

# 102 BRUCKNER BOULEVARD

BRONX, NY

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## DRAFT REMEDIAL INVESTIGATION REPORT

**NYSDEC BCP Site Number: C203168**

**AKRF Project Number: 200328**

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## ACRONYMS

Acronym	Definition
111-TCA	1,1,1-trichloroethane
AGV	Air Guidance Value
AST	aboveground storage tank
AWQSGV	Ambient Water Quality Standards and Guidance Values
BCP	Brownfield Cleanup Program
BTEX	benzene, ethylbenzene, toluene, and xylenes
CAMP	Community Air Monitoring Plan
CoC	chain of custody
COC	contaminants of concern
CVOC	chlorinated volatile organic compounds
DER-10	Division of Environmental Remediation Technical Guide 10
DOT	Department of Transportation
DPP	direct-push probe
DUSR	Data Usability Summary Reports
EC	Engineering Control
ELAP	Environmental Laboratory Accreditation Program
EPA	United States Environmental Protection Agency
ESA	Environmental Site Assessment
eV	electron volt
GPR	ground penetrating radar
HASP	Health and Safety Plan
HAZWOPER	Hazardous Waste Operations and Emergency Response
IC	Institutional Control
IDW	investigation-derived waste
MEK	2-butanone
mg/kg	milligram per kilogram
MS/MSD	matrix spike/matrix spike duplicate
MTA	Metropolitan Transportation Authority
NAPL	non-aqueous phase liquid
NAVD88	National American Vertical Datum of 1988
ng/L	nanograms per liter
NTU	nephelometric turbidity unit
NY	New York
NYCDOB	New York City Department of Buildings
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
OSHA	Occupational Safety and Health Administration
P.E.	Professional Engineer
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl

Acronym	Definition
PCE	tetrachloroethylene
PFAS	per- and polyfluoroalkyl substances
PGWSCO	Protection of Groundwater Soil Cleanup Objective
PID	photoionization detector
PPE	personal protective equipment
ppm	parts per million
ppt	parts per trillion
PVC	polyvinyl chloride
QA/QC	quality assurance/quality control
QAPP	Quality Assurance Project Plan
QEP	Qualified Environmental Professional
QHHEA	Qualitative Human Health Exposure Assessment
RAWP	Remedial Action Work Plan
REC	recognized environmental condition
RI	Remedial Investigation
RIR	Remedial Investigation Report
RIWP	Remedial Investigation Work Plan
RRSCO	Restricted Residential Soil Cleanup Objective
SCO	Soil Cleanup Objective
SIM	selective ion monitoring
SIR	Subsurface Investigation Report
SVOC	Semi-volatile organic compound
TAL	Target Analyte List
TBA	tert butyl alcohol
TCE	trichloroethylene
TOGS	Technical and Operational Guidance Series
UST	underground storage tank
UUSCO	Unrestricted Use Soil Cleanup Objective
VOC	volatile organic compound
µg/L	microgram per liter
µg/kg	microgram per kilogram
µg/m <sup>3</sup>	microgram per cubic meter

### **CERTIFICATION**

I, Marc S. Godick, certify that I am currently a Qualified Environmental Professional (QEP), as defined in 6 New York City Codes, Rules and Regulations Part 375 and that this Remedial Investigation Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the Division of Environmental Remediation (DER) Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved work plans, work plan addenda, and any DER-approved modifications.

<u>Marc S. Godick, QEP</u>	<u>4/25/2025</u>	<u>DRAFT</u>
Qualified Environmental Professional	Date	Signature

## EXECUTIVE SUMMARY

This Remedial Investigation (RI) Report (RIR) has been prepared by AKRF, Inc. (AKRF) on behalf of 132 Willis Associates, LLC (the Volunteers) for the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) Site located at 102 Bruckner Boulevard in the Bronx, NY (BCP Site No. C360202; hereafter referred to as the “Site”). The Site was entered into the BCP effective October 2, 2023 (BCA Index No. C203168-07-23). This RIR provides a summary of the findings from the RI activities described herein, which are consistent with applicable guidance and were completed in general accordance with the NYSDEC-approved May 2024 Remedial Investigation Work Plan (RIWP).

### Site Location and Current Usage

The Site consists of an approximately 0.597-acre parcel located at 102 Bruckner Boulevard in the Port Morris section of the Bronx, NY, and is identified as Bronx Tax Block 2277, Lot 50 on the New York City Tax Map (formerly Lots 78, 94, and 50). Currently, the Site buildings are unoccupied, and the Site is secured by a chain link fence. The Site is developed with a pump island from the former gasoline station, a one-story slab-on-grade former automotive repair shop and convenience store, and a one-story slab-on-grade former warehouse/garage with a loft. The remainder of the Site is concrete- and asphalt-paved with some sparse vegetation. The Site location is shown on Figure 1, and the Site layout is depicted on Figure 2.

### Surrounding Area

The area surrounding the Site is primarily commercial, with some residential uses, parkland, and vacant land. The Site is bounded to the north by Bruckner Boulevard, followed by commercial properties; to the south by vacant parcels; to the east by a self-storage facility; and to the west by a parking lot and the Willis Avenue Bridge exit ramp to Bruckner Boulevard, followed by a public park. The area surrounding the Site is primarily commercial, with some residential, parkland, and vacant land.

The nearest sensitive receptors (i.e., schools, daycares, or hospitals) include P.S. 43 / Inwood House (approximately 600 feet northeast of the Site at 165 Brown Street), Learning Through Play Pre-K Center / private day care facility (approximately 700 feet west-northwest of the Site at 105 Willis Avenue), Mott Haven Academy Charter School / BronxWorks Inc. / YMCA (approximately 750 feet northeast of the Site at 170 Brown Street), and two private day care facilities (approximately 750 feet west-northwest of the Site at 331 East 132<sup>nd</sup> Street and 800 feet northeast of the Site at 177 Brook Avenue).

### Historical Site Uses

Historically, the Site was developed with two small unspecified structures associated with Union Park by 1891. The northern portion of the Site was developed with a gasoline station with automotive repair operations by 1935; the central portion of the Site was developed with a warehouse/garage by 1935; and the southern portion of the Site remained largely undeveloped (identified as an unopened portion of East 132<sup>nd</sup> Street) since circa 1891. Former structures at the Site were demolished between 1891 and 1951. The current Site buildings were constructed between 1928 and 1935 and were vacated by 2022.

### Contaminants of Concern

Based on the Site’s history and previous environmental investigations, the primary contaminants of concern for the Site include: semi-volatile organic compounds (SVOCs) and metals in soil/fill material across the Site; petroleum-related volatile organic compounds (VOCs) in soil in the northern portion of the Site; petroleum-related VOCs (plus phenol) and potential separate phase petroleum in groundwater in the northern portion; and petroleum- and chlorinated solvent-related compounds in the northern portion of the Site. The areas where petroleum-like contamination was detected correlate with the former on-site use and storage of petroleum associated with the former gasoline service station and auto repair operations in the

northern portion of the Site. No evidence of non-aqueous phase liquid (NAPL) was encountered during the RI. Further, no evidence of historical on-site use and/or storage of large quantities of chlorinated solvents or per- and polyfluoroalkyl substances (PFAS) [perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA)] was identified through the review of available records or the evaluation of sampling results described herein.

### Summary of the Work Performed under the Remedial Investigation (RI)

The RI included the following scope of work:

1. Advancement of 10 soil borings (RI-SB-01 through RI-SB-10) with continuous sample collection and laboratory analysis of 17 soil samples [plus associated quality assurance/quality control (QA/QC) samples] for laboratory analysis. The samples were analyzed for VOCs by United States Environmental Protection Agency (EPA) Method 8260, SVOCs by EPA Method 8270, pesticides by EPA Method 8081, polychlorinated biphenyls (PCBs) by EPA Method 8082, Target Analyte List (TAL) metals by EPA Method 6000/7000 series, hexavalent chromium by EPA Method 7196A, 1,4-dioxane by EPA Method 8270, and PFAS by EPA Method 1633 (modified).
2. The installation of one temporary groundwater monitoring well (RI-GW-01) with the collection and laboratory analysis of one groundwater sample from the newly-installed well and the collection and laboratory analysis of groundwater samples from four of the five existing bedrock groundwater monitoring wells (RI-MW-01 through RI-MW-04; groundwater not present at RI-MW-05). The samples were analyzed for VOCs by EPA Method 8260, SVOCs by EPA Method 8270, PCBs by EPA Method 8082, pesticides by EPA Method 8081, total and dissolved TAL metals by EPA Method 6000/7000 series, PFAS by EPA Method 1633 (modified), and 1,4-dioxane by EPA Method 8270 selected ion monitoring (SIM).
3. The installation of seven temporary soil vapor points (RI-SV-01 through RI-SV-07) with the collection and laboratory analysis of seven soil vapor samples and one ambient air sample.
4. Surveying the locations and elevations of the groundwater monitoring wells to facilitate groundwater elevation contour mapping.

The locations of the soil borings, groundwater monitoring wells, and temporary soil vapor points from the RI are shown on Figure 2.

### Deviations from the Remedial Investigation Work Plan

The work summarized in this RIR was conducted in general accordance with the NYSDEC-approved May 2024 RIWP prepared by AKRF on behalf of the Volunteers with the following deviations:

- Incorrect flow controllers were supplied to AKRF by the laboratory; therefore, the samples were collected over an approximately 8-hour period instead of a 2-hour period.
- RI-MW-03 was initially sampled on August 22, 2024, during the initial mobilization for the RI field work; however, due to a laboratory error related to the VOC sample from this location, additional sample volume was required. The well was resampled on September 30, 2024 in accordance with the RIWP, and the groundwater sample was submitted to the laboratory for analysis of VOCs by EPA Method 8260.
- Due to poor groundwater recharge at RI-MW-02 and RI-MW-04, the wells were sampled for a reduced suite of analytical parameters (VOCs at RI-MW-02 and VOCs/SVOCs at RI-MW-04).

These deviations did not affect achieving the objectives of the RI.

## Geological and Hydrogeological Conditions

The following geologic and hydrogeologic conditions were noted during the RI:

1. Historic fill (sand, silt, and gravel, with varying amounts of ash, asphalt, brick, concrete, and wood) was observed extending from ground surface to depths up to approximately 10 feet below ground surface (bgs), underlain by apparent native sand, silt, and gravel in the southeastern and southwestern portions of the Site. The fill/soil layer was underlain by bedrock encountered at depths ranging from approximately 1 to 5 feet bgs across the Site. Based on previous investigations, shallow bedrock is present at approximately 1 to 5 feet bgs in the northern and central portions of the Site, at approximately 8.5 feet bgs in the southeastern portion of the Site, and at approximately 14 feet bgs in the southwestern portion of the Site. Shallow bedrock was reportedly removed to facilitate installation of the former gasoline station's underground storage tanks (USTs), with suspected bedrock (or a concrete tank pad) encountered at approximately 10 feet bgs in that area (the "UST field").
2. While not encountered prior to refusal outside of the UST field in the northern portion of the Site, groundwater was measured at approximately 4 feet bgs in temporary monitoring well RI-GW-01 installed within the UST field.
3. The measured groundwater elevation in the previously installed bedrock wells ranged from approximately 23 to 27 feet above mean sea level [reference: North American Vertical Datum of 1988 (NAVD88)] in August 2024, and at approximately 24 to 30 feet in October 2024; groundwater was not present at RI-MW-05 in the southern portion of the Site, consistent with previous investigations. Based on the well elevation survey and associated gauging data, the inferred groundwater flow direction is generally northeasterly.

## Summary of Environmental Findings

### Field Findings

Field evidence of suspected residual petroleum contamination was observed in one of the soil borings and one of the groundwater monitoring wells during the RI, as outlined below:

- Faint petroleum-like odors and moderate photoionization detector (PID) readings [max of 64.4 parts per million (ppm)] were detected from approximately 2 to 4 feet bgs at soil boring RI-SB-01 in the northern portion of the Site (in the area of the former gasoline station pump islands). The field evidence of contamination extended to bedrock, which was encountered at 4 feet bgs.
- Faint petroleum-like odors were detected in purge water during the groundwater sampling at RI-MW-01, in the northeastern portion of the Site (in the area of the gasoline station's former UST field). No sheens and/or residual product were detected.

The areas where petroleum-like contamination was detected correlate with the former on-site use and storage of petroleum associated with the former gasoline service station and auto repair operations in the northern portion of the Site. No evidence of non-aqueous phase liquid NAPL was encountered during the RI.

### Soil

The soil sample analytical results for VOCs, SVOCs, PCBs, pesticides, and metals were compared to the 6 New York Code of Rules and Regulations (NYCRR) Part 375 Unrestricted Use Soil Cleanup Objectives (UUSCOs), Restricted Residential Soil Cleanup Objectives (RRSCOs), and Protection of Groundwater Soil Cleanup Objectives (PGWSCOs) (for VOCs only); the results for PFAS were compared to the Unrestricted Use Guidance Values (UUGVs) and Restricted Residential Guidance Values (RRGVs) for PFAS.

- No VOCs, pesticides, or PCBs were detected at concentrations above their respective UUSCOs, RRSCOs, and/or PGWSCOs.
- Seven SVOCs [benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, and indeno(1,2,3-c,d)pyrene] were detected at concentrations above their respective UUSCOs and RRSCOs in one soil sample (RI-SB-05\_3-5\_20240821) and one blind duplicate sample (RI-SB-X\_0-2\_20240821, parent sample: RI-SB-05\_0-2\_20240821); naphthalene was detected at a concentration above its UUSCO in one sample (RI-SB-05\_3-5\_20240821).
- Five metals (arsenic, barium, copper, lead, and mercury) were detected above their respective UUSCOs and RRSCOs in three soil samples (RI-SB-01\_0-2\_20240821, RI-SB-05\_0-2\_20240821, and RI-SB-05\_3-5\_20240821) and one blind duplicate sample (RI-SB-X\_0-2\_20240821, parent sample: RI-SB-05\_0-2\_20240821); copper, lead, mercury, nickel, and/or zinc were detected above their respective UUSCOs in seven soil samples (RI-SB-01\_0-2\_20240821, RI-SB-02\_0-1\_20240821, RI-SB-05\_0-2\_20240821, RI-SB-05\_3-5\_20240821, RI-SB-07\_0-2\_20240821, RI-SB-08\_2-4\_20240821, and RI-SB-09\_7-9\_20240821) and one blind duplicate sample (RI-SB-X\_0-2\_20240821, parent sample: RI-SB-05\_0-2\_20240821).
- PFOS was detected above its UUGV of 0.88 parts per billion (ppb) in soil sample RI-SB-09\_7-9\_20240821 at a concentration of 1.01 ppb. PFOA was not detected above its UUGV in the soil samples.

#### Groundwater

The groundwater sample analytical results for VOCs, SVOCs, PCBs, pesticides, and metals were conservatively compared to the NYSDEC Ambient Water Quality Standards and Guidance Values (AWQSGVs) for Class GA groundwater. PFOA, PFOS, and 1,4-dioxane concentrations were compared to the NYSDEC AWQSGVs for Human Health. Below is a summary of the groundwater sample results.

- Seven VOCs (1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, benzene, ethylbenzene, o-xylene, m/p-xylenes, and toluene) were detected above their respective AWQSGVs in two groundwater samples (RI-MW-01\_20240821 and RI-GW-01\_20240821).
- The SVOC phenol was detected above its AWQSGV in two groundwater samples (RI-MW-01\_20240821 and RI-GW-01\_20240821) and one blind duplicate sample RI-X-01\_20240821, parent sample: RI-MW-01\_20240821).
- Iron was detected at concentrations exceeding its AWQSGV in two unfiltered samples (RI-MW-03\_20240822 and RI-GW-01\_20242821). Sodium was detected above its AWQSGV in three filtered and unfiltered groundwater samples (RI-MW-01, RI-GW-01, and RI-MW-03) and one blind duplicate sample (RI-X-01\_20240821, parent sample: RI-MW-01\_20240821).
- PCBs and pesticides were not detected above laboratory reporting limits in the groundwater samples.
- PFOA and PFOS were detected in the three groundwater samples analyzed for PFAS (RI-MW-01-20240821, RI-MW-03\_20240822, and RI-GW-01\_20240821) and the blind duplicate (RI-X-01\_20240821, parent sample: RI-MW-01\_20240821) at concentrations above the NYSDEC AWQSGVs for Human Health.

#### Soil Vapor

Several VOCs, including petroleum-related compounds (e.g., 2,2,4-trimethylpentane, benzene, cyclohexane, ethylbenzene, butane, n-heptane, n-hexane, toluene, xylenes, etc.) and chlorinated solvent-related compounds [e.g., tetrachloroethene (PCE), trichloroethene (TCE), carbon tetrachloride, methylene

chloride, etc.]. Of note, PCE was detected at a concentration of 840 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) at soil vapor point RI-SV-03 (adjacent to the former auto repair operations in the northern portion of the Site), and elevated concentrations of petroleum-related VOCs were detected at soil vapor points RI-SV-02 (adjacent to the former UST field in the northeastern portion of the Site). The elevated concentrations of VOCs detected in soil vapor are attributed to the former operations at the gasoline station/auto repair shop, including the use/storage of petroleum products. The proposed redevelopment plan is still being developed; however, it will include demolition of the current on-site structure. Therefore, potential future vapor intrusion concerns will be further evaluated during development of a Remedial Action Work Plan (RAWP) for the site.

## REMEDIAL INVESTIGATION REPORT

### 1.0 SITE BACKGROUND

This Remedial Investigation (RI) Report (RIR) has been prepared by AKRF, Inc. (AKRF) on behalf of 132 Willis Associates, LLC (the Volunteers) for the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) Site located at 102 Bruckner Boulevard in the Bronx, NY (BCP Site No. C360202; hereafter referred to as the “Site”). The goal of the RI was to further define and characterize the nature and extent of Site contamination and to assist with determining the appropriate remedial action. The RI was conducted in general accordance with the May 2024 New York State Department of Environmental Conservation (NYSDEC)-approved Remedial Investigation Work Plan (RIWP), which included a Health and Safety Plan (HASP) and a Quality Assurance Project Plan (QAPP). Deviations from the RIWP are described throughout the document, specifically in Section 4.1, although none of the deviations materially affected achieving the objectives of the RI.

#### 1.1 Site Location and Current Usage

The Site consists of an approximately 0.597-acre parcel located at 102 Bruckner Boulevard in the Port Morris section of the Bronx, NY, and is identified as Bronx Tax Block 2277, Lot 50 on the New York City Tax Map (formerly Lots 78, 94, and 50). Currently, the Site buildings are unoccupied, and the Site is secured by a chain link fence. The Site is developed with a pump island from the former gasoline station, a one-story slab-on-grade former automotive repair shop and convenience store, and a one-story slab-on-grade former warehouse/garage with a loft. The remainder of the Site is concrete- and asphalt-paved with some sparse vegetation. The Site is currently located in the MX-1 (Port Morris) special mixed-use zoning district and is zoned as M1-5 (manufacturing)/R8A (residential).

The Site location is shown on Figure 1, and the Site layout is shown on Figure 2.

#### 1.2 Description of Surrounding Property

The area surrounding the Site is primarily commercial, with some residential uses, parkland, and vacant land. The Site is bounded to the north by Bruckner Boulevard, followed by commercial properties; to the south by vacant parcels; to the east by a self-storage facility; and to the west by a parking lot and the Willis Avenue Bridge exit ramp to Bruckner Boulevard, followed by a public park. The area surrounding the Site is primarily commercial, with some residential, parkland, and vacant land.

The nearest sensitive receptors (i.e., schools, daycares, or hospitals) include P.S. 43 / Inwood House (approximately 600 feet northeast of the Site at 165 Brown Street), Learning Through Play Pre-K Center / private day care facility (approximately 700 feet west-northwest of the Site at 105 Willis Avenue), Mott Haven Academy Charter School / BronxWorks Inc. / YMCA (approximately 750 feet northeast of the Site at 170 Brown Street), and two private day care facilities (approximately 750 feet west-northwest of the Site at 331 East 132<sup>nd</sup> Street and 800 feet northeast of the Site at 177 Brook Avenue).

## 2.0 SITE HISTORY

### 2.1 Past Uses and Ownership

Historically, the Site contained two small unspecified structures associated with Union Park by 1891. The northern portion of the Site (former Lot 78) was developed with a gasoline station with auto repair operations by 1935; the central portion of the Site (former Lot 94) was developed with a warehouse/garage by 1935; and the southern portion of the Site (former Lot 50) has remained largely undeveloped (identified as an unopened portion of East 132<sup>nd</sup> Street) dating back to 1891.

The former gasoline station/auto repair shop in the northern portion of the Site was decommissioned in the summer of 2022, which included the removal of the facility’s fuel dispensers, aboveground storage tanks (ASTs), fire suppression systems, containerized automotive fluids/chemicals (antifreeze, oils, solvents, etc.), and other equipment/supplies; the facility’s three 4,000-gallon underground storage tanks (USTs) were temporarily taken out of service (permanently closed-removed in September 2023). The warehouse/garage and partially vegetated asphalt-paved driveway/parking area in the central and southern portions of the Site have been vacant since circa 2009; however, they were historically used for various commercial and manufacturing operations (bottling facility; dairy products storage, distribution, and manufacturing facility; and sign fabrication/electrical contractor uses).

**In-Text Table 1**  
**Property Ownership Record**

<b>Entity</b>	<b>Years of Ownership</b>
132 Willis Associates, LLC	April 30, 2021 (former Lots 50 and 94) October 14, 2022 (former Lot 78)
<b>Former Lot 78</b>	
102 Bruckner Boulevard Realty LLC	2004 – 2022
Salvatore Caiola	1972 – 2004
Dellwood Milk Corp.	Prior to 1972
<b>Former Lot 94</b>	
EOIN Michael Properties, LLC	2006 – 2021
National Land and Building Corporation	1989 – 2006
William Masselli	Prior to 1989
<b>Former Lot 50</b>	
Properties Hacker, LLC	2006 – 2021
National Land and Building Corporation	1989 – 2006
William Masselli	1974 – 1989
Salvatore Caiola	1972 – 1974
Dellwood Milk Corp.	Prior to 1972

## 2.2 Proposed Redevelopment Plan

The redevelopment plan is still being contemplated; however, it is anticipated to include demolition of the current Site buildings followed by construction of a new residential building that may include a mix of market and affordable units with commercial space on the ground floor.

## 2.3 Previous Environmental Reports

*Draft Phase I ESA, 102 Bruckner Boulevard, 469 East 132<sup>nd</sup> Street, and 80 Willis Avenue, Bronx, NY 10454, prepared by AKRF, November 2020*

AKRF prepared a Draft Phase I ESA of the Site in accordance with American Society for Testing and Materials (ASTM) Standard E1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Practice, which was the standard at the time of report issuance. The Draft Phase I ESA identified the following Recognized Environmental Conditions (RECs).

- The northern portion of the Site was occupied by a gasoline station with automotive repair operations beginning circa 1935 and was registered in the NYSDEC Petroleum Bulk Storage (PBS) program as Facility ID No. 2-399000 with the following in service tanks: two 4,000-gallon gasoline USTs, one 4,000-gallon diesel UST, one 275-gallon motor oil aboveground storage tank (AST), and one 275-gallon waste oil AST; and 13 closed and removed 550-gallon gasoline USTs. In addition to the registered storage tanks, the then Site owner reported that an unregistered 550-gallon waste oil UST was removed from the facility between circa 2005 and 2010; however, no documentation regarding its removal was available. Spill No. 9202017 was reported at the facility in May 1992 following the identification of petroleum-contaminated soil. According to the former Site owner, the contamination was encountered during removal of the 550-gallon gasoline USTs and was remediated prior to installation of the current 4,000-gallon USTs; however, no information regarding the tank removal and/or remediation work was available. The NYSDEC closed the spill listing in March 2003. The gasoline station was also listed as a Resource Conservation and Recovery Act (RCRA) generator (Facility ID No. NYD000698597) of unspecified waste in 1980, 1999, 2006, and 2007 with no violations noted in the listing. One 275-gallon motor oil AST, one 275-gallon waste oil AST, automotive fluids (antifreeze, fuel, oils, etc.) in containers up to 55 gallons, and general cleaning products, paints, and solvents in containers up to 5 gallons were noted throughout the facility's automotive repair shop; staining was noted on the floor in the repair bays and adjacent to chemical storage areas. No evidence of secondary containment for the 275-gallon waste oil AST or the 55-gallon drums were observed. Evidence of the former in-ground hydraulic lifts, which were reportedly abandoned below the building slab, was observed in the eastern portion of the automotive repair shop.
- The central portion of the Site was occupied by a warehouse/garage since at least 1935 and was used as a bottling facility; a dairy products storage, distribution, and manufacturing facility; and sign fabrication/electrical contractor uses. Lubricants, oils, and unlabeled chemicals in containers up to 55 gallons were noted in the southwestern portion of the building; staining was noted on the floor of the building and adjacent to the chemical storage areas.
- Uses in the vicinity of the Site included automotive repair shops, coal yards, garages with buried gasoline tanks, gasoline stations, railroad operations, used automotive sales, and other commercial, industrial, and manufacturing operations.
- Regulatory database listings in the vicinity of the Site included spill incidents; hazardous waste generators; PBS facilities; and historic automotive sites.

In addition to the RECs, Business Environmental Risks (BERs) including: E-Designations assigned to the Site for hazardous materials contamination and noise; the potential presence of asbestos-containing material (ACM), lead-based paint (LBP), lead-containing paint (LCP), and/or PCB-containing material in the Site building, in historic fill material, and/or in buried debris at the Site; the potential use of PFAS at the Site; and two previous consent orders associated with NYSDEC PBS violations.

*Subsurface (Phase II) Investigation, 469 East 132<sup>nd</sup> Street and 80 Willis Avenue, Bronx, NY 10454, prepared by AKRF, September 2021*

AKRF conducted a Subsurface (Phase II) Investigation on the southern portion of the Site [(former Lot 94) and 80 Willis Avenue (former Lot 50)] to assess whether the RECs identified in AKRF's November 2020 Draft Phase I ESA had adversely affected subsurface conditions. The investigation included the advancement of seven soil borings, installation of two bedrock groundwater monitoring wells, installation of three temporary soil vapor points, and the collection of soil, groundwater, and soil vapor samples for field-screening and laboratory analysis. Based on the findings of the Subsurface (Phase II) Investigation, AKRF concluded the following:

- Soil consisted of historic fill (sand, silt, and gravel with varying amounts of asphalt, brick, and concrete) extending from surface grade to depths up to approximately 8.5 feet below surface grade with apparent native sand, silt, and gravel below the fill layer at two locations. The fill/soil layer was underlain by apparent bedrock, which was encountered at approximately 1 to 4 feet below surface grade on the northern and central portions of the lots, sloping down to approximately 8.5 and 14 feet below surface grade on the southeastern and southwestern portions of the Site, respectively. No field evidence of contamination [e.g., odors, staining, and/or elevated photoionization detector (PID) readings] was noted in the soil borings. Low-level PID readings [0.2 to 10.6 parts per million (ppm)] were observed from approximately 0 to 2 feet below surface grade at SB-12.
- Groundwater was measured at approximately 9.5 feet below surface grade in monitoring well MW-04 and monitoring well MW-05 was dry. No field evidence of contamination was noted during purging or sampling of monitoring well MW-04.
- The volatile organic compound (VOC) acetone was detected in soil at a concentration above its Unrestricted Soil Cleanup Objective (UUSCO) and Protection of Groundwater Soil Cleanup Objective (PGWSCO), but below its Restricted Residential Soil Cleanup Objective (RRSCO) in one sample (SB-12\_0-2-20210608). The detection of acetone was attributed to a minor surface spill associated with historic industrial and manufacturing operations at the Site rather than a large-scale release or source area, and acetone was noted to be a common laboratory contaminant.
- Seven semi-volatile organic compounds (SVOCs) [benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, and indeno(1,2,3-c,d)pyrene] and six metals (barium, copper, lead, mercury, nickel, and zinc) were detected at concentrations above their respective UUSCOs, RRSCOs, and/or PGWSCOs. The SVOC exceedances were polycyclic aromatic hydrocarbons (PAHs), a class of SVOCs commonly found in historic fill material, ash, asphalt, and petroleum products; and metals exceedances were attributed to historic fill material observed in each of the soil borings advanced during the Subsurface (Phase II) Investigation.
- Analytical results for the groundwater sample identified chloroform at a concentration above its Ambient Water Quality Standards and Guidance Values (AWQSGVs). Based on the Site history, field observations, and results of the soil and soil vapor sampling, the detection of

chloroform was not indicative of an on-site release or source area and was attributed to an off-site source.

- Analytical results for the soil vapor samples identified 34 VOCs, including petroleum-related compounds [e.g., benzene, toluene, ethylbenzene, xylenes, etc.] and chlorinated solvent-related compounds [e.g., tetrachloroethylene (PCE), carbon tetrachloride, etc.] in one or more of the soil vapor samples. Of note, PCE was detected at a concentration of 37 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) at soil vapor point SV-06 and elevated concentrations of petroleum-related VOCs were detected at soil vapor point SV-07. Based on field observations and the Site history, the detected VOCs were attributed to historic industrial and manufacturing operations at the Site and/or off-site sources.

Subsurface (Phase II) Investigation, 102 Bruckner Boulevard, Bronx, NY 10454, prepared by AKRF, October 2021

AKRF conducted a Subsurface (Phase II) Investigation of 102 Bruckner Boulevard to assess whether the RECs identified in AKRF's November 2020 Draft Phase I ESA had adversely affected subsurface conditions at the Site. At the time of the Subsurface (Phase II) Investigation, 102 Bruckner Boulevard was the northern half of the current Site and included the pump station island, auto repair garage, and convenience store structures. The Subsurface (Phase II) Investigation included the advancement of 11 soil borings, the installation of three bedrock groundwater monitoring wells, and the installation of four temporary soil vapor points with the collection of soil, groundwater, and soil vapor samples for field-screening and laboratory analysis. Based on the findings of the Subsurface (Phase II) Investigation, AKRF concluded the following:

- Soil consisted of historic fill (sand, silt, and gravel with varying amounts of asphalt, brick, concrete, and wood) extending from surface grade to bedrock up to approximately 5 feet below surface grade.
- Field evidence of suspected petroleum contamination was observed in three soil borings: petroleum-like odors, staining, and elevated PID readings (14.6 to 341 ppm) were observed from approximately 2 to 4 feet below surface grade at SB-03; petroleum-like odors, staining, and elevated PID readings (64.6 to 643 ppm) from approximately 0 to 2 feet below surface grade at SB-05; and faint petroleum-like odors and low-level PID readings (7 ppm) from approximately 4 to 4.5 feet below surface grade at B-03.
- Groundwater was not encountered prior to Geoprobe<sup>®</sup> refusal on suspected bedrock. Three bedrock groundwater monitoring wells were installed to evaluate groundwater conditions. Groundwater was measured at depths ranging from approximately 4.25 to 4.75 feet below surface grade. Faint petroleum-like odors, a sheen, and low-level headspace PID readings (15.5 ppm) were observed in monitoring well MW-01.
- Analytical results for the soil samples identified total xylenes and naphthalene at concentrations above their respective UUSCOs and PGWSCO, but below their respective RRSCO in one sample located adjacent to the pump island, which were attributed to a petroleum release from fuel dispenser piping.
- Copper, lead, nickel, and zinc were detected in one or more of the samples at concentrations above their respective UUSCOs, but below their respective RRSCO and PGWSCO; mercury was detected at concentrations above its UUSCO in three samples and above its RRSCO and PGWSCO in one sample. The metals detected in the soil samples were attributed to historic fill material, which was observed in each of the soil borings advanced, and not to a release or other source area.

- No VOCs or SVOCs were detected at concentrations above their respective AWQSGVs in the groundwater samples; however, benzene was detected at a concentration of 1 micrograms per liter ( $\mu\text{g/L}$ ) in one sample, which is equal to its AWQSGV.
- Analytical results for the soil vapor samples identified petroleum-related compounds (e.g., benzene, toluene, ethylbenzene, xylenes, etc.) and chlorinated solvent-related compounds (e.g., PCE, TCE, etc.). Of note, PCE was detected at a concentration of  $1,000 \mu\text{g/m}^3$  at soil vapor point SV-01 and  $1,100 \mu\text{g/m}^3$  at soil vapor point SV-04, and elevated concentrations of petroleum-related VOCs were detected at soil vapor points SV-02 and SV-03. The elevated concentrations of PCE detected at soil vapor points SV-01 and SV-04, located in and adjacent to the auto repair shop, respectively, were attributed to historic automotive repair operations at the Site. The elevated concentrations of petroleum-related VOCs detected at soil vapor points SV-02 and SV-03, located adjacent to the UST field, were attributed to historic petroleum storage and fueling operations at the Site.

Supplemental Subsurface (Phase II) Investigation, 102 Bruckner Boulevard, Bronx, NY 10454, prepared by AKRF, December 2022

AKRF completed a Supplemental Subsurface (Phase II) Investigation at 102 Bruckner Boulevard following the decommissioning of the gasoline station and automotive repair shop to target areas that were previously inaccessible for sampling, including in the vicinity of the USTs, floor drains, and former hydraulic lifts. The Supplemental Subsurface (Phase II) Investigation included the advancement of eight soil borings and the installation of two temporary groundwater monitoring wells with the collection of soil and groundwater samples for field-screening and laboratory analysis. Based on the findings of the Supplemental Subsurface (Phase II) Investigation, AKRF concluded the following:

- Soil consisted of historic fill (sand, silt, and gravel with varying amounts of asphalt, brick, and concrete) extending from ground surface to bedrock encountered between 4 and 5 feet below surface grade except in the UST field where it was at approximately 10 feet below surface grade. The fill material in the four borings advanced in the UST field was comprised primarily of pea gravel, which is industry standard fill material for fiberglass USTs used for petroleum storage.
- Field evidence of suspected petroleum contamination was observed in seven of the eight soil borings: faint petroleum-like odors were observed from approximately 5 to 10 feet below surface grade at SSB-01 through SSB-03; faint petroleum-like odors were observed from approximately 5 to 9.5 feet below surface grade at SSB-04, with strong odors and elevated PID readings ( $>90$  ppm) noted from approximately 9.5 to 10 feet below surface grade; faint petroleum-like odors were observed from approximately 0 to 4 feet below surface grade at SSB-05 and from approximately 0 to 5 feet below surface grade at SSB-06; and faint petroleum-like odors were observed from approximately 0 to 2 feet below surface grade at SSB-08, with strong odors and elevated PID readings ( $>130$  ppm) noted from approximately 2 to 4 feet below surface grade.
- While not encountered prior to refusal outside of the UST field, groundwater was measured at a depth of approximately 4.25 feet below surface grade in the two temporary monitoring wells (TW-01 and TW-02) installed within the UST field. A faint petroleum-like odor and a discontinuous sheen were noted on purge water from each temporary monitoring well; however, no evidence of gross contamination [light non-aqueous phase liquid (LNAPL), heavy odors, continuous sheen, etc.] was detected.

- Field evidence of suspected petroleum contamination (odors and elevated PID readings) was observed from approximately 5-10 feet below surface grade at SSB-04 and from approximately 0 to 4 feet below surface grade at SSB-08. The petroleum-related VOCs ethylbenzene and total xylenes were detected in up to two soil samples at concentrations above their respective UUSCOs and above their respective PGWSCO in one sample (SSB-08\_2-4\_20221110), but below their respective RRSCO. The field screening and associated laboratory analytical results indicated the presence of petroleum-related VOCs in soil associated with the out-of-service USTs and dispensing system. Methylene chloride was detected at a concentration above its UUSCO and PGWSCO, but below its RRSCO in one sample (SSB-04\_9-10\_20221110). Methylene chloride is a common laboratory contaminant and its presence in one soil sample was likely related to laboratory contamination and may not be reflective of actual soil conditions at the Site (although it was not detected in the associated laboratory blank samples).
- Lead and mercury were detected in up to three of the soil samples at concentrations above their respective UUSCOs, but below their respective RRSCO and PGWSCO; arsenic was detected above its UUSCO, RRSCO, and PGWSCO in one sample (SSB-08\_2-4\_20221110). The metals were attributed to historic fill material, which was observed in each of the soil borings advanced, and not to a release or other source area.
- The petroleum-related VOCs benzene, isopropylbenzene, MTBE, and m,p-xylenes were detected at concentrations above their respective AWQSGVs in one or both of the groundwater samples. The field screening and associated laboratory analytical results indicated the presence of petroleum-related VOCs in groundwater associated with the out-of-service USTs and dispensing system.

Previous environmental reports are included in Appendix A.

## 2.4 Contaminants of Concern

Based on the Site’s history and previous environmental investigations, the primary contaminants of concern (COCs) for the Site, including the detected location, affected media, and associated comparison criteria, have been established as outlined on In-Text Table 2.

**In-Text Table 2**  
**Summary of the Contaminants of Concern**

Contaminant of Concern	Location	Media	NYSDEC Comparison Criteria
SVOCs	Site-wide	Soil/Fill Material	Part 375 UUSCOs and RRSCO
Metals	Site-wide	Soil/Fill Material	Part 375 UUSCOs and RRSCO
Petroleum-related VOCs	Northern portion of Site	Soil/Fill Material	Part 375 UUSCOs and RRSCO
		Groundwater	Class GA AWQSGVs
Petroleum-related SVOCs		Soil/Fill Material	Part 375 UUSCOs and RRSCO
		Groundwater	Class GA AWQSGVs
Potential LNAPL		Groundwater	Class GA AWQSGVs
PFAS		Site-wide	Groundwater
Petroleum- and Chlorinated Solvent-related VOCs	Northern portion of Site	Soil Vapor	N/A

The areas where petroleum-like contamination was detected correlate with the former on-site use and storage of petroleum associated with the former gasoline service station and auto repair operations in the northern portion of the Site. No evidence of non-aqueous phase liquid (NAPL) was encountered during the RI. Further, no evidence of historical on-site use and/or storage of large

quantities of chlorinated solvents or PFAS was identified through the review of available records or the evaluation of sampling results described herein. The primary COCs are related to the Site's historic automotive, commercial, industrial, and manufacturing operations.

### 3.0 PROJECT MANAGEMENT

#### 3.1 Project Organization

Contact information for the parties responsible for the work described in this RIR are included in In-Text Table 3.

**In-Text Table 3  
 Project Organization**

Company	Individual Name	Title	Contact Information
NYSDEC	Manfred Magloire	Project Manager	(718) 482-4078 <a href="mailto:Manfred.magloire@dec.ny.gov">Manfred.magloire@dec.ny.gov</a>
NYSDOH	Mark Sergott	Project Manager	(518) 402-7860 <a href="mailto:bee@health.ny.gov">bee@health.ny.gov</a>
AKRF	Marc Godick	Project Director, QEP	(914) 922-2356 <a href="mailto:mgodick@akrf.com">mgodick@akrf.com</a>
	Rebecca Kinal	QA/QC Officer	(914) 922-2362 <a href="mailto:rkinal@akrf.com">rkinal@akrf.com</a>
	Timothy McClintock	Project Manager	(914) 922-2374 <a href="mailto:tmclintock@akrf.com">tmclintock@akrf.com</a>
	Brian Quinn	Field Team Leader/Site Safety Officer (SSO)	(201) 314-8032 (cell)
	Madelyn Fleming	Alternate Field Team Leader/SSO	(781) 258-7107 (cell)
132 Willis Associates, LLC	Benny Caiola	Volunteer Representative	(212) 772-8830

#### 3.2 Health and Safety

All work described in this report was performed in full compliance with applicable laws and regulations, including Site and Occupational Safety and Health Administration (OSHA) worker safety requirements and Hazardous Waste Operations and Emergency Response (HAZWOPER) requirements. The work described in this RIR was also performed in accordance with the Site-specific HASP and Community Air Monitoring Plan (CAMP), both dated May 2024.

