JAMAICA WORKS
95-25 149TH STREET

QUEENS, NEW YORK

Draft Remedial Investigation Report

NYSDEC BCP Number: C241252

AKRF Project Number: 200278

Prepared for:

New York State Department of Environmental Conservation
Division of Environmental Remediation, Remedial Bureau B
625 Broadway, 12th Floor
Albany, New York 12233

Prepared on Behalf of:

Radix 95-25 149th St LLC, 95-08 150th St LLC, and 95-12 150th St 11435 LLC
347 Fifth Avenue, 16th Floor
New York, NY 10016

Prepared by:

AKRF, Inc.
440 Park Avenue South
New York, New York 10016
(212) 696-0670

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LIST OF ACRONYMS

Acronym	Definition
1,1,1-TCA	1,1,1-trichloroethane
AOCs	Areas of Concern
ASTM	American Society for Testing and Materials
AWQSGVs	Ambient Water Quality Standards and Guidance Values
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
BN	Base/Neutral
bgs	Below Ground Surface
CAMP	Community Air Monitoring Plan
CSCO	Commercial Soil Cleanup Objective
CoC	Chain of Custody
COC	Contaminants of Concern
CVOC	Chlorinated Volatile Organic Compound
DER-10	Division of Environmental Remediation Technical Guide 10
DPP	Direct-push Probe
DUSR	Data Usability Summary Report
ECs	Engineering Controls
ELAP	New York State Environmental Laboratory Approval Program
ESA	Environmental Site Assessment
eV	Electron Volt
GPR	Ground Penetrating Radar
HASP	Health and Safety Plan
HAZWOPER	Hazardous Waste Operations and Emergency Response
HDPE	High-density Polyethylene
ICs	Institutional Control
IDW	Investigation Derived Waste
IRM	Interim Remedial Measure
IRMCR	IRM Completion Report
IRMWP	IRM Work Plan
MCL	Maximum Contaminant Level
MEK	Methyl Ethyl Ketone
mg/kg	Milligrams per Kilogram
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NAPL	Non-Aqueous Phase Liquid
NAVD88	North American Vertical Datum of 1988
ND	Non-Detectable
NTUs	Nephelometric Turbidity Units
NYCRR	New York Codes, Rules and Regulations
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYSDOT	New York State Department of Transportation
ORP	Oxidation-Reduction Potential
OSHA	United States Occupational Safety and Health Administration
PAHs	Polycyclic Aromatic Hydrocarbons

Acronym	Definition
PCBs	Polychlorinated Biphenyls
PCE	Tetrachloroethylene
PFAS	Per- and Polyfluoroalkyl Substances
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctanesulfonic Acid
PGWSCO	Protection of Groundwater Soil Cleanup Objective
PID	Photoionization detector
ppb	Parts per billion
ppm	Parts per million
ppt	Parts per trillion
PVC	Polyvinyl Chloride
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QC	Quality Control
QEP	Qualified Environmental Professional
QHHEA	Qualitative Human Health Exposure Assessment
RA	Remedial Action
RAOs	Remedial Action Objectives
RAWP	Remedial Action Work Plan
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Condition
RI	Remedial Investigation
RIR	Remedial Investigation Report
RIWP	Remedial Investigation Work Plan
RRGV	Restricted Residential Guidance Value
RRSCO	Restricted Residential Soil Cleanup Objective
SCOs	Soil Cleanup Objectives
SIM	Selective Ion Monitoring
SSDS	Sub-Slab Depressurization System
SVOC	Semivolatile Organic Compound
TAL	Target Analyte List
TCE	Trichloroethylene
ULURP	Uniform Land Use Review Procedure
UST	Underground Storage Tank
UUGV	Unrestricted Use Guidance Value
UUSCO	Unrestricted Use Soil Cleanup Objective
VCP	Voluntary Cleanup Program
VEC	Vapor Encroachment Condition
VOC	Volatile Organic Compound
µg/kg	Micrograms per Kilogram
µg/L	Micrograms per Liter
$\mu g/m^3$	Micrograms per Meter Cubed

CERTIFICATION

I, Stephen Malinowski, QEP, certify that I am currently a Qualified Environmental Professional (QEP), as defined in 6 NYCRR Part 375, and that this Remedial Investigation Report (RIR) 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.

Stephen Malinowski, QEP		DRAFT
Qualified Environmental Professional	Date	Signature

EXECUTIVE SUMMARY

This Remedial Investigation Report (RIR) provides information for the establishment of remedial action objectives (RAOs), evaluation of remedial action (RA) alternatives, and selection of a remedy pursuant to the Division of Environmental Remediation (DER)-10 Technical Guidance for Site Investigation and Remediation. The Remedial Investigation (RI) described in this RIR is consistent with applicable guidance.

Site Location and Current Usage

The property is located at 95-25 149th Street in the Jamaica section of Queens, New York, also identified as Queens Borough Tax Block 10002, Lots 1, 10, and 13 on the New York City Tax Map (the "Site"). On July 7, 2021, Radix 95-25 149th St LLC (the "Applicant") entered into a Brownfield Cleanup Agreement (BCA) (Index No. C241252-06-21) for the Site with the New York State Department of Environmental Conservation (NYSDEC).

Currently, the approximately 1.17-acre Site contains 11 one- to two-story buildings. The majority of the buildings on Lot 1 (95-25 149th Street) are unoccupied and only utilized by the current Site owner for office space, storage of construction materials, and warehousing. The southern portion of Lot 1 is occasionally utilized for professional films and television sets. Lot 10 (95-08 150th Street) contains a one-story brick building and includes a garage, shop, storage, and an office utilized by a private contractor. Lot 13 (95-12 150th Street) contains a two-story building and includes a loading dock, shop, and an office utilized by a private contractor. To support the proposed redevelopment, the Site is anticipated to be rezoned from M1-4 (manufacturing). The redevelopment plans and regulatory approvals will be advanced under the Uniform Land Use Review Procedure (ULURP). The Site location and topography of the Site and surrounding area are shown on Figure 1, and the Site layout is shown on Figure 2.

Surrounding Area

The Site is abutted to the north by commercial/industrial buildings, warehouses, and residential apartment buildings along 95th Avenue; to the east by Mohan's Precast USA, Inc., Taste of Heaven Ministries, and industrial buildings and warehouses; to the south by commercial/industrial buildings and residential properties along 97th Avenue; and to the west by commercial/industrial buildings along 149th Street. The surrounding area is predominantly commercial and industrial with some residential uses.

There are no sensitive receptors (i.e., schools, daycares, or hospitals) within 600 feet of the Site. The nearest sensitive receptors include Imagine Early Learning Centers @ Jamaica Kids located at 155-10 Jamaica Avenue (approximately 1,320 feet to the northeast) and Queens High School for the Sciences located at 94-50 159th Street (approximately 1,360 feet to the northeast). There are no water bodies located on or adjacent to the Site. Willow Lake is located approximately 2 miles northwest of the Site and Jamaica Bay is located approximately 4 miles south of the Site.

Surrounding land use and sensitive receptors are shown on Figure 3.

Historical Site Uses

Available records indicated that Lot 1 was occupied by Jas. Macbeth Cap and Fuse Factory (manufacturer of patent blasting machinery) and private residences between approximately 1891 and 1901. The fuse factory included various uses such as a tarring house and coal and tinning houses. Lot 1 was later occupied by General Acoustic Company in 1911 and Dictagraph Products Corporation between approximately 1925 and 1951. Abbott Wire Products was identified on Lot 1 between 1963 and 2006. Other uses on Lot 1 included a metal plating shop and refuse burning. Lots 10 and 13 were also occupied by Jas. Macbeth Cap and Fuse Factory from 1891 through 1901, and General Acoustic Company in 1911. By 1925, Lot 10 was utilized as a battery service facility and tin shop and Lot 13 was occupied by a garage and oil burner manufacturer. In 1951, Lots 10 and 13 were occupied by a paper box manufacturer until approximately

1963 when a sink top manufacturer was identified on both lots through approximately 2006. According to the 2019 Phase I Environmental Site Assessment (ESA), the Site buildings have also been used for metal plating operations since the late 1950s. Tetrachloroethene (PCE) was reportedly used for vaporizing operations related to metals, predominantly on Lot 10.

Areas of Concern (AOCs)

The following environmental issues identified during previous assessments were considered areas of concern (AOCs) for the RI. The AOCs include:

- The Site's former industrial use, including metal plating, manufacturing, tannery, and fuse factory;
- Elevated concentrations of chlorinated solvents detected in soil vapor sampled during a 2020 Phase II Environmental Site Assessment (ESA); and
- Elevated concentrations of chlorinated solvents and metals in soil sampled during a 2020 Phase II ESA.

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

The RI included the following scope of work:

1. The performance of a geophysical survey across accessible portions of the Site and utility mark-outs.
2. The advancement of 11 soil borings with continuous soil sampling and laboratory analysis of 32 soil samples.
3. The collection of and laboratory analysis of one sediment sample from a floor drain on Lot 10.
4. The installation of 4 permanent groundwater monitoring wells with the collection and laboratory analysis of 4 groundwater samples.
5. The installation of 9 temporary soil vapor probes and the collection and laboratory analysis of 5 sub-slab soil vapor samples and 4 soil vapor samples.
6. The performance of a groundwater monitoring well elevation and location survey of the newly installed monitoring wells.

Summary of Hydrogeological Findings

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

1. Based on the August 2022 surveys of the Site by Fehringer Surveying, PC, the Site lies at an elevation of 35.52 to 38.84 feet above the North American Vertical Datum of 1988 (NAVD88), and slopes down in a generally north to northwesterly direction.
2. The stratigraphy of the Site, from the surface down, generally consisted of uncontrolled fill material comprising sand, gravel, and silt, with varying amounts of brick and concrete extending from grade to approximately 5 to 9 feet below grade. The fill layer was underlain by apparent native sand, gravel, and silt to boring termination depths (up to 20 feet below grade). Bedrock was not encountered during the RI.
3. Groundwater beneath the Site ranges from elevation 19.35 to elevation 19.50 (NAVD88), or 15.95 to 19.25 feet below grade across the Site. Based on the well elevation survey, groundwater flows in a generally southerly to southeasterly direction beneath the Site.

Summary of Environmental Findings

Soil

Thirty-two soil samples and one sediment sample were collected. The soil samples were analyzed for volatile organic compounds (VOCs) by EPA Method 8260D, semi-volatile organic compounds (SVOCs) by EPA Method 8270E, pesticides by EPA Method 8081B, polychlorinated biphenyls (PCBs) by EPA Method 8082A, TAL metals by EPA Method 6000/7000 series, cyanide by EPA Method 9012, hexavalent chromium by EPA Method 7196A, 1,4-dioxane by EPA Method 8270E, and the NYSDEC list of 21 PFAS compounds by EPA Method 537 (modified). The sediment sample was analyzed for VOCs by EPA Method 8260D, SVOCs by EPA Method 8270E, TAL metals by EPA Method 6000/7000 series, 1,4-dioxane by EPA Method 8270E, and PFAS compounds by EPA Method 537 (modified). The soil and sediment sample analytical results for VOCs, SVOCs, PCBs, pesticides, and metals, were compared to the 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives (UUSCOs) and Restricted Residential Soil Cleanup Objectives (RRSCOs), the applicable Soil Cleanup Objectives (SCOs) for the proposed future use of the Site. Concentrations of perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) were compared to the guidance values for UUSCOs and RRSCOs presented in the January 2021 NYSDEC Sampling, Analysis and Assessment of PFAS Under NYSDEC's Part 375 Remedial Programs. No standard currently exists in New York State for 1,4-dioxane in soil.

One VOC, acetone, was detected in sample RI-SB-DRAIN_1-1.5_20220727 at a concentration of 0.15 milligrams per kilogram (mg/kg), above the UUSCO of 0.05 mg/kg, but below the RRSCO of 100 mg/kg. No other VOCs were detected above UUSCOs and RRSCOs. Tetrachloroethylene (PCE) was detected in 18 samples, below the UUSCO of 1.3 mg/kg, at concentrations up to 0.046 mg/kg in samples RI-SB-05_5-7_20220726 and RI-SB-08_5-7_20220728. Five SVOCs [benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, and indeno(1,2,3-c,d)pyrene] were detected at concentrations above their respective UUSCOs in samples RI-SB-09_0-2_20220726 and RI-SB-09_0-2_20220726. Four of the SVOCs [benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and indeno(1,2,3-c,d)pyrene] were additionally detected above the RRSCOs in samples RI-SB-02_0-2_20220727 and RI-SB-09_0-2_20220726 at concentrations ranging from 0.52 mg/kg to an estimated and biased low concentration of 1.9 mg/kg. Total PCBs were not detected above laboratory reporting limits in any soil samples. One pesticide, P,P'-DDE, was detected in sample RI-SB-07_0-2_20220725 at concentrations above the UUSCO, but below the RRSCO. Seven metals (barium, cadmium, copper, lead, mercury, nickel, and zinc) were detected in 15 soil samples at concentrations ranging from 0.32 mg/kg to 1,310 mg/kg, above their respective UUSCOs. Barium, cadmium, lead, and mercury were additionally detected above RRSCOs in nine samples with concentrations of lead exceeding 500 mg/kg in RI-SB-09_02-_20220726, RI-SB-11_02-_20220725, and RI-SB-DRAIN_1-1.5_20220727.

Perfluorooctanoic acid (PFOA) was detected in sample RI-SB-DRAIN_1-1.5_20220727 at an estimated concentration of 1.55 parts per billion (ppb), above the NYSDEC UUSCO Guidance Value (UUGV) of 0.66 ppb but below the NYSDEC RRSCO Guidance Value (RRGV) of 33 ppb. Perfluorooctanesulfonic acid (PFOS) was detected in sample RI-SB-02_0-2_20220727 at low levels up to an estimated concentration of 0.12 ppb, below the UUGV of 0.88 ppb. 1,4-Dioxane was not detected above laboratory reporting limits in any soil samples.

Groundwater

Four groundwater samples were collected for laboratory analysis of VOCs by EPA Method 8260D, SVOCs by EPA Method 8270E, pesticides by EPA Method 8081B, PCBs by EPA Method 8082A, total and dissolved TAL metals by EPA Method 6000/7000 series, cyanide by EPA Method 9012, 1,4-dioxane by EPA Method 8270E Selective Ion Monitoring (SIM), and the NYSDEC list of 21 PFAS by Modified EPA Method 537 (modified). Groundwater sample analytical results for VOCs, SVOCs, PCBs, pesticides, and total/dissolved metals were conservatively compared to the NYSDEC (Ambient Water Quality Standards

and Guidance Values) AWQSGVs for Class GA groundwater. PFAS concentrations were compared to the June 2021 NYSDEC Sampling, Analysis and Assessment of PFAS Under NYSDEC's Part 375 Remedial Programs. Concentrations of 1,4-dioxane were compared to the August 2020 New York State (NYS) Maximum Contaminant Level (MCL) screening level.

VOCs and SVOCs were not detected in the groundwater samples at concentrations above their respective AWQSGVs. Iron, manganese, and sodium were detected above their respective AWQSGVs in each of the four unfiltered groundwater samples, and sodium was detected above the AWQSGVs in each of the four filtered groundwater samples. PCBs and pesticides were not detected above laboratory reporting limits in any of the four groundwater samples.

PFOA was detected above the NYSDEC January 2021 screening level of 10 parts per trillion (ppt) in each of the four groundwater samples (plus the blind duplicate) at concentrations up to 46.1 ppt. PFOS was detected above the NYSDEC January 2021 screening level of 10 parts per trillion (ppt) in each of the four groundwater samples (plus the blind duplicate) at concentrations up to 33.7 ppt. No individual PFAS compounds were detected at concentrations above 100 ppt. Total PFAS concentrations were below 500 ppt in each groundwater sample. 1,4-Dioxane was not detected above laboratory reporting limits in the groundwater samples.

Soil Vapor and Indoor Air

Five sub-slab soil vapor samples and four soil vapor samples were collected from temporary soil vapor points located across the Site. 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.

The soil vapor samples were analyzed for VOCs by EPA Method TO-15. Forty-four of the 71 VOCs analyzed for were detected in the soil vapor samples. Solvent-related VOCs [including 1,1,1-trichloroethane (1,1,1-TCA), carbon tetrachloride, chlorodifluoromethane, chloromethane, dichlorodifluoromethane, methylene chloride, PCE, and trichloroethylene (TCE)] were detected in the soil vapor samples at individual concentrations up to 530 micrograms per cubic meter ($\mu g/m^3$) from a diluted analysis (PCE in sample RI-SV-03_20220728). Other VOCs, including compounds typically associated with petroleum [such as 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 1,3-butadiene, 1,3-dichlorobenzene, 2,2,4-trimethylpentane, 2-hexanone, 4-ethyltoluene, benzene, butane, cyclohexane, cymene, ethylbenzene, isopropanol, isopropylbenzene, methyl ethyl ketone (MEK), m,p-xylenes, n-butylbenzene, n-heptane, n-hexane, n-propylbenzene, o-xylene, and toluene] were detected in the soil vapor samples at individual concentrations up to 210 $\mu g/m^3$ from a diluted analysis (toluene in sample RI-SV-08_20220728).

PCE was detected in all nine soil vapor samples at concentrations ranging from 3.3 $\mu g/m^3$ in sample RI-SV-02_20220728 to 530 $\mu g/m^3$ from a diluted analysis in sample RI-SV-03_20220728. TCE, a breakdown product of PCE, was detected in seven of the nine soil vapor samples at concentrations ranging from 0.26 $\mu g/m^3$ in sample RI-SV-02_20220728 to 50 $\mu g/m^3$ from a diluted analysis in sample RI-SV-01_20220728.

REMEDIAL INVESTIGATION REPORT

1.0 SITE BACKGROUND

This Remedial Investigation (RI) Report (RIR) summarizes the remedial investigation work performed between July 25 and July 28, 2022 and on August 17, 2022 for the 95-25 149th Street project site (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 AKRF's April 2022 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 4.7.10, although none of the deviations materially affected achieving the objectives of the RI.

1.1 Site Location and Current Usage

The property is an approximately 1.17-acre parcel located at 95-25 149th Street in the Jamaica section of Queens, New York, also identified as Queens Borough Tax Block 10002, Lots 1, 10, and 13 on the New York City Tax Map (Site). On July 7, 2021, Radix 95-25 149th St LLC (the "Applicant") entered into a Brownfield Cleanup Agreement (BCA) (Index No. C241252-06-21) for the Site with the NYSDEC.

Currently, the Site contains 11 one- to two-story buildings. The majority of the buildings on Lot 1 (95-25 149th Street) are unoccupied and only utilized by the current Site owner for office space, storage of construction materials, and warehousing. The southern portion of Lot 1 is occasionally utilized for professional films and television sets. Lot 10 (95-08 150th Street) contains a one-story brick building and includes a garage, shop, storage, and an office utilized by a private contractor. Lot 13 (95-12 150th Street) contains a two-story building and includes a loading dock, shop, and an office utilized by a private contractor. A sub-slab depressurization system (SSDS) was installed at the Site as an Interim Remedial Measure (IRM) and is currently in operation.

To support the proposed redevelopment, the Site is anticipated to be rezoned from M1-4 (manufacturing). The redevelopment plans and regulatory approvals will be advanced under the Uniform Land Use Review Procedure (ULURP). The Site location and topography of the Site and surrounding area are shown on Figure 1, and the Site layout is shown on Figure 2.

1.2 Description of Surrounding Property

The Site is abutted to the north by commercial/industrial buildings, warehouses, and residential apartment buildings along 95th Avenue; to the east by Mohan's Precast USA, Inc., Taste of Heaven Ministries, and industrial buildings and warehouses; to the south by commercial/industrial buildings and residential properties along 97th Avenue; and to the west by commercial/industrial buildings along 149th Street. The surrounding area is predominantly commercial and industrial with some residential uses.

There are no sensitive receptors (i.e., schools, daycares, or hospitals) within 600 feet of the Site. The nearest sensitive receptors include Imagine Early Learning Centers @ Jamaica Kids located at 155-10 Jamaica Avenue (approximately 1,320 feet to the northeast) and Queens High School for the Sciences located at 94-50 159th Street (approximately 1,360 feet to the northeast). There are no water bodies located on or adjacent to the Site. Willow Lake is located approximately 2 miles northwest of the Site and Jamaica Bay is located approximately 4 miles south of the Site.

Surrounding land use and sensitive receptors are shown on Figure 3.

2.0 SITE HISTORY

2.1 Past Uses and Ownership

Available records indicated that Lot 1 was occupied by Jas. Macbeth Cap and Fuse Factory (manufacturer of patent blasting machinery) and private residences between approximately 1891 and 1901. The fuse factory included various uses such as a tarring house, and coal and tinning houses. Lot 1 was later occupied by General Acoustic Company in 1911 and Dictagraph Products Corporation between approximately 1925 and 1951. Abbott Wire Products was identified on Lot 1 between 1963 and 2006. Other uses on Lot 1 included a metal plating shop and refuse burning. Lots 10 and 13 were also occupied by Jas. Macbeth Cap and Fuse Factory from 1891 through 1901, and General Acoustic Company in 1911. By 1925, Lot 10 was utilized as a battery service facility and tin shop and Lot 13 was occupied by a garage and oil burner manufacturer. In 1951, Lots 10 and 13 were occupied by a paper box manufacturer until approximately 1963 when a sink top manufacturer was identified on both lots through approximately 2006. According to the 2019 Phase I ESA, the Site buildings have also been used for metal plating operations since the late 1950s. Tetrachloroethene (PCE) was reportedly used for vaporizing operations related to metals manufacturing, predominantly on Lot 10.

Known Site owners for former Lot 1 have included: Jas. Macbeth Cap & Fuse Factory from 1891 to 1901; General Acoustic Co. in 1911; Dictagraph Products Corporation from 1925 to 1962; Abbott Wire Products, Inc. from 1963 to 2006; and Radix 95-25 149th Steet LLC (Applicant) from July 2021 to present day. Known Site owners for former Lots 10 and 13 have included: JAS Macbeth Cap & Fuse Factory from 1897 to 1901; General Acoustic Co. in 1911; and Radix 95-25 149th Steet LLC (Applicant) from July 2021 to present day.

2.2 Proposed Redevelopment Plan

Although the redevelopment plans are still being conceived, the proposed project currently includes demolition of the existing structures (including asbestos and hazardous building materials abatement as applicable), and construction of two 8-story, mixed-use buildings with a site-wide cellar level. It is anticipated that the post-remediation use will include commercial, industrial, and both market-rate and affordable residential.

It is anticipated that the structures in the southern portion of Lot 1 will be demolished to construct a temporary parking lot prior to Site redevelopment.

2.3 Previous Environmental Reports

Phase I Environmental Site Assessment, 95-04 & 95-25 149th Street, 95-08 & 95-12 150th Street, Queens, Queens County, New York, Partridge Venture Engineering, P.C. & Lawrence ENV, LLC, November 2019

Partridge Venture Engineering P.C. (PVE) doing business as Lawrence ENV, LLC (LENV) prepared a Phase I Environmental Site Assessment (ESA) in November 2019. The Phase I ESA was conducted in conformance with the scope and limitations of American Society for Testing & Materials (ASTM) Practice E1527-13 and included a visual inspection of the Site and a review of regulatory database records and historical records. It should be noted that this Phase I ESA was prepared for a larger property, which included the Site. The assessment identified the following Recognized Environmental Conditions (RECs) in connection with the Site:

- All three tax lots within the Site contain an E-Designation for hazardous materials.
- Historically, the Site was utilized for industrial purposes since approximately 1897, including metal plating, finishing and manufacturing, machine shops, tanneries, painting rooms, a tarring

house, a cap and fuse factory, and battery service. The Site's historical uses and anticipated waste generated constituted a REC.

- Nearby current and historic off-site uses with the potential to affect soil vapor beneath the Site included, a vehicle dismantling facility, a dry cleaner, auto repair shops, gasoline stations, garages with fuel oil tanks, an air conditioning manufacturer, a wire products manufacturer, and an auto painting and spraying facility. The regulatory database also identified five nearby sites in the Voluntary Cleanup Program (VCP).

Phase II Environmental Site Assessment, Abbott 149th and 150th Street Site, 95-25 149th St. and 95-08 & 95-12 150th St., Queens, New York, AKRF, November 2020

AKRF was retained by the Applicant to conduct a Phase II ESA between August and October 2020. The scope of work was based on the findings of the November 2019 Phase I ESA prepared by PVE. The Phase II ESA included a geophysical survey; the advancement of 10 soil borings across the Site and collection of up to two soil samples from each boring; installation of five temporary groundwater monitoring wells and collection of five groundwater samples; installation of seven temporary soil vapor points with collection of seven soil vapor samples; and collection of seven indoor air samples from the interior of buildings and one ambient (outdoor) air sample.

Twelve soil samples were collected from the Site for laboratory analysis. A shallow sample (collected from a 2-foot interval within the upper 5 feet below grade) was taken from each of the 10 soil borings. A second deeper sample (from the 2-foot interval directly above the water table at the groundwater interface) was collected from borings SB-10 and SB-18. Soil samples were analyzed for VOCs by EPA Method 8260, semivolatile organic compounds-base neutral fraction (SVOCs-BN) by EPA Method 8270, polychlorinated biphenyls (PCBs) by EPA Method 8082, and the Target Analyte List (TAL) of metals by EPA Method 6000/7000 series. Five 1-inch diameter temporary groundwater monitoring wells were installed within five borings across the Site. The groundwater samples were analyzed for VOCs and SVOCs-BNs by EPA Methods 8260 and 8270, respectively.

Between August 26 and 27, 2020, five temporary soil vapor points (SV-09, SV-10, SV-13, SV-16, and SV-18) were installed to enable the collection of soil vapor samples for laboratory analysis. All soil vapor points were installed between 4 and 5 feet below grade with the exception of SV-16, which was installed approximately 1 to 2 feet beneath the basement slab of the northwestern building on Lot 1. Due to elevated levels of chlorinated volatile organic compounds (CVOCs) detected in the soil sample from SB-18 as well as several of the soil vapor samples, supplemental soil vapor and indoor air sampling was conducted on October 23 and 26, 2020. The supplemental sampling included the collection of two additional sub-slab soil vapor samples, seven indoor air samples, and one ambient (exterior courtyard) air sample. The soil vapor, indoor, and ambient air samples were analyzed for VOCs by EPA Method TO-15.

Soil Quality Conditions

A layer of uncontrolled fill material (comprising sand, gravel, and silt, with varying amounts of brick) was encountered in the upper 5 feet below grade, underlain by sand and silt with fine gravel, down to the maximum boring terminus of 25 feet below grade. Bedrock was not encountered during the investigation. No petroleum-like odors, staining, or elevated photoionization detector (PID) readings were detected.

In the Phase II ESA, AKRF compared the soil sample analytical results to the NYSDEC 6 New York Codes, Rules, and Regulations (NYCRR) Part 375 Unrestricted Use Soil Cleanup Objectives (UUSCOs), Commercial Soil Cleanup Objectives (CSCOs), and Protection of Groundwater Soil Cleanup Objectives (PGWSCOs). However, based on the proposed end-use of the Site, the soil

samples are compared to the UUSCOs and Restricted Residential Soil Cleanup Objectives (RRSCOs) in this RIWP. Soil laboratory analytical results are summarized below:

- PCE was detected in sample SB-18_3-5_20200827 at a concentration of 14 milligrams per kilogram (mg/kg), above the UUSCO of 1.3 mg/kg, but below the RRSCO of 19 mg/kg. No other VOCs were detected above the UUSCOs and/or RRSCOs. PCE was detected in six other soil samples at concentrations below the UUSCOs.
- SVOCs were detected at low levels up to 1.3 mg/kg, below the UUSCOs and RRSCOs.
- PCBs were not detected at concentrations above the laboratory reporting limits.
- Copper, lead, mercury, and zinc were detected at concentration above their respective UUSCOs. Copper was detected in one sample (SB-14_2-4_20200828) at a concentration of 1,200 mg/kg, above the UUSCO of 50 mg/kg and the RRSCO of 270 mg/kg. Mercury was detected in samples SB-10_17-19_20200827 and SB-11_3-5_20200828 at concentrations of 1.7 mg/kg and 2.5 mg/kg, respectively, above the UUSCO of 0.18 mg/kg and the RRSCO of 0.81 mg/kg. No other metals were detected at concentrations above the RRSCOs.

Groundwater Quality Conditions

Groundwater was encountered between approximately 16 and 20 feet below grade. No visual or olfactory evidence of contamination was detected in the purge water from any monitoring well. Groundwater samples were compared to the NYSDEC 6 NYCRR Part 703.5 Class GA Groundwater Quality Standards and Guidance Values (AWQSGVs).

- No VOCs were detected at concentrations above the AWQSGVs. PCE was detected in all five samples at concentrations ranging from 1.3 to 4.6 micrograms per liter (µg/L), below the AWQSGV of 5 µg/L.
- SVOCs were not detected above laboratory reporting limits in any of the groundwater samples.

The low level detections of PCE indicate may be by the subject VOCs and that further investigation is necessary to delineate the impacts to groundwater.

Soil Vapor Quality Conditions

Petroleum-related VOCs, including 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 2,2,4-trimethylpentane, 2-butanone, 2-hexanone, 4-ethyltoluene, benzene, butane, cyclohexane, ethylbenzene, isopropylbenzene, m,p-xylenes, methyl ethyl ketone (MEK), n-butylbenzene, n-heptane, n-hexane, n-propylbenzene, o-xylene, and toluene, were detected at concentrations up to 1,600 micrograms per cubic meter (µg/m^3).

Chlorinated solvent-related VOCs, including PCE, trichloroethylene (TCE), 1,1,1-trichloroethane (1,1,1-TCA), carbon disulfide, carbon tetrachloride, chlorodifluoromethane, chloromethane, cis-1,2-dichloroethylene, methylene chloride, and trichlorofluoromethane, were detected at concentrations up to 54,300 µg/m^3.

A comparison of the co-located soil vapor and indoor air sample results to the values in the New York State Department of Health (NYSDOH) Soil Vapor/Indoor Air Matrix B indicates that mitigation is required for PCE at all locations. A comparison of the co-located soil vapor and indoor air sample results to the values in the NYSDOH Soil Vapor/Indoor Air Matrix A indicates that mitigation is required for TCE at sampling locations SV-18/IA-18, SV-19/IA-19, and SV-20/IA-20.

Draft Interim Remedial Measure Completion Report, Jamaica Works, 95-25 149th Street, Queens, New York, AKRF, November 2022

AKRF prepared an Interim Remedial Measure Completion Report (IRMCR) following completion of the NYSDEC-approved IRM Work Plan (IRMWP). The IRM was conducted to address the potential for soil vapor intrusion into the on-site structures until a Site-wide remedy can be developed and implemented pursuant to a NYSDEC-approved Remedial Action Work Plan (RAWP). Activities completed under the IRM including, sub-slab communication testing, design and installation of six individual SSDSs, and collection of confirmatory indoor air samples.

Following installation of the SSDS and confirmatory startup, six indoor air samples (IRM-IA-01 through IRM-IA-06) were collected across the Site. The samples were analyzed for VOCs by EPA Method TO-15. Chlorinated VOCs (including PCE, TCE, 1,1,2-trichlorotrifluoroethane, acetone, carbon disulfide, carbon tetrachloride, chlorodifluoromethane, chloroform, chloromethane, dichlorodifluoromethane, methylene chloride, and trichlorofluoromethane) were detected at individual concentrations up to 20 µg/m^3 (acetone in sample IRM-IA-05_20220104).

PCE was detected in five of the six samples at concentrations ranging from 0.22 µg/m^3 to 0.85 µg/m^3, all below the AGV of 30 µg/m^3, and significantly below the Phase II (pre-remedial) indoor air PCE concentration detection range of 3.94 to 123 µg/m^3. Methylene chloride was detected at concentrations ranging from 0.65 to 1.9 µg/m^3, all below the AGV of 60 µg/m^3, and significantly below the Phase II indoor air methylene chloride detection concentration range of 16.2 to 129 µg/m^3.

