



June 15, 2024

Mr. Patrick Powers
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233

**RE: PRELIMINARY SITE CHARACTERIZATION SUMMARY
2283 Second Avenue – Site # 231126
2283-2285 SECOND AVENUE, NEW YORK, NEW YORK
(HRP # DEC1038.P2)**

Dear Mr. Powers:

On November 23, 2022, HRP Associates, Inc. (HRP) was authorized to complete this New York State Department of Environmental Conservation (NYSDEC) Work Assignment (WA) No. 38 (D009808-38) for Site Characterization (SC) at the 2283 Second Avenue Site (NYSDEC Site No. 231126), located at 2283-2285 Second Avenue, New York, New York (the Site). The Site location is depicted on **Figure 1**.

The Site was historically occupied by a dry cleaner and currently consists of two mixed-use buildings with a first story credit union office and apartments on upper floors. Tetrachloroethene (PCE) impacts to groundwater and soil vapor have been identified at 247 East 117th Street which adjoins the Site to the east and was investigated as a New York City (NYC) Office of Environmental Remediation (OER) Voluntary Cleanup Program (VCP) site (OER VCP Site No. 18EH-N080M/18CVCP022M). The purpose of this SC is to preliminarily delineate impacts to on-site and off-site soil, groundwater, and soil vapor related to the historic use of the Site as a dry cleaner and determine if the Site poses little or no threat to public health and the environment and whether further investigation is required. Site plans depicting off-site and on-site investigation locations are included as **Figures 2A** and **2B**.

Based on the work completed to date, the extent of off-site impacts remains as a data gap requiring further investigation. The remainder of this letter includes brief descriptions of Areas of Concern (AOCs), Physical Characteristics of the Site, Field Activities, Analytical Results, Discussion of Results and Data Gaps, and Recommendations.

Areas of Concern

Based on the historic use of the Site as a dry cleaner and impacts observed on the adjoining 247 East 117th Street property, PCE and its breakdown products, including trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), and vinyl chloride have been identified as contaminants of concern for the Site. The following AOCs have been identified based on HRP's visits to the Site and discussions with the NYSDEC:

1. Potential releases through sumps, floor drains, and other openings in the basement slab (cracks, penetrations) of the Site buildings which may have historically received discharges of PCE. Sumps and floor drains are depicted on **Figure 2B**.

2. The rear patio area on the northwestern portion of the Site (behind 2285 Second Avenue) which includes a floor drain and may have been a historic dumping area for PCE and other chemicals. The rear patio area is depicted on **Figure 2B**.
3. Off-site properties which may have historically used chlorinated solvents, including those identified below. Off-site AOCs are depicted on **Figure 2A**.
 - 2287 Second Avenue: Historic use as a mattress manufacturer, refrigerator repair, and automotive repair. The tax lot containing 2287 Second Avenue has been issued an "E designation" for potential hazardous materials from NYC OER.
 - 245 East 117th Street: Historic use as an automotive repair shop (1980-2005) and a dry cleaning facility (2005-2021).
 - 2291 Second Avenue: Historic use as a dry cleaning facility (2001-2012).
4. Potential off-site receptors of contaminants from the Site through potential soil vapor intrusion (SVI) pathways including:
 - El Cemi Houses, a low income apartment complex catering to older adults. Located 60 ft south of the Site, across East 117th Street.
 - Public School 115 William Paca Elementary School. Located 200 ft east of the Site, across Second Avenue.
 - Residential apartment buildings located north (60 ft), south (60 ft), east (100 ft) and west (80 ft) of the Site.

Physical Characteristics of the Site

Topography and Hydrology

Topography at the Site and surrounding area generally slopes east towards the Harlem River. Site elevation is approximately 18 ft above mean sea level (amsl).

Soils and Surficial Geology

Surficial geology is mapped as till, deposited by glacial ice with a variable texture consisting of poorly sorted mixtures of clay, sand, silt, and gravel on the *Surficial Geologic Map of New York* (Cadwell et. al., 1986). According to the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey, the Site and surrounding area are mapped as Urban Land.

Based on soil borings completed for the SC, unconsolidated soils were measured at thicknesses ranging from 12 ft to 23 ft (based on refusal) and generally consisted of sand and silt overlain by varying amounts of fill material characterized by observations of brick, asphalt, plastic, glass, and metal in the upper 4 ft of soils.

Bedrock Geology

Bedrock geology at the Site is mapped as Inwood Marble on the USGS *Bedrock and Engineering Geologic Maps of New York County and Parts of Kings and Queens Counties, New York and Parts of Bergen and Hudson Counties, New Jersey* (Baskerville C.A., 1994). Lithologic constituents include marbles with variable amounts of calcification and/or dolomitization. According to the USGS *Bedrock-Surface Elevation and Overburden Thickness Maps of the Five Boroughs, New York City, New York*, bedrock is found between 5-25 ft bg in this area of New York (DeMott et al,

2023). Refusal was encountered between 12 and 23 ft bg in off-site borings installed along East 117th Street. The off-site boring refusal depth is inferred to be the depth of top of bedrock; however, bedrock drilling was not performed as part of the investigation and thus depth to competent bedrock could not be confirmed.

Hydrogeology

Depth to groundwater measured from Site overburden monitoring wells range from approximately 10.2 to 11.3 ft bg at MW-1, MW-2, and MW-3 located on East 117th Street (depicted on **Figure 2A**). Direction of groundwater could not be determined due to the lack of lateral control in the monitoring well network (a well could not be installed on the south side of East 117th Street due to shallow refusal); however, based on the topography of the Site and surrounding area and the location of the Harlem River, an eastern groundwater flow direction is inferred. The Harlem River is located approximately 0.4 miles east of the Site.

Field Activities

The field work described herein was completed in general accordance with the SC Work Plan dated March 29, 2023. All soil, groundwater and soil vapor samples collected for the SC were analyzed by Pace Analytical, a NYSDOH Environmental Laboratory Approval Program (ELAP) certified laboratory.

Summaries of subsurface soil, groundwater, SVI structure sampling, and exterior soil vapor point samples collected for the SC, including laboratory analyses, and rationales for sample locations are included in **Tables 1-4**. Locations of monitoring wells, surface soil, and soil vapor samples are depicted on **Figures 2A** and **2B**. Soil boring logs are presented in **Attachment A**. Monitoring well construction logs are presented in **Attachment B**. Low-flow groundwater sampling logs are presented in **Attachment C**.

Completed SC field work included the following tasks:

- Private utility markout surveys of the on-site and off-site investigation locations, including ground penetrating radar (GPR) surveys to identify any subsurface structures which may obstruct subsurface investigation.
- A survey of the Site property boundary and underground utilities as marked by the private utility locator.
- Installation and continuous sampling of 14 soil borings, including 5 exterior soil borings completed to refusal depths ranging from 12 to 23 feet below sidewalk grade and 9 soil borings within the basements of the Site buildings completed to refusal depths ranging from 1 to 10 feet below basement slab grade.
- Collection of 29 subsurface soil samples from the soil borings (up to three samples collected per boring) for analysis of total compound list (TCL) VOCs by EPA Method 8260.
- Three of the subsurface soil samples were analyzed for the following additional parameters:
 - TCL semi-volatile organic compounds (SVOCs) by EPA Method 8270



- Total analyte list (TAL) metals by EPA Method 6010B
- TCL polychlorinated biphenyls (PCBs) by EPA Method 8082
- TCL chlorinated herbicides by EPA Method 8151
- TCL organochloride pesticides by EPA Method 8081
- Per- and polyfluoroalkyl substances (PFAS) by EPA Method 1633
- Collection of one sediment sample from a dry sump in the basement of 2283 Second Avenue for analysis of TCL VOCs by EPA Method 8260.
- Installation of 5 temporary monitoring wells in the basements of the Site screened across the groundwater interface.
- Collection of 5 groundwater samples from the temporary monitoring wells for analysis of TCL VOCs by EPA Method 8260.
- Collection of one groundwater sample from a sump in the basement of 2285 Second Avenue.
- Installation and sampling of 3 off-site permanent overburden monitoring wells screened across the groundwater interface along East 117th Street.
- Collection of 3 groundwater samples from the permanent monitoring wells for the following parameters:
 - TCL VOCs by EPA Method 8260
 - TCL SVOCs by EPA Method 8270
 - TAL metals by EPA Method 6010B
 - TCL PCBs by EPA Method 8082
 - TCL chlorinated herbicides by EPA Method 8151
 - TCL organochloride pesticides by EPA Method 8081
 - PFAS by EPA Method 1633
- Installation and sampling of 4 off-site permanent soil vapor points along East 117th Street.
- Completion of SVI structure sampling (including the collection of sub-slab soil vapor, indoor air, and outdoor air samples) in the Site buildings (two rounds in April 2023 and March 2024).

Analytical Results

Laboratory analytical results from soil, groundwater, and soil vapor samples collected to date are presented in the tables and figures identified below. Laboratory analytical reports are included in **Attachment D**



Soil

Analytical results for soil samples analyzed for VOCs and a subset of soil samples analyzed for SVOCs, metals, PCBs, herbicides, pesticides and PFAS are presented on **Tables 5** and **6**, respectively. Soil boring locations are depicted on **Figures 2A** and **2B**.

Groundwater

Analytical results for groundwater samples analyzed for VOCs, and a subset of groundwater samples analyzed for SVOCs, metals, PCBs, herbicides, pesticides and PFAS are presented on **Tables 7** and **8**, respectively. Concentrations of PCE and breakdown products in SC groundwater samples and groundwater samples collected from the adjoining 247 East 117th Street property are depicted on **Figure 3**.

Soil Vapor

Analytical results for SVI structure samples and exterior soil vapor point samples collected for VOC analysis are presented on **Tables 9** and **10**, respectively. Concentrations of PCE and breakdown products in SC soil vapor samples and soil vapor samples collected from the adjoining 247 East 117th Street property are depicted on **Figure 4**.

Data Validation and Usability

Analytical data obtained during the SC was sent to a third-party validator to evaluate the usability of the data. Data Usability Summary Reports (DUSRs) are provided in **Attachment E**. The DUSRs indicate all data was qualified as usable and no data was rejected.

Discussion and Data Gaps

- Soil sampling completed for the SC did not identify a source of PCE contamination; however, based on SC groundwater and soil vapor samples, it is likely that a source of PCE exists in Site subsurface soils. Soil sampling was limited by accessibility of drilling locations in the Site basements and shallow refusal in borings through the basement slabs due to the presence of coarse gravel and cobbles. Limited soil sampling for non-VOC parameters identified mercury in a soil sample collected from beneath the basement slab of 2285 Second Avenue (SB-9), at a concentration exceeding the NYSDEC Part 375 Restricted Residential Use Soil Cleanup Objective (RRUSCO) applicable to the Site. Based on groundwater analytical results from samples collected from MW-1 through -3, the mercury contamination is not impacting groundwater. There is currently no exposure pathway to impacted soil located beneath the concrete building slab. Exposed surface soil is present on-site, in the rear of 2285 Second Avenue but was not sampled as part of the SC. The exposed surface soil is separated from the Site by a fence and is only accessible through the adjoining 247 East 117th Street property. The quality of exposed surface soil behind the Site building presents a data gap.
- PCE was detected in on-site and off-site groundwater samples above the applicable NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 Class GA criteria. PCE was detected at a maximum concentration of 1,000 micrograms per liter (µg/l) in on-site

groundwater in the temporary monitoring well installed in SB-11 in the 2283 Second Avenue basement, near the center of the Site. Analytical results from groundwater samples collected from other locations during the SC indicate a steep decline in PCE and breakdown product concentrations to the north, south, east, and west of SB-11. Results from groundwater samples collected in 2017 in the presumed upgradient direction, on the adjacent 247 East 117th Street property, indicate a source of PCE contamination is present upgradient of the Site. This may have been associated with the Site (a potential rear yard dumping area) or another historic upgradient dry cleaning operation (245 East 117th Street). The 247 East 117th Street property is being investigated and remediated under the NYC OER VCP. Groundwater samples collected in the presumed downgradient direction of SB-11 (southeast) indicate PCE breakdown products were detected at concentrations marginally exceeding Class GA criteria in SB-13 (vinyl chloride at 2.2 µg/l) and MW-3 (cis-1,2-DCE at 10 µg/l and vinyl chloride at 2.2 µg/l). Due to shallow refusal and the high density of subsurface utilities in the right-of-way surrounding the Site, locations of permanent monitoring wells were limited during the SC and therefore groundwater flow direction cannot be confirmed based on the current well network. The groundwater flow direction and the extent of PCE/breakdown product impacts to groundwater downgradient of the Site present data gaps.

- Soil vapor and indoor air analytical results from two rounds of SVI structure sampling conducted in April 2023 and March 2024 indicate intrusion of PCE and breakdown products is occurring in both Site buildings. Results from the structure sampling indicate 2283 Second Avenue and 2285 Second Avenue respectively belong in the “monitor” and “mitigate” categories of the NYSDOH Soil Vapor/Indoor Air Matrices (Decision Matrices). The highest concentrations of PCE and breakdown products detected in SC soil vapor samples were in the northwestern portion of the Site in the basement of 2285 Second Avenue. PCE or breakdown products were detected in soil vapor at concentrations at which the Decision Matrices may recommend mitigation at all on-site sub-slab sample locations and in the off-site soil vapor point locations SV-1 and SV-2 located to the south of the Site. In addition, PCE and breakdown products were also detected at Decision Matrices “mitigate-level” concentrations in soil vapor samples collected from the adjoining 247 East 117th Street property in 2017. In addition, several nearby off-site properties, including 245 East 117th Street to the west, 2287 Second Avenue to the north, and 2291 Second Avenue to the north, have historically been occupied by dry cleaning facilities or other business which may have historically used chlorinated solvents, and therefore represent potential secondary sources of chlorinated VOC impacts to soil vapor and SVI. Based on SC and off-site investigation results, the extent of impacts to off-site soil vapor and evaluation of off-site SVI exposure pathways present data gaps.

Recommendations

To mitigate SVI occurring in the Site buildings, HRP proposes the installation of a sub-slab depressurization system (SSDS) as an Interim Remedial Measure (IRM). The SSDS would use an electric fan to create a vacuum barrier beneath the building slabs and divert vapor to a discharge stack located outside of the building, effectively preventing SVI. The SSDS would be designed and installed in accordance with the New York State Department of Health (NYSDOH) *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*, dated October 2006 (including all



subsequent revisions), and all applicable local laws, regulations, and guidance. An IRM Work Plan will be prepared separately for NYSDEC and NYSDOH review.

To address the SC data gaps identified above, specifically the quality of exposed Site surface soil, the extent of off-site groundwater and soil vapor impacts, and potential SVI exposure pathways to off-site receptors, HRP proposes the activities summarized below. All additional investigation activities will be performed in accordance with the SC Work Plan dated March 29, 2023.

- Obtain Metropolitan Transit Authority (MTA) and New York City Department of Transportation (NYCDOT) permits necessary for proposed additional subsurface investigation.
- Call in underground utility clearance through NYS Code Rule 753/Dig Safe System.
- Complete a ground penetrating radar (GPR) survey to locate utilities and/or obstructions in the ground that may affect the locations of proposed soil borings, monitoring wells, and soil vapor points.
- Collect up to two surface soil samples from exposed surface soil in the rear of 2285 Second Avenue. Surface soil samples will be collected from the upper 6-inches of soil (below vegetation if present) using a stainless steel trowel or hand auger. Up to 5 surface soil samples (2 site samples, 1 duplicate, 1 matrix spike [MS], 1 matrix spike duplicate [MSD]), will be analyzed for:
 - TCL VOCs by EPA Method 8260
 - TCL SVOCs by EPA Method 8270
 - TAL metals by EPA Method 6010B
 - TCL PCBs by EPA Method 8082
 - TCL chlorinated herbicides by EPA Method 8151
 - TCL organochloride pesticides by EPA Method 8081
 - PFAS by EPA Method 1633
- Delineate the extent of off-site groundwater impacts and confirm groundwater flow direction by installing up to 3 additional off-site permanent shallow overburden monitoring wells in the right-of-way along Second Avenue to the east and southeast of the Site (presumed to be downgradient of the Site). To determine depth to water and monitoring well screen settings, soil borings will be installed for continuous soil sampling at each monitoring well location, to a depth of 25 ft bg or refusal. The wells will be constructed of 2-inch PVC with PVC slotted screens and an appropriately sized sand pack. The wells will be installed using flush-mounted protective casings and locking covers. Proposed monitoring well locations are depicted on **Figure 5**.
- Develop the three monitoring wells after installation. Each well will be developed by pumping and surging until the field parameters stabilize for a minimum of three consecutive readings of 10 percent variability or less. Field parameters will include temperature, pH and specific conductance. In addition, the turbidity of the groundwater must achieve a reading of 50 Nephelometric Turbidity Units (NTUs) or less during the field parameter readings. All groundwater obtained during well development and sampling will be disposed of in accordance with DER-10.