## 4.0 REMEDIAL INVESTIGATION (RI) ACTIVITIES

The RI was conducted on August 21 and 22, and September 30, 2024 and included the following scope of work:

1. Advancement of 10 soil borings (RI-SB-01 through RI-SB-10) with continuous sample collection and laboratory analysis of 17 soil samples [plus associated quality assurance/quality control (QA/QC) samples] for laboratory analysis. The samples were analyzed for VOCs by United States Environmental Protection Agency (EPA) Method 8260, SVOCs by EPA Method 8270, pesticides by EPA Method 8081, polychlorinated biphenyls (PCBs) by EPA Method 8082, Target Analyte List (TAL) metals by EPA Method 6000/7000 series, hexavalent chromium by EPA Method 7196A, 1,4-dioxane by EPA Method 8270, and PFAS by EPA Method 1633 (modified).
2. The installation of one temporary groundwater monitoring well (RI-GW-01) with the collection and laboratory analysis of one groundwater sample from the newly-installed well and the collection and laboratory analysis of groundwater samples from four of the five existing bedrock groundwater monitoring wells (RI-MW-01 through RI-MW-04; groundwater not present at RI-MW-05). The samples were analyzed for VOCs by EPA Method 8260, SVOCs by EPA Method 8270, PCBs by EPA Method 8082, pesticides by EPA Method 8081, total and dissolved TAL metals by EPA Method 6000/7000 series, PFAS by EPA Method 1633 (modified), and 1,4-dioxane by EPA Method 8270 selected ion monitoring (SIM).
3. The installation of seven temporary soil vapor points (RI-SV-01 through RI-SV-07) with the collection and laboratory analysis of seven soil vapor samples and one ambient air sample.
4. Surveying the locations and elevations of the groundwater monitoring wells to facilitate groundwater elevation contour mapping

The locations of the soil borings, groundwater monitoring wells, and temporary soil vapor points from the RI are shown on Figure 2. Photographs documenting the RI activities are provided in Appendix B.

### 4.1 Deviations from the Remedial Investigation Work Plan

The work summarized in this RIR was conducted in general accordance with the NYSDEC-approved May 2024 RIWP prepared by AKRF on behalf of the Volunteers with the following deviations:

- Incorrect flow controllers were supplied to AKRF by the laboratory; therefore, the samples were collected over an approximately 8-hour period instead of a 2-hour period.
- RI-MW-03 was initially sampled on August 22, 2024, during the initial mobilization for the RI field work; however, due to a laboratory error related to the VOC sample from this location, additional sample volume was required. The well was resampled on September 30, 2024 in accordance with the RIWP, and the groundwater sample was submitted to the laboratory for analysis of VOCs by EPA Method 8260.
- Due to poor groundwater recharge at RI-MW-02 and RI-MW-04, the wells were sampled for a reduced suite of analytical parameters (VOCs at RI-MW-02 and VOCs/SVOCs at RI-MW-04).

These deviations did not affect achieving the objectives of the RI.

#### 4.2 Geophysical Surveys

Geophysical surveys were conducted prior to drilling during previous investigations conducted at the Site by AKRF. Therefore, the survey reports from those investigations were used as references during the RI. The Geophysical Investigation Reports are included as Appendix C.

#### 4.3 Soil Boring Advancement

On August 21 and 22, 2024, 10 soil borings (RI-SB-01 through RI-SB-10) were advanced by Coastal Environmental Solutions, Inc. of Holbrook, New York (Coastal) across the Site using a Geoprobe® direct-push probe (DPP) drill rig under the oversight of AKRF. The soil boring locations are shown on Figure 2.

The soil borings were advanced to depths ranging from approximately 1.5 to 10 feet bgs, with shallow bedrock encountered at each location. Soil cores were collected in dedicated acetate liners from surface grade to the terminal depth of each boring. Outside of the UST field, bedrock was encountered at depths ranging from approximately 1.5 to 5 feet bgs. Shallow bedrock was historically removed to facilitate the installation of the facility’s three 4,000-gallon USTs, with Geoprobe® refusal on suspected bedrock (or a concrete tank pad) encountered at approximately 10 feet bgs in this area. While not encountered prior to refusal outside of the UST field, groundwater was encountered in the soil boring (and temporary well) installed within the UST field.

#### 4.4 Temporary Groundwater Monitoring Well Installation

One temporary groundwater monitoring well (RI-GW-01) was installed at soil boring RI-SB-03 within the former UST field, as shown on Figure 2. The temporary groundwater monitoring well was constructed with 10 feet of 1-inch diameter slotted polyvinyl chloride (PVC) well screen set across the observed water table. The well was set in existing pea gravel; therefore, installation of a sandpack surrounding the screened interval was not feasible.

The well installation and construction details, including the depth to bedrock, depth to the first water bearing zone, screened interval, total well depth, depth to water recorded in August and May 2024, and the associated well elevation survey data, are provided in In-Text Table 4. As previously noted, samples were collected from four of the five existing permanent bedrock groundwater monitoring wells (RI-MW-01 through RI-MW-04; water was not present at RI-MW-05).

**In-Text Table 4  
 Monitoring Well Installation and Construction Details**

Monitoring Well ID	Depth to Bedrock (feet bgs)	Depth to Water During Install (feet bgs)	Screened Interval	Total Depth (feet bgs)	Top Of Casing Elevation (NAVD 88)	GW Sampling 8/21/2024		GW Gauging 10/30/2024	
						Depth to Water (feet bgs)	Elevation (NAVD 88)	Depth to Water (feet bgs)	Elevation (NAVD 88)
RI-MW-01	4.5	5	5-12	12	28.29	4.78	23.51	4.29	24.00
RI-MW-02	0.5	5	3-16	16	27.39	4.4	22.99	3.14	24.25
RI-MW-03	1.5	5	3-16	16	29.42	4.11	25.31	3.94	25.48
RI-MW-04	1	5	3-12	12	38.91	11.92	26.99	7.98	30.93
RI-MW-05	2	Dry	7.5-17.5	17.5	38.91	Dry	Dry	Dry	Dry

Notes:  
 bgs = below ground surface; ND = Not Present NAVD88 = North American Vertical Datum of 1988.  
 Dry = water not detected during RI or previous environmental investigations.

#### 4.5 Groundwater Monitoring Well Elevation and Location Survey

On October 30, 2024, the five existing bedrock monitoring wells (RI-MW-01 through RI-MW-05) were surveyed by Fehringer Surveying, P.C., a New York State-licensed surveyor. The elevation

measurements were taken at the flush-mount manhole cover, on the north side of the top of the PVC casing, and the adjacent ground surface at each monitoring well. The survey datum was tied to the North American Vertical Datum of 1988 (NAVD88). Based on the monitoring well elevation survey, the inferred groundwater flow direction is generally northeasterly. A table summarizing the well installation and construction details, including the depth to bedrock, depth to first water bearing zone, screened interval, total well depth, depth to water recorded in August and October 2024, and the associated well elevation survey data, is provided in In-Text Table 4. Groundwater elevation contour maps are included as Figures 3 and 4.

#### **4.6 Groundwater Monitoring Well Development**

Following their installation in 2021, the bedrock wells were developed via pumping and surging with a submersible pump to remove any accumulated fines and establish a hydraulic connection with the surrounding aquifer. Development continued until turbidity was less than 50 NTUs for three successive readings and water quality indicators stabilized to within 10% for pH, temperature, and specific conductivity for three successive readings, to the extent practical. A minimum of three well volumes were removed from temporary groundwater monitoring well (RI-GW-01) to clear accumulated sediment and establish connection to the water-bearing zone, with low-flow purging of the bedrock wells occurring during the groundwater sampling events. All development water generated during the well development and subsequent groundwater sampling activities was containerized in New York State Department of Transportation (DOT)-approved 55-gallon drums for off-site disposal. The management of investigation-derived waste (IDW) is discussed further in Section 4.8.10.

#### **4.7 Temporary Soil Vapor Point Installation**

A total of seven temporary soil vapor points (RI-SV-01 through RI-SV-07) were installed by Coastal at the approximate locations shown on Figure 2. The temporary soil vapor points were installed to depths ranging from approximately 1.5 to 4 feet bgs (directly above the terminal depth of the corresponding soil boring) by advancing an expendable drive point into the subsurface using a track-mounted Geoprobe® DPP. At each point, a screened implant connected to Teflon™-lined polyethylene tubing was installed through the drilling rods and threaded into the drive point. The sample tubing was extended from the end of the screened implant to above grade. The rods were then removed, and the borings were backfilled with No. 2 morie sand to a maximum of 6 inches above the screen. Hydrated bentonite was used to fill the remaining void around the sampling tubing to the ground surface.

#### **4.8 Sample Collection and Chemical Analysis**

Soil, groundwater, and soil vapor at the Site have been sampled and evaluated as part of the RI. The sampling performed, which is presented herein, provides a basis for the evaluation of subsurface conditions at the Site and potential remedial actions with respect to the media sampled.

##### **4.8.1 Soil Sampling**

Soil samples were collected from a total of 10 soil borings (RI-SB-01 through RI-SB-10) advanced across the Site. Soil cores were collected using the track-mounted Geoprobe® DPP in 2-inch diameter, stainless steel macrocore piston rod samplers fitted with internal acetate liners. All sampling equipment was either dedicated or decontaminated between sampling locations.

Soil samples were inspected by AKRF field personnel for evidence of contamination (e.g., odors, staining, etc.), screened for the presence of VOCs with a calibrated PID with an 11.7 electron Volt (eV) lamp, and logged using the modified Burmister soil classification

system. Due to shallow refusal on bedrock, only one sample was collected from RI-SB-02, RI-SB-04, RI-SB-06, and RI-SB-10; two samples were collected from the remaining borings, with a third sample collected at RI-SB-09. The soil boring locations were located in the field during the GPR survey using handheld GPS device and/or upon their completion by taking measurements relative to permanent Site features such as building corners and property boundaries.

A total of 17 soil samples (plus associated quality assurance/quality control QA/QC samples) for laboratory analysis. The samples were analyzed for VOCs by EPA Method 8260, SVOCs by EPA Method 8270, pesticides by EPA Method 8081, PCBs by EPA Method 8082, TAL metals by EPA Method 6000/7000 series, hexavalent chromium by EPA Method 7196A, 1,4-dioxane by EPA Method 8270, and PFAS by EPA Method 1633 (modified).

The soil and associated QA/QC samples were analyzed by Eurofins of Edison, NJ, with Category B deliverables. Third-party data validation was performed by L.A.B. Validation Corp., of Northport, NY, and data usability summary reports (DUSRs) were prepared

Soil boring logs are provided in Appendix D. Soil analytical data is discussed in Section 5.3. Soil sampling locations, depths, and rationale are summarized in In-Text Table 5.

**In-Text Table 5**  
**Soil Sample Details and Rationale**

Soil Boring	Termination Depth <sup>1,2</sup>	On-Site Location	Sample Depth Intervals <sup>1</sup>	Rationale
RI-SB-01	4	Northern	0-2, 2-4	To assess/confirm soil quality in the northern portion of the Site in area of the former gasoline pumps and tank piping.
RI-SB-02	1.5	Northeastern	0-1	To assess/confirm soil quality in the northeastern portion of the Site adjacent to the former gasoline pumps and tank piping.
RI-SB-03	10	Northeastern	0-2, 2-4	To assess/confirm soil quality in the northeastern portion of the Site within the UST field.
RI-SB-04	2	East-central	1-2	To assess/confirm soil quality in the east-central portion of the Site within the former automotive repair shop.
RI-SB-05	5	West-central	0-2, 3-5	To assess/confirm soil quality in the west-central portion of the Site and confirm presence of SVOCs and metals identified in SB-09.
RI-SB-06	2	Central	0-2	To assess/confirm soil quality in the central portion of the Site.
RI-SB-07	4	Southeastern	0-2, 2-4	To assess/confirm soil quality in the southeastern portion of the Site to confirm laboratory results from SB-12.
RI-SB-08	4	South-central	0-2, 2-4	To assess/confirm soil quality in the south-central portion of the Site .
RI-SB-09	9	Southwestern	0-2, 3-5, 7-9	To assess/confirm soil quality in the southwestern portion of the Site.
RI-SB-10	2.5	East-central	0.5-2.5	To assess/confirm soil quality in the east-central portion of the Site.
Notes: <sup>1</sup> Feet below surface grade <sup>2</sup> Based on refusal on suspected bedrock.				

#### 4.8.2 Soil Quality Assurance/Quality Control (QA/QC) Sampling

For QA/QC purposes, one matrix spike/matrix spike duplicate (MS/MSD) sample, one blind duplicate sample, one aqueous trip blank, one aqueous field blank, and one equipment blank were submitted for laboratory analysis. The QA/QC samples were analyzed for the same parameters as the soil samples except for the trip and equipment blanks, which were only analyzed for VOCs and PFAS, respectively.

#### 4.8.3 Groundwater Sampling

The RI included the installation and sampling of one temporary groundwater monitoring well (RI-GW-01) and the collection and laboratory analysis of groundwater samples from four of the five existing bedrock groundwater monitoring wells (RI-MW-01 through RI-MW-04; groundwater not present at RI-MW-05). The groundwater samples were collected in accordance with EPA’s low-flow sampling methodology and the NYSDEC emerging contaminant sampling guidance. All sampling equipment was either dedicated or decontaminated between sampling locations.

Prior to sampling, an electronic interface probe attached to a measuring tape accurate to 0.01 foot was used to gauge the water level in each well and to check for the presence of NAPL. No evidence of NAPL was detected at any of the monitoring well locations during the sampling activities; however, faint petroleum-like odors were observed at RI-MW-01. During all sampling events, purging of the wells prior to sample collection continued until the turbidity decreased below 50 NTUs and water quality indicators stabilized to within 10% for pH, temperature, and specific conductivity, to the extent practical. Due to poor recharge at RI-MW-02 and RI-MW-04 (both went dry during initial purging), groundwater samples were collected the following day, with enough volume for only a limited suite of analyses (VOCs at RI-MW-02 and VOCs/SVOCs at RI-MW-04). During sample collection, sample containers slated for laboratory analysis of dissolved metals were field filtered using inline filters. All purged water was containerized in DOT-approved 55-gallon drums. The management of IDW is discussed further in Section 4.8.10.

Groundwater samples slated for laboratory analysis were placed in laboratory-supplied containers in accordance with EPA protocols. Groundwater samples were submitted to Eurofins of Edison, NJ in accordance with EPA CoC protocols. The groundwater samples were analyzed for VOCs by EPA Method 8260, SVOCs by EPA Method 8270, pesticides by EPA Method 8081, PCBs by EPA Method 8082, TAL metals by EPA Method 6000/7000 series (total and dissolved), 1,4-dioxane by EPA Method 8270-SIM, and PFAS by EPA Method 1633 (modified).

Monitoring well construction logs and groundwater sampling logs are provided in Appendix E and F, respectively. Groundwater analytical data is discussed in Section 5.4. Groundwater sampling details and rationale are summarized in In-Text Table 6.

**In-Text Table 6**  
**Groundwater Sampling Details and Rationale**

Monitoring Well ID	On-Site Well Location	Surface Description	Total Well Depth (feet bgs)	Rationale for Sampling Location
RI-MW-01	Northeastern	Asphalt	16	To assess/confirm groundwater quality in the northeastern portion of the Site and determine Site-specific groundwater flow direction and elevation.
RI-MW-02	Off-site	Concrete	16	To assess/confirm groundwater quality upgradient of the Site and determine Site-specific groundwater flow direction and elevation.

**In-Text Table 6**  
**Groundwater Sampling Details and Rationale**

Monitoring Well ID	On-Site Well Location	Surface Description	Total Well Depth (feet bgs)	Rationale for Sampling Location
RI-MW-03	Northwestern	Asphalt	16	To assess/confirm groundwater quality in the northwestern portion of the Site and determine Site-specific groundwater flow direction and elevation.
RI-MW-04	Central	Concrete	12	To assess/confirm groundwater quality in the central portion of the Site and determine Site-specific groundwater flow direction and elevation.
RI-GW-01	Northeastern	Gravel	10	To assess groundwater quality in the northeastern portion of the Site within the UST field.

**4.8.4 Groundwater Quality Assurance/Quality Control (QA/QC) Sampling**

For QA/QC purposes, one MS/MSD, one blind duplicate sample, two aqueous field blanks, two equipment blanks, and two aqueous trip blanks, were collected and submitted with the groundwater samples. The MS/MSD, field blank, and blind duplicate samples were submitted for the same laboratory analyses as the accompanying groundwater samples; the trip blank was submitted for laboratory analysis of VOCs by EPA Method 8260 only. The equipment blank was analyzed for PFAS only.

The groundwater samples and associated QA/QC samples were analyzed by Eurofins of Edison, NJ, with Category B deliverables. Third-party data validation was performed by L.A.B. Validation Corp., of Northport, NY, and DUSRs were prepared.

**4.8.5 Soil Vapor Point Installation, Purging, and Sampling**

Seven temporary soil vapor points (RI-SV-01 through RI-SV-07) were installed at the locations shown on Figure 2. The interior samples (RI-SV-03, RI-SV-04, and RI-SV-05) were drilled to one foot below ground surface; 6 inches below the 6-inch thick slab. Exterior samples (RI-SV-01, RI-SV-02, RI-SV-06, and RI-SV-07) were drilled to four feet below grade due to depth of refusal on bedrock. One ambient air sample (RI-AA-01) was collected concurrently to the soil vapor samples.

The temporary sub-slab and soil vapor points were installed by advancing an expendable drive point using a direct-push drill rig to the target sampling depth. At each monitoring point, a 6-inch stainless steel screen implant, connected to Teflon™ tubing was installed by hand or through the drilling rods and threaded into the drive point. The sampling tubing extended from the end of the screen to above grade. The push probe rods were then removed and the boring was backfilled with clean silica sand around and above the screen. Hydrated bentonite was used to fill the remaining void around the sampling tubing to the ground surface.

Prior to sample collection, the vapor points were purged of three sample volumes using a GilAir air sampling pump. During purging, a shroud was placed over the sampling point and helium gas was introduced to saturate the atmosphere around the sample port with helium gas. Purged vapors were collected into a Tedlar™ bag and field-screened for organic vapors using a PID. The purged air was also monitored using a portable helium detector to check for short-circuiting of ambient air into the vapor sampling point. All soil vapor points passed the seal integrity tests as helium was not detected.

Following purging, a soil vapor sample was collected using the vacuum from the SUMMA<sup>®</sup> canister. Immediately after opening the flow control valve equipped with an 8-hour regulator, the initial SUMMA<sup>®</sup> canister vacuum (inches of mercury) was noted. After approximately 8 hours, the flow controller valve was closed, the final vacuum was noted, and the SUMMA<sup>®</sup> canister was placed in a shipping carton for delivery to the laboratory. Concurrently with the vapor samples, an ambient air sample was also collected.

The soil vapor and ambient air samples were analyzed for VOCs by EPA Method TO-15 by Eurofins, a NYSDOH ELAP-certified laboratory, with Category B deliverables. Samples were shipped to the laboratory with appropriate COC documentation.

The RI soil vapor sampling logs, provided as Appendix G, include vapor point construction details. Soil vapor sampling locations, depths, and rationales are summarized in In-text Table 7.

**In-Text Table 7**  
**Soil Vapor Sampling Details and Rationale**

Soil Vapor Point ID	Site Location	Sampling Depth <sup>1</sup>	Purged Vapor PID Reading <sup>2</sup>	Rationale
RI-SV-01	Northwestern	4	2.3	To confirm concentrations of VOCs on the northwestern portion of the Site near SV-04.
RI-SV-02	Northeastern	4	8.6	To confirm concentrations of VOCs on the northeastern portion of the Site near SV-02 and SV-03.
RI-SV-03	West-central	0.5	2.8	To confirm concentrations of VOCs on the west-central portion of the Site near SV-04.
RI-SV-04	East-central	0.5	1.8	To confirm concentrations of VOCs on the east-central portion of the Site near SV-01.
RI-SV-05	West-central	0.5	1.2	To confirm concentrations of VOCs on the west-central portion of the Site near SV-06.
RI-SV-06	South-central	4	0.8	To determine concentrations of VOCs on the south-central portion of the Site.
RI-SV-07	Southeastern	4	1.6	To confirm concentrations of VOCs on the southeastern portion of the Site near SV-07.
Notes: <sup>1</sup> Feet below paving/slab <sup>2</sup> parts per million (ppm) ppm = parts per million				

#### 4.8.6 Soil Vapor and Ambient Air Data Validation

For QA/QC purposes, one ambient air sample (RI-AA-01\_20240822) was collected from an exterior area of the Site. The ambient air sample was analyzed for VOCs by EPA Method TO-15.

The soil vapor samples and associated QA/QC sample were analyzed by Eurofins of Burlington, VT, with Category B deliverables. Third-party data validation was performed by L.A.B. Validation Corp., of Northport, NY, and DUSRs were prepared.

#### 4.8.7 Chemical Analysis

Chemical analytical work has been performed under a QA program, which is summarized in In-Text Table 8.

**In-Text Table 8**  
**QA Program**

<b>Factor</b>	<b>Description</b>
Quality Assurance Officer	The chemical analytical QA/QC was directed by Rebecca Kinal of AKRF.
Third Party Data Validator	The third-party data validation was performed by Lori Beyer of L.A.B. Validation Corp.
Chemical Analytical Laboratory	The chemical analytical laboratories used in the RI were Eurofins of Edison, New Jersey and Eurofins of Burlington, Vermont.
Chemical Analytical Methods	Soil analytical methods: <ul style="list-style-type: none"> <li>• Part 375 VOCs by EPA Method 8260</li> <li>• Part 375 SVOCs by EPA Method 8270</li> <li>• PCBs by EPA Method 8082</li> <li>• Pesticides by EPA Method 8081B</li> <li>• TAL metals by EPA Method 6000/7000 series</li> <li>• Hexavalent chromium by EPA Method 7196A</li> <li>• PFAS by EPA Method 1633</li> </ul> Groundwater analytical methods: <ul style="list-style-type: none"> <li>• Part 375 VOCs by EPA Method 8260</li> <li>• Part 375 SVOCs by EPA Method 8270</li> <li>• PCBs by EPA Method 8082</li> <li>• Pesticides by EPA Method 8081</li> <li>• TAL Metals (total and dissolved) by EPA Method 6000/7000 series</li> <li>• 1,4-Dioxane by EPA Method 8270E SIM</li> <li>• PFAS by EPA Method 1633</li> </ul> Soil vapor and ambient air analytical method: <ul style="list-style-type: none"> <li>• VOCs by EPA Method TO-15</li> </ul>

#### 4.8.8 Data Validation

In accordance with DER-10 requirements, QA/QC procedures were used to provide performance information with regard to accuracy, precision, sensitivity, representation, completeness, and comparability associated with the sampling and analyses for this investigation. Field QA/QC procedures were used (1) to document that samples were representative of actual conditions at the Site and (2) to identify possible cross-contamination from field activities or sample transit. Laboratory QA/QC procedures and analyses were used to demonstrate whether analytical results have been biased either by interfering compounds in the sample matrix or by laboratory techniques that may have introduced systematic or random errors to the analytical process.

QA/QC samples were analyzed at Eurofins of Edison, NJ and Burlington, VT, both NYSDOH ELAP-certified laboratories. The third-party data validation was performed by

L.A.B. Validation Corp., of Northport, NY, and DUSRs were prepared. The DUSRs concluded that the overall assessment of the data generated was of acceptable quality. The soil, groundwater, and soil vapor DUSRs identified additional qualifiers for specific compounds, as explained in Appendix H. The data were determined to be acceptable for use with the additional data qualifiers. The qualifiers have been added to the soil, groundwater, and soil vapor data summary tables provided as Attached Tables 1 through 14.

#### **4.8.9 Results of Chemical Analyses**

Category B deliverables were provided by Eurofins of Edison, NJ and Burlington, VT. The laboratory deliverable packages and associated DUSRs are provided in Appendix H.

#### **4.8.10 Management of Investigation-Derived Waste (IDW)**

Handling of IDW and backfilling of boreholes was conducted in accordance with Section 3.3(e) of DER-10. IDW that did not exhibit evidence of contamination (e.g., staining, elevated PID readings, oily sheens, odors, etc.) was used to backfill the corresponding borehole that generated them to within 24 inches of the surface. Development and purge water from the investigation was containerized in NYSDOT-approved 55-gallon drums.

The drums were sealed at the end of each workday and labeled with the date, the well or boring number, the type of waste (i.e., drill cuttings, decontamination fluids, development water, or purge water) and the name of an AKRF point-of-contact. All drums were labeled “pending analysis” until laboratory data became available. All boreholes were restored at the surface with concrete after being backfilled. Two drums containing development and purge water (approximately 65 gallons) were generated during the RI. The drums were secured inside the former auto repair shop in the northern portion of the Site and will be removed as a component of the future demolition work.

## 5.0 ENVIRONMENTAL EVALUATION

### 5.1 Geological and Hydrogeological Conditions

#### 5.1.1 Stratigraphy

Historic fill (sand, silt, and gravel, with varying amounts of ash, asphalt, brick, concrete, and wood) was observed extending from ground surface to depths up to approximately 10 feet bgs, underlain by apparent native sand, silt, and gravel in the southeastern and southwestern portions of the Site. The fill/soil layer was underlain by bedrock encountered at depths ranging from approximately 1 to 5 feet bgs across the Site. Based on previous investigations, shallow bedrock is present at approximately 1 to 5 feet bgs in the northern and central portions of the Site, at approximately 8.5 feet bgs in the southeastern portion of the Site, and at approximately 14 feet bgs in the southwestern portion of the Site. Shallow bedrock was reportedly removed to facilitate installation of the former gasoline station's USTs, with suspected bedrock (or a concrete tank pad) encountered at approximately 10 feet bgs in the former UST field.

#### 5.1.2 Hydrogeology

The measured groundwater elevation in the previously installed bedrock wells ranged from approximately 23 to 27 feet above mean sea level (reference: NAVD88) in August 2024, and at approximately 24 to 30 feet in October 2024; groundwater was not present at RI-MW-05 in the southern portion of the Site, consistent with previous investigations. Based the well elevation survey and associated gauging data, the inferred groundwater flow direction is generally northeasterly.

### 5.2 Field Findings

Field evidence of suspected residual petroleum contamination was observed in one of the soil borings and one of the groundwater monitoring wells during the RI, as outlined below:

- Faint petroleum-like odors and moderate PID readings (max of 64.4 ppm) were detected from approximately 2 to 4 feet bgs at soil boring RI-SB-01 in the northern portion of the Site (in the area of the former gasoline station pump islands). The field evidence of contamination extended to bedrock, which was encountered at 4 feet bgs.
- Faint petroleum-like odors were detected in purge water during the groundwater sampling at RI-MW-01, in the northeastern portion of the Site (in the area of the gasoline station's former UST field). No sheens and/or residual product were detected.

The areas where petroleum-like contamination was detected correlate with the former on-site use and storage of petroleum associated with the former gasoline service station and auto repair operations in the northern portion of the Site. No evidence of non-aqueous phase liquid NAPL was encountered during the RI; however, as noted above, a sheen was observed at RI-MW-01.

### 5.3 Soil Chemistry

A total of 17 soil samples were collected for laboratory analysis from soil borings (RI-SB-01 through RI-SB-10) advanced during the RI, with one to three samples collected from each soil boring location (see In-Text Table 5 for soil sampling locations, depths, and rationales). Soil sample analytical results for VOCs, SVOCs, pesticides, herbicides, PCBs, and metals were compared to the NYSDEC Part 375 UUSCOs, RRSCOs, and Protection of Groundwater Soil Cleanup Objectives (PGWSCOs) (for VOCs only); the results for PFAS were compared to the Unrestricted Use Guidance Values (UUGVs) and Restricted Residential Guidance Values (RRGVs) for PFAS.

The complete laboratory analytical results are summarized in Attached Tables 1 through 6, and exceedances are shown on Figure 5.

### 5.3.1 Volatile Organic Compounds (VOCs) in Soil

No VOCs were detected in the soil samples at concentrations above the UUSCOs, RRSCOs, or PGWSCOs.

### 5.3.2 Semi-volatile Organic Compounds (SVOCs) in Soil and Sediment

Seven SVOCs [benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, and indeno(1,2,3-c,d)pyrene] were detected at concentrations above their respective UUSCOs and RRSCOs in one soil sample (RI-SB-05\_3-5\_20240821) and one blind duplicate sample (RI-SB-X\_0-2\_20240821, parent sample: RI-SB-05\_0-2\_2240821); naphthalene was detected at a concentration above its UUSCO in one sample (RI-SB-05\_3-5\_20240821). Soil analytical results for SVOCs are presented in Attached Table 2. In-Text Table 9 summarizes SVOC exceedances above UUSCOs and PGWSCOs in soil samples.

**In-Text Table 9**  
**SVOC Concentrations in Soil Samples Above UUSCOs and/or RRSCOs**

Analyte	Sample Identification	UUSCO (mg/kg)	RRSCO (mg/kg)	Concentration (mg/kg)
Benzo(a)Anthracene	RI-SB-05_3-5_20240821	1	1	<b>44 D</b>
	RI-SB-X_0-2_20240821			<b>15 R</b>
Benzo(a)Pyrene	RI-SB-05_3-5_20240821	1	1	<b>39 D</b>
	RI-SB-X_0-2_20240821			<b>16 R</b>
Benzo(b)Fluoranthene	RI-SB-05_3-5_20240821	1	1	<b>49 D</b>
	RI-SB-X_0-2_20240821			<b>20 R</b>
Benzo(k)Fluoranthene	RI-SB-05_3-5_20240821	0.8	3.9	<b>19 D</b>
	RI-SB-X_0-2_20240821			<b>7.8 R</b>
Chrysene	RI-SB-05_3-5_20240821	1	3.9	<b>40 D</b>
	RI-SB-X_0-2_20240821			<b>15 R</b>
Dibenz(a,h)Anthracene	RI-SB-05_3-5_20240821	0.33	0.33	<b>5.1</b>
	RI-SB-X_0-2_20240821			<b>3.9 R</b>
Indeno(1,2,3-c,d)Pyrene	RI-SB-05_3-5_20240821	0.5	0.5	<b>20 D</b>
	RI-SB-X_0-2_20240821			<b>11 R</b>
Naphthalene	RI-SB-05_3-5_20240821	12	100	16 D
Notes: D = Indicates an identified compound in an analysis that has been diluted. R = Indicates the reported result is unusable (note: the analyte may or may not be present). mg/kg = milligrams per kilogram RI-SB-X_0-2_20240821 is a blind duplicate of sample RI-SB-05_0-2_20240821 Exceedances of RRSCOs are bolded.				

The concentrations of SVOCs in the shallow soil samples collected above bedrock are primarily attributed to historic fill material, which was encountered throughout the Site. However, the SVOCs detected in the vicinity of the former gasoline station/auto repair shop in the northern portion of the Site may also be attributable to residual petroleum contamination from historic use and storage of petroleum products. Field evidence of

contamination (faint petroleum-like odors and low-level PID readings) was reported at RI-SB-01 in the vicinity of the former gasoline station pump island.

### 5.3.3 Metals in Soil

Five metals (arsenic, barium, copper, lead, and mercury) were detected above their respective UUSCOs and RRSCOs in three soil samples (RI-SB-01\_0-2\_20240821, RI-SB-05\_0-2\_20240821, and RI-SB-05\_3-5\_20240821) and one blind duplicate sample (RI-SB-X\_0-2\_20240821, parent sample: RI-SB-05\_0-2\_20240821); copper, lead, mercury, nickel, and/or zinc were detected above their respective UUSCOs in seven soil samples (RI-SB-01\_0-2\_20240821, RI-SB-02\_0-1\_20240821, RI-SB-05\_0-2\_20240821, RI-SB-05\_3-5\_20240821, RI-SB-07\_0-2\_20240821, RI-SB-08\_2-4\_20240821, and RI-SB-09\_7-9\_20240821) and one blind duplicate sample (RI-SB-X\_0-2\_20240821, parent sample: RI-SB-05\_0-2\_20240821). Soil analytical results for metals are presented in Attached Table 3. In-Text Table 10 summarizes metals exceedances above UUSCOs and RRSCOs in the soil samples.

**In-Text Table 10**  
**Metals Concentrations in Soil Samples Above UUSCOs and/or RRSCOs**

Analyte	Sample Identification	UUSCO (mg/kg)	RRSCO (mg/kg)	Concentration (mg/kg)
Arsenic	RI-SB-05_0-2_20240821	13	16	<b>22.4 JK</b>
Barium	RI-SB-01_0-2_20240821	350	400	<b>560</b>
	RI-SB-05_0-2_20240821			<b>438</b>
	RI-SB-05_3-5_20240821			<b>433</b>
	RI-SB-X_0-2_20240821			<b>548</b>
Copper	RI-SB-05_0-2_20240821	50	270	<b>284</b>
	RI-SB-05_3-5_20240821			170
	RI-SB-X_0-2_20240821			161
Lead	RI-SB-01_0-2_20240821	63	400	64.9
	RI-SB-02_0-1_20240821			113
	RI-SB-05_0-2_20240821			<b>501</b>
	RI-SB-05_3-5_20240821			282
	RI-SB-07_0-2_20240821			200
	RI-SB-08_2-4_20240821			69.8
	RI-SB-09_7-9_20240821			158
	RI-SB-X_0-2_20240821			285
Mercury	RI-SB-01_0-2_20240821	0.18	0.81	<b>1.9</b>
	RI-SB-05_0-2_20240821			0.39
	RI-SB-05_3-5_20240821			0.79
	RI-SB-09_7-9_20240821			0.32
	RI-SB-X_0-2_20240821			0.29
Nickel	RI-SB-05_3-5_20240821	30	310	30.8
	RI-SB-X_0-2_20240821			30.2

Analyte	Sample Identification	UUSCO (mg/kg)	RRSCO (mg/kg)	Concentration (mg/kg)
Zinc	RI-SB-01_0-2_20240821	109	10,000	138
	RI-SB-02_0-1_20240821			135
	RI-SB-05_0-2_20240821			632 J
	RI-SB-05_3-5_20240821			378
	RI-SB-07_0-2_20240821			124
	RI-SB-09_7-9_20240821			120
	RI-SB-X_0-2_20240821			316 J
Notes: J = The concentration given is an estimated value. K = Reported concentration value is proportional to dilution factor and may be exaggerated mg/kg = milligrams per kilogram RI-SB-X_0-2_20240821 is a blind duplicate of sample RI-SB-05_0-2_20240821 Exceedances of RRSCOs are bolded.				

The metals detected in soil samples are generally attributed to historic fill material, which was encountered throughout the Site and/or naturally occurring background conditions.

#### 5.3.4 Polychlorinated Biphenyls (PCBs) in Soil

No PCBs were detected above the laboratory reporting limits in any of the soil samples analyzed. Soil analytical results for PCBs are summarized in Attached Table 4.

#### 5.3.5 Pesticides in Soil

No pesticides were detected above the laboratory reporting limits in any of the soil samples analyzed. Soil analytical results for pesticides are summarized in Attached Table 5.

#### 5.3.6 Emerging Contaminants in Soil

The PFAS compound PFOS was detected above its UUGV of 0.88 parts per billion (ppb) in soil sample RI-SB-09\_7-9\_20240821 at a concentration of 1.01 ppb; PFOA was not detected above its UUGV in the soil samples. The compound 1,4-dioxane was not detected at concentrations above its laboratory reporting limit in any of the soil samples. Soil analytical results for 1,4-dioxane and PFAS are summarized in Attached Tables 2 and 6, respectively. In-Text Table 11 summarizes PFAS exceedances above the UUGVs.

**In-Text Table 11**  
**PFAS Concentrations in Soil Samples Above UUGV**

Analyte	Sample Identification	UUGV (ppb)	RRGV (ppb)	Concentration (ppb)
PFOS	RI-SB-09_7-9_20240821	0.88	44	1.01
Note: ppb = parts per billion				

The PFOA detection is attributed to historic fill material, which was encountered throughout the Site, and not to a large on-site release or other on-site source area.

## 5.4 Groundwater Chemistry

RI included the installation and sampling of one temporary groundwater monitoring well (RI-GW-01) and the collection and laboratory analysis of groundwater samples from four of the five existing bedrock groundwater monitoring wells (RI-MW-01 through RI-MW-04; groundwater not present at RI-MW-05). The groundwater samples were collected in accordance with EPA’s low-flow sampling methodology and the NYSDEC emerging contaminant sampling guidance.

Groundwater samples were analyzed for VOCs by EPA Method 8260, SVOCs by EPA Method 8270, PCBs by EPA Method 8082, pesticides by EPA Method 8081, total and dissolved TAL metals by EPA Method 6000/7000 series, PFAS by Modified EPA Method 1633, and 1,4-dioxane by EPA Method 8270 selected ion monitoring (SIM). Groundwater sample analytical results were conservatively compared to the NYSDEC Class GA AWQSGVs, and the PFAS and 1,4-dioxane concentrations were compared to the NYSDEC emerging contaminant guidance values. These standards are drinking water standards, although groundwater in the Bronx is not used as a source of potable water.

Groundwater sample analytical results are presented in Tables 7 through 13. RI groundwater sample concentrations above the AWQSGVs and NYSDEC PFAS guidance values are shown on Figure 6. Groundwater laboratory analytical data reports are included in Appendix H, and exceedances are shown on Figure 6.

### 5.4.1 Volatile Organic Compounds (VOCs) in Groundwater

Seven VOCs (1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, benzene, ethylbenzene, o-xylene, m/p-xylenes, and toluene) were detected above their respective AWQSGVs in two groundwater samples (RI-MW-01\_20240821 and RI-GW-01\_20240821). Groundwater analytical results for VOCs are summarized in Attached Table 7. In-Text Table 12 summarizes VOC exceedances above the AWQSGVs.

**In-Text Table 12**  
**VOCs Concentrations in Groundwater Samples Above AWQSGVs**

Analyte	Sample Identification	AWQSGV (µg/L)	Concentration (µg/L)
1,2,4-Trimethylbenzene	RI-GW-01_20240821	5	31
	RI-MW-01_20240821		5.8
1,3,5-Trimethylbenzene	RI-GW-01_20240821	5	11
Benzene	RI-MW-01_20240821	1	1.2
Ethylbenzene	RI-GW-01_20240821	5	10
M,P-Xylenes	RI-GW-01_20240821	5	51
	RI-MW-01_20240821		15
O-Xylene (1,2-Dimethylbenzene)	RI-GW-01_20240821	5	20
	RI-MW-01_20240821		6.7
Toluene	RI-GW-01_20240821	5	17
	RI-MW-01_20240821		7.8
Notes: µg/L = micrograms per liter			

The detected VOCs correlate with the former on-site use and storage of petroleum associated with the former gasoline service station and auto repair operations in the northern portion of the Site.

### 5.4.2 Semi-volatile Organic Compounds (SVOCs) in Groundwater

The SVOC phenol was detected above its AWQSGV in two groundwater samples (RI-MW-01\_20240821 and RI-GW-01\_20240821) and one blind duplicate sample (RI-X-01\_20240821, parent sample: RI-MW-03\_20240821). 1,4-Dioxane was not detected above laboratory reporting limits in any of the groundwater samples. Groundwater analytical results for SVOCs are summarized in Attached Table 8. In-Text Table 13 summarizes SVOCs exceedances above the AWQSGVs.

**SVOCs Concentrations in Groundwater Samples Above AWQSGVs**

Analyte	Sample Identification	AWQSGV (µg/L)	Concentration (µg/L)
Phenol	RI-GW-01_20240821	1	6.5 J
	RI-MW-01_20240821		2 J
	RI-X-01_20240821		2.5 J
Notes: J = The concentration given is an estimated value. µg/L = micrograms per liter RI-X-01_20240821 is a blind duplicate of sample RI-MW-01_20240821			

The detection of phenol is attributed to the former on-site auto repair operations in the northern portion of the Site.

### 5.4.3 Metals in Groundwater

#### Total (Unfiltered) Metals

Two metals (iron and sodium) were detected above their respective AWQSGVs in the three unfiltered groundwater samples (plus the blind duplicate). Groundwater analytical results for total metals are summarized in Attached Table 9. In-Text Table 14 summarizes total metals exceedances above the AWQSGVs.

