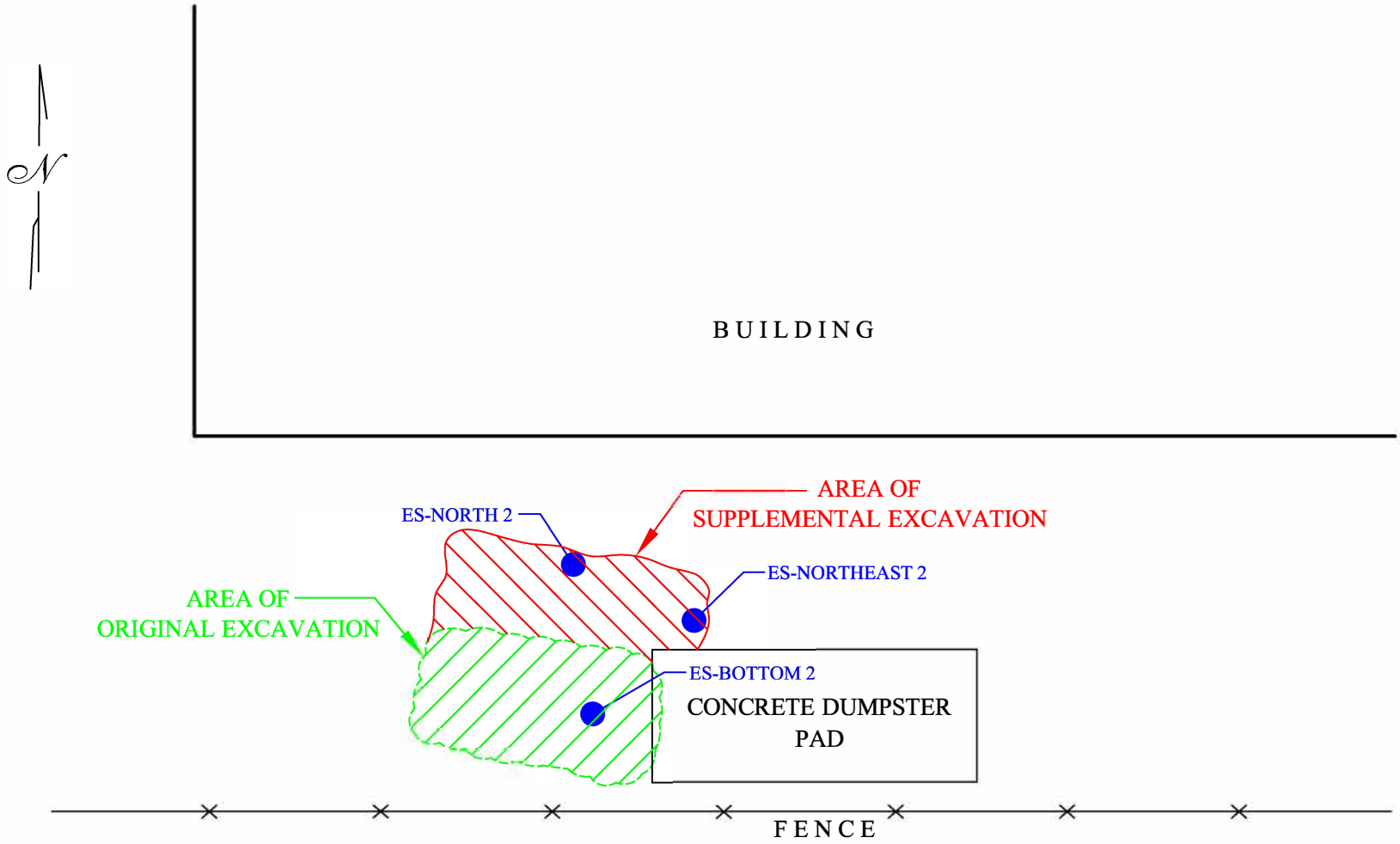
FIGURE 3
SUMMARY OF GROUNDWATER SAMPLING
AND ESTIMATED PLUME CONFIGURATION
250 LIVONIA AVENUE BROOKLYN, NEW YORK



DRAWING NOT TO SCALE

LEGEND

● ES-NORTH END SAMPLING LOCATIONS

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

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

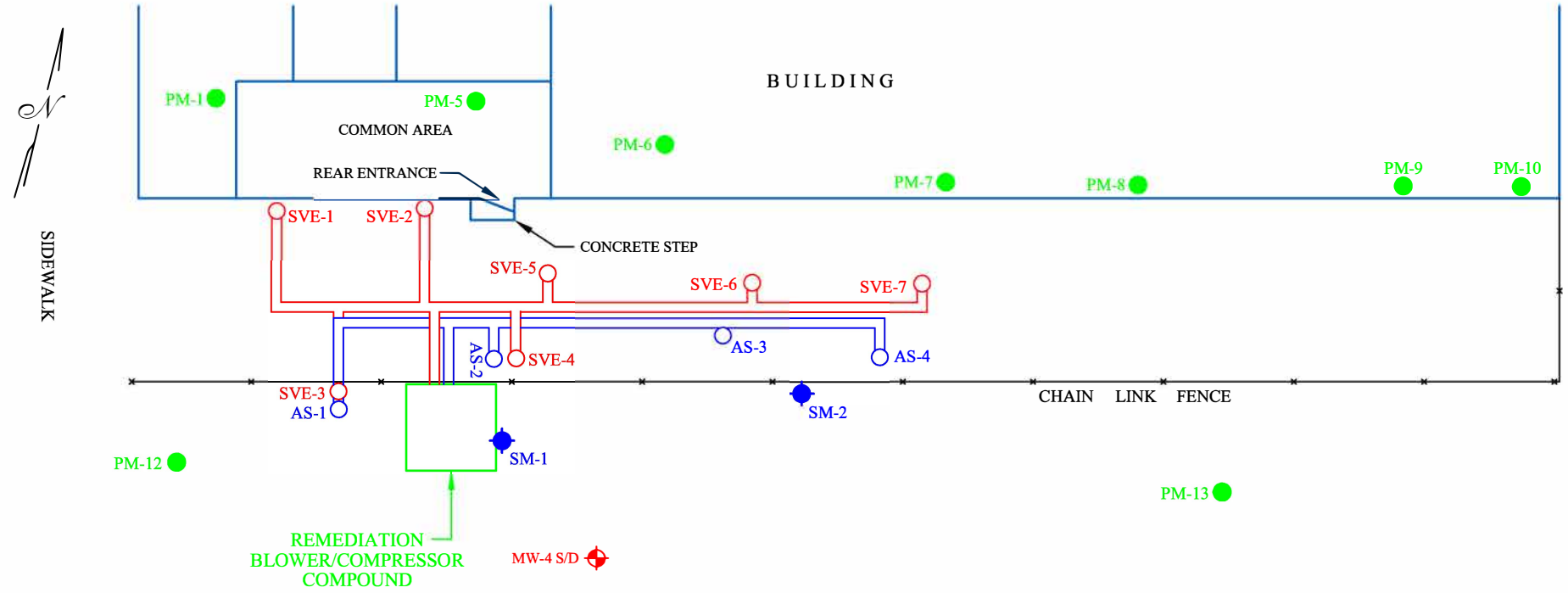

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FIGURE 5

CONFIGURATION OF AS/SVE SYSTEM
AND GROUNDWATER MONITORING WELLS

250 LIVONIA AVENUE
BROOKLYN, NEW YORK

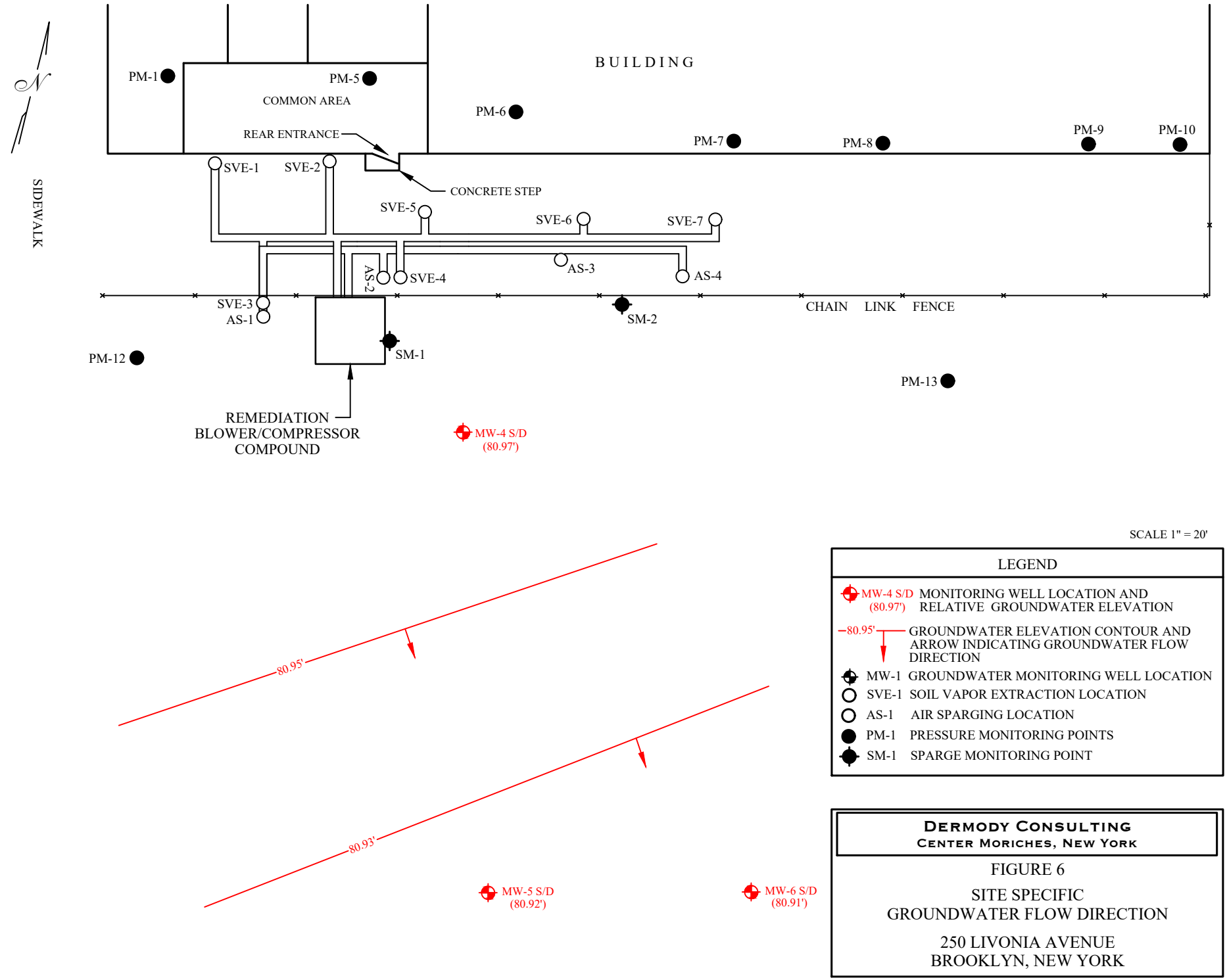

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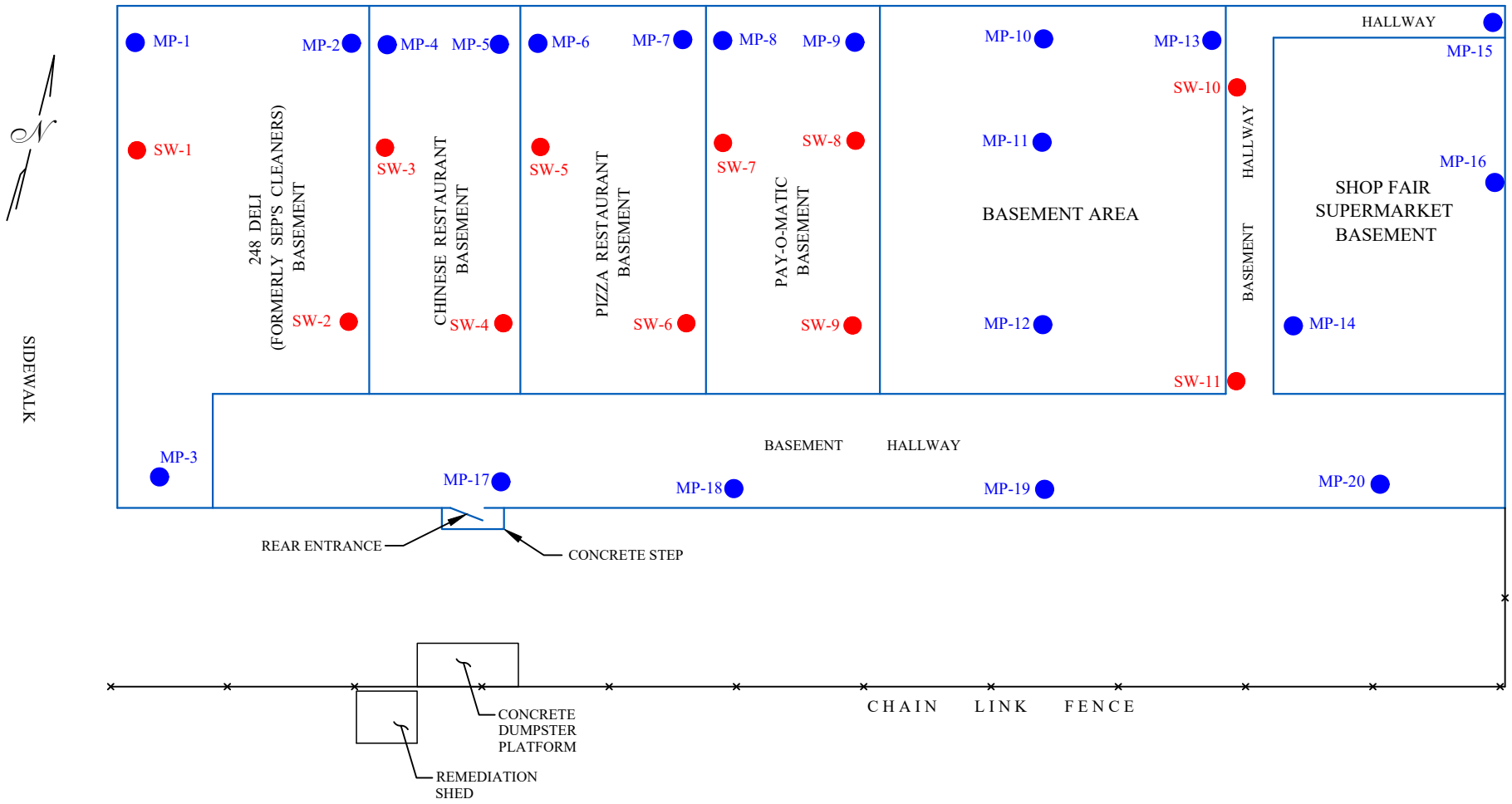
FIGURE 6