TCE was detected in one sample (IRM-IA-01_20220104) at a concentration of 2.9 µg/m^3, slightly above the AGV of 2 µg/m^3. The sample was collected on the first floor in the northern portion of the building with a partial basement on Lot 1. A source of the TCE was not identified; however, an additional indoor and ambient air sample will be collected within the location of IRM-IA-01_20220104 during the 2022-2023 heating season.

Previous environmental reports are included in Appendix A.

2.4 Areas of Concern (AOCs)

The following environmental issues, discussed in Section 2.3, were considered areas of concern (AOCs) for the RI:

- The Site's former industrial use, including metal plating, manufacturing, tannery, and fuse factory;
- Elevated concentrations of chlorinated solvents detected in soil vapor sampled during the 2020 Phase II ESA; and
- Elevated concentrations of chlorinated solvents and metals in soil sampled during the 2020 Phase II ESA.

3.0 PROJECT MANAGEMENT

3.1 Project Organization

Contact information for the parties responsible for the work described in this RIR are included in Table A:

Table A
Project Organization

Company	Individual Name	Title	Contact Number(s)
NYSDEC	Richard Mustico	Project Manager	(518) 402-9647
NYSDOH	Julia Kenney	Project Manager	(518) 402-7873
AKRF, Inc.	Stephen Malinowski, QEP	Project Director	(631) 574-3724
	Rebecca Kinal, P.E.	Remedial Engineer	(914) 922-2362
	Adrianna Bosco	Project Manager	(646) 388-9576
	John Sulich	Field Team Leader/Site Safety Officer	(914) 922-2358
Radix 95-25 149th St LLC, 95-08 150th St LLC, and 95-12 150th St 11435 LLC (The Applicant)	Peter Davidson	Applicant's Representative	(917) 843-5435

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 RI described in this RIR was also performed in general accordance with the Site-specific HASP dated January 2022.

4.0 REMEDIAL INVESTIGATION (RI) ACTIVITIES

The RI was conducted between July 25 and 28, 2022 and on August 17, 2021, and included the following scope of work:

1. The performance of a geophysical survey across accessible portions of the Site and utility mark-outs.
2. The advancement of 11 soil borings with continuous soil sampling and laboratory analysis of 32 soil samples.
3. The collection of and laboratory analysis of one sediment sample from a floor drain on Lot 10.
4. The installation of 4 permanent groundwater monitoring wells with the collection and laboratory analysis of 4 groundwater samples.
5. The installation of 9 temporary soil vapor probes and the collection and laboratory analysis of 5 sub-slab soil vapor samples and 4 soil vapor samples.
6. The performance of a groundwater monitoring well elevation and location survey of the newly installed monitoring wells.

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

4.1 Geophysical Survey

A geophysical survey was conducted across accessible portions of the Site by Enviroprobe Service, Inc. of Mount Laurel, New Jersey to investigate the presence of potential underground storage tanks (USTs) and subsurface utilities, and to clear the proposed sampling locations. The geophysical survey included ground penetrating radar (GPR) and radiodetection methods.

The geophysical survey did not identify any anomalies consistent with potential USTs at the Site. Anomalies consistent with underground utilities were identified throughout the Site and were marked appropriately.

The Geophysical Investigation Report is included as Appendix B.

4.2 Soil Boring Advancement

Between July 25 and 28, 2022, 10 soil borings (RI-SB-01 and RI-SB-03 through RI-SB-11) were advanced by Eastern Environmental Solutions, Inc. (Eastern) of Manorville, New York throughout the Site using a Geoprobe® direct-push probe (DPP) drill rig, under the oversight of AKRF. Soil boring location RI-SB-02 was advanced using a hand auger due to access limitations. Additionally, a sediment sample (RI-SB-DRAIN) was collected from a floor drain on Lot 10 using a hand auger. The soil boring locations are shown on Figure 2. Borings that were converted into permanent monitoring wells (RI-SB-01, RI-SB-03, RI-SB-04, and RI-SB-05) were advanced to 15 to 20 feet below ground surface (bgs). The remaining seven borings were advanced to the target depth of 15 feet bgs, except for RI-SB-02 and RI-SB-09. Due to equipment refusal, RI-SB-02 and RI-SB-09 were advanced to 4 and 9 feet bgs, respectively. Sample location RI-SB-DRAIN was collected from the bottom of the drain at approximately 1-foot bgs.

Continuous soil samples were collected to the bottom of the boring terminus, which ranged from 2 to 20 feet bgs. The soil boring locations that were converted into groundwater monitoring wells (RI-SB-01 and RI-SB-03 through RI-SB-05) were surveyed by Fehringer Surveying, P.C., a New York State-licensed surveyor. The remaining soil boring locations were measured against Site boundaries and fixed landmarks upon their completion. Lithological cross-sections are provided on Figures 4 and 5. Soil boring logs are provided in Appendix C.

4.3 Groundwater Monitoring Well Installation

Two 2-inch-diameter permanent groundwater monitoring wells (RI-MW-01 and RI-MW-03) were installed by Eastern using a Geoprobe® drill rig fitted with hollow stem augers between July 25 to 27, 2022, under the oversight of AKRF. Due to Site access limitations (limited overhead clearance and rig mobility restrictions), two 1-inch-diameter permanent groundwater monitoring wells (RI-MW-04 and RI-MW-05) were installed by Eastern using a remote -access Geoprobe® drill rig. The groundwater well locations are shown on Figure 2. All groundwater monitoring wells were constructed with 15 feet of 0.020-inch slotted polyvinyl chloride (PVC) well screen installed approximately 5 to 10 feet into the observed water table. Monitoring well RI-MW-05 was constructed with 10 feet of 0.020-inch slotted PVC well screen installed approximately 7 feet below the water table. A No. 02 morie sand pack was installed around the well screens, followed by two feet of hydrated bentonite. Sand was backfilled to one foot below surface grade with non-shrinking cement grout installed above to surface grade. Each of the wells were finished with a locking j-plug, locking flush-mounted protective well cover, and concrete pad.

Due to Site access limitations in the proposed location of RI-SB/MW-02, the boring was relocated approximately 25 feet south and was attempted to be installed using a hand auger. Due to shallow refusal and access limitations, RI-MW-02 could not be installed during this investigation. If required by NYSDEC, the previously proposed monitoring well RI-MW-02 can likely be installed in the future on-site parking lot after building demolition activities are completed in the southern portion of the Site.

Groundwater well construction details and sampling location rationale are summarized in Table B.

Table B
Groundwater Monitoring Well Construction Details and Rationale

Monitoring Well ID	On-Site Well Location	Screened Intervals (feet below grade)	Rationale for Sampling Location
RI-MW-01	Western	10 to 25 feet	To assess groundwater quality on the western portion of the Site; and determine Site-specific groundwater flow direction and elevation.
RI-MW-03	Northeastern	10 to 25 feet	To assess groundwater quality on the northeastern portion of the Site and determine Site-specific groundwater flow direction and elevation.
RI-MW-04	Northwestern	3 to 18 feet	To assess groundwater quality on the northwestern portion of the Site and determine Site-specific groundwater flow direction and elevation.
RI-MW-05	Northeastern	12 to 22 feet	To assess groundwater quality on the northeastern portion of the Site and determine Site-specific groundwater flow direction and elevation.

The groundwater monitoring well locations are shown on Figure 2. Groundwater monitoring well construction logs are provided in Appendix C. Groundwater sample analytical results are discussed in Section 5.3.

4.4 Groundwater Monitoring Well Development

Following installation, each well was developed via pumping and surging with a Peristaltic or Monsoon pump affixed with dedicated high-density polyethylene (HDPE) tubing to remove any

accumulated fines and establish a hydraulic connection with the surrounding aquifer. Development water was monitored with a Horiba U-52 water quality meter during development. The goal of well development was to reduce turbidity within the well until less than 50 nephelometric turbidity units (NTUs) were recorded for three successive readings, and until water quality indicators [pH, temperature, oxidation reduction potential (ORP), dissolved oxygen, and specific conductivity] stabilized to within 10% for three successive readings. Monitoring wells RI-MW-01 and RI-MW-03 through RI-MW-05 were developed until at least three well volumes were purged, groundwater was visibly clear, and water quality indicators stabilized. All purged groundwater was containerized in New York State Department of Transportation (NYSDOT)-approved 55-gallon drums for off-site disposal. Investigation-derived waste (IDW) is discussed in Section 4.7.9.

Groundwater monitoring well development logs are provided in Appendix D.

4.5 Groundwater Monitoring Well Elevation and Location Survey

On August 17, 2022, all groundwater monitoring wells were surveyed by Fehringer Surveying, P.C, a New York State-licensed surveyor. Elevation measurements were taken at the access cover and on the north side of the top of the PVC casing at each of the groundwater monitoring wells; location measurements were taken at the access cover. Horizontal and vertical datum were tied to the North American Vertical Datum of 1988 (NAVD88). The groundwater elevation ranged from 19.35 to 19.50 feet NAVD. Based on the surveyed elevations, groundwater flows in a generally southerly to southeasterly direction across the Site.

The locations of the groundwater monitoring wells are shown on Figure 2. A groundwater elevation contour map is included as Figure 6, and groundwater elevation data is presented in Table 1. The groundwater monitoring well elevation survey for the Site is provided as Appendix E, and groundwater sampling logs are provided as Appendix F.

4.6 Temporary Soil Vapor Point Installation

Nine temporary soil vapor points (RI-SV-01 through RI-SV-09) were installed at the locations shown on Figure 2. Five sub-slab soil vapor points (RI-SV-01 and RI-SV-03 through RI-SV-06) were installed approximately 6 to 9 inches below the existing concrete foundation slab. The remaining four soil vapor points (RI-SV-02 and RI-SV-07 through RI-SV-09) were installed at depths ranging from 4 to 15 feet bgs below asphalt and/or concrete paved areas. Soil vapor points RI-SV-02 and RI-SV-07 were installed at 4 and 6 feet bgs, respectively, due to access restrictions and equipment refusal.

At each soil vapor point, a 6-inch stainless steel screen implant connected to Teflon™-lined polyethylene tubing was installed by hand or through the drilling rods and threaded into the drive point. The sample tubing was extended from the bottom end of the screen to above grade. The rods were then removed and the borings were backfilled with clean silica sand above the screen. Hydrated bentonite was used to fill the remaining void around the sampling tubing to the ground surface on all soil vapor points.

The soil vapor sampling logs, provided as Appendix G, include vapor point construction details.

4.7 Sample Collection and Chemical Analysis

Soil, groundwater, and soil vapor were sampled and evaluated in this RIR. The sampling performed, as presented below, provides a basis for the evaluation of subsurface Site conditions and potential remedial actions with respect to the media sampled.

4.7.1 Soil Sampling

Soil cores from soil borings RI-SB-01, RI-SB-03 through RI-SB-11 were collected in decontaminated 3- or 5-foot-long, 2-inch-diameter, stainless steel macrocore piston rod samplers fitted with dedicated, internal acetate liners. Soil cores from borings RI-SB-02 and the Lot 10 floor drain (RI-SB-DRAIN) were collected via a decontaminated stainless-steel hand auger and laid out on polyethylene sheeting in sequential order. All sampling equipment was either dedicated or decontaminated between sampling locations.

Soil cores were field-screened using a PID equipped with an 11.7 electron volt (eV) lamp and logged using the modified Burmister soil classification system. The PID was calibrated at the beginning of each field day with isobutylene gas in accordance with the manufacturer's specifications. At each boring location, AKRF field personnel recorded and documented subsurface conditions. No field evidence of contamination, including elevated PID readings above background conditions, petroleum- or solvent-like odors, and/or dark staining, were encountered in the remaining borings. Evidence of free phase product [non-aqueous phase liquid (NAPL)] was not identified during the RI.

During the RI, 32 soil samples and one sediment sample were submitted for laboratory analysis. Up to three soil samples were collected from each soil boring location. At each boring location, one soil sample was collected from the upper 2 feet beneath the concrete slab or existing pavement, a second sample was collected from bottom two feet of the observed fill layer (if encountered), and a third was collected from the 2-foot interval at the bottom of the boring.

All soil and sediment samples were submitted to Eurofins TestAmerica, Inc. (TestAmerica) of Edison, New Jersey and Burlington, Vermont, both NYSDOH Environmental Laboratory Accreditation Program (ELAP)-certified laboratories, in accordance with EPA chain of custody (CoC) protocols. Soil samples collected were analyzed for VOCs by EPA Method 8260D, SVOCs by EPA Method 8270E, pesticides by EPA Method 8081B, PCBs by EPA Method 8082A, TAL metals by EPA Method 6000/7000 series, cyanide by EPA Method 9012, hexavalent chromium by EPA Method 7196A, 1,4-dioxane by EPA Method 8270E, and the NYSDEC list of 21 per- and polyfluoroalkyl substances (PFAS) by EPA Method 537 (modified). Sediment sample RI-SB-DRAIN was analyzed for VOCs by EPA Method 8260D, SVOCs by EPA Method 8270E, TAL metals by EPA Method 6000/7000 series, 1,4-dioxane by EPA Method 8270E, and the NYSDEC list of 21 per- and polyfluoroalkyl substances (PFAS) by EPA Method 537 (modified).

Soil sampling locations, depths, and rationales are summarized in Table C.

Table C
Soil Boring Details and Sampling Rationale

Soil Boring	On-Site Location	Sample Depth Intervals (feet below grade)	Rationale
RI-SB-01	Western	0 to 2, 7 to 9, 13 to 15	To assess soil quality in the western portion of the Site
RI-SB-02	Southern	0 to 2, 2 to 4	To assess soil quality in the southern portion of the Site and downgradient of the in-service 7,500-gallon AST
RI-SB-03	Northeastern	0 to 2, 5 to 7, 13 to 15	To assess soil quality in the northeastern portion of the Site near suspect source area

Soil Boring	On-Site Location	Sample Depth Intervals (feet below grade)	Rationale
RI-SB-04	Northwestern	0 to 2, 4 to 6, 13 to 15	To assess soil quality in the northwestern portion of the Site
RI-SB-05	Northeastern	0 to 2, 5 to 7, 13 to 15	To assess soil quality in the northeastern portion of the Site
RI-SB-06	Northeastern	0 to 2, 4 to 6, 13 to 15	To assess soil quality in the northeastern portion of the Site
RI-SB-07	Northwestern	0 to 2, 6 to 8, 13 to 15	To assess soil quality in the northwestern portion of the Site
RI-SB-08	Central	0 to 2, 5 to 7, 13 to 15	To assess soil quality in the central portion of the Site
RI-SB-09	Southern	0 to 2, 3 to 5, 7 to 9	To assess soil quality in the southern portion of the Site
RI-SB-10	Northern	0 to 2, 5 to 7, 13 to 15	To assess soil quality in the northern portion of the Site
RI-SB-11	Northeastern	0 to 2, 5 to 7, 13 to 15	To assess soil quality in the northeastern portion of the Site
Lot 10 Floor Drain	Northern	1 to 1.5	To assess sediment quality in the floor drain near the suspect source area

4.7.2 Soil Quality Assurance/Quality Control (QA/QC) Sampling

For QA/QC purposes, two matrix spike/matrix spike duplicate (MS/MSD) samples, two blind duplicate samples, two aqueous field blanks, and two aqueous trip blanks were submitted for laboratory analysis, as discussed in Section 4.7.7.

Soil and sediment samples slated for laboratory analysis were placed in laboratory-supplied containers in accordance with EPA protocols. The soil and sediment samples were analyzed by TestAmerica. Third-party data validation was performed by L.A.B. Validation Corp., of East Northport, New York, and Data Usability Summary Reports (DUSRs) were prepared.

DUSRs are further discussed in Section 4.7.7, and soil analytical data is discussed in Section 5.2. The soil boring locations are shown on Figure 2. Soil boring logs are provided in Appendix C.

4.7.3 Groundwater Sampling

Groundwater samples were collected from the four monitoring wells in accordance with EPA low flow sampling methodology, the NYSDEC guidance for *Sampling, Analysis, And Assessment Of PFAS Under NYSDEC's Part 375 Remedial Programs,* dated June 2021, and the Site-specific QAPP (included as Appendix A of the RIWP). Groundwater samples were collected using dedicated and decontaminated sampling equipment. The groundwater samples were collected a minimum of one week after well development.

Prior to collecting the groundwater samples, the depth to groundwater and the total well depth were measured at each of the groundwater monitoring wells using an oil/water interface probe attached to a measuring tape accurate to 0.01 foot. Free phase product was not detected in the groundwater monitoring wells during installation, purging, or sampling. Purging of the wells continued with a submersible pump affixed with dedicated high-density polyethylene (HDPE) tubing until at least three well volumes were removed, groundwater was visibly clear, and water quality indicators stabilized. All purge water from

the groundwater monitoring wells was containerized in labeled, NYSDOT-approved 55-gallon drums for off-site disposal at a permitted facility. Disposal of IDW is further discussed in Section 4.7.9.

The groundwater samples were submitted to TestAmerica for analysis of VOCs by EPA Method 8260D, SVOCs by EPA Method 8270E, pesticides by EPA Method 8081B, PCBs by EPA Method 8082A, total and dissolved TAL metals by EPA Method 6000/7000 series, cyanide by EPA Method 9012, 1,4-dioxane by EPA Method 8270E Selective Ion Monitoring (SIM), and the NYSDEC list of 21 PFAS by Modified EPA Method 537 (modified).

4.7.4 Groundwater Quality Assurance/Quality Control (QA/QC) Sampling

For QA/QC purposes, one MS/MSD samples, one blind duplicate sample, one aqueous field blank, one equipment blank, and one aqueous trip blank 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 equipment blank sample was submitted for laboratory analysis of PFAS by Modified EPA Method 537.1 only; and the trip blank was submitted for laboratory analysis of VOCs by EPA Method 8260 only.

Sample containers were labeled, placed in ice-filled coolers, and shipped to the laboratory via courier with CoC documentation. The laboratory samples were analyzed by TestAmerica with Category B deliverables. Third-party data validation was performed by L.A.B. Validation Corp and DUSRs were prepared.

DUSRs are further discussed in Section 4.7.7, and groundwater analytical data is discussed in Section 5.3. Groundwater sampling logs are provided in Appendix F.

4.7.5 Soil Vapor Sampling

Five sub-slab soil vapor samples (RI-SV-01 and RI-SV-03 through RI-SV-06) and four soil vapor samples (RI-SV-02 and RI-SV-07 through RI-SV-09) were collected from the temporary soil vapor points shown on Figure 2. Prior to collection, each temporary soil vapor sampling point was purged of approximately three sample volumes using a low-flow air pump at a flow rate of approximately 0.2 liter per minute. During purging, a shroud was placed over each sampling point and helium gas was introduced to saturate the atmosphere around the sample port. Purged vapors were collected in a Tedlar® bag and field-screened for organic vapors using an 11.7 eV 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 with helium detections of non-detect. As instructed by NYSDEC, the SSDS was in operation at the time of the sampling.

After purging, probes RI-SV-01 through RI-SV-09 were connected via Teflon™-lined polyethylene tubing to a laboratory-supplied batch-certified 6-Liter SUMMA® canister equipped with a flow regulator set to collect a sample over a two-hour sampling period. Immediately after opening the flow control valve, the initial SUMMA® canister vacuum (inches of mercury) was noted. After approximately two hours, the flow controller valve was closed, the final vacuum noted, and the canister placed in a shipping carton for delivery to the laboratory.

Soil vapor sampling locations, depths, and rationales are summarized in Table D.

Table D
Soil Vapor Sample Details

Soil Vapor Point ID	Temporary Soil Vapor Point Location	Sampling Depth (below existing slab-on-grade)	Purged Vapor PID Reading (ppm)	Rationale For Sampling Location
RI-SV-01	Western	9 inches	1.0	To determine concentrations of VOCs on the western portion of the Site, evaluate the potential for off-site exposure to west, and determine if there is a vapor intrusion concern.
RI-SV-02	Southern	4 feet	1.2	To determine concentrations of VOCs on the southern portion of the Site and if there is a vapor intrusion concern.
RI-SV-03	Northeastern	6 inches	2.1	To determine concentrations of VOCs on the northeastern portion of the Site, and if there is a vapor intrusion concern.
RI-SV-04	Northeastern	6 inches	1.9	To determine concentrations of VOCs on the northeastern portion of the Site and determine if there is a vapor intrusion concern.
RI-SV-05	Northwestern	6 inches	0.9	To determine concentrations of VOCs on the southern portion of the Site, evaluate the potential for off-site exposure to the west, and determine if there is a vapor intrusion concern.
RI-SV-06	Southern	9 inches	0.8	To determine concentrations of VOCs on the southern portion of the Site, evaluate the potential for off-site exposure to the southeast, and determine if there is a vapor intrusion concern.
RI-SV-07	Southern	6 feet	1.2	To determine off-site conditions and support the QHHEA.
RI-SV-08	Southwestern	15 feet	1.6	To determine off-site conditions and support the QHHEA.
RI-SV-09	Northeastern	15 feet	2.0	To determine off-site conditions and support the QHHEA.

Notes:
ppm – parts per million
ND – not detected

Methodologies used for soil vapor assessment conform to the *New York State Department of Health Final Guidance on Soil Vapor Intrusion,* October 2006; updated May, 2017. The vapor samples were analyzed for VOCs by EPA Method TO-15 by TestAmerica with Category B deliverables. Sample containers were shipped to the laboratory via courier with appropriate CoC documentation. Third-party data validation was performed by L.A.B. Validation Corp and DUSRs were prepared.

DUSRs are further discussed in Section 4.7.7, and soil vapor analytical data is discussed in Section 5.4. Soil vapor sample locations are shown on Figure 2. Soil vapor sampling logs are included as Appendix G.

4.7.6 Chemical Analysis

Chemical analytical work has been performed under a QA program, which is summarized in Table E.

Table E
QA Program

Factor	Description
Quality Assurance Officer	The chemical analytical QA/QC was directed by Stephen Malinowski 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 TestAmerica of Edison, New Jersey and Burlington, Vermont.
Chemical Analytical Methods	Soil analytical methods: • VOCs by EPA Method 8260D • SVOCs by EPA Method 8270E • PCBs by EPA Method 8082A • Pesticides by EPA Method 8081B • TAL Metals by EPA Method 6000/7000 series • Cyanide by EPA Method 9012 • Hexavalent chromium by EPA Method 7196A • 1,4-Dioxane by EPA Method 8270E • 21 compound PFAS list by Modified EPA Method 537 Groundwater analytical methods: • VOCs by EPA Method 8260D • SVOCs by EPA Method 8270E • PCBs by EPA Method 8082A • Pesticides by EPA Method 8081B • TAL Metals (total and dissolved) by EPA Method 6000/7000 series • Cyanide By EPA Method 9012 • 1,4-Dioxane by EPA Method 8270E SIM • 21 compound PFAS list by Modified EPA Method 537 Soil vapor analytical method: • VOCs by EPA Method TO-15

4.7.7 Quality Assurance/Quality Control (QA/QC) Sampling

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 are 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 TestAmerica. The third-party data validation was performed by L.A.B. Validation Corp. and reported in DUSRs for soil, groundwater, and

vapor. Laboratory analytical data sets and DUSRs are provided in Appendix H. QA/QC sampling consisted of the following:

Soil QA/QC Samples

- Two MS/MSD samples: RI-SB-09_0-2_20220726 and RI-SB-06_13-15_20220727
- Two blind duplicate samples: RI-SB-X_13-15_20220726 (collected from RI-SB-04_13-15_20220726) and RI-SB-X_4-6_20220727 (collected from RI-SB-06_4-6_20220727)
- Two trip blank samples: TB_20220726 and TB_20220728
- Two field blank samples: FB_20220726 and FB_20220727

Groundwater QA/QC Samples

- One MS/MSD sample: RI-MW-01_20220817
- One blind duplicate samples: RI-MW-X_20220817 (collected from RI-MW-03_20220817)
- One field blank sample: RI-FB-GW-01_20220817
- One equipment blank sample: RI-EB-GW-01_20220817
- One trip blank sample: RI-TB-GW-01_20220817

QA/QC samples were submitted with the soil and groundwater samples. The field blank, blind duplicate, and MS/MSD samples were analyzed for the same analyte list as the accompanying soil and groundwater samples. The equipment blank sample was submitted for laboratory analysis of PFAS by Modified EPA Method 537.1 only. The trip blank samples were submitted for laboratory analysis of VOCs only.

Data Validation

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 was 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 Tables 2 through 15, and are summarized below:

- 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.
- R: DUSR 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.
- 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.

4.7.8 Results of Chemical Analyses

Laboratory data for soil, groundwater, and soil vapor/indoor air samples are summarized in Tables 2 through 7, Tables 8 through 14, and Table 15, respectively. Soil sample concentrations above UUSCOs and RRSCOs, and PFAS concentrations above NYSDEC guidance values are shown on Figure 7. Groundwater sample concentrations above AWQSGVs and PFAS concentrations above NYSDEC guidance values are shown on Figure 8. Soil vapor analytical results are shown on Figure 9. Laboratory data deliverables are provided in digital form in Appendix H.

4.7.9 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. All 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 100 gallons) and one drum of drill cuttings were disposed of off-site at GFL Environmental, Inc. in Quebec, Canada by Eastern on August 26, 2022, in accordance with applicable regulations. The fully executed IDW disposal manifests are included as Appendix I.

4.7.10 Deviations from the Remedial Investigation Work Plan (RIWP)

The following components of the RI deviated from the RIWP:

- Due to access limitations and the presence of suspect friable asbestos overhead in the proposed location of RI-SB/MW/SV-02, the boring was relocated approximately 25 feet south. The boring location was advanced using a hand auger due to the structural integrity of the interior floorboard. Shallow refusal was encountered at 4 feet bgs and no groundwater was encountered in RI-SB-02. Therefore, RI-MW-02 was not installed as part of this RI and only two soil samples were taken at this location (0 to 2 feet bgs and 2-4 feet bgs). If required, a supplemental RI may be conducted following demolition of the southern Site building and receipt of the development plans to fill in any data gaps. Soil vapor point RI-SV-02 was installed at approximately 4 feet bgs, as opposed to a sub-slab point.
- Due to shallow equipment refusal, boring RI-SB-09 was advanced to 9 feet bgs and the proposed target depth of 15 feet was not reached.
- Due to shallow equipment refusal at the RI-SV-07 location, the soil vapor point was installed at 6 feet bgs and the target installation depth of 15 feet bgs was not reached.

None of the deviations referenced above materially affected achieving the objectives of the RI; however, if required a supplemental RI may be conducted following demolition of the southern Site building.

5.0 ENVIRONMENTAL EVALUATION

5.1 Geological and Hydrogeological Conditions

5.1.1 Stratigraphy

The stratigraphy of the Site, from the surface down, generally consisted of a layer of uncontrolled fill material comprising sand, gravel, and silt, with varying amounts of brick and concrete extending from grade to approximately 5 to 9 feet bgs. The uncontrolled fill was underlain by apparent native sand, gravel, and silt to boring termination depths (up to 20 feet bgs). Bedrock was not encountered during the RI.

5.1.2 Hydrogeology

Based on Site-specific well point measurements, groundwater beneath the Site ranges from elevation 19.35 to elevation 19.50 (NAVD88), or approximately 15.95 to 19.25 feet below grade surface across the Site. Groundwater flows beneath the Site in a generally southerly to southeasterly direction.

5.2 Soil Chemistry

A total of 32 soil samples were collected for laboratory analysis from soil borings RI-SB-01 through RI-SB-11. One sediment sample was collected from the floor drain on Lot 10 (RI-SB-DRAIN). The soil samples were analyzed for VOCs by EPA Method 8260D, SVOCs by EPA Method 8270E, pesticides by EPA Method 8081B, PCBs by EPA Method 8082A, TAL metals by EPA Method 6000/7000 series, cyanide by EPA Method 9012, hexavalent chromium by EPA Method 7196A, 1,4-dioxane by EPA Method 8270E, and the NYSDEC list of 21 PFAS compounds by EPA Method 537 (modified). The sediment sample was analyzed for VOCs by EPA Method 8260D, SVOCs by EPA Method 8270E, TAL metals by EPA Method 6000/7000 series, 1,4-dioxane by EPA Method 8270E, and PFAS compounds by EPA Method 537 (modified). The soil and sediment sample analytical results for VOCs, SVOCs, PCBs, pesticides, and metals, were compared to the 6 NYCRR Part 375 UUSCOs and RRSCOs. Concentrations of perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) were compared to the guidance values for UUSCOs and RRSCOs presented in the January 2021 *NYSDEC Sampling, Analysis and Assessment of PFAS Under NYSDEC's Part 375 Remedial Programs*. No standard currently exists in New York State for 1,4-dioxane in soil.

Soil sample analytical results are presented in Tables 2 through 7. Soil sample concentrations above UUSCOs, RRSCOs, and guidance values are shown on Figure 7. Soil laboratory analytical data reports are included in Appendix H.

5.2.1 Volatile Organic Compounds (VOCs) in Soil

One VOC, acetone, was detected in sample RI-SB-DRAIN_1-1.5_20220727 at a concentration of 0.15 mg/kg, above the UUSCO of 0.05 mg/kg, but below the RRSCO of 100 mg/kg. No other VOCs were detected above UUSCOs and RRSCOs. Tetrachloroethylene (PCE) was detected in 18 samples, below the UUSCO of 1.3 mg/kg, at concentrations up to 0.046 mg/kg in samples RI-SB-05_5-7_20220726 and RI-SB-08_5-7_20220728.

Methylene chloride was detected in one field blank (FB_20220727) at an estimated concentration of 0.41 µg/L. Methylene chloride is a common laboratory contaminant, and the detection in the field blank is likely due to laboratory contamination and not an on-site source. Table F summarizes VOC exceedances above UUSCOs in soil samples.

Table F
VOC Concentrations in Soil Samples Above UUSCOs

Analyte	Soil Sample Identification	UUSCO (mg/kg)	RRSCO (mg/kg)	Concentration (mg/kg)
Acetone	RI-SB-DRAIN_1-1.5_20220727	0.05	100	0.15 *

Notes:
mg/kg: milligrams per kilogram
Sample detections that exceed the UUSCOs are designated with *.
Sample detections that exceed the RRSCOs are designated with †.

Soil analytical results for VOCs are presented in Table 2.

5.2.2 Semivolatile Organic Compounds (SVOCs) in Soil

SVOCs were detected at low levels, with the highest concentrations detected in shallow samples collected from the upper 2 feet below grade. Five SVOCs [benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, and indeno(1,2,3-c,d)pyrene] were detected at concentrations above their respective UUSCOs in two samples. Four of the SVOCs [benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and indeno(1,2,3-c,d)pyrene] were additionally detected above the RRSCOs.

Table G summarizes SVOC exceedances above UUSCOs and RRSCOs in soil samples.

Table G
SVOC Concentrations in Soil Samples Above UUSCOs or UUSCOs/RRSCOs

Analyte	Sample Identification	UUSCO (mg/kg)	RRSCO (mg/kg)	Concentration (mg/kg)
Benzo(a)Anthracene	RI-SB-09_0-2_20220726	1	1	1.6 *†
Benzo(a)Pyrene	RI-SB-09_0-2_20220726	1	1	1.5 JL *†
Benzo(b)Fluoranthene	RI-SB-02_0-2_20220727	1	1	1.1 *†
	RI-SB-09_0-2_20220726			1.9 JL *†
Chrysene	RI-SB-09_0-2_20220726	1	3.9	1.7 *
Indeno(1,2,3-c,d)Pyrene	RI-SB-02_0-2_20220727	0.5	0.5	0.52 *†
	RI-SB-09_0-2_20220726			1.1 JL *†

Notes:
J: The concentration given is an estimated value.
L: Sample result is estimated and biased low.
mg/kg: milligrams per kilogram
Sample detections that exceed the UUSCO are designated with *.
Sample detections that exceed the RRSCO are designated with †.

Soil analytical results for SVOCs are presented in Table 3.