- Collect one groundwater sample from each of the 3 newly installed overburden monitoring wells for laboratory analysis. Groundwater samples will be collected in general accordance with low-flow groundwater sampling procedures. Up to 8 groundwater samples (3 site samples, 1 duplicate, 1 MS and 1 MSD, and 1 field blank, 1 trip blank) will be analyzed for:
 - TCL VOCs by EPA Method 8260
 - TCL SVOCs by EPA Method 8270
 - TAL metals by EPA Method 6010B
 - TCL PCBs by EPA Method 8082
 - TCL chlorinated herbicides by EPA Method 8151
 - TCL organochloride pesticides by EPA Method 8081
 - PFAS by EPA Method 1633
- Install up to 3 additional off-site soil vapor points, co-located with proposed monitoring wells. Soil vapor points will be constructed of 6-inch stainless steel screens installed to a depth of 10 ft bg or 1 ft above the groundwater interface, Teflon, Teflon-lined or vinyl tubing, an appropriately sized sand pack, bentonite seal, and flush-mounted protective casings and locking covers. Proposed off-site soil vapor point locations are depicted on **Figure 5**.
- Collect one soil vapor sample from each of the newly installed soil vapor points. One duplicate soil vapor sample and one outdoor air sample will be collected concurrently with soil vapor point sampling. Soil vapor samples will be collected in 6-liter summa canisters equipped with 2-hr regulators and analyzed for VOCs by EPA Method TO-15.
- Solicit and complete SVI structure sampling at up to 18 off-site properties surrounding the Site. SVI structure sampling will be performed in accordance with the NYSDOH *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*, dated October 2006 (including all subsequent revisions), and include completion of building questionnaires and chemical inventories and collection of at least one sub-slab soil vapor sample, one indoor air sample (paired with sub-slab sample), one indoor air sample collected from the lowest occupied level, and one outdoor air sample. Duplicate sub-slab soil vapor samples will be collected at a frequency of 1 per 20 site samples. Proposed properties for SVI structure sampling solicitation are depicted on **Figure 6**.

If you have any questions or require additional information, please feel free to contact us at (518) 877-7101.

Sincerely,



Noah Zaffino
Project Consultant



Patrick Montuori, P.G.
Project Manager

Attachments:

Figure 1 Site Location

Figure 2A Site Plan and Off-Site Investigation Locations

Figure 2B Site Plan and On-Site Investigation Locations

Figure 3 Groundwater Analytical Results – Tetrachloroethene (PCE) and Breakdown Products (Detections Only)

Figure 4 Soil Vapor Analytical Results – Tetrachloroethene (PCE) and Breakdown Products (Detections Only)

Figure 5 Proposed Monitoring Well and Soil Vapor Point Locations

Table 1 Soil Sampling Summary

Table 2 Groundwater Sampling Summary

Table 3 Soil Vapor Intrusion (SVI) Structure Sampling Investigation Summary

Table 4 Soil Vapor Point Sampling Summary

Table 5 Soil Analytical Results (VOC Detections Only)

Table 6 Soil Analytical Results (Detections Only) SVOCs, Metals, PCBs, Pesticides, Herbicides, PFAS

Table 7 Groundwater Analytical Results (VOC Detections Only)

Table 8 Groundwater Analytical Results (Detections Only) SVOCs, Metals, PCBs, Pesticides, Herbicides, PFAS

Table 9 Soil Vapor Intrusion (SVI) Investigation Soil Vapor/Air Laboratory Analytical Results (Detections Only)

Table 10 Exterior Soil Vapor Point Investigation Soil Vapor/Air Laboratory Analytical Results (Detections Only)

Attachment A: Soil Boring Logs

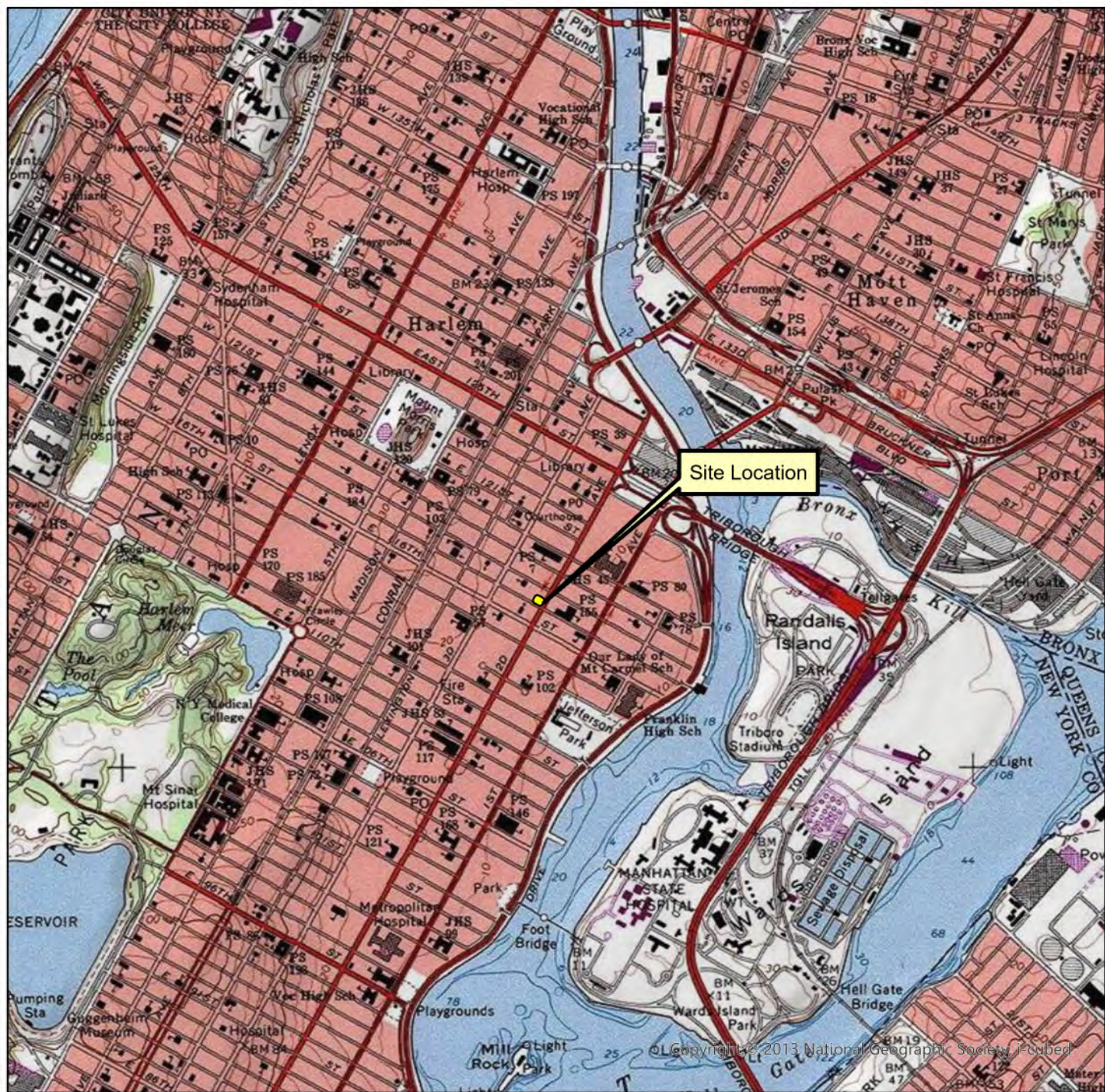
Attachment B: Monitoring Well Construction Logs

Attachment C: Low-Flow Groundwater Sampling Logs

Attachment D: Laboratory Analytical Reports

Attachment E: Data Usability Summary Reports

FIGURES



0 500 1,000 2,000 3,000 4,000 5,000 6,000 7,000 8,000
Feet



1:24,000
Figure 1
Site Location
2283 Second Avenue
Site #231126
2283 Second Avenue
New York, New York 10035
HRP # DEC1038.P2
Scale 1" = 2,000'

USGS Quadrangle Information
Quad ID: X24K7974
Name: Central Park, NY, NJ
Date Rev: 2019
Date Pub: 2019

HRP
MOVE YOUR ENVIRONMENT FORWARD
ONE FAIRCHILD SQUARE
SUITE 110
CLIFTON PARK, NY 12065
(518) 877-7101
HRPASSOCIATES.COM

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Legend

Site Boundary

Soil Vapor Point

Soil Boring/Monitoring Well

Groundwater Flow Direction (Inferred)

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North

07.515

Feet

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Issue Date:	05/30/2024	Project No:	DEC1038.P2	Sheet Size:	11x17

Site Plan and Off-Site Investigation Locations

2283 Second Avenue
NYSDEC Site # 231126
2283-2285 Second Avenue
New York, NY 11035

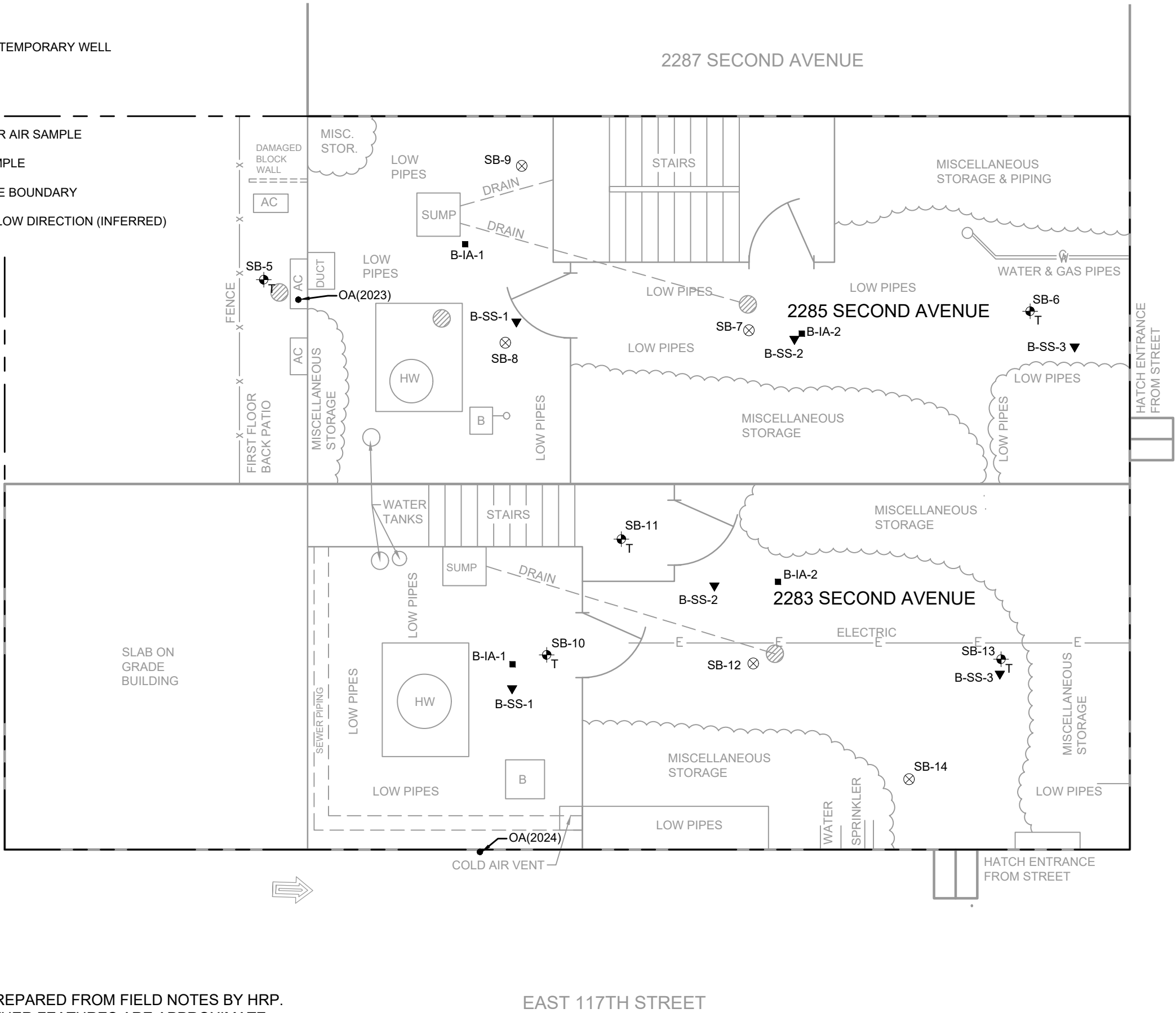
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LEGEND

- SOIL BORING AND TEMPORARY WELL
- SOIL BORING
- SVI POINT
- BASEMENT INDOOR AIR SAMPLE
- OUTDOOR AIR SAMPLE
- APPROXIMATE SITE BOUNDARY
- GROUNDWATER FLOW DIRECTION (INFERRED)
- FLOOR DRAIN
- BOILER
- HOT WATER TANK

247 EAST 117 STREET
OER VCP SITE #18EH-N080M/18CVCP022M



NOTES:
BASEMENT FLOOR PLANS PREPARED FROM FIELD NOTES BY HRP.
SAMPLE LOCATIONS AND OTHER FEATURES ARE APPROXIMATE.



REVISIONS	NO.		DATE	

DESIGNED BY:	NZ
DRAWN BY:	BB
REVIEWED BY:	PM

ISSUE DATE:	05/23/2024
PROJECT NUMBER:	DEC1038.P2
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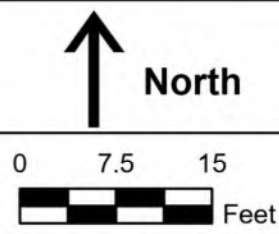
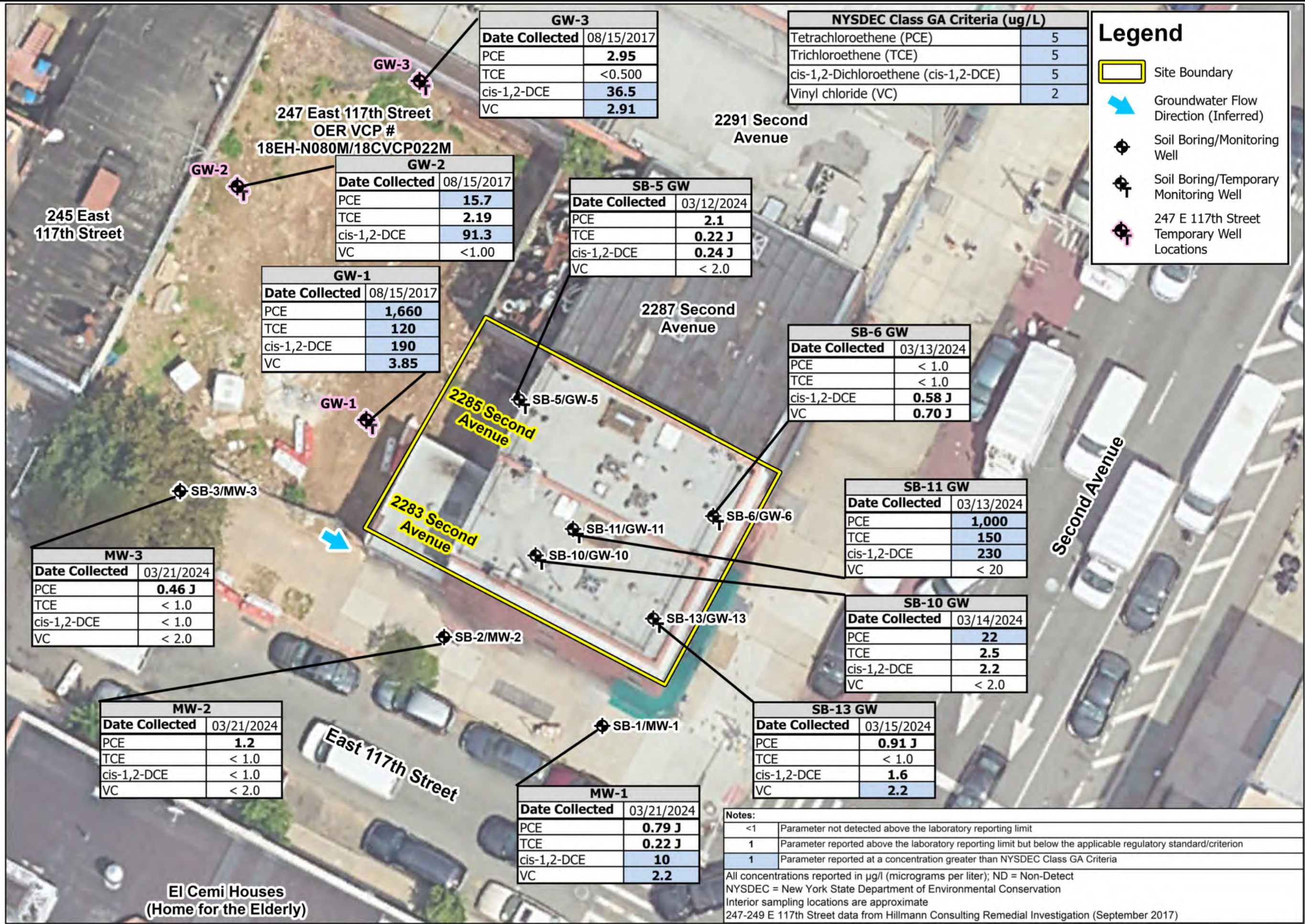
**SITE PLAN AND ON-SITE
INVESTIGATION LOCATIONS**

2283 Second Avenue
NYSDEC Site #231126
2283 Second Avenue
New York, NY 11035

FIGURE NO.