**In-Text Table 14  
 Total Metals Concentrations in Groundwater Samples Above AWQSGVs**

Analyte	Sample Identification	AWQSGV (µg/L)	Concentration (µg/L)
Iron	RI-GW-01_20240821	300	650 J
	RI-MW-03_20240822		1,540
Sodium	RI-GW-01_20240821	20,000	22,800 J
	RI-MW-01_20240821		39,000
	RI-MW-03_20240822		141,000
	RI-X-01_20240821		40,300 J
Notes: J = The concentration given is an estimated value. µg/L = micrograms per liter RI-X-01_20240821 is a blind duplicate of sample RI-MW-01_20240821			

#### Dissolved (Filtered) Metals

Sodium was the only metal detected above its AWQSGVs in the three filtered groundwater samples (plus the blind duplicate). Of the 23 metals analyzed for, 14 metals were detected in the groundwater samples at low levels below the AWQSGVs. Groundwater analytical

results for dissolved metals are summarized in Attached Table 10. In-Text Table 16 summarizes dissolved metals exceedances above the AWQSGVs.

**In-Text Table 15**  
**Dissolved Metals Concentrations in Groundwater Samples Above AWQSGVs**

Analyte	Sample Identification	AWQSGV (µg/L)	Concentration (µg/L)
Sodium	RI-GW-01_20240821	20,000	23,900 J
	RI-MW-01_20240821		41,200
	RI-MW-03_20240822		146,000
	RI-X-01_20240821		41,400 J
Notes: J = The concentration given is an estimated value. µg/L = micrograms per liter RI-X-01_20240821 is a blind duplicate of sample RI-MW-01_20240821			

Based on the results of the total (unfiltered) and dissolved (filtered) groundwater samples, which are generally consistent in both detections and concentrations, the metals detected in groundwater are attributed to naturally occurring background conditions typical of the area surrounding the Site, and to a lesser extent, sediment entrained in the samples.

**5.4.4 Polychlorinated Biphenyls (PCBs) in Groundwater**

Total PCBs were not detected above the laboratory reporting limits in any of the groundwater samples. Groundwater analytical results for PCBs are summarized in Attached Table 11.

**5.4.5 Pesticides in Groundwater**

Pesticides were not detected above the laboratory reporting limits in any of the groundwater samples. Groundwater analytical results for pesticides are summarized in Attached Table 12.

**5.4.6 Per- and Polyfluoroalkyl Substances (PFAS) in Groundwater**

PFOA and PFOS were detected in the three groundwater samples (plus the blind duplicate) at concentrations above the NYSDEC Ambient Water Quality Guidance Values for Human Health. PFOA and PFOS were detected in the three groundwater samples analyzed for PFAS (RI-MW-01-20240821, RI-MW-03, and RI-GW-01) and the blind duplicate (RI-X-01\_20240821, parent sample: RI-MW-01\_20240821) at concentrations above the PFAS guidance value. Groundwater analytical results for PFAS are summarized in Attached Table 13. In-Text Table 16 summarizes PFAS exceedances above the AWQSGVs.

**In-Text Table 16**  
**PFAS in Groundwater Samples Above Guidance Values**

Analyte	Sample Identification	AWQSGV (µg/L)	Concentration (µg/L)
Perfluorooctanesulfonic acid (PFOS)	RI-GW-01_20240821	2.7	11.6 J
	RI-MW-01_20240821		15.9
	RI-MW-03_20240822		24.4
	RI-X-01_20240821		16.6
Perfluorooctanoic acid (PFOA)	RI-GW-01_20240821	6.7	16 JD
	RI-MW-01_20240821		24.1 J
	RI-MW-03_20240822		13.2
	RI-X-01_20240821		28.4 J
Notes: D = Indicates an identified compound in an analysis that has been diluted. J = The concentration given is an estimated value. µg/L = micrograms per liter RI-X-01_20240821 is a blind duplicate of sample RI-MW-01_20240821			

Based on the historical Site uses and the PFAS results for the soil and groundwater samples collected during the RI, the PFOS and PFOA detections in groundwater might be attributable to sediment entrained in the sample or an on-site and/or off-site source, and not to a large on-site release or other on-site source area.

## 5.5 Soil Vapor Chemistry

### 5.5.1 Soil Vapor Analytical Results

During the RI, seven soil vapor samples were collected from temporary vapor points RI-SV-01 through RI-SV-07. Although there are currently no regulatory or published guidance values for VOCs in soil vapor, soil vapor data was used to assess the potential for exposure to receptors and to help define the nature and extent of contamination at the Site.

Several VOCs, including petroleum-related compounds (e.g., 2,2,4-Trimethylpentane, benzene, cyclohexane, ethylbenzene, butane, n-heptane, n-hexane, toluene, xylenes, etc.) and chlorinated solvent-related compounds (e.g., PCE TCE, carbon tetrachloride, methylene chloride, etc.). Of note, PCE was detected at a concentration of 840 µg/m<sup>3</sup> at soil vapor point RI-SV-03 (adjacent to the former auto repair operations in the northern portion of the Site), and elevated concentrations of petroleum-related VOCs were detected at soil vapor points RI-SV-02 (adjacent to the former UST field in the northeastern portion of the Site). The elevated concentrations of VOCs detected in soil vapor are attributed to the former operations at the gasoline station/auto repair shop, including the use/storage of petroleum products. The proposed redevelopment plan is still being developed; however, it will include demolition of the current on-site structure. Therefore, potential future vapor intrusion concerns will be further evaluated during development of RAWP for the Site. Soil vapor analytical results are presented in Attached Table 14 and shown on Figure 7.

## 6.0 QUALITATIVE HUMAN HEALTH EXPOSURE ASSESSMENT (QHHEA)

The objective of the Qualitative Human Health Exposure Assessment (QHHEA) is to identify potential receptors and pathways for human exposure to the COCs that are present at, and potentially migrating from, the Site. The identification of exposure pathways describes the route that the COCs takes to travel from the source to the receptor. An identified pathway indicates that the potential for exposure exists; it does not imply that exposures actually occur.

The RI, as described in this RIR, is sufficient to complete a QHHEA. The QHHEA was performed to determine whether the Site poses an existing or future health hazard to the Site's exposed or potentially exposed population. The sampling data was evaluated to determine whether there is any health risk by characterizing the exposure setting, identifying exposure pathways, and evaluating contaminant fate and transport. This QHHEA was prepared in accordance with Appendix 3B and Section 3.3 (b) 8 of the NYSDEC Draft DER-10 Technical Guidance for Site Investigation and Remediation.

### 6.1 Contaminants of Concern in Respective Media

Based on the results of the data described in this RIR and the proposed future use of the Site, the COCs are:

#### Soil

- Seven SVOCs [benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, and indeno(1,2,3-c,d)pyrene] were detected at concentrations above their respective UUSCOs and RRSCOs in one soil sample (RI-SB-05\_3-5\_20240821) and one blind duplicate sample (RI-SB-X\_0-2\_20240821, parent sample: RI-SB-05\_0-2\_2240821); naphthalene was detected at a concentration above its UUSCO in one sample (RI-SB-05\_3-5\_20240821).
- Five metals (arsenic, barium, copper, lead, and mercury) were detected above their respective UUSCOs and RRSCOs in three soil samples (RI-SB-01\_0-2\_20240821, RI-SB-05\_0-2\_20240821, and RI-SB-05\_3-5\_20240821) and one blind duplicate sample (RI-SB-X\_0-2\_20240821, parent sample: RI-SB-05\_0-2\_20240821); copper, lead, mercury, nickel, and/or zinc were detected above their respective UUSCOs in seven soil samples (RI-SB-01\_0-2\_20240821, RI-SB-02\_0-1\_20240821, RI-SB-05\_0-2\_20240821, RI-SB-05\_3-5\_20240821, RI-SB-07\_0-2\_20240821, RI-SB-08\_2-4\_20240821, and RI-SB-09\_7-9\_20240821) and one blind duplicate sample (RI-SB-X\_0-2\_20240821, parent sample: RI-SB-05\_0-2\_20240821).
- PFOS was detected above its UUGV of 0.88 ppb in soil sample RI-SB-09\_7-9\_20240821 at a concentration of 1.01 ppb. PFOA was not detected above its UUGV in the soil samples.

Th results from the RIR, including field evidence of suspected petroleum contamination that were historically detected in soil borings advanced during previous environmental investigations at the Site, were detected in generally similar locations and at similar concentrations during the RI. As such, petroleum-related VOCs and SVOCs in soil in the northern portions of the Site are also considered COCs.

#### Groundwater

- Seven VOCs (1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, benzene, ethylbenzene, o-xylene, m/p-xylenes, and toluene) were detected above their respective AWQSGVs in two groundwater samples (RI-MW-01\_20240821 and RI-GW-01\_20240821).

- The SVOC phenol was detected above its AWQSGV in two groundwater samples (RI-MW-01\_20240821 and RI-GW-01\_20240821) and one blind duplicate sample (RI-X-01\_20240821, parent sample: RI-MW-01\_20240821).
- Iron was detected at concentrations exceeding its AWQSGV in two unfiltered samples (RI-MW-03\_20240822 and RI-GW-01\_20242821). Sodium was detected above its AWQSGV in three filtered and unfiltered groundwater samples (RI-MW-01, RI-GW-01, and RI-MW-03) and one blind duplicate sample (RI-X-01\_20240821, parent sample: RI-MW-01\_20240821).
- PFOA and PFOS were detected in the three groundwater samples analyzed for PFAS (RI-MW-01-20240821, RI-MW-03, and RI-GW-01) and the blind duplicate (RI-X-01\_20240821, parent sample: RI-MW-01\_20240821) at concentrations above the NYSDEC AWQSGVs for Human Health.

The areas where petroleum-like contamination was detected correlate with the former on-site use and storage of petroleum associated with the former gasoline service station and auto repair operations in the northern portion of the Site. No evidence of NAPL was encountered during the RI; however, a faint petroleum odor was observed on purge water at RI-MW-01. No evidence of historical on-site use and/or storage of large quantities of chlorinated solvents or PFAS was identified through the review of available records or the evaluation of sampling results described herein. While iron and sodium were detected in groundwater at concentrations exceeding AWQSGVs in the groundwater samples collected during the RI, they are both secondary metals without health-based standards. The detected metals in groundwater are attributable to naturally occurring background conditions typical of the area surrounding the Site, and to a lesser extent, sediment entrained in the samples.

#### Soil Vapor

Several VOCs, including petroleum-related compounds (e.g., 2,2,4-Trimethylpentane, benzene, cyclohexane, ethylbenzene, butane, n-heptane, n-hexane, toluene, xylenes, etc.) and chlorinated solvent-related compounds [e.g., PCE, TCE, carbon tetrachloride, methylene chloride, etc.]. Of note, PCE was detected at a concentration of 840  $\mu\text{g}/\text{m}^3$  at soil vapor point RI-SV-03 (adjacent to the former auto repair operations in the northern portion of the Site), and elevated concentrations of petroleum-related VOCs were detected at soil vapor points RI-SV-02 (adjacent to the former UST field in the northeastern portion of the Site). The elevated concentrations of VOCs detected in soil vapor are attributed to the former operations at the gasoline station/auto repair shop, including the use/storage of petroleum products. The proposed redevelopment plan is still being developed; however, it will include demolition of the current on-site structure. Therefore, potential future vapor intrusion concerns will be further evaluated during development of a RAWP for the Site.

## 6.2 Exposure Pathway Elements

The five elements of an exposure pathway are:

1. The source of contamination;
2. The environmental media and transport mechanisms;
3. The point of exposure;
4. The route of exposure; and
5. The receptor population.

These elements of an exposure pathway may be based on past, present, or future events. An exposure pathway is considered complete when all five elements of an exposure pathway are documented. A potential exposure pathway exists when any one or more of the five elements comprising an exposure pathway cannot be documented. An exposure pathway may be eliminated from further evaluation when any one of the five elements comprising an exposure pathway has not existed in the past, does not exist in the present, and will never exist in the future.

### 6.3 Exposure Route

An exposure route is the mechanism by which a receptor comes into contact with a chemical. Three potential primary routes exist by which chemicals can enter the body:

- Ingestion of water, fill, and/or soil;
- Inhalation of vapors and/or particulates; and
- Dermal contact with water, fill, and/or soil.

### 6.4 Potential Receptors

The Site buildings are unoccupied, and the Site is secured by a chain link fence. The Site is developed with a pump island from the former gasoline station, a one-story slab-on-grade building formerly used as an auto repair shop and a convenience store, and a one-story slab-on-grade former warehouse/garage with a loft. The remainder of the Site is concrete- and asphalt-paved with some sparse vegetation.

The area surrounding the Site is primarily commercial, with some residential, parkland, and vacant land. The nearest sensitive receptors (i.e., schools, daycares, or hospitals) include P.S. 43 / Inwood House (approximately 600 feet northeast of the Site at 165 Brown Street), Learning Through Play Pre-K Center / private day care facility (approximately 700 feet west-northwest of the Site at 105 Willis Avenue), Mott Haven Academy Charter School / BronxWorks Inc. / YMCA (approximately 750 feet northeast of the Site at 170 Brown Street), and two private day care facilities (approximately 750 feet west-northwest of the Site at 331 East 132<sup>nd</sup> Street and 800 feet northeast of the Site at 177 Brook Avenue).

*On-Site Receptors:* As the Site is currently vacant and is secured by a fence with locked gates, on-site potential receptors include construction workers, inspectors, and other visitors granted access to the Site or potential trespassers.

During redevelopment of the Site, the on-site potential receptors will include construction workers, inspectors, and other visitors granted access to the Site or potential trespassers. Once the Site is redeveloped, the on-site potential receptors will include adult and child residents, commercial and construction workers, vendors, guests, pedestrians/cyclists, and other community members.

*Off-Site Receptors:* Potential off-site receptors within a 0.25-mile radius of the Site include adult and child residents, commercial and construction workers, students, and pedestrians/cyclists, based on the following:

1. Commercial/Manufacturing Businesses – existing and future;
2. Residential Buildings – existing and future;
3. Building Construction/Renovation – existing and future;
4. Pedestrians, Cyclists – existing and future;
5. Schools – existing and future; and

6. Day Care Facility(ies) – existing and future.

### 6.5 Existence of Human Health Exposure Pathways

This section presents an evaluation of whether there are existing exposure pathways at the Site as defined in Section 6.2.

*On-Site Existing Conditions:* The Site is vacant and secured by a fence with locked gates that is maintained by representatives of the Volunteers, and the majority of the Site is covered with the concrete building slabs and other asphalt/concrete pavement, and sparse vegetated/landscaped areas; however, there are some limited areas where shallow fill material is exposed. As the Site is vacant and secured with a fence, the only existing potential exposure pathway would be from any contaminants in exposed on-site shallow fill to construction workers, inspectors, visitors granted access to the Site or trespassers. The primary route of exposure would be dermal contact or ingestion. The majority of the Site is covered with hardscaped/landscape features, the Site is secured by a fence with locked gates, and no ground intrusive work (or other activities that could potentially result in the generation of dust) has or will be conducted without implementation of a NYSDEC-approved CAMP and HASP; therefore, completion of this potential exposure pathway is unlikely.

*Off-Site Existing Conditions:* There is a potential off-site exposure pathway from dust emanating from exposed on-site shallow fill to off-site adult and child residents, commercial and construction workers, students, and pedestrians/cyclists. The primary route of exposure would be dermal contact or ingestion. The majority of the Site is covered hardscaped features, the Site is secured by a fence with locked gates, and no ground intrusive work (or other activities that could potentially result in the generation of dust) has or will be conducted without implementation of a NYSDEC-approved CAMP and HASP; therefore, completion of this potential exposure pathway is unlikely.

*On-site Future Conditions:* Once redevelopment activities begin, there will be a potential ingestion and/or inhalation exposure pathway to construction workers and inspectors coming into direct contact with contaminated soil/fill and/or from exposure to airborne particulates during demolition, excavation, and/or construction activities. Similarly, off-site receptors could be exposed to particulates and vapors from on-site activities, unless controls to prevent off-site particulate/vapor migration are put in place. However, these potential exposures would be prevented through implementation of a NYSDEC-approved CAMP and site-specific HASP during demolition, remediation, and redevelopment of the Site. After Site redevelopment, there will be no potential exposure pathways as the remediation activities will be designed to address all known contamination at Site. Any residual contamination that may remain would be addressed with engineering controls [e.g., site cap, sub-slab depressurization system (SSDS), vapor barrier, etc.] and/or institutional controls (e.g., environmental easement, deed restrictions, groundwater use restrictions, etc.) to prevent potential exposure to contaminated media.

### 6.6 Overall Human Health Exposure Assessment

The Site is developed with a pump island from the former gasoline station, a one-story slab-on-grade former automotive repair shop and convenience store, and a one-story slab-on-grade former warehouse/garage with a loft, the remainder of the Site is concrete- and asphalt-paved with some sparse vegetation where shallow fill material is exposed. A summary of the human health exposure assessment, including the affected media and associated exposure routes, to the COCs that are present at, and potentially migrating from, the Site, are summarized in In-Text Table 17.

**In-Text Table 17**  
**Overall Human Health Exposure Assessment**

Environmental Media	Exposure Route	Exposure Assessment
Direct contact with surface soil/fill material (or incidental ingestion)	Direct Contact or Ingestion	<ul style="list-style-type: none"> <li>- A majority of the Site is covered with concrete building slabs and other asphalt/concrete pavement, with sparse vegetation; however, there are some limited areas where shallow fill material is exposed.</li> <li>- The Site is secured by a fence with locked gates; however, trespassers could come into contact with exposed soil/fill material.</li> <li>- No ground-intrusive work or other activities that could potentially result in the generation of dust have been (since execution of the BCA) or will be conducted without implementation of a NYSDEC-approved CAMP and HASP.</li> <li>- A composite cover system and appropriate engineering and institutional controls should be specified in a RAWP for areas where contaminants of concern remain in soil in exceedance of applicable use-based SCOs.</li> </ul>
Direct contact with subsurface soil/fill material (or incidental ingestion)		
Direct contact with groundwater (or incidental ingestion)	Direct Contact or Ingestion	<ul style="list-style-type: none"> <li>- Groundwater at the Site is not used as a source of potable water or for production purposes. The Site and surrounding area are serviced by municipal drinking water service. There are no surface water bodies or otherwise for potential direct contact or ingestion of groundwater/surface water.</li> <li>- The RAWP should include appropriate treatment and/or monitoring of any on-site sources of groundwater contamination.</li> </ul>
Inhalation of Soil Vapor (related to soil vapor intrusion)	Ingestion	<ul style="list-style-type: none"> <li>- The Site buildings have been unoccupied since decommissioning of the gasoline station circa 2022, and all buildings to be demolished prior to redevelopment of the Site.</li> <li>- Potential future vapor intrusion concerns will be further evaluated as part of the RAWP.</li> </ul>
<p><b>Notes:</b> BCA – brownfield cleanup agreement; RAWP – Remedial Action Work Plan; SCOs – Soil Cleanup Objectives; CAMP – community air monitoring plan; HASP – health and safety plan; HVAC – heating, ventilation, and air conditioning.</p>		

Based on the results of the QHHEA, a NYSDEC-approved Remedial Action Work Plan (RAWP), which includes a CAMP and HASP to protect on-site workers and the neighboring community, should be implemented during future redevelopment work to ensure that the potential exposure pathways identified do not become complete. The RAWP should address all contaminated media (soil/fill, groundwater, and/or soil vapor) identified at the Site and include provisions for the installation/implementation of certain engineering and/or institutional controls to address residual contamination that may remain following remediation.

## 6.7 Conceptual Site Model

Concentrations of COCs and potential COCs in soil/fill, groundwater, and soil vapor have been characterized across the Site to the extent practical. This RI, along with the findings from previous environmental investigations of the Site, concluded that contaminated soil/fill, groundwater, and soil vapor are present at the Site. The primary COCs at the Site include: SVOCs and metals in soil/fill material across the Site; petroleum-related VOCs in soil in the northern portion of the Site;

petroleum-related VOCs (plus phenol) and potential separate phase petroleum in groundwater in the northern portion; and petroleum- and chlorinated solvent-related compounds in soil vapor in the northern portion of the Site. The areas where petroleum-like contamination was detected correlate with the former on-site use and storage of petroleum associated with the former gasoline service station and auto repair operations in the northern portion of the Site. No evidence of NAPL was encountered during the RI; however, a faint petroleum odor was observed on groundwater at RI-MW-01 (and in/adjacent to the former UST field during previous investigations). The primary COCs are related to:

1. Historical uses of former buildings/structures at the Site for automotive, commercial, industrial, and manufacturing operations, including a gasoline station (petroleum) and auto repair shop (petroleum, chemicals, solvents, etc.);
2. Historical petroleum bulk storage in the northern portion of the Site; and
3. Potential petroleum impacts in soil associated with known and suspected petroleum storage at the Site.

Based on the results of the RI and the findings from previous environmental investigations of the Site, ARKF has identified areas of concern (AOCs) to be addressed concurrently with future redevelopment activities at the site. In-Text Table 18 summarizes the AOCs identified, which are shown on Figure 8.

**In-Text Table 18**  
**Areas of Concern**

AOC	Description	Data to Support Determination	Notes
1	Site-Wide Shallow Historic Fill Material (0-5 feet bgs)	Identification of historic fill material extending to bedrock across much of the Site at depths of 5 feet bgs or less.	Shallow historic fill material (0-5 feet bgs) exists across the entire Site (from boundary to boundary)
2A	Petroleum source area at former UST field	Petroleum-like contamination documented in soil/fill material above bedrock in the vicinity of the former UST field. Shallow bedrock was reportedly removed to facilitate installation of the former USTs, with bedrock encountered at approximately 10 feet bgs.	Field evidence of petroleum-like contamination limited to borings and wells in and immediately adjacent to the pump island and former pump island in the northern portion of the Site.
2B	Petroleum source area at former pump island	Petroleum-like contamination documented in shallow soil/fill material above bedrock in the vicinity of the former pump islands.	
2C	Residual petroleum product and oily water	Petroleum-related VOCs (plus phenol) and potential separate phase petroleum in groundwater in the northern portion of the Site.	
3	Elevated VOCs in soil vapor	Petroleum- and chlorinated solvent-related compounds detected in soil vapor adjacent to the former auto repair operations in the northern portion of the Site), and elevated concentrations of petroleum-related VOCs detected at soil in the northeastern portion of the Site (adjacent to the former UST field).	The elevated concentrations of VOCs detected in soil vapor are attributed to the former operations at the gasoline station/auto repair shop.
<b>Notes:</b> AOC = area of concern; UST = underground storage tank; bgs = below ground surface; bgs = below ground surface			

## 7.0 CONCLUSIONS

This RIR summarizes the RI work performed at the Site. The goal of the RI was to determine the horizontal and vertical extent of contamination at the Site. The RI activities were completed in accordance with the NYSDEC-approved May 2024 RIWP prepared by AKRF on behalf of the Volunteers, including the deviations discussed in Section 4.1.

Based on the results from the RI, along with the findings from previous environmental investigation of the Site, the nature and extent of contaminated soil/fill, groundwater, and soil vapor at the Site has been determined. The primary COCs at the Site include: SVOCs and metals in soil/fill material across the Site; petroleum-related VOCs in soil in the northern portion of the Site; petroleum-related VOCs (plus phenol) and potential separate phase petroleum in groundwater in the northern portion; and petroleum- and chlorinated solvent-related compounds in soil vapor in the northern portion of the Site. The areas where petroleum-like contamination was detected correlate with the former on-site use and storage of petroleum associated with the former gasoline service station and auto repair operations in the northern portion of the Site. No evidence of NAPL was encountered during the RI; however, a faint petroleum odor was observed on groundwater at RI-MW-01 (and in/adjacent to the former UST field during previous investigations).

The detections of SVOCs and metals in soil/fill are primarily attributable to historic fill material, which was encountered across the Site from ground surface to an average depth of approximately 5 feet bgs; bedrock was encountered at approximately 10 feet bgs (in the former UST field). In general bedrock was encountered at approximately 1 to 5 feet bgs in the northern and central portions of the Site, at approximately 8.5 feet bgs in the southeastern portion of the Site, and at approximately 14 feet bgs in the southwestern portion of the Site. The fill was historically placed Site-wide and across the general surrounding area to fill in former low-lying areas in support of original development of the area, as was a common practice in the late 1800s and early 1900s. The concentrations of SVOCs and metals in soil/fill across the Site are variable, which is expected based on the heterogeneity of the fill.

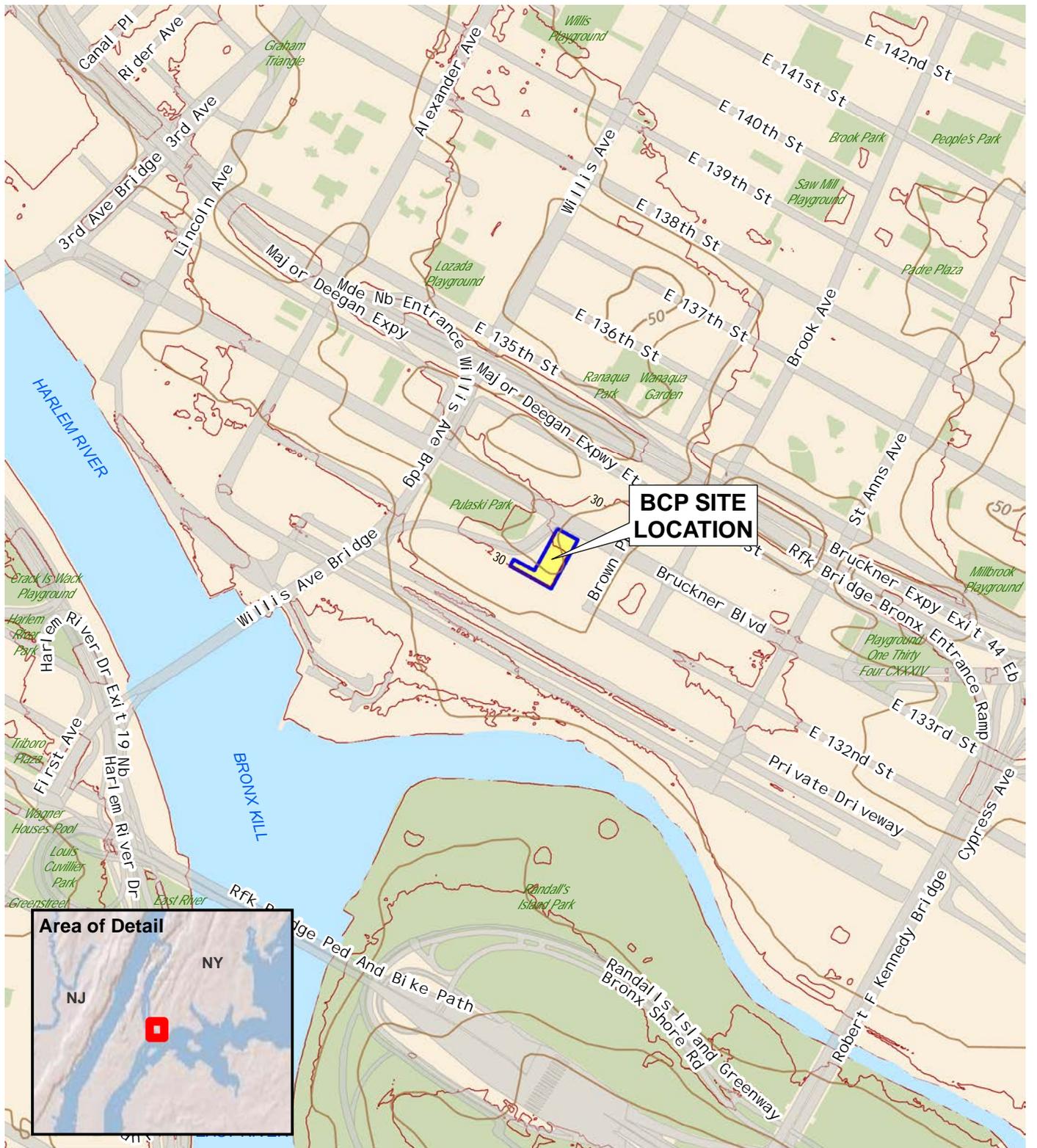
Faint petroleum-like odors and moderate PID readings (max of 64.4 ppm) were detected from approximately 2 to 4 feet bgs at soil boring RI-SB-01 in the northern portion of the Site (in the area of the former gasoline station pump islands). The field evidence of contamination extended to bedrock, which was encountered at 4 feet bgs.

Faint petroleum-like odors were detected in purge water during the groundwater sampling at RI-MW-01, in the northeastern portion of the Site (in the area of the gasoline station's former UST field). Petroleum-related VOCs (and phenol) were detected in groundwater at concentrations exceeding the AWQSGVs in two groundwater samples collected in the vicinity of the former UST field and pump island (RI-GW-01 and RI-MW-01). As previously noted, the petroleum contamination is attributed to the former gasoline service station and auto repair operations in the northern portion of the Site. While iron and sodium were detected at concentrations exceeding AWQSGVs in the groundwater samples collected during the RI, these are secondary metals without health-based standards. The detected metals in groundwater are attributable to naturally occurring background conditions typical of the area surrounding the Site, and to a lesser extent, sediment entrained in the samples.

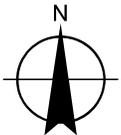
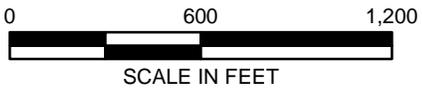
The PFAS compounds (PFOS and PFOA) were detected above their respective guidance values in the three groundwater samples analyzed for PFAS. However, based on historical Site uses (no known uses or releases of PFAS) and a lack of elevated PFAS concentrations in the soil samples, the PFOS and PFOA detections in groundwater are not indicative of a large on-site release or other on-site source area, but rather may be attributable to sediment entrained in the samples or an on-site and/or off-site source.

Potential future vapor intrusion concerns will be further evaluated during development of a RAWP for the Site.

## FIGURES



Service Layer Credits: USGS The National Map: 3d Elevation Program, Data Refreshed July, 2020



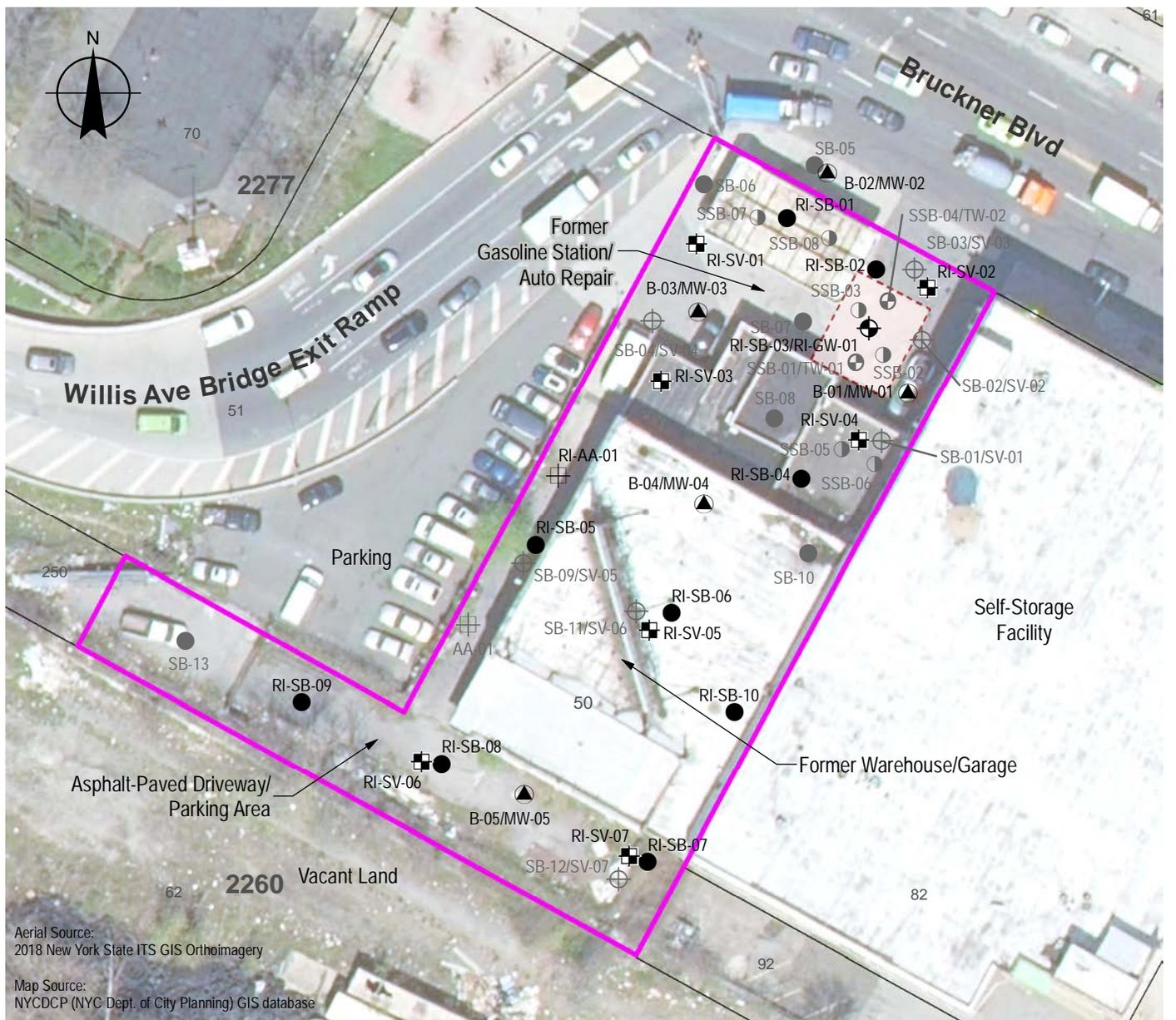
©2025 AKRF Q:\Projects\200328 - BETTINA - BRUCKNER PROPERTIES\Technical\GIS and Graphics\SARIR\200328 Fig. 1 Site location.mxd\17/2025 3:43:00 PM - mveilleux

**akrf**  
440 Park Avenue South, New York, NY 10016

**102 Bruckner Boulevard**  
Bronx, New York

**BCP SITE LOCATION MAP**

DATE	<b>4/17/2025</b>
PROJECT NO.	<b>200328</b>
FIGURE	<b>1</b>



Aerial Source:  
2018 New York State ITS GIS Orthoimagery

Map Source:  
NYCDP (NYC Dept. of City Planning) GIS database

**LEGEND**

- BCP SITE BOUNDARY
- 50 LOT BOUNDARY AND TAX LOT NUMBER
- 2277** BLOCK NUMBER
- APPROXIMATE LOCATION OF FORMER UST FIELD (ALL KNOWN TANKS REMOVED)
- SOIL BORING LOCATION (2021)
- REMEDIAL INVESTIGATION GROUNDWATER SAMPLE LOCATION (2024)
- SOIL BORING/SOIL VAPOR SAMPLE LOCATION (2021)
- AMBIENT AIR SAMPLE LOCATION (2021)
- SOIL BORING LOCATION (2022)
- SOIL BORING/TEMPORARY MONITORING WELL LOCATION (2022)
- REMEDIAL INVESTIGATION AMBIENT AIR SAMPLE LOCATION (2024)
- REMEDIAL INVESTIGATION SOIL BORING LOCATION (2024)
- REMEDIAL INVESTIGATION SOIL BORING / TEMPORARY MONITORING WELL LOCATION (2024)
- REMEDIAL INVESTIGATION SOIL VAPOR SAMPLE LOCATION (2024)



© 2025 AKRF Q:\Projects\200328 - BETTINA - BRUCKNER PROPERTIES\Technical\GIS and Graphics\SAR\IR\200328 Fig 2 Site and Sample Location Plan.mxd 4/24/2025 8:44:34 AM mvelleux



440 Park Avenue South, New York, NY 10016

**102 Bruckner Boulevard**  
Bronx, New York

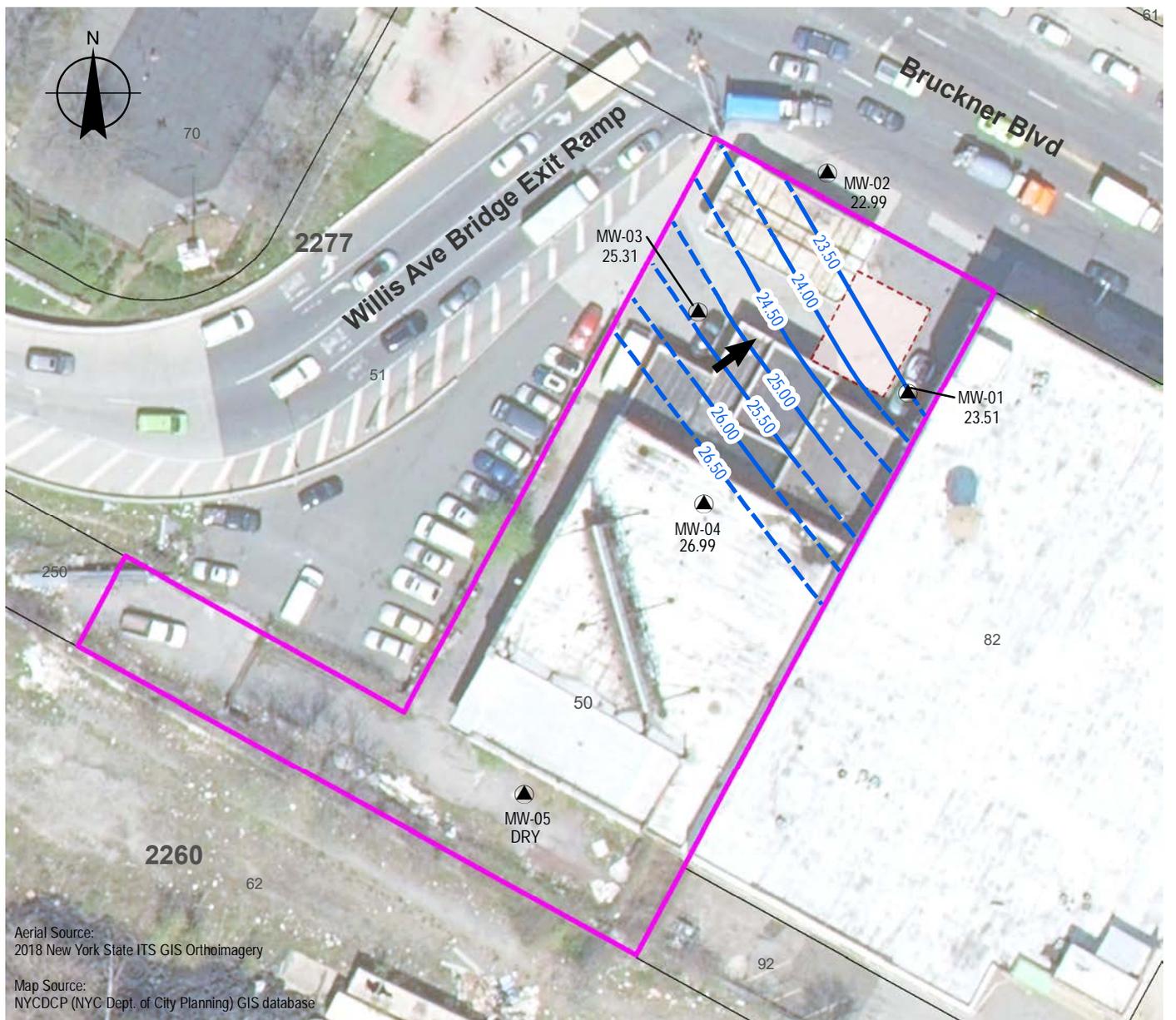
**SITE AND SAMPLE LOCATION PLAN**

DATE  
**4/24/2025**

PROJECT NO.  
**200328**

FIGURE  
**2**

© 2025 AKRF Q:\Projects\200328 - BETTINA - BRUCKNER PROPERTIES\Technical\GIS and Graphics\SARIR\200328 Fig 3 Groundwater Elevation Contour Map - August 21, 2024.mxd/24/2025 8:47:58 AM mveilleux



Aerial Source:  
2018 New York State ITS GIS Orthoimagery

Map Source:  
NYC DCP (NYC Dept. of City Planning) GIS database

**LEGEND**

-  BCP SITE BOUNDARY
-  LOT BOUNDARY AND TAX LOT NUMBER
- 2277** BLOCK NUMBER
-  APPROXIMATE LOCATION OF FORMER UST FIELD (ALL KNOWN TANKS REMOVED)
-  REMEDIAL INVESTIGATION GROUNDWATER SAMPLE LOCATION (2024)
-  GROUNDWATER ELEVATION CONTOUR LINE (DASHED WHERE INFERRED)
-  ANTICIPATED GROUNDWATER FLOW DIRECTION