5.2.3 Target Analyte List (TAL) Metals in Soil

Seven metals (barium, cadmium, copper, lead, mercury, nickel, and zinc) were detected in up to 15 soil samples across the Site at concentrations ranging from an estimated concentration of 0.015 mg/kg to 1,310 mg/kg, above their respective UUSCOs. Barium, cadmium, lead, and mercury were detected in up to nine samples at concentrations above the RRSCOs.

Table H summarizes metals exceedances above UUSCOs and RRSCOs in soil samples.

Table H
TAL Metals Concentrations in Soil Samples Above UUSCOs or UUSCOs/RRSCOs

Analyte	Sample Identification	UUSCO (mg/kg)	RRSCO (mg/kg)	Concentration (mg/kg)
Barium	RI-SB-DRAIN_1-1.5_20220727	350	400	436 *†
Cadmium	RI-SB-03_0-2_20220725	2.5	4.3	4.9 *†
	RI-SB-DRAIN_1-1.5_20220727			5.9 *†
Copper	RI-SB-01_7-9_20220727	50	270	136 *
	RI-SB-02_0-2_20220727			53.1 *
	RI-SB-02_2-4_20220727			58.1 *
	RI-SB-08_0-2_20220728			63 *
	RI-SB-08_5-7_20220728			50.8 *
	RI-SB-09_0-2_20220726			106 *
	RI-SB-10_0-2_20220725			52.9 *
	RI-SB-11_0-2_20220725			68 *
	RI-SB-DRAIN_1-1.5_20220727			201 *
Lead	RI-SB-01_7-9_20220727	63	400	187 *
	RI-SB-02_0-2_20220727			172 *
	RI-SB-02_2-4_20220727			145 *
	RI-SB-03_0-2_20220725			484 *†
	RI-SB-05_0-2_20220726			104 *
	RI-SB-05_5-7_20220726			138 *
	RI-SB-09_0-2_20220726			853 J *†
	RI-SB-09_3-5_20220726			477 *†
	RI-SB-10_0-2_20220725			365 *
	RI-SB-11_0-2_20220725			929 *†
	RI-SB-DRAIN_1-1.5_20220727			814 *†
Mercury	RI-SB-01_7-9_20220727	0.18	0.81	1 *†
	RI-SB-02_0-2_20220727			3.3 *†
	RI-SB-02_2-4_20220727			2.7 *†
	RI-SB-03_0-2_20220725			0.32 *
	RI-SB-05_0-2_20220726			3 *†
	RI-SB-05_5-7_20220726			0.48 *
	RI-SB-09_0-2_20220726			2.4 *†
	RI-SB-09_3-5_20220726			0.43 *
	RI-SB-10_0-2_20220725			0.5 *
	RI-SB-11_0-2_20220725			1.3 *†
	RI-SB-DRAIN_1-1.5_20220727			1.1 *†
Nickel	RI-SB-DRAIN_1-1.5_20220727	30	310	49.2 *
Zinc	RI-SB-03_0-2_20220725	109	10,000	1,310 *
	RI-SB-03_5-7_20220725			150 *
	RI-SB-09_0-2_20220726			209 *
	RI-SB-09_7-9_20220726			161 *
	RI-SB-10_0-2_20220725			215 *
	RI-SB-DRAIN_1-1.5_20220727			520 *

Notes:
J: The concentration given is an estimated value.
mg/kg: milligrams per kilogram
Sample detections that exceed the UUSCO are designated with *.
Sample detections that exceed the RRSCO are designated with †.

Soil analytical results for TAL metals are presented in Table 4.

5.2.4 Polychlorinated Biphenyls (PCBs) in Soil

Total PCBs were not detected above laboratory reporting limits any soil samples.

Soil analytical results for PCBs are presented in Table 5.

5.2.5 Pesticides in Soil

One pesticide, P,P'-DDE, was detected in sample RI-SB-07_0-2_20220725 at a concentration of 0.0092 mg/kg, above the UUSCO of 0.0033 mg/kg, but below the RRSCO of 8.9 mg/kg. No other pesticides were detected above UUSCOs and RRSCOs.

Table G summarizes pesticide exceedances above UUSCOs in soil samples.

Table I
Pesticide Concentrations in Soil Samples Above UUSCOs

Analyte	Sample Identification	UUSCO (mg/kg)	RRSCO (mg/kg)	Concentration (mg/kg)
P,P'-DDE	RI-SB-07_0-2_20220725	0.0033	8.9	0.0092 *

Notes:
mg/kg: milligrams per kilogram
Sample detections that exceed the UUSCOs are designated with *.
Sample detections that exceed the RRSCOs are designated with †.

Soil analytical results for pesticides are presented in Table 6.

5.2.6 Per- and Polyfluoroalkyl Substances (PFAS) and 1,4-Dioxane in Soil

PFOA was detected in sample RI-SB-DRAIN_1-1.5_20220727 at an estimated concentration of 1.55 ppb, above the NYSDEC UUSCO Guidance Value (UUGV) of 0.66 ppb, but below the NYSDEC RRSCO Guidance Value (RRGV) of 33 ppb. PFOS was detected at low levels up to an estimated concentration of 0.12 ppb, below the UUGV of 0.88 ppb. 1,4-Dioxane was not detected above laboratory reporting limits in any soil samples.

Table J summarizes PFAS exceedances above UUGVs in soil samples.

Table J
PFAS Concentrations in Soil Samples Above UUGVs

Analyte	Sample Identification	UUGV (ppb)	RRGV (ppb)	Concentration (ppb)
PFOA	RI-SB-DRAIN_1-1.5_20220727	0.66	33	1.55 J *

Notes:
ppb: parts per billion
Sample detections that exceed the UUGV are designated with *.
Sample detections that exceed the RRGV are designated with †.

Soil analytical results for 1,4-dioxane are presented in Table 3. Soil analytical results for PFAS are presented in Table 7.

5.3 Groundwater Chemistry

Four groundwater samples were collected for laboratory analysis from groundwater monitoring wells RI-MW-01 and RI-MW-03 through RI-MW-05. Groundwater samples were analyzed for

VOCs by EPA Method 8260D, SVOCs by EPA Method 8270E, pesticides by EPA Method 8081B, PCBs by EPA Method 8082A, total and dissolved TAL metals by EPA Method 6000/7000 series, cyanide by EPA Method 9012, 1,4-dioxane by EPA Method 8270E Selective Ion Monitoring (SIM), and the NYSDEC list of 21 PFAS by Modified EPA Method 537 (modified). Groundwater sample analytical results for VOCs, SVOCs, PCBs, pesticides, and total/dissolved metals were conservatively compared to the NYSDEC Class GA AWQSGVs. PFAS concentrations were compared to the June 2021 *NYSDEC Sampling, Analysis and Assessment of PFAS Under NYSDEC's Part 375 Remedial Programs*. Concentrations of 1,4-dioxane were compared to the August 2020 New York State (NYS) Maximum Contaminant Level (MCL) screening level. These standards are drinking water standards, although groundwater in this portion of Queens is not used as a source of potable water.

Groundwater sample analytical results are presented in Tables 8 through 14. Groundwater sample concentrations above the AWQSGVs or NYSDEC screening levels are shown on Figure 8. Groundwater laboratory analytical data reports are included in Appendix H.

5.3.1 Volatile Organic Compounds (VOCs) in Groundwater

No VOCs were detected in the groundwater samples at concentrations above their respective AWQSGVs. Three VOCs (chloroform, PCE, and TCE) were detected in each of the five samples below AWQSGVs at concentrations ranging from 0.32 µg/L to 2 µg/L.

Methylene chloride was detected in one field blank (RI-FB-GW-01_20220817) at an estimated concentration of 0.73 µg/L. Methylene chloride is a common laboratory contaminant, and the detection in the field blank is likely due to laboratory contamination and not an on-site source.

Groundwater analytical results for VOCs are presented in Table 8.

5.3.2 Semivolatile Organic Compounds (SVOCs) in Groundwater

1,4-Dioxane was detected in the groundwater sample RI-MW-01_20220817 at a concentration of 0.36 µg/L. Further information regarding 1-4 Dioxane detections in groundwater samples will be discussed in Section 5.3.6.

No other SVOCs were detected above laboratory reporting limits in any of the groundwater samples.

Groundwater analytical results for SVOCs are presented in Table 9.

5.3.3 Metals in Groundwater

Total (Unfiltered) Metals

Three metals (iron, manganese, and sodium) were detected above their respective AWQSGVs in the four unfiltered groundwater samples (plus the blind duplicate). Of the 23 metals analyzed for, 13 metals were detected at low levels below the AWQSGVs in the groundwater samples.

Table K summarizes total (unfiltered) metals exceedances above AWQSGVs in groundwater samples.

Table K
Total (Unfiltered) Metals Concentrations in Groundwater Samples Above AWQSGVs

Analyte	Sample Identification	AWQSGV (µg/L)	Concentration (µg/L)
Iron	RI-MW-03_20220817	300	1,140
	RI-MW-04_20220817		664
	RI-MW-05_20220817		1,040
	RI-MW-X_20220817		1,280
Manganese	RI-MW-03_20220817	300	381
	RI-MW-X_20220817		399
Sodium	RI-MW-01_20220817	20,000	123,000
	RI-MW-03_20220817		210,000
	RI-MW-04_20220817		146,000
	RI-MW-05_20220817		95,000
	RI-MW-X_20220817		211,000

Notes:
µg/L: micrograms per liter
RI-MW-X_20220817 is a blind duplicate of RI-MW-03_20220817.

Groundwater analytical results for total (unfiltered) metals are presented in Table 10.

Dissolved (Filtered) Metals

Sodium was detected above the AWQSGVs in each of the four filtered groundwater samples (plus the blind duplicate). Barium, calcium, copper, magnesium, manganese, nickel, potassium, selenium, and zinc were detected in the groundwater samples at low levels below the AWQSGVs.

Table L summarizes dissolved (filtered) metal exceedances above AWQSGVs in groundwater samples.

Table L
Dissolved (Filtered) Metals Concentrations in Groundwater Samples Above AWQSGVs

Analyte	Sample Identification	AWQSGV (µg/L)	Concentration (µg/L)
Sodium	RI-MW-01_20220817	20,000	130,000
	RI-MW-03_20220817		229,000
	RI-MW-04_20220817		157,000
	RI-MW-05_20220817		98,900
	RI-MW-X_20220817		228,000

Notes:
µg/L: micrograms per liter
RI-MW-X_20220817 is a blind duplicate of RI-MW-03_20220817.

Groundwater analytical results for dissolved (filtered) metals are presented in Table 11.

5.3.4 Polychlorinated Biphenyls (PCBs) in Groundwater

Total PCBs were not detected above laboratory reporting limits in any of the groundwater samples.

Groundwater analytical results for PCBs are presented in Table 12.

5.3.5 Pesticides in Groundwater

Pesticides were not detected above laboratory reporting limits in any of the groundwater samples.

Groundwater analytical results for PCBs are presented in Table 13.

5.3.6 Per- and Polyfluoroalkyl Substances (PFAS) and 1,4-Dioxane in Groundwater

PFOA was detected above the NYSDEC June 2021 screening level of 10 parts per trillion (ppt) in each of the four groundwater samples (plus the blind duplicate) at concentrations up to 46.1 ppt. PFOS was detected above the NYSDEC January 2021 screening level of 10 parts per trillion (ppt) in each of the four groundwater samples (plus the blind duplicate) at concentrations up to 33.7 ppt. No individual PFAS compounds were detected at concentrations above 100 ppt. Total PFAS concentrations were below 500 ppt in each groundwater sample.

1,4-Dioxane was detected in groundwater sample RI-MW-01_20220817 at a concentration of 0.36 µg/L, below the August 2020 NYS MCL screening level of 1 µg/L.

Table M summarizes the PFOA and PFOS exceedances above the NYSDEC screening levels in groundwater samples.

Table M
PFOA and PFOS Concentrations in Groundwater Samples Above the NYSDEC Screening Level

Analyte	Sample	NYSDEC PFAS Screening Level (ppt)	Concentration (ppt)
PFOA	RI-MW-01_20201222	10	30.4
	RI-MW-03_20201222		31.3
	RI-MW-04_20201222		46.1
	RI-MW-05_20201222		25.2
	RI-MW-0X_20201222		30
PFOS	RI-MW-01_20201222	10	20.6
	RI-MW-03_20201222		33.7
	RI-MW-04_20201222		27.2
	RI-MW-05_20201222		26.7
	RI-MW-0X_20201222		33.2

Notes:
ppt: parts per trillion
RI-MW-0X_20220817 is a blind duplicate of RI-MW-03_20220817.

Groundwater analytical results for PFAS compounds are presented in Table 14. Groundwater analytical results for 1,4-dioxane are presented in Table 9.

5.4 Soil Vapor Chemistry

5.4.1 Soil Vapor Analytical Results

Five sub-slab soil vapor samples (RI-SV-01_20220728, RI-SV-03_20220728, RI-SV-04_20220728, RI-SV-05_20220728, and RI-SV-06_20220728) and four soil vapor

samples (RI-SV-02_20220728, RI-SV-07_20220728, RI-SV-08_20220728, and RI-SV-09_20220728) were collected from temporary soil vapor points shown on Figure 2. 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.

The soil vapor samples were analyzed for VOCs by EPA Method TO-15. Forty-four of the 71 VOCs analyzed for were detected in the soil vapor samples. Solvent-related VOCs [including 1,1,1-trichloroethane (1,1,1-TCA), carbon tetrachloride, chlorodifluoromethane, chloromethane, dichlorodifluoromethane, methylene chloride, PCE, and TCE] were detected in the soil vapor samples at individual concentrations up to 530 µg/m^3 from a diluted analysis (PCE in sample RI-SV-03_20220728). Other VOCs, including compounds typically associated with petroleum [such as 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 1,3-butadiene, 1,3-dichlorobenzene, 2,2,4-trimethylpentane, 2-hexanone, 4-ethyltoluene, benzene, butane, cyclohexane, cymene, ethylbenzene, isopropanol, isopropylbenzene, methyl ethyl ketone (MEK), m,p-xylenes, n-butylbenzene, n-heptane, n-hexane, n-propylbenzene, o-xylene, and toluene] were detected in the soil vapor samples at individual concentrations up to 210 µg/m^3 from a diluted analysis (toluene in sample RI-SV-08_20220728).

PCE was detected in all nine soil vapor samples at concentrations ranging from 3.3 µg/m^3 in sample RI-SV-02_20220728 to 530 µg/m^3 from a diluted analysis in sample RI-SV-03_20220728. TCE, a breakdown product of PCE, was detected in seven of the nine soil vapor samples at concentrations ranging from 0.26 µg/m^3 in sample RI-SV-02_20220728 to 50 µg/m^3 from a diluted analysis in sample RI-SV-01_20220728.

6.0 QUALITATIVE HUMAN HEALTH EXPOSURE ASSESSMENT (QHHEA)

The objective of the QHHEA is to identify potential receptors and pathways for human exposure to the contaminants of concern (COC) that are present at, or migrating from, the Site. The identification of exposure pathways describes the route that the COC 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 from the RI 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 (c) 4 of the NYSDEC Draft DER-10 Technical Guidance for Site Investigation and Remediation.

6.1 Contaminants of Concern (COCs) in Respective Media

Based on the results of previous subsurface investigations and this RI, the COCs include the following:

Soil

- The VOC acetone was detected at concentrations above the UUSCO, but below the RRSCO.
- The SVOCs benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and indeno(1,2,3-c,d)pyrene were detected at concentrations above the UUSCOs and RRSCOs. Chrysene was detected above the UUSCO, but below the RRSCO.
- The metals barium, cadmium, lead, and mercury were detected above the UUSCOs and RRSCOs. The metals copper, nickel, and zinc were detected above the UUSCOs, but below the RRSCOs.
- The pesticides P,P'-DDE was detected above the UUSCO, but below the RRSCO.
- PFOA was detected at concentrations above the UUGV, but below the RRGV.

Groundwater

- The metals iron (total), manganese (total), and sodium (total and dissolved) were detected at concentrations above the AWQSGVs.
- PFOA and PFOS were detected at concentrations above the NYSDEC screening levels.

Soil Vapor

- Petroleum- and chlorinated solvent-related VOCs were detected in soil vapor.

6.2 Conceptual Model of Site Contamination

Based on an evaluation of the data and information in this RI, the Site is contaminated with: VOCs, SVOCs, metals, pesticides, and PFOA in soil/fill; metals, PFOA, and PFOS in groundwater; and solvent- and petroleum-related VOCs in soil vapor.

The elevated concentrations of VOCs, SVOCs, metals, pesticides, and PFOA in soil/fill are likely related to the presence of contaminated soil/fill material within the soil. The PFOA, and PFOS in groundwater are likely the result of regional groundwater conditions. The elevated concentrations of metals in groundwater may be related to regional conditions and/or sediment entrained in the groundwater samples. Solvent-related and petroleum-related VOCs were detected at varying

concentrations in the soil vapor samples collected from the Site. The detections may be related to the Site's historical manufacturing/industrial uses, as PCE and TCE were found in the soil at concentrations below their UUSCOs.

6.3 Potential Routes of Exposure

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.

6.4 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;
- Dermal contact with water, fill, soil, and/or building materials; and
- Inhalation of vapors and/or particulates.

6.5 Potential Receptors

The Site is currently occupied by the Site owner on Lot 1 and utilized for office space, storage of construction materials, warehousing, and parking; a private contractor on Lot 10 and utilized for garage space, workshop space, storage, and parking; and a private contractor uses Lot 13 for office space and storage. The area immediately surrounding the Site is predominantly industrial, commercial, and residential in nature. The anticipated future use of the Site will include commercial, residential, and both market-rate and affordable residential units.

On-site Receptors: Current on-site receptors include the Site owner and on-site tenants.

During redevelopment of the Site, the on-site potential sensitive receptors will include construction workers and inspectors. Once the Site is redeveloped, the on-site potential sensitive receptors will include residents, employees, community members, and vendors.

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, pedestrians, trespassers, and cyclists, based on the following:

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

5. Day Care Facilities – existing and future
6. Schools – existing and future

6.6 Existence of Human Health Exposure Pathways

This evaluation consists of the following components: contaminant source; contaminant release and transport mechanism; point of exposure; route of exposure; and receptor population.

The Site is currently capped with a concrete building slab and asphalt-paved parking lot, which were noted to be in good to fair condition with minor surficial cracking. Any potential for inhalation of contaminants via soil vapor intrusion is addressed by the on-site SSDS. Additionally, groundwater is not used for drinking or other potable purposes in this part of Queens, and the Site is served by a public water supply that is not affected by Site contamination.

Once redevelopment activities begin, there will be a potential exposure pathway from contaminated surface soil and fill to construction workers, as these workers could potentially ingest, inhale, or have dermal contact with any exposed contaminated soil and fill; however, this will be mitigated with proper implementation of a Community Air Monitoring Plan (CAMP) that will prevent migration of particulates and VOCs, and a HASP that will dictate safe practices including the wearing of personal protective equipment.

6.7 Overall Human Health Exposure Assessment

The entirety of the Site is capped with a concrete building slab and asphalt-paved parking lot, which were noted to be in good to fair condition with minor surficial cracking. Any potential for inhalation of contaminants via soil vapor intrusion is addressed by the on-site SSDS. Once redevelopment activities begin, there will be a potential exposure pathway from contaminated surface soil/fill to construction workers, as these workers could potentially ingest, inhale, or have dermal contact with any exposed contaminated fill or soil; however, this will be mitigated with proper implementation of a CAMP that will prevent migration of particulates and VOCs, and a HASP that will dictate safe practices including the wearing of personal protective equipment.

Based on the results of the QHHEA, a NYSDEC-approved Remedial Action Work Plan (RAWP), which includes a HASP to protect on-site workers, should be implemented during remedial action and construction of the proposed Site buildings to ensure that the potential exposure pathways identified do not become complete. The HASP will include a CAMP compliant with Appendices 1A and 1B of DER-10. The RAWP should address the contaminated soil/fill at the Site and the installation/implementation of certain engineering and/or institutional controls (ECs and/or ICs, respectively).

7.0 CONCLUSIONS

This RIR summarizes the investigation work performed between July 25 and July 28, 2022 and on August 17, 2022. 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 AKRF's April 2022 RIWP, which included a HASP and a QAPP.

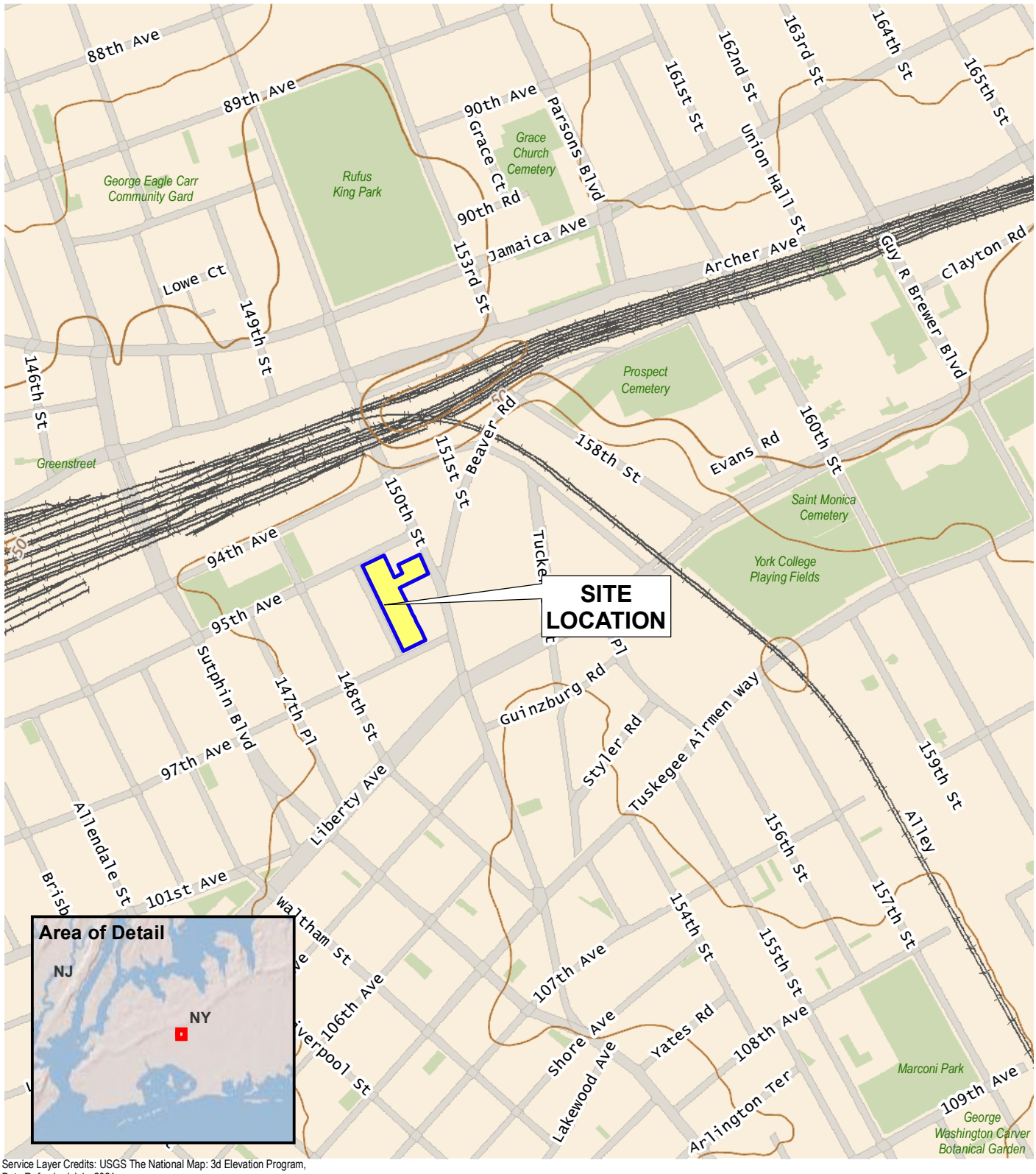
Based on the RI results, the nature and extent of contaminated soil, groundwater, and vapor present at the Site has been defined. The COCs at the Site include: VOCs, SVOCs, metals, pesticides, and PFOA in soil/fill above the UUSCOs and/or RRSCOs; metals, PFOA, and PFOS in groundwater above the AWQSGVs or NYSDEC screening levels; and chlorinated solvent- and petroleum-related VOCs in soil vapor.

This RI documented a layer of contaminated uncontrolled fill Site-wide from surface grade down to approximately 5 to 9 feet bgs. The fill/soil contained elevated concentrations of VOCs, SVOCs, metals, pesticides, and PFAS. VOCs and pesticides were detected above UUSCOs, but below RRSCOs. SVOC concentrations above UUSCOs and RRSCOs were detected in shallow soil at the Site. Detected concentrations of SVOCs in soil are likely related to the presence of contaminated soil/fill material. Total metals were detected primarily in shallow samples throughout the Site, but were detected in deeper samples as well. The highest total concentrations of metals were detected in the shallow soil sample collected from the drain on Lot 10. PFAS was detected across the Site at variable concentrations down to approximately 8 feet bgs.

Total iron and manganese were detected above the AWQSGV in the groundwater samples, but were not detected at elevated concentrations in the dissolved sample. Because iron and manganese were also detected in soil samples collected throughout the Site, these detections are likely the result of sediment entrained in the samples. Sodium was detected in both the total and dissolved samples; the elevated concentrations are most likely related to regional groundwater conditions as opposed to an on-site release, because sodium is a common constituent in native soil in the region. PFOS and PFOA were detected in groundwater above the NYSDEC January 2021 screening level of 10 ppt in the groundwater samples. The presences of PFAS in groundwater is likely the result of regional groundwater conditions.

Petroleum and chlorinated-solvent related VOCs were detected at elevated concentrations in all soil vapor samples collected. The elevated concentrations of chlorinated solvents in soil vapor are believed to be related to the Site's historical manufacturing usage. The RI data suggests that contamination is not migrating off-site to sensitive receptors. Adjacent and commercial uses are located surrounding the Site; however, the entire Site is bounded by 149th Street, 95th Avenue, 150th Street, and 97th Avenue, which act as buffers to buildings located across those streets.

FIGURES



Service Layer Credits: USGS The National Map: 3d Elevation Program, Data Refreshed July, 2021

0 600 1,200

SCALE IN FEET

AKRF

440 Park Avenue South, New York, NY 10016

Jamaica Works
95-25 149th Street
Queens, New York

SITE LOCATION

DATE
11/21/2022

PROJECT NO.
200278

FIGURE
1

LEGEND

- PROJECT SITE BOUNDARY
- 1 — LOT BOUNDARY AND TAX LOT NUMBER
- 10002 — BLOCK NUMBER
- BUILDING
- RI SOIL BORING
- RI SEDIMENT SAMPLE
- RI SOIL BORING/MONITORING WELL
- RI SOIL BORING/MONITORING WELL/SOIL VAPOR POINT
- RI SOIL BORING/SOIL VAPOR POINT
- RI SOIL VAPOR POINT
- SOIL BORING (PHASE II, NOVEMBER 2020)
- SOIL BORING/TEMPORARY WELL/SOIL VAPOR POINT (PHASE II, NOVEMBER 2020)
- SUPPLEMENTAL SOIL VAPOR POINT (PHASE II, NOVEMBER 2020)
- INDOOR AIR SAMPLE LOCATION (PHASE II, NOVEMBER 2020)
- AMBIENT AIR SAMPLE LOCATION (PHASE II, NOVEMBER 2020)
- ABOVEGROUND STORAGE TANK (AST)

0 30 60 120

SCALE IN FEET

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

AKRF
440 Park Avenue South, New York, NY 10016

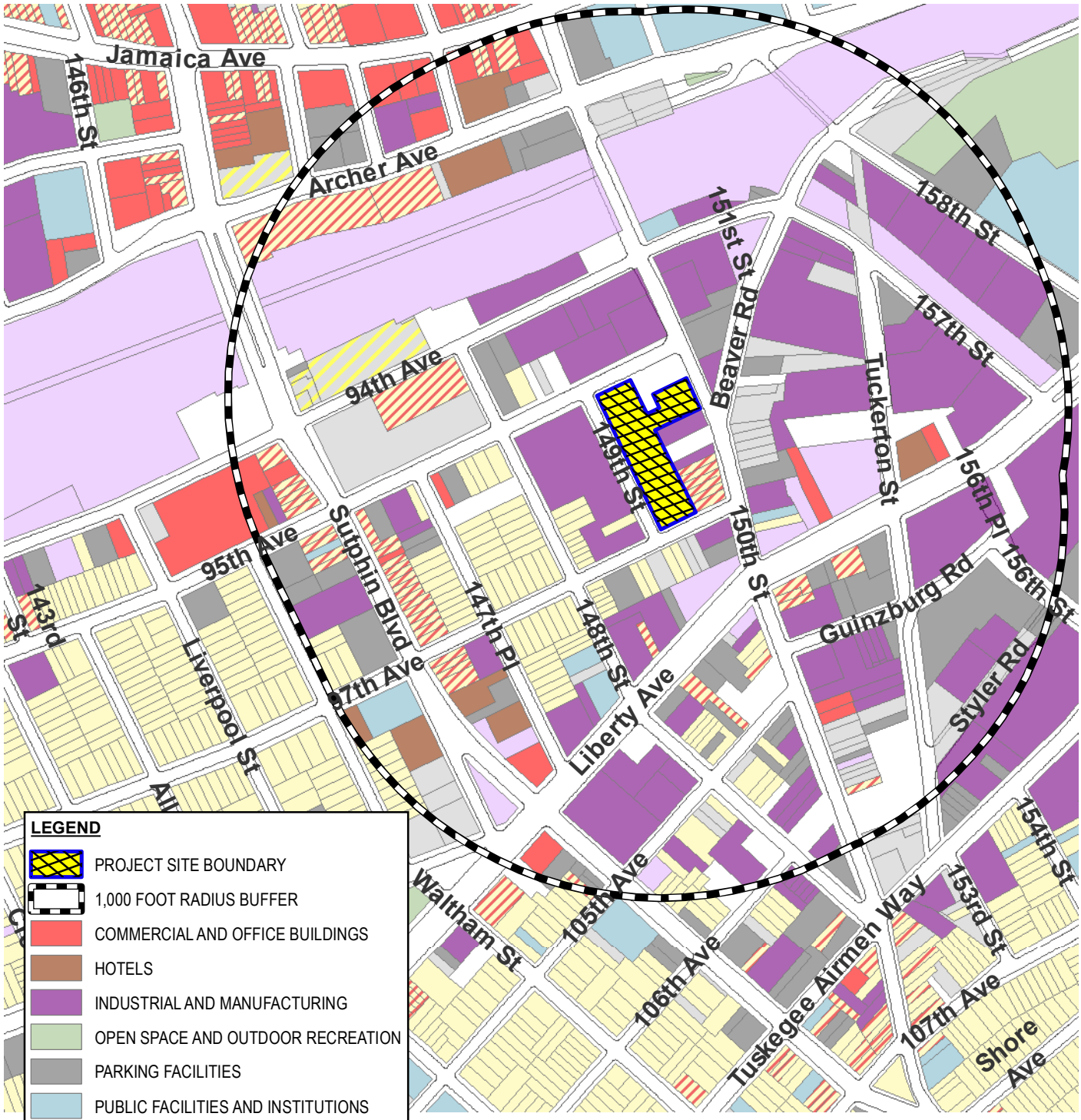
Jamaica Works
95-25 149th Street
Queens, New York