2B

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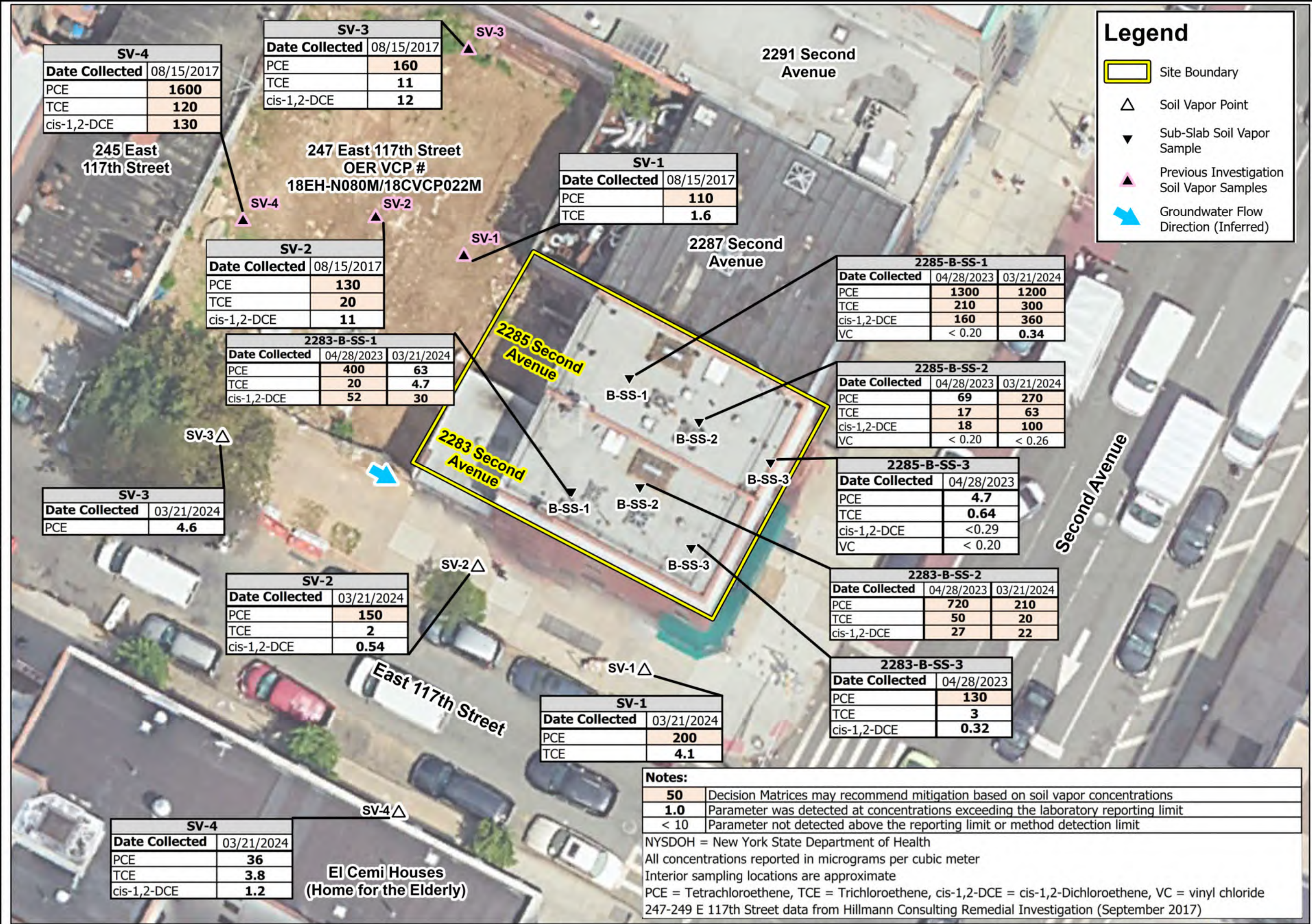
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Groundwater Analytical Results - Tetrachloroethene (PCE) and Breakdown Products (Detections Only)

2283 Second Avenue
NYSDEC Site # 231126
2283-2285 Second Avenue
New York, NY 11035

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North

0 7.5 15 Feet

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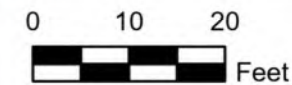
**Soil Vapor Analytical Results
PCE and Breakdown Products
(Detections Only; 2017-2024)**

2283 Second Avenue
NYSDEC Site # 231126
2283-2285 Second Avenue
New York, NY 11035

Figure No.

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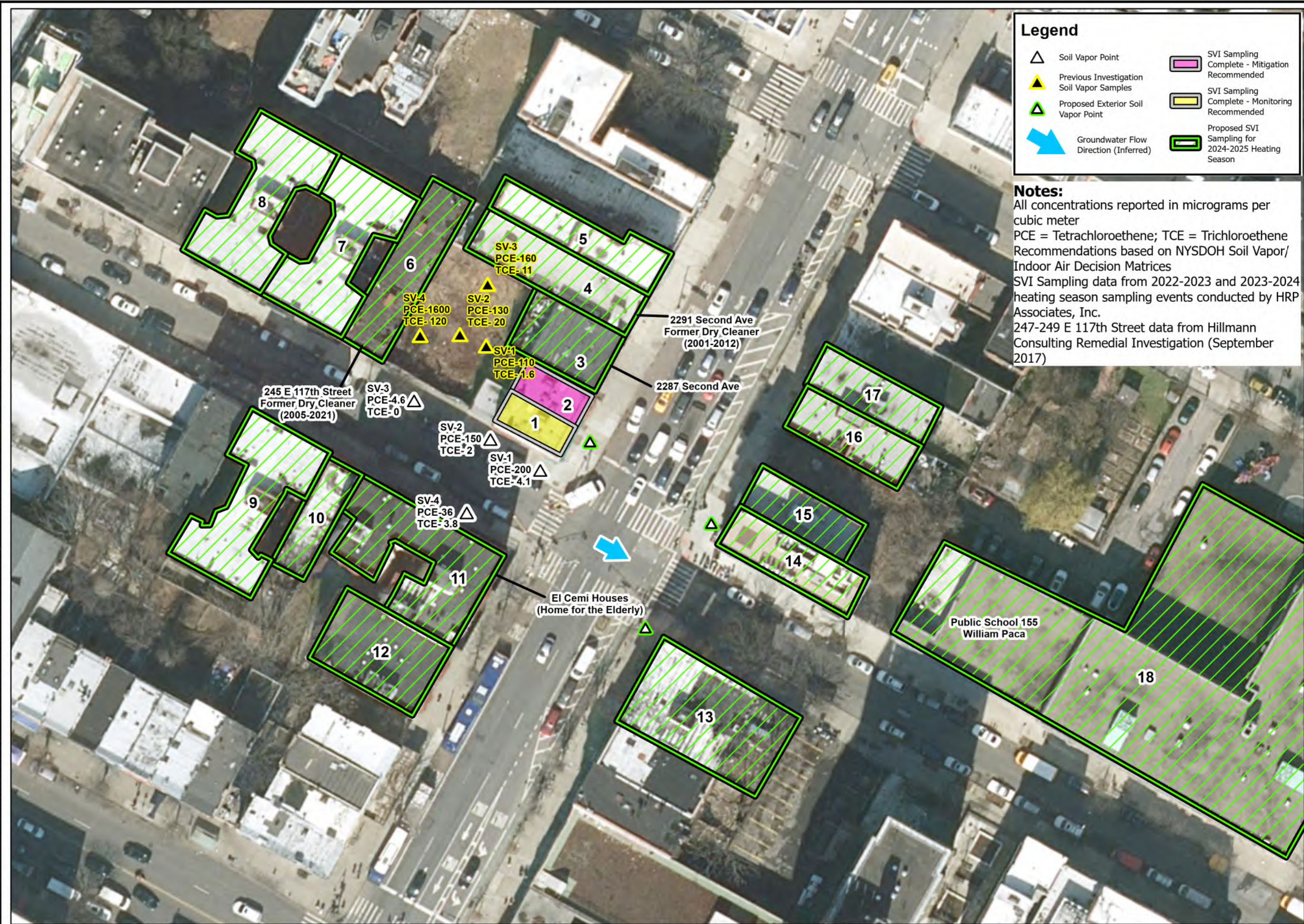
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Proposed Monitoring Well and Soil Vapor Point Locations
2283 Second Avenue
NYSDEC Site # 231126
2283-2285 Second Avenue
New York, NY 11035

Figure No.

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Project No:	DEC1038.P2	
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**Soil Vapor Intrusion
Sampling Results and
Proposed Investigation
Locations**
2283 Second Avenue
NYSDEC Site # 231126
2283-2285 Second Avenue
New York, NY 11035

TABLES

Table 1
Soil Sampling Summary

2283 Second Avenue Site
2283-2285 Second Avenue, New York, NY
Site #231126

Soil Boring ID	Soil Boring Depth	Location	Additional Media Investigated	Figure	Sample Depth	Justification	AOC Number	Analyses
SB-1	23 ft bg (refusal)	Southeast of Site, at corner of East 117th Street and Second Avenue	GW, SV	2A	1-2 ft bg	Investigate potential impacts to shallow subsurface soil crossgradient/south of the Site	4	VOCs Method 8260
					11-12 ft bg	Investigate potential impacts to subsurface soil at the groundwater interface crossgradient/south of the Site		VOCs Method 8260
					22-23 ft bg	Investigate potential impacts to subsurface soil at refusal crossgradient/south of the Site		VOCs Method 8260
SB-2	21 ft bg (refusal)	Southwest of Site, along East 117th Street	GW, SV	2A	1-2 ft bg	Investigate potential impacts to shallow subsurface soil crossgradient/south of the Site	4	VOCs Method 8260
					10-11 ft bg	Investigate potential impacts to subsurface soil at the groundwater interface crossgradient/south of the Site		VOCs Method 8260
					20-21 ft bg	Investigate potential impacts to subsurface soil at refusal crossgradient/south of the Site		VOCs Method 8260
SB-3	17 ft bg (refusal)	West of Site, along East 117th Street	GW, SV	2A	1-2 ft bg	Investigate potential impacts to shallow subsurface soil upgradient/west of the Site from former dry cleaner at 245 East 117th Street	3	VOCs Method 8260
					11-12 ft bg	Investigate potential impacts to subsurface soil at the groundwater interface upgradient/west of the Site from former dry cleaner at 245 East 117th Street		VOCs Method 8260
					16-17 ft bg	Investigate potential impacts to shallow subsurface soil at refusal upgradient/west of the Site from former dry cleaner at 245 East 117th Street		VOCs Method 8260
SB-4	12 ft bg (refusal)	Southwest of Site, across East 117th Street	SV	2A	1-2 ft bg	Investigate potential impacts to shallow subsurface soil crossgradient of the Site	4	VOCs Method 8260
					5-6 ft bg	Investigate potential impacts to subsurface soil at the groundwater interface crossgradient of the Site		VOCs Method 8260
					10-11 ft bg	Investigate potential impacts to subsurface soil at refusal crossgradient of the Site		VOCs Method 8260
SB-5	16 ft bg (refusal)	Back patio area behind 2285 Second Ave	GW	2B	2.5-3 ft bg	Investigate potential impacts to shallow subsurface soil at potential back door dumping area, potential source of impacts found at 247 East 117th Street	2	VOCs Method 8260
					8-9 ft bg	Investigate potential impacts to subsurface soil at potential back door dumping area, potential source of impacts found at 247 East 117th Street		VOCs Method 8260
					12-14 ft bg	Investigate potential impacts to subsurface soil at the groundwater interface at northern point of the Site, potential back door area for dumping, potential of impacts found at 247 East 117th Street, elevated PID reading (85 ppm)		VOCs Method 8260
SB-6	8 ft bs (refusal)	Eastern portion of 2285 Second Ave basement	GW	2B	0.5-1 ft bs	Investigate potential impacts to sub-slab soil in downgradient/eastern portion of the Site	1, 4	VOCs Method 8260 SVOCs Method 8270 TAL Metal Method 6010B PCB Method 8082 Chlorinated Pesticides 8081 Chlorinated Herbicides 8151 PFAS Method 1633
					7-8 ft bs	Investigate potential impacts to sub-slab soil at the groundwater interface/refusal in downgradient/eastern portion of the Site		VOCs Method 8260

Notes:

- AOC = Area of Concern
- ft bg = Feet below sidewalk grade
- ft bs = Feet below basement slab
- GW = Groundwater
- PCB = Polychlorinated biphenyls
- PFAS = per- and polyfluoroalkyl substances
- PID = Photoionization Detector
- ppm = parts per million
- SV = Soil Vapor
- SVOCs = Semi-Volatile Organic Compound
- VOCs = Volatile Organic Compounds
- AOC 1 = Potential releases through sump, floor drains and other openings in the basement slab
- AOC 2 = Back patio/potential historic dumping area
- AOC 3 = Off-Site properties which may have historically used chlorinated solvents
- AOC 4 = Potential off-Site receptors of Site contaminants

Table 1
Soil Sampling Summary

2283 Second Avenue Site
2283-2285 Second Avenue, New York, NY
Site #231126

Soil Boring ID	Soil Boring Depth	Location	Additional Media Investigated	Figure	Sample Depth	Justification	AOC Number	Analyses
SB-7	1 ft bs (refusal)	Near floor drain in center of basement of 2285 Second Ave next to floor drain	-	2B	0.5-1 ft bs	Investigate potential impacts to sub-slab soil at refusal in center of 2285 Second Ave basement, near floor drain	1	VOCs Method 8260
SB-8	2 ft bs (refusal)	Near drain in hot water containment in boiler room of 2285 Second Ave	-	2B	1-2 ft bs	Investigate potential impacts to sub-slab soil at refusal in northern section of 2285 Second Ave basement, near floor drain and sump	1	VOCs Method 8260
SB-9	1 ft bs (refusal)	Near sump in basement of 2285 Second Ave	-	2B	1-2 ft bs	Investigate potential impacts to sub-slab soil at refusal in northeastern section of 2285 Second Ave basement, near sump	1	VOCs Method 8260 SVOCs Method 8270 TAL Metal Method 6010B PCB Method 8082 Chlorinated Pesticides 8081 Chlorinated Herbicides 8151 PFAS Method 1633
SB-10	10 ft bs (refusal)	Western portion of 2283 Second Ave basement, near sump	GW	2B	0.5-1 ft bs	Investigate potential impacts to sub-slab soil in northeastern section of 2283 Second Ave basement, near sump	1	VOCs Method 8260
					5-6 ft bs	Investigate potential impacts to sub-slab soil at the groundwater interface in northeastern section of 2283 Second Ave basement, near sump		VOCs Method 8260
					8-10 ft bs	Investigate potential impacts to sub-slab soil at refusal in northwestern section of 2283 Second Ave basement, near sump		VOCs Method 8260
SB-11	6 ft bs (refusal)	In basement stairwell of 2283 Second Ave, center of Site	GW	2B	1-2 ft bs	Investigate potential impacts to shallow sub-slab soil in northern section of 2283 Second Ave basement	1	VOCs Method 8260
					6 ft bs	Investigate potential impacts to sub-slab soil at groundwater interface/refusal in northern section of 2283 Second Ave basement, elevated PID reading (55 ppm)		VOCs Method 8260
SB-12	2 ft bs (refusal)	Near floor drain in center of basement of 2283 Second Ave	-	2B	1-2 ft bs	Investigate potential impacts to sub-slab soil in center of 2283 Second Ave basement, near sump	1	VOCs Method 8260
SB-13	8 ft bs (refusal)	Eastern portion of 2283 Second Ave basement	GW	2B	0.5-1.5 ft bs	Investigate potential impacts to shallow sub-slab soil in downgradient/eastern portion of 2283 Second Ave basement	1, 4	VOCs Method 8260
					6 ft bs	Investigate potential impacts to sub-slab soil at groundwater interface/refusal in downgradient/eastern portion of 2283 Second Ave basement		VOCs Method 8260
SB-14	2.5 ft bs (refusal)	Southern portion of 2283 Second Ave basement	-	2B	1.5-2.5 ft bs	Investigate potential impacts to sub-slab soil at refusal in western section of 2283 Second Ave basement	1	VOCs Method 8260 SVOCs Method 8270 TAL Metal Method 6010B PCB Method 8082 Chlorinated Pesticides 8081 Chlorinated Herbicides 8151 PFAS Method 1633