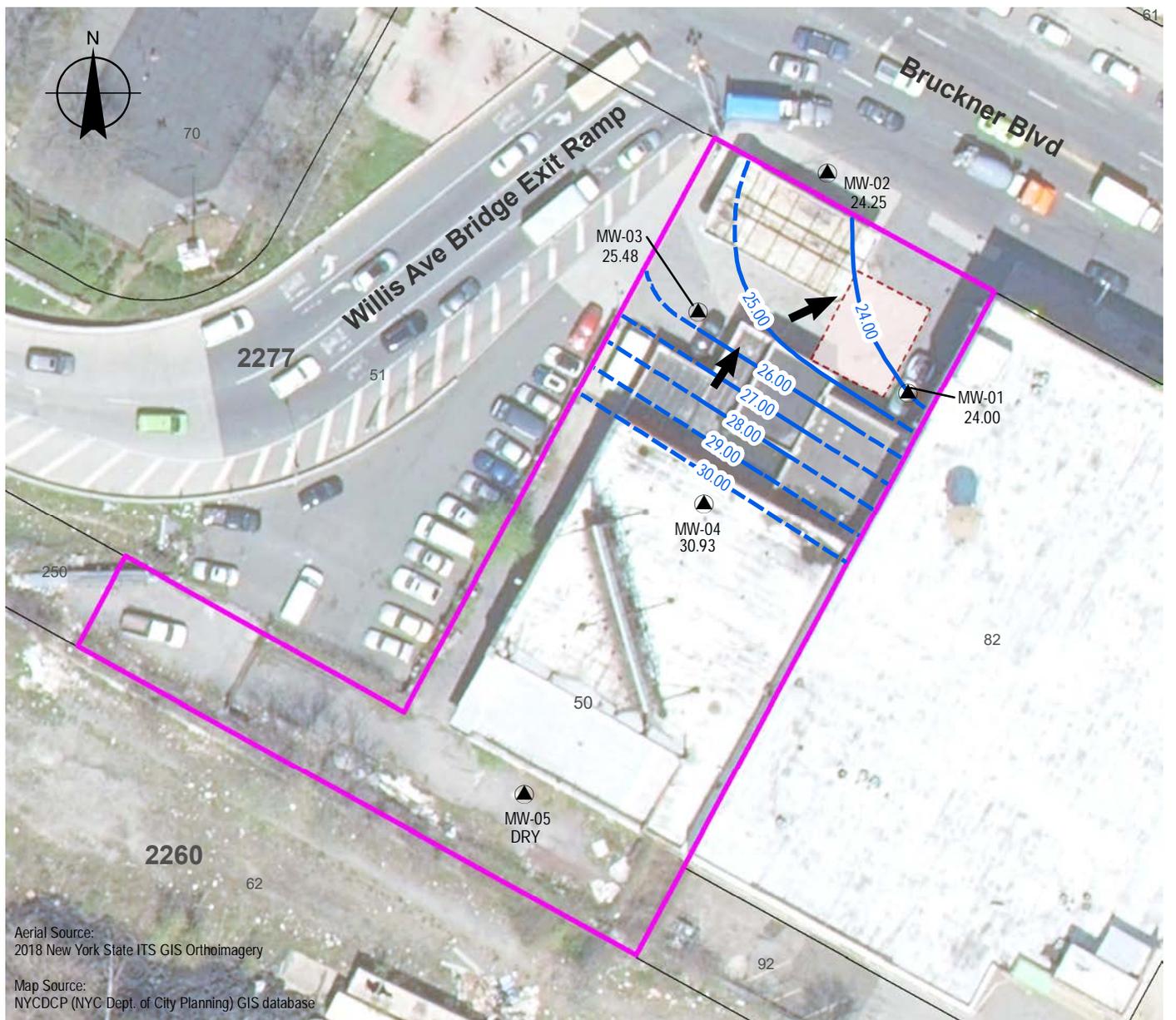
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**102 Bruckner Boulevard**  
Bronx, New York

**GROUNDWATER ELEVATION CONTOUR MAP**  
- AUGUST 21, 2024

DATE	<b>4/24/2025</b>
PROJECT NO.	<b>200328</b>
FIGURE	<b>3</b>

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Aerial Source:  
2018 New York State ITS GIS Orthoimagery

Map Source:  
NYC DCP (NYC Dept. of City Planning) GIS database

**LEGEND**

-  BCP SITE BOUNDARY
-  LOT BOUNDARY AND TAX LOT NUMBER
- 2277** BLOCK NUMBER
-  APPROXIMATE LOCATION OF FORMER UST FIELD (ALL KNOWN TANKS REMOVED)
-  REMEDIAL INVESTIGATION GROUNDWATER SAMPLE LOCATION (2024)
-  GROUNDWATER ELEVATION CONTOUR LINE (DASHED WHERE INFERRED)
-  ANTICIPATED GROUNDWATER FLOW DIRECTION



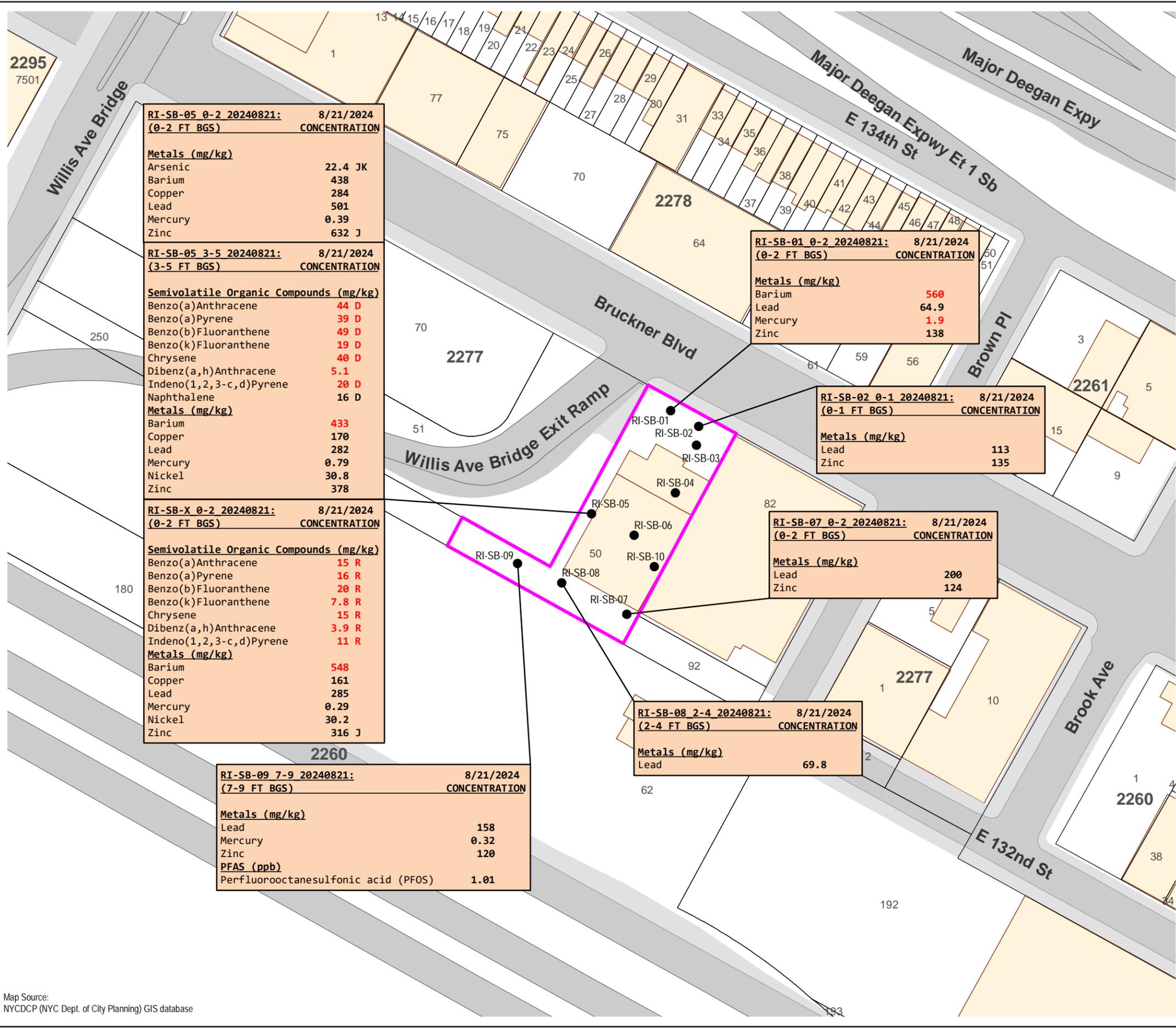
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**102 Bruckner Boulevard**  
Bronx, New York

**GROUNDWATER ELEVATION CONTOUR MAP**  
- OCTOBER 30, 2024

DATE	<b>4/24/2025</b>
PROJECT NO.	<b>200328</b>
FIGURE	<b>4</b>

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**RI-SB-05 0-2 20240821: 8/21/2024**  
**(0-2 FT BGS) CONCENTRATION**

**Metals (mg/kg)**

Arsenic	22.4 JK
Barium	438
Copper	284
Lead	501
Mercury	0.39
Zinc	632 J

**RI-SB-05 3-5 20240821: 8/21/2024**  
**(3-5 FT BGS) CONCENTRATION**

**Semivolatile Organic Compounds (mg/kg)**

Benzo(a)Anthracene	44 D
Benzo(a)Pyrene	39 D
Benzo(b)Fluoranthene	49 D
Benzo(k)Fluoranthene	19 D
Chrysene	40 D
Dibenz(a,h)Anthracene	5.1
Indeno(1,2,3-c,d)Pyrene	20 D
Naphthalene	16 D

**RI-SB-X 0-2 20240821: 8/21/2024**  
**(0-2 FT BGS) CONCENTRATION**

**Metals (mg/kg)**

Barium	433
Copper	170
Lead	282
Mercury	0.79
Nickel	30.8
Zinc	378

**RI-SB-09 7-9 20240821: 8/21/2024**  
**(7-9 FT BGS) CONCENTRATION**

**Semivolatile Organic Compounds (mg/kg)**

Benzo(a)Anthracene	15 R
Benzo(a)Pyrene	16 R
Benzo(b)Fluoranthene	20 R
Benzo(k)Fluoranthene	7.8 R
Chrysene	15 R
Dibenz(a,h)Anthracene	3.9 R
Indeno(1,2,3-c,d)Pyrene	11 R

**Metals (mg/kg)**

Barium	548
Copper	161
Lead	285
Mercury	0.29
Nickel	30.2
Zinc	316 J

**RI-SB-09 7-9 20240821: 8/21/2024**  
**(7-9 FT BGS) CONCENTRATION**

**Metals (mg/kg)**

Lead	158
Mercury	0.32
Zinc	120

**PFAS (ppb)**

Perfluorooctanesulfonic acid (PFOS)	1.01
-------------------------------------	------

**RI-SB-01 0-2 20240821: 8/21/2024**  
**(0-2 FT BGS) CONCENTRATION**

**Metals (mg/kg)**

Barium	560
Lead	64.9
Mercury	1.9
Zinc	138

**RI-SB-02 0-1 20240821: 8/21/2024**  
**(0-1 FT BGS) CONCENTRATION**

**Metals (mg/kg)**

Lead	113
Zinc	135

**RI-SB-07 0-2 20240821: 8/21/2024**  
**(0-2 FT BGS) CONCENTRATION**

**Metals (mg/kg)**

Lead	200
Zinc	124

**RI-SB-08 2-4 20240821: 8/21/2024**  
**(2-4 FT BGS) CONCENTRATION**

**Metals (mg/kg)**

Lead	69.8
------	------

**LEGEND**

- BCP SITE BOUNDARY
- 50 LOT BOUNDARY AND TAX LOT NUMBER
- 2277** BLOCK NUMBER
- BUILDING
- REMEDIAL INVESTIGATION SOIL BORING LOCATION (2024)

Part 375 Soil Cleanup Objectives (SCOs): SCOs listed in the New York State Department of Environmental Conservation (NYSDEC) "Part 375" Regulations (6 NYCRR Part 375).

UUGV/RRGV - Guidance Value for Unrestricted and Restricted Residential Use listed in New York State Department of Environmental Conservation (NYSDEC) "Sampling, Analysis, and Assessment of PFAS", April 2023.

Exceedances of the UUGVs are shown in bold font.

Exceedances of NYSDEC Unrestricted Use Soil Cleanup Objectives (UUSCOs) and/or PFAS Guidance Values are presented in bold font.

Exceedances of NYSDEC Restricted Residential Soil Cleanup Objectives (RRSCOs) are presented in red.

Exceedances of NYSDEC Protected Groundwater Soil Cleanup Objectives (PGWSCOs) are presented in underline.

mg/kg: milligrams per kilogram = parts per million (ppm)  
(ppb) = parts per billion.

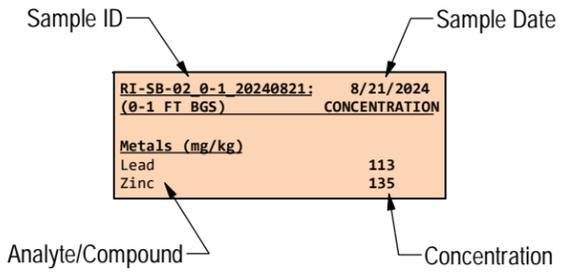
PFAS: Polyfluoroalkyl Substances

D: Analyte concentration obtained from dilution.

K: Reported concentration value is proportional to dilution factor and may be exaggerated.

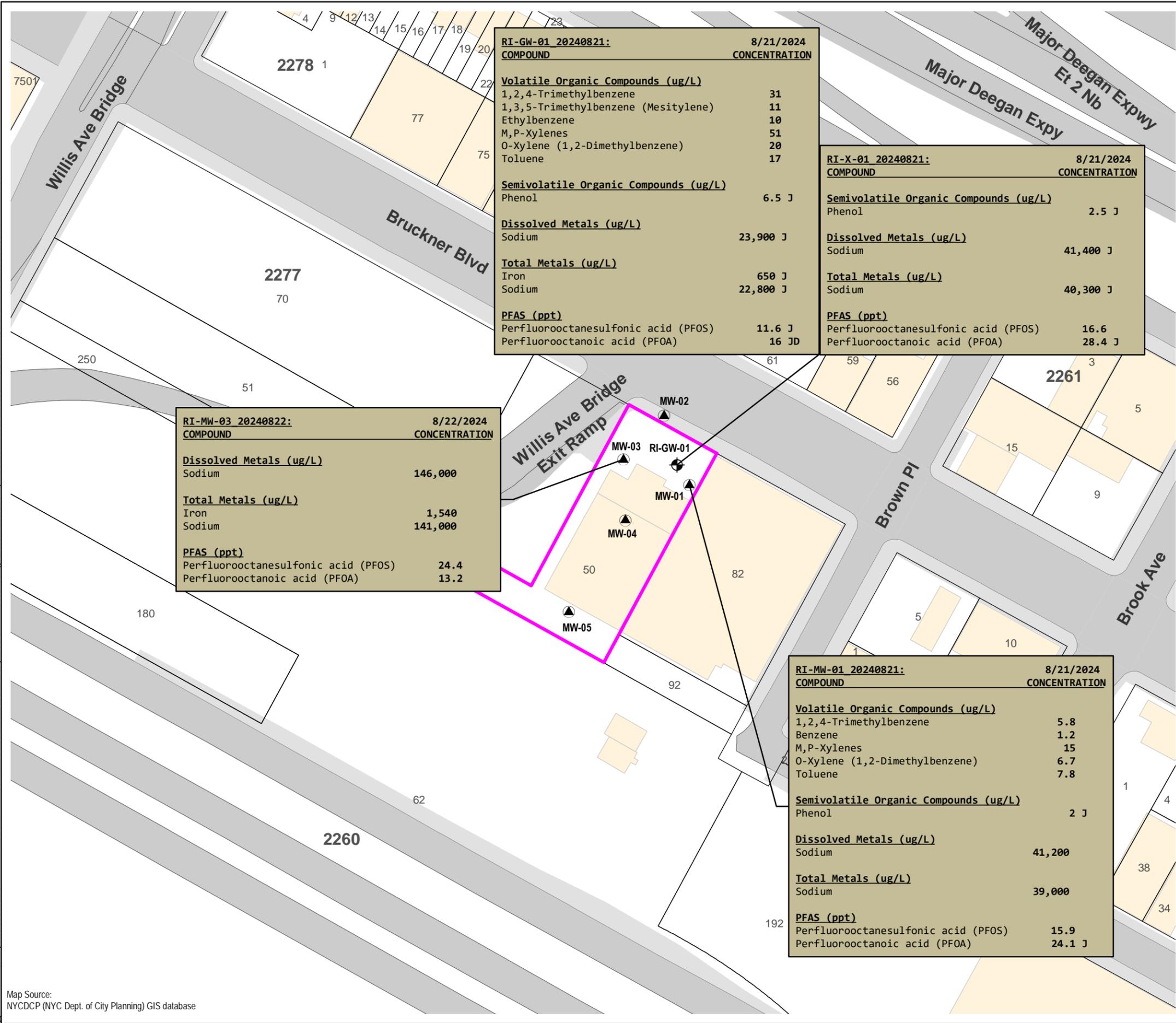
J: The concentration given is an estimated value.

	UUGV	RRGV	RRSCO	UUSCO
<b>Semivolatile Organic Compounds</b>				
Benzo(a)Anthracene			1	1
Benzo(a)Pyrene			1	1
Benzo(b)Fluoranthene			1	1
Benzo(k)Fluoranthene			3.9	0.8
Chrysene			3.9	1
Dibenz(a,h)Anthracene			0.33	0.33
Indeno(1,2,3-c,d)Pyrene			0.5	0.5
Naphthalene			100	12
<b>Metals</b>				
Arsenic			16	13
Barium			400	350
Copper			270	50
Lead			400	63
Mercury			0.81	0.18
Nickel			310	30
Zinc			10000	109
<b>PFAS</b>				
Perfluorooctanesulfonic acid (PFOS)	0.88	44		



Map Source:  
NYC DCP (NYC Dept. of City Planning) GIS database

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RI-GW-01 20240821:		8/21/2024
COMPOUND	CONCENTRATION	
<b>Volatile Organic Compounds (ug/L)</b>		
1,2,4-Trimethylbenzene		31
1,3,5-Trimethylbenzene (Mesitylene)		11
Ethylbenzene		10
M,P-Xylenes		51
O-Xylene (1,2-Dimethylbenzene)		20
Toluene		17
<b>Semivolatile Organic Compounds (ug/L)</b>		
Phenol	6.5	J
<b>Dissolved Metals (ug/L)</b>		
Sodium	23,900	J
<b>Total Metals (ug/L)</b>		
Iron	650	J
Sodium	22,800	J
<b>PFAS (ppt)</b>		
Perfluorooctanesulfonic acid (PFOS)	11.6	J
Perfluorooctanoic acid (PFOA)	16	JD

RI-X-01 20240821:		8/21/2024
COMPOUND	CONCENTRATION	
<b>Semivolatile Organic Compounds (ug/L)</b>		
Phenol	2.5	J
<b>Dissolved Metals (ug/L)</b>		
Sodium	41,400	J
<b>Total Metals (ug/L)</b>		
Sodium	40,300	J
<b>PFAS (ppt)</b>		
Perfluorooctanesulfonic acid (PFOS)	16.6	
Perfluorooctanoic acid (PFOA)	28.4	J

RI-MW-03 20240822:		8/22/2024
COMPOUND	CONCENTRATION	
<b>Dissolved Metals (ug/L)</b>		
Sodium	146,000	
<b>Total Metals (ug/L)</b>		
Iron	1,540	
Sodium	141,000	
<b>PFAS (ppt)</b>		
Perfluorooctanesulfonic acid (PFOS)	24.4	
Perfluorooctanoic acid (PFOA)	13.2	

RI-MW-01 20240821:		8/21/2024
COMPOUND	CONCENTRATION	
<b>Volatile Organic Compounds (ug/L)</b>		
1,2,4-Trimethylbenzene	5.8	
Benzene	1.2	
M,P-Xylenes	15	
O-Xylene (1,2-Dimethylbenzene)	6.7	
Toluene	7.8	
<b>Semivolatile Organic Compounds (ug/L)</b>		
Phenol	2	J
<b>Dissolved Metals (ug/L)</b>		
Sodium	41,200	
<b>Total Metals (ug/L)</b>		
Sodium	39,000	
<b>PFAS (ppt)</b>		
Perfluorooctanesulfonic acid (PFOS)	15.9	
Perfluorooctanoic acid (PFOA)	24.1	J

**LEGEND**

- BCP SITE BOUNDARY
- 50 LOT BOUNDARY AND TAX LOT NUMBER
- 2277** BLOCK NUMBER
- BUILDING
- TEMPORARY MONITORING WELL LOCATION
- REMEDIAL INVESTIGATION GROUNDWATER SAMPLE LOCATION (2024)

**NYSDEC TOGS Class GA Ambient Water Quality Standard and Guidance Values (AWQSGVs):**  
 New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) (1.1.1):

Groundwater PFAS results are compared to guidance values listed in NYSDEC's 2021 *Draft Addendum to the Technical and Operational Guidance (TOGS) No. 1.1.1*.

PFAS: Polyfluoroalkyl Substances  
 D: Analyte concentration obtained from dilution.  
 J: The concentration given is an estimated value.  
 ug/L: micrograms per Liter = parts per billion (ppb)  
 (ppt) = parts per trillion

Only Exceedances of NYSDEC AWQSGVs are shown in

	NYSDEC AWQSGVs	
	ppt	ug/l
<b>Volatile Organic Compounds</b>		
1,2,4-Trimethylbenzene		5
1,3,5-Trimethylbenzene (Mesitylene)		5
Benzene		1
Ethylbenzene		5
O-Xylene (1,2-Dimethylbenzene)		5
Toluene		5
Xylenes, M,P		5
<b>Semivolatile Organic Compounds</b>		
Phenol		1
<b>Metals</b>		
Iron		300
Sodium		20000
<b>PFAS</b>		
Perfluorooctanesulfonic acid (PFOS)		2.7
Perfluorooctanoic acid (PFOA)		6.7

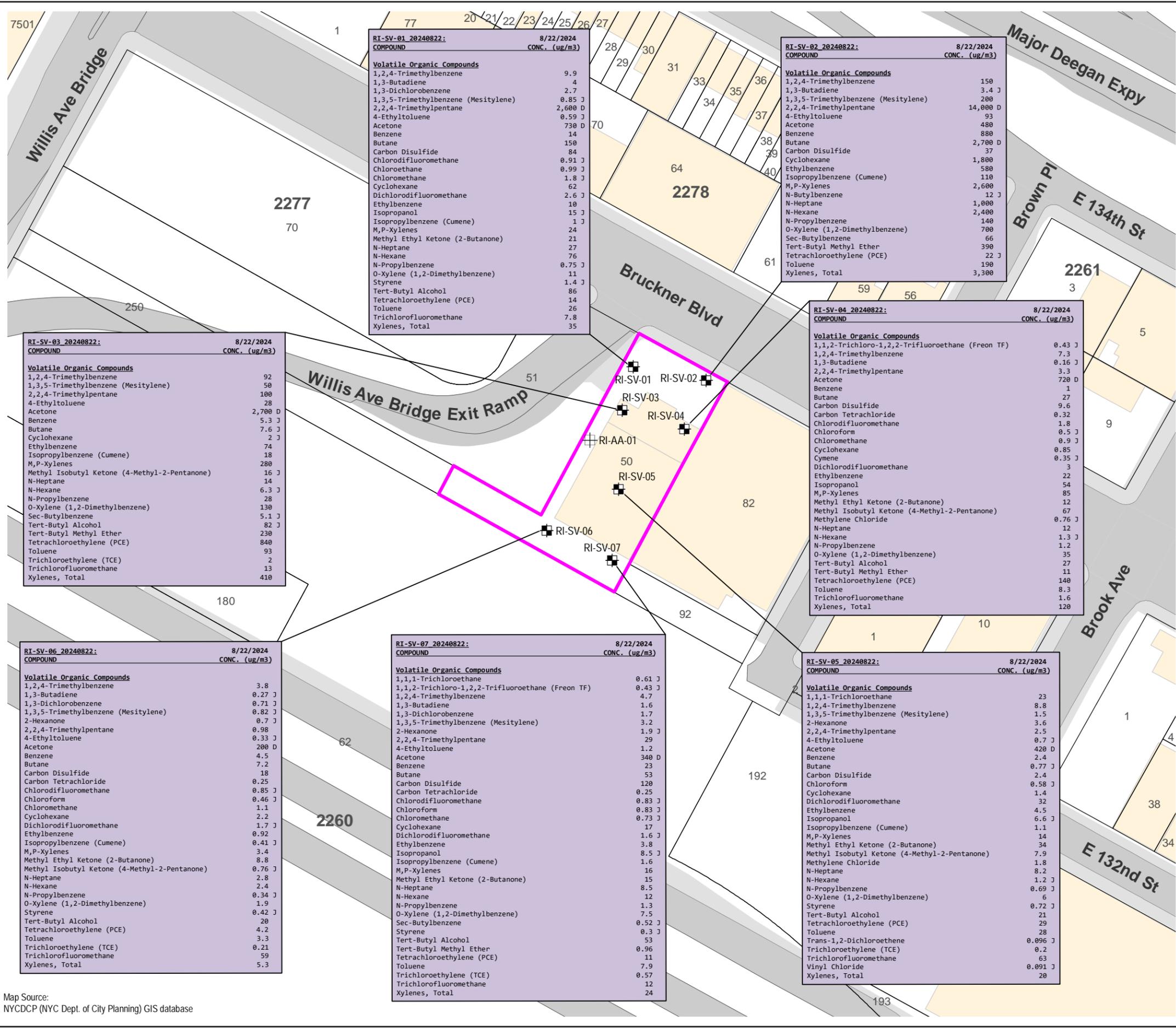
Sample ID → Sample Date

RI-MW-03 20240822:		8/22/2024
COMPOUND	CONCENTRATION	
<b>Dissolved Metals (ug/L)</b>		
Sodium	146,000	
<b>Total Metals (ug/L)</b>		
Iron	1,540	
Sodium	141,000	
<b>PFAS (ppt)</b>		
Perfluorooctanesulfonic acid (PFOS)	24.4	
Perfluorooctanoic acid (PFOA)	13.2	

Analyte/Compound → Concentration



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RI-SV-01 20240822:		8/22/2024
COMPOUND		CONC. (ug/m3)
<b>Volatile Organic Compounds</b>		
1,2,4-Trimethylbenzene		9.9
1,3-Butadiene		4
1,3-Dichlorobenzene		2.7
1,3,5-Trimethylbenzene (Mesitylene)		0.85 J
2,2,4-Trimethylpentane		2,600 D
4-Ethyltoluene		0.59 J
Acetone		730 D
Benzene		14
Butane		150
Carbon Disulfide		84
Chlorodifluoromethane		0.91 J
Chloroethane		0.99 J
Chloromethane		1.8 J
Cyclohexane		62
Dichlorodifluoromethane		2.6 J
Ethylbenzene		10
Isopropanol		15 J
Isopropylbenzene (Cumene)		1 J
M,P-Xylenes		24
Methyl Ethyl Ketone (2-Butanone)		21
N-Heptane		27
N-Hexane		76
N-Propylbenzene		0.75 J
O-Xylene (1,2-Dimethylbenzene)		11
Styrene		1.4 J
Tert-Butyl Alcohol		86
Tetrachloroethylene (PCE)		14
Toluene		26
Trichlorofluoromethane		7.8
Xylenes, Total		35

RI-SV-02 20240822:		8/22/2024
COMPOUND		CONC. (ug/m3)
<b>Volatile Organic Compounds</b>		
1,2,4-Trimethylbenzene		150
1,3-Butadiene		3.4 J
1,3,5-Trimethylbenzene (Mesitylene)		200
2,2,4-Trimethylpentane		14,000 D
4-Ethyltoluene		93
Acetone		480
Benzene		880
Butane		2,700 D
Carbon Disulfide		37
Cyclohexane		1,800
Ethylbenzene		580
Isopropylbenzene (Cumene)		110
M,P-Xylenes		2,600
N-Butylbenzene		12 J
N-Heptane		1,000
N-Hexane		2,400
N-Propylbenzene		140
O-Xylene (1,2-Dimethylbenzene)		700
Sec-Butylbenzene		66
Tert-Butyl Methyl Ether		390
Tetrachloroethylene (PCE)		22 J
Toluene		190
Xylenes, Total		3,300

RI-SV-03 20240822:		8/22/2024
COMPOUND		CONC. (ug/m3)
<b>Volatile Organic Compounds</b>		
1,2,4-Trimethylbenzene		92
1,3,5-Trimethylbenzene (Mesitylene)		50
2,2,4-Trimethylpentane		100
4-Ethyltoluene		28
Acetone		2,700 D
Benzene		5.3 J
Butane		7.6 J
Cyclohexane		2 J
Ethylbenzene		74
Isopropylbenzene (Cumene)		18
M,P-Xylenes		280
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		16 J
N-Heptane		14
N-Hexane		6.3 J
N-Propylbenzene		28
O-Xylene (1,2-Dimethylbenzene)		130
Sec-Butylbenzene		5.1 J
Tert-Butyl Alcohol		82 J
Tert-Butyl Methyl Ether		230
Tetrachloroethylene (PCE)		840
Toluene		93
Trichloroethylene (TCE)		2
Trichlorofluoromethane		13
Xylenes, Total		410

RI-SV-04 20240822:		8/22/2024
COMPOUND		CONC. (ug/m3)
<b>Volatile Organic Compounds</b>		
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)		0.43 J
1,2,4-Trimethylbenzene		7.3
1,3-Butadiene		0.16 J
2,2,4-Trimethylpentane		3.3
Acetone		720 D
Benzene		1
Butane		27
Carbon Disulfide		9.6
Carbon Tetrachloride		0.32
Chlorodifluoromethane		1.8
Chloroform		0.5 J
Chloromethane		0.9 J
Cyclohexane		0.85
Cymene		0.35 J
Dichlorodifluoromethane		3
Ethylbenzene		22
Isopropanol		54
M,P-Xylenes		85
Methyl Ethyl Ketone (2-Butanone)		12
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		67
Methylene Chloride		0.76 J
N-Heptane		12
N-Hexane		1.3 J
N-Propylbenzene		1.2
O-Xylene (1,2-Dimethylbenzene)		35
Tert-Butyl Alcohol		27
Tert-Butyl Methyl Ether		11
Tetrachloroethylene (PCE)		140
Toluene		8.3
Trichlorofluoromethane		1.6
Xylenes, Total		120

RI-SV-06 20240822:		8/22/2024
COMPOUND		CONC. (ug/m3)
<b>Volatile Organic Compounds</b>		
1,2,4-Trimethylbenzene		3.8
1,3-Butadiene		0.27 J
1,3-Dichlorobenzene		0.71 J
1,3,5-Trimethylbenzene (Mesitylene)		0.82 J
2-Hexanone		0.7 J
2,2,4-Trimethylpentane		0.98
4-Ethyltoluene		0.33 J
Acetone		200 D
Benzene		4.5
Butane		7.2
Carbon Disulfide		18
Carbon Tetrachloride		0.25
Chlorodifluoromethane		0.85 J
Chloroform		0.46 J
Chloromethane		1.1
Cyclohexane		2.2
Dichlorodifluoromethane		1.7 J
Ethylbenzene		0.92
Isopropylbenzene (Cumene)		0.41 J
M,P-Xylenes		3.4
Methyl Ethyl Ketone (2-Butanone)		8.8
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		0.76 J
N-Heptane		2.8
N-Hexane		2.4
N-Propylbenzene		0.34 J
O-Xylene (1,2-Dimethylbenzene)		1.9
Styrene		0.42 J
Tert-Butyl Alcohol		20
Tetrachloroethylene (PCE)		4.2
Toluene		3.3
Trichloroethylene (TCE)		0.21
Trichlorofluoromethane		59
Xylenes, Total		5.3

RI-SV-07 20240822:		8/22/2024
COMPOUND		CONC. (ug/m3)
<b>Volatile Organic Compounds</b>		
1,1,1-Trichloroethane		0.61 J
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)		0.43 J
1,2,4-Trimethylbenzene		4.7
1,3-Butadiene		1.6
1,3-Dichlorobenzene		1.7
1,3,5-Trimethylbenzene (Mesitylene)		3.2
2-Hexanone		1.9 J
2,2,4-Trimethylpentane		29
4-Ethyltoluene		1.2
Acetone		340 D
Benzene		23
Butane		53
Carbon Disulfide		120
Carbon Tetrachloride		0.25
Chlorodifluoromethane		0.83 J
Chloroform		0.83 J
Chloromethane		0.73 J
Cyclohexane		17
Dichlorodifluoromethane		1.6 J
Ethylbenzene		3.8
Isopropanol		8.5 J
Isopropylbenzene (Cumene)		1.6
M,P-Xylenes		16
Methyl Ethyl Ketone (2-Butanone)		15
N-Heptane		8.5
N-Hexane		12
N-Propylbenzene		1.3
O-Xylene (1,2-Dimethylbenzene)		7.5
Sec-Butylbenzene		0.52 J
Styrene		0.3 J
Tert-Butyl Alcohol		53
Tert-Butyl Methyl Ether		0.96
Tetrachloroethylene (PCE)		11
Toluene		7.9
Trichloroethylene (TCE)		0.57
Trichlorofluoromethane		12
Xylenes, Total		24

RI-SV-05 20240822:		8/22/2024
COMPOUND		CONC. (ug/m3)
<b>Volatile Organic Compounds</b>		
1,1,1-Trichloroethane		23
1,2,4-Trimethylbenzene		8.8
1,3,5-Trimethylbenzene (Mesitylene)		1.5
2-Hexanone		3.6
2,2,4-Trimethylpentane		2.5
4-Ethyltoluene		0.7 J
Acetone		420 D
Benzene		2.4
Butane		0.77 J
Carbon Disulfide		2.4
Chloroform		0.58 J
Cyclohexane		1.4
Dichlorodifluoromethane		32
Ethylbenzene		4.5
Isopropanol		6.6 J
Isopropylbenzene (Cumene)		1.1
M,P-Xylenes		14
Methyl Ethyl Ketone (2-Butanone)		34
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		7.9
Methylene Chloride		1.8
N-Heptane		8.2
N-Hexane		1.2 J
N-Propylbenzene		0.69 J
O-Xylene (1,2-Dimethylbenzene)		6
Styrene		0.72 J
Tert-Butyl Alcohol		21
Tetrachloroethylene (PCE)		29
Toluene		28
Trans-1,2-Dichloroethene		0.096 J
Trichloroethylene (TCE)		0.2
Trichlorofluoromethane		63
Vinyl Chloride		0.091 J
Xylenes, Total		20

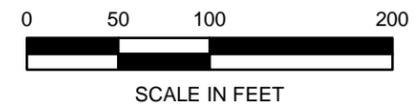
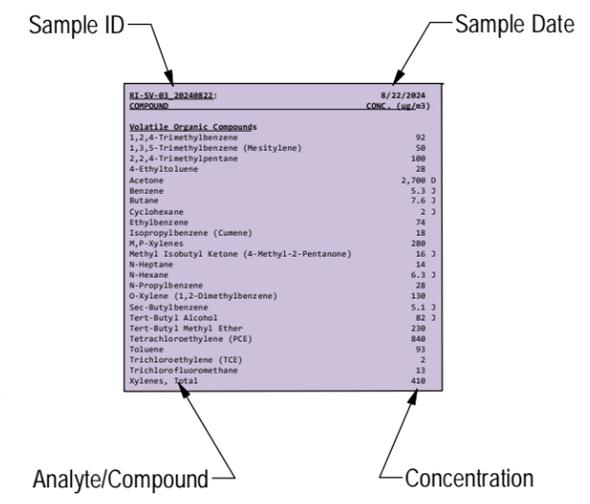
**LEGEND**

- BCP SITE BOUNDARY
- 50 LOT BOUNDARY AND TAX LOT NUMBER
- 2277** BLOCK NUMBER
- BUILDING
- REMEDIAL INVESTIGATION AMBIENT AIR SAMPLE LOCATION (2024)
- REMEDIAL INVESTIGATION SOIL VAPOR SAMPLE LOCATION (2024)

**SOIL VAPOR**

µg/m³- micrograms per cubic meter

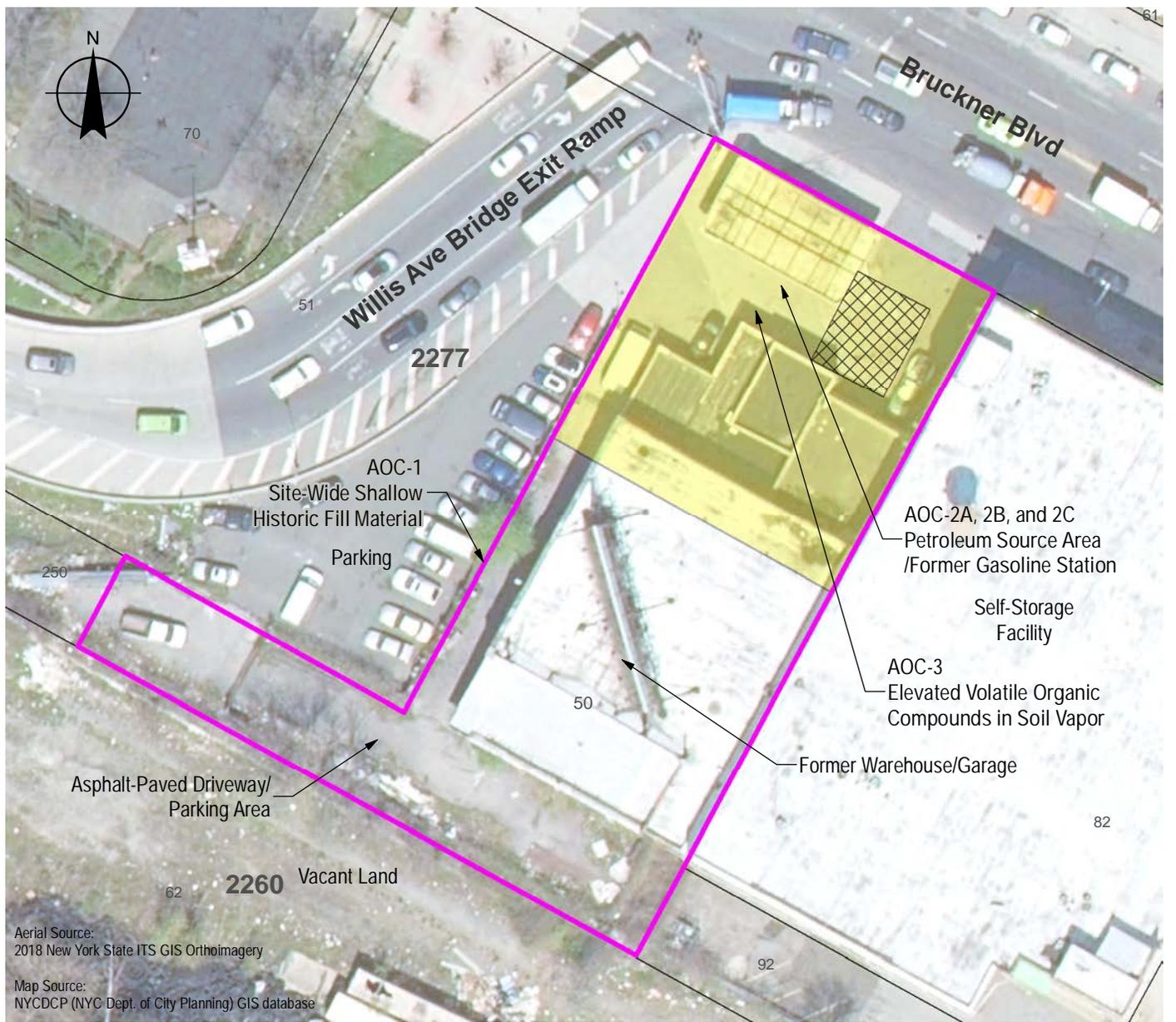
D: Analyte concentration obtained from dilution.  
J: The concentration given is an estimated value.  
E: Result exceeded calibration range.