SITE SPECIFIC
GROUNDWATER FLOW DIRECTION

250 LIVONIA AVENUE
BROOKLYN, NEW YORK



LEGEND

SW-1 SUCTION WELL LOCATION

MP-1 VACUUM MONITORING POINT

DRAWING SCALE 1" = 20'

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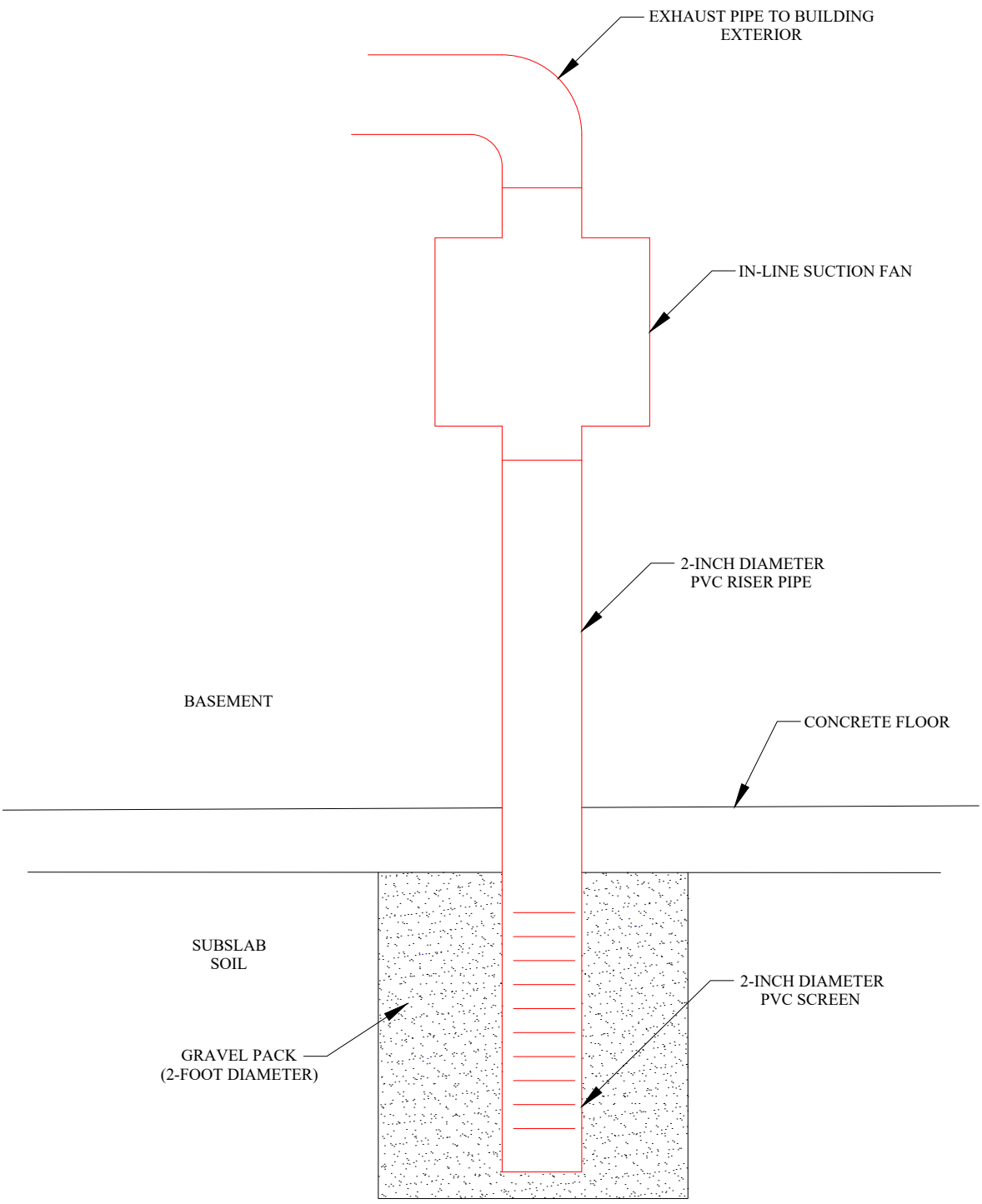
FIGURE 7
SSDS SUCTION WELL AND
MONITORING POINT LOCATIONS
250 LIVONIA AVENUE
BROOKLYN, NEW YORK



DRAWING NOT TO SCALE

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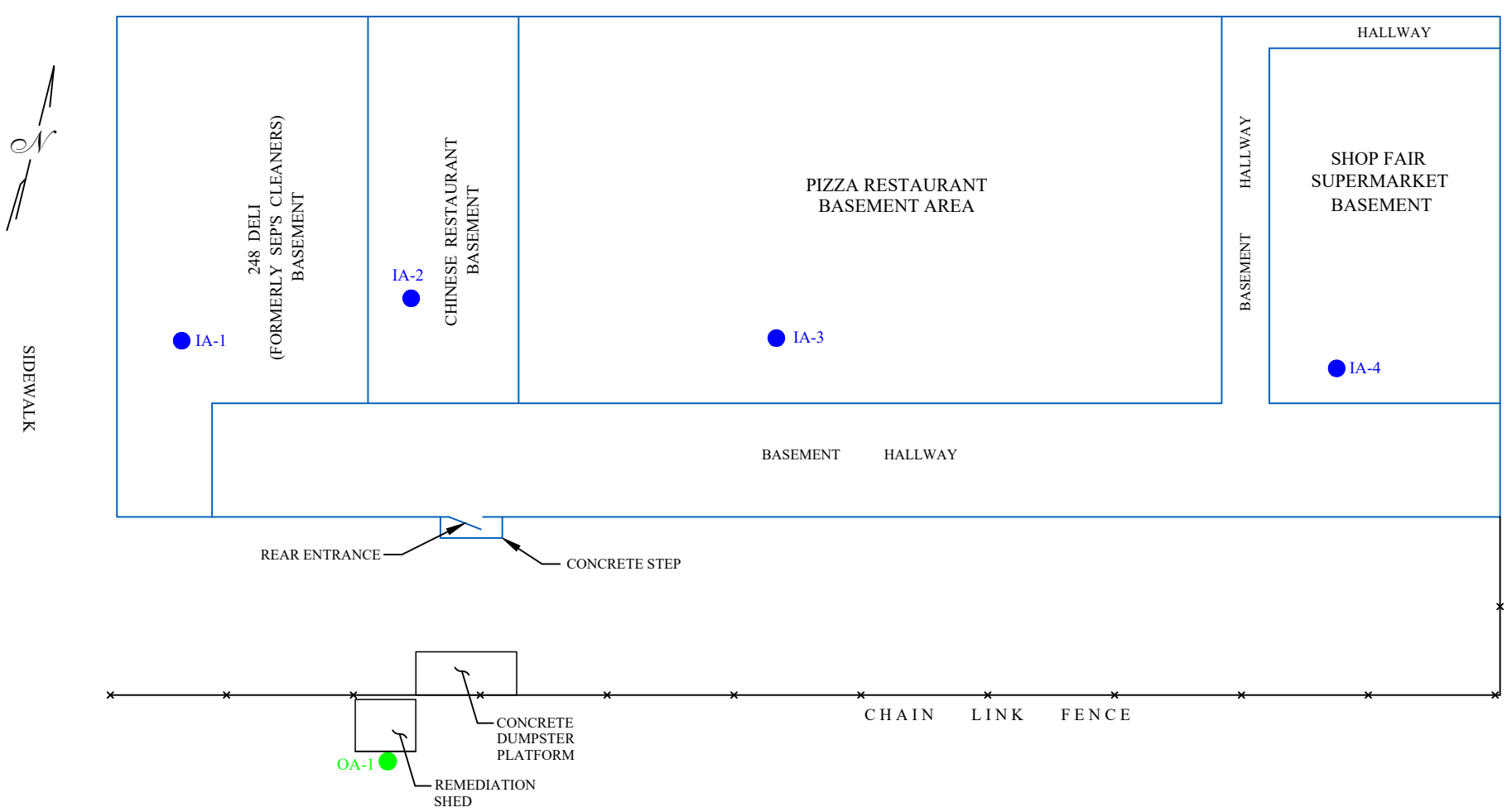
FIGURE 8
SCHEMATIC DIAGRAM OF
TYPICAL SUCTION WELL / FAN
250 LIVONIA AVENUE
BROOKLYN, NEW YORK



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

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
Pressure 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 *(in feet below grade)*	**DO** *(in milligrams per liter)*	**DTW** *(in feet below grade)*	**DO** *(in milligrams per liter)*
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
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 90th 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 90th 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
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).

Appendix A

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.

2017030101426001001E0D38

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	Address
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
Taxable Mortgage Amount:	$	0.00
Exemption:		
TAXES: County (Basic):	$	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

Filing Fee:	$	100.00
NYC Real Property Transfer Tax:	$	0.00
NYS Real Estate Transfer Tax:	$	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

THIS INDENTURE made this 95 of 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 b 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.

Remainder of Page Intentionally Left Blank

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

Riverdale Osborne Towers Commercial LLC:

By: _____

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 20 17, 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.

_____
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 comer 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

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.

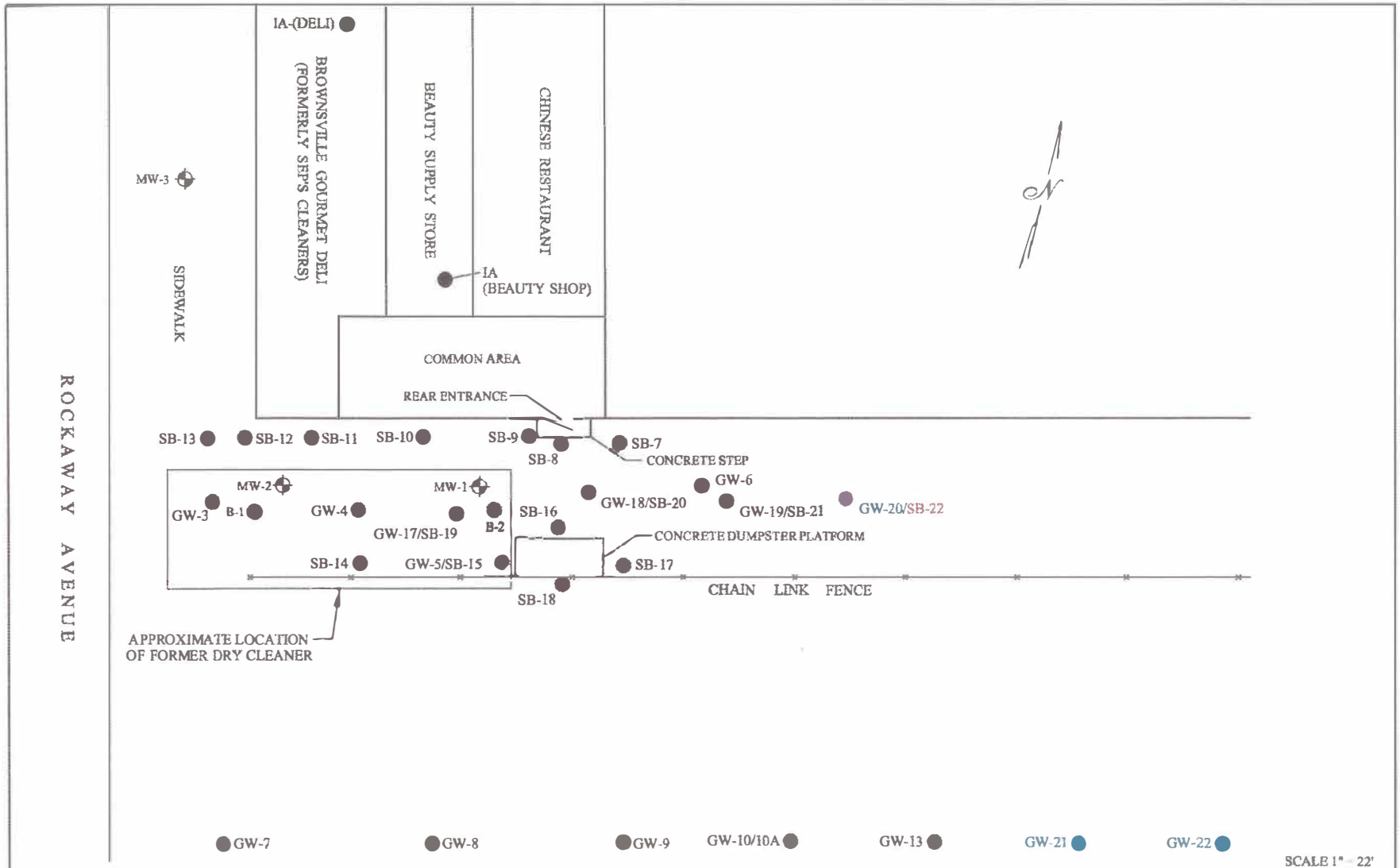
Should you have any questions, please do not hesitate to contact me.