Notes:
AOC = Area of Concern
ft bg = Feet below sidewalk grade
ft bs = Feet below basement slab
GW = Groundwater
PCB = Polychlorinated biphenyls
PFAS = per- and polyfluoroalkyl substances
PID = Photoionization Detector
ppm = parts per million
SV = Soil Vapor
SVOCs = Semi-Volatile Organic Compound
VOCs = Volatile Organic Compounds

AOC 1 = Potential releases through sump, floor drains and other openings in the basement slab
AOC 2 = Back patio/potential historic dumping area
AOC 3 = Off-Site properties which may have historically used chlorinated solvents
AOC 4 = Potential off-Site receptors of Site contaminants

Table 2
Groundwater Sampling Summary

2283 Second Avenue Site
Site #231126
2283-2285 Second Avenue, New York, NY

Groundwater Sample ID	Figure	Location	Screen Interval	Justification	AOC	Analyses
MW-1	2A	Southeast of Site, at corner of East 117th Street and Second Avenue	10-20 ft bg	Investigate extent of potential impacts to the southeast of Site, potential exposure pathways to home for the elderly and other off-site receptors	4	VOCs Method 8260 SVOCs Method 8270 1,4-Dioxane Method 8270SIM TAL Metal Method 6010B PCB Method 8082 Chlorinated Pesticides 8081 Chlorinated Herbicides 8151 PFAS Method 1633
MW-2	2A	Southwest of Site, along East 117th Street	10-20 ft bg	Investigate extent of potential impacts to the southwest of Site, potential exposure pathways to home for the elderly and other off-site receptors	4	VOCs Method 8260 SVOCs Method 8270 1,4-Dioxane Method 8270SIM TAL Metal Method 6010B PCB Method 8082 Chlorinated Pesticides 8081 Chlorinated Herbicides 8151 PFAS Method 1633
MW-3	2A	West of Site, along East 117th Street	6- 16 ft bg	Investigate potential impacts from potential upgradient source (former dry cleaner at 245 East 117th Street)and extent of potential impacts to west	3, 4	VOCs Method 8260 SVOCs Method 8270 1,4-Dioxane Method 8270SIM TAL Metal Method 6010B PCB Method 8082 Chlorinated Pesticides 8081 Chlorinated Herbicides 8151 PFAS Method 1633
SB-5-GW	2B	Back patio area behind 2285 Second Ave	4-14 ft bg	Investigate potential back door dumping area, extent of potential impacts northwest of the Site	2, 4	VOCs Method 8260
SB-6-GW	2B	Eastern portion of 2285 Second Ave basement	0-8 ft bs	Investigate extent of potential impacts in eastern/downgradient portion of Site	1, 4	VOCs Method 8260
SB-10-GW	2B	Western portion of 2283 Second Ave basement, near sump	0-10 ft bs	Investigate potential sump dumping area, extent of potential impacts in the southwestern portion of Site	1	VOCs Method 8260
SB-11-GW	2B	In basement stairwell of 2283 Second Ave, center of Site	0-6 ft bs	Investigate extent of potential impacts in the central portion of Site	1	VOCs Method 8260
SB-13-GW	2B	Eastern portion of 2283 Second Ave basement	0-6 ft bs	Investigate extent of potential impacts in eastern/downgradient portion of Site	1, 4	VOCs Method 8260

Notes:

ft bg = Feet below grade

ft bs = Feet below slab

GW = Groundwater

PCB = Polychlorinated biphenyls

PFAS = per- and polyfluoroalkyl substances

SVOCs = Semi-Volatile Organic Compound

VOCs = Volatile Organic Compound

AOC 1 = Potential releases through sump, floor drains and other openings in the basement slab

AOC 2 = Back patio/potential historic dumping area

AOC 3 = Off-Site properties which may have historically used chlorinated solvents

AOC 4 = Potential off-Site receptors of Site contaminants

Table 3
Soil Vapor Intrusion (SVI) Structure Sampling Investigation Summary

2283 Second Avenue Site
Site #231126
2283-2285 Second Avenue, New York, NY

SVI Location	Property Block, Lot	Location Description	Sub-Slab Soil Vapor/Air Samples 4/27/2023		Justification	Sub-Slab Soil Vapor/Air Samples 3/22/2024		Justification
			Sample Location	Sample ID		Sample Location	Sample ID	
2283 2 nd Avenue	1667, 21	4-story residential building with a commercial use first floor. The lowest level consists of an unfinished basement used as storage for the building.	Sub-slab soil vapor (Boiler room)	B-SS-1	Investigate impacts to soil vapor and indoor air at the Site from historical drycleaning activities.	Sub-slab soil vapor (Boiler room)	B-SS-1-R	Resample due to first sampling event occurring outside of heating season
			Sub-slab soil vapor (Center of main basement room)	B-SS-2		Sub-slab soil vapor (Center of main basement room)	B-SS-2-R	
			Sub-slab soil vapor (Eastern portion of main basement room)	B-SS-3		Boiler room indoor air	B-IA-1-R	
			Boiler room indoor air	B-IA-1		First floor indoor air	F1-IA-R	
			Basement indoor air	B-IA-2		Outdoor air	OA	
			First floor indoor air	F1-IA				
			Outdoor air	OA				
2285 2 nd Avenue	1667, 21	4-story residential building with a commercial use first floor. The lowest level consists of an unfinished basement used as storage for the building.	Sub-slab soil vapor (Boiler room)	B-SS-1	Investigate impacts to soil vapor and indoor air at the Site from historical drycleaning activities.	Sub-slab soil vapor (Boiler room)	B-SS-1-R	Resample due to first sampling event occurring outside of heating season
			Sub-slab soil vapor (Center of main basement room)	B-SS-2		Sub-slab soil vapor (Center of main basement room)	B-SS-2-R	
			Sub-slab soil vapor (Eastern portion of main basement room)	B-SS-3		Boiler room indoor air	B-IA-1-R	
			Boiler room indoor air	B-IA-1		First floor indoor air	F1-IA-R	
			Basement indoor air	B-IA-2		Outdoor air	OA	
			First floor indoor air	F1-IA				
			Outdoor air	OA				

Table 4
Soil Vapor Point Sampling Summary

2283 Second Avenue Site
Site #231126
2283-2285 Second Avenue, New York, NY

Soil Vapor Point Sampling Locations				
Soil Vapor Point ID	Screen Depth	Location Description	Justification	AOC
SV-1	9.5-10 ft bg	Southeast of Site, at corner of East 117th Street and Second Avenue	Investigate potential exposure pathways to home for the elderly and other off-site receptors south of Site	4
SV-2	9.5-10 ft bg	Southwest of Site, along East 117th Street	Investigate potential exposure pathways to home for the elderly and other off-site receptors south of Site	4
SV-3	9.5-10 ft bg	West of Site, along East 117th Street	Investigate potential exposure pathways to the west of the Site	4
SV-4	9.5-10 ft bg	Southwest of Site, across East 117th Street	Investigate potential exposure pathways to home for the elderly and other off-site receptors south of Site	4

Notes:

AOC = Area of concern
ft bg = feet below grade

AOC 1 = Potential releases through sump, floor drains and other openings in the basement slab
AOC 2 = Back patio/potential historic dumping area
AOC 3 = Off-Site properties which may have historically used chlorinated solvents
AOC 4 = Potential off-Site receptors of Site contaminants

Location:	Part 375 Unrestricted	Part 375 Protection of Groundwater	Part 375 Restricted Residential	SB-1			SB-2			SB-3		
Date Collected:				03/11/2024	03/11/2024	03/11/2024	03/11/2024	03/11/2024	03/11/2024	03/11/2024	03/11/2024	03/11/2024
Depth:				1-2 FT BG	11-12 FT BG	22-23 FT BG	1-2 FT BG	10-11 FT BG	20-21 FT BG	1-2 FT BG	11-12 FT BG	16-17 FT BG
Laboratory Sample ID:				24C1547-01	24C1547-02	24C1547-03	24C1547-04	24C1547-05	24C1547-06	24C1547-07	24C1547-08	24C1547-09
Volatile Organic Compounds (VOCs) (mg/kg)												
Acetone	0.05	0.05	100	< 0.12	< 0.13	< 0.11	< 0.12	< 0.14	< 0.12	< 0.12	< 0.12	< 0.11
Chloroform	0.37	0.37	49	< 0.0050	< 0.0051	< 0.0044	< 0.0049	< 0.0054	0.0011 J	< 0.0046	< 0.0046	< 0.0045
cis-1,2-Dichloroethene	0.25	0.25	100	< 0.0025	< 0.0026	< 0.0022	< 0.0025	< 0.0027	< 0.0024	< 0.0023	< 0.0023	< 0.0023
Ethylbenzene	1	1	41	< 0.0025	< 0.0026	< 0.0022	< 0.0025	< 0.0027	< 0.0024	< 0.0023	< 0.0023	< 0.0023
m,p-Xylene	0.26	1.6	100	< 0.0050	< 0.0051	< 0.0044	< 0.0049	< 0.0054	< 0.0048	< 0.0046	< 0.0046	< 0.0045
Methylene chloride	0.05	0.05	100	< 0.025	< 0.026	< 0.022	< 0.025	< 0.027	< 0.024	< 0.023	< 0.023	< 0.023
o-Xylene	0.26	1.6	100	< 0.0025	< 0.0026	< 0.0022	< 0.0025	< 0.0027	< 0.0024	< 0.0023	< 0.0023	< 0.0023
Tetrachloroethene	1.3	1.3	19	0.0015 J	< 0.0026	0.0081	< 0.0025	< 0.0027	< 0.0024	< 0.0023	< 0.0023	< 0.0023
Total Xylenes	0.26	1.6	100	< 0.0025	< 0.0026	< 0.0022	< 0.0025	< 0.0027	< 0.0024	< 0.0023	< 0.0023	< 0.0023
Trichloroethene	0.47	0.47	21	< 0.0025	< 0.0026	< 0.0022	< 0.0025	< 0.0027	< 0.0024	< 0.0023	< 0.0023	< 0.0023

Location:	Part 375 Unrestricted	Part 375 Protection of Groundwater	Part 375 Restricted Residential	SB-4			SB-5			SB-6		SB-7
Date Collected:				03/12/2024	03/12/2024	03/12/2024	03/12/2024	03/12/2024	03/12/2024	03/13/2024	03/13/2024	03/13/2024
Depth:				1-2 FT BG	5-6 FT BG	10-11 FT BG	2.5-3 FT BG	8-9 FT BG	12-14 FT BG	0.5-1 FT BS	7-8 FT BS	0.5-1 FT BS
Laboratory Sample ID:				24C1547-10	24C1547-18	24C1547-19	24C1547-15	24C1547-16	24C1547-17	24C1547-11	24C1916-08	24C1916-14
Volatile Organic Compounds (VOCs) (mg/kg)												
Acetone	0.05	0.05	100	< 0.12	< 0.12	< 0.13	< 0.13	< 0.12	< 0.11	< 0.12	< 0.12	< 0.11
Chloroform	0.37	0.37	49	< 0.0049	< 0.0049	< 0.0053	< 0.0053	< 0.0046	< 0.0044	< 0.0046	< 0.0047	< 0.0045
cis-1,2-Dichloroethene	0.25	0.25	100	< 0.0025	< 0.0025	< 0.0027	< 0.0026	< 0.0023	< 0.0022	< 0.0023	< 0.0023	< 0.0022
Ethylbenzene	1	1	41	< 0.0025	< 0.0025	< 0.0027	< 0.0026	< 0.0023	< 0.0022	0.010	< 0.0023	0.0018 J
m,p-Xylene	0.26	1.6	100	< 0.0049	< 0.0049	< 0.0053	< 0.0053	< 0.0046	< 0.0044	0.0036 J	< 0.0047	< 0.0045
Methylene chloride	0.05	0.05	100	< 0.025	< 0.025	< 0.027	< 0.026	< 0.023	< 0.022	< 0.023	< 0.023	0.0023 J
o-Xylene	0.26	1.6	100	< 0.0025	< 0.0025	< 0.0027	< 0.0026	< 0.0023	< 0.0022	0.0023 J	< 0.0023	< 0.0022
Tetrachloroethene	1.3	1.3	19	< 0.0025	< 0.0025	< 0.0027	< 0.0026	< 0.0023	< 0.0022	< 0.0023	< 0.0023	0.0040
Total Xylenes	0.26	1.6	100	< 0.0025	< 0.0025	< 0.0027	< 0.0026	< 0.0023	< 0.0022	0.0059	< 0.0023	< 0.0022
Trichloroethene	0.47	0.47	21	< 0.0025	< 0.0025	< 0.0027	< 0.0026	< 0.0023	< 0.0022	< 0.0023	< 0.0023	< 0.0022

Location:	Part 375 Unrestricted	Part 375 Protection of Groundwater	Part 375 Restricted Residential	SB-8	SB-9	SB-10			SB-11		SB-12
Date Collected:				03/13/2024	03/13/2024	03/14/2024	03/13/2024	03/14/2024	03/13/2024	03/15/2024	03/14/2024
Depth:				1-2 FT BS	0.5-1 FT BS	0.5-1.5 FT BS	5-6 FT BS	8-10 FT BS	1-2 FT BS	6 FT BS	1-2 FT BS
Laboratory Sample ID:				24C1916-16	24C1916-05	24C1916-18	24C1916-20	24C1916-11	24C1916-19	24C1916-15	24C1916-09
Volatile Organic Compounds (VOCs) (mg/kg)											
Acetone	0.05	0.05	100	< 0.11	24 E	< 0.12	< 0.11	< 0.11	< 0.12	< 0.11	< 0.10
Chloroform	0.37	0.37	49	< 0.0044	< 0.0043	< 0.0047	< 0.0043	< 0.0043	< 0.0048	< 0.0043	< 0.0041
cis-1,2-Dichloroethene	0.25	0.25	100	< 0.0022	< 0.0021	< 0.0024	< 0.0021	< 0.0022	< 0.0024	0.032	< 0.0020
Ethylbenzene	1	1	41	< 0.0022	0.0011 J	< 0.0024	< 0.0021	< 0.0022	< 0.0024	< 0.0021	< 0.0020
m,p-Xylene	0.26	1.6	100	< 0.0044	< 0.0043	< 0.0047	< 0.0043	< 0.0043	< 0.0048	< 0.0043	< 0.0041
Methylene chloride	0.05	0.05	100	0.0014 J	0.0041 J	0.0016 J	< 0.021	0.0016 J	0.0021 J	0.0015 J	< 0.020
o-Xylene	0.26	1.6	100	< 0.0022	< 0.0021	< 0.0024	< 0.0021	< 0.0022	< 0.0024	< 0.0021	< 0.0020
Tetrachloroethene	1.3	1.3	19	0.0031	< 0.0021	0.0024	< 0.0021	0.0014 J	0.013	0.23	0.0032
Total Xylenes	0.26	1.6	100	< 0.0022	< 0.0021	< 0.0024	< 0.0021	< 0.0022	< 0.0024	< 0.0021	< 0.0020
Trichloroethene	0.47	0.47	21	< 0.0022	< 0.0021	< 0.0024	< 0.0021	< 0.0022	< 0.0024	0.027	< 0.0020

Location:	Part 375 Unrestricted	Part 375 Protection of Groundwater	Part 375 Restricted Residential	SB-13		SB-14	2283-SUMP-SED		
Date Collected:				03/13/2024	03/15/2024	03/14/2024	03/15/2024	Legend	
Depth:				0.5-1.5 FT BS	6 FT BS	1.5-2.5 FT BS	Surface	<1	Parameter not detected above the laboratory reporting limit
Laboratory Sample ID:				24C1916-13	24C1916-10	24C1916-06	24C1916-17	1	Parameter reported above the laboratory reporting limit but below the applicable regulatory standard/criterion
Volatile Organic Compounds (VOCs) (mg/kg)								1	Parameter reported at a concentration greater than Part 375 Unrestricted SCOs
Acetone	0.05	0.05	100	< 0.11	< 0.11	16 E	< 0.13	1	Parameter reported at a concentration greater than Part 375 Protection of Ground water SCOs
Chloroform	0.37	0.37	49	< 0.0045	< 0.0044	< 0.0044	< 0.0050	1	Parameter reported at a concentration greater than Part 375 Restricted Residential SCOs
cis-1,2-Dichloroethene	0.25	0.25	100	< 0.0022	< 0.0022	< 0.0022	< 0.0025	Notes: ft bg = feet below grade ft bs = feet below slab mg/kg = micrograms per kilogram NP = not promulgated/ no applicable SCO SCO = Soil Cleanup Objective J = parameter detected at a concentration below the laboratory reporting limit; estimated concentration E = Estimated result; value reported over verified calibration range	
Ethylbenzene	1	1	41	< 0.0022	< 0.0022	< 0.0022	< 0.0025		
m,p-Xylene	0.26	1.6	100	< 0.0045	< 0.0044	< 0.0044	< 0.0050		
Methylene chloride	0.05	0.05	100	< 0.022	< 0.022	0.0012 J	0.0016 J		
o-Xylene	0.26	1.6	100	< 0.0022	< 0.0022	< 0.0022	< 0.0025		
Tetrachloroethene	1.3	1.3	19	0.0064	< 0.0022	< 0.0022	< 0.0025		
Total Xylenes	0.26	1.6	100	< 0.0022	< 0.0022	< 0.0022	< 0.0025		
Trichloroethene	0.47	0.47	21	< 0.0022	< 0.0022	< 0.0022	< 0.0025		