Map Source: NYCDP (NYC Dept. of City Planning) GIS database

DATE	4/24/2025
PROJECT NO.	200328
FIGURE	7

© 2025 AKRF Q:\Projects\200328 - BETTINA - BRUCKNER PROPERTIES\Technical\GIS and Graphics\SAR\IR\200328 Fig 8 Areas of Concern.mxd/24/2025 8:59:48 AM mveilleux



Aerial Source:  
2018 New York State ITS GIS Orthoimagery

Map Source:  
NYC DCP (NYC Dept. of City Planning) GIS database

Areas of Concern

**LEGEND**

- BCP SITE BOUNDARY
- APPROXIMATE LOCATION OF FORMER UST FIELD (ALL KNOWN TANKS REMOVED)
- 50 LOT BOUNDARY AND TAX LOT NUMBER
- 2277** BLOCK NUMBER
- AOCS 2 THROUGH 3

AOC	Description	Data to Support Determination	Notes
1	Site-Wide Shallow Historic Fill Material (0-5 feet bgs)	Identification of historic fill material extending to bedrock across much of the Site at depths of 5 feet bgs or less.	Shallow historic fill material (0-5 feet bgs) exists across the entire Site (from boundary to boundary)
2A	Petroleum source area at former UST field	Petroleum-like contamination documented in soil/fill material above bedrock in the vicinity of the former UST field. Shallow bedrock was reportedly removed to facilitate installation of the former USTs, with bedrock encountered at approximately 10 feet bgs.	Field evidence of petroleum-like contamination limited to borings and wells in and immediately adjacent to the pump island and former pump island in the northern portion of the Site.
2B	Petroleum source area at former pump island	Petroleum-like contamination documented in shallow soil/fill material above bedrock in the vicinity of the former pump islands.	
2C	Residual petroleum product and oily water	Petroleum-related VOCs (plus phenol) and potential separate phase petroleum in groundwater in the northern portion of the Site.	The elevated concentrations of VOCs detected in soil vapor are attributed to the former operations at the gasoline station/auto repair shop.
3	Elevated VOCs in soil vapor	Petroleum- and chlorinated solvent-related compounds detected in soil vapor adjacent to the former auto repair operations in the northern portion of the Site), and elevated concentrations of petroleum-related VOCs detected at soil in the northeastern portion of the Site (adjacent to the former UST field).	

Notes: AOC = area of concern; UST = underground storage tank; bgs = below ground surface; bgs = below ground surface



**akrf**  
440 Park Avenue South, New York, NY 10016

**102 Bruckner Boulevard**  
Bronx, New York

**AREAS OF CONCERN**

DATE  
**4/24/2025**

PROJECT NO.  
**200328**

FIGURE  
**8**

## TABLES

**Table 1**  
**102 Bruckner Boulevard**  
**Bronx, NY**

Remedial Investigation  
Soil Analytical Results of Volatile Organic Compounds (VOCs)

Compound	AKRF Sample ID			RI-SB-01_0-2_20240821	RI-SB-01_2-4_20240821	RI-SB-02_0-1_20240821	RI-SB-03_0-2_20240821
	NYSDEC UUSCO	NYSDEC RRSO	NYSDEC PGWSCO	460-309960-4 8/21/2024 1 mg/kg	460-309960-5 8/21/2024 1 mg/kg	460-309960-6 8/21/2024 1 mg/kg	460-309960-7 8/21/2024 1 mg/kg
Compound	NYSDEC UUSCO	NYSDEC RRSO	NYSDEC PGWSCO	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.68	0.0011 U	0.0011 U	0.0011 U	0.0011 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U
1,1,2-Trichloroethane	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U
1,1-Dichloroethane	0.27	26	0.27	0.0011 U	0.0011 U	0.0011 U	0.0011 U
1,1-Dichloroethene	0.33	100	0.33	0.0011 U	0.0011 U	0.0011 U	0.0011 U
1,2,3-Trichlorobenzene	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U
1,2,4-Trichlorobenzene	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U
1,2,4-Trimethylbenzene	3.6	52	3.6	0.00035 J	0.041	0.0011 U	0.0011 U
1,2-Dibromo-3-Chloropropane	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U
1,2-Dichlorobenzene	1.1	100	1.1	0.0011 U	0.0011 U	0.0011 U	0.0011 U
1,2-Dichloroethane	0.02	3.1	0.02	0.0011 U	0.0011 U	0.0011 U	0.0011 U
1,2-Dichloropropane	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	8.4	0.0011 U	0.012	0.0011 U	0.0011 U
1,3-Dichlorobenzene	2.4	49	2.4	0.0011 U	0.0011 U	0.0011 U	0.0011 U
1,4-Dichlorobenzene	1.8	13	1.8	0.0011 U	0.0011 U	0.0011 U	0.0011 U
2-Hexanone	NS	NS	NS	0.0055 U	0.0055 U	0.0055 U	0.0053 U
Acetone	0.05	100	0.05	0.012	0.026	0.022	0.032
Benzene	0.06	4.8	0.06	0.0011 U	0.00052 J	0.0015	0.0011 U
Bromochloromethane	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U
Bromodichloromethane	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U
Bromoform	NS	NS	NS	0.0011 UJ	0.0011 UJ	0.0011 UJ	0.0011 UJ
Bromomethane	NS	NS	NS	0.0022 UJ	0.0022 UJ	0.0022 UJ	0.0021 UJ
Carbon Disulfide	NS	NS	NS	0.004	0.0026	0.0011	0.0013
Carbon Tetrachloride	0.76	2.4	0.76	0.0011 U	0.0011 U	0.0011 U	0.0011 U
Chlorobenzene	1.1	100	1.1	0.0011 U	0.0011 U	0.0011 U	0.0011 U
Chloroethane	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U
Chloroform	0.37	49	0.37	0.0011 U	0.0011 U	0.0011 U	0.0011 U
Chloromethane	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.0011 U	0.0011 U	0.0011 U	0.0011 U
Cis-1,3-Dichloropropene	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U
Cyclohexane	NS	NS	NS	0.0011 U	0.00062 J	0.0011 U	0.0011 U
Dibromochloromethane	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U
Dichlorodifluoromethane	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U
Ethylbenzene	1	41	1	0.0011 U	0.0082	0.00067 J	0.00027 J
Isopropylbenzene (Cumene)	NS	NS	NS	0.0011 U	0.0017	0.0011 U	0.0011 U
M,P-Xylenes	NS	NS	NS	0.00076 JL	0.028	0.001 J	0.0011
Methyl Acetate	NS	NS	NS	0.0055 U	0.0055 U	0.0055 U	0.0053 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.12	0.0055 U	0.0034 J	0.0039 J	0.0053 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	NS	0.0055 U	0.0055 U	0.0055 U	0.0053 U
Methylcyclohexane	NS	NS	NS	0.0011 U	0.0027	0.0011 U	0.0011 U
Methylene Chloride	0.05	100	0.05	0.0022 U	0.0022 U	0.0022 U	0.0021 U
N-Butylbenzene	12	100	12	0.0011 U	0.0033	0.0011 U	0.0011 U
N-Propylbenzene	3.9	100	3.9	0.0011 U	0.0041	0.00044 J	0.0011 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	NS	0.00033 JL	0.018	0.0011 U	0.0003 J
Sec-Butylbenzene	11	100	11	0.0011 U	0.0017	0.0011 U	0.0011 U
Styrene	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U
T-Butylbenzene	5.9	100	5.9	0.0011 U	0.0011 U	0.0011 U	0.0011 U
Tert-Butyl Methyl Ether	0.93	100	0.93	0.0011 U	0.0011 U	0.0011 U	0.0011 U
Tetrachloroethylene (PCE)	1.3	19	1.3	0.0011 U	0.0011 U	0.0011 U	0.0011 U
Toluene	0.7	100	0.7	0.00062 JL	0.015	0.00051 J	0.0011 U
Trans-1,2-Dichloroethene	0.19	100	0.19	0.0011 U	0.0011 U	0.0011 U	0.0011 U
Trans-1,3-Dichloropropene	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U
Trichloroethylene (TCE)	0.47	21	0.47	0.0011 U	0.0011 U	0.0011 U	0.0011 U
Trichlorofluoromethane	NS	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0011 U
Vinyl Chloride	0.02	0.9	0.02	0.0011 U	0.0011 U	0.0011 U	0.0011 U
Xylenes, Total	0.26	100	1.6	0.0011 JL	0.047	0.001 J	0.0014 J

**Table 1**  
**102 Bruckner Boulevard**  
**Bronx, NY**

Remedial Investigation  
Soil Analytical Results of Volatile Organic Compounds (VOCs)

Compound	AKRF Sample ID			RI-SB-03_2-4_20240821	RI-SB-04_1-2_20240821	RI-SB-05_0-2_20240821	RI-SB-X_0-2_20240821
	NYSDEC UUSCO	NYSDEC RRSO	NYSDEC PGWSCO	460-309960-8	460-309960-9	460-309960-10	460-309960-19
	Laboratory Sample ID			8/21/2024	8/21/2024	8/21/2024	8/21/2024
	Date Sampled			1	1	1	1
	Dilution Factor			mg/kg	mg/kg	mg/kg	mg/kg
	Unit			CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.68	0.0012 U	0.001 U	0.0014 U	0.0012 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	0.0012 U	0.001 U	0.0014 U	0.0012 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	NS	0.0012 U	0.001 U	0.0014 U	0.0012 U
1,1,2-Trichloroethane	NS	NS	NS	0.0012 U	0.001 U	0.0014 U	0.0012 U
1,1-Dichloroethane	0.27	26	0.27	0.0012 U	0.001 U	0.0014 U	0.0012 U
1,1-Dichloroethene	0.33	100	0.33	0.0012 U	0.001 U	0.0014 U	0.0012 U
1,2,3-Trichlorobenzene	NS	NS	NS	0.0012 U	0.001 U	0.0014 UJ	0.0012 UJ
1,2,4-Trichlorobenzene	NS	NS	NS	0.0012 U	0.001 U	0.0014 UJ	0.0012 UJ
1,2,4-Trimethylbenzene	3.6	52	3.6	0.0012 U	0.001 U	0.0014 U	0.0012 U
1,2-Dibromo-3-Chloropropane	NS	NS	NS	0.0012 U	0.001 U	0.0014 UJ	0.0012 UJ
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	NS	0.0012 U	0.001 U	0.0014 UJ	0.0012 UJ
1,2-Dichlorobenzene	1.1	100	1.1	0.0012 U	0.001 U	0.0014 UJ	0.0012 UJ
1,2-Dichloroethane	0.02	3.1	0.02	0.0012 U	0.001 U	0.0014 U	0.0012 U
1,2-Dichloropropane	NS	NS	NS	0.0012 U	0.001 U	0.0014 U	0.0012 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	8.4	0.0012 U	0.001 U	0.0014 U	0.0012 U
1,3-Dichlorobenzene	2.4	49	2.4	0.0012 U	0.001 U	0.0014 UJ	0.0012 UJ
1,4-Dichlorobenzene	1.8	13	1.8	0.0012 U	0.001 U	0.0014 UJ	0.0012 UJ
2-Hexanone	NS	NS	NS	0.0059 U	0.005 U	0.0071 U	0.0059 U
Acetone	0.05	100	0.05	0.014	0.006 U	0.0086 U	0.0071 U
Benzene	0.06	4.8	0.06	0.0012 U	0.001 U	0.0014 U	0.0012 U
Bromochloromethane	NS	NS	NS	0.0012 U	0.001 U	0.0014 U	0.0012 U
Bromodichloromethane	NS	NS	NS	0.0012 U	0.001 U	0.0014 U	0.0012 U
Bromoform	NS	NS	NS	0.0012 UJ	0.001 UJ	0.0014 UJ	0.0012 UJ
Bromomethane	NS	NS	NS	0.0023 UJ	0.002 UJ	0.0029 UJ	0.0024 UJ
Carbon Disulfide	NS	NS	NS	0.00053 J	0.001 U	0.0014 U	0.0012 U
Carbon Tetrachloride	0.76	2.4	0.76	0.0012 U	0.001 U	0.0014 U	0.0012 U
Chlorobenzene	1.1	100	1.1	0.0012 U	0.001 U	0.0014 UJ	0.0012 UJ
Chloroethane	NS	NS	NS	0.0012 U	0.001 U	0.0014 U	0.0012 U
Chloroform	0.37	49	0.37	0.0012 U	0.001 U	0.0014 U	0.0012 U
Chloromethane	NS	NS	NS	0.0012 U	0.001 U	0.0014 U	0.0012 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.0012 U	0.001 U	0.0014 U	0.0012 U
Cis-1,3-Dichloropropene	NS	NS	NS	0.0012 U	0.001 U	0.0014 U	0.0012 U
Cyclohexane	NS	NS	NS	0.0012 U	0.001 U	0.0014 U	0.0012 U
Dibromochloromethane	NS	NS	NS	0.0012 U	0.001 U	0.0014 UJ	0.0012 UJ
Dichlorodifluoromethane	NS	NS	NS	0.0012 U	0.001 U	0.0014 U	0.0012 U
Ethylbenzene	1	41	1	0.0012 U	0.001 U	0.0014 U	0.0012 U
Isopropylbenzene (Cumene)	NS	NS	NS	0.0012 U	0.001 U	0.0014 U	0.0012 U
M,P-Xylenes	NS	NS	NS	0.0012 U	0.001 U	0.0014 UJ	0.0012 UJ
Methyl Acetate	NS	NS	NS	0.0059 U	0.005 U	0.0071 U	0.0059 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.12	0.0059 U	0.005 U	0.0071 U	0.0059 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	NS	0.0059 U	0.005 U	0.0071 U	0.0059 U
Methylcyclohexane	NS	NS	NS	0.0012 U	0.001 U	0.0014 U	0.0012 U
Methylene Chloride	0.05	100	0.05	0.0023 U	0.002 U	0.0029 UJ	0.0024 UJ
N-Butylbenzene	12	100	12	0.0012 U	0.001 U	0.0014 UJ	0.0012 UJ
N-Propylbenzene	3.9	100	3.9	0.0012 U	0.001 U	0.0014 U	0.0012 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	NS	0.0012 U	0.001 U	0.0014 U	0.0012 U
Sec-Butylbenzene	11	100	11	0.0012 U	0.001 U	0.0014 UJ	0.0012 UJ
Styrene	NS	NS	NS	0.0012 U	0.001 U	0.0014 UJ	0.0012 UJ
T-Butylbenzene	5.9	100	5.9	0.0012 U	0.001 U	0.0014 UJ	0.0012 UJ
Tert-Butyl Methyl Ether	0.93	100	0.93	0.0012 U	0.001 U	0.0014 U	0.0012 U
Tetrachloroethylene (PCE)	1.3	19	1.3	0.0012 U	0.0015	0.0014 UJ	0.0012 UJ
Toluene	0.7	100	0.7	0.0012 U	0.001 U	0.0014 U	0.0012 U
Trans-1,2-Dichloroethene	0.19	100	0.19	0.0012 U	0.001 U	0.0014 U	0.0012 U
Trans-1,3-Dichloropropene	NS	NS	NS	0.0012 U	0.001 U	0.0014 UJ	0.0012 UJ
Trichloroethylene (TCE)	0.47	21	0.47	0.0012 U	0.001 U	0.0014 U	0.0012 U
Trichlorofluoromethane	NS	NS	NS	0.0012 U	0.001 U	0.0014 U	0.0012 U
Vinyl Chloride	0.02	0.9	0.02	0.0012 U	0.001 U	0.0014 U	0.0012 U
Xylenes, Total	0.26	100	1.6	0.0023 U	0.002 U	0.0029 U	0.0024 U

**Table 1**  
**102 Bruckner Boulevard**  
**Bronx, NY**

Remedial Investigation  
Soil Analytical Results of Volatile Organic Compounds (VOCs)

Compound	AKRF Sample ID			RI-SB-05_3-5_20240821	RI-SB-06_0-2_20240822	RI-SB-07_0-2_20240821	RI-SB-07_2-4_20240821
	NYSDEC UUSCO	NYSDEC RRSO	NYSDEC PGWSCO	460-309960-11 8/21/2024 1 mg/kg	460-310022-1 8/21/2024 1 mg/kg	460-309960-12 8/21/2024 1 mg/kg	460-309960-13 8/21/2024 1 mg/kg
1,1,1-Trichloroethane	0.68	100	0.68	0.0014 U	0.001 U	0.0015 U	0.0011 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	0.0014 U	0.001 U	0.0015 U	0.0011 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	NS	0.0014 U	0.001 U	0.0015 U	0.0011 U
1,1,2-Trichloroethane	NS	NS	NS	0.0014 U	0.001 U	0.0015 U	0.0011 U
1,1-Dichloroethane	0.27	26	0.27	0.0014 U	0.001 U	0.0015 U	0.0011 U
1,1-Dichloroethene	0.33	100	0.33	0.0014 U	0.001 U	0.0015 U	0.0011 U
1,2,3-Trichlorobenzene	NS	NS	NS	0.0014 U	0.001 U	0.0015 U	0.0011 U
1,2,4-Trichlorobenzene	NS	NS	NS	0.0014 U	0.001 U	0.0015 U	0.0011 U
1,2,4-Trimethylbenzene	3.6	52	3.6	0.0032	0.001 U	0.0015 U	0.0011 U
1,2-Dibromo-3-Chloropropane	NS	NS	NS	0.0014 U	0.001 U	0.0015 U	0.0011 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	NS	0.0014 U	0.001 U	0.0015 U	0.0011 U
1,2-Dichlorobenzene	1.1	100	1.1	0.0014 U	0.001 U	0.0015 U	0.0011 U
1,2-Dichloroethane	0.02	3.1	0.02	0.0014 U	0.001 U	0.0015 U	0.0011 U
1,2-Dichloropropane	NS	NS	NS	0.0014 U	0.001 U	0.0015 U	0.0011 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	8.4	0.0017	0.001 U	0.0015 U	0.0011 U
1,3-Dichlorobenzene	2.4	49	2.4	0.0014 U	0.001 U	0.0015 U	0.0011 U
1,4-Dichlorobenzene	1.8	13	1.8	0.0014 U	0.001 U	0.0015 U	0.0011 U
2-Hexanone	NS	NS	NS	0.007 U	0.0051 U	0.0077 U	0.0054 U
Acetone	0.05	100	0.05	0.01	0.0063	0.0093 U	0.0065 U
Benzene	0.06	4.8	0.06	0.0014 U	0.001 U	0.0015 U	0.0011 U
Bromochloromethane	NS	NS	NS	0.0014 U	0.001 U	0.0015 U	0.0011 U
Bromodichloromethane	NS	NS	NS	0.0014 U	0.001 U	0.0015 U	0.0011 U
Bromoform	NS	NS	NS	0.0014 UJ	0.001 UJ	0.0015 UJ	0.0011 UJ
Bromomethane	NS	NS	NS	0.0028 UJ	0.0021 UJ	0.0031 UJ	0.0022 UJ
Carbon Disulfide	NS	NS	NS	0.0014 U	0.001 U	0.0015 U	0.0011 U
Carbon Tetrachloride	0.76	2.4	0.76	0.0014 U	0.001 U	0.0015 U	0.0011 U
Chlorobenzene	1.1	100	1.1	0.0014 U	0.001 U	0.0015 U	0.0011 U
Chloroethane	NS	NS	NS	0.0014 U	0.001 U	0.0015 U	0.0011 U
Chloroform	0.37	49	0.37	0.0014 U	0.001 U	0.0015 U	0.0011 U
Chloromethane	NS	NS	NS	0.0014 U	0.001 U	0.0015 U	0.0011 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.0014 U	0.001 U	0.0015 U	0.0011 U
Cis-1,3-Dichloropropene	NS	NS	NS	0.0014 U	0.001 U	0.0015 U	0.0011 U
Cyclohexane	NS	NS	NS	0.0014 U	0.001 U	0.0015 U	0.0011 U
Dibromochloromethane	NS	NS	NS	0.0014 U	0.001 U	0.0015 U	0.0011 U
Dichlorodifluoromethane	NS	NS	NS	0.0014 U	0.001 U	0.0015 U	0.0011 U
Ethylbenzene	1	41	1	0.00067 J	0.001 U	0.0015 U	0.0011 U
Isopropylbenzene (Cumene)	NS	NS	NS	0.00055 J	0.001 U	0.0015 U	0.0011 U
M,P-Xylenes	NS	NS	NS	0.00093 J	0.001 U	0.0015 U	0.0011 U
Methyl Acetate	NS	NS	NS	0.007 U	0.0051 U	0.0077 U	0.0054 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.12	0.007 U	0.0051 U	0.0077 U	0.0054 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	NS	0.007 U	0.0051 U	0.0077 U	0.0054 U
Methylcyclohexane	NS	NS	NS	0.0014 U	0.001 U	0.0015 U	0.0011 U
Methylene Chloride	0.05	100	0.05	0.0028 U	0.0021 U	0.0031 U	0.0022 U
N-Butylbenzene	12	100	12	0.0014 U	0.001 U	0.0015 U	0.0011 U
N-Propylbenzene	3.9	100	3.9	0.00025 J	0.001 U	0.0015 U	0.0011 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	NS	0.001 J	0.001 U	0.0015 U	0.0011 U
Sec-Butylbenzene	11	100	11	0.0014 U	0.001 U	0.0015 U	0.0011 U
Styrene	NS	NS	NS	0.0014 U	0.001 U	0.0015 U	0.0011 U
T-Butylbenzene	5.9	100	5.9	0.0014 U	0.001 U	0.0015 U	0.0011 U
Tert-Butyl Methyl Ether	0.93	100	0.93	0.0014 U	0.001 U	0.0015 U	0.0011 U
Tetrachloroethylene (PCE)	1.3	19	1.3	0.0014 U	0.001 U	0.0015 U	0.0011 U
Toluene	0.7	100	0.7	0.0005 J	0.001 U	0.0015 U	0.0011 U
Trans-1,2-Dichloroethene	0.19	100	0.19	0.0014 U	0.001 U	0.0015 U	0.0011 U
Trans-1,3-Dichloropropene	NS	NS	NS	0.0014 U	0.001 U	0.0015 U	0.0011 U
Trichloroethylene (TCE)	0.47	21	0.47	0.0014 U	0.001 U	0.0015 U	0.0011 U
Trichlorofluoromethane	NS	NS	NS	0.0014 U	0.001 U	0.0015 U	0.0011 U
Vinyl Chloride	0.02	0.9	0.02	0.0014 U	0.001 U	0.0015 U	0.0011 U
Xylenes, Total	0.26	100	1.6	0.002 J	0.0021 U	0.0031 U	0.0022 U

**Table 1**  
**102 Bruckner Boulevard**  
**Bronx, NY**

Remedial Investigation  
Soil Analytical Results of Volatile Organic Compounds (VOCs)

Compound	AKRF Sample ID			RI-SB-08_0-2_20240821	RI-SB-08_2-4_20240821	RI-SB-09_0-2_20240821	RI-SB-09_3-5_20240821
	NYSDEC UUSCO	NYSDEC RRSO	NYSDEC PGWSCO	460-309960-14	460-309960-15	460-309960-16	460-309960-17
	Laboratory Sample ID			8/21/2024	8/21/2024	8/21/2024	8/21/2024
	Date Sampled			1	1	1	1
	Dilution Factor			mg/kg	mg/kg	mg/kg	mg/kg
	Unit			CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.68	0.0011 U	0.001 U	0.00084 U	0.00095 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	0.0011 U	0.001 U	0.00084 U	0.00095 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	NS	0.0011 U	0.001 U	0.00084 U	0.00095 U
1,1,2-Trichloroethane	NS	NS	NS	0.0011 U	0.001 U	0.00084 U	0.00095 U
1,1-Dichloroethane	0.27	26	0.27	0.0011 U	0.001 U	0.00084 U	0.00095 U
1,1-Dichloroethene	0.33	100	0.33	0.0011 U	0.001 U	0.00084 U	0.00095 U
1,2,3-Trichlorobenzene	NS	NS	NS	0.0011 U	0.001 U	0.00084 U	0.00095 U
1,2,4-Trichlorobenzene	NS	NS	NS	0.0011 U	0.001 U	0.00084 U	0.00095 U
1,2,4-Trimethylbenzene	3.6	52	3.6	0.0011 U	0.001 U	0.00084 U	0.00095 U
1,2-Dibromo-3-Chloropropane	NS	NS	NS	0.0011 U	0.001 U	0.00084 U	0.00095 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	NS	0.0011 U	0.001 U	0.00084 U	0.00095 U
1,2-Dichlorobenzene	1.1	100	1.1	0.0011 U	0.001 U	0.00084 U	0.00095 U
1,2-Dichloroethane	0.02	3.1	0.02	0.0011 U	0.001 U	0.00084 U	0.00095 U
1,2-Dichloropropane	NS	NS	NS	0.0011 U	0.001 U	0.00084 U	0.00095 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	8.4	0.0011 U	0.001 U	0.00084 U	0.00095 U
1,3-Dichlorobenzene	2.4	49	2.4	0.0011 U	0.001 U	0.00084 U	0.00095 U
1,4-Dichlorobenzene	1.8	13	1.8	0.0011 U	0.001 U	0.00084 U	0.00095 U
2-Hexanone	NS	NS	NS	0.0054 U	0.0052 U	0.0042 U	0.0047 U
Acetone	0.05	100	0.05	0.013	0.016	0.005 U	0.0057 U
Benzene	0.06	4.8	0.06	0.0011 U	0.001 U	0.00084 U	0.00095 U
Bromochloromethane	NS	NS	NS	0.0011 U	0.001 U	0.00084 U	0.00095 U
Bromodichloromethane	NS	NS	NS	0.0011 U	0.001 U	0.00084 U	0.00095 U
Bromoform	NS	NS	NS	0.0011 UJ	0.001 UJ	0.00084 UJ	0.00095 UJ
Bromomethane	NS	NS	NS	0.0021 UJ	0.0021 UJ	0.0017 UJ	0.0019 UJ
Carbon Disulfide	NS	NS	NS	0.0011 U	0.001 U	0.00084 U	0.00095 U
Carbon Tetrachloride	0.76	2.4	0.76	0.0011 U	0.001 U	0.00084 U	0.00095 U
Chlorobenzene	1.1	100	1.1	0.0011 U	0.001 U	0.00084 U	0.00095 U
Chloroethane	NS	NS	NS	0.0011 U	0.001 U	0.00084 U	0.00095 U
Chloroform	0.37	49	0.37	0.0011 U	0.001 U	0.00084 U	0.00095 U
Chloromethane	NS	NS	NS	0.0011 U	0.001 U	0.00084 U	0.00095 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.0011 U	0.001 U	0.00084 U	0.00095 U
Cis-1,3-Dichloropropene	NS	NS	NS	0.0011 U	0.001 U	0.00084 U	0.00095 U
Cyclohexane	NS	NS	NS	0.0011 U	0.001 U	0.00084 U	0.00095 U
Dibromochloromethane	NS	NS	NS	0.0011 U	0.001 U	0.00084 U	0.00095 U
Dichlorodifluoromethane	NS	NS	NS	0.0011 U	0.001 U	0.00084 U	0.00095 U
Ethylbenzene	1	41	1	0.0011 U	0.001 U	0.00084 U	0.00095 U
Isopropylbenzene (Cumene)	NS	NS	NS	0.0011 U	0.001 U	0.00084 U	0.00095 U
M,P-Xylenes	NS	NS	NS	0.0011 U	0.001 U	0.00084 U	0.00095 U
Methyl Acetate	NS	NS	NS	0.0054 U	0.0052 U	0.0042 U	0.0047 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.12	0.0054 U	0.0052 U	0.0042 U	0.0047 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	NS	0.0054 U	0.0052 U	0.0042 U	0.0047 U
Methylcyclohexane	NS	NS	NS	0.0011 U	0.001 U	0.00084 U	0.00095 U
Methylene Chloride	0.05	100	0.05	0.0021 U	0.0021 U	0.0017 U	0.0019 U
N-Butylbenzene	12	100	12	0.0011 U	0.001 U	0.00084 U	0.00095 U
N-Propylbenzene	3.9	100	3.9	0.0011 U	0.001 U	0.00084 U	0.00095 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	NS	0.0011 U	0.001 U	0.00084 U	0.00095 U
Sec-Butylbenzene	11	100	11	0.0011 U	0.001 U	0.00084 U	0.00095 U
Styrene	NS	NS	NS	0.0011 U	0.001 U	0.00084 U	0.00095 U
T-Butylbenzene	5.9	100	5.9	0.0011 U	0.001 U	0.00084 U	0.00095 U
Tert-Butyl Methyl Ether	0.93	100	0.93	0.0011 U	0.001 U	0.00084 U	0.00095 U
Tetrachloroethylene (PCE)	1.3	19	1.3	0.0011 U	0.001 U	0.00084 U	0.00095 U
Toluene	0.7	100	0.7	0.0011 U	0.001 U	0.00084 U	0.00095 U
Trans-1,2-Dichloroethene	0.19	100	0.19	0.0011 U	0.001 U	0.00084 U	0.00095 U
Trans-1,3-Dichloropropene	NS	NS	NS	0.0011 U	0.001 U	0.00084 U	0.00095 U
Trichloroethylene (TCE)	0.47	21	0.47	0.0011 U	0.001 U	0.00084 U	0.00095 U
Trichlorofluoromethane	NS	NS	NS	0.0011 U	0.001 U	0.00084 U	0.00095 U
Vinyl Chloride	0.02	0.9	0.02	0.0011 U	0.001 U	0.00084 U	0.00095 U
Xylenes, Total	0.26	100	1.6	0.0021 U	0.0021 U	0.0017 U	0.0019 U

**Table 1**  
**102 Bruckner Boulevard**  
**Bronx, NY**

Remedial Investigation  
Soil Analytical Results of Volatile Organic Compounds (VOCs)

Compound	AKRF Sample ID			RI-SB-09_7-9_20240821	RI-SB-10_0.5-2.5_20240822	FB-01_20240821	TB-01_20240821
	NYSDEC UUSCO	NYSDEC RRSO	NYSDEC PGWSCO	460-309960-18	460-310022-2	460-309960-20	460-309960-21
	Laboratory Sample ID			8/21/2024	8/22/2024	8/21/2024	8/21/2024
	Date Sampled			1	1	1	1
	Dilution Factor			mg/kg	mg/kg	mg/kg	mg/kg
	Unit			CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.68	0.001 U	0.001 U	1 U	1 U
1,1,2,2-Tetrachloroethane	NS	NS	NS	0.001 U	0.001 U	1 UJ	1 UJ
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NS	NS	NS	0.001 U	0.001 U	1 U	1 U
1,1,2-Trichloroethane	NS	NS	NS	0.001 U	0.001 U	1 U	1 U
1,1-Dichloroethane	0.27	26	0.27	0.001 U	0.001 U	1 U	1 U
1,1-Dichloroethene	0.33	100	0.33	0.001 U	0.001 U	1 U	1 U
1,2,3-Trichlorobenzene	NS	NS	NS	0.001 U	0.001 U	1 U	1 U
1,2,4-Trichlorobenzene	NS	NS	NS	0.001 U	0.001 U	1 U	1 U
1,2,4-Trimethylbenzene	3.6	52	3.6	0.001 U	0.001 U	1 U	1 U
1,2-Dibromo-3-Chloropropane	NS	NS	NS	0.001 U	0.001 U	1 U	1 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	NS	0.001 U	0.001 U	1 U	1 U
1,2-Dichlorobenzene	1.1	100	1.1	0.001 U	0.001 U	1 U	1 U
1,2-Dichloroethane	0.02	3.1	0.02	0.001 U	0.001 U	1 U	1 U
1,2-Dichloropropane	NS	NS	NS	0.001 U	0.001 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	8.4	0.001 U	0.001 U	1 U	1 U
1,3-Dichlorobenzene	2.4	49	2.4	0.001 U	0.001 U	1 U	1 U
1,4-Dichlorobenzene	1.8	13	1.8	0.001 U	0.001 U	1 U	1 U
2-Hexanone	NS	NS	NS	0.0051 U	0.005 U	5 U	5 U
Acetone	0.05	100	0.05	0.0062 U	0.006 U	5 U	5 U
Benzene	0.06	4.8	0.06	0.001 U	0.001 U	1 U	1 U
Bromochloromethane	NS	NS	NS	0.001 U	0.001 U	1 UJ	1 UJ
Bromodichloromethane	NS	NS	NS	0.001 U	0.001 U	1 U	1 U
Bromoform	NS	NS	NS	0.001 UJ	0.001 UJ	1 U	1 U
Bromomethane	NS	NS	NS	0.0021 UJ	0.002 UJ	1 U	1 U
Carbon Disulfide	NS	NS	NS	0.001 U	0.001 U	1 U	1 U
Carbon Tetrachloride	0.76	2.4	0.76	0.001 U	0.001 U	1 U	1 U
Chlorobenzene	1.1	100	1.1	0.001 U	0.001 U	1 U	1 U
Chloroethane	NS	NS	NS	0.001 U	0.001 U	1 U	1 U
Chloroform	0.37	49	0.37	0.001 U	0.001 U	1.8	1 U
Chloromethane	NS	NS	NS	0.001 U	0.001 U	1 U	1 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.001 U	0.001 U	1 U	1 U
Cis-1,3-Dichloropropene	NS	NS	NS	0.001 U	0.001 U	1 U	1 U
Cyclohexane	NS	NS	NS	0.001 U	0.001 U	1 U	1 U
Dibromochloromethane	NS	NS	NS	0.001 U	0.001 U	1 U	1 U
Dichlorodifluoromethane	NS	NS	NS	0.001 U	0.001 U	1 U	1 U
Ethylbenzene	1	41	1	0.001 U	0.001 U	1 U	1 U
Isopropylbenzene (Cumene)	NS	NS	NS	0.001 U	0.001 U	1 U	1 U
M,P-Xylenes	NS	NS	NS	0.001 U	0.001 U	1 U	1 U
Methyl Acetate	NS	NS	NS	0.0051 U	0.005 U	5 U	5 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.12	0.0051 U	0.005 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	NS	0.0051 U	0.005 U	5 U	5 U
Methylcyclohexane	NS	NS	NS	0.001 U	0.001 U	1 U	1 U
Methylene Chloride	0.05	100	0.05	0.0021 U	0.002 U	0.53 J	1 U
N-Butylbenzene	12	100	12	0.001 U	0.001 U	1 UJ	1 UJ
N-Propylbenzene	3.9	100	3.9	0.001 U	0.001 U	1 U	1 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	NS	0.001 U	0.001 U	1 U	1 U
Sec-Butylbenzene	11	100	11	0.001 U	0.001 U	1 U	1 U
Styrene	NS	NS	NS	0.001 U	0.001 U	1 U	1 U
T-Butylbenzene	5.9	100	5.9	0.001 U	0.001 U	1 U	1 U
Tert-Butyl Methyl Ether	0.93	100	0.93	0.001 U	0.001 U	1 U	1 U
Tetrachloroethylene (PCE)	1.3	19	1.3	0.001 U	0.001 U	1 U	1 U
Toluene	0.7	100	0.7	0.001 U	0.001 U	1 U	1 U
Trans-1,2-Dichloroethene	0.19	100	0.19	0.001 U	0.001 U	1 U	1 U
Trans-1,3-Dichloropropene	NS	NS	NS	0.001 U	0.001 U	1 U	1 U
Trichloroethylene (TCE)	0.47	21	0.47	0.001 U	0.001 U	1 U	1 U
Trichlorofluoromethane	NS	NS	NS	0.001 U	0.001 U	1 U	1 U
Vinyl Chloride	0.02	0.9	0.02	0.001 U	0.001 U	1 U	1 U
Xylenes, Total	0.26	100	1.6	0.0021 U	0.002 U	2 U	2 U

**Table 2**  
**102 Bruckner Boulevard**  
**Bronx, NY**

Remedial Investigation  
 Soil Analytical Results of Semivolatile Organic Compounds (SVOCs)

Compound	AKRF Sample ID		RI-SB-01_0-2_20240821	RI-SB-01_2-4_20240821	RI-SB-02_0-1_20240821	RI-SB-03_0-2_20240821	RI-SB-03_2-4_20240821	RI-SB-04_1-2_20240821
	Laboratory Sample ID		460-309960-4	460-309960-5	460-309960-6	460-309960-7	460-309960-8	460-309960-9
	Date Sampled		8/21/2024	8/21/2024	8/21/2024	8/21/2024	8/21/2024	8/21/2024
	Unit		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Dilution Factor		1	1	1	1	1	1	
NYSDEC UUSCO		NYSDEC RRSO		CONC Q				
1,2,4,5-Tetrachlorobenzene	NS	NS	0.33 U					
1,4-Dioxane (P-Dioxane)	0.1	13	0.033 U					
2,3,4,6-Tetrachlorophenol	NS	NS	0.33 U					
2,4,5-Trichlorophenol	NS	NS	0.33 U					
2,4,6-Trichlorophenol	NS	NS	0.13 U					
2,4-Dichlorophenol	NS	NS	0.13 U					
2,4-Dimethylphenol	NS	NS	0.33 U					
2,4-Dinitrophenol	NS	NS	0.27 U					
2,4-Dinitrotoluene	NS	NS	0.068 U	0.067 U				
2,6-Dinitrotoluene	NS	NS	0.068 U	0.067 U				
2-Chloronaphthalene	NS	NS	0.33 U					
2-Chlorophenol	NS	NS	0.33 U					
2-Methylnaphthalene	NS	NS	0.33 U	0.016 J	0.016 J	0.33 U	0.33 U	0.33 U
2-Methylphenol (O-Cresol)	0.33	100	0.33 U					
2-Nitroaniline	NS	NS	0.33 U					
2-Nitrophenol	NS	NS	0.33 U					
3- And 4- Methylphenol (Total)	NS	NS	0.33 U					
3,3'-Dichlorobenzidine	NS	NS	0.13 U					
3-Nitroaniline	NS	NS	0.33 U					
4,6-Dinitro-2-Methylphenol	NS	NS	0.27 U					
4-Bromophenyl Phenyl Ether	NS	NS	0.33 U					
4-Chloro-3-Methylphenol	NS	NS	0.33 U					
4-Chloroaniline	NS	NS	0.33 U					
4-Chlorophenyl Phenyl Ether	NS	NS	0.33 U					
4-Methylphenol (P-Cresol)	0.33	100	0.33 U					
4-Nitroaniline	NS	NS	0.33 U					
4-Nitrophenol	NS	NS	0.68 U	0.67 U				
Acenaphthene	20	100	0.33 U					
Acenaphthylene	100	100	0.33 U					
Acetophenone	NS	NS	0.33 U					
Anthracene	100	100	0.33 U	0.33 U	0.33 U	0.33 U	0.015 J	0.33 U
Atrazine	NS	NS	0.13 U					
Benzaldehyde	NS	NS	0.33 UJ					
Benzo(a)Anthracene	1	1	0.033 U	0.033 U	0.033 U	0.034	0.033 U	0.033 U
Benzo(a)Pyrene	1	1	0.033 U	0.033 U	0.033 U	0.027 J	0.012 J	0.015 J
Benzo(b)Fluoranthene	1	1	0.033 U	0.011 J	0.0092 J	0.035	0.014 J	0.02 J
Benzo(g,h,i)Perylene	100	100	0.33 U	0.33 U	0.33 U	0.019 J	0.33 U	0.33 U
Benzo(k)Fluoranthene	0.8	3.9	0.033 U	0.033 U	0.033 U	0.013 J	0.0076 J	0.0073 J
Benzyl Butyl Phthalate	NS	NS	0.33 U					
Biphenyl (Diphenyl)	NS	NS	0.33 U					
Bis(2-Chloroethoxy) Methane	NS	NS	0.33 U					
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	0.033 U					
Bis(2-Chloroisopropyl) Ether	NS	NS	0.33 U					
Bis(2-Ethylhexyl) Phthalate	NS	NS	0.33 U					
Caprolactam	NS	NS	0.33 U					
Carbazole	NS	NS	0.33 U					
Chrysene	1	3.9	0.33 U	0.33 U	0.33 U	0.028 J	0.014 J	0.018 J
Dibenz(a,h)Anthracene	0.33	0.33	0.033 U					
Dibenzofuran	7	59	0.33 U					
Diethyl Phthalate	NS	NS	0.33 U					
Dimethyl Phthalate	NS	NS	0.33 U					
Di-N-Butyl Phthalate	NS	NS	0.017 J	0.047 J	0.037 J	0.12 J	0.12 J	0.14 J
Di-N-Octylphthalate	NS	NS	0.33 U					
Fluoranthene	100	100	0.33 U	0.018 J	0.33 U	0.04 J	0.045 J	0.039 J
Fluorene	30	100	0.33 U					
Hexachlorobenzene	0.33	1.2	0.033 U					
Hexachlorobutadiene	NS	NS	0.068 U	0.067 U				
Hexachlorocyclopentadiene	NS	NS	0.33 U					
Hexachloroethane	NS	NS	0.033 U					
Indeno(1,2,3-c,d)Pyrene	0.5	0.5	0.033 U	0.033 U	0.033 U	0.017 J	0.033 U	0.033 U
Isophorone	NS	NS	0.13 U					
Naphthalene	12	100	0.33 U	0.33 U	0.019 J	0.33 U	0.33 U	0.33 U
Nitrobenzene	NS	NS	0.033 U					
N-Nitrosodi-N-Propylamine	NS	NS	0.033 U					
N-Nitrosodiphenylamine	NS	NS	0.33 U					
Pentachlorophenol	0.8	6.7	0.27 U					
Phenanthrene	100	100	0.33 U	0.02 J	0.33 U	0.022 J	0.063 J	0.034 J
Phenol	0.33	100	0.33 U					
Pyrene	100	100	0.01 J	0.02 J	0.013 J	0.046 J	0.042 J	0.04 J