BCP SITE AND SAMPLE LOCATION PLAN

DATE
12/2/2022

PROJECT NO.
200278

FIGURE
2



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

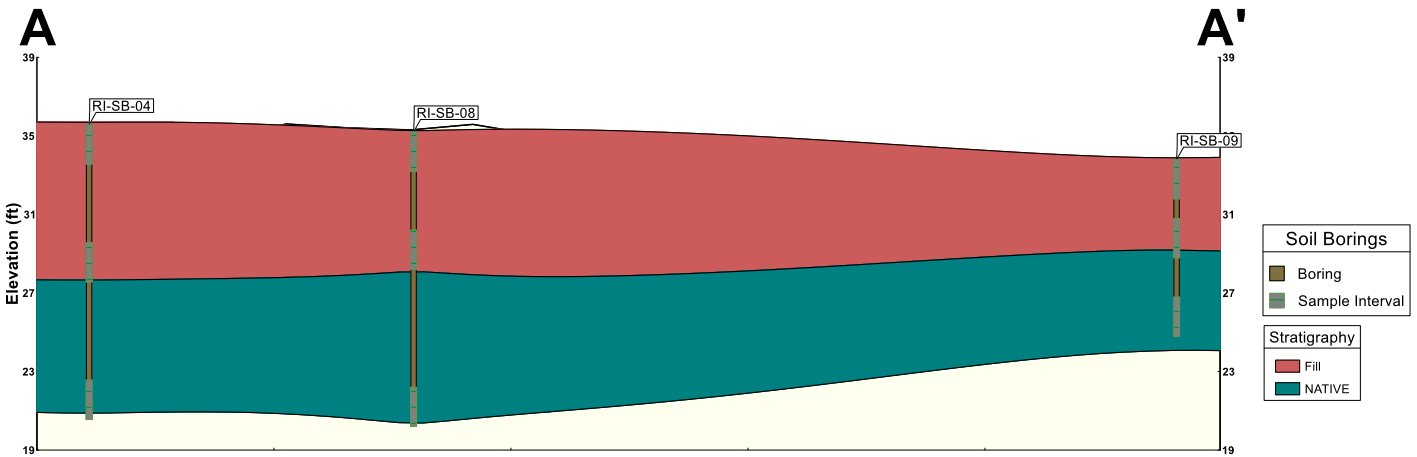
0 400 800
SCALE IN FEET

AKRF
440 Park Avenue South, New York, NY 10016

Jamaica Works
95-25 149th Street
Queens, New York

SURROUNDING LAND USE

DATE
11/21/2022
PROJECT NO.
200278
FIGURE
3



AKRF
440 Park Avenue South, New York, NY 10016

Jamaica Works
95-25 149th Street
Queens, NY

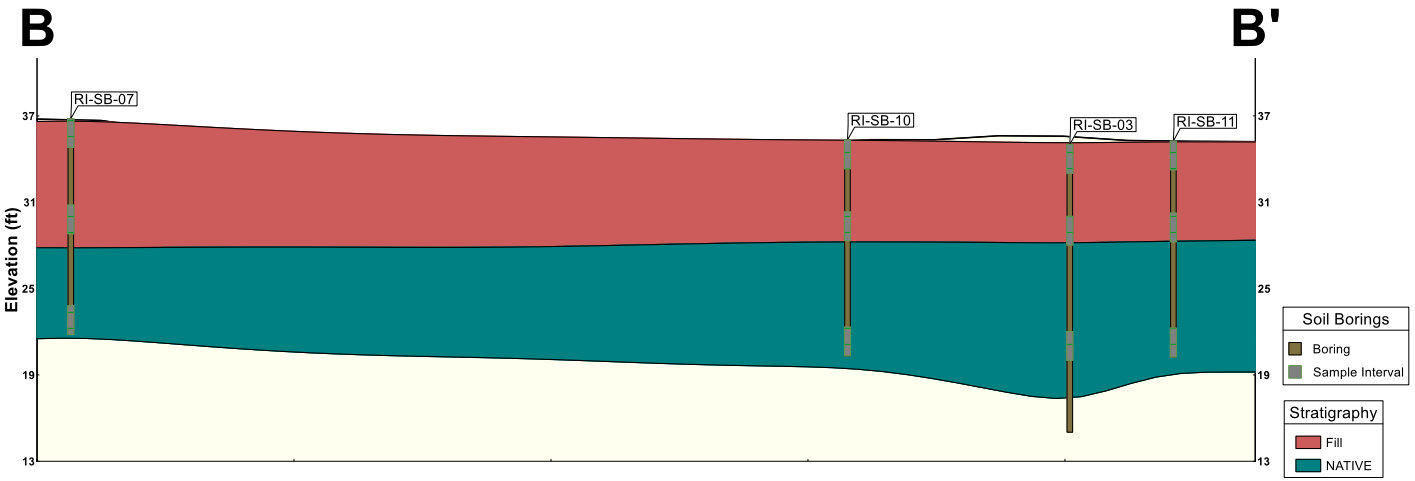
Northwest-Southeast Lithology Cross Section

Date
11/22/2022

Project No.
200278

Figure
4

W:\Projects\200278 - EMPIRE-JAMAICA WORKS BCP\149TH&150TH\SAR\Equis\EnvironSite\200278 XSecs.vizx



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AKRF
440 Park Avenue South, New York, NY 10016

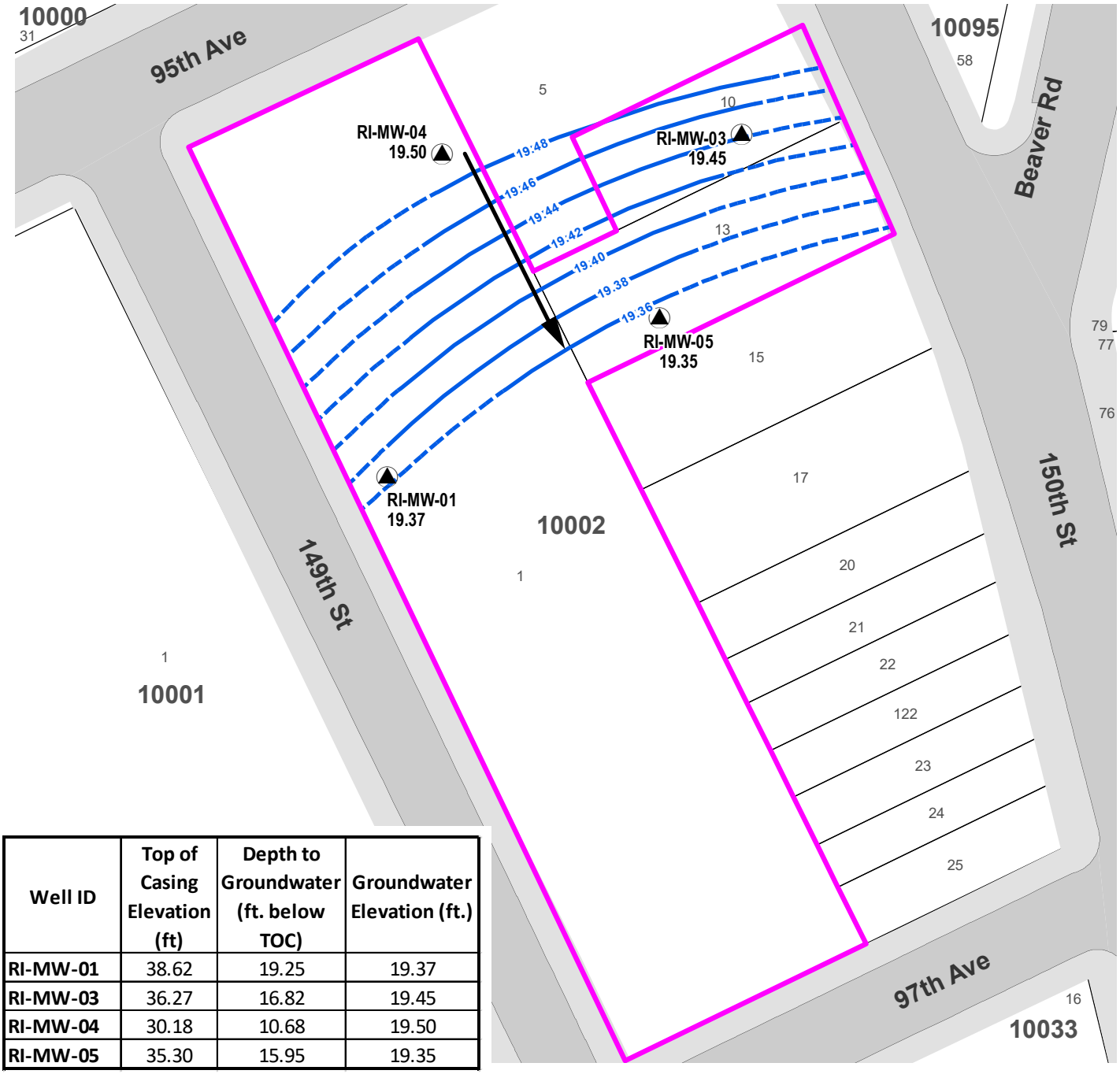
Jamaica Works
95-25 149th Street
Queens, NY

Northeast-Southwest Lithology Cross Section

Date
11/21/2022

Project No.
200278

Figure
5



Well ID	Top of Casing Elevation (ft)	Depth to Groundwater (ft. below TOC)	Groundwater Elevation (ft.)
RI-MW-01	38.62	19.25	19.37
RI-MW-03	36.27	16.82	19.45
RI-MW-04	30.18	10.68	19.50
RI-MW-05	35.30	15.95	19.35

LEGEND

- PROJECT SITE BOUNDARY
- 7 — LOT BOUNDARY AND TAX LOT NUMBER
- 3376 — BLOCK NUMBER
- 19.37 — MONITORING WELL ID WITH ELEVATION IN FEET
- MONITORING WELL WATER TABLE ELEVATION IN FEET (NAVD 88)
- INFERRED WATER TABLE ELEVATION
- GROUNDWATER FLOW DIRECTION

Datum: North American Vertical Datum of 1988
Map Source:
NYCDCP (NYC Dept. of City Planning) GIS database

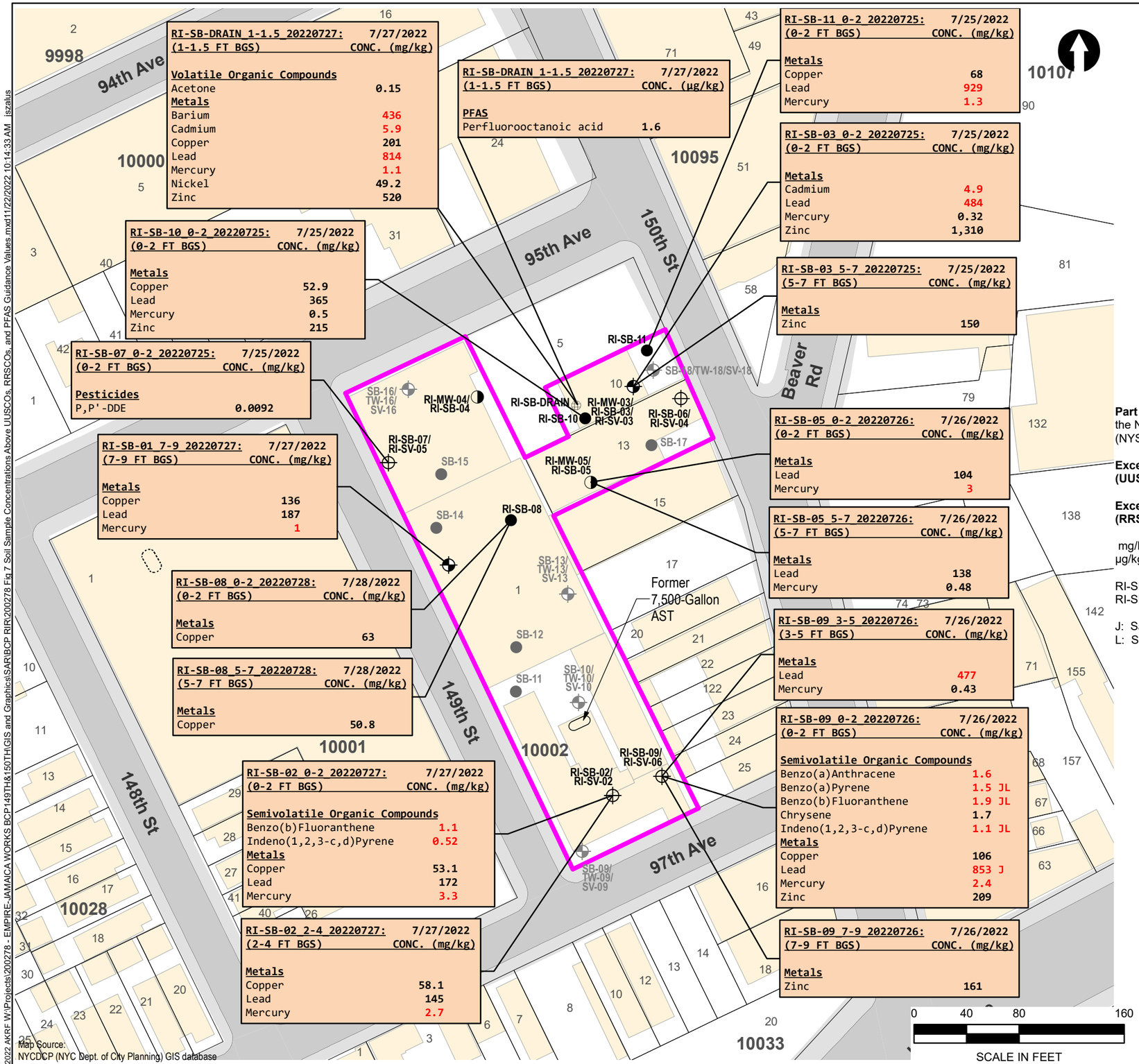
0 60 120
SCALE IN FEET

AKRF
440 Park Avenue South, New York, NY 10016

Jamaica Works
95-25 149th Street
Queens, New York

GROUNDWATER ELEVATION CONTOURS
AUGUST 17, 2022

DATE: 12/7/2022
PROJECT NO.: 200278
FIGURE: 6



LEGEND

- PROJECT SITE BOUNDARY
- 1 LOT BOUNDARY AND TAX LOT NUMBER
- 10002 BLOCK NUMBER
- BUILDING
- ABOVEGROUND STORAGE TANK (AST)
- RI SOIL BORING
- RI SEDIMENT SAMPLE
- RI SOIL BORING/MONITORING WELL
- RI SOIL BORING/MONITORING WELL/SOIL VAPOR POINT
- RI SOIL BORING/SOIL VAPOR POINT
- SOIL BORING (PHASE II NOV 2020)
- SOIL BORING/TEMPORARY WELL/SOIL VAPOR POINT (PHASE II NOV 2020)

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).

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

Exceedances of NYSDEC Restricted Residential Soil Cleanup Objectives (RRSCOs) and Restricted Residential Use Guidance (RRGVs) are presented in red

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

RI-SB-X_13-15_20220726 is a blind duplicate of sample RI-SB-04_13-15_20220726
RI-SB-X_4-6_20220727 is a blind duplicate of sample RI-SB-06_4-6_20220727

J: Sample result is estimated.
L: Sample result is estimated and biased low.

	PART 375 RESTRICTED RESIDENTIAL	PART 375 UNRESTRICTED
	mg/kg	mg/kg
Semivolatile Organic Compounds		
Benzo(a)Anthracene	1	1
Benzo(a)Pyrene	1	1
Benzo(b)Fluoranthene	1	1
Chrysene	3.9	1
Indeno(1,2,3-c,d)Pyrene	0.5	0.5
Metals		
Cadmium	4.3	2.5
Copper	270	50
Lead	400	63
Mercury	0.81	0.18
Zinc	10,000	109
Pesticides		
P,P'-DDE	8.9	0.0033

	PFAS GUIDANCE VALUES Restricted Residential Use	PFAS GUIDANCE VALUES Unrestricted Use
	µg/kg	µg/kg
PFAS		
Perfluorooctanesulfonic acid	44	0.88
Perfluorooctanoic acid	33	0.66

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

AKRF
440 Park Avenue South, New York, NY 10016

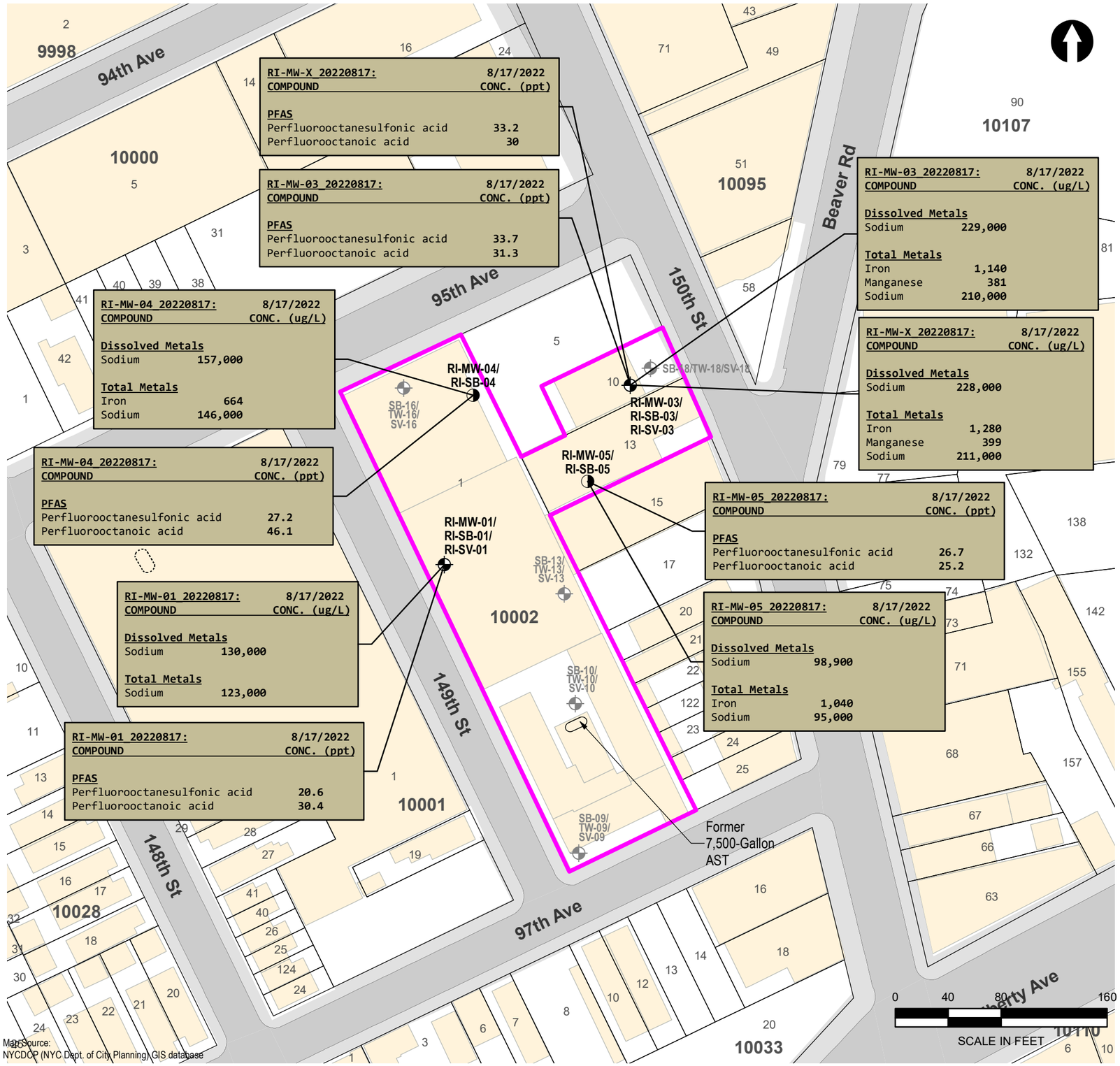
Soil Sample Concentrations Above UUSCOs, RRSCOs, and PFAS Guidance Values

Jamaica Works
95-25 149th Street
Queens, New York

DATE
11/22/2022

PROJECT NO.
200278

FIGURE
7



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

LEGEND

- PROJECT SITE BOUNDARY
- 1 — LOT BOUNDARY AND TAX LOT NUMBER
- 10002 — BLOCK NUMBER
- BUILDING
- ABOVEGROUND STORAGE TANK (AST)
- RI SOIL BORING/MONITORING WELL
- RI SOIL BORING/MONITORING WELL/SOIL VAPOR POINT
- SOIL BORING (PHASE II NOV 2020)
- SOIL BORING/TEMPORARY WELL/SOIL VAPOR POINT (PHASE II NOV 2020)

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

µg/L : micrograms per Liter = parts per billion (ppb)
ng/L : nanograms per Liter = parts per trillion (ppt)

Exceedances of NYSDEC AWQSGVs and Exceedances of NYSDEC Screening Values are shown in bold font.

PFOA: Perfluorooctanoic acid
PFOS: Perfluorooctanesulfonic acid
PFAS: Per- and polyfluoroalkyl substances

RI-MW-X_20220817 is a blind duplicate of sample RI-MW-03_20220817

	PFAS Screening Levels Groundwater ng/L
Emerging Contaminants	
Perfluorooctanesulfonic acid	10
Perfluorooctanoic acid	10

	NYSDEC AWQSGVs ug/l
Metals	
Iron	300
Manganese	300
Sodium	20,000

Sample ID — Sample Date

RI-MW-05_20220817:	8/17/2022
COMPOUND	CONC. (ppt)
PFAS	
Perfluorooctanesulfonic acid	26.7
Perfluorooctanoic acid	25.2

Analyte/Compound — Concentration

AKRF
440 Park Avenue South, New York, NY 10016

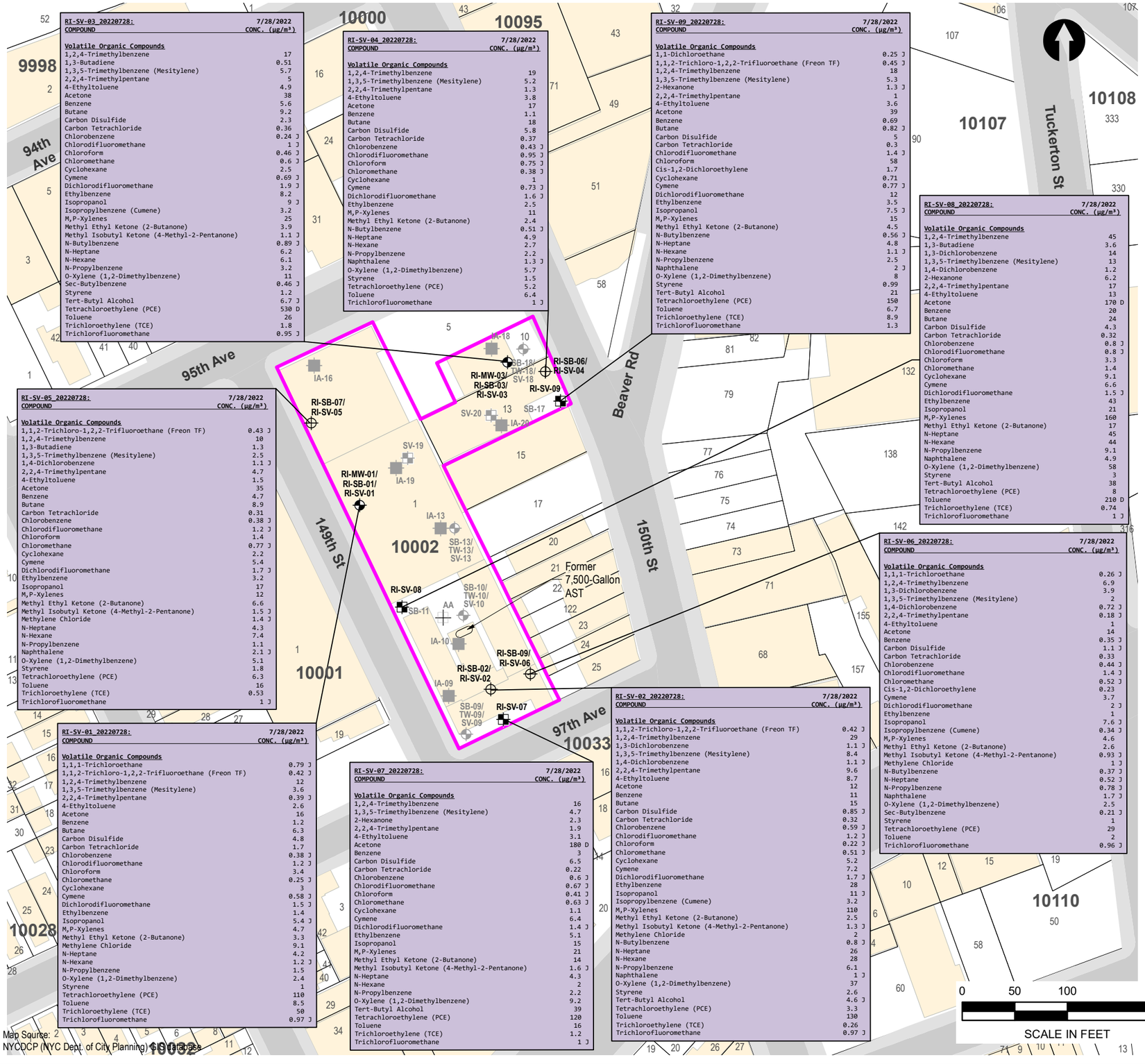
Jamaica Works
95-25 149th Street
Queens, New York

Groundwater Sample Concentrations Above AWQSGVs and PFAS Guidance Values

DATE
11/21/2022

PROJECT NO.
200278

FIGURE
8



RI-SV-03_20220728: 7/28/2022

COMPOUND	CONC. (µg/m³)
Volatile Organic Compounds	
1,2,4-Trimethylbenzene	17
1,3-Butadiene	0.51
1,3,5-Trimethylbenzene (Mesitylene)	5.7
2,2,4-Trimethylpentane	5
4-Ethyltoluene	4.9
Acetone	38
Benzene	5.6
Butane	9.2
Carbon Disulfide	2.3
Carbon Tetrachloride	0.36
Chlorobenzene	0.24 J
Chlorodifluoromethane	1 J
Chloroform	0.46 J
Chloromethane	0.6 J
Cyclohexane	2.5
Cymene	0.69 J
Dichlorodifluoromethane	1.9 J
Ethylbenzene	8.2
Isopropanol	9 J
Isopropylbenzene (Cumene)	3.2
M,P-Xylenes	25
Methyl Ethyl Ketone (2-Butanone)	3.9
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	1.1 J
N-Butylbenzene	0.89 J
N-Heptane	6.2
N-Hexane	6.1
N-Propylbenzene	3.2
O-Xylene (1,2-Dimethylbenzene)	11
Sec-Butylbenzene	0.46 J
Styrene	1.2
Tert-Butyl Alcohol	6.7 J
Tetrachloroethylene (PCE)	530 D
Toluene	26
Trichloroethylene (TCE)	1.8
Trichlorofluoromethane	0.95 J

RI-SV-04_20220728: 7/28/2022

COMPOUND	CONC. (µg/m³)
Volatile Organic Compounds	
1,2,4-Trimethylbenzene	19
1,3,5-Trimethylbenzene (Mesitylene)	5.2
2,2,4-Trimethylpentane	1.3
4-Ethyltoluene	3.8
Acetone	17
Benzene	1.1
Butane	18
Carbon Disulfide	5.8
Carbon Tetrachloride	0.37
Chlorobenzene	0.43 J
Chlorodifluoromethane	0.95 J
Chloroform	0.75 J
Chloromethane	0.38 J
Cyclohexane	1
Cymene	0.73 J
Dichlorodifluoromethane	1.6 J
Ethylbenzene	2.5
M,P-Xylenes	11
Methyl Ethyl Ketone (2-Butanone)	2.4
N-Butylbenzene	0.51 J
N-Heptane	4.9
N-Hexane	2.7
N-Propylbenzene	2.2
Naphthalene	1.3 J
O-Xylene (1,2-Dimethylbenzene)	5.7
Styrene	1.5
Tetrachloroethylene (PCE)	5.2
Toluene	6.4
Trichlorofluoromethane	1 J

RI-SV-09_20220728: 7/28/2022

COMPOUND	CONC. (µg/m³)
Volatile Organic Compounds	
1,1-Dichloroethane	0.25 J
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	0.45 J
1,2,4-Trimethylbenzene	18
1,3,5-Trimethylbenzene (Mesitylene)	5.3
2-Hexanone	1.3 J
2,2,4-Trimethylpentane	1
4-Ethyltoluene	3.6
Acetone	39
Benzene	0.69
Butane	0.82 J
Carbon Disulfide	5
Carbon Tetrachloride	0.3
Chlorodifluoromethane	1.4 J
Chloroform	58
Cis-1,2-Dichloroethylene	1.7
Cyclohexane	0.71
Cymene	0.77 J
Dichlorodifluoromethane	12
Ethylbenzene	3.5
Isopropanol	7.5 J
M,P-Xylenes	15
Methyl Ethyl Ketone (2-Butanone)	4.5
N-Butylbenzene	0.56 J
N-Heptane	4.8
N-Hexane	1.1 J
N-Propylbenzene	2.5
Naphthalene	2 J
O-Xylene (1,2-Dimethylbenzene)	8
Styrene	0.99
Tert-Butyl Alcohol	21
Tetrachloroethylene (PCE)	150
Toluene	6.7
Trichloroethylene (TCE)	8.9
Trichlorofluoromethane	1.3

RI-SV-08_20220728: 7/28/2022

COMPOUND	CONC. (µg/m³)
Volatile Organic Compounds	
1,2,4-Trimethylbenzene	45
1,3-Butadiene	3.6
1,3-Dichlorobenzene	14
1,3,5-Trimethylbenzene (Mesitylene)	13
1,4-Dichlorobenzene	1.2
2-Hexanone	6.2
2,2,4-Trimethylpentane	17
4-Ethyltoluene	13
Acetone	170 D
Benzene	20
Butane	24
Carbon Disulfide	4.3
Carbon Tetrachloride	0.32
Chlorobenzene	0.8 J
Chlorodifluoromethane	0.8 J
Chloroform	3.3
Chloromethane	1.4
Cyclohexane	9.1
Cymene	6.6
Dichlorodifluoromethane	1.5 J
Ethylbenzene	43
Isopropanol	21
M,P-Xylenes	160
Methyl Ethyl Ketone (2-Butanone)	17
N-Heptane	45
N-Hexane	44
N-Propylbenzene	9.1
Naphthalene	4.9
O-Xylene (1,2-Dimethylbenzene)	58
Styrene	3
Tert-Butyl Alcohol	38
Tetrachloroethylene (PCE)	8
Toluene	210 D
Trichloroethylene (TCE)	0.74
Trichlorofluoromethane	1 J

RI-SV-05_20220728: 7/28/2022

COMPOUND	CONC. (µg/m³)
Volatile Organic Compounds	
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	0.43 J
1,2,4-Trimethylbenzene	10
1,3-Butadiene	1.3
1,3,5-Trimethylbenzene (Mesitylene)	2.5
1,4-Dichlorobenzene	1.1 J
2,2,4-Trimethylpentane	4.7
4-Ethyltoluene	1.5
Acetone	35
Benzene	4.7
Butane	8.9
Carbon Tetrachloride	0.31
Chlorobenzene	0.38 J
Chlorodifluoromethane	1.2 J
Chloroform	1.4
Chloromethane	0.77 J
Cyclohexane	2.2
Cymene	5.4
Dichlorodifluoromethane	1.7 J
Ethylbenzene	3.2
Isopropanol	17
M,P-Xylenes	12
Methyl Ethyl Ketone (2-Butanone)	6.6
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	1.5 J
Methylene Chloride	1.4 J
N-Heptane	4.3
N-Hexane	7.4
N-Propylbenzene	1.1
Naphthalene	2.1 J
O-Xylene (1,2-Dimethylbenzene)	5.1
Styrene	1.8
Tetrachloroethylene (PCE)	6.3
Toluene	16
Trichloroethylene (TCE)	0.53
Trichlorofluoromethane	1 J