Table 6
Soil Analytical Results (Detections Only)
SVOCs, Metals, PCBs, Pesticides, Herbicides, PFAS
2283 Second Avenue
Site #231126
2283-2285 Second Ave, New York, New York

Location:	Part 375 Unrestricted	Part 375 Protection of Groundwater	Part 375 Restricted Residential	SB-6	SB-9	SB-14
Date Collected:				03/13/2024	03/13/2024	03/14/2024
Depth:				0.5-1 FT BS	0.5-1 FT BS	1.5-2.5 FT BS
Laboratory Sample ID:				24C1547-11	24C1916-05	24C1927-01 / 24C1916-06
Semivolatiles Organic Compounds (SVOCs) (mg/kg)						
Benzo(a)anthracene	1	1	1	0.10 J	< 0.20	< 0.19
Benzo(a)pyrene	1	22	1	0.10 J	< 0.20	< 0.19
Benzo(b)fluoranthene	1	1.7	1	0.13 J	< 0.20	< 0.19
Benzo(ghi)perylene	100	1000	100	0.092 J	< 0.20	< 0.19
Bis(2-ethylhexyl)phthalate	NP	435	NP	0.84	< 0.40	< 0.38
Butylbenzyl phthalate	NP	122	NP	0.10 J	< 0.40	< 0.38
Chrysene	1	1	3.9	0.12 J	< 0.20	< 0.19
Fluoranthene	100	1000	100	0.21	< 0.20	< 0.19
Indeno(1,2,3-cd)pyrene	0.5	8.2	0.5	0.086 J	< 0.20	< 0.19
Phenanthrene	100	1000	100	0.18 J	< 0.20	< 0.19
Pyrene	100	1000	100	0.21	< 0.20	< 0.19
Metals (mg/kg)						
Aluminum	NP	NP	NP	6,600	4,900	6,900
Arsenic	13	16	16	2.5 J	4.8	1.2 J
Barium	350	820	400	130	220	47
Beryllium	7.2	47	72	0.24	0.23	0.27
Cadmium	2.5	7.5	4.3	0.57	0.58	< 0.38
Calcium	NP	NP	NP	27,000	10,000	2,000
Chromium	30	NP	180	14	12	7.8
Cobalt	NP	NP	NP	4.9	5.1	4
Copper	50	1720	270	38 B	53 B	15 B
Iron	NP	NP	NP	11,000	10,000	8,900
Lead	63	450	400	14	40	3.6
Magnesium	NP	NP	NP	6,500	4,600	1,900
Manganese	1600	2000	2000	270	310	150
Mercury	0.18	0.73	0.81	0.73	1.1	< 0.028
Nickel	30	130	310	12	10	11
Potassium	NP	NP	NP	1,100	890	600
Sodium	NP	NP	NP	280	150 J	51 J
Thallium	NP	NP	NP	0.86 J	< 1.9	< 1.9
Vanadium	NP	NP	NP	15	15	10
Zinc	109	2480	10000	260	340	17
Polychlorinated Biphenyls (PCBs) (mg/kg)						
No PCBs detected						
Pesticides (mg/kg)						
4,4"-DDE	0.0033	17	8.9	0.0055 J	0.014 J	<0.0043
4,4"-DDT	0.0033	136	7.9	0.012 J	0.035	<0.0043
Herbicides (mg/kg)						
No herbicides detected						
Per- and Polyfluoroalkyl Substances (PFAS) (mg/kg)						
Perfluorobutanesulfonic acid (PFBS)	NP	NP	NP	< 0.00019	0.00011 J	< 0.00019
Perfluorodecanesulfonic acid (PFDS)	NP	NP	NP	0.00016 J	< 0.00020	< 0.00019
Perfluorodecanoic acid (PFDA)	NP	NP	NP	0.00019 J	0.000043 J	0.000074 J
Perfluorododecanoic acid (PFDoA)	NP	NP	NP	0.000092 J	0.000028 J	< 0.00019
Perfluoroheptanoic acid (PFHpA)	NP	NP	NP	0.00016 J	< 0.00020	< 0.00019
Perfluorohexanesulfonic acid (PFHxS)	NP	NP	NP	0.000084 J	< 0.00020	< 0.00019
Perfluorohexanoic acid (PFHxA)	NP	NP	NP	0.00015 J	0.000045 J	< 0.00019
Perfluorononanoic acid (PFNA)	NP	NP	NP	0.00018 J	0.000027 J	0.000028 J
Perfluorooctane Sulfonamide (PFOSA)	NP	NP	NP	0.000034 J	< 0.00020	< 0.00019
Perfluorooctanesulfonic acid (PFOS)	0.00088	0.001	0.033	0.0037	0.0011	0.00054
Perfluorooctanoic acid (PFOA)	0.00066	0.0008	0.044	0.00065	0.00018 J	0.00011 J
Perfluoropentanoic acid (PFPeA)	NP	NP	NP	0.00014 J	0.000061 J	0.000044 J
Perfluorotetradecanoic acid (PFTeDA)	NP	NP	NP	0.000041 J	< 0.00020	< 0.00019
Perfluoroundecanoic acid (PFUnA)	NP	NP	NP	0.000074 J	0.000025 J	< 0.00019

Legend		Notes:
<1	Parameter not detected above the laboratory reporting limit	ft bs = feet below slab
1	Parameter reported above the laboratory reporting limit but below the applicable regulatory standard/criterion	mg/kg = micrograms per kilogram
1	Parameter reported at a concentration greater than Part 375 Unrestricted SCOs	J = parameter detected below laboratory reporting limit; estimated; B = analyte found in associated laboratory blank as well as sample
1	Parameter reported at a concentration greater than Part 375 Protection of Groundwater SCOs	NA = Not Analyzed; NP = not promulgated / no applicable SCO
1	Parameter reported at a concentration greater than Part 375 Restricted Residential SCOs	SCO = Soil Cleanup Objective derived from NYSDEC Regulation 6 NYCRR Part 375 Subpart 375-6 and Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs

Table 7
Groundwater Analytical Results (VOC Detections Only)
2283 Second Ave
Site #231126
2283-2285 Second Ave, New York, New York

Grab Groundwater Samples							
Location:	NYSDEC Class GA Criteria	2285 Sump	SB-5	SB-6	SB-10	SB-11	SB-13
Date Collected:		03/12/2024	03/12/2024	03/13/2024	03/14/2024	03/13/2024	03/15/2024
Laboratory Sample ID:		24C1547-13	24C1547-14	24C1916-01	24C1916-04	24C1916-03	24C1916-02
Volatile Organic Compounds (VOCs) (µg/l)							
Acetone	50	24 J	8.7 J	9.4 J	9.3 J	< 50	4.1 J
Chloroform	7	< 20	5.2	< 2.0	0.23 J	< 20	< 2.0
Chloromethane	5	< 20	< 2.0	< 2.0	< 2.0	< 20	< 2.0
cis-1,2-Dichloroethene	5	< 10	0.24 J	0.58 J	2.2	230	1.6
Tetrachloroethene	5	< 10	2.1	< 1.0	22	1,000	0.91 J
Trichloroethene	5	< 10	0.22 J	< 1.0	2.5	150	< 1.0
Vinyl chloride	2	< 20	< 2.0	0.70 J	< 2.0	< 20	2.2

Monitoring Well Groundwater Samples				
Location:	NYSDEC Class GA Criteria	MW-1	MW-2	MW-3
Date Collected:		03/21/2024	03/21/2024	03/21/2024
Laboratory Sample ID:		24C2699-01	24C2699-02	24C2699-03
Volatile Organic Compounds (VOCs) (µg/l)				
Acetone	50	< 50	< 50	< 50
Chloroform	7	< 2.0	7.1	0.72 J
Chloromethane	5	< 2.0	< 2.0	< 2.0
cis-1,2-Dichloroethene	5	10	< 1.0	< 1.0
Tetrachloroethene	5	0.79 J	1.2	0.46 J
Trichloroethene	5	0.22 J	< 1.0	< 1.0
Vinyl chloride	2	2.2	< 2.0	< 2.0

Legend	
<1	Parameter not detected above the laboratory reporting limit
1	Parameter reported above the laboratory reporting limit but below the applicable regulatory standard/criterion
1	Parameter reported at a concentration greater than NYSDEC Class GA Criteria

Notes:

µg/l = micrograms per liter

NA = Not Analyzed ; NP = not promulgated/ no applicable cleanup criteria

J = parameter detected below laboratory reporting limits; estimated concentration

NYSDEC = New York State Department of Environmental Conservation

NYSDEC Class GA Criteria from *Division of Water Technical and Operational Guidance Series (TOGS 1.1.1); Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations* (October 1993 and subsequent revisions, errata sheets and amendments)

Table 8
Groundwater Analytical Results (Detections Only)
SVOCs, Metals, PCBs, Pesticides, Herbicides, PFAS
2283 Second Ave
Site #231126
2283-2285 Second Ave, New York, New York

Page 2 of 2

Location:	NYSDEC Class	MW-1	MW-2	MW-3
Date Collected:	GA Criteria	03/21/2024	03/21/2024	03/21/2024
Lab Report Number:		24C2699-01	24C2699-02	24C2699-03
Semivolatile Organic Compounds (SVOCs) (µg/l)				
No SVOCs Detected				
Metals (µg/l)				
Aluminum	NP	230	540	88
Barium	1,000	430	67	130
Calcium	NP	110,000	42,000	130,000
Cobalt	NP	3.7 J	< 10	< 10
Copper	200	5.5 JB	< 10	< 10
Iron	300	360	740	360
Magnesium	35,000	17,000	5,500	35,000
Manganese	300	6,100	130	98
Nickel	100	7.2 J	2.5 J	4.6 J
Potassium	NP	8,900	5,700	19,000
Sodium	20,000	180,000	40,000	97,000
Polychlorinated Biphenyls (PCB) (µg/l)				
No PCB's Detected				
Pesticides (µg/l)				
No Pesticides detected				
Herbicides (µg/l)				
No Herbicides detected				
Per- and Polyfluoroalkyl Substances (PFAS) (ng/l)				
N-ethyl perfluorooctanesulfonamidoacetic acid (NETFOSAA)	NP	0.58 J	< 0.95	< 0.96
Perfluorobutanesulfonic acid (PFBS)	NP	6.7	4.7	7.1
Perfluorobutanoic acid (PFBA)	NP	17	9.3	20
Perfluorodecanesulfonic acid (PFDS)	NP	< 0.96	< 0.95	2.6
Perfluorodecanoic acid (PFDA)	NP	1.9	1.1	0.60 J
Perfluoroheptanesulfonic acid (PFHpS)	NP	0.71 J	0.40 J	1.3
Perfluoroheptanoic acid (PFHpA)	NP	12	5.9	7.6
Perfluorohexanesulfonic acid (PFHxS)	NP	4.4	1.3	7.0
Perfluorohexanoic acid (PFHxA)	NP	17	17	12
Perfluorononanoic acid (PFNA)	NP	3.7	2.2	1.8
Perfluorooctane Sulfonamide (PFOSA)	NP	0.37 J	0.38 J	< 0.96
Perfluorooctanesulfonic acid (PFOS)	2.7	41	33	32
Perfluorooctanoic acid (PFOA)	6.7	37	10	37
Perfluoropentane sulfonate (PFPeS)	NP	0.84 J	< 0.95	1.0
Perfluoropentanoic acid (PFPeA)	NP	16	16	14
Perfluoroundecanoic acid (PFUnA)	NP	< 0.96	0.27 J	0.25 J

Legend	
<1	Parameter not detected above the laboratory reporting limit
1	Parameter reported above the laboratory reporting limit but below the applicable regulatory
1	Parameter reported at a concentration greater than NYSDEC Class GA Criteria

Notes:

µg/l = micrograms per liter; ng/l = nanograms per liter

NA = Not Analyzed ; NP = not promulgated/ no applicable cleanup criteria

J = parameter detected below laboratory reporting limit; estimated concentration

B = parameter detected in associated laboratory blank as well as field sample

NYSDEC = New York State Department of Environmental Conservation

NYSDEC Class GA Criteria from Division of Water Technical and Operational Guidance Series (TOGS

1.1.1); Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations

(October 1993 and subsequent revisions, errata sheets and amendments)

2283 Second Ave (Block 1667, Lot 21) 2023											
Sample ID:	1667-21-B-SS-1	1667-21-B-IA-1	1667-21-B-SS-2-R	1667-21-B-SS-3	1667-21-B-IA-2	1667-21-F1-IA	1667-22-OA	NYSDOH Air Guidance Values	NYSDOH Immediate Action Levels	NYSDOH May 2017 / February 2024 Matrix Recommendations	Final Action Recommended
Lab ID:	23E0443-01	23E0443-02	23E0443-15	23E0443-07	23E0443-06	23E0443-03	23E0443-14				
Date Collected:	4/27-4/28/23	4/27-4/28/23	4/27-4/28/23	4/27-4/28/23	4/27-4/28/23	4/27-4/28/23	4/27-4/28/23				
Sample Locations	Boiler Room Basement Sub-Slab Soil Vapor Concentrations	Boiler Room Basement Indoor Air Concentrations	Basement Sub-Slab Soil Vapor Concentrations	Basement Sub-Slab Soil Vapor Concentrations	Basement Indoor Air Concentrations	First Floor Indoor Air Concentrations	Outdoor Air Concentrations				
Volatile Organic Compounds (µg/m3)											
Acetone	91	11	69	89	18	22	12	---	---	---	Monitor
Benzene	0.86	0.61	1.2	2.6	0.59	0.6	0.47	---	---	No further action	
Bromodichloromethane	0.71	<0.16	<0.47	<0.47	0.21	0.2	<0.16	---	---	---	
2-Butanone (MEK)	9.2	1.9	7.2	13	5.5	4.8	3.1	---	---	---	
Carbon Disulfide	5.6	<0.10	2.6	5.4	<0.10	1.1	<0.10	---	---	---	
Carbon Tetrachloride	<0.50	<0.17	<0.50	<0.50	0.21	0.43	0.45	---	---	No further action	
Chloroethane	<0.23	<0.082	<0.23	<0.23	<0.082	0.14	<0.082	---	---	---	
Chloroform	63	1.2	29	8.1	1.9	9.6	<0.16	---	---	---	
Chloromethane	0.36	0.86	0.18	0.19	0.93	1.1	1	---	---	---	
Cyclohexane	<0.21	0.15	0.21	0.54	0.17	0.17	0.13	---	---	No further action	
1,4-Dichlorobenzene	<0.39	0.19	<0.39	<0.39	0.21	0.36	0.18	---	---	---	
Dichlorodifluoromethane (Freon 12)	2.2	2	1.9	2.3	2	1.8	1.8	---	---	---	
1,1-Dichloroethylene	<0.30	<0.11	<0.30	<0.30	<0.11	<0.11	<0.11	---	---	---	
cis-1,2-Dichloroethylene	52	0.21	27	0.32	0.43	<0.10	<0.10	---	---	Monitor	
trans-1,2-Dichloroethylene	0.48	<0.11	<0.31	<0.31	<0.11	<0.11	<0.11	---	---	---	
Ethanol	70	120	70	130	56	5400	21	---	---	---	
Ethyl Acetate	<1.8	0.76	<1.8	2.3	4.4	1.1	<0.64	---	---	---	
Ethylbenzene	0.46	0.62	1.9	2	0.61	0.48	0.24	---	---	No further action	
4-Ethyltoluene	<0.30	0.12	0.48	0.47	0.16	<0.11	<0.11	---	---	---	
Heptane	0.64	0.37	0.51	1.1	0.55	0.56	0.28	---	---	No further action	
Hexane	<1.8	<0.64	<1.8	<1.8	<0.64	<0.64	<0.64	---	---	No further action	
2-Hexanone (MBK)	0.29	0.25	0.59	1.2	0.24	0.43	0.69	---	---	---	
Isopropanol	410	27	NA	470	16	230	3.8	---	---	---	
Methylene Chloride	<1.6	<0.56	<1.6	<1.6	<0.56	0.77	<0.56	60	---	No further action	
4-Methyl-2-pentanone (MIBK)	<0.22	<0.076	<0.22	<0.22	0.51	<0.076	0.39	---	---	---	
Naphthalene	<0.40	0.42	<0.40	<0.40	0.31	0.26	<0.14	---	---	No further action	
Propene	1.7	<0.53	<1.5	<1.5	<0.53	<0.53	<0.53	---	---	---	
Styrene	0.39	0.1	0.48	0.47	0.17	0.21	<0.078	---	---	---	
Tetrachloroethylene	400	5.9	720	130	6.6	8.5	31	30	300	Monitor	
Tetrahydrofuran	2.2	<0.17	1.6	2.4	0.63	0.48	<0.17	---	---	---	
Toluene	27	2.6	18	27	3.3	2.1	1.1	---	---	No further action	
Trichloroethylene	20	0.24	50	3	0.43	<0.13	0.3	2	20	Monitor	
Trichlorofluoromethane (Freon 11)	1.8	1.2	1.4	1.2	1.2	1.3	1.3	---	---	---	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	<0.85	0.5	0.98	<0.85	0.53	0.81	0.79	---	---	---	
1,2,4-Trimethylbenzene	1	0.52	1.7	1.8	0.84	0.43	0.31	---	---	No further action	
1,3,5-Trimethylbenzene	0.29	0.13	0.5	0.53	0.18	0.12	<0.091	---	---	No further action	
Vinyl Acetate	<1.9	<0.66	2.1	<1.9	<0.66	4.4	2	---	---	---	
m&p-Xylene	1.4	2.1	6.4	6.6	2	1.6	0.74	---	---	No further action	
o-Xylene	0.58	0.78	2.2	2.1	0.72	0.73	0.35	---	---	No further action	