Very truly yours,

Peter Dermody, C.P.G.
Principal Hydrogeologist

enclosures

cc: Deborah Widerkehr
Barry Light
Barry S. Cohen



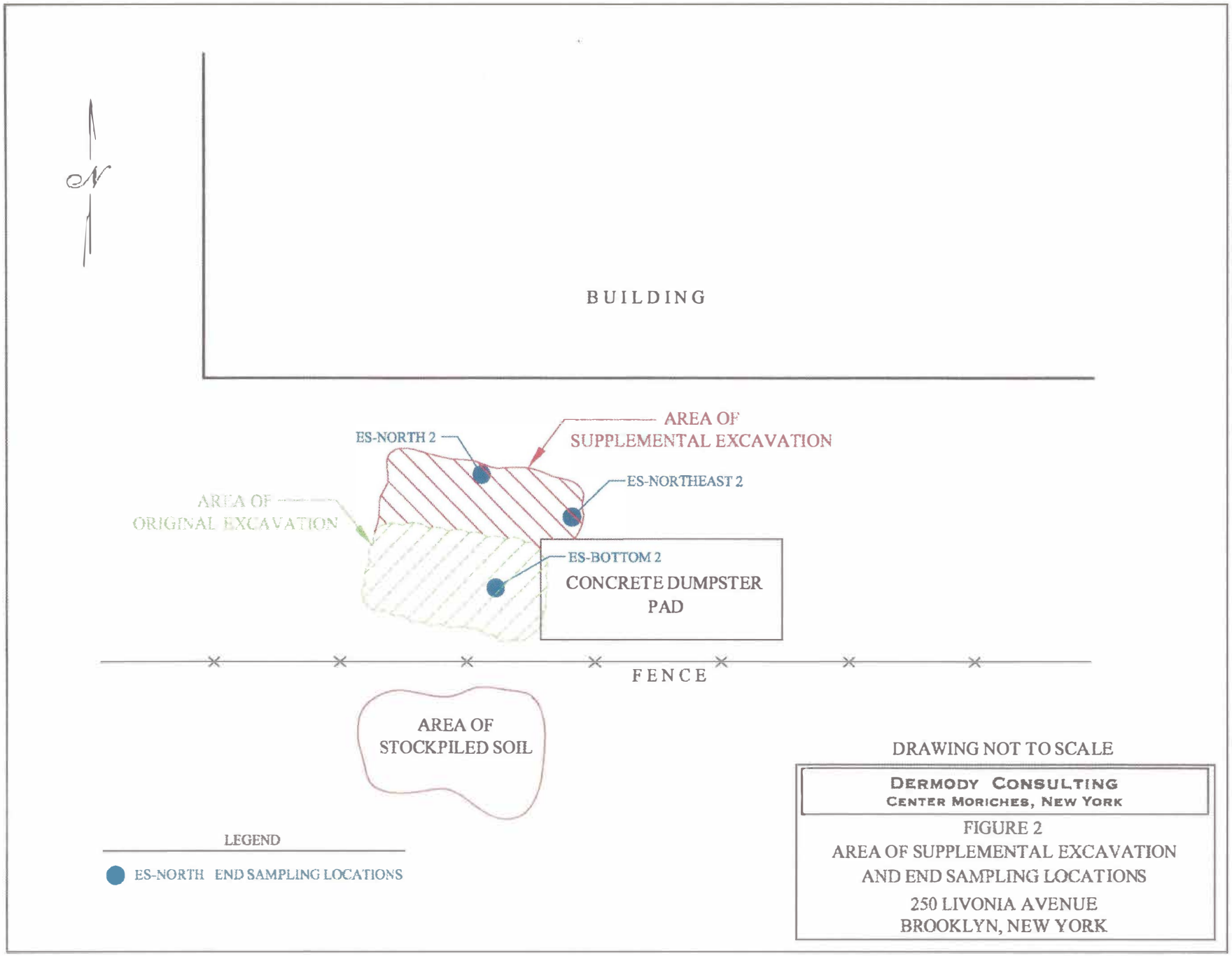
LEGEND

- GW-17/SB-19 SUPPLEMENTAL GROUNDWATER/SOIL SAMPLING LOCATIONS
- GW-13 SUPPLEMENTAL GROUNDWATER SAMPLING LOCATIONS
- GW-17/SB-19 GROUNDWATER/SOIL SAMPLING LOCATIONS
- GW-13 GROUNDWATER SAMPLING LOCATIONS
- IA-(DELI) INDOOR AIR SAMPLING LOCATION
- SB-7 SOIL BORING SAMPLING LOCATION
- GW-1 GROUNDWATER SAMPLING LOCATION
- MW-1 GROUNDWATER MONITORING WELL LOCATION
- B-1 SOIL/GROUNDWATER SAMPLING LOCATION

DERMODY CONSULTING
CENTER MORICHES, NEW YORK

FIGURE 1

SUPPLEMENTAL SOIL
AND GROUNDWATER
SAMPLING LOCATIONS
250 LIVONIA AVENUE
BROOKLYN, NEW YORK



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.

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: 002815441JJK
Transporter: HORWITH
Date: 06/15/2009
Time In: 2:38 PM
Time Out: 4:33 PM

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

NO SALVAGING ON PREMISES

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	NYD093769354	1	(516) 605-2110	002815441 JJK

GENERATOR

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 Phone: (212) 869-5300

Generator's Site Address (if different than mailing address):
256 LIVONIA AVENUE
BROOKLYN, NY 11212

6. Transporter 1 Company Name: HORWITH 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
Facility's Phone: (800) 592-5489
U.S. EPA ID Number: MID048900633

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. NA3077, Hazardous waste solid,n.o.s., 9, PGIII	XX1	DT	2	T	F002		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
F091043 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/Offeror's Printed/Typed Name: [illegible] | Signature: [illegible] | Month: 6 | Day: 12 | Year: 95

INTL

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: [illegible] | Signature: [illegible] | Month: 6 | Day: 12 | Year: 95

Transporter 2 Printed/Typed Name: | Signature: | Month: | Day: | Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
[illegible]
Manifest Reference Number:

18b. Alternate Facility (or Generator) | U.S. EPA ID Number
Facility's Phone:

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. 11192 | 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 Tarrade | Signature: [illegible] | Month: 6 | Day: 12 | Year: 95

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

Forest P
62330
592

NO SALVAGING ON PREMISES

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	NYD093769354	1	(516) 605-2110	002815440 JJK

GENERATOR

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 Phone: (212) 869-5300

Generator's Site Address (if different than mailing address):
258 LIVONIA AVENUE
BROOKLYN, NY 11212

6. Transporter 1 Company Name: HORWITH 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
Facility's Phone: (800) 592-5489
U.S. EPA ID Number: MID048090633

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. NA3077, Hazardous waste solid,n.o.s.,9,PGIII	XX1	DT	07000	P	F002		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
F091043 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/Offeror's Printed/Typed Name: MICHAEL O'LEARY
Signature:
Month: 6 Day: 12 Year: 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: FORREST NOVEMESKY
Signature:
Month: 6 Day: 12 Year: 09

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) U.S. EPA ID Number
Facility's Phone:

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. H132 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: Nathaniel Enright
Signature:
Month: 06 Day: 15 Year: 09

EPA Form 8700-22 (Rev. 3-05). Previous editions are obsolete. TRANSPORTER'S COPY

Appendix C

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

120 RESEARCH DRIVE STRATFORD, CT 06615 ■ 132-02 89th AVENUE RICHMOND HILL, NY 11418
www.YORKLAB.com (203) 325-1371 FAX (203) 357-0166 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.

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
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 Ai	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: 

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.	Client Project ID	Matrix	Collection Date/Time	Date Received
23D0020	Livonia Ave.	Indoor Ambient Air	March 31, 2023 3:00 pm	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/m³	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/m³	0.51	0.934	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/13/2023 22:29	VH
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.64	0.934	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/13/2023 22:29	VH
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.72	0.934	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/13/2023 22:29	VH
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.51	0.934	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/13/2023 22:29	VH
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.38	0.934	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/13/2023 22:29	VH
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.093	0.934	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/13/2023 22:29	VH
120-82-1	1,2,4-Trichlorobenzene	ND	TO-CCV, TO-LCS-L	ug/m³	0.69	0.934	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/13/2023 22:29	VH
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	0.46	0.934	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/13/2023 22:29	VH
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.72	0.934	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/13/2023 22:29	VH
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.56	0.934	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/13/2023 22:29	VH
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.38	0.934	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/13/2023 22:29	VH
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.43	0.934	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/13/2023 22:29	VH
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.65	0.934	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/13/2023 22:29	VH
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.46	0.934	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/13/2023 22:29	VH
106-99-0	1,3-Butadiene	ND		ug/m³	0.62	0.934	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/13/2023 22:29	VH
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.56	0.934	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/13/2023 22:29	VH

Sample Information

Client Sample ID: IA-1 **York Sample ID:** 23D0020-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23D0020	Livonia Ave.	Indoor Ambient Air	March 31, 2023 3:00 pm	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/m³	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/m³	0.56	0.934	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/13/2023 22:29	VH
123-91-1	1,4-Dioxane	ND		ug/m³	0.67	0.934	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/13/2023 22:29	VH
78-93-3	**2-Butanone**	**1.5**		ug/m³	0.28	0.934	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/13/2023 22:29	VH
591-78-6	* 2-Hexanone	ND		ug/m³	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/m³	1.5	0.934	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/13/2023 22:29	VH
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.38	0.934	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/13/2023 22:29	VH
67-64-1	**Acetone**	**14**		ug/m³	0.44	0.934	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/13/2023 22:29	VH
107-13-1	Acrylonitrile	ND		ug/m³	0.20	0.934	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/13/2023 22:29	VH
71-43-2	**Benzene**	**1.3**		ug/m³	0.30	0.934	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/13/2023 22:29	VH
100-44-7	Benzyl chloride	ND	TO-LC S-L	ug/m³	0.48	0.934	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/13/2023 22:29	VH
75-27-4	Bromodichloromethane	ND		ug/m³	0.63	0.934	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/13/2023 22:29	VH
75-25-2	Bromoform	ND		ug/m³	0.97	0.934	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/13/2023 22:29	VH
74-83-9	Bromomethane	ND		ug/m³	0.36	0.934	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/13/2023 22:29	VH
75-15-0	Carbon disulfide	ND		ug/m³	0.29	0.934	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/13/2023 22:29	VH
56-23-5	**Carbon tetrachloride**	**0.47**		ug/m³	0.15	0.934	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/13/2023 22:29	VH
108-90-7	Chlorobenzene	ND		ug/m³	0.43	0.934	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/13/2023 22:29	VH
75-00-3	Chloroethane	ND		ug/m³	0.25	0.934	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2023 10:00	04/13/2023 22:29	VH
67-66-3	**Chloroform**	**0.82**		ug/m³	0.46	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-1 **York Sample ID:** 23D0020-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23D0020	Livonia Ave.	Indoor Ambient Air	March 31, 2023 3:00 pm	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
74-87-3	**Chloromethane**	**1.1**		ug/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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.	Client Project ID	Matrix	Collection Date/Time	Date Received
23D0020	Livonia Ave.	Indoor Ambient Air	March 31, 2023 3:00 pm	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
127-18-4	Tetrachloroethylene	ND		ug/m³	0.63	0.934	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/13/2023 22:29	VH
109-99-9	* Tetrahydrofuran	ND		ug/m³	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/m³	0.35	0.934	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/13/2023 22:29	VH
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.37	0.934	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/13/2023 22:29	VH
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.42	0.934	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/13/2023 22:29	VH
79-01-6	Trichloroethylene	ND		ug/m³	0.13	0.934	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/13/2023 22:29	VH
75-69-4	**Trichlorofluoromethane (Freon 11)**	**1.2**		ug/m³	0.52	0.934	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/13/2023 22:29	VH
108-05-4	Vinyl acetate	ND		ug/m³	0.33	0.934	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/13/2023 22:29	VH
593-60-2	Vinyl bromide	ND		ug/m³	0.41	0.934	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/13/2023 22:29	VH
75-01-4	Vinyl Chloride	ND		ug/m³	0.12	0.934	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/13/2023 22:29	VH

Sample Information

Client Sample ID: IA-2 **York Sample ID:** 23D0020-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23D0020	Livonia Ave.	Indoor Ambient Air	March 31, 2023 3:00 pm	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/m³	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/m³	0.83	1.512	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 02:48	VH
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	1.0	1.512	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 02:48	VH

Sample Information

Client Sample ID: IA-2 **York Sample ID:** 23D0020-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23D0020	Livonia Ave.	Indoor Ambient Air	March 31, 2023 3:00 pm	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/m³	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/m³	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/m³	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/m³	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-CCV, TO-LCS-L	ug/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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.	Client Project ID	Matrix	Collection Date/Time	Date Received
23D0020	Livonia Ave.	Indoor Ambient Air	March 31, 2023 3:00 pm	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/m³	1.2	1.512	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 02:48	VH
107-05-1	3-Chloropropene	ND		ug/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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.	Client Project ID	Matrix	Collection Date/Time	Date Received
23D0020	Livonia Ave.	Indoor Ambient Air	March 31, 2023 3:00 pm	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/m³	1.3	1.512	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 02:48	VH
75-71-8	**Dichlorodifluoromethane**	**4.4**		ug/m³	0.75	1.512	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 02:48	VH
141-78-6	*** Ethyl acetate**	**3.2**		ug/m³	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/m³	0.66	1.512	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 02:48	VH
87-68-3	Hexachlorobutadiene	ND	TO-LC S-L	ug/m³	1.6	1.512	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 02:48	VH
67-63-0	**Isopropanol**	**27**		ug/m³	0.74	1.512	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 02:48	VH
80-62-6	Methyl Methacrylate	ND		ug/m³	0.62	1.512	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 02:48	VH
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.55	1.512	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 02:48	VH
75-09-2	**Methylene chloride**	**1.9**		ug/m³	1.1	1.512	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 02:48	VH
142-82-5	**n-Heptane**	**4.8**		ug/m³	0.62	1.512	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 02:48	VH
110-54-3	**n-Hexane**	**2.1**		ug/m³	0.53	1.512	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 02:48	VH
95-47-6	**o-Xylene**	**1.7**		ug/m³	0.66	1.512	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 02:48	VH
179601-23-1	**p- & m- Xylenes**	**3.9**		ug/m³	1.3	1.512	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 02:48	VH
622-96-8	*** p-Ethyltoluene**	**0.89**		ug/m³	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/m³	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/m³	0.64	1.512	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 02:48	VH
127-18-4	Tetrachloroethylene	ND		ug/m³	1.0	1.512	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 02:48	VH
109-99-9	*** Tetrahydrofuran**	**3.4**		ug/m³	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/m³	0.57	1.512	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 02:48	VH
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.60	1.512	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 02:48	VH