**Table 2**  
**102 Bruckner Boulevard**  
**Bronx, NY**

Remedial Investigation  
 Soil Analytical Results of Semivolatile Organic Compounds (SVOCs)

Compound	AKRF Sample ID		RI-SB-05_0-2_20240821	RI-SB-X_0-2_20240821	RI-SB-X_0-2_20240821	RI-SB-05_3-5_20240821	RI-SB-05_3-5_20240821	RI-SB-05_3-5_20240821
	Laboratory Sample ID		460-309960-10	460-309960-19	460-309960-19	460-309960-11	460-309960-11	460-309960-11
	Date Sampled		8/21/2024	8/21/2024	8/21/2024	8/21/2024	8/21/2024	8/21/2024
	Unit		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Dilution Factor		1	1	5	1	10	50	
NYSDEC UUSCO		NYSDEC RRSO		CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS	0.33 U	0.33 R	NR	0.33 U	NR	NR
1,4-Dioxane (P-Dioxane)	0.1	13	0.033 U	0.033 R	NR	0.033 U	NR	NR
2,3,4,6-Tetrachlorophenol	NS	NS	0.33 U	0.33 R	NR	0.33 U	NR	NR
2,4,5-Trichlorophenol	NS	NS	0.33 U	0.33 R	NR	0.33 U	NR	NR
2,4,6-Trichlorophenol	NS	NS	0.13 U	0.13 R	NR	0.13 U	NR	NR
2,4-Dichlorophenol	NS	NS	0.13 U	0.13 R	NR	0.13 U	NR	NR
2,4-Dimethylphenol	NS	NS	0.33 U	0.095 R	NR	0.14 J	NR	NR
2,4-Dinitrophenol	NS	NS	0.27 U	0.27 R	NR	0.27 U	NR	NR
2,4-Dinitrotoluene	NS	NS	0.068 U	0.068 R	NR	0.068 U	NR	NR
2,6-Dinitrotoluene	NS	NS	0.068 U	0.068 R	NR	0.068 U	NR	NR
2-Chloronaphthalene	NS	NS	0.33 U	0.33 R	NR	0.33 U	NR	NR
2-Chlorophenol	NS	NS	0.33 U	0.33 R	NR	0.33 U	NR	NR
2-Methylnaphthalene	NS	NS	0.33 U	2.8 R	NR	NR	9.6 D	NR
2-Methylphenol (O-Cresol)	0.33	100	0.33 U	0.05 R	NR	0.073 J	NR	NR
2-Nitroaniline	NS	NS	0.33 U	0.33 R	NR	0.33 U	NR	NR
2-Nitrophenol	NS	NS	0.33 U	0.33 R	NR	0.33 U	NR	NR
3- And 4- Methylphenol (Total)	NS	NS	0.33 U	0.12 R	NR	0.19 J	NR	NR
3,3'-Dichlorobenzidine	NS	NS	0.13 U	0.13 R	NR	0.13 U	NR	NR
3-Nitroaniline	NS	NS	0.33 U	0.33 R	NR	0.33 U	NR	NR
4,6-Dinitro-2-Methylphenol	NS	NS	0.27 U	0.27 R	NR	0.27 U	NR	NR
4-Bromophenyl Phenyl Ether	NS	NS	0.33 U	0.33 R	NR	0.33 U	NR	NR
4-Chloro-3-Methylphenol	NS	NS	0.33 U	0.33 R	NR	0.33 U	NR	NR
4-Chloroaniline	NS	NS	0.33 U	0.33 R	NR	0.33 U	NR	NR
4-Chlorophenyl Phenyl Ether	NS	NS	0.33 U	0.33 R	NR	0.33 U	NR	NR
4-Methylphenol (P-Cresol)	0.33	100	0.33 U	0.12 R	NR	0.19 J	NR	NR
4-Nitroaniline	NS	NS	0.33 U	0.33 R	NR	0.33 U	NR	NR
4-Nitrophenol	NS	NS	0.68 U	0.68 R	NR	0.68 U	NR	NR
Acenaphthene	20	100	0.33 U	4.2 R	NR	NR	12 D	NR
Acenaphthylene	100	100	0.33 U	0.64 R	NR	0.35	NR	NR
Acetophenone	NS	NS	0.33 U	0.33 R	NR	0.33 U	NR	NR
Anthracene	100	100	0.33 U	7.3 R	NR	NR	21 D	NR
Atrazine	NS	NS	0.13 U	0.13 R	NR	0.13 U	NR	NR
Benzaldehyde	NS	NS	0.33 UJ	0.33 R	NR	0.33 UJ	NR	NR
Benzo(a)Anthracene	1	1	0.033 U	NR	15 R	NR	44 D	NR
Benzo(a)Pyrene	1	1	0.033 U	NR	16 R	NR	39 D	NR
Benzo(b)Fluoranthene	1	1	0.033 U	NR	20 R	NR	49 D	NR
Benzo(g,h,i)Perylene	100	100	0.33 U	NR	12 R	NR	19 D	NR
Benzo(k)Fluoranthene	0.8	3.9	0.033 U	7.8 R	NR	NR	19 D	NR
Benzyl Butyl Phthalate	NS	NS	0.33 U	0.33 R	NR	0.33 U	NR	NR
Biphenyl (Diphenyl)	NS	NS	0.33 U	0.44 R	NR	1.5	NR	NR
Bis(2-Chloroethoxy) Methane	NS	NS	0.33 U	0.33 R	NR	0.33 U	NR	NR
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	0.033 U	0.033 R	NR	0.033 U	NR	NR
Bis(2-Chloroisopropyl) Ether	NS	NS	0.33 U	0.33 R	NR	0.33 U	NR	NR
Bis(2-Ethylhexyl) Phthalate	NS	NS	0.33 U	0.33 R	NR	0.33 U	NR	NR
Caprolactam	NS	NS	0.33 U	0.33 R	NR	0.33 U	NR	NR
Carbazole	NS	NS	0.33 U	4 R	NR	NR	8.8 D	NR
Chrysene	1	3.9	0.33 U	NR	15 R	NR	40 D	NR
Dibenz(a,h)Anthracene	0.33	0.33	0.033 U	3.9 R	NR	5.1	NR	NR
Dibenzofuran	7	59	0.33 U	2.2 R	NR	5.6	NR	NR
Diethyl Phthalate	NS	NS	0.33 U	0.33 R	NR	0.33 U	NR	NR
Dimethyl Phthalate	NS	NS	0.33 U	0.33 R	NR	0.33 U	NR	NR
Di-N-Butyl Phthalate	NS	NS	0.026 J	0.12 R	NR	0.17 J	NR	NR
Di-N-Octylphthalate	NS	NS	0.33 U	0.33 R	NR	0.33 U	NR	NR
Fluoranthene	100	100	0.33 U	NR	30 R	NR	NR	89 D
Fluorene	30	100	0.33 U	3.8 R	NR	NR	11 D	NR
Hexachlorobenzene	0.33	1.2	0.033 U	0.033 R	NR	0.033 U	NR	NR
Hexachlorobutadiene	NS	NS	0.068 U	0.068 R	NR	0.068 U	NR	NR
Hexachlorocyclopentadiene	NS	NS	0.33 U	0.33 R	NR	0.33 U	NR	NR
Hexachloroethane	NS	NS	0.033 U	0.033 R	NR	0.033 U	NR	NR
Indeno(1,2,3-c,d)Pyrene	0.5	0.5	0.033 U	NR	11 R	NR	20 D	NR
Isophorone	NS	NS	0.13 U	0.13 R	NR	0.13 U	NR	NR
Naphthalene	12	100	0.33 U	4.4 R	NR	NR	16 D	NR
Nitrobenzene	NS	NS	0.033 U	0.033 R	NR	0.033 U	NR	NR
N-Nitrosodi-N-Propylamine	NS	NS	0.033 U	0.033 R	NR	0.033 U	NR	NR
N-Nitrosodiphenylamine	NS	NS	0.33 U	0.33 R	NR	0.33 U	NR	NR
Pentachlorophenol	0.8	6.7	0.27 U	0.27 R	NR	0.27 U	NR	NR
Phenanthrene	100	100	0.33 U	NR	25 R	NR	NR	93 D
Phenol	0.33	100	0.33 U	0.33 R	NR	0.33 U	NR	NR
Pyrene	100	100	0.33 U	NR	25 R	NR	72 D	NR

**Table 2**  
**102 Bruckner Boulevard**  
**Bronx, NY**  
Remedial Investigation  
Soil Analytical Results of Semivolatile Organic Compounds (SVOCs)

Compound	AKRF Sample ID		RI-SB-06_0-2_20240822	RI-SB-07_0-2_20240821	RI-SB-07_2-4_20240821	RI-SB-08_0-2_20240821	RI-SB-08_2-4_20240821	RI-SB-09_0-2_20240821
	Laboratory Sample ID		460-310022-1	460-309960-12	460-309960-13	460-309960-14	460-309960-15	460-309960-16
	Date Sampled		8/21/2024	8/21/2024	8/21/2024	8/21/2024	8/21/2024	8/21/2024
	Unit		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Dilution Factor		1	1	1	1	1	1	
NYSDEC UUSCO		NYSDEC RRSO		CONC Q				
1,2,4,5-Tetrachlorobenzene	NS	NS	0.36 U	0.33 U				
1,4-Dioxane (P-Dioxane)	0.1	13	0.036 U	0.033 U				
2,3,4,6-Tetrachlorophenol	NS	NS	0.36 U	0.33 U				
2,4,5-Trichlorophenol	NS	NS	0.36 U	0.33 U				
2,4,6-Trichlorophenol	NS	NS	0.14 U	0.13 U				
2,4-Dichlorophenol	NS	NS	0.14 U	0.13 U				
2,4-Dimethylphenol	NS	NS	0.36 U	0.33 U				
2,4-Dinitrophenol	NS	NS	0.29 U	0.27 U				
2,4-Dinitrotoluene	NS	NS	0.073 U	0.068 U	0.067 U	0.068 U	0.067 U	0.067 U
2,6-Dinitrotoluene	NS	NS	0.073 U	0.068 U	0.067 U	0.068 U	0.067 U	0.067 U
2-Chloronaphthalene	NS	NS	0.36 U	0.33 U				
2-Chlorophenol	NS	NS	0.36 U	0.33 U				
2-Methylnaphthalene	NS	NS	0.36 U	0.33 U				
2-Methylphenol (O-Cresol)	0.33	100	0.36 U	0.33 U				
2-Nitroaniline	NS	NS	0.36 U	0.33 U				
2-Nitrophenol	NS	NS	0.36 U	0.33 U				
3- And 4- Methylphenol (Total)	NS	NS	0.36 U	0.33 U				
3,3'-Dichlorobenzidine	NS	NS	0.14 U	0.13 U				
3-Nitroaniline	NS	NS	0.36 U	0.33 U				
4,6-Dinitro-2-Methylphenol	NS	NS	0.29 U	0.27 U				
4-Bromophenyl Phenyl Ether	NS	NS	0.36 U	0.33 U				
4-Chloro-3-Methylphenol	NS	NS	0.36 U	0.33 U				
4-Chloroaniline	NS	NS	0.36 U	0.33 U				
4-Chlorophenyl Phenyl Ether	NS	NS	0.36 U	0.33 U				
4-Methylphenol (P-Cresol)	0.33	100	0.36 U	0.33 U				
4-Nitroaniline	NS	NS	0.36 U	0.33 U				
4-Nitrophenol	NS	NS	0.73 UJ	0.68 U	0.67 U	0.68 U	0.67 U	0.67 U
Acenaphthene	20	100	0.36 U	0.33 U	0.33 U	0.33 U	0.031 J	0.33 U
Acenaphthylene	100	100	0.36 U	0.012 J	0.33 U	0.33 U	0.033 J	0.33 U
Acetophenone	NS	NS	0.36 U	0.33 U				
Anthracene	100	100	0.36 U	0.028 J	0.33 U	0.018 J	0.055 J	0.33 U
Atrazine	NS	NS	0.14 U	0.13 U				
Benzaldehyde	NS	NS	0.36 UJ	0.33 UJ				
Benzo(a)Anthracene	1	1	0.036 U	0.17	0.033 U	0.14	0.47	0.033 U
Benzo(a)Pyrene	1	1	0.01 J	0.2	0.033 U	0.1	0.51	0.033 U
Benzo(b)Fluoranthene	1	1	0.014 J	0.25	0.033 U	0.14	0.57	0.033 U
Benzo(g,h,i)Perylene	100	100	0.36 U	0.18 J	0.33 U	0.072 J	0.32 J	0.33 U
Benzo(k)Fluoranthene	0.8	3.9	0.036 U	0.1	0.033 U	0.06	0.24	0.033 U
Benzyl Butyl Phthalate	NS	NS	0.36 U	0.33 U				
Biphenyl (Diphenyl)	NS	NS	0.36 U	0.33 U				
Bis(2-Chloroethoxy) Methane	NS	NS	0.36 U	0.33 U				
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	0.036 U	0.033 U				
Bis(2-Chloroisopropyl) Ether	NS	NS	0.36 U	0.33 U				
Bis(2-Ethylhexyl) Phthalate	NS	NS	0.36 U	0.33 U				
Caprolactam	NS	NS	0.36 UJ	0.33 U				
Carbazole	NS	NS	0.36 U	0.013 J	0.33 U	0.33 U	0.024 J	0.33 U
Chrysene	1	3.9	0.36 U	0.17 J	0.33 U	0.12 J	0.41	0.33 U
Dibenz(a,h)Anthracene	0.33	0.33	0.036 U	0.036	0.033 U	0.02 J	0.076	0.033 U
Dibenzofuran	7	59	0.36 U	0.33 U				
Diethyl Phthalate	NS	NS	0.36 U	0.33 U				
Dimethyl Phthalate	NS	NS	0.36 U	0.33 U				
Di-N-Butyl Phthalate	NS	NS	0.12 J	0.14 J	0.072 J	0.18 J	0.15 J	0.084 J
Di-N-Octylphthalate	NS	NS	0.36 U	0.33 U				
Fluoranthene	100	100	0.021 J	0.29 J	0.33 U	0.22 J	0.78	0.33 U
Fluorene	30	100	0.36 U	0.33 U	0.33 U	0.33 U	0.02 J	0.33 U
Hexachlorobenzene	0.33	1.2	0.036 U	0.033 U				
Hexachlorobutadiene	NS	NS	0.073 U	0.068 U	0.067 U	0.068 U	0.067 U	0.067 U
Hexachlorocyclopentadiene	NS	NS	0.36 U	0.33 U				
Hexachloroethane	NS	NS	0.036 U	0.033 U				
Indeno(1,2,3-c,d)Pyrene	0.5	0.5	0.036 U	0.15	0.033 U	0.069	0.31	0.033 U
Isophorone	NS	NS	0.14 U	0.13 U				
Naphthalene	12	100	0.36 U	0.33 U				
Nitrobenzene	NS	NS	0.036 U	0.033 U				
N-Nitrosodi-N-Propylamine	NS	NS	0.036 U	0.033 U				
N-Nitrosodiphenylamine	NS	NS	0.36 U	0.33 U				
Pentachlorophenol	0.8	6.7	0.29 U	0.27 U				
Phenanthrene	100	100	0.018 J	0.13 J	0.33 U	0.069 J	0.26 J	0.33 U
Phenol	0.33	100	0.36 U	0.33 U				
Pyrene	100	100	0.015 J	0.27 J	0.33 U	0.26 J	0.86	0.33 U

**Table 2**  
**102 Bruckner Boulevard**  
**Bronx, NY**

Remedial Investigation  
 Soil Analytical Results of Semivolatile Organic Compounds (SVOCs)

Compound	AKRF Sample ID		RI-SB-09_3-5_20240821	RI-SB-09_7-9_20240821	RI-SB-10_0.5-2.5_20240822	FB-01_20240821
	Laboratory Sample ID		460-309960-17	460-309960-18	460-310022-2	460-309960-20
	Date Sampled		8/21/2024	8/21/2024	8/22/2024	8/21/2024
	Unit		mg/kg	mg/kg	mg/kg	mg/kg
Dilution Factor		1	1	1	1	
	NYSDEC UUSCO	NYSDEC RRSO	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS	0.33 U	0.33 U	0.36 U	10 U
1,4-Dioxane (P-Dioxane)	0.1	13	0.033 U	0.033 U	0.036 U	0.2 U
2,3,4,6-Tetrachlorophenol	NS	NS	0.33 U	0.33 U	0.36 U	10 U
2,4,5-Trichlorophenol	NS	NS	0.33 U	0.33 U	0.36 U	10 U
2,4,6-Trichlorophenol	NS	NS	0.13 U	0.13 U	0.14 U	10 U
2,4-Dichlorophenol	NS	NS	0.13 U	0.13 U	0.14 U	10 U
2,4-Dimethylphenol	NS	NS	0.33 U	0.33 U	0.36 U	10 U
2,4-Dinitrophenol	NS	NS	0.27 U	0.27 U	0.29 U	40 UJ
2,4-Dinitrotoluene	NS	NS	0.067 U	0.067 U	0.072 U	10 UJ
2,6-Dinitrotoluene	NS	NS	0.067 U	0.067 U	0.072 U	2 U
2-Chloronaphthalene	NS	NS	0.33 U	0.33 U	0.36 U	10 U
2-Chlorophenol	NS	NS	0.33 U	0.33 U	0.36 U	10 U
2-Methylnaphthalene	NS	NS	0.33 U	0.33 U	0.36 U	10 U
2-Methylphenol (O-Cresol)	0.33	100	0.33 U	0.33 U	0.36 U	10 U
2-Nitroaniline	NS	NS	0.33 U	0.33 U	0.36 U	10 U
2-Nitrophenol	NS	NS	0.33 U	0.33 U	0.36 U	10 U
3- And 4- Methylphenol (Total)	NS	NS	0.33 U	0.33 U	0.36 U	10 U
3,3'-Dichlorobenzidine	NS	NS	0.13 U	0.13 U	0.14 U	10 U
3-Nitroaniline	NS	NS	0.33 U	0.33 U	0.36 U	10 U
4,6-Dinitro-2-Methylphenol	NS	NS	0.27 U	0.27 U	0.29 U	20 U
4-Bromophenyl Phenyl Ether	NS	NS	0.33 U	0.33 U	0.36 U	10 U
4-Chloro-3-Methylphenol	NS	NS	0.33 U	0.33 U	0.36 U	10 U
4-Chloroaniline	NS	NS	0.33 U	0.33 U	0.36 U	10 U
4-Chlorophenyl Phenyl Ether	NS	NS	0.33 U	0.33 U	0.36 U	10 U
4-Methylphenol (P-Cresol)	0.33	100	0.33 U	0.33 U	0.36 U	10 U
4-Nitroaniline	NS	NS	0.33 U	0.33 U	0.36 U	10 U
4-Nitrophenol	NS	NS	0.67 U	0.67 U	0.72 UJ	20 UJ
Acenaphthene	20	100	0.33 U	0.035 J	0.36 U	10 U
Acenaphthylene	100	100	0.33 U	0.33 U	0.36 U	10 U
Acetophenone	NS	NS	0.33 U	0.33 U	0.36 U	10 U
Anthracene	100	100	0.33 U	0.082 J	0.36 U	10 U
Atrazine	NS	NS	0.13 U	0.13 U	0.14 U	2 U
Benzaldehyde	NS	NS	0.33 UJ	0.33 UJ	0.36 UJ	10 UJ
Benzo(a)Anthracene	1	1	0.033 U	0.35	0.036 U	1 U
Benzo(a)Pyrene	1	1	0.033 U	0.33	0.036 U	1 U
Benzo(b)Fluoranthene	1	1	0.033 U	0.4	0.036 U	2 U
Benzo(g,h,i)Perylene	100	100	0.33 U	0.21 J	0.36 U	10 U
Benzo(k)Fluoranthene	0.8	3.9	0.033 U	0.17	0.036 U	1 U
Benzyl Butyl Phthalate	NS	NS	0.33 U	0.33 U	0.36 U	10 U
Biphenyl (Diphenyl)	NS	NS	0.33 U	0.33 U	0.36 U	10 U
Bis(2-Chloroethoxy) Methane	NS	NS	0.33 U	0.33 U	0.36 U	10 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	0.033 U	0.033 U	0.036 U	1 U
Bis(2-Chloroisopropyl) Ether	NS	NS	0.33 U	0.33 U	0.36 U	10 U
Bis(2-Ethylhexyl) Phthalate	NS	NS	0.33 U	0.33 U	0.36 U	2 U
Caprolactam	NS	NS	0.33 U	0.33 U	0.36 UJ	10 UJ
Carbazole	NS	NS	0.33 U	0.024 J	0.36 U	10 U
Chrysene	1	3.9	0.33 U	0.34	0.36 U	2 U
Dibenz(a,h)Anthracene	0.33	0.33	0.033 U	0.056	0.036 U	1 U
Dibenzofuran	7	59	0.33 U	0.33 U	0.36 U	10 U
Diethyl Phthalate	NS	NS	0.33 U	0.33 U	0.36 U	10 U
Dimethyl Phthalate	NS	NS	0.33 U	0.33 U	0.36 U	10 U
Di-N-Butyl Phthalate	NS	NS	0.098 J	0.2 J	0.075 J	10 U
Di-N-Octylphthalate	NS	NS	0.33 U	0.33 U	0.36 U	10 U
Fluoranthene	100	100	0.33 U	0.63	0.014 J	10 U
Fluorene	30	100	0.33 U	0.024 J	0.36 U	10 U
Hexachlorobenzene	0.33	1.2	0.033 U	0.033 U	0.036 U	1 U
Hexachlorobutadiene	NS	NS	0.067 U	0.067 U	0.072 U	1 U
Hexachlorocyclopentadiene	NS	NS	0.33 U	0.33 U	0.36 U	10 U
Hexachloroethane	NS	NS	0.033 U	0.033 U	0.036 U	2 U
Indeno(1,2,3-c,d)Pyrene	0.5	0.5	0.033 U	0.21	0.036 U	2 U
Isophorone	NS	NS	0.13 U	0.13 U	0.14 U	10 U
Naphthalene	12	100	0.33 U	0.33 U	0.36 U	2 U
Nitrobenzene	NS	NS	0.033 U	0.033 U	0.036 U	1 U
N-Nitrosodi-N-Propylamine	NS	NS	0.033 U	0.033 U	0.036 U	1 U
N-Nitrosodiphenylamine	NS	NS	0.33 U	0.33 U	0.36 U	10 U
Pentachlorophenol	0.8	6.7	0.27 U	0.27 U	0.29 U	20 U
Phenanthrene	100	100	0.33 U	0.33	0.36 U	10 U
Phenol	0.33	100	0.33 U	0.33 U	0.36 U	10 U
Pyrene	100	100	0.33 U	0.58	0.013 J	10 U

**Table 3**  
**102 Bruckner Boulevard**  
**Bronx, NY**  
Remedial Investigation  
Soil Analytical Results of Metals

Compound	AKRF Sample ID		RI-SB-01_0-2_20240821	RI-SB-01_0-2_20240821	RI-SB-01_2-4_20240821	RI-SB-02_0-1_20240821	RI-SB-03_0-2_20240821
	NYSDEC UUSCO	NYSDEC RRSCO	460-309960-4	460-309960-4	460-309960-5	460-309960-6	460-309960-7
	Date Sampled	Date Sampled	8/21/2024	8/21/2024	8/21/2024	8/21/2024	8/21/2024
	Unit	Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	Dilution Factor	Dilution Factor	1	3	1	1	1
	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	15,900	NR	13,700	12,100	5,370
Antimony	NS	NS	2.1	NR	0.36 J	1.3	0.31 J
Arsenic	13	16	3.4	NR	2.2	10	2.9
Barium	350	400	560	NR	252	119	38.3
Beryllium	7.2	72	0.2 J	NR	0.29 J	0.37	0.23 J
Cadmium	2.5	4.3	0.29 J	NR	0.14 J	0.22 J	0.21 J
Calcium	NS	NS	8,800	NR	7,510	9,260	3,330
Chromium, Hexavalent	1	110	2 U	NR	2 U	2 U	2 U
Chromium, Total	NS	NS	17.9	NR	34.3	27.5	14.9
Cobalt	NS	NS	20.7	NR	12.1	10.4	5
Copper	50	270	36.9	NR	30.1	44.5	17.8
Cyanide	27	27	0.2 U	NR	0.2 U	0.24 U	0.21 U
Iron	NS	NS	34,600	NR	24,900	17,200	14,100
Lead	63	400	64.9	NR	38.6	113	44.6
Magnesium	NS	NS	13,000	NR	8,810	7,880	1,790
Manganese	1,600	2,000	281	NR	236	153	248
Mercury	0.18	0.81	NR	1.9	0.13	0.16	0.093
Nickel	30	310	13.1	NR	22.8	20.2	12.8
Potassium	NS	NS	7,300	NR	5,750	3,190	776
Selenium	3.9	180	0.56 J	NR	0.21 J	0.56 J	0.17 J
Silver	2	180	0.097 J	NR	0.31 U	0.084 J	0.3 U
Sodium	NS	NS	430	NR	511	391	170
Thallium	NS	NS	0.38	NR	0.24 J	0.21 J	0.071 J
Vanadium	NS	NS	101	NR	50	39.4	20.7
Zinc	109	10,000	138	NR	97.5	135	51

**Table 3**  
**102 Bruckner Boulevard**  
**Bronx, NY**  
Remedial Investigation  
Soil Analytical Results of Metals

AKRF Sample ID Laboratory Sample ID Date Sampled Unit Dilution Factor		RI-SB-03_2-4_20240821 460-309960-8 8/21/2024 mg/kg 1	RI-SB-04_1-2_20240821 460-309960-9 8/21/2024 mg/kg 1	RI-SB-05_0-2_20240821 460-309960-10 8/21/2024 mg/kg 1	RI-SB-X_0-2_20240821 460-309960-19 8/21/2024 mg/kg 1	RI-SB-05_3-5_20240821 460-309960-11 8/21/2024 mg/kg 1
Compound	NYSDEC UUSCO	NYSDEC RRSCO	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	4,390	15,400	12,600	18,900
Antimony	NS	NS	0.25 J	0.2 J	3.3 J	1.5 J
Arsenic	13	16	2.2	1.9	22.4 JK	8.6 J
Barium	350	400	29.7	240	438	548
Beryllium	7.2	72	0.18 J	0.25 J	1.1	0.51
Cadmium	2.5	4.3	0.09 J	0.13 J	1.7	0.88
Calcium	NS	NS	2,620	6,200	25,100	15,800
Chromium, Hexavalent	1	110	2 U	2 U	2 U	1.9 U
Chromium, Total	NS	NS	12.3	55.6	39.9	65.7
Cobalt	NS	NS	3.4	13.3	10.4 JL	14.8
Copper	50	270	13.3	20.7	284	161
Cyanide	27	27	0.24	0.22 U	0.92	0.48
Iron	NS	NS	9,560	28,000	37,300	36,900
Lead	63	400	31	31.3	501	285
Magnesium	NS	NS	1,350	10,400	9,910	12,300
Manganese	1,600	2,000	144	278	535	443
Mercury	0.18	0.81	0.071	0.11	0.39	0.29
Nickel	30	310	9.1	25.8	27.7 JL	30.2
Potassium	NS	NS	632	6,060	2,930 J	10,200 J
Selenium	3.9	180	0.15 J	0.17 J	2 J	0.88 J
Silver	2	180	0.31 U	0.32 U	0.89 J	0.35 J
Sodium	NS	NS	138	182	531 JK	323
Thallium	NS	NS	0.053 J	0.28 J	0.44 JL	0.45
Vanadium	NS	NS	13.9	62.5	52.9	75.6
Zinc	109	10,000	38.2	101	632 J	316 J

**Table 3**  
**102 Bruckner Boulevard**  
**Bronx, NY**  
Remedial Investigation  
Soil Analytical Results of Metals

AKRF Sample ID Laboratory Sample ID Date Sampled Unit Dilution Factor		RI-SB-06_0-2_20240822 460-310022-1 8/21/2024 mg/kg 1	RI-SB-07_0-2_20240821 460-309960-12 8/21/2024 mg/kg 1	RI-SB-07_2-4_20240821 460-309960-13 8/21/2024 mg/kg 1	RI-SB-08_0-2_20240821 460-309960-14 8/21/2024 mg/kg 1	RI-SB-08_2-4_20240821 460-309960-15 8/21/2024 mg/kg 1	
Compound	NYSDEC UUSCO	NYSDEC RRSCO	CONC Q	CONC Q	CONC Q	CONC Q	
Aluminum	NS	NS	17,300	8,460	8,710	5,430	9,150
Antimony	NS	NS	0.28 J	0.89	0.77 U	0.25 J	0.63 J
Arsenic	13	16	0.96	4.9	0.47 J	1.8	4
Barium	350	400	341	231	45.3	50.2	56.2
Beryllium	7.2	72	0.21 J	0.37	0.1 J	0.2 J	0.34
Cadmium	2.5	4.3	0.11 J	0.28 J	0.77 U	0.8 U	0.36 J
Calcium	NS	NS	6,010	15,600	1,700	31,000	11,600
Chromium, Hexavalent	1	110	2.1 U	2 U	2 U	2 U	2 U
Chromium, Total	NS	NS	53	22.3	6.7	10.3	18.1
Cobalt	NS	NS	16	9.2	6.6	3.8	7.8
Copper	50	270	14.6	42.5	24.4	18.1	26.7
Cyanide	27	27	0.22 U	0.17 J	0.24 U	0.17 J	0.24 U
Iron	NS	NS	28,300	19,100	17,500	8,460	18,000
Lead	63	400	8.9	200	1.6	30.7	69.8
Magnesium	NS	NS	12,300	4,750	4,680	5,140	4,700
Manganese	1,600	2,000	264	298	189	130	301
Mercury	0.18	0.81	0.024	0.16	0.017 U	0.11	0.074
Nickel	30	310	26.7	15.9	4	8.4	14.3
Potassium	NS	NS	8,690	1,750	3,130	1,330	1,330
Selenium	3.9	180	1.1 U	0.39 J	0.96 U	1 U	0.28 J
Silver	2	180	0.34 U	0.13 J	0.31 U	0.32 U	0.32 U
Sodium	NS	NS	329	203	98.5	123	165
Thallium	NS	NS	0.26 J	0.15 J	0.081 J	0.068 J	0.098 J
Vanadium	NS	NS	63.1	37.5	29.2	15.5	31.1
Zinc	109	10,000	69.9	124	31.5	39	88.1

**Table 3**  
**102 Bruckner Boulevard**  
**Bronx, NY**  
Remedial Investigation  
Soil Analytical Results of Metals

AKRF Sample ID Laboratory Sample ID Date Sampled Unit Dilution Factor			RI-SB-09_0-2_20240821 460-309960-16 8/21/2024 mg/kg 1	RI-SB-09_3-5_20240821 460-309960-17 8/21/2024 mg/kg 1	RI-SB-09_7-9_20240821 460-309960-18 8/21/2024 mg/kg 1	RI-SB-10_0.5-2.5_20240822 460-310022-2 8/22/2024 mg/kg 1	FB-01_20240821 460-309960-20 8/21/2024 mg/kg 1
Compound	NYSDEC UUSCO	NYSDEC RRSCO	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	7,240	6,760	9,830	13,400	40 U
Antimony	NS	NS	0.74 U	0.79 U	0.62 J	0.19 J	2 U
Arsenic	13	16	0.79	0.8	5.2	3	2 U
Barium	350	400	37.3	40.5	98.1	77.8	4 U
Beryllium	7.2	72	0.29 J	0.24 J	0.34	0.41	0.8 U
Cadmium	2.5	4.3	0.74 U	0.79 U	0.24 J	0.85 U	2 U
Calcium	NS	NS	46,500	47,200	8,240	1,560	500 U
Chromium, Hexavalent	1	110	2 U	1.9 U	2 U	2.1 U	10 U
Chromium, Total	NS	NS	13.5	17.2	24.2	20.6	4 U
Cobalt	NS	NS	5.6	6.3	8.8	7.9	4 U
Copper	50	270	12.1	11.5	49.1	11.5	4 U
Cyanide	27	27	0.24 U	0.2 U	0.21 U	0.24 U	0.01 U
Iron	NS	NS	11,700	13,100	19,800	18,100	120 U
Lead	63	400	3.2	3.7	158	17	1.2 U
Magnesium	NS	NS	30,500	29,900	5,420	4,110	200 U
Manganese	1,600	2,000	264	277	252	358	8 U
Mercury	0.18	0.81	0.016 U	0.015 U	0.32	0.053	0.2 U
Nickel	30	310	10.7	11.8	18.9	13.7	4 U
Potassium	NS	NS	1,280	1,410	3,710	1,410	200 U
Selenium	3.9	180	0.93 U	0.99 U	0.39 J	0.19 J	2.5 U
Silver	2	180	0.3 U	0.32 U	0.09 J	0.56	2 U
Sodium	NS	NS	250	301	244	130	500 U
Thallium	NS	NS	0.11 J	0.13 J	0.23 J	0.1 J	0.8 U
Vanadium	NS	NS	21.5	25.1	51.3	27.8	4 U
Zinc	109	10,000	36.7	38.4	120	53.8	16 U

**Table 4**  
**102 Bruckner Boulevard**  
**Bronx, NY**

Remedial Investigation  
Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

AKRF Sample ID Laboratory Sample ID Date Sampled Unit Dilution Factor			RI-SB-01_0-2_20240821 460-309960-4 8/21/2024 mg/kg 1	RI-SB-01_2-4_20240821 460-309960-5 8/21/2024 mg/kg 1	RI-SB-02_0-1_20240821 460-309960-6 8/21/2024 mg/kg 1	RI-SB-03_0-2_20240821 460-309960-7 8/21/2024 mg/kg 1	RI-SB-03_2-4_20240821 460-309960-8 8/21/2024 mg/kg 1
Compound	NYSDEC UUSCO	NYSDEC RRSCO	CONC Q				
PCB-1016 (Aroclor 1016)	NS	NS	0.068 U	0.067 U	0.067 U	0.067 U	0.067 U
PCB-1221 (Aroclor 1221)	NS	NS	0.068 U	0.067 U	0.067 U	0.067 U	0.067 U
PCB-1232 (Aroclor 1232)	NS	NS	0.068 U	0.067 U	0.067 U	0.067 U	0.067 U
PCB-1242 (Aroclor 1242)	NS	NS	0.068 U	0.067 U	0.067 U	0.067 U	0.067 U
PCB-1248 (Aroclor 1248)	NS	NS	0.068 U	0.067 U	0.067 U	0.067 U	0.067 U
PCB-1254 (Aroclor 1254)	NS	NS	0.068 U	0.067 U	0.067 U	0.067 U	0.067 U
PCB-1260 (Aroclor 1260)	NS	NS	0.068 U	0.067 U	0.067 U	0.067 U	0.067 U
PCB-1262 (Aroclor 1262)	NS	NS	0.068 U	0.067 U	0.067 U	0.067 U	0.067 U
PCB-1268 (Aroclor 1268)	NS	NS	0.068 U	0.067 U	0.067 U	0.067 U	0.067 U
Total PCBs	0.1	1	0.068 U	0.067 U	0.067 U	0.067 U	0.067 U

**Table 4**  
**102 Bruckner Boulevard**  
**Bronx, NY**

Remedial Investigation  
Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

AKRF Sample ID Laboratory Sample ID Date Sampled Unit Dilution Factor			RI-SB-04_1-2_20240821 460-309960-9 8/21/2024 mg/kg 1	RI-SB-05_0-2_20240821 460-309960-10 8/21/2024 mg/kg 1	RI-SB-X_0-2_20240821 460-309960-19 8/21/2024 mg/kg 1	RI-SB-05_3-5_20240821 460-309960-11 8/21/2024 mg/kg 1	RI-SB-06_0-2_20240822 460-310022-1 8/21/2024 mg/kg 1
Compound	NYSDEC UUSCO	NYSDEC RRSCO	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	0.067 U	0.068 U	0.067 U	0.068 U	0.073 U
PCB-1221 (Aroclor 1221)	NS	NS	0.067 U	0.068 U	0.067 U	0.068 U	0.073 U
PCB-1232 (Aroclor 1232)	NS	NS	0.067 U	0.068 U	0.067 U	0.068 U	0.073 U
PCB-1242 (Aroclor 1242)	NS	NS	0.067 U	0.068 U	0.067 U	0.068 U	0.073 U
PCB-1248 (Aroclor 1248)	NS	NS	0.067 U	0.068 U	0.067 U	0.068 U	0.073 U
PCB-1254 (Aroclor 1254)	NS	NS	0.067 U	0.068 U	0.067 U	0.068 U	0.073 U
PCB-1260 (Aroclor 1260)	NS	NS	0.067 U	0.068 U	0.067 U	0.068 U	0.073 U
PCB-1262 (Aroclor 1262)	NS	NS	0.067 U	0.068 U	0.067 U	0.068 U	0.073 U
PCB-1268 (Aroclor 1268)	NS	NS	0.067 U	0.068 U	0.067 U	0.068 U	0.073 U
Total PCBs	0.1	1	0.067 U	0.068 U	0.067 U	0.068 U	0.073 U

**Table 4**  
**102 Bruckner Boulevard**  
**Bronx, NY**

Remedial Investigation  
Soil Analytical Results of Polychlorinated Biphenyls (PCBs)

AKRF Sample ID			RI-SB-07_0-2_20240821	RI-SB-07_2-4_20240821	RI-SB-08_0-2_20240821	RI-SB-08_2-4_20240821	RI-SB-09_0-2_20240821
Laboratory Sample ID			460-309960-12	460-309960-13	460-309960-14	460-309960-15	460-309960-16
Date Sampled			8/21/2024	8/21/2024	8/21/2024	8/21/2024	8/21/2024
Unit			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Dilution Factor			1	1	1	1	1
Compound	NYSDEC UUSCO	NYSDEC RRSCO	CONC Q				
PCB-1016 (Aroclor 1016)	NS	NS	0.068 U	0.068 U	0.068 U	0.067 U	0.067 U
PCB-1221 (Aroclor 1221)	NS	NS	0.068 U	0.068 U	0.068 U	0.067 U	0.067 U
PCB-1232 (Aroclor 1232)	NS	NS	0.068 U	0.068 U	0.068 U	0.067 U	0.067 U
PCB-1242 (Aroclor 1242)	NS	NS	0.068 U	0.068 U	0.068 U	0.067 U	0.067 U
PCB-1248 (Aroclor 1248)	NS	NS	0.068 U	0.068 U	0.068 U	0.067 U	0.067 U
PCB-1254 (Aroclor 1254)	NS	NS	0.068 U	0.068 U	0.068 U	0.067 U	0.067 U
PCB-1260 (Aroclor 1260)	NS	NS	0.068 U	0.068 U	0.068 U	0.067 U	0.067 U
PCB-1262 (Aroclor 1262)	NS	NS	0.068 U	0.068 U	0.068 U	0.067 U	0.067 U
PCB-1268 (Aroclor 1268)	NS	NS	0.068 U	0.068 U	0.068 U	0.067 U	0.067 U
Total PCBs	0.1	1	0.068 U	0.068 U	0.068 U	0.067 U	0.067 U