Legend:	
50	Decision Matrices recommend a specific action based on parameter concentrations
25	Parameter was detected at concentrations exceeding the NYSDOH Immediate Action Levels
5.0	Parameter was detected at concentrations exceeding the NYSDOH Air Guidance Values
1.0	Parameter was detected at concentrations exceeding the laboratory reporting limit

Notes:
NA = Not analyzed
E = Reported result is estimated; value reported over verified calibration range
J = Value is estimated
NYSDOH = New York Department of Health
--- = not promulgated/ no applicable action level
ug/m3 = micrograms per cubic meter

Table 9
Soil Vapor Intrusion Investigation
Soil Vapor/Air Laboratory Analytical Results (Detections Only)
2283 Second Avenue Site
NYSDEC Site No. 231126
2283-2285 Second Avenue, New York, NY

2283 Second Ave (Block 1667, Lot 21) 2024									
ID:	2283-B-SS-1-R	2283-B-IA-R	2283-B-SS-2-R	2283-F1-IA-R	2283-OA	NYSDOH Air Guidance Values	NYSDOH Immediate Action Levels	NYSDOH May 2017 / February 2024 Matrix Recommendations	Final Action Recommended
Date Collected:	03/22/2024	03/22/2024	03/22/2024	03/22/2024	03/22/2024				
Lab Report No:	24C2759	24C2759	24C2759	24C2759	24C2759				
Sample Locations:	Boiler Room Basement Sub-Slab Soil Vapor Concentrations	Boiler Room Basement Indoor Air Concentrations	Basement Sub-Slab Soil Vapor Concentrations	First Floor Indoor Air Concentrations	Outdoor Air Concentrations				
Volatile Organic Compounds (µg/m3)									
1,1,2-Trichlorotrifluoroethane (Freon 113)	0.550 J	0.520 J	0.570 J	0.540 J	0.530 J	---	---	---	Monitor
1,2,4-Trimethylbenzene	1.4	0.32	1.2	0.3	0.150 J	---	---	No Further Action	
1,4-Dichlorobenzene	< 0.600	0.160 J	< 0.600	0.200 J	0.140 J	---	---	---	
2,2,4-Trimethylpentane	< 1.30	0.140 J	< 1.30	0.170 J	0.150 J	---	---	No Further Action	
2-Butanone (MEK)	8.60 J	< 4.10	< 12.0	< 4.10	< 4.10	---	---	---	
Benzene	1.8	0.51	0.54	0.55	0.53	---	---	No Further Action	
Carbon tetrachloride	< 0.630	0.46	< 0.630	0.45	0.47	---	---	No Further Action	
Chloroform	33	0.47	19	0.55	0.110 J	---	---	---	
Chloromethane	0.52	0.99	0.320 J	1.1	1	---	---	---	
cis-1,2-Dichloroethene	30	0.34	22	< 0.140	< 0.140	---	---	Monitor	
cis-1,3-Dichloropropene	< 0.450	< 0.160	< 0.450	< 0.160	< 0.160	---	---	---	
Cyclohexane	0.330 J	< 0.120	< 0.340	< 0.120	< 0.120	---	---	No Further Action	
Dichlorodifluoromethane	1.2	1	1.2	0.88	0.83	---	---	---	
Ethanol	190	36	120	300 E	12	---	---	---	
Ethylbenzene	0.81	0.23	0.65	0.130 J	0.120 J	---	---	No Further Action	
Heptane	1.2	0.140 J	0.47	0.36	0.25	---	---	No Further Action	
m,p-Xylene	3.5	0.75	2.6	0.46	0.4	---	---	No Further Action	
Methyl isobutyl ketone (MIBK)	0.370 J	< 0.140	0.300 J	< 0.140	< 0.140	---	---	---	
Methylene chloride	< 3.50	0.410 J	< 3.50	0.510 J	0.410 J	60	---	No Further Action	
Methyltertbutyl ether	0.180 J	< 0.130	< 0.360	< 0.130	< 0.130	---	---	---	
Naphthalene	0.82	< 0.180	< 0.520	< 0.180	< 0.180	---	---	No Further Action	
o-Xylene	1.3	0.27	1	0.18	0.15	---	---	No Further Action	
Styrene	1.7	< 0.150	1.2	< 0.150	< 0.150	---	---	---	
tert-Butanol	1.9	< 0.440	< 1.20	< 0.440	< 0.440	---	---	---	
Tetrachloroethene	63	4.7	210	1.2	0.73	30	300	Monitor	
Toluene	7.6	0.77	5.4	0.85	0.71	---	---	No Further Action	
trans-1,2-Dichloroethene	0.330 J	< 0.140	< 0.400	< 0.140	< 0.140	---	---	---	
Trichloroethene	4.7	0.3	20	< 0.190	< 0.190	2	20	Monitor	
Trichlorofluoromethane	1.70 J	1.3	1.50 J	1.3	1.3	---	---	---	

Legend:	
50	Decision Matrices recommend a specific action based on parameter concentrations
25	Parameter was detected at concentrations exceeding the NYSDOH Immediate Action Levels
5.0	Parameter was detected at concentrations exceeding the NYSDOH Air Guidance Values
1.0	Parameter was detected at concentrations exceeding the laboratory reporting limit

Notes:
E = Reported result is estimated; value reported over verified calibration range
J = Value is estimated
NYSDOH = New York Department of Health
--- = not promulgated/ no applicable action level
ug/m3 = micrograms per cubic meter

2285 Second Ave (Block 1667, Lot 21) 2023											
Lab ID:	23E0443-08	23E0443-09	23E0443-11	23E0443-13	23E0443-12	23E0443-10	23E0443-14	Air Guidance Values	Immediate Action Levels	NYSDOH May 2017 / February 2024 Matrix Recommendations	Final Action Recommended
Sample ID:	1667-22-B-SS-1	1667-22-B-IA-1	1667-22-B-SS-2	1667-22-B-SS-3	1667-22-B-IA-2	1667-22-F1-IA	1667-22-OA				
Date Collected:	4/27-4/28/23	4/27-4/28/23	4/27-4/28/23	4/27-4/28/23	4/27-4/28/23	4/27-4/28/23	4/27-4/28/23				
Sample Locations	Boiler Room Basement Sub-Slab Soil Vapor Concentrations	Boiler Room Basement Indoor Air Concentrations	Basement Sub-Slab Soil Vapor Concentrations	Basement Sub-Slab Soil Vapor Concentrations	Basement Indoor Air Concentrations	First Floor Indoor Air Concentrations	Outdoor Air Concentrations				
Volatile Organic Compounds (µg/m3)											
Acetone	45	13	65	63	19	12	12	---	---	---	Mitigate
Benzene	0.89	0.48	2.5	1.8	0.49	0.52	0.47	---	---	No further action	
Bromodichloromethane	<0.47	<0.16	<0.47	<0.47	<0.16	<0.16	<0.16	---	---	---	
2-Butanone (MEK)	6.2	2.7	9.1	9.1	2.3	1.6	3.1	---	---	---	
Carbon Disulfide	1.2	<0.10	5	2.8	<0.10	<0.10	<0.10	---	---	---	
Carbon Tetrachloride	<0.50	0.44	<0.50	<0.50	0.43	0.43	0.45	---	---	No further action	
Chloroethane	<0.23	<0.082	<0.23	<0.23	<0.082	<0.082	<0.082	---	---	---	
Chloroform	9	0.28	3.7	2.5	0.52	0.51	<0.16	---	---	---	
Chloromethane	0.28	0.89	0.21	0.25	0.72	0.79	1	---	---	---	
Cyclohexane	<0.21	0.36	0.54	0.36	0.67	0.55	0.13	---	---	No further action	
1,4-Dichlorobenzene	<0.39	0.25	<0.39	<0.39	0.65	0.34	0.18	---	---	---	
Dichlorodifluoromethane (Freon 12)	2	2.1	2.1	2.1	1.9	1.9	1.8	---	---	---	
1,1-Dichloroethylene	<0.30	<0.11	0.33	<0.30	<0.11	<0.11	<0.11	---	---	---	
cis-1,2-Dichloroethylene	160	<0.10	18	<0.29	0.22	0.12	<0.10	---	---	Mitigate	
trans-1,2-Dichloroethylene	0.94	<0.11	<0.31	<0.31	<0.11	<0.11	<0.11	---	---	---	
Ethanol	83	61	130	130	67	100	21	---	---	---	
Ethyl Acetate	<1.8	0.68	2.4	2.3	0.84	0.7	<0.64	---	---	---	
Ethylbenzene	0.49	0.57	1.5	2	0.82	0.77	0.24	---	---	No further action	
4-Ethyltoluene	0.31	0.18	<0.30	0.46	0.29	0.25	<0.11	---	---	---	
Heptane	0.46	0.56	1.3	0.93	0.9	0.86	0.28	---	---	No further action	
Hexane	<1.8	2	<1.8	<1.8	2.4	2.2	<0.64	---	---	No further action	
2-Hexanone (MBK)	0.48	0.71	0.94	0.96	0.38	<0.071	0.69	---	---	---	
Isopropanol	NA	8.7	570	490	16	11	3.8	---	---	---	
Methylene Chloride	<1.6	<0.56	<1.6	<1.6	<0.56	<0.56	<0.56	60	---	No further action	
4-Methyl-2-pentanone (MIBK)	<0.22	0.43	<0.22	<0.22	<0.076	<0.076	0.39	---	---	---	
Naphthalene	0.43	0.17	<0.40	<0.40	0.28	0.19	<0.14	---	---	No further action	
Propene	<1.5	<0.53	<1.5	<1.5	<0.53	<0.53	<0.53	---	---	---	
Styrene	0.48	0.12	<0.22	0.54	0.11	0.11	<0.078	---	---	---	
Tetrachloroethylene	1300	25	69	4.7	7.6	6.7	31	30	300	Mitigate	
Tetrahydrofuran	2.3	<0.17	3.3	2.7	<0.17	<0.17	<0.17	---	---	---	
Toluene	22	2	29	30	5	3.8	1.1	---	---	No further action	
Trichloroethylene	210	0.36	17	0.64	0.39	0.25	0.3	2	20	Mitigate	
Trichlorofluoromethane (Freon 11)	1.2	1.2	1.2	1.2	1.2	1.2	1.3	---	---	---	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	<0.85	0.52	<0.85	<0.85	0.53	0.53	0.79	---	---	---	
1,2,4-Trimethylbenzene	1.2	0.99	0.57	1.7	2	1.6	0.31	---	---	No further action	
1,3,5-Trimethylbenzene	0.33	0.27	<0.26	0.54	0.56	0.47	<0.091	---	---	No further action	
Vinyl Acetate	<1.9	<0.66	<1.9	<1.9	<0.66	<0.66	2	---	---	---	
m&p-Xylene	1.6	2.1	4.3	6.5	3.2	2.9	0.74	---	---	No further action	
o-Xylene	0.64	0.92	1.4	2.2	1.6	1.4	0.35	---	---	No further action	

Legend:	
50	Decision Matrices recommend a specific action based on parameter concentrations
25	Parameter was detected at concentrations exceeding the NYSDOH Immediate Action Levels
5.0	Parameter was detected at concentrations exceeding the NYSDOH Air Guidance Values
1.0	Parameter was detected at concentrations exceeding the laboratory reporting limit

Notes:
NA = Not analyzed
E = Reported result is estimated; value reported over verified calibration range
J = Value is estimated
NYSDOH = New York Department of Health
--- = not promulgated/ no applicable action level
ug/m3 = micrograms per cubic meter

Table 9
Soil Vapor Intrusion Investigation
Soil Vapor/Air Laboratory Analytical Results (Detections Only)
2283 Second Avenue Site
NYSDEC Site No. 231126
2283-2285 Second Avenue, New York, NY

2285 Second Ave (Block 1667, Lot 21) 2024									
ID:	2285-B-SS-1	2285-B-SS-2	2285-B-IA-R	2285-F1-IA-R	2283-OA	NYSDOH Air Guidance Values	NYSDOH Immediate Action Levels	NYSDOH May 2017 / February 2024 Matrix Recommendations	Final Action Recommended
Date Collected:	03/22/2024	03/22/2024	03/22/2024	03/22/2024	03/22/2024				
Lab Report No:	24C2759	24C2759	24C2759	24C2759	24C2759				
Sample Locations:	Boiler Room Basement Sub-Slab Soil Vapor Concentrations	Basement Sub-Slab Soil Vapor Concentrations	Boiler Room Basement Indoor Air Concentrations	First Floor Indoor Air Concentrations	Outdoor Air Concentrations				
Volatile Organic Compounds (µg/m3)									
1,1,2-Trichlorotrifluoroethane (Freon 113)	0.510 J	0.540 J	0.530 J	0.520 J	0.530 J	---	---	---	Mitigate
1,1-Dichloroethene	0.51	< 0.400	< 0.140	< 0.140	< 0.140	---	---	No Further Action	
1,2,4-Trimethylbenzene	1.2	1.3	0.48	0.19	0.150 J	---	---	No Further Action	
1,3,5-trimethyl-benzene	< 0.490	< 0.490	0.150 J	< 0.170	< 0.170	---	---	No Further Action	
1,4-Dichlorobenzene	< 0.600	< 0.600	0.160 J	0.180 J	0.140 J	---	---	---	
2,2,4-Trimethylpentane	< 1.30	< 1.30	0.370 J	0.200 J	0.150 J	---	---	No Further Action	
Benzene	0.84	0.68	0.52	0.56	0.53	---	---	No Further Action	
Carbon tetrachloride	< 0.630	< 0.630	0.44	0.45	0.47	---	---	No Further Action	
Chloroform	6.1	2	0.18	0.37	0.110 J	---	---	---	
Chloromethane	0.340 J	< 0.410	0.99	1	1	---	---	---	
cis-1,2-Dichloroethene	360	100	0.16	< 0.140	< 0.140	---	---	Mitigate	
Cyclohexane	< 0.340	< 0.340	0.15	< 0.120	< 0.120	---	---	No Further Action	
Dichlorodifluoromethane	1.1	1.3	0.8	0.75	0.83	---	---	---	
Ethanol	76	71	24	180 E	12	---	---	---	
Ethylbenzene	0.63	0.69	0.18	0.140 J	0.120 J	---	---	No Further Action	
Heptane	0.390 J	0.43	0.61	1.5	0.25	---	---	No Further Action	
Hexachloro-1,3-butadiene	< 1.10	< 1.10	< 0.370	< 0.370	< 0.370	---	---	---	
m,p-Xylene	2.8	3	0.62	0.44	0.4	---	---	No Further Action	
Methyl isobutyl ketone (MIBK)	0.340 J	0.310 J	< 0.140	< 0.140	< 0.140	---	---	---	
Methylene chloride	< 3.50	< 3.50	0.450 J	0.520 J	0.410 J	60	---	No Further Action	
o-Xylene	1.1	1.1	0.25	0.18	0.15	---	---	No Further Action	
Styrene	1.2	1.1	< 0.150	0.17	< 0.150	---	---	---	
tert-Butanol	0.730 J	< 1.20	< 0.440	< 0.430	< 0.440	---	---	---	
Tetrachloroethene	1200	270	5.2	1.6	0.73	30	300	Mitigate	
Toluene	4.8	5.6	1.3	1	0.71	---	---	No Further Action	
trans-1,2-Dichloroethene	1.2	0.340 J	< 0.140	< 0.140	< 0.140	---	---	---	
Trichloroethene	300	63	0.29	< 0.190	< 0.190	2	20	Mitigate	
Trichlorofluoromethane	1.30 J	1.40 J	1.4	1.3	1.3	---	---	---	
Vinyl chloride	0.34	< 0.260	< 0.0900	< 0.0890	< 0.0900	---	---	No Further Action	

Legend:		Notes:
50	Decision Matrices recommend a specific action based on parameter concentrations	E = Reported result is estimated; value reported over verified calibration range
25	Parameter was detected at concentrations exceeding the NYSDOH Immediate Action Levels	J = Value is estimated
5.0	Parameter was detected at concentrations exceeding the NYSDOH Air Guidance Values	NYSDOH = New York Department of Health
1.0	Parameter was detected at concentrations exceeding the laboratory reporting limit	--- = not promulgated/ no applicable action level
		ug/m3 = micrograms per cubic meter