Sample Information

Client Sample ID: IA-2 **York Sample ID:** 23D0020-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23D0020	Livonia Ave.	Indoor Ambient Air	March 31, 2023 3:00 pm	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
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.69	1.512	EPA TO-15	04/13/2023 10:00	04/14/2023 02:48	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-01-6	Trichloroethylene	ND		ug/m³	0.20	1.512	EPA TO-15	04/13/2023 10:00	04/14/2023 02:48	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-69-4	**Trichlorofluoromethane (Freon 11)**	**2.4**		ug/m³	0.85	1.512	EPA TO-15	04/13/2023 10:00	04/14/2023 02:48	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-05-4	Vinyl acetate	ND		ug/m³	0.53	1.512	EPA TO-15	04/13/2023 10:00	04/14/2023 02:48	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
593-60-2	Vinyl bromide	ND		ug/m³	0.66	1.512	EPA TO-15	04/13/2023 10:00	04/14/2023 02:48	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-01-4	Vinyl Chloride	ND		ug/m³	0.19	1.512	EPA TO-15	04/13/2023 10:00	04/14/2023 02:48	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: IA-3 **York Sample ID:** 23D0020-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23D0020	Livonia Ave.	Indoor Ambient Air	March 31, 2023 3:00 pm	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/m³	1.3	1.872	EPA TO-15	04/13/2023 10:00	04/14/2023 03:58	VH
							Certifications:			
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	1.0	1.872	EPA TO-15	04/13/2023 10:00	04/14/2023 03:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	1.3	1.872	EPA TO-15	04/13/2023 10:00	04/14/2023 03:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.4	1.872	EPA TO-15	04/13/2023 10:00	04/14/2023 03:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	1.0	1.872	EPA TO-15	04/13/2023 10:00	04/14/2023 03:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.76	1.872	EPA TO-15	04/13/2023 10:00	04/14/2023 03:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.19	1.872	EPA TO-15	04/13/2023 10:00	04/14/2023 03:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: IA-3 **York Sample ID:** 23D0020-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23D0020	Livonia Ave.	Indoor Ambient Air	March 31, 2023 3:00 pm	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-CCV, TO-LCS-L	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
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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.	Client Project ID	Matrix	Collection Date/Time	Date Received
23D0020	Livonia Ave.	Indoor Ambient Air	March 31, 2023 3:00 pm	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/m³	0.60	1.872	EPA TO-15	04/13/2023 10:00	04/14/2023 03:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
100-44-7	Benzyl chloride	ND	TO-LC S-L	ug/m³	0.97	1.872	EPA TO-15	04/13/2023 10:00	04/14/2023 03:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-27-4	Bromodichloromethane	ND		ug/m³	1.3	1.872	EPA TO-15	04/13/2023 10:00	04/14/2023 03:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-25-2	Bromoform	ND		ug/m³	1.9	1.872	EPA TO-15	04/13/2023 10:00	04/14/2023 03:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-83-9	Bromomethane	ND		ug/m³	0.73	1.872	EPA TO-15	04/13/2023 10:00	04/14/2023 03:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-15-0	Carbon disulfide	ND		ug/m³	0.58	1.872	EPA TO-15	04/13/2023 10:00	04/14/2023 03:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
56-23-5	**Carbon tetrachloride**	**1.1**		ug/m³	0.29	1.872	EPA TO-15	04/13/2023 10:00	04/14/2023 03:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-90-7	Chlorobenzene	ND		ug/m³	0.86	1.872	EPA TO-15	04/13/2023 10:00	04/14/2023 03:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-00-3	Chloroethane	ND		ug/m³	0.49	1.872	EPA TO-15	04/13/2023 10:00	04/14/2023 03:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-66-3	**Chloroform**	**12**		ug/m³	0.91	1.872	EPA TO-15	04/13/2023 10:00	04/14/2023 03:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-87-3	**Chloromethane**	**2.5**		ug/m³	0.39	1.872	EPA TO-15	04/13/2023 10:00	04/14/2023 03:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.19	1.872	EPA TO-15	04/13/2023 10:00	04/14/2023 03:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.85	1.872	EPA TO-15	04/13/2023 10:00	04/14/2023 03:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-82-7	Cyclohexane	ND		ug/m³	0.64	1.872	EPA TO-15	04/13/2023 10:00	04/14/2023 03:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
124-48-1	Dibromochloromethane	ND		ug/m³	1.6	1.872	EPA TO-15	04/13/2023 10:00	04/14/2023 03:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-71-8	**Dichlorodifluoromethane**	**4.0**		ug/m³	0.93	1.872	EPA TO-15	04/13/2023 10:00	04/14/2023 03:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
141-78-6	*** Ethyl acetate**	**6.3**		ug/m³	1.3	1.872	EPA TO-15	04/13/2023 10:00	04/14/2023 03:58	VH
							Certifications:			
100-41-4	Ethyl Benzene	ND		ug/m³	0.81	1.872	EPA TO-15	04/13/2023 10:00	04/14/2023 03:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
87-68-3	Hexachlorobutadiene	ND	TO-LC S-L	ug/m³	2.0	1.872	EPA TO-15	04/13/2023 10:00	04/14/2023 03:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-63-0	**Isopropanol**	**64**		ug/m³	0.92	1.872	EPA TO-15	04/13/2023 10:00	04/14/2023 03:58	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: IA-3 **York Sample ID:** 23D0020-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23D0020	Livonia Ave.	Indoor Ambient Air	March 31, 2023 3:00 pm	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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.	Client Project ID	Matrix	Collection Date/Time	Date Received
23D0020	Livonia Ave.	Indoor Ambient Air	March 31, 2023 3:00 pm	04/03/2023

Sample Information

Client Sample ID: IA-4 **York Sample ID:** 23D0020-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23D0020	Livonia Ave.	Indoor Ambient Air	March 31, 2023 3:00 pm	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/m³	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/m³	0.93	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	1.2	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.3	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.93	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.69	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.17	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
120-82-1	1,2,4-Trichlorobenzene	ND	TO-CCV, TO-LCS-L	ug/m³	1.3	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	0.84	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.3	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	1.0	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.69	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.79	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	1.2	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.84	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH

Sample Information

Client Sample ID: IA-4 **York Sample ID:** 23D0020-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23D0020	Livonia Ave.	Indoor Ambient Air	March 31, 2023 3:00 pm	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/m³	1.1	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	1.0	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	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/m³	1.0	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
123-91-1	1,4-Dioxane	ND		ug/m³	1.2	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
78-93-3	**2-Butanone**	**4.8**		ug/m³	0.50	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
591-78-6	* 2-Hexanone	ND		ug/m³	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/m³	2.7	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.70	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
67-64-1	**Acetone**	**120**		ug/m³	0.81	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
107-13-1	Acrylonitrile	ND		ug/m³	0.37	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
71-43-2	Benzene	ND		ug/m³	0.54	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
100-44-7	Benzyl chloride	ND	TO-LC S-L	ug/m³	0.88	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
75-27-4	Bromodichloromethane	ND		ug/m³	1.1	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
75-25-2	Bromoform	ND		ug/m³	1.8	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
74-83-9	Bromomethane	ND		ug/m³	0.66	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
75-15-0	Carbon disulfide	ND		ug/m³	0.53	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
56-23-5	**Carbon tetrachloride**	**0.86**		ug/m³	0.27	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
108-90-7	Chlorobenzene	ND		ug/m³	0.78	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH

Sample Information

Client Sample ID: IA-4 **York Sample ID:** 23D0020-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23D0020	Livonia Ave.	Indoor Ambient Air	March 31, 2023 3:00 pm	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:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
67-66-3	**Chloroform**	**2.4**		ug/m³	0.83	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
74-87-3	**Chloromethane**	**2.5**		ug/m³	0.35	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.17	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.77	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
110-82-7	**Cyclohexane**	**0.59**		ug/m³	0.59	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
124-48-1	Dibromochloromethane	ND		ug/m³	1.5	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
75-71-8	**Dichlorodifluoromethane**	**4.0**		ug/m³	0.84	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	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:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	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:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
67-63-0	**Isopropanol**	**65**		ug/m³	0.84	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
80-62-6	Methyl Methacrylate	ND		ug/m³	0.70	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	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:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
75-09-2	**Methylene chloride**	**1.9**		ug/m³	1.2	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
142-82-5	**n-Heptane**	**11**		ug/m³	0.70	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
110-54-3	**n-Hexane**	**1.0**		ug/m³	0.60	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
95-47-6	**o-Xylene**	**0.89**		ug/m³	0.74	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	04/14/2023 05:08	VH
179601-23-1	**p- & m- Xylenes**	**1.9**		ug/m³	1.5	1.704	EPA TO-15 Certifications:	04/13/2023 10:00 NELAC-NY12058,NJDEP-Queens	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.	Client Project ID	Matrix	Collection Date/Time	Date Received
23D0020	Livonia Ave.	Indoor Ambient Air	March 31, 2023 3:00 pm	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
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: NELAC-NY12058,NJDEP-Queens	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: NELAC-NY12058,NJDEP-Queens	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: NELAC-NY12058,NJDEP-Queens	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: NELAC-NY12058,NJDEP-Queens	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: NELAC-NY12058,NJDEP-Queens	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: NELAC-NY12058,NJDEP-Queens	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: NELAC-NY12058,NJDEP-Queens	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: NELAC-NY12058,NJDEP-Queens	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: NELAC-NY12058,NJDEP-Queens	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: NELAC-NY12058,NJDEP-Queens	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.	Client Project ID	Matrix	Collection Date/Time	Date Received
23D0020	Livonia Ave.	Outdoor Ambient Air	March 31, 2023 3:00 pm	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/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.	Client Project ID	Matrix	Collection Date/Time	Date Received
23D0020	Livonia Ave.	Outdoor Ambient Air	March 31, 2023 3:00 pm	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
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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-CCV, TO-LCS-L	ug/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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.	Client Project ID	Matrix	Collection Date/Time	Date Received
23D0020	Livonia Ave.	Outdoor Ambient Air	March 31, 2023 3:00 pm	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/m³	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/m³	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/m³	1.5	1.846	EPA TO-15 Certifications:	04/13/2023 10:00	04/14/2023 06:18	VH
107-05-1	3-Chloropropene	ND		ug/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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.	Client Project ID	Matrix	Collection Date/Time	Date Received
23D0020	Livonia Ave.	Outdoor Ambient Air	March 31, 2023 3:00 pm	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
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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.	Client Project ID	Matrix	Collection Date/Time	Date Received
23D0020	Livonia Ave.	Outdoor Ambient Air	March 31, 2023 3:00 pm	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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/m³	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.

York Analytical Laboratories, Inc.
120 Research Drive, Stratford, CT 06615
132-02 89th Ave Queens, NY 11418
clientservices@yorklab.com
www.yorklab.com

Field Chain-of-Custody Record - AIR

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

YORK Project No. 23D0070

YOUR Information	Report To:	Invoice To:
Company: DERMODY CONSULTING	Company: PETER DERMODY	Company: SAME
Address:	Address:	Address:
Phone.:	Phone.:	Phone.:
Contact:	Contact:	Contact:
E-mail:	E-mail:	E-mail:

YOUR Project Number

YOUR Project Name: Livonia Ave.

YOUR PO#:

Turn-Around Time

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

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

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

Air Matrix Codes

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

Samples From

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

Report / EDD Type (circle selections)

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

YORK Reg. Comp.

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

Certified Canisters: Batch ___ Individual ___

Please enter the following REQUIRED Field Data

Reporting Units: ug/m3 X ppbv ___ ppmv ___

Sample Identification	Date/Time Sampled	Air Matrix	Canister Vacuum Before Sampling (in Hg)	Canister Vacuum After Sampling (in Hg)	Canister ID	Flow Cont. ID	Analysis Requested
IA-1	3/21/23	AI	30	8	36988	17896	TO-15 VOCs
IA-2	↓	AI	30	5	22076	16415	↓
IA-3		AI	30	10	36983	16421	
IA-4		AI	30	8	16956	16417	
~~IA~~ OA-1		AO	30	10	28849	16419	

Comments:

Detection Limits Required

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

Sampling Media

6 Liter Canister X
Tedlar Bag

Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time
Peter Dermody	4/3/23, 900A	[illegible]	4/3/23 3PM	[illegible]	4/3/23 1635
Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time
[illegible] / YORK	4/3/23 1635	[illegible]	4/3/23	Victor D. York	4/3/23 19:45
Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Received in LAB by	Date/Time
Victor D. York				[illegible] York	4/5/23 12:00

Technical Report

prepared for:

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

Report Date: 06/08/2023
Client Project ID: Livonia Ave.
York Project (SDG) No.: 23E1663

CT Cert. No. PH-0723 New Jersey Cert. No. CT005 and NY037 New York Cert. Nos. 10854 and 12058 PA Cert. No. 68-04440

120 RESEARCH DRIVE STRATFORD, CT 06615 ■ 132-02 89th AVENUE RICHMOND HILL, NY 11418
www.YORKLAB.com (203) 325-1371 FAX (203) 357-0166 ClientServices@yorklab.com

Report Date: 06/08/2023
Client Project ID: Livonia Ave.
York Project (SDG) No.: 23E1663

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 May 26, 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.