RI-SV-06_20220728: 7/28/2022

COMPOUND	CONC. (µg/m³)
Volatile Organic Compounds	
1,1,1-Trichloroethane	0.26 J
1,2,4-Trimethylbenzene	6.9
1,3-Dichlorobenzene	3.9
1,3,5-Trimethylbenzene (Mesitylene)	2
1,4-Dichlorobenzene	0.72 J
2,2,4-Trimethylpentane	0.18 J
4-Ethyltoluene	1
Acetone	14
Benzene	0.35 J
Carbon Disulfide	1.1 J
Carbon Tetrachloride	0.33
Chlorobenzene	0.44 J
Chlorodifluoromethane	1.4 J
Chloromethane	0.52 J
Cis-1,2-Dichloroethylene	0.23
Cymene	3.7
Dichlorodifluoromethane	2 J
Ethylbenzene	1
Isopropanol	7.6 J
Isopropylbenzene (Cumene)	0.34 J
M,P-Xylenes	4.6
Methyl Ethyl Ketone (2-Butanone)	2.6
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	0.93 J
Methylene Chloride	1 J
N-Butylbenzene	0.37 J
N-Heptane	0.52 J
N-Propylbenzene	0.78 J
Naphthalene	1.7 J
O-Xylene (1,2-Dimethylbenzene)	2.5
Sec-Butylbenzene	0.21 J
Styrene	1
Tetrachloroethylene (PCE)	29
Toluene	2
Trichlorofluoromethane	0.96 J

RI-SV-01_20220728: 7/28/2022

COMPOUND	CONC. (µg/m³)
Volatile Organic Compounds	
1,1,1-Trichloroethane	0.79 J
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	0.42 J
1,2,4-Trimethylbenzene	12
1,3,5-Trimethylbenzene (Mesitylene)	3.6
2,2,4-Trimethylpentane	0.39 J
4-Ethyltoluene	2.6
Acetone	16
Benzene	1.2
Butane	6.3
Carbon Disulfide	4.8
Carbon Tetrachloride	1.7
Chlorobenzene	0.38 J
Chlorodifluoromethane	1.2 J
Chloroform	3.4
Chloromethane	0.25 J
Cyclohexane	3
Cymene	0.58 J
Dichlorodifluoromethane	1.5 J
Ethylbenzene	1.4
Isopropanol	5.4 J
M,P-Xylenes	4.7
Methyl Ethyl Ketone (2-Butanone)	3.3
Methylene Chloride	9.1
N-Heptane	4.2
N-Hexane	1.2 J
N-Propylbenzene	1.5
O-Xylene (1,2-Dimethylbenzene)	2.4
Styrene	1
Tetrachloroethylene (PCE)	110
Toluene	8.5
Trichloroethylene (TCE)	50
Trichlorofluoromethane	0.97 J

RI-SV-07_20220728: 7/28/2022

COMPOUND	CONC. (µg/m³)
Volatile Organic Compounds	
1,2,4-Trimethylbenzene	16
1,3,5-Trimethylbenzene (Mesitylene)	4.7
2-Hexanone	2.3
2,2,4-Trimethylpentane	1.9
4-Ethyltoluene	3.1
Acetone	180 D
Benzene	3
Carbon Disulfide	6.5
Carbon Tetrachloride	0.22
Chlorobenzene	0.6 J
Chlorodifluoromethane	0.67 J
Chloroform	0.41 J
Chloromethane	0.63 J
Cyclohexane	1.1
Cymene	6.4
Dichlorodifluoromethane	1.4 J
Ethylbenzene	5.1
Isopropanol	15
M,P-Xylenes	21
Methyl Ethyl Ketone (2-Butanone)	14
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	1.6 J
N-Heptane	4.3
N-Hexane	2
N-Propylbenzene	2.2
O-Xylene (1,2-Dimethylbenzene)	9.2
Tert-Butyl Alcohol	39
Tetrachloroethylene (PCE)	120
Toluene	16
Trichloroethylene (TCE)	1.2
Trichlorofluoromethane	1 J

RI-SV-02_20220728: 7/28/2022

COMPOUND	CONC. (µg/m³)
Volatile Organic Compounds	
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	0.42 J
1,2,4-Trimethylbenzene	29
1,3-Dichlorobenzene	1.1 J
1,3,5-Trimethylbenzene (Mesitylene)	8.4
1,4-Dichlorobenzene	1.1 J
2,2,4-Trimethylpentane	9.6
4-Ethyltoluene	8.7
Acetone	12
Benzene	11
Butane	15
Carbon Disulfide	0.85 J
Carbon Tetrachloride	0.32
Chlorobenzene	0.59 J
Chlorodifluoromethane	1.2 J
Chloroform	0.22 J
Chloromethane	0.51 J
Cyclohexane	5.2
Cymene	7.2
Dichlorodifluoromethane	1.7 J
Ethylbenzene	28
Isopropanol	11 J
Isopropylbenzene (Cumene)	3.2
M,P-Xylenes	110
Methyl Ethyl Ketone (2-Butanone)	2.5
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	1.3 J
Methylene Chloride	2
N-Butylbenzene	0.8 J
N-Heptane	26
N-Hexane	28
N-Propylbenzene	6.1
Naphthalene	1 J
O-Xylene (1,2-Dimethylbenzene)	37
Styrene	2.6
Tert-Butyl Alcohol	4.6 J
Tetrachloroethylene (PCE)	3.3
Toluene	130
Trichloroethylene (TCE)	0.26
Trichlorofluoromethane	0.97 J

LEGEND

- PROJECT SITE BOUNDARY
- 1 — LOT BOUNDARY AND TAX LOT NUMBER
- 10002 — BLOCK NUMBER
- BUILDING
- RI SOIL BORING/MONITORING WELL/SOIL VAPOR POINT
- RI SOIL BORING/SOIL VAPOR POINT
- RI SOIL VAPOR POINT
- SOIL BORING/TEMPORARY WELL/SOIL VAPOR POINT (PHASE II, NOVEMBER 2020)
- SUPPLEMENTAL SOIL VAPOR POINT (PHASE II, NOVEMBER 2020)
- INDOOR AIR SAMPLE LOCATION (PHASE II, NOVEMBER 2020)
- AMBIENT AIR SAMPLE LOCATION (PHASE II, NOVEMBER 2020)
- ABOVEGROUND STORAGE TANK (AST)

All Detections are Shown

µg/m³- micrograms per cubic meter

J: The reported value is estimated.
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.

Sample ID — Sample Date

RI-SV-08_20220728: 7/28/2022

Analyte/Compound	CONC. (µg/m³)
Volatile Organic Compounds	
1,2,4-Trimethylbenzene	45
1,3-Butadiene	3.6
1,3-Dichlorobenzene	14
1,3,5-Trimethylbenzene (Mesitylene)	13
1,4-Dichlorobenzene	1.2
2-Hexanone	6.2
2,2,4-Trimethylpentane	17
4-Ethyltoluene	13
Acetone	170 D
Benzene	20
Butane	24
Carbon Disulfide	4.3
Carbon Tetrachloride	0.32
Chlorobenzene	0.8 J
Chlorodifluoromethane	0.8 J
Chloroform	3.3
Chloromethane	1.4
Cyclohexane	9.1
Cymene	6.6
Dichlorodifluoromethane	1.5 J
Ethylbenzene	43
Isopropanol	21
M,P-Xylenes	160
Methyl Ethyl Ketone (2-Butanone)	17
N-Heptane	45
N-Hexane	44
N-Propylbenzene	9.1
Naphthalene	4.9
O-Xylene (1,2-Dimethylbenzene)	58
Styrene	3
Tert-Butyl Alcohol	38
Tetrachloroethylene (PCE)	8
Toluene	210 D
Trichloroethylene (TCE)	0.74
Trichlorofluoromethane	1 J

Concentration

Map Source: NYCDCP (NYC Dept. of City Planning) GIS Database

AKRF
440 Park Avenue South, New York, NY 10016

Jamaica Works
95-25 149th Street
Queens, New York

Soil Vapor Detections

DATE
12/7/2022

PROJECT NO.
200278

FIGURE
9

TABLES

Table 1

Groundwater Elevation Data

Jamacia Works - Remedial Investigation

95-25 149th Street, Queens, NY

Date	Well ID	Top of Casing Elevation (ft.)	Depth to Groundwater (ft. below TOC)	Groundwater Elevation (ft.)
8/17/2022	RI-MW-01	38.62	19.25	19.37
8/17/2022	RI-MW-03	36.27	16.82	19.45
8/17/2022	RI-MW-04	30.18	10.68	19.50
8/17/2022	RI-MW-05	35.30	15.95	19.35

Notes:

ft. = feet

TOC = top of casing

Elevation = feet above mean sea level based on the North American Vertical Datum of 1988 (NAVD88).

Table 2
Soil Analytical Results of Volatile Organic Compounds
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-01_0-2_20220727	RI-SB-01_7-9_20220727	RI-SB-01_13-15_20220727	RI-SB-02_0-2_20220727	RI-SB-02_2-4_20220727
		Laboratory Sample ID	460-262706-8	460-262706-9	460-262706-10	460-262706-6	460-262706-7
		Date Sampled	7/27/2022	7/27/2022	7/27/2022	7/27/2022	7/27/2022
		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	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
1,1,2,2-Tetrachloroethane	NS	NS	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	NS	NS	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
1,1,2-Trichloroethane	NS	NS	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
1,1-Dichloroethane	0.27	26	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
1,1-Dichloroethene	0.33	100	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
1,2,3-Trichlorobenzene	NS	NS	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
1,2,4-Trichlorobenzene	NS	NS	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
1,2,4-Trimethylbenzene	3.6	52	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
1,2-Dibromo-3-Chloropropane	NS	NS	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
1,2-Dichlorobenzene	1.1	100	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
1,2-Dichloroethane	0.02	3.1	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
1,2-Dichloropropane	NS	NS	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
1,3-Dichlorobenzene	2.4	49	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
1,4-Dichlorobenzene	1.8	13	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
2-Hexanone	NS	NS	0.0084 U	0.011 U	0.0063 U	0.0073 U	0.0064 U
Acetone	**0.05**	100	0.01 U	0.013 U	0.0076 U	0.0088 U	0.0076 U
Benzene	0.06	4.8	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
Bromochloromethane	NS	NS	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
Bromodichloromethane	NS	NS	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
Bromoform	NS	NS	0.0017 UJ	0.0022 UJ	0.0013 U	0.0015 UJ	0.0013 UJ
Bromomethane	NS	NS	0.0034 U	0.0045 U	0.0025 U	0.0029 U	0.0025 U
Carbon Disulfide	NS	NS	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
Carbon Tetrachloride	0.76	2.4	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
Chlorobenzene	1.1	100	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
Chloroethane	NS	NS	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
Chloroform	0.37	49	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
Chloromethane	NS	NS	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
Cis-1,2-Dichloroethylene	0.25	100	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
Cis-1,3-Dichloropropene	NS	NS	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
Cyclohexane	NS	NS	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
Dibromochloromethane	NS	NS	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
Dichlorodifluoromethane	NS	NS	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
Ethylbenzene	1	41	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
Isopropylbenzene (Cumene)	NS	NS	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
M,P-Xylenes	NS	NS	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
Methyl Acetate	NS	NS	0.0084 U	0.011 U	0.0063 U	0.0073 U	0.0064 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.0084 U	0.011 U	0.0063 U	0.0073 U	0.0064 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	0.0084 U	0.011 U	0.0063 U	0.0073 U	0.0064 U
Methylcyclohexane	NS	NS	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
Methylene Chloride	0.05	100	0.0034 U	0.0045 U	0.0025 U	0.0029 U	0.0025 U
N-Butylbenzene	12	100	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
N-Propylbenzene	3.9	100	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
Sec-Butylbenzene	11	100	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
Styrene	NS	NS	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
T-Butylbenzene	5.9	100	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
Tert-Butyl Methyl Ether	0.93	100	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
Tetrachloroethylene (PCE)	1.3	19	0.0017 U	0.025	0.0013 U	0.0015 U	0.0013 U
Toluene	0.7	100	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
Trans-1,2-Dichloroethene	0.19	100	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
Trans-1,3-Dichloropropene	NS	NS	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
Trichloroethylene (TCE)	0.47	21	0.0017 U	0.016	0.0013 U	0.0015 U	0.0013 U
Trichlorofluoromethane	NS	NS	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
Vinyl Chloride	0.02	0.9	0.0017 U	0.0022 U	0.0013 U	0.0015 U	0.0013 U
Xylenes, Total	0.26	100	0.0034 U	0.0045 U	0.0025 U	0.0029 U	0.0025 U

Table 2
Soil Analytical Results of Volatile Organic Compounds
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-03_0-2_20220725	RI-SB-03_5-7_20220725	RI-SB-03_13-15_20220725	RI-SB-04_0-2_20220726	RI-SB-04_6-8_20220726
		Laboratory Sample ID	460-262562-7	460-262562-8	460-262562-9	460-262621-1	460-262621-2
		Date Sampled	7/25/2022	7/25/2022	7/25/2022	7/26/2022	7/26/2022
		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	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
1,1,2,2-Tetrachloroethane	NS	NS	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	NS	NS	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
1,1,2-Trichloroethane	NS	NS	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
1,1-Dichloroethane	0.27	26	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
1,1-Dichloroethene	0.33	100	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
1,2,3-Trichlorobenzene	NS	NS	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
1,2,4-Trichlorobenzene	NS	NS	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
1,2,4-Trimethylbenzene	3.6	52	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
1,2-Dibromo-3-Chloropropane	NS	NS	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
1,2-Dichlorobenzene	1.1	100	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
1,2-Dichloroethane	0.02	3.1	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
1,2-Dichloropropane	NS	NS	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
1,3-Dichlorobenzene	2.4	49	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
1,4-Dichlorobenzene	1.8	13	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
2-Hexanone	NS	NS	0.0067 U	0.0061 U	0.0062 U	0.0084 U	0.008 U
Acetone	**0.05**	100	0.008 U	0.0073 U	0.0074 U	0.01 U	0.0096 U
Benzene	0.06	4.8	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
Bromochloromethane	NS	NS	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
Bromodichloromethane	NS	NS	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
Bromoform	NS	NS	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
Bromomethane	NS	NS	0.0027 U	0.0024 U	0.0025 U	0.0034 U	0.0032 U
Carbon Disulfide	NS	NS	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
Carbon Tetrachloride	0.76	2.4	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
Chlorobenzene	1.1	100	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
Chloroethane	NS	NS	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
Chloroform	0.37	49	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
Chloromethane	NS	NS	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
Cis-1,2-Dichloroethylene	0.25	100	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
Cis-1,3-Dichloropropene	NS	NS	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
Cyclohexane	NS	NS	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
Dibromochloromethane	NS	NS	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
Dichlorodifluoromethane	NS	NS	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
Ethylbenzene	1	41	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
Isopropylbenzene (Cumene)	NS	NS	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
M,P-Xylenes	NS	NS	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
Methyl Acetate	NS	NS	0.0067 U	0.0061 U	0.0062 U	0.0084 U	0.008 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.0067 UJ	0.0061 UJ	0.0062 UJ	0.0084 U	0.008 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	0.0067 U	0.0061 U	0.0062 U	0.0084 U	0.008 U
Methylcyclohexane	NS	NS	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
Methylene Chloride	0.05	100	0.0027 U	0.0024 U	0.0025 U	0.0034 U	0.0032 U
N-Butylbenzene	12	100	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
N-Propylbenzene	3.9	100	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
Sec-Butylbenzene	11	100	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
Styrene	NS	NS	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
T-Butylbenzene	5.9	100	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
Tert-Butyl Methyl Ether	0.93	100	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
Tetrachloroethylene (PCE)	1.3	19	0.014	0.0014	0.0012 U	0.0017 U	0.0016 U
Toluene	0.7	100	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
Trans-1,2-Dichloroethene	0.19	100	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
Trans-1,3-Dichloropropene	NS	NS	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
Trichloroethylene (TCE)	0.47	21	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
Trichlorofluoromethane	NS	NS	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
Vinyl Chloride	0.02	0.9	0.0013 U	0.0012 U	0.0012 U	0.0017 U	0.0016 U
Xylenes, Total	0.26	100	0.0027 U	0.0024 U	0.0025 U	0.0034 U	0.0032 U

Table 2
Soil Analytical Results of Volatile Organic Compounds
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-04_13-15_20220726	RI-SB-X_13-15_20220726	RI-SB-05_0-2_20220726	RI-SB-05_5-7_20220726	RI-SB-05_13-15_20220726
		Laboratory Sample ID	460-262621-3	460-262621-4	460-262621-10	460-262621-11	460-262621-12
		Date Sampled	7/26/2022	7/26/2022	7/26/2022	7/26/2022	7/26/2022
		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	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
1,1,2,2-Tetrachloroethane	NS	NS	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	NS	NS	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
1,1,2-Trichloroethane	NS	NS	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
1,1-Dichloroethane	0.27	26	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
1,1-Dichloroethene	0.33	100	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
1,2,3-Trichlorobenzene	NS	NS	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
1,2,4-Trichlorobenzene	NS	NS	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
1,2,4-Trimethylbenzene	3.6	52	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
1,2-Dibromo-3-Chloropropane	NS	NS	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
1,2-Dichlorobenzene	1.1	100	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
1,2-Dichloroethane	0.02	3.1	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
1,2-Dichloropropane	NS	NS	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
1,3-Dichlorobenzene	2.4	49	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
1,4-Dichlorobenzene	1.8	13	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
2-Hexanone	NS	NS	0.0091 U	0.0073 U	0.0071 U	0.006 U	0.005 U
Acetone	**0.05**	100	0.011 J	0.0088 U	0.017	0.0072 U	0.006 U
Benzene	0.06	4.8	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
Bromochloromethane	NS	NS	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
Bromodichloromethane	NS	NS	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
Bromoform	NS	NS	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
Bromomethane	NS	NS	0.0036 U	0.0029 U	0.0029 U	0.0024 U	0.002 U
Carbon Disulfide	NS	NS	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
Carbon Tetrachloride	0.76	2.4	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
Chlorobenzene	1.1	100	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
Chloroethane	NS	NS	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
Chloroform	0.37	49	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
Chloromethane	NS	NS	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
Cis-1,2-Dichloroethylene	0.25	100	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
Cis-1,3-Dichloropropene	NS	NS	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
Cyclohexane	NS	NS	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
Dibromochloromethane	NS	NS	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
Dichlorodifluoromethane	NS	NS	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
Ethylbenzene	1	41	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
Isopropylbenzene (Cumene)	NS	NS	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
M,P-Xylenes	NS	NS	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
Methyl Acetate	NS	NS	0.0091 U	0.0073 U	0.0071 U	0.006 U	0.005 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.0091 U	0.0073 U	0.0071 U	0.006 U	0.005 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	0.0091 U	0.0073 U	0.0071 U	0.006 U	0.005 U
Methylcyclohexane	NS	NS	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
Methylene Chloride	0.05	100	0.0036 U	0.0029 U	0.0029 U	0.0024 U	0.002 U
N-Butylbenzene	12	100	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
N-Propylbenzene	3.9	100	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
Sec-Butylbenzene	11	100	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
Styrene	NS	NS	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
T-Butylbenzene	5.9	100	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
Tert-Butyl Methyl Ether	0.93	100	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
Tetrachloroethylene (PCE)	1.3	19	0.0018 U	0.0016	0.019	0.046	0.0027
Toluene	0.7	100	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
Trans-1,2-Dichloroethene	0.19	100	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
Trans-1,3-Dichloropropene	NS	NS	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
Trichloroethylene (TCE)	0.47	21	0.0018 U	0.002	0.0014 U	0.00043 J	0.001 U
Trichlorofluoromethane	NS	NS	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
Vinyl Chloride	0.02	0.9	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.001 U
Xylenes, Total	0.26	100	0.0036 U	0.0029 U	0.0029 U	0.0024 U	0.002 U

Table 2
Soil Analytical Results of Volatile Organic Compounds
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-06_0-2_20220727	RI-SB-06_4-6_20220727	RI-SB-X_4-6_20220727	RI-SB-06_13-15_20220727	RI-SB-07_0-2_20220725
		Laboratory Sample ID	460-262706-1	460-262706-2	460-262706-4	460-262706-3	460-262562-10
		Date Sampled	7/27/2022	7/27/2022	7/27/2022	7/27/2022	7/25/2022
		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	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.0014 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U
1,1,2,2-Tetrachloroethane	NS	NS	0.0014 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	NS	NS	0.0014 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U
1,1,2-Trichloroethane	NS	NS	0.0014 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U
1,1-Dichloroethane	0.27	26	0.0014 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U
1,1-Dichloroethene	0.33	100	0.0014 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U
1,2,3-Trichlorobenzene	NS	NS	0.0014 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U
1,2,4-Trichlorobenzene	NS	NS	0.0014 U	0.0013 U	0.0012 U	0.0012 UJ	0.0013 U
1,2,4-Trimethylbenzene	3.6	52	0.0014 U	0.0013 U	0.0012 U	0.0012 UJ	0.0013 U
1,2-Dibromo-3-Chloropropane	NS	NS	0.0014 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	0.0014 U	0.0013 U	0.0012 U	0.0012 UJ	0.0013 U
1,2-Dichlorobenzene	1.1	100	0.0014 U	0.0013 U	0.0012 U	0.0012 UJ	0.0013 U
1,2-Dichloroethane	0.02	3.1	0.0014 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U
1,2-Dichloropropane	NS	NS	0.0014 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	0.0014 U	0.0013 U	0.0012 U	0.0012 UJ	0.0013 U
1,3-Dichlorobenzene	2.4	49	0.0014 U	0.0013 U	0.0012 U	0.0012 UJ	0.0013 U
1,4-Dichlorobenzene	1.8	13	0.0014 U	0.0013 U	0.0012 U	0.0012 UJ	0.0013 U
2-Hexanone	NS	NS	0.0068 U	0.0067 U	0.0061 U	0.0062 U	0.0065 U
Acetone	**0.05**	100	0.0082 U	0.008 U	0.0074 U	0.0075 U	0.0079 U
Benzene	0.06	4.8	0.0014 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U
Bromochloromethane	NS	NS	0.0014 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U
Bromodichloromethane	NS	NS	0.0014 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U
Bromoform	NS	NS	0.0014 UJ	0.0013 UJ	0.0012 UJ	0.0012 U	0.0013 U
Bromomethane	NS	NS	0.0027 U	0.0027 U	0.0025 U	0.0025 U	0.0026 U
Carbon Disulfide	NS	NS	0.0014 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U
Carbon Tetrachloride	0.76	2.4	0.0014 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U
Chlorobenzene	1.1	100	0.0014 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U
Chloroethane	NS	NS	0.0014 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U
Chloroform	0.37	49	0.0014 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U
Chloromethane	NS	NS	0.0014 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U
Cis-1,2-Dichloroethylene	0.25	100	0.0014 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U
Cis-1,3-Dichloropropene	NS	NS	0.0014 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U
Cyclohexane	NS	NS	0.0014 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U
Dibromochloromethane	NS	NS	0.0014 U	0.0013 U	0.0012 U	0.0012 UJ	0.0013 U
Dichlorodifluoromethane	NS	NS	0.0014 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U
Ethylbenzene	1	41	0.0014 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U
Isopropylbenzene (Cumene)	NS	NS	0.0014 U	0.0013 U	0.0012 U	0.0012 UJ	0.0013 U
M,P-Xylenes	NS	NS	0.0014 U	0.0013 U	0.0012 U	0.0012 UJ	0.0013 U
Methyl Acetate	NS	NS	0.0068 U	0.0067 U	0.0061 U	0.0062 U	0.0065 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.0068 U	0.0067 U	0.0061 U	0.0062 U	0.0065 UJ
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	0.0068 U	0.0067 U	0.0061 U	0.0062 U	0.0065 U
Methylcyclohexane	NS	NS	0.0014 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U
Methylene Chloride	0.05	100	0.0027 U	0.0027 U	0.0025 U	0.0025 U	0.0026 U
N-Butylbenzene	12	100	0.0014 U	0.0013 U	0.0012 U	0.0012 UJ	0.0013 U
N-Propylbenzene	3.9	100	0.0014 U	0.0013 U	0.0012 U	0.0012 UJ	0.0013 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	0.0014 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U
Sec-Butylbenzene	11	100	0.0014 U	0.0013 U	0.0012 U	0.0012 UJ	0.0013 U
Styrene	NS	NS	0.0014 U	0.0013 U	0.0012 U	0.0012 UJ	0.0013 U
T-Butylbenzene	5.9	100	0.0014 U	0.0013 U	0.0012 U	0.0012 UJ	0.0013 U
Tert-Butyl Methyl Ether	0.93	100	0.0014 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U
Tetrachloroethylene (PCE)	1.3	19	0.0011 J	0.001 J	0.0014	0.00069 J	0.0013 U
Toluene	0.7	100	0.0014 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U
Trans-1,2-Dichloroethene	0.19	100	0.0014 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U
Trans-1,3-Dichloropropene	NS	NS	0.0014 U	0.0013 U	0.0012 U	0.0012 UJ	0.0013 U
Trichloroethylene (TCE)	0.47	21	0.0014 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U
Trichlorofluoromethane	NS	NS	0.0014 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U
Vinyl Chloride	0.02	0.9	0.0014 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U
Xylenes, Total	0.26	100	0.0027 U	0.0027 U	0.0025 U	0.0025 U	0.0026 U

Table 2
Soil Analytical Results of Volatile Organic Compounds
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-07_6-8_20220725	RI-SB-07_13-15_20220725	RI-SB-08_0-2_20220728	RI-SB-08_5-7_20220728	RI-SB-08_13-15_20220728
		Laboratory Sample ID	460-262562-11	460-262562-12	460-262775-1	460-262775-2	460-262775-3
		Date Sampled	7/25/2022	7/25/2022	7/28/2022	7/28/2022	7/28/2022
		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	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
1,1,2,2-Tetrachloroethane	NS	NS	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	NS	NS	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
1,1,2-Trichloroethane	NS	NS	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
1,1-Dichloroethane	0.27	26	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
1,1-Dichloroethene	0.33	100	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
1,2,3-Trichlorobenzene	NS	NS	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
1,2,4-Trichlorobenzene	NS	NS	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
1,2,4-Trimethylbenzene	3.6	52	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
1,2-Dibromo-3-Chloropropane	NS	NS	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
1,2-Dichlorobenzene	1.1	100	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
1,2-Dichloroethane	0.02	3.1	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
1,2-Dichloropropane	NS	NS	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
1,3-Dichlorobenzene	2.4	49	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
1,4-Dichlorobenzene	1.8	13	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
2-Hexanone	NS	NS	0.0063 U	0.0055 U	0.006 U	0.0057 U	0.0061 U
Acetone	**0.05**	100	0.0076 U	0.0066 U	0.0071 U	0.0068 U	0.0073 U
Benzene	0.06	4.8	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
Bromochloromethane	NS	NS	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
Bromodichloromethane	NS	NS	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
Bromoform	NS	NS	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
Bromomethane	NS	NS	0.0025 U	0.0022 U	0.0024 U	0.0023 U	0.0024 U
Carbon Disulfide	NS	NS	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
Carbon Tetrachloride	0.76	2.4	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
Chlorobenzene	1.1	100	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
Chloroethane	NS	NS	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
Chloroform	0.37	49	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
Chloromethane	NS	NS	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
Cis-1,2-Dichloroethylene	0.25	100	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
Cis-1,3-Dichloropropene	NS	NS	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
Cyclohexane	NS	NS	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
Dibromochloromethane	NS	NS	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
Dichlorodifluoromethane	NS	NS	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
Ethylbenzene	1	41	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
Isopropylbenzene (Cumene)	NS	NS	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
M,P-Xylenes	NS	NS	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
Methyl Acetate	NS	NS	0.0063 U	0.0055 U	0.006 U	0.0057 U	0.0061 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.0063 UJ	0.0055 UJ	0.006 U	0.0057 U	0.0061 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	0.0063 U	0.0055 U	0.006 U	0.0057 U	0.0061 U
Methylcyclohexane	NS	NS	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
Methylene Chloride	0.05	100	0.0025 U	0.0022 U	0.0024 U	0.0023 U	0.0024 U
N-Butylbenzene	12	100	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
N-Propylbenzene	3.9	100	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
Sec-Butylbenzene	11	100	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
Styrene	NS	NS	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
T-Butylbenzene	5.9	100	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
Tert-Butyl Methyl Ether	0.93	100	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
Tetrachloroethylene (PCE)	1.3	19	0.0013 U	0.0011 U	0.00091 J	0.0046	0.0012 U
Toluene	0.7	100	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
Trans-1,2-Dichloroethene	0.19	100	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
Trans-1,3-Dichloropropene	NS	NS	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
Trichloroethylene (TCE)	0.47	21	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
Trichlorofluoromethane	NS	NS	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
Vinyl Chloride	0.02	0.9	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U
Xylenes, Total	0.26	100	0.0025 U	0.0022 U	0.0024 U	0.0023 U	0.0024 U