Table 10
Exterior Soil Vapor Investigation
Soil Vapor/Air Laboratory Analytical Results (2024 Detections Only)
2283 Second Avenue Site
NYSDEC Site No. 231126
2283-2285 Second Avenue, New York, NY

ID:	SV-1	SV-2	SV-3	SV-4	OA-3.21.24
Date Collected:	03/21/2024	03/21/2024	03/21/2024	03/21/2024	03/21/2024
Lab Report No:	24C2759-12	24C2759-13	24C2759-14	24C2759-16	24C2759-15
Volatile Organic Compounds (µg/m3)					
1,1,2-Trichlorotrifluoroethane (Freon 113)	0.78 J	0.64 J	< 15	0.58 J	0.53 J
1,2,4-Trimethylbenzene	0.51	8.8	< 2.5	0.44 J	0.17
1,3,5-trimethyl-benzene	< 0.49	0.48 J	< 2.5	< 0.49	< 0.17
2,2,4-Trimethylpentane	< 1.3	0.41 J	< 6.3	< 1.3	0.21 J
Benzene	0.38	0.53	< 1.6	1.6	0.51
Bromodichloromethane	< 0.67	< 0.67	11	0.99	< 0.24
Chloroethane	< 0.26	0.55	< 1.3	< 0.26	< 0.093
Chloroform	3.2	110	200	46	0.099 J
Chloromethane	0.36 J	1.1	< 2.1	< 0.41	1.1
cis-1,2-Dichloroethene	< 0.40	0.54	< 2.0	1.2	< 0.14
Cyclohexane	< 0.34	0.54	< 1.7	< 0.34	< 0.12
Dichlorodifluoromethane	1.4	1.2	1.8 J	1.3	0.76
Ethanol	23	18	< 38	14	14
Ethylbenzene	0.32 J	0.44	< 2.2	0.62	0.11 J
Heptane	< 0.41	11	< 2.0	< 0.41	0.18
Hexane	< 14	12 J	< 70	< 14.	< 4.9
m,p-Xylene	1.3	4.6	< 4.3	2.4	0.37
Methyl isobutyl ketone (MIBK)	0.23 J	< 0.41	< 2.0	0.56	< 0.14
Methylene chloride	< 3.5	< 3.5	< 17	0.95 J	0.48 J
o-Xylene	0.49	0.78	< 2.2	0.89	0.15
Styrene	0.33 J	0.47	< 2.1	< 0.43	< 0.15
tert-Butanol	< 1.2	1.3	< 6.2	< 1.2	< 0.44
Tetrachloroethene	200	150	4.6	36	< 0.24
Toluene	1.6	6	1.2 J	37	0.84
Trichloroethene	4.1	2	< 2.7	3.8	< 0.19
Trichlorofluoromethane	1.6 J	1.5 J	1.3 J	1.3 J	1.3

Legend	
<1	Parameter not detected above the laboratory reporting limit
1	Parameter reported above the laboratory reporting limit but below the applicable regulatory standard/criterion

Notes:
J = Parameter detected below laboratory reporting limit; value is estimated
µg/m3 = micrograms per cubic meter

ATTACHMENT A

Soil Boring Logs



MOVE YOUR ENVIRONMENT FORWARD

Project: 2283 Second Ave				Boring I.D.: SB-1	
Job Number: DEC1038.P2				Date: 3/11/2024	
Drilling Company: Island Pump and Tank				Time: 09:30	
Drilling Equipment: Geoprobe 7822DT				Drilling Method: Direct push	
Sampling Method: Macro-core 2.25"				Observer: MEM	
Location: At corner of East 117th Street and Second Avenue					
Sample Interval (ft bg)		Recovery (ft)	Moisture	Description (grain size, color, compaction, staining, odor)	PID (PPM)
Top	Bottom				
0	5	3	Dry	(0-0.8) Concrete	0.0
			Dry	(0.8-3) SILT, trace sand (f) Dark Brown, no odor	0.0
			Dry	(3-5) SAND (f) and silt, orange brown, no odor	0.0
5	10	2.5	Moist @ 7	(5-9.5) SILT and sand (f), brown, no odor	0.0
			Dry	(9.5-10) SAND (c-m), orange, tan, no odor	0.0
10	15	3	Wet @ 12	(10-12) SAND (c-m), orange tan, no odor	0.0
			Wet	(12-15) SAND (c-m), and silt, gray and brown red, no odor	0.0
15	20	3	Wet	(15-19) SAND (c-m), and silt, gray and brown red, no odor	0.0
			Wet	(19-20) SAND (c-m), some sand (f), trace tan and red gravel (f, rounded), grey, black, green, no odor	0.0
20	23	3	Wet	(20-23) SAND (c-m), some sand (f), trace tan and red gravel (f, rounded), grey, black, green, no odor, refusal at 23'	0.0
Water Samples Collected:			Soil Samples Collected:		Time
ID:		Time	SB-1 (1-2)		1000
Well Screen:			SB-1 (11-12)		1015
Sampling Method:			SB-1 (22-23)		1035
Description of Water:					



MOVE YOUR ENVIRONMENT FORWARD

Project: 2283 Second Ave	Boring I.D.: SB-2
Job Number: DEC1038.P2	Date: 3/11/2024
Drilling Company: Island Pump and Tank	Time: 1110
Drilling Equipment: Geoprobe 7822DT	Drilling Method: Direct Push
Sampling Method:	Observer: MEM
Location: Southwest of site, along East 117 th Street	

Sample Interval (ft bg)		Recovery (ft)	Moisture	Description (grain size, color, compaction, staining, odor)	PID (PPM)
Top	Bottom				
0	5	3	Dry	(0-0.8) Concrete	0.0
			Dry	(0.8-3) SAND (f), and silt, reddish brown, no odor	0.0
			Dry	(3-5) SAND (f), and silt, tan, no odor	0.0
5	10	3	Dry	(5-6) SILT, dark brown, no odor	0.0
			Dry	(6-9) SILT, and sand (f), tan, gray, orange, no odor	0.0
			Moist @ 8	(9-10) SAND (m-c), some silt, tan, no odor	0.0
10	15	2	Wet @ 11	(10-15) SAND (c-m), and silt, tan, brown, red, no odor	0.0
15	20	4	Wet	(15-17) SAND (c), and silt, trace course black sand, reddish brown, no odor	0.0
			Wet	(17-18) SAND (f-m), trace sand (c), tan, no odor	0.0
			Wet	(18-19) SAND (c), trace silt, brown to gray, no odor	0.0
			Wet	(19-20) SAND (c-f), and gravel (f, angular), trace gravel (f, rounded), no odor	0.0
20	21	1	Wet	(20-21) SAND (c) brown, red, tan, black, no odor	0.0
				Refusal at 21'	

Water Samples Collected:		Soil Samples Collected:	Time
ID:	Time	SB-2 (1-2)	1120
Well Screen:		SB-2 (10-11)	1135
Sampling Method:		SB-2 (20-21)	1150
Description of Water:			



MOVE YOUR ENVIRONMENT FORWARD

Project: 2283 Second Ave	Boring I.D.: SB-3
Job Number: DEC1038.P2	Date: 3/11/2024
Drilling Company: Island Pump and Tank	Time: 1205
Drilling Equipment: Geoprobe 7822DT	Drilling Method: Direct Push
Sampling Method:	Observer: MEM

Location: East of site, along East 117th Street

Sample Interval (ft bg)		Recovery (ft)	Moisture	Description (grain size, color, compaction, staining, odor)	PID (PPM)
Top	Bottom				
0	5	2	Dry	(0-0.8) Concrete	0.0
			Dry	(0.8-1) SILT, and crushed asphalt, tan, no odor	0.0
			Dry	(1-2) SILT, and sand (c), brown, no odor	0.0
			Dry	(2-4) BRICK	0.0
			Dry	(4-5) SILT, and crushed gravel, brown, no odor	0.0
5	10	1	Moist @ 9'	(5-10) SAND (f), and silt and sand (c), trace brick and gravel (f, rounded), brown, no odor	0.0
10	15	3.5	Wet @ 12'	(10-13.5) SAND (c), red orange, no odor	0.0
			Wet	(13.5-15) SAND (m), red, no odor	0.0
15	17	2.5	Wet	(15-16) SAND (c), reddish brown, no odor	0.0
			Wet	(16-17) SAND (c), and silt (black), red brown, no odor, refusal at 17'	0.0
Water Samples Collected:				Soil Samples Collected:	Time
ID:			Time	SB-3 (1-2)	1300
Well Screen:				SB-3 (11-12)	1310
Sampling Method:				SB-3 (16-17)	1325
Description of Water:					



Project: 2283 Second Ave				Boring I.D.: SB-4	
Job Number: DEC1038.P2				Date: 3/12/2024	
Drilling Company: Island Pump and Tank				Time: 1120	
Drilling Equipment: Geoprobe 7822DT				Drilling Method: Direct Push	
Sampling Method:				Observer: MEM	
Location: Across East 117 th Street southwest of site, along East 117 th Street					
Sample Interval (ft bg)		Recovery (ft)	Moisture	Description (grain size, color, compaction, staining, odor)	PID (PPM)
Top	Bottom				
0	5	2	Dry	(0-0.8) Concrete	0.0
			Dry	(0.8-1) CRUSHED ASPHALT, brick, silt, some sand (f), brown, no odor	0.0
			Dry	(1-5) SILT, and sand (f), brown, no odor	0.0
5	10	4	Dry	(5-6.5) SILT, and sand (f), tan, no odor	0.0
			Wet @ 7.5'	(6.5-9.5) SILT, tan, no odor	0.0
			Dry	(9.5-10) SILT to sand (m), tan, no odor	0.0
10	12	2	Wet @ 11.5'	(10-12) SILT to sand (m), tan, no odor, refusal at 12'	0.0
Water Samples Collected:				Soil Samples Collected:	
ID:		Time	SB-4 (1-2)		1130
Well Screen:			SB-4 (10-11)		1140
Sampling Method:			SB-4 (5-6)		1230
Description of Water:					



MOVE YOUR ENVIRONMENT FORWARD

Project: 2283 Second Ave			Boring I.D.: SB-5		
Job Number: DEC1038.P2			Date: 3/12/2024		
Drilling Company: Island Pump and Tank			Time:		
Drilling Equipment: Geoprobe 420 M			Drilling Method: Direct Push		
Sampling Method:			Observer: NZ		
Location: Back patio area behind 2285 Second Ave					
Sample Interval (ft bg)		Recovery (ft)	Moisture	Description (grain size, color, compaction, staining, odor)	PID (PPM)
Top	Bottom				
0	3'	1.5	Dry	(0-4") Concrete	0.0
			Dry	(4-8") TOPSOIL, some gravel (f), sand (m-c), concrete, brown, no odor	0.0
			Moist	(8"-3') SAND (f), some silt, brown, no odor	0.0
3	6	1.5	Dry	(3-3.5) SAND (m-c), some gravel (f), brown, no odor	0.0
			Wet	(3.5-6) SILT, some sand (vf), few clay, brown, no odor	0.0
6	9	2	Wet	(6-6.5) SILT, some sand (vf), few clay, brown, no odor	0.0
			Dry	(6.5-7) GRAVEL (c), and sand (c), no odor	0.0
			Dry	(7-9) SAND (c), few sand (f), few clay, brown, no odor	0.0
9	12	1.5	Moist	(9-12) SAND (c), few sand (f), few clay, brown, layer of gravel (c) at bottom 3", wet at bottom 3", sand is more coarse at bottom 3" brown no odor	0.0
12	15	2	Wet @ 12	(12-15) SAND (c), few sand (f), few clay, brown, bottom 2" black but same composition (0-2ppm for black material) no odor	86
15	16	2"	Wet	(15-16) SAND (c), few sand (f), few clay, brown, no odor, refusal at 16'	0.0
Water Samples Collected:			Soil Samples Collected:		Time
ID: SB-5-GW		Time 1112	SB-5 (2.5-3)		1040
Well Screen:			SB-5 (8-9)		1050
Sampling Method:			SB-5 (12-14)		1100
Description of Water:					



MOVE YOUR ENVIRONMENT FORWARD

Project: 2283 Second Ave			Boring I.D.: SB-6		
Job Number: DEC1038.P2			Date: 3/13/2024		
Drilling Company: Island Pump and Tank			Time: 1020		
Drilling Equipment: Geoprobe 420 M			Drilling Method: Direct Push		
Sampling Method:			Observer: NZ		
Location: Eastern portion of 2285 Second Ave basement					
Sample Interval (ft bs)		Recovery (ft)	Moisture	Description (grain size, color, compaction, staining, odor)	PID (PPM)
Top	Bottom				
0'	0.5'	0.5	Dry	(0-0.5') Concrete	0.0
0.5'	1'	0.5	Dry	(0.5-1) SAND (m-c) and cobbles, few glass and plastic, some gravel (f), brown, no odor	0.0
1'	6'	0.5	Wet @ 6'	(1-6) SAND (c) few gravel (f), brown, no odor	0.0
6'	8'	1.5	Wet	(6-8) SAND (c) some gravel (f), few pieces of broken gravel (c), brown, no odor, refusal at 8'	0.0
Water Samples Collected:			Soil Samples Collected:		Time
ID: SB-6		Time	SB-6 (0.5-1)		1030
Well Screen: 8'			SB-6 (7-8)		1220
Sampling Method:			SB-6GW		1230
Description of Water:					



MOVE YOUR ENVIRONMENT FORWARD

Project: 2283 Second Ave		Boring I.D.: SB-7			
Job Number: DEC1038.P2		Date: 3/13/2024			
Drilling Company: Island Pump and Tank		Time:			
Drilling Equipment: Geoprobe 420 M		Drilling Method: Direct push			
Sampling Method:		Observer: NZ			
Location: Near floor drain in center of basement of 2285 Second Ave					
Sample Interval (ft bs)		Recovery (ft)	Moisture	Description (grain size, color, compaction, staining, odor)	PID (PPM)
Top	Bottom				
0	0.5	0.5	Dry	(0-0.5) Concrete	0.0
0.5	1	0.5	Dry	(0.5-1) SAND (m-c) and cobbles, few concrete pieces, brown, no odor, refusal at 1'	0.0
Water Samples Collected:			Soil Samples Collected:	Time	
ID:		Time	SB-7 (0.5-1)		
Well Screen:					
Sampling Method:					
Description of Water:					



Project: 2283 Second Ave				Boring I.D.: SB-8	
Job Number: DEC1038.P2				Date: 3/13/2024	
Drilling Company: Island Pump and Tank				Time:	
Drilling Equipment: Geoprobe 420 M				Drilling Method: direct push	
Sampling Method:				Observer: NZ	
Location: Near drain in hot water containment in boiler room of 2285 Second Ave					
Sample Interval (ft bs)		Recovery (ft)	Moisture	Description (grain size, color, compaction, staining, odor)	PID (PPM)
Top	Bottom				
0	0.5	0.5	Dry	(0-0.5) Concrete	0.0
0.5	2	1.5	Dry	(0.5-2) SAND (m-c), large cobbles, and small cobbles, brown no odor, refusal at 2'	0.0
Water Samples Collected:				Soil Samples Collected:	
ID:			Time	SB-8 (1-2)	1140
Well Screen:					
Sampling Method:					
Description of Water:					



MOVE YOUR ENVIRONMENT FORWARD

Project: 2283 Second Ave			Boring I.D.: SB-9		
Job Number: DEC1038.P2			Date: 3/13/2024		
Drilling Company: Island Pump and Tank			Time:		
Drilling Equipment: Geoprobe 420 M			Drilling Method: direct push		
Sampling Method:			Observer: NZ		
Location: Near drain pipe in boiler room of basement of 2285 Second Ave					
Sample Interval (ft bs)		Recovery (ft)	Moisture	Description (grain size, color, compaction, staining, odor)	PID (PPM)
Top	Bottom				
0	0.5	0.5	Dry	(0-0.5) Concrete, metal plate below concrete, moving north	0.0
0.5	1	0.5	Dry	(0.5-1) SAND (m-c), large cobbles, and small cobbles, brown no odor, refusal at 1'	0.0
Water Samples Collected:			Soil Samples Collected:		Time
ID:		Time	SB-9 (1-2)		1150
Well Screen:					
Sampling Method:					
Description of Water:					