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
23E1663-01	SW-3	Soil Vapor	05/25/2023	05/26/2023
23E1663-02	SW-4	Soil Vapor	05/25/2023	05/26/2023
23E1663-03	SW-5	Soil Vapor	05/25/2023	05/26/2023
23E1663-04	SW-6	Soil Vapor	05/25/2023	05/26/2023
23E1663-05	SW-7	Soil Vapor	05/25/2023	05/26/2023
23E1663-06	SW-8	Soil Vapor	05/25/2023	05/26/2023
23E1663-07	SW-9	Soil Vapor	05/25/2023	05/26/2023
23E1663-08	SW-10	Soil Vapor	05/25/2023	05/26/2023
23E1663-09	SW-11	Soil Vapor	05/25/2023	05/26/2023

General Notes for York Project (SDG) No.: 23E1663

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

Approved By: 

Date: 06/08/2023

Cassie L. Mosher
Laboratory Manager

Sample Information

Client Sample ID: SW-3 **York Sample ID:** 23E1663-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes: TO-VAC

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.69	1	EPA TO-15 Certifications:	06/08/2023 07:00	06/08/2023 13:13	VH
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.55	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.69	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.77	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.55	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.40	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.099	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.74	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	0.49	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.77	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.60	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.40	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.46	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.70	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.49	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
106-99-0	1,3-Butadiene	ND		ug/m³	0.66	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.60	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.46	1	EPA TO-15 Certifications:	06/08/2023 07:00	06/08/2023 13:13	VH

Sample Information

Client Sample ID: SW-3 **York Sample ID:** 23E1663-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes: TO-VAC

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.60	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
123-91-1	1,4-Dioxane	ND		ug/m³	0.72	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
78-93-3	**2-Butanone**	**0.56**		ug/m³	0.29	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
591-78-6	* 2-Hexanone	ND	CAL-E	ug/m³	0.82	1	EPA TO-15 Certifications:	06/08/2023 07:00	06/08/2023 13:13	VH
107-05-1	3-Chloropropene	ND		ug/m³	1.6	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.41	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
67-64-1	**Acetone**	**16**		ug/m³	0.71	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
107-13-1	Acrylonitrile	ND		ug/m³	0.22	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
71-43-2	Benzene	ND		ug/m³	0.32	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
100-44-7	Benzyl chloride	ND		ug/m³	0.52	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
75-27-4	Bromodichloromethane	ND		ug/m³	0.67	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
75-25-2	Bromoform	ND		ug/m³	1.0	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
74-83-9	Bromomethane	ND		ug/m³	0.39	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
75-15-0	Carbon disulfide	ND		ug/m³	0.31	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
56-23-5	Carbon tetrachloride	ND		ug/m³	0.16	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
108-90-7	Chlorobenzene	ND		ug/m³	0.46	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
75-00-3	Chloroethane	ND		ug/m³	0.26	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
67-66-3	**Chloroform**	**9.8**		ug/m³	0.49	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
74-87-3	**Chloromethane**	**0.45**	TO-CCV, TO-LCS-H	ug/m³	0.21	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH

Sample Information

Client Sample ID: SW-3 **York Sample ID:** 23E1663-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes: TO-VAC

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
156-59-2	**cis-1,2-Dichloroethylene**	**6.1**		ug/m³	0.099	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.45	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
110-82-7	Cyclohexane	ND		ug/m³	0.34	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
124-48-1	Dibromochloromethane	ND		ug/m³	0.85	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
75-71-8	**Dichlorodifluoromethane**	**1.4**		ug/m³	0.49	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
141-78-6	*** Ethyl acetate**	**1.4**		ug/m³	0.72	1	EPA TO-15 Certifications:	06/08/2023 07:00	06/08/2023 13:13	VH
100-41-4	Ethyl Benzene	ND		ug/m³	0.43	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.1	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
67-63-0	**Isopropanol**	**9.7**	B	ug/m³	1.2	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
80-62-6	Methyl Methacrylate	ND		ug/m³	0.41	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.36	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
75-09-2	Methylene chloride	ND		ug/m³	0.69	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
142-82-5	**n-Heptane**	**0.90**		ug/m³	0.41	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
110-54-3	**n-Hexane**	**0.46**		ug/m³	0.35	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
95-47-6	o-Xylene	ND		ug/m³	0.43	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
179601-23-1	p- & m- Xylenes	ND		ug/m³	0.87	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.49	1	EPA TO-15 Certifications:	06/08/2023 07:00	06/08/2023 13:13	VH
115-07-1	* Propylene	ND		ug/m³	0.17	1	EPA TO-15 Certifications:	06/08/2023 07:00	06/08/2023 13:13	VH
100-42-5	Styrene	ND		ug/m³	0.43	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
127-18-4	**Tetrachloroethylene**	**310**		ug/m³	9.6	14.14	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/06/2023 06:00	06/06/2023 20:45	YR

Sample Information

Client Sample ID: SW-3 **York Sample ID:** 23E1663-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes: TO-VAC

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.59	1	EPA TO-15 Certifications:	06/08/2023 07:00	06/08/2023 13:13	VH
108-88-3	**Toluene**	**3.7**		ug/m³	0.38	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
156-60-5	**trans-1,2-Dichloroethylene**	**0.63**		ug/m³	0.40	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.45	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
79-01-6	**Trichloroethylene**	**14**		ug/m³	0.13	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
75-69-4	**Trichlorofluoromethane (Freon 11)**	**0.73**		ug/m³	0.56	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
108-05-4	Vinyl acetate	ND		ug/m³	0.35	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
593-60-2	Vinyl bromide	ND		ug/m³	0.44	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH
75-01-4	Vinyl Chloride	ND		ug/m³	0.13	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 13:13	VH

Sample Information

Client Sample ID: SW-4 **York Sample ID:** 23E1663-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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/m³	6.2	9.085	EPA TO-15 Certifications:	06/08/2023 07:00	06/08/2023 14:00	VH
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	5.0	9.085	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:00	VH
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	6.2	9.085	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:00	VH
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	7.0	9.085	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:00	VH
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	5.0	9.085	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:00	VH

Sample Information

Client Sample ID: SW-4 **York Sample ID:** 23E1663-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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
75-34-3	1,1-Dichloroethane	ND		ug/m³	3.7	9.085	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:00	VH
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.90	9.085	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:00	VH
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	6.7	9.085	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:00	VH
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	4.5	9.085	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:00	VH
106-93-4	1,2-Dibromoethane	ND		ug/m³	7.0	9.085	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:00	VH
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	5.5	9.085	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:00	VH
107-06-2	1,2-Dichloroethane	ND		ug/m³	3.7	9.085	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:00	VH
78-87-5	1,2-Dichloropropane	ND		ug/m³	4.2	9.085	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:00	VH
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	6.4	9.085	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:00	VH
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	4.5	9.085	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:00	VH
106-99-0	1,3-Butadiene	ND		ug/m³	6.0	9.085	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:00	VH
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	5.5	9.085	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:00	VH
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	4.2	9.085	EPA TO-15 Certifications:	06/08/2023 07:00	06/08/2023 14:00	VH
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	5.5	9.085	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:00	VH
123-91-1	1,4-Dioxane	ND		ug/m³	6.5	9.085	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:00	VH
78-93-3	2-Butanone	ND		ug/m³	2.7	9.085	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:00	VH
591-78-6	* 2-Hexanone	ND	CAL-E	ug/m³	7.4	9.085	EPA TO-15 Certifications:	06/08/2023 07:00	06/08/2023 14:00	VH
107-05-1	3-Chloropropene	ND		ug/m³	14	9.085	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:00	VH
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	3.7	9.085	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:00	VH

Sample Information

Client Sample ID: SW-4 **York Sample ID:** 23E1663-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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
67-64-1	**Acetone**	**26**		ug/m³	6.5	9.085	EPA TO-15	06/08/2023 07:00	06/08/2023 14:00	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
107-13-1	Acrylonitrile	ND		ug/m³	2.0	9.085	EPA TO-15	06/08/2023 07:00	06/08/2023 14:00	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
71-43-2	Benzene	ND		ug/m³	2.9	9.085	EPA TO-15	06/08/2023 07:00	06/08/2023 14:00	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
100-44-7	Benzyl chloride	ND		ug/m³	4.7	9.085	EPA TO-15	06/08/2023 07:00	06/08/2023 14:00	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-27-4	Bromodichloromethane	ND		ug/m³	6.1	9.085	EPA TO-15	06/08/2023 07:00	06/08/2023 14:00	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-25-2	Bromoform	ND		ug/m³	9.4	9.085	EPA TO-15	06/08/2023 07:00	06/08/2023 14:00	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
74-83-9	Bromomethane	ND		ug/m³	3.5	9.085	EPA TO-15	06/08/2023 07:00	06/08/2023 14:00	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-15-0	Carbon disulfide	ND		ug/m³	2.8	9.085	EPA TO-15	06/08/2023 07:00	06/08/2023 14:00	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
56-23-5	Carbon tetrachloride	ND		ug/m³	1.4	9.085	EPA TO-15	06/08/2023 07:00	06/08/2023 14:00	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-90-7	Chlorobenzene	ND		ug/m³	4.2	9.085	EPA TO-15	06/08/2023 07:00	06/08/2023 14:00	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-00-3	Chloroethane	ND		ug/m³	2.4	9.085	EPA TO-15	06/08/2023 07:00	06/08/2023 14:00	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-66-3	**Chloroform**	**14**		ug/m³	4.4	9.085	EPA TO-15	06/08/2023 07:00	06/08/2023 14:00	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
74-87-3	Chloromethane	ND		ug/m³	1.9	9.085	EPA TO-15	06/08/2023 07:00	06/08/2023 14:00	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
156-59-2	**cis-1,2-Dichloroethylene**	**260**		ug/m³	0.90	9.085	EPA TO-15	06/08/2023 07:00	06/08/2023 14:00	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	4.1	9.085	EPA TO-15	06/08/2023 07:00	06/08/2023 14:00	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
110-82-7	Cyclohexane	ND		ug/m³	3.1	9.085	EPA TO-15	06/08/2023 07:00	06/08/2023 14:00	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
124-48-1	Dibromochloromethane	ND		ug/m³	7.7	9.085	EPA TO-15	06/08/2023 07:00	06/08/2023 14:00	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-71-8	Dichlorodifluoromethane	ND		ug/m³	4.5	9.085	EPA TO-15	06/08/2023 07:00	06/08/2023 14:00	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
141-78-6	* Ethyl acetate	ND		ug/m³	6.5	9.085	EPA TO-15	06/08/2023 07:00	06/08/2023 14:00	VH
							Certifications:			

Sample Information

Client Sample ID: SW-4 **York Sample ID:** 23E1663-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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
100-41-4	Ethyl Benzene	ND		ug/m³	3.9	9.085	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:00	VH
87-68-3	Hexachlorobutadiene	ND		ug/m³	9.7	9.085	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:00	VH
67-63-0	**Isopropanol**	**19**	B	ug/m³	11	9.085	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:00	VH
80-62-6	Methyl Methacrylate	ND		ug/m³	3.7	9.085	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:00	VH
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	3.3	9.085	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:00	VH
75-09-2	Methylene chloride	ND		ug/m³	6.3	9.085	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:00	VH
142-82-5	n-Heptane	ND		ug/m³	3.7	9.085	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:00	VH
110-54-3	n-Hexane	ND		ug/m³	3.2	9.085	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:00	VH
95-47-6	o-Xylene	ND		ug/m³	3.9	9.085	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:00	VH
179601-23-1	p- & m- Xylenes	ND		ug/m³	7.9	9.085	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:00	VH
622-96-8	* p-Ethyltoluene	ND		ug/m³	4.5	9.085	EPA TO-15 Certifications:	06/08/2023 07:00	06/08/2023 14:00	VH
115-07-1	* Propylene	ND		ug/m³	1.6	9.085	EPA TO-15 Certifications:	06/08/2023 07:00	06/08/2023 14:00	VH
100-42-5	Styrene	ND		ug/m³	3.9	9.085	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:00	VH
127-18-4	**Tetrachloroethylene**	**3300**		ug/m³	13	18.71	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/06/2023 06:00	06/06/2023 21:41	YR
109-99-9	* Tetrahydrofuran	ND		ug/m³	5.4	9.085	EPA TO-15 Certifications:	06/08/2023 07:00	06/08/2023 14:00	VH
108-88-3	**Toluene**	**5.1**		ug/m³	3.4	9.085	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:00	VH
156-60-5	**trans-1,2-Dichloroethylene**	**11**		ug/m³	3.6	9.085	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:00	VH
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	4.1	9.085	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:00	VH
79-01-6	**Trichloroethylene**	**370**		ug/m³	1.2	9.085	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:00	VH

Sample Information

Client Sample ID: SW-4 **York Sample ID:** 23E1663-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m³	5.1	9.085	EPA TO-15	06/08/2023 07:00	06/08/2023 14:00	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-05-4	Vinyl acetate	ND		ug/m³	3.2	9.085	EPA TO-15	06/08/2023 07:00	06/08/2023 14:00	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
593-60-2	Vinyl bromide	ND		ug/m³	4.0	9.085	EPA TO-15	06/08/2023 07:00	06/08/2023 14:00	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-01-4	Vinyl Chloride	ND		ug/m³	1.2	9.085	EPA TO-15	06/08/2023 07:00	06/08/2023 14:00	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: SW-5 **York Sample ID:** 23E1663-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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/m³	1.2	1.7	EPA TO-15	06/08/2023 07:00	06/08/2023 14:53	VH
							Certifications:			
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.93	1.7	EPA TO-15	06/08/2023 07:00	06/08/2023 14:53	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	1.2	1.7	EPA TO-15	06/08/2023 07:00	06/08/2023 14:53	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.3	1.7	EPA TO-15	06/08/2023 07:00	06/08/2023 14:53	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.93	1.7	EPA TO-15	06/08/2023 07:00	06/08/2023 14:53	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.69	1.7	EPA TO-15	06/08/2023 07:00	06/08/2023 14:53	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.17	1.7	EPA TO-15	06/08/2023 07:00	06/08/2023 14:53	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.3	1.7	EPA TO-15	06/08/2023 07:00	06/08/2023 14:53	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	0.84	1.7	EPA TO-15	06/08/2023 07:00	06/08/2023 14:53	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: SW-5 **York Sample ID:** 23E1663-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.3	1.7	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:53	VH
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	1.0	1.7	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:53	VH
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.69	1.7	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:53	VH
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.79	1.7	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:53	VH
76-14-2	**1,2-Dichlorotetrafluoroethane**	**1.3**	TO-CCV, TO-LCS-H	ug/m³	1.2	1.7	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:53	VH
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.84	1.7	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:53	VH
106-99-0	1,3-Butadiene	ND		ug/m³	1.1	1.7	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:53	VH
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	1.0	1.7	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:53	VH
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.79	1.7	EPA TO-15 Certifications:	06/08/2023 07:00	06/08/2023 14:53	VH
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	1.0	1.7	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:53	VH
123-91-1	1,4-Dioxane	ND		ug/m³	1.2	1.7	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:53	VH
78-93-3	**2-Butanone**	**1.8**		ug/m³	0.50	1.7	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:53	VH
591-78-6	* 2-Hexanone	ND	CAL-E	ug/m³	1.4	1.7	EPA TO-15 Certifications:	06/08/2023 07:00	06/08/2023 14:53	VH
107-05-1	3-Chloropropene	ND		ug/m³	2.7	1.7	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:53	VH
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.70	1.7	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:53	VH
67-64-1	**Acetone**	**57**		ug/m³	1.2	1.7	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:53	VH
107-13-1	Acrylonitrile	ND		ug/m³	0.37	1.7	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:53	VH
71-43-2	Benzene	ND		ug/m³	0.54	1.7	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:53	VH
100-44-7	Benzyl chloride	ND		ug/m³	0.88	1.7	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 14:53	VH