Table 2
Soil Analytical Results of Volatile Organic Compounds
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-09_0-2_20220726	RI-SB-09_3-5_20220726	RI-SB-09_7-9_20220726	RI-SB-10_0-2_20220725	RI-SB-10_5-7_20220725
		Laboratory Sample ID	460-262621-7	460-262621-8	460-262621-9	460-262562-4	460-262562-5
		Date Sampled	7/26/2022	7/26/2022	7/26/2022	7/25/2022	7/25/2022
		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	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.0011 U	0.0011 U	0.0011 U	0.0018 U	0.00098 U
1,1,2,2-Tetrachloroethane	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0018 U	0.00098 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	NS	NS	0.0011 UJ	0.0011 U	0.0011 U	0.0018 U	0.00098 U
1,1,2-Trichloroethane	NS	NS	0.0011 UJ	0.0011 U	0.0011 U	0.0018 U	0.00098 U
1,1-Dichloroethane	0.27	26	0.0011 U	0.0011 U	0.0011 U	0.0018 U	0.00098 U
1,1-Dichloroethene	0.33	100	0.0011 U	0.0011 U	0.0011 U	0.0018 U	0.00098 U
1,2,3-Trichlorobenzene	NS	NS	0.0011 UJ	0.0011 U	0.0011 U	0.0018 U	0.00098 U
1,2,4-Trichlorobenzene	NS	NS	0.0011 UJ	0.0011 U	0.0011 U	0.0018 U	0.00098 U
1,2,4-Trimethylbenzene	3.6	52	0.0011 UJ	0.0011 U	0.0011 U	0.0018 U	0.00098 U
1,2-Dibromo-3-Chloropropane	NS	NS	0.0011 UJ	0.0011 U	0.0011 U	0.0018 U	0.00098 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	0.0011 UJ	0.0011 U	0.0011 U	0.0018 U	0.00098 U
1,2-Dichlorobenzene	1.1	100	0.0011 UJ	0.0011 U	0.0011 U	0.0018 U	0.00098 U
1,2-Dichloroethane	0.02	3.1	0.0011 U	0.0011 U	0.0011 U	0.0018 U	0.00098 U
1,2-Dichloropropane	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0018 U	0.00098 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	0.0011 UJ	0.0011 U	0.0011 U	0.0018 U	0.00098 U
1,3-Dichlorobenzene	2.4	49	0.0011 UJ	0.0011 U	0.0011 U	0.0018 U	0.00098 U
1,4-Dichlorobenzene	1.8	13	0.0011 UJ	0.0011 U	0.0011 U	0.0018 U	0.00098 U
2-Hexanone	NS	NS	0.0057 U	0.0056 U	0.0055 U	0.009 U	0.0049 U
Acetone	**0.05**	100	0.0069 U	0.0067 U	0.0066 U	0.015	0.0057 J
Benzene	0.06	4.8	0.0011 U	0.0011 U	0.0011 U	0.0018 U	0.00098 U
Bromochloromethane	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0018 U	0.00098 U
Bromodichloromethane	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0018 U	0.00098 U
Bromoform	NS	NS	0.0011 UJ	0.0011 U	0.0011 U	0.0018 U	0.00098 U
Bromomethane	NS	NS	0.0023 U	0.0022 U	0.0022 U	0.0036 U	0.002 U
Carbon Disulfide	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0018 U	0.00098 U
Carbon Tetrachloride	0.76	2.4	0.0011 U	0.0011 U	0.0011 U	0.0018 U	0.00098 U
Chlorobenzene	1.1	100	0.0011 UJ	0.0011 U	0.0011 U	0.0018 U	0.00098 U
Chloroethane	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0018 U	0.00098 U
Chloroform	0.37	49	0.0011 U	0.0011 U	0.0011 U	0.0018 U	0.00098 U
Chloromethane	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0018 U	0.00098 U
Cis-1,2-Dichloroethylene	0.25	100	0.0011 U	0.0011 U	0.0011 U	0.0018 U	0.00098 U
Cis-1,3-Dichloropropene	NS	NS	0.0011 UJ	0.0011 U	0.0011 U	0.0018 U	0.00098 U
Cyclohexane	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0018 U	0.00098 U
Dibromochloromethane	NS	NS	0.0011 UJ	0.0011 U	0.0011 U	0.0018 U	0.00098 U
Dichlorodifluoromethane	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0018 U	0.00098 U
Ethylbenzene	1	41	0.0011 UJ	0.0011 U	0.0011 U	0.0018 U	0.00098 U
Isopropylbenzene (Cumene)	NS	NS	0.0011 UJ	0.0011 U	0.0011 U	0.0018 U	0.00098 U
M,P-Xylenes	NS	NS	0.0011 UJ	0.0011 U	0.0011 U	0.0018 U	0.00098 U
Methyl Acetate	NS	NS	0.0057 U	0.0056 U	0.0055 U	0.009 U	0.0049 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.0057 U	0.0056 U	0.0055 U	0.009 UJ	0.0049 UJ
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	0.0057 UJ	0.0056 U	0.0055 U	0.009 U	0.0049 U
Methylcyclohexane	NS	NS	0.0011 UJ	0.0011 U	0.0011 U	0.0018 U	0.00098 U
Methylene Chloride	0.05	100	0.0023 U	0.0022 U	0.0022 U	0.0049	0.002 U
N-Butylbenzene	12	100	0.0011 UJ	0.0011 U	0.0011 U	0.0018 U	0.00098 U
N-Propylbenzene	3.9	100	0.0011 UJ	0.0011 U	0.0011 U	0.0018 U	0.00098 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	0.0011 UJ	0.0011 U	0.0011 U	0.0018 U	0.00098 U
Sec-Butylbenzene	11	100	0.0011 UJ	0.0011 U	0.0011 U	0.0018 U	0.00098 U
Styrene	NS	NS	0.0011 UJ	0.0011 U	0.0011 U	0.0018 U	0.00098 U
T-Butylbenzene	5.9	100	0.0011 UJ	0.0011 U	0.0011 U	0.0018 U	0.00098 U
Tert-Butyl Methyl Ether	0.93	100	0.0011 U	0.0011 U	0.0011 U	0.0018 U	0.00098 U
Tetrachloroethylene (PCE)	1.3	19	0.0011 UJ	0.0011 U	0.0011 U	0.028	0.035
Toluene	0.7	100	0.0011 UJ	0.0011 U	0.0011 U	0.0018 U	0.00098 U
Trans-1,2-Dichloroethene	0.19	100	0.0011 UJ	0.0011 U	0.0011 U	0.0018 U	0.00098 U
Trans-1,3-Dichloropropene	NS	NS	0.0011 UJ	0.0011 U	0.0011 U	0.0018 U	0.00098 U
Trichloroethylene (TCE)	0.47	21	0.0011 UJ	0.0011 U	0.0011 U	0.0018 U	0.00098 U
Trichlorofluoromethane	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.0018 U	0.00098 U
Vinyl Chloride	0.02	0.9	0.0011 U	0.0011 U	0.0011 U	0.0018 U	0.00098 U
Xylenes, Total	0.26	100	0.0023 UJ	0.0022 U	0.0022 U	0.0036 U	0.002 U

Table 2
Soil Analytical Results of Volatile Organic Compounds
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-10_13-15_20220725	RI-SB-11_0-2_20220725	RI-SB-11_5-7_20220725	RI-SB-11_13-15_20220725	RI-SB-DRAIN_1-1.5_20220727
		Laboratory Sample ID	460-262562-6	460-262562-1	460-262562-2	460-262562-3	460-262706-11
		Date Sampled	7/25/2022	7/25/2022	7/25/2022	7/25/2022	7/27/2022
		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	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
1,1,2,2-Tetrachloroethane	NS	NS	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	NS	NS	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
1,1,2-Trichloroethane	NS	NS	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
1,1-Dichloroethane	0.27	26	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
1,1-Dichloroethene	0.33	100	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
1,2,3-Trichlorobenzene	NS	NS	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
1,2,4-Trichlorobenzene	NS	NS	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
1,2,4-Trimethylbenzene	3.6	52	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.003
1,2-Dibromo-3-Chloropropane	NS	NS	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
1,2-Dichlorobenzene	1.1	100	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
1,2-Dichloroethane	0.02	3.1	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
1,2-Dichloropropane	NS	NS	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.00077 J
1,3-Dichlorobenzene	2.4	49	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
1,4-Dichlorobenzene	1.8	13	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
2-Hexanone	NS	NS	0.0056 U	0.0065 U	0.0041 U	0.0053 U	0.0041 J
Acetone	**0.05**	100	0.0067 U	0.0078 U	0.0096	0.0063 U	**0.15**
Benzene	0.06	4.8	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.00039 J
Bromochloromethane	NS	NS	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
Bromodichloromethane	NS	NS	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
Bromoform	NS	NS	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
Bromomethane	NS	NS	0.0022 U	0.0026 U	0.0016 U	0.0021 U	0.0029 U
Carbon Disulfide	NS	NS	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
Carbon Tetrachloride	0.76	2.4	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
Chlorobenzene	1.1	100	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
Chloroethane	NS	NS	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
Chloroform	0.37	49	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
Chloromethane	NS	NS	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
Cis-1,2-Dichloroethylene	0.25	100	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
Cis-1,3-Dichloropropene	NS	NS	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
Cyclohexane	NS	NS	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
Dibromochloromethane	NS	NS	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
Dichlorodifluoromethane	NS	NS	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
Ethylbenzene	1	41	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.00075 J
Isopropylbenzene (Cumene)	NS	NS	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
M,P-Xylenes	NS	NS	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0026
Methyl Acetate	NS	NS	0.0056 U	0.0065 U	0.0041 U	0.0053 U	0.0074 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	0.0056 UJ	0.0065 UJ	0.0041 UJ	0.0053 UJ	0.036
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	0.0056 U	0.0065 U	0.0041 U	0.0053 U	0.0033 J
Methylcyclohexane	NS	NS	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
Methylene Chloride	0.05	100	0.0022 U	0.0026 U	0.0013 J	0.0021 U	0.0029 U
N-Butylbenzene	12	100	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
N-Propylbenzene	3.9	100	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0004 J
O-Xylene (1,2-Dimethylbenzene)	NS	NS	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0013 J
Sec-Butylbenzene	11	100	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
Styrene	NS	NS	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
T-Butylbenzene	5.9	100	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
Tert-Butyl Methyl Ether	0.93	100	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
Tetrachloroethylene (PCE)	1.3	19	0.0011 U	0.0044	0.017	0.0011 U	0.0018
Toluene	0.7	100	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0028
Trans-1,2-Dichloroethene	0.19	100	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
Trans-1,3-Dichloropropene	NS	NS	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
Trichloroethylene (TCE)	0.47	21	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
Trichlorofluoromethane	NS	NS	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
Vinyl Chloride	0.02	0.9	0.0011 U	0.0013 U	0.00081 U	0.0011 U	0.0015 U
Xylenes, Total	0.26	100	0.0022 U	0.0026 U	0.0016 U	0.0021 U	0.0038

Table 2
Soil Analytical Results of Volatile Organic Compounds
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	FB_20220726	FB_20220727	TB_20220726	TB_20220727	TB_20220728
		Laboratory Sample ID	460-262621-5	460-262706-5	460-262621-6	460-262706-12	460-262775-4
		Date Sampled	7/26/2022	7/27/2022	7/26/2022	7/27/2022	7/28/2022
		Unit	µg/L	µg/L	µg/L	µg/L	µg/L
		Dilution Factor	1	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.68	100	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	NS	NS	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	NS	NS	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	NS	NS	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	0.27	26	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	0.33	100	1 U	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	NS	NS	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	NS	NS	1 U	1 U	1 U	1 U	1 U
1,2,4-Trimethylbenzene	3.6	52	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-Chloropropane	NS	NS	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	NS	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1.1	100	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.02	3.1	1 UJ	1 U	1 UJ	1 U	1 U
1,2-Dichloropropane	NS	NS	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	52	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	2.4	49	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1.8	13	1 U	1 U	1 U	1 U	1 U
2-Hexanone	NS	NS	5 U	5 U	5 U	5 U	5 U
Acetone	**0.05**	100	5 U	5 U	5 U	5 U	5 U
Benzene	0.06	4.8	1 U	1 U	1 U	1 U	1 U
Bromochloromethane	NS	NS	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	NS	NS	1 U	1 U	1 U	1 U	1 U
Bromoform	NS	NS	1 U	1 U	1 U	1 U	1 U
Bromomethane	NS	NS	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide	NS	NS	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	0.76	2.4	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	1.1	100	1 U	1 U	1 U	1 U	1 U
Chloroethane	NS	NS	1 U	1 U	1 U	1 U	1 U
Chloroform	0.37	49	1 U	1 U	1 U	1 U	1 U
Chloromethane	NS	NS	1 U	1 U	1 U	1 U	1 U
Cis-1,2-Dichloroethylene	0.25	100	1 U	1 U	1 U	1 U	1 U
Cis-1,3-Dichloropropene	NS	NS	1 U	1 U	1 U	1 U	1 U
Cyclohexane	NS	NS	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	NS	NS	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	NS	NS	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	1	41	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene (Cumene)	NS	NS	1 U	1 U	1 U	1 U	1 U
M,P-Xylenes	NS	NS	1 U	1 U	1 U	1 U	1 U
Methyl Acetate	NS	NS	5 U	5 U	5 U	5 U	5 U
Methyl Ethyl Ketone (2-Butanone)	0.12	100	5 U	5 U	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	NS	5 U	5 U	5 U	5 U	5 U
Methylcyclohexane	NS	NS	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	0.05	100	1 U	0.41 J	1 U	1 U	1 U
N-Butylbenzene	12	100	1 U	1 U	1 U	1 U	1 U
N-Propylbenzene	3.9	100	1 U	1 U	1 U	1 U	1 U
O-Xylene (1,2-Dimethylbenzene)	NS	NS	1 U	1 U	1 U	1 U	1 U
Sec-Butylbenzene	11	100	1 U	1 U	1 U	1 U	1 U
Styrene	NS	NS	1 U	1 U	1 U	1 U	1 U
T-Butylbenzene	5.9	100	1 U	1 U	1 U	1 U	1 U
Tert-Butyl Methyl Ether	0.93	100	1 U	1 U	1 U	1 U	1 U
Tetrachloroethylene (PCE)	1.3	19	1 U	1 U	1 U	1 U	1 U
Toluene	0.7	100	1 U	1 U	1 U	1 U	1 U
Trans-1,2-Dichloroethene	0.19	100	1 U	1 U	1 U	1 U	1 U
Trans-1,3-Dichloropropene	NS	NS	1 U	1 U	1 U	1 U	1 U
Trichloroethylene (TCE)	0.47	21	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	NS	NS	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	0.02	0.9	1 U	1 U	1 U	1 U	1 UJ
Xylenes, Total	0.26	100	2 U	2 U	2 U	2 U	2 U

Table 3
Soil Analytical Results of Semivolatile Organic Compounds
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-01_0-2_20220727	RI-SB-01_7-9_20220727	RI-SB-01_13-15_20220727	RI-SB-02_0-2_20220727	RI-SB-02_2-4_20220727	RI-SB-03_0-2_20220725
		Laboratory Sample ID	460-262706-8	460-262706-9	460-262706-10	460-262706-6	460-262706-7	460-262562-7
		Date Sampled	7/27/2022	7/27/2022	7/27/2022	7/27/2022	7/27/2022	7/25/2022
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS	0.33 U	0.34 U	0.33 U	0.34 U	0.34 U	0.36 U
1,4-Dioxane (P-Dioxane)	0.1	13	0.033 U	0.034 U	0.033 U	0.034 U	0.034 U	0.036 U
2,3,4,6-Tetrachlorophenol	NS	NS	0.33 U	0.34 U	0.33 U	0.34 U	0.34 U	0.36 U
2,4,5-Trichlorophenol	NS	NS	0.33 U	0.34 U	0.33 U	0.34 U	0.34 U	0.36 U
2,4,6-Trichlorophenol	NS	NS	0.13 U	0.14 U	0.13 U	0.14 U	0.14 U	0.14 U
2,4-Dichlorophenol	NS	NS	0.13 U	0.14 U	0.13 U	0.14 U	0.14 U	0.14 U
2,4-Dimethylphenol	NS	NS	0.33 U	0.34 U	0.33 U	0.34 U	0.34 U	0.36 U
2,4-Dinitrophenol	NS	NS	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.29 U
2,4-Dinitrotoluene	NS	NS	0.067 U	0.069 U	0.067 U	0.068 U	0.069 U	0.072 U
2,6-Dinitrotoluene	NS	NS	0.067 U	0.069 U	0.067 U	0.068 U	0.069 U	0.072 U
2-Chloronaphthalene	NS	NS	0.33 U	0.34 U	0.33 U	0.34 U	0.34 U	0.36 U
2-Chlorophenol	NS	NS	0.33 U	0.34 U	0.33 U	0.34 U	0.34 U	0.36 U
2-Methylnaphthalene	NS	NS	0.33 U	0.34 U	0.33 U	0.34 U	0.34 U	0.36 U
2-Methylphenol (O-Cresol)	0.33	100	0.33 U	0.34 U	0.33 U	0.34 U	0.34 U	0.36 U
2-Nitroaniline	NS	NS	0.33 U	0.34 U	0.33 U	0.34 UJ	0.34 U	0.36 U
2-Nitrophenol	NS	NS	0.33 U	0.34 U	0.33 U	0.34 U	0.34 U	0.36 U
3- And 4- Methylphenol (Total)	NS	NS	0.33 U	0.34 U	0.33 U	0.34 U	0.34 U	0.36 U
3,3'-Dichlorobenzidine	NS	NS	0.13 U	0.14 U	0.13 U	0.14 U	0.14 U	0.14 U
3-Nitroaniline	NS	NS	0.33 U	0.34 U	0.33 U	0.34 U	0.34 U	0.36 U
4,6-Dinitro-2-Methylphenol	NS	NS	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.29 U
4-Bromophenyl Phenyl Ether	NS	NS	0.33 U	0.34 U	0.33 U	0.34 U	0.34 U	0.36 U
4-Chloro-3-Methylphenol	NS	NS	0.33 U	0.34 U	0.33 U	0.34 U	0.34 U	0.36 U
4-Chloroaniline	NS	NS	0.33 U	0.34 U	0.33 U	0.34 U	0.34 U	0.36 U
4-Chlorophenyl Phenyl Ether	NS	NS	0.33 U	0.34 U	0.33 U	0.34 U	0.34 U	0.36 U
4-Methylphenol (P-Cresol)	0.33	100	0.33 U	0.34 U	0.33 U	0.34 U	0.34 U	0.36 U
4-Nitroaniline	NS	NS	0.33 U	0.34 U	0.33 U	0.34 U	0.34 U	0.36 U
4-Nitrophenol	NS	NS	0.67 U	0.69 U	0.67 U	0.68 UJ	0.69 U	0.72 U
Acenaphthene	20	100	0.33 U	0.34 U	0.33 U	0.012 J	0.34 U	0.013 J
Acenaphthylene	100	100	0.33 U	0.34 U	0.33 U	0.24 J	0.03 J	0.36 U
Acetophenone	NS	NS	0.33 U	0.34 U	0.33 U	0.34 U	0.34 U	0.36 U
Anthracene	100	100	0.33 U	0.012 J	0.33 U	0.11 J	0.026 J	0.045 J
Atrazine	NS	NS	0.13 U	0.14 U	0.13 U	0.14 U	0.14 U	0.14 U
Benzaldehyde	NS	NS	0.33 UJ	0.34 UJ	0.33 UJ	0.34 UJ	0.34 UJ	0.36 UJ
Benzo(a)Anthracene	**1**	1	0.033 U	0.042	0.033 U	0.98	0.25	0.26
Benzo(a)Pyrene	**1**	1	0.033 U	0.031 J	0.033 U	0.76	0.13	0.23
Benzo(b)Fluoranthene	**1**	1	0.033 U	0.046	0.033 U	**1.1**	0.27	0.34
Benzo(g,h,i)Perylene	100	100	0.33 U	0.015 J	0.33 U	0.4	0.095 J	0.16 J
Benzo(k)Fluoranthene	0.8	3.9	0.033 U	0.016 J	0.033 U	0.45	0.11	0.11
Benzyl Butyl Phthalate	NS	NS	0.33 U	0.34 U	0.33 U	0.34 U	0.34 U	0.36 U
Biphenyl (Diphenyl)	NS	NS	0.33 U	0.34 U	0.33 U	0.34 U	0.34 U	0.36 U
Bis(2-Chloroethoxy) Methane	NS	NS	0.33 U	0.34 U	0.33 U	0.34 U	0.34 U	0.36 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	0.033 U	0.034 U	0.033 U	0.034 U	0.034 U	0.036 U
Bis(2-Chloroisopropyl) Ether	NS	NS	0.33 U	0.34 U	0.33 U	0.34 UJ	0.34 U	0.36 U
Bis(2-Ethylhexyl) Phthalate	NS	NS	0.33 U	0.34 U	0.33 U	0.018 J	0.07 J	0.36 U
Caprolactam	NS	NS	0.33 U	0.34 U	0.33 U	0.34 U	0.34 U	0.36 U
Carbazole	NS	NS	0.33 U	0.34 U	0.33 U	0.047 J	0.028 J	0.027 J
Chrysene	**1**	3.9	0.33 U	0.043 J	0.33 U	0.91	0.43	0.28 J
Dibenz(a,h)Anthracene	0.33	0.33	0.033 U	0.034 U	0.033 U	0.15	0.063	0.039
Dibenzofuran	7	59	0.33 U	0.34 U	0.33 U	0.34 U	0.34 U	0.36 U
Diethyl Phthalate	NS	NS	0.33 U	0.34 U	0.33 U	0.34 U	0.34 U	0.36 U
Dimethyl Phthalate	NS	NS	0.33 U	0.34 U	0.33 U	0.34 U	0.34 U	0.36 U
Di-N-Butyl Phthalate	NS	NS	0.33 U	0.34 U	0.33 U	0.34 U	0.02 J	0.36 U
Di-N-Octylphthalate	NS	NS	0.33 U	0.34 U	0.33 U	0.34 UJ	0.34 U	0.36 U
Fluoranthene	100	100	0.33 U	0.081 J	0.33 U	1.5	0.26 J	0.48
Fluorene	30	100	0.33 U	0.34 U	0.33 U	0.016 J	0.01 J	0.36 U
Hexachlorobenzene	0.33	1.2	0.033 U	0.034 U	0.033 U	0.034 U	0.034 U	0.036 U
Hexachlorobutadiene	NS	NS	0.067 U	0.069 U	0.067 U	0.068 U	0.069 U	0.072 U
Hexachlorocyclopentadiene	NS	NS	0.33 U	0.34 U	0.33 U	0.34 U	0.34 U	0.36 U
Hexachloroethane	NS	NS	0.033 U	0.034 U	0.033 U	0.034 U	0.034 U	0.036 U
Indeno(1,2,3-c,d)Pyrene	**0.5**	0.5	0.033 U	0.019 J	0.033 U	**0.52**	0.11	0.2
Isophorone	NS	NS	0.13 U	0.14 U	0.13 U	0.14 UJ	0.14 U	0.14 U
Naphthalene	12	100	0.33 U	0.34 U	0.33 U	0.01 J	0.0062 J	0.36 U
Nitrobenzene	NS	NS	0.033 U	0.034 U	0.033 U	0.034 U	0.034 U	0.036 U
N-Nitrosodi-N-Propylamine	NS	NS	0.033 U	0.034 U	0.033 U	0.034 U	0.034 U	0.036 U
N-Nitrosodiphenylamine	NS	NS	0.33 U	0.34 U	0.33 U	0.34 U	0.34 U	0.36 U
Pentachlorophenol	0.8	6.7	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.29 U
Phenanthrene	100	100	0.33 U	0.053 J	0.33 U	0.24 J	0.11 J	0.28 J
Phenol	0.33	100	0.33 U	0.34 U	0.33 U	0.34 UJ	0.34 U	0.36 U
Pyrene	100	100	0.33 U	0.069 J	0.33 U	0.93	0.23 J	0.45

Table 3
Soil Analytical Results of Semivolatile Organic Compounds
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-03_5-7_20220725	RI-SB-03_13-15_20220725	RI-SB-04_0-2_20220726	RI-SB-04_6-8_20220726	RI-SB-04_13-15_20220726	RI-SB-X_13-15_20220726
		Laboratory Sample ID	460-262562-8	460-262562-9	460-262621-1	460-262621-2	460-262621-3	460-262621-4
		Date Sampled	7/25/2022	7/25/2022	7/26/2022	7/26/2022	7/26/2022	7/26/2022
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS	0.33 U	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U
1,4-Dioxane (P-Dioxane)	0.1	13	0.033 U	0.038 U	0.038 U	0.04 U	0.041 U	0.042 U
2,3,4,6-Tetrachlorophenol	NS	NS	0.33 U	0.38 U	0.38 R	0.4 U	0.41 U	0.42 U
2,4,5-Trichlorophenol	NS	NS	0.33 U	0.38 U	0.38 R	0.4 U	0.41 U	0.42 U
2,4,6-Trichlorophenol	NS	NS	0.13 U	0.15 U	0.15 R	0.16 U	0.16 U	0.17 U
2,4-Dichlorophenol	NS	NS	0.13 U	0.15 U	0.15 R	0.16 U	0.16 U	0.17 U
2,4-Dimethylphenol	NS	NS	0.33 U	0.38 U	0.38 R	0.4 U	0.41 U	0.42 U
2,4-Dinitrophenol	NS	NS	0.27 U	0.3 U	0.3 R	0.32 U	0.33 U	0.34 U
2,4-Dinitrotoluene	NS	NS	0.068 U	0.077 U	0.077 U	0.081 U	0.083 U	0.085 U
2,6-Dinitrotoluene	NS	NS	0.068 U	0.077 U	0.077 U	0.081 U	0.083 U	0.085 U
2-Chloronaphthalene	NS	NS	0.33 U	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U
2-Chlorophenol	NS	NS	0.33 U	0.38 U	0.38 R	0.4 U	0.41 U	0.42 U
2-Methylnaphthalene	NS	NS	0.33 U	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U
2-Methylphenol (O-Cresol)	0.33	100	0.33 U	0.38 U	0.38 R	0.4 U	0.41 U	0.42 U
2-Nitroaniline	NS	NS	0.33 U	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U
2-Nitrophenol	NS	NS	0.33 U	0.38 U	0.38 R	0.4 U	0.41 U	0.42 U
3- And 4- Methylphenol (Total)	NS	NS	0.33 U	0.38 U	0.38 R	0.4 U	0.41 U	0.42 U
3,3'-Dichlorobenzidine	NS	NS	0.13 U	0.15 U	0.15 U	0.16 U	0.16 U	0.17 U
3-Nitroaniline	NS	NS	0.33 U	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U
4,6-Dinitro-2-Methylphenol	NS	NS	0.27 U	0.3 U	0.3 R	0.32 U	0.33 U	0.34 U
4-Bromophenyl Phenyl Ether	NS	NS	0.33 U	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U
4-Chloro-3-Methylphenol	NS	NS	0.33 U	0.38 U	0.38 R	0.4 U	0.41 U	0.42 U
4-Chloroaniline	NS	NS	0.33 U	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U
4-Chlorophenyl Phenyl Ether	NS	NS	0.33 U	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U
4-Methylphenol (P-Cresol)	0.33	100	0.33 U	0.38 U	0.38 R	0.4 U	0.41 U	0.42 U
4-Nitroaniline	NS	NS	0.33 U	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U
4-Nitrophenol	NS	NS	0.68 U	0.77 U	0.77 R	0.81 U	0.83 U	0.85 U
Acenaphthene	20	100	0.33 U	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U
Acenaphthylene	100	100	0.33 U	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U
Acetophenone	NS	NS	0.33 U	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U
Anthracene	100	100	0.33 U	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U
Atrazine	NS	NS	0.13 U	0.15 U	0.15 U	0.16 U	0.16 U	0.17 U
Benzaldehyde	NS	NS	0.33 UJ	0.38 UJ	0.38 UJ	0.4 UJ	0.41 UJ	0.42 UJ
Benzo(a)Anthracene	**1**	1	0.064	0.038 U	0.038 U	0.04 U	0.041 U	0.042 U
Benzo(a)Pyrene	**1**	1	0.081	0.038 U	0.038 U	0.04 U	0.041 U	0.042 U
Benzo(b)Fluoranthene	**1**	1	0.11	0.038 U	0.038 U	0.04 U	0.041 U	0.042 U
Benzo(g,h,i)Perylene	100	100	0.068 J	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U
Benzo(k)Fluoranthene	0.8	3.9	0.046	0.038 U	0.038 U	0.04 U	0.041 U	0.042 U
Benzyl Butyl Phthalate	NS	NS	0.33 U	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U
Biphenyl (Diphenyl)	NS	NS	0.33 U	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U
Bis(2-Chloroethoxy) Methane	NS	NS	0.33 U	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	0.033 U	0.038 U	0.038 U	0.04 U	0.041 U	0.042 U
Bis(2-Chloroisopropyl) Ether	NS	NS	0.33 U	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U
Bis(2-Ethylhexyl) Phthalate	NS	NS	0.33 U	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U
Caprolactam	NS	NS	0.33 U	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U
Carbazole	NS	NS	0.33 U	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U
Chrysene	**1**	3.9	0.084 J	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U
Dibenz(a,h)Anthracene	0.33	0.33	0.033 U	0.038 U	0.038 U	0.04 U	0.041 U	0.042 U
Dibenzofuran	7	59	0.33 U	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U
Diethyl Phthalate	NS	NS	0.33 U	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U
Dimethyl Phthalate	NS	NS	0.33 U	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U
Di-N-Butyl Phthalate	NS	NS	0.33 U	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U
Di-N-Octylphthalate	NS	NS	0.33 U	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U
Fluoranthene	100	100	0.087 J	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U
Fluorene	30	100	0.33 U	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U
Hexachlorobenzene	0.33	1.2	0.033 U	0.038 U	0.038 U	0.04 U	0.041 U	0.042 U
Hexachlorobutadiene	NS	NS	0.068 U	0.077 U	0.077 U	0.081 U	0.083 U	0.085 U
Hexachlorocyclopentadiene	NS	NS	0.33 U	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U
Hexachloroethane	NS	NS	0.033 U	0.038 U	0.038 U	0.04 U	0.041 U	0.042 U
Indeno(1,2,3-c,d)Pyrene	**0.5**	0.5	0.076	0.038 U	0.038 U	0.04 U	0.041 U	0.042 U
Isophorone	NS	NS	0.13 U	0.15 U	0.15 U	0.16 U	0.16 U	0.17 U
Naphthalene	12	100	0.33 U	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U
Nitrobenzene	NS	NS	0.033 U	0.038 U	0.038 U	0.04 U	0.041 U	0.042 U
N-Nitrosodi-N-Propylamine	NS	NS	0.033 U	0.038 U	0.038 U	0.04 U	0.041 U	0.042 U
N-Nitrosodiphenylamine	NS	NS	0.33 U	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U
Pentachlorophenol	0.8	6.7	0.27 U	0.3 U	0.3 R	0.32 U	0.33 U	0.34 U
Phenanthrene	100	100	0.021 J	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U
Phenol	0.33	100	0.33 U	0.38 U	0.38 R	0.4 U	0.41 U	0.42 U
Pyrene	100	100	0.1 J	0.38 U	0.38 U	0.4 U	0.41 U	0.42 U

Table 3
Soil Analytical Results of Semivolatile Organic Compounds
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-05_0-2_20220726	RI-SB-05_5-7_20220726	RI-SB-05_13-15_20220726	RI-SB-06_0-2_20220727	RI-SB-06_4-6_20220727	RI-SB-X_4-6_20220727
		Laboratory Sample ID	460-262621-10	460-262621-11	460-262621-12	460-262706-1	460-262706-2	460-262706-4
		Date Sampled	7/26/2022	7/26/2022	7/26/2022	7/27/2022	7/27/2022	7/27/2022
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS	0.36 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,4-Dioxane (P-Dioxane)	0.1	13	0.036 U	0.034 U	0.034 U	0.034 U	0.034 U	0.034 U
2,3,4,6-Tetrachlorophenol	NS	NS	0.36 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
2,4,5-Trichlorophenol	NS	NS	0.36 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
2,4,6-Trichlorophenol	NS	NS	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
2,4-Dichlorophenol	NS	NS	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
2,4-Dimethylphenol	NS	NS	0.36 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
2,4-Dinitrophenol	NS	NS	0.29 U	0.28 U	0.27 U	0.27 U	0.27 U	0.28 U
2,4-Dinitrotoluene	NS	NS	0.072 U	0.07 U	0.069 U	0.069 U	0.069 U	0.069 U
2,6-Dinitrotoluene	NS	NS	0.072 U	0.07 U	0.069 U	0.069 U	0.069 U	0.069 U
2-Chloronaphthalene	NS	NS	0.36 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
2-Chlorophenol	NS	NS	0.36 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
2-Methylnaphthalene	NS	NS	0.011 J	0.022 J	0.34 U	0.34 U	0.34 U	0.34 U
2-Methylphenol (O-Cresol)	0.33	100	0.36 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
2-Nitroaniline	NS	NS	0.36 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
2-Nitrophenol	NS	NS	0.36 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
3- And 4- Methylphenol (Total)	NS	NS	0.36 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
3,3'-Dichlorobenzidine	NS	NS	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
3-Nitroaniline	NS	NS	0.36 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
4,6-Dinitro-2-Methylphenol	NS	NS	0.29 U	0.28 U	0.27 U	0.27 U	0.27 U	0.28 U
4-Bromophenyl Phenyl Ether	NS	NS	0.36 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
4-Chloro-3-Methylphenol	NS	NS	0.36 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
4-Chloroaniline	NS	NS	0.36 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
4-Chlorophenyl Phenyl Ether	NS	NS	0.36 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
4-Methylphenol (P-Cresol)	0.33	100	0.36 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
4-Nitroaniline	NS	NS	0.36 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
4-Nitrophenol	NS	NS	0.72 U	0.7 U	0.69 U	0.69 U	0.69 U	0.69 U
Acenaphthene	20	100	0.03 J	0.021 J	0.34 U	0.34 U	0.34 U	0.34 U
Acenaphthylene	100	100	0.02 J	0.019 J	0.34 U	0.34 U	0.34 U	0.34 U
Acetophenone	NS	NS	0.36 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Anthracene	100	100	0.12 J	0.07 J	0.016 J	0.34 U	0.34 U	0.34 U
Atrazine	NS	NS	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Benzaldehyde	NS	NS	0.36 UJ	0.34 UJ	0.34 UJ	0.34 UJ	0.34 UJ	0.34 UJ
Benzo(a)Anthracene	**1**	1	0.38	0.26	0.083	0.042	0.032 J	0.041
Benzo(a)Pyrene	**1**	1	0.37	0.26	0.081	0.037	0.03 J	0.035
Benzo(b)Fluoranthene	**1**	1	0.48	0.33	0.11	0.054	0.043	0.054
Benzo(g,h,i)Perylene	100	100	0.27 J	0.19 J	0.061 J	0.028 J	0.025 J	0.025 J
Benzo(k)Fluoranthene	0.8	3.9	0.18	0.11	0.044	0.019 J	0.014 J	0.017 J
Benzyl Butyl Phthalate	NS	NS	0.36 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Biphenyl (Diphenyl)	NS	NS	0.36 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Bis(2-Chloroethoxy) Methane	NS	NS	0.36 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	0.036 U	0.034 U	0.034 U	0.034 U	0.034 U	0.034 U
Bis(2-Chloroisopropyl) Ether	NS	NS	0.36 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Bis(2-Ethylhexyl) Phthalate	NS	NS	0.36 U	0.49	0.34 U	0.34 U	0.34 U	0.34 U
Caprolactam	NS	NS	0.36 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Carbazole	NS	NS	0.052 J	0.03 J	0.34 U	0.34 U	0.34 U	0.34 U
Chrysene	**1**	3.9	0.34 J	0.23 J	0.079 J	0.044 J	0.033 J	0.044 J
Dibenz(a,h)Anthracene	0.33	0.33	0.055	0.039	0.034 U	0.034 U	0.034 U	0.034 U
Dibenzofuran	7	59	0.024 J	0.035 J	0.34 U	0.34 U	0.34 U	0.34 U
Diethyl Phthalate	NS	NS	0.36 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Dimethyl Phthalate	NS	NS	0.36 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Di-N-Butyl Phthalate	NS	NS	0.15 J	0.076 J	0.23 J	0.34 U	0.34 U	0.34 U
Di-N-Octylphthalate	NS	NS	0.36 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Fluoranthene	100	100	0.74	0.46	0.15 J	0.062 J	0.055 J	0.07 J
Fluorene	30	100	0.033 J	0.014 J	0.34 U	0.34 U	0.34 U	0.34 U
Hexachlorobenzene	0.33	1.2	0.036 U	0.034 U	0.034 U	0.034 U	0.034 U	0.034 U
Hexachlorobutadiene	NS	NS	0.072 U	0.07 U	0.069 U	0.069 U	0.069 U	0.069 U
Hexachlorocyclopentadiene	NS	NS	0.36 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Hexachloroethane	NS	NS	0.036 U	0.034 U	0.034 U	0.034 U	0.034 U	0.034 U
Indeno(1,2,3-c,d)Pyrene	**0.5**	0.5	0.29	0.21	0.071	0.026 J	0.025 J	0.028 J
Isophorone	NS	NS	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Naphthalene	12	100	0.022 J	0.085 J	0.34 U	0.34 U	0.34 U	0.34 U
Nitrobenzene	NS	NS	0.036 U	0.034 U	0.034 U	0.034 U	0.034 U	0.034 U
N-Nitrosodi-N-Propylamine	NS	NS	0.036 U	0.034 U	0.034 U	0.034 U	0.034 U	0.034 U
N-Nitrosodiphenylamine	NS	NS	0.36 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Pentachlorophenol	0.8	6.7	0.29 U	0.28 U	0.27 U	0.27 U	0.27 U	0.28 U
Phenanthrene	100	100	0.55	0.33 J	0.1 J	0.016 J	0.018 J	0.028 J
Phenol	0.33	100	0.36 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Pyrene	100	100	0.74	0.49	0.14 J	0.061 J	0.046 J	0.063 J