Project: 2283 Second Ave				Boring I.D.: SB-10	
Job Number: DEC1038.P2				Date: 3/14/2024	
Drilling Company: Island Pump and Tank				Time: 908	
Drilling Equipment: Geoprobe 420 M				Drilling Method: direct push	
Sampling Method:				Observer: NZ	
Location: Near drain in hot water containment in boiler room of 2283 Second Ave					
Sample Interval (ft bs)		Recovery (ft)	Moisture	Description (grain size, color, compaction, staining, odor)	PID (PPM)
Top	Bottom				
0	0.45	All		(0-0.45) Concrete	0.0
0.45	1.5	All	Dry	(0.45-1.5) TOPSOIL, large cobbles, sand (m-c), some gravel (f), few brick, brown, no odor	0.0
1.5	3.5	1.5	Dry	(1.5-3.5) SAND (c-m), gravel (c), few silts, brown, no odor	0.0
3.5	6	1.7	Wet @ 6	(3.5-5) SAND (c-m), gravel (c), few silts, brown, no odor	0.0
				(5-6) SAND (c), few gravel (f), brown, no odor	0.0
6	10	1.5	Wet	(6-10) SAND (c), few gravel (f), dark brown, no odor, refusal at 10'	0.0
Water Samples Collected:				Soil Samples Collected:	
ID: SB-10GW		Time		SB-10(0.5-1)	920
Well Screen:				SB-10(5-6)	1349
Sampling Method:				SB-10(8-10)	1406
Description of Water:					



Project: 2283 Second Ave			Boring I.D.: SB-11		
Job Number: DEC1038.P2			Date: 3/15/2024		
Drilling Company: Island Pump and Tank			Time:		
Drilling Equipment: Geoprobe 420 M			Drilling Method: direct push		
Sampling Method:			Observer: NZ		
Location: In stairwell to basement of 2283 Second Ave, center of the site					
Sample Interval (ft bs)		Recovery (ft)	Moisture	Description (grain size, color, compaction, staining, odor)	PID (PPM)
Top	Bottom				
0	0.5	all		(0-0.5) Concrete	0.0
0.5	2	all	dry	(0.5-2) TOPSOIL and cobbles, some sand (c-f), few silts, dark brown, no odor	0.0
2	4	3"	dry	Material from above that fell	0.0
4	6	1	Wet @ 5'	(4-6) SAND (c) and gravel (f-c), some brick, brown no odor, bottom is large cobble, bottom was 55 ppm , refusal at 6'	55
Water Samples Collected:			Soil Samples Collected:		Time
ID:			Time	SB-11 (1-2)	930
Well Screen:				SB-11 (6)	908
Sampling Method:					
Description of Water:					



Project: 2283 Second Ave				Boring I.D.: SB-12	
Job Number: DEC1038.P2				Date: 3/14/2024	
Drilling Company: Island Pump and Tank				Time:	
Drilling Equipment: Geoprobe 420 M				Drilling Method: direct push	
Sampling Method:				Observer: NZ	
Location: Near floor drain in center of basement of 2283 Second Ave					
Sample Interval (ft bs)		Recovery (ft)	Moisture	Description (grain size, color, compaction, staining, odor)	PID (PPM)
Top	Bottom				
0	0.5	All	Dry	Concrete	0.0
0.5	2	All	Dry	(0.5-2) TOPSOIL, some cobbles, gravel (f), sand (c-m), brown, no odor, refusal at 2'	0.0
Water Samples Collected:				Soil Samples Collected:	
ID:		Time	SB-12 (1-2)		1000
Well Screen:					
Sampling Method:					
Description of Water:					



Project: 2283 Second Ave			Boring I.D.: SB-13		
Job Number: DEC1038.P2			Date: 3/15/2024		
Drilling Company: Island Pump and Tank			Time:		
Drilling Equipment: Geoprobe 420 M			Drilling Method: direct push		
Sampling Method:			Observer: NZ		
Location: Eastern most position of 2283 Second Ave basement					
Sample Interval (ft bs)		Recovery (ft)	Moisture	Description (grain size, color, compaction, staining, odor)	PID (PPM)
Top	Bottom				
0	0.5	All		(0-0.5) Concrete	0.0
0.5	1.5	1	Dry	(0.5-1) TOPSOIL, cobbles, some gravel (f), sand (c-m), few brick, large rocks at bottom (1.5'), no odor	0.0
1.5	4	1	Dry	(1.5-4) SAND (m), some gravel (c), some silt, few brick, brown, no odor	0.0
4	6	1	GW @ 5	(4-6) SAND (c), some silt, few gravel (c), few clay, few brick, brown, no odor	0.0
6	8	0		No recovery, refusal at 8'	
Water Samples Collected:			Soil Samples Collected:		Time
ID:		Time	SB-13 (0.5-1.5)		1140
Well Screen:			SB-13 (6)		953
Sampling Method:					
Description of Water:					



Project: 2283 Second Ave				Boring I.D.: SB-14	
Job Number: DEC1038.P2				Date: 3/15/2024	
Drilling Company: Island Pump and Tank				Time:	
Drilling Equipment: Geoprobe 420 M				Drilling Method: direct push	
Sampling Method:				Observer: NZ	
Location: Southernmost position of 2283 Second Ave basement					
Sample Interval (ft bs)		Recovery (ft)	Moisture	Description (grain size, color, compaction, staining, odor)	PID (PPM)
Top	Bottom				
0	0.5	All	Dry	(0-0.5) Concrete	0.0
0.5	1.5	All	Dry	(0.5-1) TOPSOIL, cobbles and gravel (c), sand (c-m), brown, no odor	0.0
1.5	2.5	all	Dry	(1.5-2.5) SAND (f-m), some silt, light brown, no odor, large cobble at bottom, refusal at 2.5'	0.0
Water Samples Collected:			Soil Samples Collected:		Time
ID:		Time	SB-14(1.5-2.5)		1220
Well Screen:					
Sampling Method:					
Description of Water:					

ATTACHMENT B

Monitoring Well Construction Logs



HRP Associates, Inc.
Monitoring Well Installation Log

WELL NO: MW-1 (SB-1)

PAGE 1 OF 1 PAGES

PROJECT: 2283 Second Avenue

JOB NUMBER: DEC1038.P2

DATE COMPLETED: 3/14/2024

DRILLING COMPANY: Island Pump and Tank

RIG TYPE: Geoprobe 7822

DRILLING METHOD: HSA

HAMMER WEIGHT/DROP: NA

SAMPLING METHOD: Macro-core

OBSERVER: Matt Mlyniec

REFERENCE POINT (RP): Grade

STICK-UP: No

SURFACE COMPLETION: Flushmount Roadbox

SCREEN SIZE & TYPE: 2-inch Schedule 40 PVC

SLOT NO.: 0.010-inch **SETTING:** 10-20 ft bg

SAND PACK SIZE & TYPE: #0 Sand

SETTING: 8-20 ft bg

CASING SIZE & TYPE: 2-inch Schedule 40 PVC

SETTING: 0-10 ft bg

SEAL TYPE: Bentonite Pellets

SETTING: 6-8 ft bg

BACKFILL TYPE: Cuttings

STATIC WATER LEVEL: 10.05 ft below TOC

REMARKS: At corner of East 117th Street and Second Avenue

ABBREVIATIONS: ft bg = feet below grade, TOC = Top of Casing



HRP Associates, Inc.
Monitoring Well Installation Log

WELL NO: MW-2 (SB-2)

PAGE 1 OF 1 PAGES

PROJECT: 2283 Second Avenue

JOB NUMBER: DEC1038.P2

DATE COMPLETED: 3/13/2024

DRILLING COMPANY: Island Pump and Tank

RIG TYPE: Geoprobe 7822

DRILLING METHOD: HSA

HAMMER WEIGHT/DROP: NA

SAMPLING METHOD: Macro-core

OBSERVER: Matt Mlyniec

REFERENCE POINT (RP): Grade

STICK-UP: No

SURFACE COMPLETION: Flushmount Roadbox

SCREEN SIZE & TYPE: 2-inch Schedule 40 PVC

SLOT NO.: 0.010-inch SETTING: 10-20 ft bg

SAND PACK SIZE & TYPE: #0 Sand

SETTING: 8-20 ft bg

CASING SIZE & TYPE: 2-inch Schedule 40 PVC

SETTING: 0-10 ft bg

SEAL TYPE: Bentonite Pellets

SETTING: 6-8 ft bg

BACKFILL TYPE: Cuttings

STATIC WATER LEVEL: 8.31 ft below TOC

REMARKS: Southwest of site, along East 117th Street

ABBREVIATIONS: ft bg = feet below grade, TOC = Top of Casing



HRP Associates, Inc.
Monitoring Well Installation Log

WELL NO: MW-3 (SB-3)

PAGE 1 OF 1 PAGES

PROJECT: 2283 Second Avenue

JOB NUMBER: DEC1038.P2

DATE COMPLETED: 3/12/2024

DRILLING COMPANY: Island Pump and Tank

RIG TYPE: Geoprobe 7822

DRILLING METHOD: HSA

HAMMER WEIGHT/DROP: NA

SAMPLING METHOD: Macro-core

OBSERVER: Matt Mlyniec

REFERENCE POINT (RP): Grade

STICK-UP: No

SURFACE COMPLETION: Flushmount Roadbox

SCREEN SIZE & TYPE: 2-inch Schedule 40 PVC

SLOT NO.: 0.010-inch SETTING: 6-16 ft bg

SAND PACK SIZE & TYPE: #0 Sand

SETTING: 4-16 ft bg

CASING SIZE & TYPE: 2-inch Schedule 40 PVC

SETTING: 0-6 ft bg

SEAL TYPE: Bentonite Pellets

SETTING: 1-4 ft bg

BACKFILL TYPE: Cuttings

STATIC WATER LEVEL: 10.82 ft below TOC

REMARKS: East of site, along East 117th Street

ABBREVIATIONS: ft bg = feet below grade, TOC = Top of Casing

ATTACHMENT C

Low-Flow Groundwater Sampling Logs

SAMPLE DATE: 3/21/24
LOW-FLOW SAMPLING LOG

TOTAL # WELLS: _____

 Client Name: NYSDEC Sample Pump: Peristaltic

 Project Location 2283 Second Ave, New York, NY Tubing Type: HDPE

 Sampler(s): EJ Monitoring Equipment: YSI

 Well I.D. MW-1 Screen Setting (ft btoc): 10' to 20'

 Well Diameter (inches): 2" Tubing Intake (ft btoc): 15'

 Total Depth (ft btoc): 19.67' Comments: _____

 Depth to Water (ft btoc): 10.20'

 Well Condition: New, good

Time (hours)	Depth to Water (ft btoc)	Evacuation Rate (ml/min)	Water Quality Monitoring Parameters					
			Temperature (oC)	pH	ORP (mv)	Conductivity (ms/cm)	Turbidity (NTU)	Dissolved oxygen (mg/l)
1105	10.20	100	10.90	7.57	93.7	3.760	755.20	2
1108	10.21	100	13.10	7.12	93.3	3.346	479.55	0.44
1111	10.22	100	13.30	7.05	81.2	2.946	107.55	0.27
1114	10.25	100	13.40	7.02	69.1	2.624	70.77	0.20
1117	10.25	100	13.50	6.98	53.1	2.427	59.90	0.14
1120	10.25	100	13.40	6.96	43.9	2.283	55.95	0.13
1123	10.25	100	13.50	6.92	43.6	2.284	<10	0.11
1126	10.25	100	13.40	6.94	43.6	2.282	<10	0.12

Stabilization of Parameters (stabilization achieved for three consecutive measurements)

Time		Depth to Water (ft btoc)	Evacuation Rate (ml/min)	Temperature (oC)	pH	ORP (mv)	Conductivity (ms/cm)	Turbidity (NTU)	Dissolved oxygen (mg/l)
FROM	TO								
1120	1123	0.00	0.00	0.75	0.04	0.30	0.04		-15.38
1123	1126	0.00	0.00	-0.74	-0.02	0.00	-0.09		9.09
1120	1126	0.00	0.00	0.00	0.02	0.30	-0.04		-7.69
Recommended Stabilization		+/- 0.3	100-500	+/- 3%	+/- 0.1	+/- 10	+/- 3%	+/- 10%	+/- 10%
Stabilization: (Yes/No)		Y	Y	Y	Y	Y	Y	N	N

 Sample Time: 1130, MS/MSD & DUP collected here Reviewed by: NZ

ft btoc	feet below top of casing	NTU	Nephelometric Turbidity Units	°C	degrees Celsius
ml/min	milliliters per minute	mg/l	milligrams per liter	mv	millivolts
µs/cm	microseimons per centimeter				

LOW-FLOW SAMPLING LOG

 Client Name: NYSDEC Sample Pump: Peristaltic

 Project Location 2283 Second Ave, New York, NY Tubing Type: HDPE

 Sampler(s): EJ Monitoring Equipment: YSI

 Well I.D. MW-2 Screen Setting (ft btoc): 10 to 20

 Well Diameter (inches): 2" Tubing Intake (ft btoc): 15

 Total Depth (ft btoc): 19.9 Comments: _____

 Depth to Water (ft btoc): 10.5

 Well Condition: New, good

Time (hours)	Depth to Water (ft btoc)	Evacuation Rate (ml/min)	Water Quality Monitoring Parameters					
			Temperature (oC)	pH	ORP (mv)	Conductivity (ms/cm)	Turbidity (NTU)	Dissolved oxygen (mg/l)
1257	10.50	100	11.50	7.79	73.7	0.546	55.36	7.10
1300	10.50	100	11.30	7.59	71.0	0.528	44.49	7.02
1303	10.50	100	11.30	7.48	72.4	0.522	36.46	7.41
1306	10.50	100	11.30	7.44	75.0	0.520	21.01	7.49
1309	10.50	100	11.20	7.42	76.1	0.519	<10	7.23
1312	10.50	100	11.30	7.40	75.3	0.519	<10	7.20
1315	10.50	100	11.20	7.39	75.9	0.518	<10	7.19
1318	10.50	100	11.30	7.40	75.8	0.519	<10	7.21

Stabilization of Parameters (stabilization achieved for three consecutive measurements)

Time		Depth to Water (ft btoc)	Evacuation Rate (ml/min)	Temperature (oC)	pH	ORP (mv)	Conductivity (ms/cm)	Turbidity (NTU)	Dissolved oxygen (mg/l)
FROM	TO								
1312	1315	0.00	0.00	-0.88	0.01	-0.60	-0.19		-0.14
1315	1318	0.00	0.00	0.89	-0.01	0.10	0.19		0.28
1312	1318	0.00	0.00	0.00	0.00	-0.50	0.00		0.14
Recommended Stabilization		+/- 0.3	100-500	+/- 3%	+/- 0.1	+/- 10	+/- 3%	+/- 10%	+/- 10%
Stabilization: (Yes/No)		Y	Y	Y	Y	Y	Y	Y	Y

 Sample Time: 1320 Reviewed by: NZ

ft btoc	feet below top of casing	NTU	Nephelometric Turbidity Units	°C	degrees Celsius
ml/min	milliliters per minute	mg/l	milligrams per liter	mv	millivolts
µs/cm	microseimons per centimeter				

LOW-FLOW SAMPLING LOG

 Client Name: NYSDEC Sample Pump: Peristaltic

 Project Location 2283 Second Ave, New York, NY Tubing Type: HDPE

 Sampler(s): EJ Monitoring Equipment: YSI

 Well I.D. MW-3 Screen Setting (ft btoc): 6 to 16

 Well Diameter (inches): 2" Tubing Intake (ft btoc): ~13.5

 Total Depth (ft btoc): 16 Comments: _____

 Depth to Water (ft btoc): 11.03

 Well Condition: New, good (uneven cut on top of casing)

Time (hours)	Depth to Water (ft btoc)	Evacuation Rate (ml/min)	Water Quality Monitoring Parameters					
			Temperature (oC)	pH	ORP (mv)	Conductivity (ms/cm)	Turbidity (NTU)	Dissolved oxygen (mg/l)
1407	11.03	100	12.70	7.140	138.5	1.395	177.42	3.06
1410	11.03	100	12.90	7.110	133.3	1.451	60.42	2.93
1413	11.03	100	12.90	7.110	131.0	1.456	20.26	2.86
1416	11.03	100	12.90	7.110	129.9	1.455	<10	2.90
1419	11.03	100	12.80	7.120	130.3	1.453	<10	2.89

Stabilization of Parameters (stabilization achieved for three consecutive measurements)

Time		Depth to Water (ft btoc)	Evacuation Rate (ml/min)	Temperature (oC)	pH	ORP (mv)	Conductivity (ms/cm)	Turbidity (NTU)	Dissolved oxygen (mg/l)
FROM	TO								
1413	1416	0.00	0.00	0.00	0.00	0.00	-0.07		1.40
1416	1419	0.00	0.00	-0.78	0.00	0.00	-0.14		-0.34
1413	1419	0.00	0.00	-0.78	0.00	0.00	-0.21		1.05
Recommended Stabilization		+/- 0.3	100-500	+/- 3%	+/- 0.1	+/- 10	+/- 3%	+/- 10%	+/- 10%
Stabilization: (Yes/No)		Y	Y	Y	Y	Y	Y	N	Y

 Sample Time: 1420 Reviewed by: NZ

ft btoc	feet below top of casing	NTU	Nephelometric Turbidity Units	°C	degrees Celsius
ml/min	milliliters per minute	mg/l	milligrams per liter	mv	millivolts
µs/cm	microseimons per centimeter				

ATTACHMENT D

Laboratory Analytical Reports

ATTACHMENT E

Data Usability Summary Reports