Sample Information

Client Sample ID: SW-5 **York Sample ID:** 23E1663-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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
75-27-4	Bromodichloromethane	ND		ug/m³	1.1	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH
75-25-2	Bromoform	ND		ug/m³	1.8	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH
74-83-9	Bromomethane	ND		ug/m³	0.66	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH
75-15-0	Carbon disulfide	ND		ug/m³	0.53	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH
56-23-5	**Carbon tetrachloride**	**0.43**		ug/m³	0.27	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH
108-90-7	Chlorobenzene	ND		ug/m³	0.78	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH
75-00-3	Chloroethane	ND		ug/m³	0.45	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH
67-66-3	**Chloroform**	**10**		ug/m³	0.83	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH
74-87-3	**Chloromethane**	**0.98**	TO-CCV, TO-LCS-H	ug/m³	0.35	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH
156-59-2	**cis-1,2-Dichloroethylene**	**2.2**		ug/m³	0.17	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.77	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH
110-82-7	Cyclohexane	ND		ug/m³	0.59	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH
124-48-1	Dibromochloromethane	ND		ug/m³	1.4	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH
75-71-8	**Dichlorodifluoromethane**	**2.3**		ug/m³	0.84	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH
141-78-6	*** Ethyl acetate**	**2.2**		ug/m³	1.2	1.7	EPA TO-15 Certifications:	06/08/2023 07:00	06/08/2023 14:53	VH
100-41-4	Ethyl Benzene	ND		ug/m³	0.74	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.8	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH
67-63-0	**Isopropanol**	**13**	B	ug/m³	2.1	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH
80-62-6	Methyl Methacrylate	ND		ug/m³	0.70	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH

Sample Information

Client Sample ID: SW-5 **York Sample ID:** 23E1663-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.61	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH
75-09-2	Methylene chloride	ND		ug/m³	1.2	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH
142-82-5	**n-Heptane**	**2.1**		ug/m³	0.70	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH
110-54-3	**n-Hexane**	**0.60**		ug/m³	0.60	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH
95-47-6	o-Xylene	ND		ug/m³	0.74	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH
179601-23-1	p- & m- Xylenes	ND		ug/m³	1.5	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.84	1.7	EPA TO-15 Certifications:	06/08/2023 07:00	06/08/2023 14:53	VH
115-07-1	* Propylene	ND		ug/m³	0.29	1.7	EPA TO-15 Certifications:	06/08/2023 07:00	06/08/2023 14:53	VH
100-42-5	Styrene	ND		ug/m³	0.72	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH
127-18-4	**Tetrachloroethylene**	**82**		ug/m³	1.2	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH
109-99-9	* Tetrahydrofuran	ND		ug/m³	1.0	1.7	EPA TO-15 Certifications:	06/08/2023 07:00	06/08/2023 14:53	VH
108-88-3	**Toluene**	**9.0**		ug/m³	0.64	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.67	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.77	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH
79-01-6	**Trichloroethylene**	**6.0**		ug/m³	0.23	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH
75-69-4	**Trichlorofluoromethane (Freon 11)**	**1.4**		ug/m³	0.96	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH
108-05-4	Vinyl acetate	ND		ug/m³	0.60	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH
593-60-2	Vinyl bromide	ND		ug/m³	0.74	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH
75-01-4	Vinyl Chloride	ND		ug/m³	0.22	1.7	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 14:53	VH

Sample Information

Client Sample ID: SW-6 **York Sample ID:** 23E1663-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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/m³	1.2	1.743	EPA TO-15 Certifications:	06/08/2023 07:00	06/08/2023 15:46	VH
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.95	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	1.2	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.3	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.95	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.71	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.17	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.3	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	0.86	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.3	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	1.0	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.71	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.81	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH
76-14-2	**1,2-Dichlorotetrafluoroethane**	**1.8**	TO-CCV, TO-LCS-H	ug/m³	1.2	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.86	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH
106-99-0	1,3-Butadiene	ND		ug/m³	1.2	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	1.0	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.81	1.743	EPA TO-15 Certifications:	06/08/2023 07:00	06/08/2023 15:46	VH

Sample Information

Client Sample ID: SW-6 **York Sample ID:** 23E1663-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	1.0	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH
123-91-1	1,4-Dioxane	ND		ug/m³	1.3	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH
78-93-3	**2-Butanone**	**1.6**		ug/m³	0.51	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH
591-78-6	* 2-Hexanone	ND	CAL-E	ug/m³	1.4	1.743	EPA TO-15 Certifications:	06/08/2023 07:00	06/08/2023 15:46	VH
107-05-1	3-Chloropropene	ND		ug/m³	2.7	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.71	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH
67-64-1	**Acetone**	**50**		ug/m³	1.2	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH
107-13-1	Acrylonitrile	ND		ug/m³	0.38	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH
71-43-2	Benzene	ND		ug/m³	0.56	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH
100-44-7	Benzyl chloride	ND		ug/m³	0.90	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH
75-27-4	Bromodichloromethane	ND		ug/m³	1.2	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH
75-25-2	Bromoform	ND		ug/m³	1.8	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH
74-83-9	Bromomethane	ND		ug/m³	0.68	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH
75-15-0	Carbon disulfide	ND		ug/m³	0.54	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH
56-23-5	**Carbon tetrachloride**	**0.44**		ug/m³	0.27	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH
108-90-7	Chlorobenzene	ND		ug/m³	0.80	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH
75-00-3	Chloroethane	ND		ug/m³	0.46	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH
67-66-3	**Chloroform**	**12**		ug/m³	0.85	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH
74-87-3	**Chloromethane**	**1.1**	TO-CCV, TO-LCS-H	ug/m³	0.36	1.743	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 15:46	VH

Sample Information

Client Sample ID: SW-6 **York Sample ID:** 23E1663-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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
156-59-2	**cis-1,2-Dichloroethylene**	**0.69**		ug/m³	0.17	1.743	EPA TO-15	06/08/2023 07:00	06/08/2023 15:46	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.79	1.743	EPA TO-15	06/08/2023 07:00	06/08/2023 15:46	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
110-82-7	Cyclohexane	ND		ug/m³	0.60	1.743	EPA TO-15	06/08/2023 07:00	06/08/2023 15:46	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
124-48-1	Dibromochloromethane	ND		ug/m³	1.5	1.743	EPA TO-15	06/08/2023 07:00	06/08/2023 15:46	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-71-8	**Dichlorodifluoromethane**	**2.3**		ug/m³	0.86	1.743	EPA TO-15	06/08/2023 07:00	06/08/2023 15:46	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
141-78-6	*** Ethyl acetate**	**2.4**		ug/m³	1.3	1.743	EPA TO-15	06/08/2023 07:00	06/08/2023 15:46	VH
							Certifications:			
100-41-4	Ethyl Benzene	ND		ug/m³	0.76	1.743	EPA TO-15	06/08/2023 07:00	06/08/2023 15:46	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.9	1.743	EPA TO-15	06/08/2023 07:00	06/08/2023 15:46	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-63-0	**Isopropanol**	**13**	B	ug/m³	2.1	1.743	EPA TO-15	06/08/2023 07:00	06/08/2023 15:46	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
80-62-6	Methyl Methacrylate	ND		ug/m³	0.71	1.743	EPA TO-15	06/08/2023 07:00	06/08/2023 15:46	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.63	1.743	EPA TO-15	06/08/2023 07:00	06/08/2023 15:46	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-09-2	Methylene chloride	ND		ug/m³	1.2	1.743	EPA TO-15	06/08/2023 07:00	06/08/2023 15:46	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
142-82-5	**n-Heptane**	**2.0**		ug/m³	0.71	1.743	EPA TO-15	06/08/2023 07:00	06/08/2023 15:46	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
110-54-3	n-Hexane	ND		ug/m³	0.61	1.743	EPA TO-15	06/08/2023 07:00	06/08/2023 15:46	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
95-47-6	o-Xylene	ND		ug/m³	0.76	1.743	EPA TO-15	06/08/2023 07:00	06/08/2023 15:46	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
179601-23-1	p- & m- Xylenes	ND		ug/m³	1.5	1.743	EPA TO-15	06/08/2023 07:00	06/08/2023 15:46	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.86	1.743	EPA TO-15	06/08/2023 07:00	06/08/2023 15:46	VH
							Certifications:			
115-07-1	* Propylene	ND		ug/m³	0.30	1.743	EPA TO-15	06/08/2023 07:00	06/08/2023 15:46	VH
							Certifications:			
100-42-5	Styrene	ND		ug/m³	0.74	1.743	EPA TO-15	06/08/2023 07:00	06/08/2023 15:46	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			

Sample Information

Client Sample ID: SW-6 **York Sample ID:** 23E1663-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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
127-18-4	**Tetrachloroethylene**	**34**		ug/m³	1.2	1.743	EPA TO-15	06/08/2023 07:00	06/08/2023 15:46	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
109-99-9	* Tetrahydrofuran	ND		ug/m³	1.0	1.743	EPA TO-15	06/08/2023 07:00	06/08/2023 15:46	VH
							Certifications:			
108-88-3	**Toluene**	**8.6**		ug/m³	0.66	1.743	EPA TO-15	06/08/2023 07:00	06/08/2023 15:46	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.69	1.743	EPA TO-15	06/08/2023 07:00	06/08/2023 15:46	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.79	1.743	EPA TO-15	06/08/2023 07:00	06/08/2023 15:46	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
79-01-6	**Trichloroethylene**	**1.7**		ug/m³	0.23	1.743	EPA TO-15	06/08/2023 07:00	06/08/2023 15:46	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-69-4	**Trichlorofluoromethane (Freon 11)**	**1.4**		ug/m³	0.98	1.743	EPA TO-15	06/08/2023 07:00	06/08/2023 15:46	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-05-4	Vinyl acetate	ND		ug/m³	0.61	1.743	EPA TO-15	06/08/2023 07:00	06/08/2023 15:46	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
593-60-2	Vinyl bromide	ND		ug/m³	0.76	1.743	EPA TO-15	06/08/2023 07:00	06/08/2023 15:46	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-01-4	Vinyl Chloride	ND		ug/m³	0.22	1.743	EPA TO-15	06/08/2023 07:00	06/08/2023 15:46	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			

Sample Information

Client Sample ID: SW-7 **York Sample ID:** 23E1663-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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/m³	1.2	1.759	EPA TO-15	06/08/2023 07:00	06/08/2023 16:39	VH
							Certifications:			
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.96	1.759	EPA TO-15	06/08/2023 07:00	06/08/2023 16:39	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	1.2	1.759	EPA TO-15	06/08/2023 07:00	06/08/2023 16:39	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.3	1.759	EPA TO-15	06/08/2023 07:00	06/08/2023 16:39	VH
							Certifications: NELAC-NY12058,NJDEP-Queens			

Sample Information

Client Sample ID: SW-7 **York Sample ID:** 23E1663-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.96	1.759	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 16:39	VH
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.71	1.759	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 16:39	VH
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.17	1.759	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 16:39	VH
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.3	1.759	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 16:39	VH
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	0.86	1.759	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 16:39	VH
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.4	1.759	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 16:39	VH
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	1.1	1.759	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 16:39	VH
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.71	1.759	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 16:39	VH
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.81	1.759	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 16:39	VH
76-14-2	**1,2-Dichlorotetrafluoroethane**	**1.2**		ug/m³	1.2	1.759	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 16:39	VH
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.86	1.759	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 16:39	VH
106-99-0	1,3-Butadiene	ND		ug/m³	1.2	1.759	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 16:39	VH
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	1.1	1.759	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 16:39	VH
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.81	1.759	EPA TO-15 Certifications:	06/08/2023 07:00	06/08/2023 16:39	VH
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	1.1	1.759	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 16:39	VH
123-91-1	1,4-Dioxane	ND		ug/m³	1.3	1.759	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 16:39	VH
78-93-3	**2-Butanone**	**0.99**		ug/m³	0.52	1.759	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 16:39	VH
591-78-6	* 2-Hexanone	ND	CAL-E	ug/m³	1.4	1.759	EPA TO-15 Certifications:	06/08/2023 07:00	06/08/2023 16:39	VH
107-05-1	3-Chloropropene	ND		ug/m³	2.8	1.759	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 16:39	VH

Sample Information

Client Sample ID: SW-7 **York Sample ID:** 23E1663-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.72	1.759	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:39	VH
67-64-1	**Acetone**	**25**		ug/m³	1.3	1.759	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:39	VH
107-13-1	Acrylonitrile	ND		ug/m³	0.38	1.759	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:39	VH
71-43-2	Benzene	ND		ug/m³	0.56	1.759	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:39	VH
100-44-7	Benzyl chloride	ND		ug/m³	0.91	1.759	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:39	VH
75-27-4	Bromodichloromethane	ND		ug/m³	1.2	1.759	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:39	VH
75-25-2	Bromoform	ND		ug/m³	1.8	1.759	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:39	VH
74-83-9	Bromomethane	ND		ug/m³	0.68	1.759	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:39	VH
75-15-0	Carbon disulfide	ND		ug/m³	0.55	1.759	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:39	VH
56-23-5	Carbon tetrachloride	ND		ug/m³	0.28	1.759	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:39	VH
108-90-7	Chlorobenzene	ND		ug/m³	0.81	1.759	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:39	VH
75-00-3	Chloroethane	ND		ug/m³	0.46	1.759	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:39	VH
67-66-3	**Chloroform**	**10**		ug/m³	0.86	1.759	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:39	VH
74-87-3	**Chloromethane**	**0.65**	TO-CCV, TO-LCS-H	ug/m³	0.36	1.759	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:39	VH
156-59-2	**cis-1,2-Dichloroethylene**	**15**		ug/m³	0.17	1.759	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:39	VH
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.80	1.759	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:39	VH
110-82-7	Cyclohexane	ND		ug/m³	0.61	1.759	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:39	VH
124-48-1	Dibromochloromethane	ND		ug/m³	1.5	1.759	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:39	VH
75-71-8	**Dichlorodifluoromethane**	**2.5**		ug/m³	0.87	1.759	EPA TO-15 Certifications:	06/08/2023 07:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:39	VH