Table 3
Soil Analytical Results of Semivolatile Organic Compounds
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-06_13-15_20220727	RI-SB-07_0-2_20220725	RI-SB-07_6-8_20220725	RI-SB-07_13-15_20220725	RI-SB-08_0-2_20220728	RI-SB-08_5-7_20220728
		Laboratory Sample ID	460-262706-3	460-262562-10	460-262562-11	460-262562-12	460-262775-1	460-262775-2
		Date Sampled	7/27/2022	7/25/2022	7/25/2022	7/25/2022	7/28/2022	7/28/2022
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U
1,4-Dioxane (P-Dioxane)	0.1	13	0.033 U	0.033 U	0.034 U	0.034 U	0.034 U	0.033 U
2,3,4,6-Tetrachlorophenol	NS	NS	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U
2,4,5-Trichlorophenol	NS	NS	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U
2,4,6-Trichlorophenol	NS	NS	0.13 U	0.13 U	0.14 U	0.14 U	0.14 U	0.13 U
2,4-Dichlorophenol	NS	NS	0.13 U	0.13 U	0.14 U	0.14 U	0.14 U	0.13 U
2,4-Dimethylphenol	NS	NS	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U
2,4-Dinitrophenol	NS	NS	0.27 UJ	0.27 U	0.27 U	0.27 U	0.28 UJ	0.27 UJ
2,4-Dinitrotoluene	NS	NS	0.067 U	0.068 U	0.069 U	0.069 U	0.069 U	0.068 U
2,6-Dinitrotoluene	NS	NS	0.067 U	0.068 U	0.069 U	0.069 U	0.069 U	0.068 U
2-Chloronaphthalene	NS	NS	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U
2-Chlorophenol	NS	NS	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U
2-Methylnaphthalene	NS	NS	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U
2-Methylphenol (O-Cresol)	0.33	100	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U
2-Nitroaniline	NS	NS	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U
2-Nitrophenol	NS	NS	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U
3- And 4- Methylphenol (Total)	NS	NS	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U
3,3'-Dichlorobenzidine	NS	NS	0.13 U	0.13 U	0.14 U	0.14 U	0.14 U	0.13 U
3-Nitroaniline	NS	NS	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U
4,6-Dinitro-2-Methylphenol	NS	NS	0.27 UJ	0.27 U	0.27 U	0.27 U	0.28 UJ	0.27 UJ
4-Bromophenyl Phenyl Ether	NS	NS	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U
4-Chloro-3-Methylphenol	NS	NS	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U
4-Chloroaniline	NS	NS	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U
4-Chlorophenyl Phenyl Ether	NS	NS	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U
4-Methylphenol (P-Cresol)	0.33	100	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U
4-Nitroaniline	NS	NS	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U
4-Nitrophenol	NS	NS	0.67 U	0.68 U	0.69 U	0.69 U	0.69 U	0.68 U
Acenaphthene	20	100	0.33 U	0.33 U	0.34 U	0.34 U	0.023 J	0.33 U
Acenaphthylene	100	100	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U
Acetophenone	NS	NS	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U
Anthracene	100	100	0.33 U	0.33 U	0.34 U	0.34 U	0.052 J	0.33 U
Atrazine	NS	NS	0.13 U	0.13 U	0.14 U	0.14 U	0.14 U	0.13 U
Benzaldehyde	NS	NS	0.33 UJ	0.33 UJ	0.34 UJ	0.34 UJ	0.34 UJ	0.33 UJ
Benzo(a)Anthracene	**1**	1	0.019 J	0.033 U	0.034 U	0.034 U	0.076	0.017 J
Benzo(a)Pyrene	**1**	1	0.013 J	0.033 U	0.034 U	0.034 U	0.053	0.033 U
Benzo(b)Fluoranthene	**1**	1	0.018 J	0.033 U	0.034 U	0.034 U	0.068	0.0094 J
Benzo(g,h,i)Perylene	100	100	0.013 J	0.33 U	0.34 U	0.34 U	0.028 J	0.33 U
Benzo(k)Fluoranthene	0.8	3.9	0.033 U	0.033 U	0.034 U	0.034 U	0.029 J	0.033 U
Benzyl Butyl Phthalate	NS	NS	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U
Biphenyl (Diphenyl)	NS	NS	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U
Bis(2-Chloroethoxy) Methane	NS	NS	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	0.033 U	0.033 U	0.034 U	0.034 U	0.034 U	0.033 U
Bis(2-Chloroisopropyl) Ether	NS	NS	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U
Bis(2-Ethylhexyl) Phthalate	NS	NS	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U
Caprolactam	NS	NS	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U
Carbazole	NS	NS	0.33 U	0.33 U	0.34 U	0.34 U	0.022 J	0.33 U
Chrysene	**1**	3.9	0.015 J	0.33 U	0.34 U	0.34 U	0.062 J	0.01 J
Dibenz(a,h)Anthracene	0.33	0.33	0.033 U	0.033 U	0.034 U	0.034 U	0.034 UJ	0.033 UJ
Dibenzofuran	7	59	0.33 U	0.33 U	0.34 U	0.34 U	0.025 J	0.33 U
Diethyl Phthalate	NS	NS	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U
Dimethyl Phthalate	NS	NS	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U
Di-N-Butyl Phthalate	NS	NS	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U
Di-N-Octylphthalate	NS	NS	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U
Fluoranthene	100	100	0.023 J	0.33 U	0.34 U	0.34 U	0.18 J	0.025 J
Fluorene	30	100	0.33 U	0.33 U	0.34 U	0.34 U	0.021 J	0.33 U
Hexachlorobenzene	0.33	1.2	0.033 U	0.033 U	0.034 U	0.034 U	0.034 U	0.033 U
Hexachlorobutadiene	NS	NS	0.067 U	0.068 U	0.069 U	0.069 U	0.069 U	0.068 U
Hexachlorocyclopentadiene	NS	NS	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U
Hexachloroethane	NS	NS	0.033 U	0.033 U	0.034 U	0.034 U	0.034 U	0.033 U
Indeno(1,2,3-c,d)Pyrene	**0.5**	0.5	0.033 U	0.033 U	0.034 U	0.034 U	0.067	0.033 U
Isophorone	NS	NS	0.13 U	0.13 U	0.14 U	0.14 U	0.14 U	0.13 U
Naphthalene	12	100	0.33 U	0.33 U	0.34 U	0.34 U	0.017 J	0.33 U
Nitrobenzene	NS	NS	0.033 U	0.033 U	0.034 U	0.034 U	0.034 U	0.033 U
N-Nitrosodi-N-Propylamine	NS	NS	0.033 U	0.033 U	0.034 U	0.034 U	0.034 U	0.033 U
N-Nitrosodiphenylamine	NS	NS	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U
Pentachlorophenol	0.8	6.7	0.27 U	0.27 U	0.27 U	0.27 U	0.28 U	0.27 U
Phenanthrene	100	100	0.012 J	0.33 U	0.34 U	0.34 U	0.24 J	0.03 J
Phenol	0.33	100	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.33 U
Pyrene	100	100	0.022 J	0.33 U	0.34 U	0.34 U	0.13 J	0.021 J

Table 3
Soil Analytical Results of Semivolatile Organic Compounds
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-08_13-15_20220728	RI-SB-09_0-2_20220726	RI-SB-09_3-5_20220726	RI-SB-09_7-9_20220726	RI-SB-10_0-2_20220725	RI-SB-10_5-7_20220725
		Laboratory Sample ID	460-262775-3	460-262621-7	460-262621-8	460-262621-9	460-262562-4	460-262562-5
		Date Sampled	7/28/2022	7/26/2022	7/26/2022	7/26/2022	7/25/2022	7/25/2022
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS	0.33 U	0.35 UJ	0.35 U	0.34 U	0.36 U	0.36 U
1,4-Dioxane (P-Dioxane)	0.1	13	0.033 U	0.035 UJ	0.035 U	0.034 U	0.036 U	0.036 U
2,3,4,6-Tetrachlorophenol	NS	NS	0.33 U	0.35 U	0.35 U	0.34 U	0.36 U	0.36 U
2,4,5-Trichlorophenol	NS	NS	0.33 U	0.35 U	0.35 U	0.34 U	0.36 U	0.36 U
2,4,6-Trichlorophenol	NS	NS	0.13 U	0.14 U	0.14 U	0.14 U	0.15 U	0.15 U
2,4-Dichlorophenol	NS	NS	0.13 U	0.14 UJ	0.14 U	0.14 U	0.15 U	0.15 U
2,4-Dimethylphenol	NS	NS	0.33 U	0.35 UJ	0.35 U	0.34 U	0.36 U	0.36 U
2,4-Dinitrophenol	NS	NS	0.27 UJ	0.28 UJ	0.28 U	0.27 U	0.29 U	0.29 U
2,4-Dinitrotoluene	NS	NS	0.067 U	0.071 U	0.071 U	0.068 U	0.074 U	0.073 U
2,6-Dinitrotoluene	NS	NS	0.067 U	0.071 UJ	0.071 U	0.068 U	0.074 U	0.073 U
2-Chloronaphthalene	NS	NS	0.33 U	0.35 UJ	0.35 U	0.34 U	0.36 U	0.36 U
2-Chlorophenol	NS	NS	0.33 U	0.35 UJ	0.35 U	0.34 U	0.36 U	0.36 U
2-Methylnaphthalene	NS	NS	0.33 U	0.032 JL	0.35 U	0.34 U	0.012 J	0.36 U
2-Methylphenol (O-Cresol)	0.33	100	0.33 U	0.35 UJ	0.35 U	0.34 U	0.36 U	0.36 U
2-Nitroaniline	NS	NS	0.33 U	0.35 U	0.35 U	0.34 U	0.36 U	0.36 U
2-Nitrophenol	NS	NS	0.33 U	0.35 UJ	0.35 U	0.34 U	0.36 U	0.36 U
3- And 4- Methylphenol (Total)	NS	NS	0.33 U	0.35 UJ	0.35 U	0.34 U	0.36 U	0.36 U
3,3'-Dichlorobenzidine	NS	NS	0.13 U	0.14 U	0.14 U	0.14 U	0.15 U	0.15 U
3-Nitroaniline	NS	NS	0.33 U	0.35 U	0.35 U	0.34 U	0.36 U	0.36 U
4,6-Dinitro-2-Methylphenol	NS	NS	0.27 UJ	0.28 UJ	0.28 U	0.27 U	0.29 U	0.29 U
4-Bromophenyl Phenyl Ether	NS	NS	0.33 U	0.35 UJ	0.35 U	0.34 U	0.36 U	0.36 U
4-Chloro-3-Methylphenol	NS	NS	0.33 U	0.35 UJ	0.35 U	0.34 U	0.36 U	0.36 U
4-Chloroaniline	NS	NS	0.33 U	0.35 U	0.35 U	0.34 U	0.36 U	0.36 U
4-Chlorophenyl Phenyl Ether	NS	NS	0.33 U	0.35 U	0.35 U	0.34 U	0.36 U	0.36 U
4-Methylphenol (P-Cresol)	0.33	100	0.33 U	0.35 UJ	0.35 U	0.34 U	0.36 U	0.36 U
4-Nitroaniline	NS	NS	0.33 U	0.35 U	0.35 U	0.34 U	0.36 U	0.36 U
4-Nitrophenol	NS	NS	0.67 U	0.71 U	0.71 U	0.68 U	0.74 U	0.73 U
Acenaphthene	20	100	0.33 U	0.078 J	0.35 U	0.34 U	0.037 J	0.36 U
Acenaphthylene	100	100	0.33 U	0.088 JL	0.35 U	0.34 U	0.015 J	0.36 U
Acetophenone	NS	NS	0.33 U	0.35 UJ	0.35 U	0.34 U	0.36 U	0.36 U
Anthracene	100	100	0.33 U	0.26 JL	0.011 J	0.34 U	0.089 J	0.36 U
Atrazine	NS	NS	0.13 U	0.14 U	0.14 U	0.14 U	0.15 U	0.15 U
Benzaldehyde	NS	NS	0.33 UJ	0.35 UJ	0.35 UJ	0.34 UJ	0.36 UJ	0.36 UJ
Benzo(a)Anthracene	**1**	1	0.033 U	**1.6**	0.075	0.034 U	0.28	0.036 U
Benzo(a)Pyrene	**1**	1	0.033 U	**1.5 JL**	0.073	0.034 U	0.24	0.036 U
Benzo(b)Fluoranthene	**1**	1	0.033 U	**1.9 JL**	0.1	0.034 U	0.31	0.036 U
Benzo(g,h,i)Perylene	100	100	0.33 U	1.1 JL	0.055 J	0.34 U	0.17 J	0.36 U
Benzo(k)Fluoranthene	0.8	3.9	0.033 U	0.59	0.035	0.034 U	0.13	0.036 U
Benzyl Butyl Phthalate	NS	NS	0.33 U	0.35 U	0.35 U	0.34 U	0.36 U	0.36 U
Biphenyl (Diphenyl)	NS	NS	0.33 U	0.35 UJ	0.35 U	0.34 U	0.36 U	0.36 U
Bis(2-Chloroethoxy) Methane	NS	NS	0.33 U	0.35 UJ	0.35 U	0.34 U	0.36 U	0.36 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	0.033 U	0.035 UJ	0.035 U	0.034 U	0.036 U	0.036 U
Bis(2-Chloroisopropyl) Ether	NS	NS	0.33 U	0.35 UJ	0.35 U	0.34 U	0.36 U	0.36 U
Bis(2-Ethylhexyl) Phthalate	NS	NS	0.33 U	0.35 U	0.35 U	0.34 U	0.36 U	0.36 U
Caprolactam	NS	NS	0.33 U	0.35 U	0.35 U	0.34 U	0.36 U	0.36 U
Carbazole	NS	NS	0.33 U	0.12 J	0.35 U	0.34 U	0.045 J	0.36 U
Chrysene	**1**	3.9	0.33 U	**1.7**	0.084 J	0.34 U	0.25 J	0.36 U
Dibenz(a,h)Anthracene	0.33	0.33	0.033 UJ	0.29 JL	0.035 U	0.034 U	0.037	0.036 U
Dibenzofuran	7	59	0.33 U	0.043 J	0.35 U	0.34 U	0.019 J	0.36 U
Diethyl Phthalate	NS	NS	0.33 U	0.35 U	0.35 U	0.34 U	0.36 U	0.36 U
Dimethyl Phthalate	NS	NS	0.33 U	0.35 U	0.35 U	0.34 U	0.36 U	0.36 U
Di-N-Butyl Phthalate	NS	NS	0.33 U	0.35 U	0.35 U	0.34 U	0.36 U	0.36 U
Di-N-Octylphthalate	NS	NS	0.33 U	0.35 UJ	0.35 U	0.34 U	0.36 U	0.36 U
Fluoranthene	100	100	0.33 U	2.5 JL	0.13 J	0.34 U	0.54	0.36 U
Fluorene	30	100	0.33 U	0.068 J	0.35 U	0.34 U	0.029 J	0.36 U
Hexachlorobenzene	0.33	1.2	0.033 U	0.035 UJ	0.035 U	0.034 U	0.036 U	0.036 U
Hexachlorobutadiene	NS	NS	0.067 U	0.071 UJ	0.071 U	0.068 U	0.074 U	0.073 U
Hexachlorocyclopentadiene	NS	NS	0.33 U	0.35 UJ	0.35 U	0.34 U	0.36 U	0.36 U
Hexachloroethane	NS	NS	0.033 U	0.035 UJ	0.035 U	0.034 U	0.036 U	0.036 U
Indeno(1,2,3-c,d)Pyrene	**0.5**	0.5	0.033 U	**1.1 JL**	0.057	0.034 U	0.2	0.036 U
Isophorone	NS	NS	0.13 U	0.14 UJ	0.14 U	0.14 U	0.15 U	0.15 U
Naphthalene	12	100	0.33 U	0.063 JL	0.35 U	0.34 U	0.36 U	0.36 U
Nitrobenzene	NS	NS	0.033 U	0.035 UJ	0.035 U	0.034 U	0.036 U	0.036 U
N-Nitrosodi-N-Propylamine	NS	NS	0.033 U	0.035 UJ	0.035 U	0.034 U	0.036 U	0.036 U
N-Nitrosodiphenylamine	NS	NS	0.33 U	0.35 U	0.35 U	0.34 U	0.36 U	0.36 U
Pentachlorophenol	0.8	6.7	0.27 U	0.28 U	0.28 U	0.27 U	0.29 U	0.29 U
Phenanthrene	100	100	0.33 U	1.6 JL	0.058 J	0.34 U	0.37	0.36 U
Phenol	0.33	100	0.33 U	0.35 UJ	0.35 U	0.34 U	0.36 U	0.36 U
Pyrene	100	100	0.33 U	3 JL	0.13 J	0.34 U	0.45	0.36 U

Table 3
Soil Analytical Results of Semivolatile Organic Compounds
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

			AKRF Sample ID	RI-SB-10_13-15_20220725	RI-SB-11_0-2_20220725	RI-SB-11_5-7_20220725	RI-SB-11_13-15_20220725	RI-SB-DRAIN_1-1.5_20220727
			Laboratory Sample ID	460-262562-6	460-262562-1	460-262562-2	460-262562-3	460-262706-11
			Date Sampled	7/25/2022	7/25/2022	7/25/2022	7/25/2022	7/27/2022
			Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
			Dilution Factor	1	1	1	1	5
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**		CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS		0.34 U	0.36 U	0.34 U	0.34 U	1.7 U
1,4-Dioxane (P-Dioxane)	0.1	13		0.034 U	0.036 U	0.034 U	0.034 U	0.17 U
2,3,4,6-Tetrachlorophenol	NS	NS		0.34 U	0.36 U	0.34 U	0.34 U	1.7 U
2,4,5-Trichlorophenol	NS	NS		0.34 U	0.36 U	0.34 U	0.34 U	1.7 U
2,4,6-Trichlorophenol	NS	NS		0.14 U	0.15 U	0.14 U	0.14 U	0.67 U
2,4-Dichlorophenol	NS	NS		0.14 U	0.15 U	0.14 U	0.14 U	0.67 U
2,4-Dimethylphenol	NS	NS		0.34 U	0.36 U	0.34 U	0.34 U	1.7 U
2,4-Dinitrophenol	NS	NS		0.27 U	0.29 UJ	0.27 U	0.27 U	1.3 U
2,4-Dinitrotoluene	NS	NS		0.068 U	0.074 U	0.068 U	0.068 U	0.34 U
2,6-Dinitrotoluene	NS	NS		0.068 U	0.074 U	0.068 U	0.068 U	0.34 U
2-Chloronaphthalene	NS	NS		0.34 U	0.36 U	0.34 U	0.34 U	1.7 U
2-Chlorophenol	NS	NS		0.34 U	0.36 U	0.34 U	0.34 U	1.7 U
2-Methylnaphthalene	NS	NS		0.34 U	0.36 U	0.34 U	0.34 U	0.21 J
2-Methylphenol (O-Cresol)	0.33	100		0.34 U	0.36 U	0.34 U	0.34 U	1.7 U
2-Nitroaniline	NS	NS		0.34 U	0.36 U	0.34 U	0.34 U	1.7 U
2-Nitrophenol	NS	NS		0.34 U	0.36 U	0.34 U	0.34 U	1.7 U
3- And 4- Methylphenol (Total)	NS	NS		0.34 U	0.36 U	0.34 U	0.34 U	1.7 U
3,3'-Dichlorobenzidine	NS	NS		0.14 U	0.15 U	0.14 U	0.14 U	0.67 U
3-Nitroaniline	NS	NS		0.34 U	0.36 U	0.34 U	0.34 U	1.7 U
4,6-Dinitro-2-Methylphenol	NS	NS		0.27 U	0.29 UJ	0.27 U	0.27 U	1.3 U
4-Bromophenyl Phenyl Ether	NS	NS		0.34 U	0.36 U	0.34 U	0.34 U	1.7 U
4-Chloro-3-Methylphenol	NS	NS		0.34 U	0.36 U	0.34 U	0.34 U	1.7 U
4-Chloroaniline	NS	NS		0.34 U	0.36 U	0.34 U	0.34 U	1.7 U
4-Chlorophenyl Phenyl Ether	NS	NS		0.34 U	0.36 U	0.34 U	0.34 U	1.7 U
4-Methylphenol (P-Cresol)	0.33	100		0.34 U	0.36 U	0.34 U	0.34 U	1.7 U
4-Nitroaniline	NS	NS		0.34 U	0.36 U	0.34 U	0.34 U	1.7 U
4-Nitrophenol	NS	NS		0.68 U	0.74 U	0.68 U	0.68 U	3.4 U
Acenaphthene	20	100		0.34 U	0.058 J	0.054 J	0.34 U	1.7 U
Acenaphthylene	100	100		0.34 U	0.016 J	0.34 U	0.34 U	1.7 U
Acetophenone	NS	NS		0.34 U	0.36 U	0.34 U	0.34 U	1.7 U
Anthracene	100	100		0.34 U	0.13 J	0.12 J	0.34 U	1.7 U
Atrazine	NS	NS		0.14 U	0.15 U	0.14 U	0.14 U	0.67 U
Benzaldehyde	NS	NS		0.34 UJ	0.36 UJ	0.34 UJ	0.34 UJ	1.7 UJ
Benzo(a)Anthracene	**1**	1		0.034 U	0.68	0.44	0.034 U	0.17 U
Benzo(a)Pyrene	**1**	1		0.034 U	0.62	0.38	0.034 U	0.17 U
Benzo(b)Fluoranthene	**1**	1		0.034 U	0.81	0.5	0.034 U	0.17 U
Benzo(g,h,i)Perylene	100	100		0.34 U	0.38	0.21 J	0.34 U	1.7 U
Benzo(k)Fluoranthene	0.8	3.9		0.034 U	0.29	0.17	0.034 U	0.17 U
Benzyl Butyl Phthalate	NS	NS		0.34 U	0.36 U	0.34 U	0.34 U	1.7 U
Biphenyl (Diphenyl)	NS	NS		0.34 U	0.36 U	0.34 U	0.34 U	1.7 U
Bis(2-Chloroethoxy) Methane	NS	NS		0.34 U	0.36 U	0.34 U	0.34 U	1.7 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS		0.034 U	0.036 U	0.034 U	0.034 U	0.17 U
Bis(2-Chloroisopropyl) Ether	NS	NS		0.34 U	0.36 U	0.34 U	0.34 U	1.7 U
Bis(2-Ethylhexyl) Phthalate	NS	NS		0.34 U	0.36 U	0.34 U	0.34 U	9.1
Caprolactam	NS	NS		0.34 U	0.36 U	0.34 U	0.34 U	1.7 U
Carbazole	NS	NS		0.34 U	0.064 J	0.055 J	0.34 U	1.7 U
Chrysene	**1**	3.9		0.34 U	0.64	0.45	0.34 U	1.7 U
Dibenz(a,h)Anthracene	0.33	0.33		0.034 U	0.088	0.067	0.034 U	0.17 U
Dibenzofuran	7	59		0.34 U	0.02 J	0.024 J	0.34 U	0.07 J
Diethyl Phthalate	NS	NS		0.34 U	0.36 U	0.34 U	0.34 U	0.49 J
Dimethyl Phthalate	NS	NS		0.34 U	0.36 U	0.34 U	0.34 U	1.7 U
Di-N-Butyl Phthalate	NS	NS		0.34 U	0.36 U	0.34 U	0.34 U	1.2 J
Di-N-Octylphthalate	NS	NS		0.34 U	0.36 U	0.34 U	0.34 U	1.7 U
Fluoranthene	100	100		0.34 U	1.2	0.91	0.34 U	1.7 U
Fluorene	30	100		0.34 U	0.042 J	0.046 J	0.34 U	0.088 J
Hexachlorobenzene	0.33	1.2		0.034 U	0.036 U	0.034 U	0.034 U	0.17 U
Hexachlorobutadiene	NS	NS		0.068 U	0.074 U	0.068 U	0.068 U	0.34 U
Hexachlorocyclopentadiene	NS	NS		0.34 U	0.36 U	0.34 U	0.34 U	1.7 U
Hexachloroethane	NS	NS		0.034 U	0.036 U	0.034 U	0.034 U	0.17 U
Indeno(1,2,3-c,d)Pyrene	**0.5**	0.5		0.034 U	0.45	0.29	0.034 U	0.17 U
Isophorone	NS	NS		0.14 U	0.15 U	0.14 U	0.14 U	0.67 U
Naphthalene	12	100		0.34 U	0.36 U	0.34 U	0.34 U	0.11 J
Nitrobenzene	NS	NS		0.034 U	0.036 U	0.034 U	0.034 U	0.17 U
N-Nitrosodi-N-Propylamine	NS	NS		0.034 U	0.036 U	0.034 U	0.034 U	0.17 U
N-Nitrosodiphenylamine	NS	NS		0.34 U	0.36 U	0.34 U	0.34 U	1.7 U
Pentachlorophenol	0.8	6.7		0.27 U	0.29 U	0.27 U	0.27 U	1.3 U
Phenanthrene	100	100		0.34 U	0.74	0.68	0.34 U	0.53 J
Phenol	0.33	100		0.34 U	0.36 U	0.34 U	0.34 U	0.12 J
Pyrene	100	100		0.34 U	1.2	0.85	0.34 U	1.7 U

Table 3
Soil Analytical Results of Semivolatile Organic Compounds
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	FB_20220726	FB_20220727
		Laboratory Sample ID	460-262621-5	460-262706-5
		Date Sampled	7/26/2022	7/27/2022
		Unit	µg/L	µg/L
		Dilution Factor	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q
1,2,4,5-Tetrachlorobenzene	NS	NS	10 U	10 U
1,4-Dioxane (P-Dioxane)	0.1	13	0.2 U	0.2 U
2,3,4,6-Tetrachlorophenol	NS	NS	10 U	10 U
2,4,5-Trichlorophenol	NS	NS	10 U	10 U
2,4,6-Trichlorophenol	NS	NS	10 U	10 U
2,4-Dichlorophenol	NS	NS	10 U	10 U
2,4-Dimethylphenol	NS	NS	10 U	10 UJ
2,4-Dinitrophenol	NS	NS	40 UJ	40 U
2,4-Dinitrotoluene	NS	NS	10 UJ	10 UJ
2,6-Dinitrotoluene	NS	NS	2 U	2 U
2-Chloronaphthalene	NS	NS	10 U	10 U
2-Chlorophenol	NS	NS	10 U	10 U
2-Methylnaphthalene	NS	NS	10 U	10 U
2-Methylphenol (O-Cresol)	0.33	100	10 U	10 U
2-Nitroaniline	NS	NS	10 U	10 U
2-Nitrophenol	NS	NS	10 UJ	10 UJ
3- And 4- Methylphenol (Total)	NS	NS	10 U	10 U
3,3'-Dichlorobenzidine	NS	NS	10 U	10 U
3-Nitroaniline	NS	NS	10 U	10 U
4,6-Dinitro-2-Methylphenol	NS	NS	20 UJ	20 UJ
4-Bromophenyl Phenyl Ether	NS	NS	10 U	10 U
4-Chloro-3-Methylphenol	NS	NS	10 U	10 U
4-Chloroaniline	NS	NS	10 U	10 U
4-Chlorophenyl Phenyl Ether	NS	NS	10 U	10 U
4-Methylphenol (P-Cresol)	0.33	100	10 U	10 U
4-Nitroaniline	NS	NS	10 U	10 U
4-Nitrophenol	NS	NS	20 UJ	20 UJ
Acenaphthene	20	100	10 U	10 U
Acenaphthylene	100	100	10 U	10 U
Acetophenone	NS	NS	10 U	10 U
Anthracene	100	100	10 U	10 U
Atrazine	NS	NS	2 U	2 UJ
Benzaldehyde	NS	NS	10 UJ	10 UJ
Benzo(a)Anthracene	**1**	1	1 U	1 U
Benzo(a)Pyrene	**1**	1	1 U	1 U
Benzo(b)Fluoranthene	**1**	1	2 U	2 U
Benzo(g,h,i)Perylene	100	100	10 U	10 U
Benzo(k)Fluoranthene	0.8	3.9	1 U	1 U
Benzyl Butyl Phthalate	NS	NS	10 U	10 U
Biphenyl (Diphenyl)	NS	NS	10 U	10 U
Bis(2-Chloroethoxy) Methane	NS	NS	10 U	10 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NS	NS	1 U	1 U
Bis(2-Chloroisopropyl) Ether	NS	NS	10 U	10 U
Bis(2-Ethylhexyl) Phthalate	NS	NS	2 U	2 U
Caprolactam	NS	NS	10 U	10 U
Carbazole	NS	NS	10 U	10 U
Chrysene	**1**	3.9	2 U	2 U
Dibenz(a,h)Anthracene	0.33	0.33	1 U	1 U
Dibenzofuran	7	59	10 U	10 U
Diethyl Phthalate	NS	NS	10 U	10 U
Dimethyl Phthalate	NS	NS	10 U	10 U
Di-N-Butyl Phthalate	NS	NS	10 U	10 U
Di-N-Octylphthalate	NS	NS	10 U	10 U
Fluoranthene	100	100	10 U	10 U
Fluorene	30	100	10 U	10 U
Hexachlorobenzene	0.33	1.2	1 U	1 U
Hexachlorobutadiene	NS	NS	1 U	1 U
Hexachlorocyclopentadiene	NS	NS	10 U	10 U
Hexachloroethane	NS	NS	2 U	2 U
Indeno(1,2,3-c,d)Pyrene	**0.5**	0.5	2 U	2 U
Isophorone	NS	NS	10 U	10 U
Naphthalene	12	100	2 U	2 U
Nitrobenzene	NS	NS	1 U	1 U
N-Nitrosodi-N-Propylamine	NS	NS	1 U	1 U
N-Nitrosodiphenylamine	NS	NS	10 U	10 U
Pentachlorophenol	0.8	6.7	20 U	20 U
Phenanthrene	100	100	10 U	10 U
Phenol	0.33	100	10 U	10 U
Pyrene	100	100	10 U	10 U