**Table 4**  
**102 Bruckner Boulevard**  
**Bronx, NY**

Remedial Investigation  
*Soil Analytical Results of Polychlorinated Biphenyls (PCBs)*

AKRF Sample ID Laboratory Sample ID Date Sampled Unit Dilution Factor			RI-SB-09_3-5_20240821 460-309960-17 8/21/2024 mg/kg 1	RI-SB-09_7-9_20240821 460-309960-18 8/21/2024 mg/kg 1	RI-SB-10_0.5-2.5_20240822 460-310022-2 8/22/2024 mg/kg 1	FB-01_20240821 460-309960-20 8/21/2024 mg/kg 1
Compound	NYSDEC UUSCO	NYSDEC RRSCO	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	0.067 U	0.067 U	0.072 U	0.4 U
PCB-1221 (Aroclor 1221)	NS	NS	0.067 U	0.067 U	0.072 U	0.4 U
PCB-1232 (Aroclor 1232)	NS	NS	0.067 U	0.067 U	0.072 U	0.4 U
PCB-1242 (Aroclor 1242)	NS	NS	0.067 U	0.067 U	0.072 U	0.4 U
PCB-1248 (Aroclor 1248)	NS	NS	0.067 U	0.067 U	0.072 U	0.4 U
PCB-1254 (Aroclor 1254)	NS	NS	0.067 U	0.067 U	0.072 U	0.4 U
PCB-1260 (Aroclor 1260)	NS	NS	0.067 U	0.067 U	0.072 U	0.4 U
PCB-1262 (Aroclor 1262)	NS	NS	0.067 U	0.067 U	0.072 U	0.4 U
PCB-1268 (Aroclor 1268)	NS	NS	0.067 U	0.067 U	0.072 U	0.4 U
Total PCBs	0.1	1	0.067 U	0.067 U	0.072 U	0.4 U

**Table 5**  
**102 Bruckner Boulevard**  
**Bronx, NY**  
Remedial Investigation  
Soil Analytical Results of Pesticides

	<b>AKRF Sample ID</b>	RI-SB-01_0-2_20240821	RI-SB-01_2-4_20240821	RI-SB-02_0-1_20240821	RI-SB-03_0-2_20240821	RI-SB-03_2-4_20240821
	<b>Laboratory Sample ID</b>	460-309960-4	460-309960-5	460-309960-6	460-309960-7	460-309960-8
	<b>Date Sampled</b>	8/21/2024	8/21/2024	8/21/2024	8/21/2024	8/21/2024
	<b>Unit</b>	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	<b>Dilution Factor</b>	1	1	1	1	1
<b>Compound</b>	<b>NYSDEC UUSCO</b>	<b>NYSDEC RRSCO</b>	<b>CONC Q</b>	<b>CONC Q</b>	<b>CONC Q</b>	<b>CONC Q</b>
Aldrin	0.005	0.097	0.0068 U	0.0067 U	0.0067 U	0.0067 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.002 U	0.002 U	0.002 U	0.002 U
Alpha Endosulfan	NS	NS	0.0068 U	0.0067 U	0.0067 U	0.0067 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.002 U	0.002 U	0.002 U	0.002 U
Beta Endosulfan	NS	NS	0.0068 U	0.0067 U	0.0067 U	0.0067 U
cis-Chlordane	0.094	4.2	0.0068 U	0.0067 U	0.0067 U	0.0067 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.002 U	0.002 U	0.002 U	0.002 U
Dieldrin	0.005	0.2	0.002 U	0.002 U	0.002 U	0.002 U
Endosulfan Sulfate	NS	NS	0.0068 U	0.0067 U	0.0067 U	0.0067 U
Endosulfans ABS	2.4	24	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.0068 U	0.0067 U	0.0067 U	0.0067 U
Endrin Aldehyde	NS	NS	0.0068 U	0.0067 U	0.0067 U	0.0067 U
Endrin Ketone	NS	NS	0.0068 U	0.0067 U	0.0067 U	0.0067 U
Gamma Bhc (Lindane)	0.1	1.3	0.002 U	0.002 U	0.002 U	0.002 U
Heptachlor	0.042	2.1	0.0068 U	0.0067 U	0.0067 U	0.0067 U
Heptachlor Epoxide	NS	NS	0.0068 U	0.0067 U	0.0067 U	0.0067 U
Methoxychlor	NS	NS	0.0068 U	0.0067 U	0.0067 U	0.0067 U
P,P'-DDD	0.0033	13	0.0068 U	0.0067 U	0.0067 U	0.0067 U
P,P'-DDE	0.0033	8.9	0.0068 U	0.0067 U	0.0067 U	0.0067 U
P,P'-DDT	0.0033	7.9	0.0068 U	0.0067 U	0.0067 U	0.0067 U
Toxaphene	NS	NS	0.068 U	0.067 U	0.067 U	0.067 U

**Table 5**  
**102 Bruckner Boulevard**  
**Bronx, NY**  
Remedial Investigation  
Soil Analytical Results of Pesticides

	<b>AKRF Sample ID</b>	<b>RI-SB-04_1-2_20240821</b>	<b>RI-SB-05_0-2_20240821</b>	<b>RI-SB-X_0-2_20240821</b>	<b>RI-SB-05_3-5_20240821</b>	<b>RI-SB-06_0-2_20240822</b>	
	<b>Laboratory Sample ID</b>	460-309960-9	460-309960-10	460-309960-19	460-309960-11	460-310022-1	
	<b>Date Sampled</b>	8/21/2024	8/21/2024	8/21/2024	8/21/2024	8/21/2024	
	<b>Unit</b>	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
	<b>Dilution Factor</b>	1	1	1	1	1	
<b>Compound</b>	<b>NYSDEC UUSCO</b>	<b>NYSDEC RRSCO</b>	<b>CONC Q</b>	<b>CONC Q</b>	<b>CONC Q</b>	<b>CONC Q</b>	
Aldrin	0.005	0.097	0.0067 U	0.0068 U	0.0067 U	0.0068 U	0.0073 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.002 U	0.002 U	0.002 U	0.002 U	0.0022 U
Alpha Endosulfan	NS	NS	0.0067 U	0.0068 U	0.0067 U	0.0068 U	0.0073 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.002 U	0.002 U	0.002 U	0.002 U	0.0022 U
Beta Endosulfan	NS	NS	0.0067 U	0.0068 U	0.0067 U	0.0068 U	0.0073 U
cis-Chlordane	0.094	4.2	0.0067 U	0.0068 U	0.0067 U	0.0068 U	0.0073 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.002 U	0.002 U	0.002 U	0.002 U	0.0022 U
Dieldrin	0.005	0.2	0.002 U	0.002 U	0.002 U	0.002 U	0.0022 U
Endosulfan Sulfate	NS	NS	0.0067 U	0.0068 U	0.0067 U	0.0068 U	0.0073 U
Endosulfans ABS	2.4	24	0 U	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.0067 U	0.0068 U	0.0067 U	0.0068 U	0.0073 U
Endrin Aldehyde	NS	NS	0.0067 U	0.0068 U	0.0067 U	0.0068 U	0.0073 U
Endrin Ketone	NS	NS	0.0067 U	0.0068 U	0.0067 U	0.0068 U	0.0073 U
Gamma Bhc (Lindane)	0.1	1.3	0.002 U	0.002 U	0.002 U	0.002 U	0.0022 U
Heptachlor	0.042	2.1	0.0067 U	0.0068 U	0.0067 U	0.0068 U	0.0073 U
Heptachlor Epoxide	NS	NS	0.0067 U	0.0068 U	0.0067 U	0.0068 U	0.0073 U
Methoxychlor	NS	NS	0.0067 U	0.0068 U	0.0067 U	0.0068 U	0.0073 U
P,P'-DDD	0.0033	13	0.0067 U	0.0068 U	0.0067 U	0.0068 U	0.0073 U
P,P'-DDE	0.0033	8.9	0.0067 U	0.0068 U	0.0067 U	0.0068 U	0.0073 U
P,P'-DDT	0.0033	7.9	0.0067 U	0.0068 U	0.0067 U	0.0068 U	0.0073 U
Toxaphene	NS	NS	0.067 U	0.068 U	0.067 U	0.068 U	0.073 U

**Table 5**  
**102 Bruckner Boulevard**  
**Bronx, NY**  
Remedial Investigation  
Soil Analytical Results of Pesticides

	AKRF Sample ID		RI-SB-07_0-2_20240821	RI-SB-07_2-4_20240821	RI-SB-08_0-2_20240821	RI-SB-08_2-4_20240821	RI-SB-09_0-2_20240821
	Laboratory Sample ID		460-309960-12	460-309960-13	460-309960-14	460-309960-15	460-309960-16
	Date Sampled		8/21/2024	8/21/2024	8/21/2024	8/21/2024	8/21/2024
	Unit		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	Dilution Factor		1	1	1	1	1
Compound	NYSDEC UUSCO	NYSDEC RRSCO	CONC Q				
Aldrin	0.005	0.097	0.0068 U	0.0068 U	0.0068 U	0.0067 U	0.0067 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.002 U				
Alpha Endosulfan	NS	NS	0.0068 U	0.0068 U	0.0068 U	0.0067 U	0.0067 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.002 U				
Beta Endosulfan	NS	NS	0.0068 U	0.0068 U	0.0068 U	0.0067 U	0.0067 U
cis-Chlordane	0.094	4.2	0.0068 U	0.0068 U	0.0068 U	0.0067 U	0.0067 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.002 U				
Dieldrin	0.005	0.2	0.002 U				
Endosulfan Sulfate	NS	NS	0.0068 U	0.0068 U	0.0068 U	0.0067 U	0.0067 U
Endosulfans ABS	2.4	24	0 U	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.0068 U	0.0068 U	0.0068 U	0.0067 U	0.0067 U
Endrin Aldehyde	NS	NS	0.0068 U	0.0068 U	0.0068 U	0.0067 U	0.0067 U
Endrin Ketone	NS	NS	0.0068 U	0.0068 U	0.0068 U	0.0067 U	0.0067 U
Gamma Bhc (Lindane)	0.1	1.3	0.002 U				
Heptachlor	0.042	2.1	0.0068 U	0.0068 U	0.0068 U	0.0067 U	0.0067 U
Heptachlor Epoxide	NS	NS	0.0068 U	0.0068 U	0.0068 U	0.0067 U	0.0067 U
Methoxychlor	NS	NS	0.0068 U	0.0068 U	0.0068 U	0.0067 U	0.0067 U
P,P'-DDD	0.0033	13	0.0068 U	0.0068 U	0.0068 U	0.0067 U	0.0067 U
P,P'-DDE	0.0033	8.9	0.0068 U	0.0068 U	0.0068 U	0.0067 U	0.0067 U
P,P'-DDT	0.0033	7.9	0.0068 U	0.0068 U	0.0068 U	0.0067 U	0.0067 U
Toxaphene	NS	NS	0.068 U	0.068 U	0.068 U	0.067 U	0.067 U

**Table 5**  
**102 Bruckner Boulevard**  
**Bronx, NY**  
Remedial Investigation  
Soil Analytical Results of Pesticides

	AKRF Sample ID		RI-SB-09_3-5_20240821	RI-SB-09_7-9_20240821	RI-SB-10_0.5-2.5_20240822	FB-01_20240821
	Laboratory Sample ID		460-309960-17	460-309960-18	460-310022-2	460-309960-20
	Date Sampled		8/21/2024	8/21/2024	8/22/2024	8/21/2024
	Unit		mg/kg	mg/kg	mg/kg	mg/kg
	Dilution Factor		1	1	1	1
Compound	NYSDEC UUSCO	NYSDEC RRSCO	CONC Q	CONC Q	CONC Q	CONC Q
Aldrin	0.005	0.097	0.0067 U	0.0067 U	0.0072 U	0.02 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.002 U	0.002 U	0.0022 U	0.02 U
Alpha Endosulfan	NS	NS	0.0067 U	0.0067 U	0.0072 U	0.02 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.002 U	0.002 U	0.0022 U	0.02 U
Beta Endosulfan	NS	NS	0.0067 U	0.0067 U	0.0072 U	0.02 U
cis-Chlordane	0.094	4.2	0.0067 U	0.0067 U	0.0072 U	0.02 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.002 U	0.002 U	0.0022 U	0.02 U
Dieldrin	0.005	0.2	0.002 U	0.002 U	0.0022 U	0.02 U
Endosulfan Sulfate	NS	NS	0.0067 U	0.0067 U	0.0072 U	0.02 U
Endosulfans ABS	2.4	24	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.0067 U	0.0067 U	0.0072 U	0.02 U
Endrin Aldehyde	NS	NS	0.0067 U	0.0067 U	0.0072 U	0.02 U
Endrin Ketone	NS	NS	0.0067 U	0.0067 U	0.0072 U	0.02 U
Gamma Bhc (Lindane)	0.1	1.3	0.002 U	0.002 U	0.0022 U	0.02 U
Heptachlor	0.042	2.1	0.0067 U	0.0067 U	0.0072 U	0.02 U
Heptachlor Epoxide	NS	NS	0.0067 U	0.0067 U	0.0072 U	0.02 U
Methoxychlor	NS	NS	0.0067 U	0.0067 U	0.0072 U	0.02 U
P,P'-DDD	0.0033	13	0.0067 U	0.0067 U	0.0072 U	0.02 U
P,P'-DDE	0.0033	8.9	0.0067 U	0.0067 U	0.0072 U	0.02 U
P,P'-DDT	0.0033	7.9	0.0067 U	0.0067 U	0.0072 U	0.02 U
Toxaphene	NS	NS	0.067 U	0.067 U	0.072 U	0.5 U

**Table 6**  
**102 Bruckner Boulevard**

Bronx, NY

Remedial Investigation

Soil Analytical Results of Per- and Polyfluoroalkyl Substances (PFAS)

Compound	AKRF Sample ID		RI-SB-01_0-2_20240821	RI-SB-01_2-4_20240821	RI-SB-02_0-1_20240821	RI-SB-03_0-2_20240821	RI-SB-03_2-4_20240821
	NYSDEC UUGV	NYSDEC RRGV	CONC Q				
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	NS	NS	0.85 U	0.71 U	0.79 U	0.76 U	0.74 U
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	NS	NS	0.85 U	0.71 U	0.79 U	0.76 U	0.74 U
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	NS	NS	0.85 U	0.71 U	0.79 U	0.76 U	0.74 U
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	NS	NS	0.85 U	0.71 U	0.79 U	0.76 U	0.74 U
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	NS	NS	5.33 U	4.47 U	4.96 U	4.78 U	4.64 U
3-Perfluoropentylpropanoic acid (5:3 FTCA)	NS	NS	5.33 U	4.47 U	4.96 U	4.78 U	4.64 U
3-Perfluoropropylpropanoic acid (3:3 FTCA)	NS	NS	1.07 U	0.89 U	0.99 U	0.96 U	0.93 U
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NS	NS	0.85 U	0.71 U	0.79 U	0.76 U	0.74 U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	NS	NS	0.85 U	0.71 U	0.79 U	0.76 U	0.74 U
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	NS	NS	0.85 U	0.71 U	0.79 U	0.76 U	0.74 U
N-ethylperfluorooctane sulfonamide (NEtFOSA)	NS	NS	0.21 U	0.18 U	0.2 U	0.19 U	0.19 U
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	NS	NS	2.13 U	1.79 U	1.98 U	1.91 U	1.85 U
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	NS	NS	0.21 U	0.18 U	0.2 U	0.19 U	0.19 U
N-methylperfluorooctane sulfonamide (NMeFOSA)	NS	NS	0.21 U	0.18 U	0.2 U	0.19 U	0.19 U
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	NS	NS	2.13 U	1.79 U	1.98 U	1.91 U	1.85 U
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	NS	NS	0.21 U	0.18 U	0.2 U	0.19 U	0.19 U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NS	NS	0.43 U	0.36 U	0.4 U	0.38 U	0.37 U
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	NS	NS	0.43 U	0.36 U	0.4 U	0.38 U	0.37 U
Perfluoro-3-methoxypropanoic acid (PFMPA)	NS	NS	0.43 U	0.36 U	0.4 U	0.38 U	0.37 U
Perfluoro-4-methoxybutanoic acid (PFMBA)	NS	NS	0.43 U	0.36 U	0.4 U	0.38 U	0.37 U
Perfluorobutanesulfonic acid (PFBS)	NS	NS	0.21 U	0.18 U	0.2 U	0.19 U	0.19 U
Perfluorobutanoic acid (PFBA)	NS	NS	0.85 U	0.71 U	0.79 U	0.76 U	0.74 U
Perfluorodecanesulfonic acid (PFDS)	NS	NS	0.21 U	0.18 U	0.2 U	0.19 U	0.19 U
Perfluorodecanoic acid (PFDA)	NS	NS	0.21 U	0.18 U	0.2 U	0.19 U	0.054 J
Perfluorododecanesulfonic acid (PFDoS)	NS	NS	0.21 U	0.18 U	0.2 U	0.19 U	0.19 U
Perfluorododecanoic acid (PFDoA)	NS	NS	0.21 U	0.18 U	0.2 U	0.19 U	0.19 U
Perfluoroheptanesulfonic acid (PFHpS)	NS	NS	0.21 U	0.18 U	0.2 U	0.19 U	0.19 U
Perfluoroheptanoic acid (PFHpA)	NS	NS	0.21 U	0.18 U	0.2 U	0.19 U	0.19 U
Perfluoroheptanesulfonic acid (PFHxS)	NS	NS	0.21 U	0.18 U	0.2 U	0.19 U	0.19 U
Perfluoroheptanoic acid (PFHxA)	NS	NS	0.21 U	0.18 U	0.2 U	0.19 U	0.19 U
Perfluorononanesulfonic acid (PFNS)	NS	NS	0.21 U	0.18 U	0.2 U	0.19 U	0.19 U
Perfluorononanoic acid (PFNA)	NS	NS	0.21 U	0.18 U	0.2 U	0.19 U	0.1 J
Perfluorooctanesulfonamide (PFOSA)	NS	NS	0.21 U	0.18 U	0.2 U	0.19 U	0.19 U
Perfluorooctanesulfonic acid (PFOS)	0.88	44	0.21 U	0.18 U	0.4 JK	0.32 JK	0.39 JK
Perfluorooctanoic acid (PFOA)	0.66	33	0.21 U	0.18 U	0.2 U	0.19 U	0.18 J
Perfluoropentanesulfonic acid (PFPeS)	NS	NS	0.21 U	0.18 U	0.2 U	0.19 U	0.19 U
Perfluoropentanoic acid (PFPeA)	NS	NS	0.43 U	0.36 U	0.4 U	0.38 U	0.37 U
Perfluorotetradecanoic acid (PFTeDA)	NS	NS	0.21 U	0.18 U	0.2 U	0.19 U	0.19 U
Perfluorotridecanoic acid (PFTrDA)	NS	NS	0.21 U	0.18 U	0.2 U	0.19 U	0.19 U
Perfluoroundecanoic acid (PFUnA)	NS	NS	0.21 U	0.18 U	0.2 U	0.19 U	0.19 U

**Table 6**  
**102 Bruckner Boulevard**  
**Bronx, NY**

Remedial Investigation  
 Soil Analytical Results of Per- and Polyfluoroalkyl Substances (PFAS)

AKRF Sample ID Laboratory Sample ID Date Sampled Dilution Factor Unit	RI-SB-04_1-2_20240821		RI-SB-05_0-2_20240821		RI-SB-X_0-2_20240821		RI-SB-05_3-5_20240821		RI-SB-06_0-2_20240822	
	460-309990-9 8/21/2024 1 ppb		460-309990-10 8/21/2024 1 ppb		460-309990-19 8/21/2024 1 ppb		460-309990-11 8/21/2024 1 ppb		460-310026-1 8/21/2024 1 ppb	
Compound	NYSDEC UUGV	NYSDEC RRGV	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	NS	NS	0.78 U	0.76 U	0.73 U	0.78 U	0.7 U			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	NS	NS	0.78 U	0.76 U	0.73 U	0.78 U	0.7 U			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	NS	NS	0.78 U	0.76 U	0.73 U	0.78 U	0.7 U			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	NS	NS	0.78 U	0.76 U	0.73 U	0.78 U	0.7 U			
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	NS	NS	4.88 U	4.75 UJ	4.56 UJ	4.85 U	4.36 U			
3-Perfluoropentylpropanoic acid (5:3 FTCA)	NS	NS	4.88 U	4.75 U	4.56 U	4.85 U	4.36 U			
3-Perfluoropropylpropanoic acid (3:3 FTCA)	NS	NS	0.98 U	0.95 U	0.91 U	0.97 U	0.87 U			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NS	NS	0.78 U	0.76 U	0.73 U	0.78 U	0.7 U			
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	NS	NS	0.78 U	0.76 U	0.73 U	0.78 U	0.7 U			
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	NS	NS	0.78 U	0.76 U	0.73 U	0.78 U	0.7 U			
N-ethylperfluorooctane sulfonamide (NEtFOSA)	NS	NS	0.2 U	0.19 U	0.11 J	0.19 U	0.17 U			
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	NS	NS	1.95 U	1.9 U	1.83 U	1.94 U	1.74 U			
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	NS	NS	0.2 U	0.19 U	0.18 U	0.19 U	0.17 U			
N-methylperfluorooctane sulfonamide (NMeFOSA)	NS	NS	0.2 U	0.19 U	0.058 J	0.19 U	0.17 U			
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	NS	NS	1.95 U	1.9 U	1.83 U	1.94 U	1.74 U			
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	NS	NS	0.2 U	0.19 U	0.18 U	0.19 U	0.17 U			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NS	NS	0.39 U	0.38 U	0.37 U	0.39 U	0.35 U			
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	NS	NS	0.39 U	0.38 U	0.37 U	0.39 U	0.35 U			
Perfluoro-3-methoxypropanoic acid (PFMPA)	NS	NS	0.39 U	0.38 U	0.37 U	0.39 U	0.35 U			
Perfluoro-4-methoxybutanoic acid (PFMBA)	NS	NS	0.39 U	0.38 U	0.37 U	0.39 U	0.35 U			
Perfluorobutanesulfonic acid (PFBS)	NS	NS	0.2 U	0.16 J	0.18 U	0.25	0.17 U			
Perfluorobutanoic acid (PFBA)	NS	NS	0.78 U	0.76 U	0.73 U	0.78 U	0.7 U			
Perfluorodecanesulfonic acid (PFDS)	NS	NS	0.2 U	0.19 U	0.18 U	0.19 U	0.17 U			
Perfluorodecanoic acid (PFDA)	NS	NS	0.2 U	0.19 U	0.18 U	0.19 U	0.17 U			
Perfluorododecanesulfonic acid (PFDoS)	NS	NS	0.2 U	0.19 U	0.18 U	0.19 U	0.17 U			
Perfluorododecanoic acid (PFDoA)	NS	NS	0.2 U	0.19 U	0.18 U	0.19 U	0.17 U			
Perfluoroheptanesulfonic acid (PFHpS)	NS	NS	0.2 U	0.19 U	0.18 U	0.19 U	0.17 U			
Perfluoroheptanoic acid (PFHpA)	NS	NS	0.2 U	0.077 J	0.18 U	0.052 J	0.17 U			
Perfluorohexanesulfonic acid (PFHxS)	NS	NS	0.2 U	0.19 U	0.18 U	0.19 U	0.17 U			
Perfluorohexanoic acid (PFHxA)	NS	NS	0.2 U	0.34 J	0.18 U	0.16 J	0.17 U			
Perfluorononanesulfonic acid (PFNS)	NS	NS	0.2 U	0.19 U	0.18 U	0.19 U	0.17 U			
Perfluorononanoic acid (PFNA)	NS	NS	0.2 U	0.19 U	0.18 U	0.19 U	0.17 U			
Perfluorooctanesulfonamide (PFOSA)	NS	NS	0.2 U	0.19 U	0.18 U	0.19 U	0.17 U			
Perfluorooctanesulfonic acid (PFOS)	0.88	44	0.2 U	0.19 U	0.18 U	0.19 U	0.1 J			
Perfluorooctanoic acid (PFOA)	0.66	33	0.2 U	0.31 J	0.077 J	0.26	0.17 U			
Perfluoropentanesulfonic acid (PFPeS)	NS	NS	0.2 U	0.19 U	0.18 U	0.19 U	0.17 U			
Perfluoropentanoic acid (PFPeA)	NS	NS	0.39 U	0.83 J	0.37 U	0.59	0.35 U			
Perfluorotetradecanoic acid (PFTeDA)	NS	NS	0.2 U	0.19 U	0.18 U	0.19 U	0.17 U			
Perfluorotridecanoic acid (PFTrDA)	NS	NS	0.2 U	0.19 U	0.18 U	0.19 U	0.17 U			
Perfluoroundecanoic acid (PFUnA)	NS	NS	0.2 U	0.19 U	0.18 U	0.19 U	0.17 U			

**Table 6**  
**102 Bruckner Boulevard**

Bronx, NY

Remedial Investigation

Soil Analytical Results of Per- and Polyfluoroalkyl Substances (PFAS)

Compound	AKRF Sample ID		RI-SB-07_0-2_20240821	RI-SB-07_2-4_20240821	RI-SB-08_0-2_20240821	RI-SB-08_2-4_20240821	RI-SB-09_0-2_20240821
	Laboratory Sample ID	Date Sampled	460-309990-12	460-309990-13	460-309990-14	460-309990-15	460-309990-16
	Dilution Factor	Unit	1	1	1	1	1
			ppb	ppb	ppb	ppb	ppb
	NYSDEC UUGV	NYSDEC RRGV	CONC Q				
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	NS	NS	0.86 U	0.71 U	0.73 U	0.74 U	0.8 U
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	NS	NS	0.86 U	0.71 U	0.73 U	0.74 U	0.8 U
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	NS	NS	0.86 U	0.71 U	0.73 U	0.74 U	0.8 U
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	NS	NS	0.86 U	0.71 U	0.73 U	0.74 U	0.8 U
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	NS	NS	5.37 U	4.43 U	4.56 U	4.61 U	4.99 U
3-Perfluoropentylpropanoic acid (5:3 FTCA)	NS	NS	5.37 U	4.43 U	4.56 U	4.61 U	4.99 U
3-Perfluoropropylpropanoic acid (3:3 FTCA)	NS	NS	1.07 U	0.89 U	0.91 U	0.92 U	1 U
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NS	NS	0.86 U	0.71 U	0.73 U	0.74 U	0.8 U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	NS	NS	0.86 U	0.71 U	0.73 U	0.74 U	0.8 U
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	NS	NS	0.86 U	0.71 U	0.73 U	0.74 U	0.8 U
N-ethylperfluorooctane sulfonamide (NEtFOSA)	NS	NS	0.21 U	0.18 U	0.18 U	0.18 U	0.2 U
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	NS	NS	2.15 U	1.77 U	1.82 U	1.84 U	1.99 U
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	NS	NS	0.21 U	0.18 U	0.18 U	0.18 U	0.2 U
N-methylperfluorooctane sulfonamide (NMeFOSA)	NS	NS	0.21 U	0.18 U	0.18 U	0.18 U	0.2 U
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	NS	NS	2.15 U	1.77 U	1.82 U	1.84 U	1.99 U
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	NS	NS	0.21 U	0.18 U	0.18 U	0.18 U	0.2 U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NS	NS	0.43 U	0.35 U	0.36 U	0.37 U	0.4 U
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	NS	NS	0.43 U	0.35 U	0.36 U	0.37 U	0.4 U
Perfluoro-3-methoxypropanoic acid (PFMPA)	NS	NS	0.43 U	0.35 U	0.36 U	0.37 U	0.4 U
Perfluoro-4-methoxybutanoic acid (PFMBA)	NS	NS	0.43 U	0.35 U	0.36 U	0.37 U	0.4 U
Perfluorobutanesulfonic acid (PFBS)	NS	NS	0.21 U	0.18 U	0.18 U	0.18 U	0.2 U
Perfluorobutanoic acid (PFBA)	NS	NS	0.86 U	0.71 U	0.73 U	0.74 U	0.8 U
Perfluorodecanesulfonic acid (PFDS)	NS	NS	0.094 J	0.18 U	0.18 U	0.18 U	0.2 U
Perfluorodecanoic acid (PFDA)	NS	NS	0.087 J	0.18 U	0.18 U	0.18 U	0.2 U
Perfluorododecanesulfonic acid (PFDoS)	NS	NS	0.21 U	0.18 U	0.18 U	0.18 U	0.2 U
Perfluorododecanoic acid (PFDoA)	NS	NS	0.21 U	0.18 U	0.18 U	0.18 U	0.2 U
Perfluoroheptanesulfonic acid (PFHpS)	NS	NS	0.21 U	0.18 U	0.18 U	0.18 U	0.2 U
Perfluoroheptanoic acid (PFHpA)	NS	NS	0.21 U	0.18 U	0.18 U	0.18 U	0.2 U
Perfluorohexanesulfonic acid (PFHxS)	NS	NS	0.21 U	0.18 U	0.18 U	0.18 U	0.2 U
Perfluorohexanoic acid (PFHxA)	NS	NS	0.21 U	0.18 U	0.18 U	0.18 U	0.2 U
Perfluorononanesulfonic acid (PFNS)	NS	NS	0.21 U	0.18 U	0.18 U	0.18 U	0.2 U
Perfluorononanoic acid (PFNA)	NS	NS	0.067 J	0.059 J	0.18 U	0.18 U	0.2 U
Perfluorooctanesulfonamide (PFOSA)	NS	NS	0.21 U	0.18 U	0.18 U	0.18 U	0.2 U
Perfluorooctanesulfonic acid (PFOS)	0.88	44	0.47	0.42	0.19	0.24	0.093 J
Perfluorooctanoic acid (PFOA)	0.66	33	0.21 U	0.18 U	0.18 U	0.18 U	0.2 U
Perfluoropentanesulfonic acid (PFPeS)	NS	NS	0.21 U	0.18 U	0.18 U	0.18 U	0.2 U
Perfluoropentanoic acid (PFPeA)	NS	NS	0.43 U	0.35 U	0.18 J	0.096 J	0.4 U
Perfluorotetradecanoic acid (PFTeDA)	NS	NS	0.21 U	0.18 U	0.18 U	0.18 U	0.2 U
Perfluorotridecanoic acid (PFTrDA)	NS	NS	0.21 U	0.18 U	0.18 U	0.18 U	0.2 U
Perfluoroundecanoic acid (PFUnA)	NS	NS	0.21 U	0.18 U	0.18 U	0.18 U	0.2 U

**Table 6**  
**102 Bruckner Boulevard**

Bronx, NY

Remedial Investigation

Soil Analytical Results of Per- and Polyfluoroalkyl Substances (PFAS)

Compound	AKRF Sample ID		RI-SB-09_3-5_20240821	RI-SB-09_7-9_20240821	RI-SB-10_0.5-2.5_20240822	FB-01_20240821
	Laboratory Sample ID	Date Sampled	460-309990-17 8/21/2024	460-309990-18 8/21/2024	460-310026-2 8/22/2024	460-309990-20 8/21/2024
	Dilution Factor	Unit	ppb	ppb	ppb	ppt
	NYSDEC UUGV	NYSDEC RRGV	CONC Q	CONC Q	CONC Q	CONC Q
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	NS	NS	0.73 U	0.72 U	0.7 U	6.49 U
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	NS	NS	0.73 U	0.72 U	0.7 U	6.49 U
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	NS	NS	0.73 U	0.72 U	0.7 U	6.49 U
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	NS	NS	0.73 U	0.72 U	0.7 U	6.49 U
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	NS	NS	4.56 U	4.49 U	4.39 U	40.5 U
3-Perfluoropentylpropanoic acid (5:3 FTCA)	NS	NS	4.56 U	4.49 U	4.39 U	40.5 U
3-Perfluoropropylpropanoic acid (3:3 FTCA)	NS	NS	0.91 U	0.9 U	0.88 U	8.11 U
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NS	NS	0.73 U	0.72 U	0.7 U	6.49 U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	NS	NS	0.73 U	0.72 U	0.7 U	6.49 U
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	NS	NS	0.73 U	0.72 U	0.7 U	6.49 U
N-ethylperfluorooctane sulfonamide (NEtFOSA)	NS	NS	0.18 U	0.18 U	0.18 U	1.62 U
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	NS	NS	1.82 U	1.8 U	1.76 U	16.2 U
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	NS	NS	0.18 U	0.18 U	0.18 U	1.62 U
N-methylperfluorooctane sulfonamide (NMeFOSA)	NS	NS	0.18 U	0.18 U	0.18 U	1.62 U
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	NS	NS	1.82 U	1.8 U	1.76 U	16.2 U
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	NS	NS	0.18 U	0.18 U	0.18 U	1.62 U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NS	NS	0.36 U	0.36 U	0.35 U	3.24 U
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	NS	NS	0.36 U	0.36 U	0.35 U	3.24 U
Perfluoro-3-methoxypropanoic acid (PFMPA)	NS	NS	0.36 U	0.36 U	0.35 U	3.24 U
Perfluoro-4-methoxybutanoic acid (PFMBA)	NS	NS	0.36 U	0.36 U	0.35 U	3.24 U
Perfluorobutanesulfonic acid (PFBS)	NS	NS	0.18 U	0.18 U	0.18 U	1.62 U
Perfluorobutanoic acid (PFBA)	NS	NS	0.73 U	0.72 U	0.7 U	6.49 U
Perfluorodecanesulfonic acid (PFDS)	NS	NS	0.18 U	0.18 U	0.18 U	1.62 U
Perfluorodecanoic acid (PFDA)	NS	NS	0.18 U	0.18 U	0.18 U	1.62 U
Perfluorododecanesulfonic acid (PFDoS)	NS	NS	0.18 U	0.18 U	0.18 U	1.62 U
Perfluorododecanoic acid (PFDoA)	NS	NS	0.18 U	0.18 U	0.18 U	1.62 U
Perfluoroheptanesulfonic acid (PFHpS)	NS	NS	0.18 U	0.18 U	0.18 U	1.62 U
Perfluoroheptanoic acid (PFHpA)	NS	NS	0.18 U	0.18 U	0.18 U	1.62 U
Perfluorohexanesulfonic acid (PFHxS)	NS	NS	0.18 U	0.1 J	0.18 U	1.62 U
Perfluorohexanoic acid (PFHxA)	NS	NS	0.18 U	0.062 J	0.18 U	1.62 U
Perfluorononanesulfonic acid (PFNS)	NS	NS	0.18 U	0.18 U	0.18 U	1.62 U
Perfluorononanoic acid (PFNA)	NS	NS	0.18 U	0.051 J	0.18 U	1.62 U
Perfluorooctanesulfonamide (PFOSA)	NS	NS	0.18 U	0.18 U	0.18 U	1.62 U
Perfluorooctanesulfonic acid (PFOS)	0.88	44	0.12 J	1.01	0.18 U	1.62 U
Perfluorooctanoic acid (PFOA)	0.66	33	0.06 J	0.24	0.18 U	1.62 U
Perfluoropentanesulfonic acid (PFPeS)	NS	NS	0.18 U	0.18 U	0.18 U	1.62 U
Perfluoropentanoic acid (PFPeA)	NS	NS	0.36 U	0.36 U	0.35 U	3.24 U
Perfluorotetradecanoic acid (PFTeDA)	NS	NS	0.18 U	0.18 U	0.18 U	1.62 U
Perfluorotridecanoic acid (PFTrDA)	NS	NS	0.18 U	0.18 U	0.18 U	1.62 U
Perfluoroundecanoic acid (PFUnA)	NS	NS	0.18 U	0.18 U	0.18 U	1.62 U

**Table 7**  
**102 Bruckner Boulevard**  
**Bronx, NY**  
Remedial Investigation  
Groundwater Analytical Results of VOCs

AKRF Sample ID Laboratory Sample ID Date Sampled Unit Dilution Factor	RI-MW-01_20240821 460-309960-2 8/21/2024 µg/L 1	RI-MW-02_20240822 460-310022-4 8/22/2024 µg/L 1	RI-MW-03_20240930 460-312500-4 9/30/2024 µg/L 1	RI-MW-X_20240930 460-312500-4 9/30/2024 µg/L 1	RI-MW-04_20240822 460-310022-3 8/22/2024 µg/L 1
Compound	AWQSGV	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	5	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	5	1 UJ	1 UJ	1 U	1 UJ
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	5	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	5	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	5	1 U	1 U	1 U	1 U
1,2,4-Trimethylbenzene	5	5.8	1 U	1 U	1 U
1,2-Dibromo-3-Chloropropane	0.04	1 U	1 U	1 U	1 U
1,2-Dibromoethane (Ethylene Dibromide)	0.0006	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	3	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	5	2.3	1 U	1 U	1 U
1,3-Dichlorobenzene	3	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3	1 U	1 U	1 U	1 U
2-Hexanone	50	5 U	5 U	5 U	5 U
Acetone	50	12	5.8	5 U	5 U
Benzene	1	1.2	1 U	1 U	1 U
Bromochloromethane	5	1 UJ	1 U	1 U	1 U
Bromodichloromethane	50	1 U	1 U	1 U	1 U
Bromoform	50	1 U	1 U	1 U	1 U
Bromomethane	5	1 U	1 U	1 U	1 U
Carbon Disulfide	60	1 U	1 U	1 U	1 U
Carbon Tetrachloride	5	1 U	1 U	1 U	1 U
Chlorobenzene	5	1 U	1 U	1 U	1 U
Chloroethane	5	1 U	1 U	1 U	1 U
Chloroform	7	1 U	1 U	1 U	1 U
Chloromethane	5	1 U	1 U	1 U	1 U
Cis-1,2-Dichloroethylene	5	1 U	1 U	1 U	1 U
Cis-1,3-Dichloropropene	NS	1 U	1 U	1 U	1 U
Cyclohexane	NS	7.3	1 U	1 U	1 U
Dibromochloromethane	50	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	5	1 U	1 U	1 U	1 U
Ethylbenzene	5	3.9	1 U	1 U	1 U
Isopropylbenzene (Cumene)	5	2.5	1 U	1 U	1 U
M,P-Xylenes	5	15	1 U	1 U	1 U
Methyl Acetate	NS	5 U	5 U	5 U	5 U
Methyl Ethyl Ketone (2-Butanone)	50	5 U	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	5 U	5 U	5 U	5 U
Methylcyclohexane	NS	1 U	1 U	1 U	1 U
Methylene Chloride	5	1 U	1 U	0.54 J	1 U
N-Butylbenzene	5	1.7 J	1 U	1 U	1 U
N-Propylbenzene	5	4.9	1 U	1 U	1 U
O-Xylene (1,2-Dimethylbenzene)	5	6.7	1 U	1 U	1 U
Sec-Butylbenzene	5	1 U	1 U	1 U	1 U
Styrene	5	1 U	1 U	1 U	1 U
T-Butylbenzene	5	1 U	1 U	1 U	1 U
Tert-Butyl Methyl Ether	10	5.1	1 U	1 U	1 U
Tetrachloroethylene (PCE)	5	0.38 J	1 U	1 U	1 U
Toluene	5	7.8	1 U	1 U	1 U
Trans-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U
Trans-1,3-Dichloropropene	NS	1 U	1 U	1 U	1 U
Trichloroethylene (TCE)	5	1 U	1 U	1 U	1 U
Trichlorofluoromethane	5	1 U	1 U	1 U	1 U
Vinyl Chloride	2	1 U	1 U	1 U	1 U
Xylenes, Total	NS	22	2 U	2 U	2 U