Sample Information

Client Sample ID: SW-7 **York Sample ID:** 23E1663-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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
141-78-6	* Ethyl acetate	ND		ug/m³	1.3	1.759	EPA TO-15 Certifications:	06/08/2023 07:00	06/08/2023 16:39	VH
100-41-4	Ethyl Benzene	ND		ug/m³	0.76	1.759	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 16:39	VH
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.9	1.759	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 16:39	VH
67-63-0	**Isopropanol**	**7.7**	B	ug/m³	2.2	1.759	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 16:39	VH
80-62-6	Methyl Methacrylate	ND		ug/m³	0.72	1.759	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 16:39	VH
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.63	1.759	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 16:39	VH
75-09-2	Methylene chloride	ND		ug/m³	1.2	1.759	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 16:39	VH
142-82-5	**n-Heptane**	**1.0**		ug/m³	0.72	1.759	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 16:39	VH
110-54-3	n-Hexane	ND		ug/m³	0.62	1.759	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 16:39	VH
95-47-6	o-Xylene	ND		ug/m³	0.76	1.759	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 16:39	VH
179601-23-1	p- & m- Xylenes	ND		ug/m³	1.5	1.759	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 16:39	VH
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.86	1.759	EPA TO-15 Certifications:	06/08/2023 07:00	06/08/2023 16:39	VH
115-07-1	* Propylene	ND		ug/m³	0.30	1.759	EPA TO-15 Certifications:	06/08/2023 07:00	06/08/2023 16:39	VH
100-42-5	Styrene	ND		ug/m³	0.75	1.759	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 16:39	VH
127-18-4	**Tetrachloroethylene**	**310**		ug/m³	1.2	1.759	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 16:39	VH
109-99-9	* Tetrahydrofuran	ND		ug/m³	1.0	1.759	EPA TO-15 Certifications:	06/08/2023 07:00	06/08/2023 16:39	VH
108-88-3	**Toluene**	**4.5**		ug/m³	0.66	1.759	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 16:39	VH
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.70	1.759	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 16:39	VH
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.80	1.759	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 07:00	06/08/2023 16:39	VH

Sample Information

Client Sample ID: SW-7 **York Sample ID:** 23E1663-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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
79-01-6	**Trichloroethylene**	**12**		ug/m³	0.24	1.759	EPA TO-15	06/08/2023 07:00	06/08/2023 16:39	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-69-4	**Trichlorofluoromethane (Freon 11)**	**1.4**		ug/m³	0.99	1.759	EPA TO-15	06/08/2023 07:00	06/08/2023 16:39	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-05-4	Vinyl acetate	ND		ug/m³	0.62	1.759	EPA TO-15	06/08/2023 07:00	06/08/2023 16:39	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
593-60-2	Vinyl bromide	ND		ug/m³	0.77	1.759	EPA TO-15	06/08/2023 07:00	06/08/2023 16:39	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-01-4	Vinyl Chloride	ND		ug/m³	0.22	1.759	EPA TO-15	06/08/2023 07:00	06/08/2023 16:39	VH
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: SW-8 **York Sample ID:** 23E1663-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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/m³	1.1	1.588	EPA TO-15	06/08/2023 02:00	06/08/2023 15:07	YR
							Certifications:			
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.87	1.588	EPA TO-15	06/08/2023 02:00	06/08/2023 15:07	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	1.1	1.588	EPA TO-15	06/08/2023 02:00	06/08/2023 15:07	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.2	1.588	EPA TO-15	06/08/2023 02:00	06/08/2023 15:07	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.87	1.588	EPA TO-15	06/08/2023 02:00	06/08/2023 15:07	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.64	1.588	EPA TO-15	06/08/2023 02:00	06/08/2023 15:07	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.16	1.588	EPA TO-15	06/08/2023 02:00	06/08/2023 15:07	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.2	1.588	EPA TO-15	06/08/2023 02:00	06/08/2023 15:07	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: **SW-8** **York Sample ID:** **23E1663-06**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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
95-63-6	**1,2,4-Trimethylbenzene**	**0.78**		ug/m³	0.78	1.588	EPA TO-15	06/08/2023 02:00	06/08/2023 15:07	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.2	1.588	EPA TO-15	06/08/2023 02:00	06/08/2023 15:07	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.95	1.588	EPA TO-15	06/08/2023 02:00	06/08/2023 15:07	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.64	1.588	EPA TO-15	06/08/2023 02:00	06/08/2023 15:07	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.73	1.588	EPA TO-15	06/08/2023 02:00	06/08/2023 15:07	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	1.1	1.588	EPA TO-15	06/08/2023 02:00	06/08/2023 15:07	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.78	1.588	EPA TO-15	06/08/2023 02:00	06/08/2023 15:07	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-99-0	1,3-Butadiene	ND		ug/m³	1.1	1.588	EPA TO-15	06/08/2023 02:00	06/08/2023 15:07	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.95	1.588	EPA TO-15	06/08/2023 02:00	06/08/2023 15:07	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.73	1.588	EPA TO-15	06/08/2023 02:00	06/08/2023 15:07	YR
							Certifications:			
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.95	1.588	EPA TO-15	06/08/2023 02:00	06/08/2023 15:07	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
123-91-1	1,4-Dioxane	ND		ug/m³	1.1	1.588	EPA TO-15	06/08/2023 02:00	06/08/2023 15:07	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-93-3	**2-Butanone**	**5.7**		ug/m³	0.47	1.588	EPA TO-15	06/08/2023 02:00	06/08/2023 15:07	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
591-78-6	* 2-Hexanone	ND		ug/m³	1.3	1.588	EPA TO-15	06/08/2023 02:00	06/08/2023 15:07	YR
							Certifications:			
107-05-1	3-Chloropropene	ND		ug/m³	2.5	1.588	EPA TO-15	06/08/2023 02:00	06/08/2023 15:07	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.65	1.588	EPA TO-15	06/08/2023 02:00	06/08/2023 15:07	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-64-1	**Acetone**	**59**	B	ug/m³	1.1	1.588	EPA TO-15	06/08/2023 02:00	06/08/2023 15:07	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-13-1	Acrylonitrile	ND		ug/m³	0.34	1.588	EPA TO-15	06/08/2023 02:00	06/08/2023 15:07	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
71-43-2	Benzene	ND		ug/m³	0.51	1.588	EPA TO-15	06/08/2023 02:00	06/08/2023 15:07	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: SW-8 **York Sample ID:** 23E1663-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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
100-44-7	Benzyl chloride	ND		ug/m³	0.82	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR
75-27-4	Bromodichloromethane	ND		ug/m³	1.1	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR
75-25-2	Bromoform	ND		ug/m³	1.6	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR
74-83-9	Bromomethane	ND		ug/m³	0.62	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR
75-15-0	Carbon disulfide	ND		ug/m³	0.49	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR
56-23-5	**Carbon tetrachloride**	**0.50**		ug/m³	0.25	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR
108-90-7	Chlorobenzene	ND		ug/m³	0.73	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR
75-00-3	Chloroethane	ND		ug/m³	0.42	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR
67-66-3	**Chloroform**	**4.8**		ug/m³	0.78	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR
74-87-3	**Chloromethane**	**1.1**		ug/m³	0.33	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.16	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.72	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR
110-82-7	**Cyclohexane**	**0.55**		ug/m³	0.55	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR
124-48-1	Dibromochloromethane	ND		ug/m³	1.4	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR
75-71-8	**Dichlorodifluoromethane**	**2.4**		ug/m³	0.79	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR
141-78-6	*** Ethyl acetate**	**3.8**		ug/m³	1.1	1.588	EPA TO-15 Certifications:	06/08/2023 02:00	06/08/2023 15:07	YR
100-41-4	Ethyl Benzene	ND		ug/m³	0.69	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.7	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR
67-63-0	**Isopropanol**	**17**	B	ug/m³	2.0	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR
80-62-6	Methyl Methacrylate	ND		ug/m³	0.65	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR

Sample Information

Client Sample ID: SW-8 **York Sample ID:** 23E1663-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.57	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR
75-09-2	Methylene chloride	ND		ug/m³	1.1	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR
142-82-5	**n-Heptane**	**3.5**		ug/m³	0.65	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR
110-54-3	**n-Hexane**	**1.8**		ug/m³	0.56	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR
95-47-6	**o-Xylene**	**0.69**		ug/m³	0.69	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR
179601-23-1	**p- & m- Xylenes**	**1.8**		ug/m³	1.4	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.78	1.588	EPA TO-15 Certifications:	06/08/2023 02:00	06/08/2023 15:07	YR
115-07-1	* Propylene	ND		ug/m³	0.27	1.588	EPA TO-15 Certifications:	06/08/2023 02:00	06/08/2023 15:07	YR
100-42-5	Styrene	ND		ug/m³	0.68	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR
127-18-4	**Tetrachloroethylene**	**2.0**		ug/m³	1.1	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR
109-99-9	*** Tetrahydrofuran**	**4.1**		ug/m³	0.94	1.588	EPA TO-15 Certifications:	06/08/2023 02:00	06/08/2023 15:07	YR
108-88-3	**Toluene**	**11**		ug/m³	0.60	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.63	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.72	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR
79-01-6	Trichloroethylene	ND		ug/m³	0.21	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR
75-69-4	**Trichlorofluoromethane (Freon 11)**	**1.3**		ug/m³	0.89	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR
108-05-4	Vinyl acetate	ND		ug/m³	0.56	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR
593-60-2	Vinyl bromide	ND		ug/m³	0.69	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR
75-01-4	Vinyl Chloride	ND		ug/m³	0.20	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 15:07	YR

Sample Information

Client Sample ID: SW-9 **York Sample ID:** 23E1663-07

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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/m³	1.1	1.588	EPA TO-15 Certifications:	06/08/2023 02:00	06/08/2023 16:10	YR
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.87	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	1.1	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.2	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.87	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.64	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.16	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.2	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	0.78	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.2	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.95	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.64	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.73	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	1.1	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.78	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
106-99-0	1,3-Butadiene	ND		ug/m³	1.1	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.95	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.73	1.588	EPA TO-15 Certifications:	06/08/2023 02:00	06/08/2023 16:10	YR
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.95	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR

Sample Information

Client Sample ID: **SW-9** **York Sample ID:** **23E1663-07**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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/m³	1.1	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
78-93-3	**2-Butanone**	**1.1**		ug/m³	0.47	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
591-78-6	* 2-Hexanone	ND		ug/m³	1.3	1.588	EPA TO-15 Certifications:	06/08/2023 02:00	06/08/2023 16:10	YR
107-05-1	3-Chloropropene	ND		ug/m³	2.5	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.65	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
67-64-1	**Acetone**	**74**	B	ug/m³	1.1	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
107-13-1	Acrylonitrile	ND		ug/m³	0.34	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
71-43-2	Benzene	ND		ug/m³	0.51	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
100-44-7	Benzyl chloride	ND		ug/m³	0.82	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
75-27-4	Bromodichloromethane	ND		ug/m³	1.1	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
75-25-2	Bromoform	ND		ug/m³	1.6	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
74-83-9	Bromomethane	ND		ug/m³	0.62	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
75-15-0	Carbon disulfide	ND		ug/m³	0.49	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
56-23-5	**Carbon tetrachloride**	**0.70**		ug/m³	0.25	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
108-90-7	Chlorobenzene	ND		ug/m³	0.73	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
75-00-3	Chloroethane	ND		ug/m³	0.42	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
67-66-3	**Chloroform**	**9.7**		ug/m³	0.78	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
74-87-3	**Chloromethane**	**0.72**		ug/m³	0.33	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
156-59-2	**cis-1,2-Dichloroethylene**	**0.82**		ug/m³	0.16	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR

Sample Information

Client Sample ID: SW-9 **York Sample ID:** 23E1663-07

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.72	1.588	EPA TO-15 Certifications:	06/08/2023 02:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:10	YR
110-82-7	Cyclohexane	ND		ug/m³	0.55	1.588	EPA TO-15 Certifications:	06/08/2023 02:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:10	YR
124-48-1	Dibromochloromethane	ND		ug/m³	1.4	1.588	EPA TO-15 Certifications:	06/08/2023 02:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:10	YR
75-71-8	**Dichlorodifluoromethane**	**3.6**		ug/m³	0.79	1.588	EPA TO-15 Certifications:	06/08/2023 02:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:10	YR
141-78-6	*** Ethyl acetate**	**5.1**		ug/m³	1.1	1.588	EPA TO-15 Certifications:	06/08/2023 02:00	06/08/2023 16:10	YR
100-41-4	Ethyl Benzene	ND		ug/m³	0.69	1.588	EPA TO-15 Certifications:	06/08/2023 02:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:10	YR
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.7	1.588	EPA TO-15 Certifications:	06/08/2023 02:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:10	YR
67-63-0	**Isopropanol**	**21**	B	ug/m³	2.0	1.588	EPA TO-15 Certifications:	06/08/2023 02:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:10	YR
80-62-6	Methyl Methacrylate	ND		ug/m³	0.65	1.588	EPA TO-15 Certifications:	06/08/2023 02:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:10	YR
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.57	1.588	EPA TO-15 Certifications:	06/08/2023 02:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:10	YR
75-09-2	Methylene chloride	ND		ug/m³	1.1	1.588	EPA TO-15 Certifications:	06/08/2023 02:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:10	YR
142-82-5	**n-Heptane**	**7.9**		ug/m³	0.65	1.588	EPA TO-15 Certifications:	06/08/2023 02:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:10	YR
110-54-3	**n-Hexane**	**0.73**		ug/m³	0.56	1.588	EPA TO-15 Certifications:	06/08/2023 02:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:10	YR
95-47-6	o-Xylene	ND		ug/m³	0.69	1.588	EPA TO-15 Certifications:	06/08/2023 02:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:10	YR
179601-23-1	p- & m- Xylenes	ND		ug/m³	1.4	1.588	EPA TO-15 Certifications:	06/08/2023 02:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:10	YR
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.78	1.588	EPA TO-15 Certifications:	06/08/2023 02:00	06/08/2023 16:10	YR
115-07-1	* Propylene	ND		ug/m³	0.27	1.588	EPA TO-15 Certifications:	06/08/2023 02:00	06/08/2023 16:10	YR
100-42-5	Styrene	ND		ug/m³	0.68	1.588	EPA TO-15 Certifications:	06/08/2023 02:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:10	YR
127-18-4	**Tetrachloroethylene**	**16**		ug/m³	1.1	1.588	EPA TO-15 Certifications:	06/08/2023 02:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 16:10	YR

Sample Information

Client Sample ID: SW-9 **York Sample ID:** 23E1663-07

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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/m³	0.94	1.588	EPA TO-15 Certifications:	06/08/2023 02:00	06/08/2023 16:10	YR
108-88-3	**Toluene**	**29**		ug/m³	0.60	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.63	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.72	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
79-01-6	**Trichloroethylene**	**0.51**		ug/m³	0.21	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
75-69-4	**Trichlorofluoromethane (Freon 11)**	**2.2**		ug/m³	0.89	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
108-05-4	Vinyl acetate	ND		ug/m³	0.56	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
593-60-2	Vinyl bromide	ND		ug/m³	0.69	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR
75-01-4	Vinyl Chloride	ND		ug/m³	0.20	1.588	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 16:10	YR

Sample Information

Client Sample ID: SW-10 **York Sample ID:** 23E1663-08

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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/m³	1.1	1.65	EPA TO-15 Certifications:	06/08/2023 02:00	06/08/2023 17:13	YR
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.90	1.65	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 17:13	YR
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	1.1	1.65	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 17:13	YR
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.3	1.65	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 17:13	YR

Sample Information

Client Sample ID: SW-10 **York Sample ID:** 23E1663-08

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.90	1.65	EPA TO-15 Certifications:	06/08/2023 02:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 17:13	YR
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.67	1.65	EPA TO-15 Certifications:	06/08/2023 02:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 17:13	YR
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.16	1.65	EPA TO-15 Certifications:	06/08/2023 02:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 17:13	YR
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.2	1.65	EPA TO-15 Certifications:	06/08/2023 02:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 17:13	YR
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	0.81	1.65	EPA TO-15 Certifications:	06/08/2023 02:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 17:13	YR
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.3	1.65	EPA TO-15 Certifications:	06/08/2023 02:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 17:13	YR
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.99	1.65	EPA TO-15 Certifications:	06/08/2023 02:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 17:13	YR
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.67	1.65	EPA TO-15 Certifications:	06/08/2023 02:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 17:13	YR
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.76	1.65	EPA TO-15 Certifications:	06/08/2023 02:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 17:13	YR
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	1.2	1.65	EPA TO-15 Certifications:	06/08/2023 02:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 17:13	YR
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.81	1.65	EPA TO-15 Certifications:	06/08/2023 02:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 17:13	YR
106-99-0	1,3-Butadiene	ND		ug/m³	1.1	1.65	EPA TO-15 Certifications:	06/08/2023 02:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 17:13	YR
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.99	1.65	EPA TO-15 Certifications:	06/08/2023 02:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 17:13	YR
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.76	1.65	EPA TO-15 Certifications:	06/08/2023 02:00	06/08/2023 17:13	YR
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.99	1.65	EPA TO-15 Certifications:	06/08/2023 02:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 17:13	YR
123-91-1	1,4-Dioxane	ND		ug/m³	1.2	1.65	EPA TO-15 Certifications:	06/08/2023 02:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 17:13	YR
78-93-3	**2-Butanone**	**10**		ug/m³	0.49	1.65	EPA TO-15 Certifications:	06/08/2023 02:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 17:13	YR
591-78-6	* 2-Hexanone	ND		ug/m³	1.4	1.65	EPA TO-15 Certifications:	06/08/2023 02:00	06/08/2023 17:13	YR
107-05-1	3-Chloropropene	ND		ug/m³	2.6	1.65	EPA TO-15 Certifications:	06/08/2023 02:00 NELAC-NY12058,NJDEP-Queens	06/08/2023 17:13	YR

Sample Information

Client Sample ID: SW-10 **York Sample ID:** 23E1663-08

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.68	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-64-1	**Acetone**	**20**	B	ug/m³	1.2	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
107-13-1	Acrylonitrile	ND		ug/m³	0.36	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
71-43-2	**Benzene**	**1.0**		ug/m³	0.53	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
100-44-7	Benzyl chloride	ND		ug/m³	0.85	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-27-4	Bromodichloromethane	ND		ug/m³	1.1	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-25-2	Bromoform	ND		ug/m³	1.7	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
74-83-9	Bromomethane	ND		ug/m³	0.64	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-15-0	Carbon disulfide	ND		ug/m³	0.51	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
56-23-5	**Carbon tetrachloride**	**0.42**		ug/m³	0.26	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-90-7	Chlorobenzene	ND		ug/m³	0.76	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-00-3	Chloroethane	ND		ug/m³	0.44	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-66-3	**Chloroform**	**1.1**		ug/m³	0.81	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
74-87-3	**Chloromethane**	**1.3**		ug/m³	0.34	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.16	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.75	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
110-82-7	**Cyclohexane**	**0.68**		ug/m³	0.57	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
124-48-1	Dibromochloromethane	ND		ug/m³	1.4	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-71-8	**Dichlorodifluoromethane**	**2.4**		ug/m³	0.82	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
141-78-6	* Ethyl acetate	ND		ug/m³	1.2	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications:			

Sample Information

Client Sample ID: **SW-10** **York Sample ID:** **23E1663-08**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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
100-41-4	**Ethyl Benzene**	**1.3**		ug/m³	0.72	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.8	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-63-0	**Isopropanol**	**4.7**	B	ug/m³	2.0	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
80-62-6	Methyl Methacrylate	ND		ug/m³	0.68	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.59	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-09-2	Methylene chloride	ND		ug/m³	1.1	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
142-82-5	**n-Heptane**	**2.2**		ug/m³	0.68	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
110-54-3	**n-Hexane**	**1.7**		ug/m³	0.58	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
95-47-6	**o-Xylene**	**1.2**		ug/m³	0.72	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
179601-23-1	**p- & m- Xylenes**	**3.6**		ug/m³	1.4	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.81	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications:			
115-07-1	* Propylene	ND		ug/m³	0.28	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications:			
100-42-5	Styrene	ND		ug/m³	0.70	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
127-18-4	**Tetrachloroethylene**	**3.7**		ug/m³	1.1	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
109-99-9	*** Tetrahydrofuran**	**5.8**		ug/m³	0.97	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications:			
108-88-3	**Toluene**	**7.8**		ug/m³	0.62	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.65	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.75	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
79-01-6	Trichloroethylene	ND		ug/m³	0.22	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-69-4	**Trichlorofluoromethane (Freon 11)**	**1.3**		ug/m³	0.93	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			

Sample Information

Client Sample ID: SW-10 **York Sample ID:** 23E1663-08

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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
108-05-4	Vinyl acetate	ND		ug/m³	0.58	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
593-60-2	Vinyl bromide	ND		ug/m³	0.72	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-01-4	Vinyl Chloride	ND		ug/m³	0.21	1.65	EPA TO-15	06/08/2023 02:00	06/08/2023 17:13	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: SW-11 **York Sample ID:** 23E1663-09

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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/m³	1.3	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications:			
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	1.0	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	1.3	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.4	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	1.0	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.74	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.18	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.4	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	0.90	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.4	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: SW-11 **York Sample ID:** 23E1663-09

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	1.1	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.74	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.85	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	1.3	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.90	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-99-0	1,3-Butadiene	ND		ug/m³	1.2	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	1.1	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.85	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications:			
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	1.1	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
123-91-1	1,4-Dioxane	ND		ug/m³	1.3	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-93-3	**2-Butanone**	**2.1**		ug/m³	0.54	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
591-78-6	* 2-Hexanone	ND		ug/m³	1.5	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications:			
107-05-1	3-Chloropropene	ND		ug/m³	2.9	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.75	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-64-1	**Acetone**	**39**	B	ug/m³	1.3	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-13-1	Acrylonitrile	ND		ug/m³	0.40	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
71-43-2	Benzene	ND		ug/m³	0.59	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
100-44-7	Benzyl chloride	ND		ug/m³	0.95	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-27-4	Bromodichloromethane	ND		ug/m³	1.2	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: SW-11 **York Sample ID:** 23E1663-09

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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
75-25-2	Bromoform	ND		ug/m³	1.9	1.832	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 18:16	YR
74-83-9	Bromomethane	ND		ug/m³	0.71	1.832	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 18:16	YR
75-15-0	Carbon disulfide	ND		ug/m³	0.57	1.832	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 18:16	YR
56-23-5	**Carbon tetrachloride**	**0.81**		ug/m³	0.29	1.832	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 18:16	YR
108-90-7	Chlorobenzene	ND		ug/m³	0.84	1.832	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 18:16	YR
75-00-3	Chloroethane	ND		ug/m³	0.48	1.832	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 18:16	YR
67-66-3	**Chloroform**	**12**		ug/m³	0.89	1.832	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 18:16	YR
74-87-3	**Chloromethane**	**0.49**		ug/m³	0.38	1.832	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 18:16	YR
156-59-2	**cis-1,2-Dichloroethylene**	**1.2**		ug/m³	0.18	1.832	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 18:16	YR
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.83	1.832	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 18:16	YR
110-82-7	Cyclohexane	ND		ug/m³	0.63	1.832	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 18:16	YR
124-48-1	Dibromochloromethane	ND		ug/m³	1.6	1.832	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 18:16	YR
75-71-8	**Dichlorodifluoromethane**	**3.8**		ug/m³	0.91	1.832	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 18:16	YR
141-78-6	*** Ethyl acetate**	**2.2**		ug/m³	1.3	1.832	EPA TO-15 Certifications:	06/08/2023 02:00	06/08/2023 18:16	YR
100-41-4	Ethyl Benzene	ND		ug/m³	0.80	1.832	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 18:16	YR
87-68-3	Hexachlorobutadiene	ND		ug/m³	2.0	1.832	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 18:16	YR
67-63-0	**Isopropanol**	**8.3**	B	ug/m³	2.3	1.832	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 18:16	YR
80-62-6	Methyl Methacrylate	ND		ug/m³	0.75	1.832	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 18:16	YR
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.66	1.832	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 18:16	YR
75-09-2	Methylene chloride	ND		ug/m³	1.3	1.832	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	06/08/2023 02:00	06/08/2023 18:16	YR

Sample Information

Client Sample ID: SW-11 **York Sample ID:** 23E1663-09

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23E1663	Livonia Ave.	Soil Vapor	May 25, 2023 3:00 pm	05/26/2023

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
142-82-5	**n-Heptane**	**4.6**		ug/m³	0.75	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
110-54-3	n-Hexane	ND		ug/m³	0.65	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
95-47-6	o-Xylene	ND		ug/m³	0.80	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
179601-23-1	p- & m- Xylenes	ND		ug/m³	1.6	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.90	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications:			
115-07-1	* Propylene	ND		ug/m³	0.32	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications:			
100-42-5	Styrene	ND		ug/m³	0.78	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
127-18-4	**Tetrachloroethylene**	**21**		ug/m³	1.2	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
109-99-9	* Tetrahydrofuran	ND		ug/m³	1.1	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications:			
108-88-3	**Toluene**	**17**		ug/m³	0.69	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.73	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.83	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
79-01-6	**Trichloroethylene**	**0.79**		ug/m³	0.25	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-69-4	**Trichlorofluoromethane (Freon 11)**	**2.3**		ug/m³	1.0	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-05-4	Vinyl acetate	ND		ug/m³	0.65	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
593-60-2	Vinyl bromide	ND		ug/m³	0.80	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-01-4	Vinyl Chloride	ND		ug/m³	0.23	1.832	EPA TO-15	06/08/2023 02:00	06/08/2023 18:16	YR
							Certifications: NELAC-NY12058,NJDEP-Queens			

Sample and Data Qualifiers Relating to This Work Order

TO-VAC	The final vacuum in the canister was less than -2 inches Hg vacuum. The time integrated sampling may be affected and not reflect proper sampling over the time period. The data user should take note.
TO-LCS-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-CCV	The value reported is ESTIMATED for this compound due to its behavior during continuing calibration verification (>30% Difference from initial calibration).
CAL-E	The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration (average Rf>20%)
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.

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Field Chain-of-Custody Record - AIR

YORK Project No. 23E1663

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

Page 1 of 1

YOUR Information	Report To:	Invoice To:
Company: DERMODY CONSULTING	Company: PETER DERMODY	Company: SAME
Address:	Address:	Address:
Phone.:	Phone.:	Phone.:
Contact:	Contact:	Contact:
E-mail:	E-mail:	E-mail:

YOUR Project Number:

YOUR Project Name: Livonia Ave.

YOUR PO#:

Turn-Around Time

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

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

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

Peter Dermody

Air Matrix Codes

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

Samples From

New York	X
New Jersey	
Connecticut	
Pennsylvania	
Other	

Report / EDD Type (circle selections)

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

YORK Reg. Comp.

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

Certified Canisters: Batch ___ Individual ___

Please enter the following REQUIRED Field Data

Reporting Units: ug/m³ ___ ppbv ___ ppmv ___

Sample Identification	Date/Time Sampled	Air Matrix	Canister Vacuum Before Sampling (in Hg)	Canister Vacuum After Sampling (in Hg)	Canister ID	Flow Cont. ID	Analysis Requested
SW-3	5/25/23	AS	30	4	23156	None	Toxs VOCs
SW-4	↓	↓	30	9	28853	↓	
SW-5			29	8	42991		↓
SW-6			30	9	28852		
SW-7			30	9	28855		
SW-8			30	7	16156		
SW-9			29	8	14193		
SW-10			30	6	28850		
SW-11			30	7	24113		

Comments:

Detection Limits Required

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

Sampling Media

6 Liter Canister	
Tedlar Bag	

Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time
Peter Dermody	5/26/23, 10A	K Bullymore	5/26/23, 1220pm	K Bullymore	5/26/23 1630
Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time
K Bluck	5/26/23 1630			Victor T. York	5/26/23 20:00
Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Received in LAB by	Date/Time
Victor D. York				YORK	05/30/23 1217