**Table 7**  
**102 Bruckner Boulevard**  
**Bronx, NY**  
Remedial Investigation  
Groundwater Analytical Results of VOCs

AKRF Sample ID Laboratory Sample ID Date Sampled Unit Dilution Factor	RI-GW-01_20240821 460-309960-1 8/21/2024 µg/L 1	FB-01_20240930 460-312500-3 9/30/2024 µg/L 1	TB-02_20240822 460-310022-5 8/22/2024 µg/L 1	TB-01_20240930 460-312500-2 9/30/2024 µg/L 1	
Compound	AWQSGV	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	5	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	5	1 UJ	1 U	1 UJ	1 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	5	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	5	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	5	1 U	1 U	1 U	1 U
1,2,4-Trimethylbenzene	5	31	1 U	1 U	1 U
1,2-Dibromo-3-Chloropropane	0.04	1 U	1 U	1 U	1 U
1,2-Dibromoethane (Ethylene Dibromide)	0.0006	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	3	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	5	11	1 U	1 U	1 U
1,3-Dichlorobenzene	3	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3	1 U	1 U	1 U	1 U
2-Hexanone	50	5 U	5 U	5 U	5 U
Acetone	50	6.6	5 U	5 U	5 U
Benzene	1	0.64 J	1 U	1 U	1 U
Bromochloromethane	5	1 UJ	1 U	1 U	1 U
Bromodichloromethane	50	1 U	1 U	1 U	1 U
Bromoform	50	1 U	1 U	1 U	1 U
Bromomethane	5	1 U	1 U	1 U	1 U
Carbon Disulfide	60	1 U	1 U	1 U	1 U
Carbon Tetrachloride	5	1 U	1 U	1 U	1 U
Chlorobenzene	5	1 U	1 U	1 U	1 U
Chloroethane	5	1 U	1 U	1 U	1 U
Chloroform	7	1 U	1 U	1 U	1 U
Chloromethane	5	1 U	1 U	1 U	1 U
Cis-1,2-Dichloroethylene	5	1 U	1 U	1 U	1 U
Cis-1,3-Dichloropropene	NS	1 U	1 U	1 U	1 U
Cyclohexane	NS	3.4	1 U	1 U	1 U
Dibromochloromethane	50	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	5	1 U	1 U	1 U	1 U
Ethylbenzene	5	10	1 U	1 U	1 U
Isopropylbenzene (Cumene)	5	1.6	1 U	1 U	1 U
M,P-Xylenes	5	51	1 U	1 U	1 U
Methyl Acetate	NS	5 U	5 U	5 U	5 U
Methyl Ethyl Ketone (2-Butanone)	50	5 U	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	5 U	5 U	5 U	5 U
Methylcyclohexane	NS	4.2	1 U	1 U	1 U
Methylene Chloride	5	1 U	0.44 J	1 U	0.37 J
N-Butylbenzene	5	0.71 J	1 U	1 U	1 U
N-Propylbenzene	5	3.9	1 U	1 U	1 U
O-Xylene (1,2-Dimethylbenzene)	5	20	1 U	1 U	1 U
Sec-Butylbenzene	5	0.89 J	1 U	1 U	1 U
Styrene	5	1 U	1 U	1 U	1 U
T-Butylbenzene	5	1 U	1 U	1 U	1 U
Tert-Butyl Methyl Ether	10	3	1 U	1 U	1 U
Tetrachloroethylene (PCE)	5	1 U	1 U	1 U	1 U
Toluene	5	17	1 U	1 U	1 U
Trans-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U
Trans-1,3-Dichloropropene	NS	1 U	1 U	1 U	1 U
Trichloroethylene (TCE)	5	1 U	1 U	1 U	1 U
Trichlorofluoromethane	5	1 U	1 U	1 U	1 U
Vinyl Chloride	2	1 U	1 U	1 U	1 U
Xylenes, Total	NS	71	2 U	2 U	2 U

**Table 8**  
**102 Bruckner Boulevard**  
**Bronx, NY**  
Remedial Investigation  
Groundwater Analytical Results of SVOCs

AKRF Sample ID	RI-MW-01_20240821	RI-MW-03_20240822	RI-MW-04_20240822	RI-GW-01_20240821	RI-X-01_20240821	FB-02_20240822
Laboratory Sample ID	460-309960-2	460-310022-7	460-310022-3	460-309960-1	460-309960-3	460-310022-6
Date Sampled	8/21/2024	8/22/2024	8/22/2024	8/21/2024	8/21/2024	8/22/2024
Unit	µg/L	µg/L	µg/L	µg/L	µg/L	mg/kg
Dilution Factor	1	1	1	1	1	1
Compound	AWQSGV	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	5	10 U	10 U	10 U	10 U	10 U
1,4-Dioxane (P-Dioxane)	0.35	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2,3,4,6-Tetrachlorophenol	NS	10 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	NS	10 U	10 U	10 U	10 U	10 U
2,4,6-Trichlorophenol	NS	10 U	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	5	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	50	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	10	40 UJ	40 U	40 UJ	40 UJ	40 U
2,4-Dinitrotoluene	5	10 UJ	10 U	10 U	10 UJ	10 UJ
2,6-Dinitrotoluene	5	2 U	2 U	2 U	2 U	2 U
2-Chloronaphthalene	10	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol	NS	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene	NS	0.91 J	10 U	10 U	4.5 J	1.2 J
2-Methylphenol (O-Cresol)	NS	10 U	10 U	10 U	10 U	10 U
2-Nitroaniline	5	10 U	10 U	10 U	10 U	10 U
2-Nitrophenol	NS	10 U	10 U	10 U	10 U	10 U
3- And 4- Methylphenol (Total)	NS	10 U	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	5	10 R	10 U	10 U	10 U	10 U
3-Nitroaniline	5	10 UJ	10 UJ	10 UJ	10 U	10 UJ
4,6-Dinitro-2-Methylphenol	NS	20 U	20 U	20 U	20 U	20 U
4-Bromophenyl Phenyl Ether	NS	10 U	10 U	10 U	10 U	10 UJ
4-Chloro-3-Methylphenol	NS	10 U	10 U	10 U	10 U	10 U
4-Chloroaniline	5	10 R	10 UJ	10 UJ	10 U	10 UJ
4-Chlorophenyl Phenyl Ether	NS	10 U	10 U	10 U	10 U	10 U
4-Methylphenol (P-Cresol)	NS	10 U	10 U	10 U	10 U	10 U
4-Nitroaniline	5	10 U	10 UJ	10 UJ	10 U	10 UJ
4-Nitrophenol	NS	20 U	20 UJ	20 UJ	20 U	20 UJ
Acenaphthene	20	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	NS	10 U	10 U	10 U	10 U	10 U
Acetophenone	NS	10 U	10 U	10 U	10 U	10 U
Anthracene	50	10 U	10 U	10 U	10 U	10 U
Atrazine	7.5	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	NS	10 UJ	10 UJ	10 UJ	10 UJ	10 U
Benzo(a)Anthracene	0.002	1 U	1 U	1 U	1 U	1 U
Benzo(a)Pyrene	ND	1 U	1 U	1 U	1 U	1 U
Benzo(b)Fluoranthene	0.002	2 U	2 U	2 U	2 U	2 U
Benzo(g,h,i)Perylene	NS	10 U	10 U	10 U	10 U	10 U
Benzo(k)Fluoranthene	0.002	1 U	1 U	1 U	1 U	1 U
Benzyl Butyl Phthalate	50	10 U	10 U	10 U	10 U	10 U
Biphenyl (Diphenyl)	5	10 U	10 U	10 U	10 U	10 U
Bis(2-Chloroethoxy) Methane	5	10 U	10 U	10 U	10 U	10 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	1	1 U	1 U	1 U	1 U	1 U
Bis(2-Chloroisopropyl) Ether	5	10 U	10 U	10 U	10 U	10 U
Bis(2-Ethylhexyl) Phthalate	5	2 U	2 U	2 U	1.2 J	2 U
Caprolactam	NS	10 UJ	10 U	10 U	10 UJ	10 U
Carbazole	NS	10 U	10 U	10 U	10 U	10 U
Chrysene	0.002	2 U	2 U	2 U	2 U	2 U
Dibenz(a,h)Anthracene	NS	1 U	1 U	1 U	1 U	1 U
Dibenzofuran	NS	10 U	10 U	10 U	10 U	10 U
Diethyl Phthalate	50	10 U	10 U	10 U	10 U	10 U
Dimethyl Phthalate	50	10 U	10 U	10 U	10 U	10 U
Di-N-Butyl Phthalate	50	10 U	10 U	10 U	10 U	10 U
Di-N-Octylphthalate	50	10 U	10 U	10 U	10 U	10 U
Fluoranthene	50	10 U	10 U	10 U	10 U	10 U
Fluorene	50	10 U	10 U	10 U	10 U	10 U
Hexachlorobenzene	0.04	1 U	1 UJ	1 UJ	1 U	1 UJ
Hexachlorobutadiene	0.5	1 U	1 U	1 U	1 U	1 U
Hexachlorocyclopentadiene	5	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	5	2 U	2 U	2 U	2 U	2 U
Indeno(1,2,3-c,d)Pyrene	0.002	2 U	2 U	2 U	2 U	2 U
Isophorone	50	10 U	10 U	10 U	10 U	10 U
Naphthalene	10	2 U	2 U	2 U	3	2 U
Nitrobenzene	0.4	1 U	1 U	1 U	1 U	1 U
N-Nitrosodi-N-Propylamine	NS	1 U	1 U	1 U	1 U	1 U
N-Nitrosodiphenylamine	50	10 U	10 U	10 U	10 U	10 U
Pentachlorophenol	NS	20 U	20 U	20 U	20 U	20 U
Phenanthrene	50	10 U	10 U	10 U	10 U	10 U
Phenol	1	2 J	10 U	10 U	6.5 J	10 U
Pyrene	50	10 U	10 U	10 U	10 U	10 U

**Table 9**  
**102 Bruckner Boulevard**  
**Bronx, NY**  
Remedial Investigation  
*Groundwater Analytical Results of Total Metals*

AKRF Sample ID Laboratory Sample ID Date Sampled Unit Dilution Factor		RI-MW-01_20240821 460-309960-2 8/21/2024 µg/L 1	RI-MW-03_20240822 460-310022-7 8/22/2024 µg/L 1	RI-GW-01_20240821 460-309960-1 8/21/2024 µg/L 1	RI-X-01_20240821 460-309960-3 8/21/2024 µg/L 1	FB-02_20240822 460-310022-6 8/22/2024 µg/L 1
Compound	AWQSGV	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	959	834	1,690 J	959 J	40.5
Antimony	3	0.87 J	1.4 J	1.5 J	0.94 J	2 U
Arsenic	25	8.8	1.2 J	8.8	8.7	2 U
Barium	1,000	40.6	188	13.9 J	40.3 J	4 U
Beryllium	3	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Cadmium	5	2 U	2 U	2 U	2 U	2 U
Calcium	NS	32,400	44,200	61,400 J	32,600 J	57.2 J
Chromium, Total	50	4 U	3.1 J	1.8 J	4 U	4 U
Cobalt	NS	4 U	1.4 J	0.71 J	4 U	4 U
Copper	200	2.8 J	2.4 J	10.3 J	2.4 J	4 U
Iron	<b>300</b>	73.2 J	<b>1,540</b>	<b>650 J</b>	62 J	74.2 J
Lead	25	0.66 J	1.4	5 J	0.66 J	1.2 U
Magnesium	35,000	809	4,840	90.2 J	848 J	33.2 J
Manganese	300	16.2	74.3	23.5	17	8 U
Mercury	0.7	0.17 J	0.2 U	0.2 U	0.17 J	0.2 U
Nickel	100	3.7 J	7.8	4.3 J	2.9 J	4 U
Potassium	NS	16,800	13,900	11,900 J	17,100 J	200 U
Selenium	10	0.69 J	1.9 J	0.53 J	0.56 J	2.5 U
Silver	50	2 U	2 U	2 U	2 U	2 U
Sodium	<b>20,000</b>	<b>39,000</b>	<b>141,000</b>	<b>22,800 J</b>	<b>40,300 J</b>	500 U
Thallium	0.5	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Vanadium	NS	5.2	4	3 J	5.4 J	4 U
Zinc	2,000	16 U	7.7 J	24.6 J	16 U	16 U

**Table 10**  
**102 Bruckner Boulevard**  
**Bronx, NY**

Remedial Investigation

*Groundwater Analytical Results of Dissolved Metals*

AKRF Sample ID Laboratory Sample ID Date Sampled Unit Dilution Factor		RI-MW-01_20240821 460-309960-2 8/21/2024 µg/L 1	RI-MW-03_20240822 460-310022-7 8/22/2024 µg/L 1	RI-GW-01_20240821 460-309960-1 8/21/2024 µg/L 1	RI-X-01_20240821 460-309960-3 8/21/2024 µg/L 1	FB-02_20240822 460-310022-6 8/22/2024 µg/L 1
Compound	AWQSGV	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	945	40 U	1,340 J	962 J	40 U
Antimony	3	0.65 J	1.5 J	1.2 J	0.67 J	2 U
Arsenic	25	8.5	1.3 J	8.2	7.7	2 U
Barium	1,000	48.3	176	11.9 J	49.3 J	4 U
Beryllium	3	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Cadmium	5	2 U	2 U	2 U	2 U	2 U
Calcium	NS	35,400	45,900	62,700 J	35,800 J	500 U
Chromium, Total	50	4 U	4 U	4 U	4 U	4 U
Cobalt	NS	4 U	0.62 J	4 U	4 U	4 U
Copper	200	4 U	4 U	4 U	4 U	4 U
Iron	300	23.1 J	109 J	120 U	24.5 J	120 U
Lead	25	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Magnesium	35,000	1,150	4,740	200 U	1,160 J	200 U
Manganese	300	22.9	68.6	8 U	23.4 J	8 U
Mercury	0.7	0.12 J	0.2 U	0.2 U	0.11 J	0.2 U
Nickel	100	2.6 J	4.9	2.9 J	2.7 J	4 U
Potassium	NS	17,500	14,300	12,400 J	17,400 J	200 U
Selenium	10	4.4	2.1 J	4	3.7	2.5 U
Silver	50	2 U	2 U	2 U	2 U	2 U
Sodium	<b>20,000</b>	<b>41,200</b>	<b>146,000</b>	<b>23,900 J</b>	<b>41,400 J</b>	500 U
Thallium	0.5	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Vanadium	NS	5.3	4 U	2.1 J	5.3 J	4 U
Zinc	2,000	16 U	16 U	16 U	16 U	16 U

**Table 11**  
**102 Bruckner Boulevard**  
**Bronx, NY**

Remedial Investigation  
*Groundwater Analytical Results of PCBs*

AKRF Sample ID		RI-MW-01_20240821	RI-MW-03_20240822	RI-GW-01_20240821	RI-X-01_20240821	FB-02_20240822
Laboratory Sample ID		460-309960-2	460-310022-7	460-309960-1	460-309960-3	460-310022-6
Date Sampled		8/21/2024	8/22/2024	8/21/2024	8/21/2024	8/22/2024
Unit		µg/L	µg/L	µg/L	µg/L	mg/kg
Dilution Factor		1	1	1	1	1
Compound	AWQSGV	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1221 (Aroclor 1221)	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1232 (Aroclor 1232)	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1242 (Aroclor 1242)	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1248 (Aroclor 1248)	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1254 (Aroclor 1254)	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1260 (Aroclor 1260)	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1262 (Aroclor 1262)	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
PCB-1268 (Aroclor 1268)	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Total PCBs	0.09	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U

**Table 12**  
**102 Bruckner Boulevard**  
**Bronx, NY**  
Remedial Investigation  
*Groundwater Analytical Results of Pesticides*

<b>AKRF Sample ID</b>		RI-MW-01_20240821	RI-MW-03_20240822	RI-GW-01_20240821	RI-X-01_20240821	FB-02_20240822
<b>Laboratory Sample ID</b>		460-309960-2	460-310022-7	460-309960-1	460-309960-3	460-310022-6
<b>Date Sampled</b>		8/21/2024	8/22/2024	8/21/2024	8/21/2024	8/22/2024
<b>Unit</b>		µg/L	µg/L	µg/L	µg/L	mg/kg
<b>Dilution Factor</b>		1	1	1	1	1
<b>Compound</b>	<b>AWQSGV</b>	<b>CONC Q</b>	<b>CONC Q</b>	<b>CONC Q</b>	<b>CONC Q</b>	<b>CONC Q</b>
Aldrin	ND	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.01	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Alpha Endosulfan	NS	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.04	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Beta Endosulfan	NS	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
cis-Chlordane	NS	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Dieldrin	0.004	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Endosulfan Sulfate	NS	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Endosulfans ABS	NS	0 U	0 U	0 U	0 U	0 U
Endrin	ND	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Endrin Aldehyde	5	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Endrin Ketone	5	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Gamma Bhc (Lindane)	0.05	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Heptachlor	0.04	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Heptachlor Epoxide	0.03	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Methoxychlor	35	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
P,P'-DDD	0.3	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
P,P'-DDE	0.2	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
P,P'-DDT	0.2	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Toxaphene	0.06	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

**Table 13**  
**102 Bruckner Boulevard**  
**Bronx, NY**  
Remedial Investigation  
Groundwater Analytical Results of PFAS

AKRF Sample ID Laboratory Sample ID Date Sampled Unit Dilution Factor	RI-MW-01_20240821	RI-MW-03_20240822	RI-GW-01_20240821	RI-GW-01_20240821	RI-X-01_20240821	FB-02_20240822	
	460-309990-1 8/21/2024 ppt 1	460-310026-5 8/22/2024 ppt 1	460-309990-2 8/21/2024 ppt 1	460-309990-2 8/21/2024 ppt 10	460-309990-3 8/21/2024 ppt 1	460-310026-4 8/22/2024 ppt 1	
Compound	AWQSGV	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	NS	6.91 U	7.2 U	6.51 U	NR	6.53 U	8.32 U
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	NS	6.91 U	7.2 U	6.51 U	NR	6.53 U	8.32 U
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	NS	6.91 U	7.2 U	6.51 U	NR	6.53 U	8.32 U
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	NS	6.91 U	7.2 U	6.51 U	NR	6.53 U	8.32 U
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	NS	43.2 U	45 U	NR	407 U	40.8 U	52 U
3-Perfluoropentylpropanoic acid (5:3 FTCA)	NS	43.2 U	45 U	NR	407 U	40.8 U	52 U
3-Perfluoropropylpropanoic acid (3:3 FTCA)	NS	8.64 U	9 U	8.14 U	NR	8.16 U	10.4 U
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NS	6.91 U	7.2 U	6.51 U	NR	6.53 U	8.32 U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	NS	6.91 U	7.2 U	6.51 U	NR	6.53 U	8.32 U
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	NS	6.91 U	7.2 U	6.51 U	NR	6.53 U	8.32 U
N-ethylperfluorooctane sulfonamide (NEtFOSA)	NS	1.73 U	1.8 U	1.63 U	NR	1.63 U	2.08 U
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	NS	17.3 U	18 U	16.3 U	NR	16.3 U	20.8 U
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	NS	1.73 U	1.8 U	0.46 J	NR	0.44 J	2.08 U
N-methylperfluorooctane sulfonamide (NMeFOSA)	NS	1.73 U	1.8 U	1.63 U	NR	1.63 U	2.08 U
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	NS	17.3 U	18 U	16.3 U	NR	16.3 U	20.8 U
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	NS	1.73 U	1.8 U	1.63 U	NR	0.58 J	2.08 U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NS	3.46 U	3.6 U	NR	32.6 U	3.26 U	4.16 U
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	NS	3.46 U	3.6 U	NR	32.6 U	3.26 U	4.16 U
Perfluoro-3-methoxypropanoic acid (PFMPA)	NS	3.46 U	3.6 U	3.26 U	NR	3.26 U	4.16 U
Perfluoro-4-methoxybutanoic acid (PFMBA)	NS	3.46 U	3.6 U	3.26 U	NR	3.26 U	4.16 U
Perfluorobutanesulfonic acid (PFBS)	NS	1.57 J	2.82	1.3 J	NR	1.68	2.08 U
Perfluorobutanoic acid (PFBA)	NS	11.8	4.43 J	5.97 J	NR	8	8.32 U
Perfluorodecanesulfonic acid (PFDS)	NS	1.41 J	1.8 U	3.69	NR	1.38 J	2.08 U
Perfluorodecanoic acid (PFDA)	NS	1.64 J	1.17 J	1.68	NR	1.7	2.08 U
Perfluorododecanesulfonic acid (PFDoS)	NS	1.73 U	1.8 U	1.63 U	NR	1.63 U	2.08 U
Perfluorododecanoic acid (PFDoA)	NS	1.73 U	1.8 U	1.63 U	NR	1.63 U	2.08 U
Perfluoroheptanesulfonic acid (PFHpS)	NS	1.73 U	1.8 U	1.63 U	NR	1.63 U	2.08 U
Perfluoroheptanoic acid (PFHpA)	NS	4.38	2.16	NR	16.3 U	4.07	2.08 U
Perfluorohexanesulfonic acid (PFHxS)	NS	1.9	0.82 J	1.56 J	NR	1.88	2.08 U
Perfluorohexanoic acid (PFHxA)	NS	11.7	4.05	NR	12.6 JD	10.5	2.08 U
Perfluorononanesulfonic acid (PFNS)	NS	1.73 U	1.8 U	1.63 U	NR	1.63 U	2.08 U
Perfluorononanoic acid (PFNA)	NS	3.11	3.83	2.37	NR	2.82	2.08 U
Perfluorooctanesulfonamide (PFOSA)	NS	1.73 U	1.8 U	1.63 U	NR	1.63 U	2.08 U
Perfluorooctanesulfonic acid (PFOS)	2.7	15.9	24.4	11.6 J	NR	16.6	2.08 U
Perfluorooctanoic acid (PFOA)	6.7	24.1 J	13.2	NR	16 JD	28.4 J	2.08 U
Perfluoropentanesulfonic acid (PFPeS)	NS	1.73 U	1.8 U	1.63 U	NR	1.63 U	2.08 U
Perfluoropentanoic acid (PFPeA)	NS	9.85	3.58 J	7.29	NR	8.12	4.16 U
Perfluorotetradecanoic acid (PFTeDA)	NS	1.73 U	1.8 U	1.63 U	NR	1.63 U	2.08 U
Perfluorotridecanoic acid (PFTrDA)	NS	1.73 U	1.8 U	1.63 U	NR	1.63 U	2.08 U
Perfluoroundecanoic acid (PFUnA)	NS	0.64 J	1.8 U	1.12 J	NR	0.58 J	2.08 U

**Table 14**  
**102 Bruckner Boulevard**  
**Bronx, NY**  
Remedial Investigation  
Soil Vapor Analytical Results of VOCs

AKRF Sample ID Laboratory Sample ID Date Sampled Unit Dilution Factor	RI-SV-01_20240822 200-74868-1 8/22/2024 µg/m <sup>3</sup> 2	RI-SV-01_20240822 200-74868-1 8/22/2024 µg/m <sup>3</sup> 15.4	RI-SV-02_20240822 200-74868-2 8/22/2024 µg/m <sup>3</sup> 20.1	RI-SV-02_20240822 200-74868-2 8/22/2024 µg/m <sup>3</sup> 106	RI-SV-03_20240822 200-74868-3 8/22/2024 µg/m <sup>3</sup> 10.1	RI-SV-03_20240822 200-74868-3 8/22/2024 µg/m <sup>3</sup> 50.9	RI-SV-04_20240822 200-74868-4 8/22/2024 µg/m <sup>3</sup> 1
Compound	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	2.2 U	NR	22 U	NR	11 U	NR	1.1 U
1,1,2,2-Tetrachloroethane	2.7 U	NR	28 U	NR	14 U	NR	1.4 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	3.1 U	NR	31 U	NR	15 U	NR	0.43 J
1,1,2-Trichloroethane	2.2 U	NR	22 U	NR	11 U	NR	1.1 U
1,1-Dichloroethane	1.6 U	NR	16 U	NR	8.2 U	NR	0.81 U
1,1-Dichloroethene	0.4 U	NR	4 U	NR	2 U	NR	0.2 U
1,2,4-Trichlorobenzene	7.4 U	NR	75 U	NR	37 U	NR	3.7 U
1,2,4-Trimethylbenzene	9.9	NR	150	NR	92	NR	7.3
1,2-Dibromoethane (Ethylene Dibromide)	3.1 U	NR	31 U	NR	16 U	NR	1.5 U
1,2-Dichlorobenzene	2.4 U	NR	24 U	NR	12 U	NR	1.2 U
1,2-Dichloroethane	1.6 U	NR	16 U	NR	8.2 U	NR	0.81 U
1,2-Dichloropropane	1.8 U	NR	19 U	NR	9.3 U	NR	0.92 U
1,2-Dichlorotetrafluoroethane	2.8 U	NR	28 U	NR	14 U	NR	1.4 U
1,3,5-Trimethylbenzene (Mesitylene)	0.85 J	NR	200	NR	50	NR	0.98 U
1,3-Butadiene	4	NR	3.4 J	NR	4.5 U	NR	0.16 J
1,3-Dichlorobenzene	2.7	NR	24 U	NR	12 U	NR	1.2 U
1,4-Dichlorobenzene	2.4 U	NR	24 U	NR	12 U	NR	1.2 U
2,2,4-Trimethylpentane	NR	2,600 D	NR	14,000 D	100	NR	3.3
2-Chlorotoluene	2.1 U	NR	21 U	NR	10 U	NR	1 U
2-Hexanone	4.1 U	NR	41 U	NR	21 U	NR	2 U
4-Ethyltoluene	0.59 J	NR	93	NR	28	NR	0.98 U
Acetone	NR	730 D	480	NR	NR	2,700 D	NR
Allyl Chloride (3-Chloropropene)	3.1 U	NR	31 U	NR	16 U	NR	1.6 U
Benzene	14	NR	880	NR	5.3 J	NR	1
Benzyl Chloride	2.1 U	NR	21 U	NR	10 U	NR	1 U
Bromodichloromethane	2.7 U	NR	27 U	NR	14 U	NR	1.3 U
Bromoform	4.1 U	NR	42 U	NR	21 U	NR	2.1 U
Bromomethane	1.6 U	NR	16 U	NR	7.8 U	NR	0.78 U
Butane	150	NR	NR	2,700 D	7.6 J	NR	27
Carbon Disulfide	84	NR	37	NR	16 U	NR	9.6
Carbon Tetrachloride	0.44 U	NR	4.4 U	NR	2.2 U	NR	0.32
Chlorobenzene	1.8 U	NR	19 U	NR	9.3 U	NR	0.92 U
Chlorodifluoromethane	0.91 J	NR	36 U	NR	18 U	NR	1.8
Chloroethane	0.99 J	NR	27 U	NR	13 U	NR	1.3 U
Chloroform	2 U	NR	20 U	NR	9.9 U	NR	0.5 J
Chloromethane	1.8 J	NR	21 U	NR	10 U	NR	0.9 J
Cis-1,2-Dichloroethylene	0.4 U	NR	4 U	NR	2 U	NR	0.2 U
Cis-1,3-Dichloropropene	1.8 U	NR	18 U	NR	9.2 U	NR	0.91 U
Cyclohexane	62	NR	1,800	NR	2 J	NR	0.85
Cymene	2.2 U	NR	22 U	NR	11 U	NR	0.35 J
Dibromochloromethane	3.4 U	NR	34 U	NR	17 U	NR	1.7 U
Dichlorodifluoromethane	2.6 J	NR	50 U	NR	25 U	NR	3
Ethylbenzene	10	NR	580	NR	74	NR	22
Hexachlorobutadiene	4.3 U	NR	43 U	NR	22 U	NR	2.1 U
Isopropanol	15 J	NR	250 U	NR	120 U	NR	54
Isopropylbenzene (Cumene)	1 J	NR	110	NR	18	NR	0.98 U
M,P-Xylenes	24	NR	2,600	NR	280	NR	85
Methyl Ethyl Ketone (2-Butanone)	21	NR	30 U	NR	15 U	NR	12
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	4.1 U	NR	41 U	NR	16 J	NR	67
Methyl Methacrylate	4.1 U	NR	41 U	NR	21 U	NR	2 U
Methylene Chloride	3.5 U	NR	35 U	NR	18 U	NR	0.76 J
Naphthalene	4 U	NR	40 U	NR	20 U	NR	2 U
N-Butylbenzene	2.2 U	NR	12 J	NR	11 U	NR	1.1 U
N-Heptane	27	NR	1,000	NR	14	NR	12
N-Hexane	76	NR	2,400	NR	6.3 J	NR	1.3 J
N-Propylbenzene	0.75 J	NR	140	NR	28	NR	1.2
O-Xylene (1,2-Dimethylbenzene)	11	NR	700	NR	130	NR	35
Sec-Butylbenzene	2.2 U	NR	66	NR	5.1 J	NR	1.1 U
Styrene	1.4 J	NR	17 U	NR	8.6 U	NR	0.85 U
T-Butylbenzene	2.2 U	NR	22 U	NR	11 U	NR	1.1 U
Tert-Butyl Alcohol	86	NR	300 U	NR	82 J	NR	27
Tert-Butyl Methyl Ether	1.4 U	NR	390	NR	230	NR	11
Tetrachloroethylene (PCE)	14	NR	22 J	NR	840	NR	140
Tetrahydrofuran	29 U	NR	300 U	NR	150 U	NR	15 U
Toluene	26	NR	190	NR	93	NR	8.3
Trans-1,2-Dichloroethene	1.6 U	NR	16 U	NR	8 U	NR	0.79 U
Trans-1,3-Dichloropropene	1.8 U	NR	18 U	NR	9.2 U	NR	0.91 U
Trichloroethylene (TCE)	0.4 U	NR	4 U	NR	2	NR	0.2 U
Trichlorofluoromethane	7.8	NR	23 U	NR	13	NR	1.6
Vinyl Bromide	1.7 U	NR	18 U	NR	8.8 U	NR	0.87 U
Vinyl Chloride	0.4 U	NR	4 U	NR	2 U	NR	0.2 U
Xylenes, Total	35	NR	3,300	NR	410	NR	120

**Table 14**  
**102 Bruckner Boulevard**  
**Bronx, NY**  
Remedial Investigation  
Soil Vapor Analytical Results of VOCs

AKRF Sample ID Laboratory Sample ID Date Sampled Unit Dilution Factor	RI-SV-04_20240822 200-74868-4 8/22/2024 µg/m <sup>3</sup> 11.8	RI-SV-05_20240822 200-74868-5 8/22/2024 µg/m <sup>3</sup> 1	RI-SV-05_20240822 200-74868-5 8/22/2024 µg/m <sup>3</sup> 5	RI-SV-06_20240822 200-74868-6 8/22/2024 µg/m <sup>3</sup> 1	RI-SV-06_20240822 200-74868-6 8/22/2024 µg/m <sup>3</sup> 2.99	RI-SV-07_20240822 200-74868-7 8/22/2024 µg/m <sup>3</sup> 1	RI-SV-07_20240822 200-74868-7 8/22/2024 µg/m <sup>3</sup> 5
Compound	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	NR	23	NR	1.1 U	NR	0.61 J	NR
1,1,2,2-Tetrachloroethane	NR	1.4 U	NR	1.4 U	NR	1.4 U	NR
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	NR	1.5 U	NR	1.5 U	NR	0.43 J	NR
1,1,2-Trichloroethane	NR	1.1 U	NR	1.1 U	NR	1.1 U	NR
1,1-Dichloroethane	NR	0.81 U	NR	0.81 U	NR	0.81 U	NR
1,1-Dichloroethene	NR	0.2 U	NR	0.2 U	NR	0.2 U	NR
1,2,4-Trichlorobenzene	NR	3.7 U	NR	3.7 U	NR	3.7 U	NR
1,2,4-Trimethylbenzene	NR	8.8	NR	3.8	NR	4.7	NR
1,2-Dibromoethane (Ethylene Dibromide)	NR	1.5 U	NR	1.5 U	NR	1.5 U	NR
1,2-Dichlorobenzene	NR	1.2 U	NR	1.2 U	NR	1.2 U	NR
1,2-Dichloroethane	NR	0.81 U	NR	0.81 U	NR	0.81 U	NR
1,2-Dichloropropane	NR	0.92 U	NR	0.92 U	NR	0.92 U	NR
1,2-Dichlorotetrafluoroethane	NR	1.4 U	NR	1.4 U	NR	1.4 U	NR
1,3,5-Trimethylbenzene (Mesitylene)	NR	1.5	NR	0.82 J	NR	3.2	NR
1,3-Butadiene	NR	0.44 U	NR	0.27 J	NR	1.6	NR
1,3-Dichlorobenzene	NR	1.2 U	NR	0.71 J	NR	1.7	NR
1,4-Dichlorobenzene	NR	1.2 U	NR	1.2 U	NR	1.2 U	NR
2,2,4-Trimethylpentane	NR	2.5	NR	0.98	NR	29	NR
2-Chlorotoluene	NR	1 U	NR	1 U	NR	1 U	NR
2-Hexanone	NR	3.6	NR	0.7 J	NR	1.9 J	NR
4-Ethyltoluene	NR	0.7 J	NR	0.33 J	NR	1.2	NR
Acetone	720 D	NR	420 D	NR	200 D	NR	340 D
Allyl Chloride (3-Chloropropene)	NR	1.6 U	NR	1.6 U	NR	1.6 U	NR
Benzene	NR	2.4	NR	4.5	NR	23	NR
Benzyl Chloride	NR	1 U	NR	1 U	NR	1 U	NR
Bromodichloromethane	NR	1.3 U	NR	1.3 U	NR	1.3 U	NR
Bromoform	NR	2.1 U	NR	2.1 U	NR	2.1 U	NR
Bromomethane	NR	0.78 U	NR	0.78 U	NR	0.78 U	NR
Butane	NR	0.77 J	NR	7.2	NR	53	NR
Carbon Disulfide	NR	2.4	NR	18	NR	120	NR
Carbon Tetrachloride	NR	0.22 U	NR	0.25	NR	0.25	NR
Chlorobenzene	NR	0.92 U	NR	0.92 U	NR	0.92 U	NR
Chlorodifluoromethane	NR	1.8 U	NR	0.85 J	NR	0.83 J	NR
Chloroethane	NR	1.3 U	NR	1.3 U	NR	1.3 U	NR
Chloroform	NR	0.58 J	NR	0.46 J	NR	0.83 J	NR
Chloromethane	NR	1 U	NR	1.1	NR	0.73 J	NR
Cis-1,2-Dichloroethylene	NR	0.2 U	NR	0.2 U	NR	0.2 U	NR
Cis-1,3-Dichloropropene	NR	0.91 U	NR	0.91 U	NR	0.91 U	NR
Cyclohexane	NR	1.4	NR	2.2	NR	17	NR
Cymene	NR	1.1 U	NR	1.1 U	NR	1.1 U	NR
Dibromochloromethane	NR	1.7 U	NR	1.7 U	NR	1.7 U	NR
Dichlorodifluoromethane	NR	32	NR	1.7 J	NR	1.6 J	NR
Ethylbenzene	NR	4.5	NR	0.92	NR	3.8	NR
Hexachlorobutadiene	NR	2.1 U	NR	2.1 U	NR	2.1 U	NR
Isopropanol	NR	6.6 J	NR	12 U	NR	8.5 J	NR
Isopropylbenzene (Cumene)	NR	1.1	NR	0.41 J	NR	1.6	NR
m,P-Xylenes	NR	14	NR	3.4	NR	16	NR
Methyl Ethyl Ketone (2-Butanone)	NR	34	NR	8.8	NR	15	NR
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NR	7.9	NR	0.76 J	NR	2 U	NR
Methyl Methacrylate	NR	2 U	NR	2 U	NR	2 U	NR
Methylene Chloride	NR	1.8	NR	1.7 U	NR	1.7 U	NR
Naphthalene	NR	2 U	NR	2 U	NR	2 U	NR
N-Butylbenzene	NR	1.1 U	NR	1.1 U	NR	1.1 U	NR
N-Heptane	NR	8.2	NR	2.8	NR	8.5	NR
N-Hexane	NR	1.2 J	NR	2.4	NR	12	NR
N-Propylbenzene	NR	0.69 J	NR	0.34 J	NR	1.3	NR
O-Xylene (1,2-Dimethylbenzene)	NR	6	NR	1.9	NR	7.5	NR
Sec-Butylbenzene	NR	1.1 U	NR	1.1 U	NR	0.52 J	NR
Styrene	NR	0.72 J	NR	0.42 J	NR	0.3 J	NR
T-Butylbenzene	NR	1.1 U	NR	1.1 U	NR	1.1 U	NR
Tert-Butyl Alcohol	NR	21	NR	20	NR	53	NR
Tert-Butyl Methyl Ether	NR	0.72 U	NR	0.72 U	NR	0.96	NR
Tetrachloroethylene (PCE)	NR	29	NR	4.2	NR	11	NR
Tetrahydrofuran	NR	15 U	NR	15 U	NR	15 U	NR
Toluene	NR	28	NR	3.3	NR	7.9	NR
Trans-1,2-Dichloroethene	NR	0.096 J	NR	0.79 U	NR	0.79 U	NR
Trans-1,3-Dichloropropene	NR	0.91 U	NR	0.91 U	NR	0.91 U	NR
Trichloroethylene (TCE)	NR	0.2	NR	0.21	NR	0.57	NR
Trichlorofluoromethane	NR	63	NR	59	NR	12	NR
Vinyl Bromide	NR	0.87 U	NR	0.87 U	NR	0.87 U	NR
Vinyl Chloride	NR	0.091 J	NR	0.2 U	NR	0.2 U	NR
Xylenes, Total	NR	20	NR	5.3	NR	24	NR

**Tables 1-14**  
**102 Bruckner Boulevard**  
**Bronx, NY**  
Remedial Investigation  
Notes

**DEFINITIONS**

- D** : Indicates an identified compound in an analysis that has been diluted. This flag alerts the data user to any differences between the concentrations reported in the two analyses.
- J** : The concentration given is an estimated value.
- K** : Reported concentration value is proportional to dilution factor and may be exaggerated
- L** : Sample result is estimated and biased low.
- ND** : The standard is a non-detectable concentration by the approved analytical method.
- NR** : Not reported.
- NS** : No standard.
- R** : Indicates the reported result is unusable (note: the analyte may or may not be present).
- U** : The analyte was not detected at the indicated concentration.
- UJ** : The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise
- mg/kg** : milligrams per kilogram
- ppb** : parts per billion
- ppt** : parts per trillion
- µg/L** : micrograms per liter
- µg/m<sup>3</sup>** : micrograms per cubic meter of air

**STANDARDS**

**Part 375 Soil Cleanup Objectives** : Soil Cleanup Objectives listed in New York State Department of Environmental Conservation (NYSDEC) "Part 375" Regulations [6 New York Codes, Rules and Regulations (NYCRR) Part 375].

Note: Endosulfans ABS represents the detected sum of Endosulfan I, Endosulfan II, and Endosulfan Sulfate.

**Exceedances of Part 375 Unrestricted Use Soil Cleanup Objectives (UUSCOs) are highlighted in bold font.**  
**Exceedances of Part 375 Restricted Residential Soil Cleanup Objectives (RRSCO) are highlighted in gray shading.**

**NYSDEC Part 375 PFAS Guidance Values** : New York State Department of Environmental Conservation (NYSDEC) Sampling, Analysis and Assessment Of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDCE's Part 375 Remedial Programs Issued April 2023.

**Exceedances of NYSDCE PFAS Unrestricted Use Guidance Values (UUGVs) are highlighted in bold font.**  
**Exceedances of NYSDCE PFAS Restricted Residential Guidance Values (RRGVs) are highlighted in gray shading.**

**NYSDEC Class GA AWQSGVs** : New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (1.1.1): Class GA Ambient Water Quality Standards and Guidance Values (AWQSGVs).

**Exceedances of NYSDCE Class GA AWQSGVs are highlighted in bold font.**

**DUPLICATES**

RI-MW-X\_20240930 is a blind duplicate of sample RI-MW-03\_20240930  
RI-SB-X\_0-2\_20240821 is a blind duplicate of sample RI-SB-05\_0-2\_20240821  
RI-X-01\_20240821 is a blind duplicate of sample RI-GW-01\_20240821