Table 4
Soil Analytical Results of Metals
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-01_0-2_20220727	RI-SB-01_7-9_20220727	RI-SB-01_7-9_20220727	RI-SB-01_13-15_20220727	RI-SB-02_0-2_20220727
		Laboratory Sample ID	460-262706-8	460-262706-9	460-262706-9	460-262706-10	460-262706-6
		Date Sampled	7/27/2022	7/27/2022	7/27/2022	7/27/2022	7/27/2022
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	3	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	3,820	10,600	NR	2,800	12,500
Antimony	NS	NS	0.15 J	0.2 J	NR	0.14 J	0.33 J
Arsenic	13	16	1.7	4.4	NR	1.6	5
Barium	**350**	400	23.2	99.1	NR	17.4	81
Beryllium	7.2	72	0.23 J	0.56	NR	0.19 J	0.56
Cadmium	**2.5**	4.3	0.96 U	0.99 U	NR	0.95 U	0.61 J
Calcium	NS	NS	1,310	31,800	NR	498	940
Chromium, Hexavalent	1	110	2 U	2 U	NR	1.9 U	2.1 U
Chromium, Total	NS	NS	11.5	16.6	NR	9.6	21.6
Cobalt	NS	NS	4.3	6	NR	3.5	6.3
Copper	**50**	270	11.2	**136**	NR	18.4	**53.1**
Cyanide	27	27	0.21 U	0.25	NR	0.22 U	0.29
Iron	NS	NS	17,000	18,900	NR	15,500	21,500
Lead	**63**	400	3.4	**187**	NR	2	**172**
Magnesium	NS	NS	1,420	2,520	NR	1,040	2,060
Manganese	1,600	2,000	292	429	NR	294	384
Mercury	**0.18**	0.81	0.017 U	NR	**1**	0.017 U	NR
Nickel	**30**	310	10.6	12.4	NR	8.5	15.1
Potassium	NS	NS	541	1,120	NR	395	450
Selenium	3.9	180	1.2 U	0.4 J	NR	1.2 U	0.43 J
Silver	2	180	0.38 U	0.24 J	NR	0.38 U	0.13 J
Sodium	NS	NS	44 J	398	NR	57.3 J	87.7 J
Thallium	NS	NS	0.054 J	0.1 J	NR	0.051 J	0.11 J
Vanadium	NS	NS	14.2	25	NR	12.3	27.5
Zinc	**109**	10,000	14.9	33.4	NR	23.6	108

Table 4
Soil Analytical Results of Metals
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-02_0-2_20220727	RI-SB-02_2-4_20220727	RI-SB-02_2-4_20220727	RI-SB-03_0-2_20220725	RI-SB-03_5-7_20220725
		Laboratory Sample ID	460-262706-6	460-262706-7	460-262706-7	460-262562-7	460-262562-8
		Date Sampled	7/27/2022	7/27/2022	7/27/2022	7/25/2022	7/25/2022
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	5	1	20	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	NR	12,200	NR	7,920	4,410
Antimony	NS	NS	NR	0.3 J	NR	0.59 J	0.99 U
Arsenic	13	16	NR	4.7	NR	4.1	2.2
Barium	**350**	400	NR	70.9	NR	57.4	37
Beryllium	7.2	72	NR	0.54	NR	0.37 J	0.26 J
Cadmium	**2.5**	4.3	NR	0.35 J	NR	**4.9**	1.1
Calcium	NS	NS	NR	675	NR	17,700	2,640
Chromium, Hexavalent	1	110	NR	2 U	NR	2.2 U	2 U
Chromium, Total	NS	NS	NR	20.7	NR	15.3	16.6
Cobalt	NS	NS	NR	6.4	NR	4.4	3.6
Copper	**50**	270	NR	**58.1**	NR	44.8	12.1
Cyanide	27	27	NR	0.19 J	NR	0.16 J	0.2 U
Iron	NS	NS	NR	24,700	NR	17,200	16,400
Lead	**63**	400	NR	**145**	NR	**484**	20.3
Magnesium	NS	NS	NR	1,950	NR	1,700	1,050
Manganese	1,600	2,000	NR	413	NR	243	276
Mercury	**0.18**	0.81	**3.3**	NR	**2.7**	**0.32**	0.016 U
Nickel	**30**	310	NR	14.1	NR	12.6	8.4
Potassium	NS	NS	NR	439	NR	570	397
Selenium	3.9	180	NR	0.51 J	NR	0.41 J	0.14 J
Silver	2	180	NR	0.14 J	NR	0.42 U	0.4 U
Sodium	NS	NS	NR	88.3 J	NR	315	118
Thallium	NS	NS	NR	0.1 J	NR	0.087 J	0.054 J
Vanadium	NS	NS	NR	26	NR	19.6	14.8
Zinc	**109**	10,000	NR	95.9	NR	**1,310**	**150**

Table 4
Soil Analytical Results of Metals
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-03_13-15_20220725	RI-SB-04_0-2_20220726	RI-SB-04_6-8_20220726	RI-SB-04_13-15_20220726	RI-SB-X_13-15_20220726
		Laboratory Sample ID	460-262562-9	460-262621-1	460-262621-2	460-262621-3	460-262621-4
		Date Sampled	7/25/2022	7/26/2022	7/26/2022	7/26/2022	7/26/2022
		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	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	2,640	3,950	4,830	3,260	3,480
Antimony	NS	NS	1.1 U	1.1 U	1.1 U	1.2 U	1.2 U
Arsenic	13	16	1.1	1.5	2.4	1.1 J	1.5
Barium	**350**	400	22.3	24.4	34.9	22.5	26.7
Beryllium	7.2	72	0.17 J	0.2 J	0.26 J	0.2 J	0.43 J
Cadmium	**2.5**	4.3	0.3 J	1.1 U	1.1 U	1.2 U	1.2 U
Calcium	NS	NS	270	4,440	5,170	841 J	1,330 J
Chromium, Hexavalent	1	110	2.3 U	2.2 U	2.4 U	2.4 U	2.5 U
Chromium, Total	NS	NS	9	10	15.1	16.3	18.5
Cobalt	NS	NS	2.7	4.2	5.2	3	4.1
Copper	**50**	270	7.4	13.5	14.4	9.1	12.6
Cyanide	27	27	0.26 U	0.24 U	0.24 U	0.26 U	0.27 U
Iron	NS	NS	12,600	15,900	20,700	14,600 J	21,800 J
Lead	**63**	400	1.8	23.9	15.5	6.1	9.2
Magnesium	NS	NS	921	1,430	1,900	1,060	1,060
Manganese	1,600	2,000	208	283	346	213	345
Mercury	**0.18**	0.81	0.017 U	0.02	0.057	0.015 J	0.039 J
Nickel	**30**	310	6.2	8.8	10.9	7.4	8.9
Potassium	NS	NS	391	508	900	442	453
Selenium	3.9	180	1.4 U	0.16 J	1.4 U	1.5 U	1.5 U
Silver	2	180	0.45 U	0.42 U	0.45 U	0.47 U	0.5 U
Sodium	NS	NS	59.7 J	165	286	97.9 J	116 J
Thallium	NS	NS	0.45 U	0.05 J	0.055 J	0.47 U	0.059 J
Vanadium	NS	NS	12.1	14.2	19.1	15.6	20.2
Zinc	**109**	10,000	56.6	23	23.1	14.6	19.1

Table 4
Soil Analytical Results of Metals
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-05_0-2_20220726	RI-SB-05_0-2_20220726	RI-SB-05_5-7_20220726	RI-SB-05_13-15_20220726	RI-SB-06_0-2_20220727
		Laboratory Sample ID	460-262621-10	460-262621-10	460-262621-11	460-262621-12	460-262706-1
		Date Sampled	7/26/2022	7/26/2022	7/26/2022	7/26/2022	7/27/2022
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	5	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	8,530	NR	5,870	1,600	4,910
Antimony	NS	NS	0.15 J	NR	0.18 J	0.96 U	0.2 J
Arsenic	13	16	3.3	NR	3.1	0.8 J	2.2
Barium	**350**	400	72.4	NR	61.9	19.9	33
Beryllium	7.2	72	0.4 J	NR	0.36 J	0.094 J	0.25 J
Cadmium	**2.5**	4.3	0.18 J	NR	0.2 J	0.96 U	0.98 U
Calcium	NS	NS	11,600	NR	3,620	1,110	2,110
Chromium, Hexavalent	1	110	2.1 U	NR	2.1 U	2 U	2 U
Chromium, Total	NS	NS	17.5	NR	13.1	5.4	12.8
Cobalt	NS	NS	5.4	NR	6	1.8 J	4.4
Copper	**50**	270	27.9	NR	47.5	8	12.2
Cyanide	27	27	0.13 J	NR	0.22 U	0.24 U	0.23 U
Iron	NS	NS	17,700	NR	17,500	6,670	18,300
Lead	**63**	400	**104**	NR	**138**	36.7	35
Magnesium	NS	NS	1,910	NR	1,260	481	1,350
Manganese	1,600	2,000	356	NR	366	204	292
Mercury	**0.18**	0.81	NR	**3**	**0.48**	0.084	0.027
Nickel	**30**	310	11.6	NR	10.9	3.8	9.4
Potassium	NS	NS	621	NR	512	201	385
Selenium	3.9	180	0.36 J	NR	0.27 J	1.2 U	0.17 J
Silver	2	180	0.42 U	NR	0.38 U	0.38 U	0.39 U
Sodium	NS	NS	141	NR	75.1 J	95.7 U	99.5
Thallium	NS	NS	0.086 J	NR	0.092 J	0.38 U	0.055 J
Vanadium	NS	NS	21	NR	17.3	6.3	17
Zinc	**109**	10,000	78.5	NR	95.6	15.5	22.2

Table 4
Soil Analytical Results of Metals
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-06_4-6_20220727	RI-SB-X_4-6_20220727	RI-SB-06_13-15_20220727	RI-SB-07_0-2_20220725	RI-SB-07_6-8_20220725
		Laboratory Sample ID	460-262706-2	460-262706-4	460-262706-3	460-262562-10	460-262562-11
		Date Sampled	7/27/2022	7/27/2022	7/27/2022	7/25/2022	7/25/2022
		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	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	4,820	4,390	4,690	3,310	2,670
Antimony	NS	NS	0.14 J	0.15 J	0.17 JL	0.94 U	1 U
Arsenic	13	16	1.5 J	3.1 J	2.8	1.7	1.1
Barium	**350**	400	34.9	36.1	52.5 J	31.9	19.1
Beryllium	7.2	72	0.18 J	0.24 J	0.32 J	0.23 J	0.15 J
Cadmium	**2.5**	4.3	0.95 U	0.96 U	1 UJ	0.94 U	1 U
Calcium	NS	NS	886	819	2,250	5,370	284
Chromium, Hexavalent	1	110	2 U	2 U	2 U	2 U	2 U
Chromium, Total	NS	NS	12	13.3	13.4	11	9.4
Cobalt	NS	NS	4.1	4	5.4	4.6	3.2
Copper	**50**	270	13.9	11.2	14.5	40.1	6.4
Cyanide	27	27	0.25 U	0.22 U	2.8	0.22 U	1.4
Iron	NS	NS	11,700	15,800	21,900 J	12,400	13,800
Lead	**63**	400	8.2 J	26.8 J	30 J	8.4	1.8
Magnesium	NS	NS	1,620	1,320	1,320 J	1,160	855
Manganese	1,600	2,000	209	305	681 J	252	230
Mercury	**0.18**	0.81	0.017 U	0.015 J	0.042	0.093	0.016 U
Nickel	**30**	310	13.8	9	10.6	11.2	6.2
Potassium	NS	NS	552	484	498	619	441
Selenium	3.9	180	1.2 U	0.17 J	0.16 J	1.2 U	1.3 U
Silver	2	180	0.38 U	0.38 U	0.4 UJ	0.37 U	0.41 U
Sodium	NS	NS	130 J	95.9 U	66.7 JK	141	50.7 J
Thallium	NS	NS	0.042 J	0.066 J	0.09 J	0.054 J	0.41 U
Vanadium	NS	NS	14	17.5	18.8 J	13	13.9
Zinc	**109**	10,000	17.3	18.2	24.5	14	12

Table 4
Soil Analytical Results of Metals
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-07_13-15_20220725	RI-SB-08_0-2_20220728	RI-SB-08_5-7_20220728	RI-SB-08_13-15_20220728	RI-SB-09_0-2_20220726
		Laboratory Sample ID	460-262562-12	460-262775-1	460-262775-2	460-262775-3	460-262621-7
		Date Sampled	7/25/2022	7/28/2022	7/28/2022	7/28/2022	7/26/2022
		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	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	2,620	5,820	3,570	3,800	9,680
Antimony	NS	NS	1 U	0.14 J	0.94 U	0.17 J	16.9 JL
Arsenic	13	16	1.1	1.9	1.7	3.7	5.2
Barium	**350**	400	20	29.5	19.9	22.8	64.1
Beryllium	7.2	72	0.16 J	0.32 J	0.24 J	0.29 J	0.44
Cadmium	**2.5**	4.3	1 U	0.98 U	0.94 U	0.98 U	0.28 J
Calcium	NS	NS	671	2,630	356	1,040	8,420
Chromium, Hexavalent	1	110	2.1 U	2.1 U	2 U	1.9 U	2.1 U
Chromium, Total	NS	NS	12.6	13.1	11.1	14.9	18.5 JK
Cobalt	NS	NS	2.8	4.6	4.4	5.2	6.1
Copper	**50**	270	8.9	**63**	**50.8**	47.5	**106**
Cyanide	27	27	0.21 U	0.23 U	0.13 J	0.22 U	0.21
Iron	NS	NS	13,300	13,700	17,100	18,200	19,500
Lead	**63**	400	3.4	9.7	2.8	3.1	**853 J**
Magnesium	NS	NS	782	1,440	1,120	1,160	1,830 JL
Manganese	1,600	2,000	231	245	340	336	361
Mercury	**0.18**	0.81	0.027	0.016 U	0.017 U	0.016 U	NR
Nickel	**30**	310	6.4	9.7	8.9	10	16.5
Potassium	NS	NS	415	533	387	539	653 JL
Selenium	3.9	180	1.3 U	0.26 J	1.2 U	1.2 U	0.51 J
Silver	2	180	0.4 U	0.39 U	0.38 U	0.39 U	0.18 J
Sodium	NS	NS	106	52.6 J	47.1 J	67.7 J	101 J
Thallium	NS	NS	0.4 U	0.057 J	0.065 J	0.071 J	0.12 J
Vanadium	NS	NS	11.9	15.3	15.3	15.1	23.9
Zinc	**109**	10,000	19	18.9	14.2	16.5	**209**

Table 4
Soil Analytical Results of Metals
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-09_0-2_20220726	RI-SB-09_3-5_20220726	RI-SB-09_7-9_20220726	RI-SB-10_0-2_20220725	RI-SB-10_5-7_20220725
		Laboratory Sample ID	460-262621-7	460-262621-8	460-262621-9	460-262562-4	460-262562-5
		Date Sampled	7/26/2022	7/26/2022	7/26/2022	7/25/2022	7/25/2022
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	10	1	1	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	NR	6,300	3,790	6,070	2,720
Antimony	NS	NS	NR	0.17 J	0.93 U	4.4	0.84 U
Arsenic	13	16	NR	3.6	1.6	4.3	1.2
Barium	**350**	400	NR	43.8	16.2	75.4	18.7
Beryllium	7.2	72	NR	0.38 J	0.19 J	0.32 J	0.2 J
Cadmium	**2.5**	4.3	NR	0.14 J	0.15 J	0.62 J	0.84 U
Calcium	NS	NS	NR	569	393	18,800	387
Chromium, Hexavalent	1	110	NR	2.1 U	2 U	2.1 U	2.1 U
Chromium, Total	NS	NS	NR	15.5	9	13.5	7.2
Cobalt	NS	NS	NR	4.7	3.8	4	4
Copper	**50**	270	NR	49.6	10.3	**52.9**	9.9
Cyanide	27	27	NR	0.23 U	0.23 J	0.2 J	0.26 U
Iron	NS	NS	NR	20,300	13,600	15,600	16,400
Lead	**63**	400	NR	**477**	3.4	**365**	2.9
Magnesium	NS	NS	NR	1,350	1,220	1,280	1,050
Manganese	1,600	2,000	NR	346	237	194	264
Mercury	**0.18**	0.81	**2.4**	**0.43**	0.015 U	**0.5**	0.018 U
Nickel	**30**	310	NR	12	9.8	9.6	8
Potassium	NS	NS	NR	429	424	618	324
Selenium	3.9	180	NR	0.36 J	1.2 U	0.34 J	1 U
Silver	2	180	NR	0.41 U	0.37 U	0.1 J	0.34 U
Sodium	NS	NS	NR	103 U	47.4 J	183	48.5 J
Thallium	NS	NS	NR	0.081 J	0.046 J	0.066 J	0.038 J
Vanadium	NS	NS	NR	18.9	13.3	18.9	14.4
Zinc	**109**	10,000	NR	65.8	**161**	**215**	12.8

Table 4
Soil Analytical Results of Metals
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-10_13-15_20220725	RI-SB-11_0-2_20220725	RI-SB-11_0-2_20220725	RI-SB-11_5-7_20220725	RI-SB-11_13-15_20220725
		Laboratory Sample ID	460-262562-6	460-262562-1	460-262562-1	460-262562-2	460-262562-3
		Date Sampled	7/25/2022	7/25/2022	7/25/2022	7/25/2022	7/25/2022
		Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		Dilution Factor	1	1	5	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	2,640	10,200	NR	3,010	3,300
Antimony	NS	NS	0.96 U	0.57 J	NR	0.8 U	0.76 U
Arsenic	13	16	0.78 J	3.8	NR	1.7	1.6
Barium	**350**	400	19.6	119	NR	18.1	26.8
Beryllium	7.2	72	0.12 J	0.48	NR	0.2 J	0.25 J
Cadmium	**2.5**	4.3	0.96 U	0.12 J	NR	0.8 U	0.76 U
Calcium	NS	NS	313	1,260	NR	2,360	522
Chromium, Hexavalent	1	110	2 U	2.2 U	NR	2 U	2 U
Chromium, Total	NS	NS	6.3	16	NR	10.1	15.4
Cobalt	NS	NS	2.7	5.4	NR	4.3	3.9
Copper	**50**	270	6.4	**68**	NR	11.4	12
Cyanide	27	27	0.22 U	0.27	NR	0.25 U	0.23 U
Iron	NS	NS	10,200	19,100	NR	15,900	17,900
Lead	**63**	400	2.2	**929**	NR	14.2	2.8
Magnesium	NS	NS	839	1,470	NR	918	929
Manganese	1,600	2,000	194	435	NR	236	285
Mercury	**0.18**	0.81	0.016 U	NR	**1.3**	0.027	0.016 U
Nickel	**30**	310	5.4	10.3	NR	7.7	9.6
Potassium	NS	NS	350	333	NR	326	316
Selenium	3.9	180	1.2 U	0.39 J	NR	0.13 J	0.96 U
Silver	2	180	0.38 U	0.34 U	NR	0.32 U	0.31 U
Sodium	NS	NS	46.4 J	122	NR	44.3 J	66.3 J
Thallium	NS	NS	0.38 U	0.1 J	NR	0.037 J	0.04 J
Vanadium	NS	NS	8.5	22.1	NR	12.7	20.4
Zinc	**109**	10,000	10.4	98.7	NR	51.3	14.4

Table 4
Soil Analytical Results of Metals
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-DRAIN_1-1.5_20220727	RI-SB-DRAIN_1-1.5_20220727	RI-SB-DRAIN_1-1.5_20220727	FB_20220726	FB_20220727
		Laboratory Sample ID	460-262706-11	460-262706-11	460-262706-11	460-262621-5	460-262706-5
		Date Sampled	7/27/2022	7/27/2022	7/27/2022	7/26/2022	7/27/2022
		Unit	mg/kg	mg/kg	mg/kg	µg/L	µg/L
		Dilution Factor	1	3	5	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	NS	6,860	NR	NR	40 U	40 U
Antimony	NS	NS	1.2	NR	NR	2 U	2 U
Arsenic	13	16	11.2	NR	NR	2 U	2 U
Barium	**350**	400	**436**	NR	NR	4 U	4 U
Beryllium	7.2	72	0.42	NR	NR	0.8 U	0.8 U
Cadmium	**2.5**	4.3	**5.9**	NR	NR	2 U	2 U
Calcium	NS	NS	7,360	NR	NR	56 J	500 U
Chromium, Hexavalent	1	110	NR	NR	NR	10 U	10 U
Chromium, Total	NS	NS	92.1	NR	NR	4 U	4 U
Cobalt	NS	NS	5.9	NR	NR	4 U	4 U
Copper	**50**	270	**201**	NR	NR	4 U	4 U
Cyanide	27	27	NR	NR	NR	10 U	10 U
Iron	NS	NS	NR	NR	93,000	120 U	120 U
Lead	**63**	400	**814**	NR	NR	1.2 U	1.2 U
Magnesium	NS	NS	1,990	NR	NR	200 U	200 U
Manganese	1,600	2,000	336	NR	NR	8 U	8 U
Mercury	**0.18**	0.81	NR	**1.1**	NR	0.2 U	0.2 U
Nickel	**30**	310	**49.2**	NR	NR	4 U	4 U
Potassium	NS	NS	1,500	NR	NR	200 U	200 U
Selenium	3.9	180	0.56 J	NR	NR	2.5 U	2.5 U
Silver	2	180	0.44	NR	NR	2 U	2 U
Sodium	NS	NS	357	NR	NR	266 J	500 U
Thallium	NS	NS	0.052 J	NR	NR	0.8 U	0.8 U
Vanadium	NS	NS	13.3	NR	NR	4 U	4 U
Zinc	**109**	10,000	**520**	NR	NR	16 U	16 U

Table 5
Soil Analytical Results of Polychlorinated Biphenyls
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-01_0-2_20220727	RI-SB-01_7-9_20220727	RI-SB-01_13-15_20220727	RI-SB-02_0-2_20220727	RI-SB-02_2-4_20220727
		Laboratory Sample ID	460-262706-8	460-262706-9	460-262706-10	460-262706-6	460-262706-7
		Date Sampled	7/27/2022	7/27/2022	7/27/2022	7/27/2022	7/27/2022
		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	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	0.067 U	0.068 U	0.068 U	0.069 U	0.069 U
PCB-1221 (Aroclor 1221)	NS	NS	0.067 U	0.068 U	0.068 U	0.069 U	0.069 U
PCB-1232 (Aroclor 1232)	NS	NS	0.067 U	0.068 U	0.068 U	0.069 U	0.069 U
PCB-1242 (Aroclor 1242)	NS	NS	0.067 U	0.068 U	0.068 U	0.069 U	0.069 U
PCB-1248 (Aroclor 1248)	NS	NS	0.067 U	0.068 U	0.068 U	0.069 U	0.069 U
PCB-1254 (Aroclor 1254)	NS	NS	0.067 U	0.068 U	0.068 U	0.069 U	0.069 U
PCB-1260 (Aroclor 1260)	NS	NS	0.067 U	0.068 U	0.068 U	0.069 U	0.069 U
PCB-1262 (Aroclor 1262)	NS	NS	0.067 U	0.068 U	0.068 U	0.069 U	0.069 U
PCB-1268 (Aroclor 1268)	NS	NS	0.067 U	0.068 U	0.068 U	0.069 U	0.069 U
Total PCBs	0.1	1	0.067 U	0.068 U	0.068 U	0.069 U	0.069 U

Table 5
Soil Analytical Results of Polychlorinated Biphenyls
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-03_0-2_20220725	RI-SB-03_5-7_20220725	RI-SB-03_13-15_20220725	RI-SB-04_0-2_20220726	RI-SB-04_6-8_20220726
		Laboratory Sample ID	460-262562-7	460-262562-8	460-262562-9	460-262621-1	460-262621-2
		Date Sampled	7/25/2022	7/25/2022	7/25/2022	7/26/2022	7/26/2022
		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	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	0.072 U	0.068 U	0.076 U	0.076 U	0.08 U
PCB-1221 (Aroclor 1221)	NS	NS	0.072 U	0.068 U	0.076 U	0.076 U	0.08 U
PCB-1232 (Aroclor 1232)	NS	NS	0.072 U	0.068 U	0.076 U	0.076 U	0.08 U
PCB-1242 (Aroclor 1242)	NS	NS	0.072 U	0.068 U	0.076 U	0.076 U	0.08 U
PCB-1248 (Aroclor 1248)	NS	NS	0.072 U	0.068 U	0.076 U	0.076 U	0.08 U
PCB-1254 (Aroclor 1254)	NS	NS	0.072 U	0.068 U	0.076 U	0.076 U	0.08 U
PCB-1260 (Aroclor 1260)	NS	NS	0.072 U	0.068 U	0.076 U	0.076 U	0.08 U
PCB-1262 (Aroclor 1262)	NS	NS	0.072 U	0.068 U	0.076 U	0.076 U	0.08 U
PCB-1268 (Aroclor 1268)	NS	NS	0.072 U	0.068 U	0.076 U	0.076 U	0.08 U
Total PCBs	0.1	1	0.072 U	0.068 U	0.076 U	0.076 U	0.08 U

Table 5
Soil Analytical Results of Polychlorinated Biphenyls
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-04_13-15_20220726	RI-SB-X_13-15_20220726	RI-SB-05_0-2_20220726	RI-SB-05_5-7_20220726	RI-SB-05_13-15_20220726
		Laboratory Sample ID	460-262621-3	460-262621-4	460-262621-10	460-262621-11	460-262621-12
		Date Sampled	7/26/2022	7/26/2022	7/26/2022	7/26/2022	7/26/2022
		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	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	0.083 U	0.084 U	0.072 U	0.069 U	0.069 U
PCB-1221 (Aroclor 1221)	NS	NS	0.083 U	0.084 U	0.072 U	0.069 U	0.069 U
PCB-1232 (Aroclor 1232)	NS	NS	0.083 U	0.084 U	0.072 U	0.069 U	0.069 U
PCB-1242 (Aroclor 1242)	NS	NS	0.083 U	0.084 U	0.072 U	0.069 U	0.069 U
PCB-1248 (Aroclor 1248)	NS	NS	0.083 U	0.084 U	0.072 U	0.069 U	0.069 U
PCB-1254 (Aroclor 1254)	NS	NS	0.083 U	0.084 U	0.072 U	0.069 U	0.069 U
PCB-1260 (Aroclor 1260)	NS	NS	0.083 U	0.084 U	0.072 U	0.069 U	0.069 U
PCB-1262 (Aroclor 1262)	NS	NS	0.083 U	0.084 U	0.072 U	0.069 U	0.069 U
PCB-1268 (Aroclor 1268)	NS	NS	0.083 U	0.084 U	0.072 U	0.069 U	0.069 U
Total PCBs	0.1	1	0.083 U	0.084 U	0.072 U	0.069 U	0.069 U

Table 5
Soil Analytical Results of Polychlorinated Biphenyls
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-06_0-2_20220727	RI-SB-06_4-6_20220727	RI-SB-X_4-6_20220727	RI-SB-06_13-15_20220727	RI-SB-07_0-2_20220725
		Laboratory Sample ID	460-262706-1	460-262706-2	460-262706-4	460-262706-3	460-262562-10
		Date Sampled	7/27/2022	7/27/2022	7/27/2022	7/27/2022	7/25/2022
		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	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	0.069 U	0.069 U	0.069 U	0.067 U	0.068 U
PCB-1221 (Aroclor 1221)	NS	NS	0.069 U	0.069 U	0.069 U	0.067 U	0.068 U
PCB-1232 (Aroclor 1232)	NS	NS	0.069 U	0.069 U	0.069 U	0.067 U	0.068 U
PCB-1242 (Aroclor 1242)	NS	NS	0.069 U	0.069 U	0.069 U	0.067 U	0.068 U
PCB-1248 (Aroclor 1248)	NS	NS	0.069 U	0.069 U	0.069 U	0.067 U	0.068 U
PCB-1254 (Aroclor 1254)	NS	NS	0.069 U	0.069 U	0.069 U	0.067 U	0.068 U
PCB-1260 (Aroclor 1260)	NS	NS	0.069 U	0.069 U	0.069 U	0.067 U	0.068 U
PCB-1262 (Aroclor 1262)	NS	NS	0.069 U	0.069 U	0.069 U	0.067 U	0.068 U
PCB-1268 (Aroclor 1268)	NS	NS	0.069 U	0.069 U	0.069 U	0.067 U	0.068 U
Total PCBs	0.1	1	0.069 U	0.069 U	0.069 U	0.067 U	0.068 U

Table 5
Soil Analytical Results of Polychlorinated Biphenyls
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-07_6-8_20220725	RI-SB-07_13-15_20220725	RI-SB-08_0-2_20220728	RI-SB-08_5-7_20220728	RI-SB-08_13-15_20220728
		Laboratory Sample ID	460-262562-11	460-262562-12	460-262775-1	460-262775-2	460-262775-3
		Date Sampled	7/25/2022	7/25/2022	7/28/2022	7/28/2022	7/28/2022
		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	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	0.069 U	0.069 U	0.069 U	0.068 U	0.067 U
PCB-1221 (Aroclor 1221)	NS	NS	0.069 U	0.069 U	0.069 U	0.068 U	0.067 U
PCB-1232 (Aroclor 1232)	NS	NS	0.069 U	0.069 U	0.069 U	0.068 U	0.067 U
PCB-1242 (Aroclor 1242)	NS	NS	0.069 U	0.069 U	0.069 U	0.068 U	0.067 U
PCB-1248 (Aroclor 1248)	NS	NS	0.069 U	0.069 U	0.069 U	0.068 U	0.067 U
PCB-1254 (Aroclor 1254)	NS	NS	0.069 U	0.069 U	0.069 U	0.068 U	0.067 U
PCB-1260 (Aroclor 1260)	NS	NS	0.069 U	0.069 U	0.069 U	0.068 U	0.067 U
PCB-1262 (Aroclor 1262)	NS	NS	0.069 U	0.069 U	0.069 U	0.068 U	0.067 U
PCB-1268 (Aroclor 1268)	NS	NS	0.069 U	0.069 U	0.069 U	0.068 U	0.067 U
Total PCBs	0.1	1	0.069 U	0.069 U	0.069 U	0.068 U	0.067 U

Table 5
Soil Analytical Results of Polychlorinated Biphenyls
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-09_0-2_20220726	RI-SB-09_3-5_20220726	RI-SB-09_7-9_20220726	RI-SB-10_0-2_20220725	RI-SB-10_5-7_20220725
		Laboratory Sample ID	460-262621-7	460-262621-8	460-262621-9	460-262562-4	460-262562-5
		Date Sampled	7/26/2022	7/26/2022	7/26/2022	7/25/2022	7/25/2022
		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	CONC Q	CONC Q	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	0.071 U	0.07 U	0.068 U	0.074 U	0.073 U
PCB-1221 (Aroclor 1221)	NS	NS	0.071 U	0.07 U	0.068 U	0.074 U	0.073 U
PCB-1232 (Aroclor 1232)	NS	NS	0.071 U	0.07 U	0.068 U	0.074 U	0.073 U
PCB-1242 (Aroclor 1242)	NS	NS	0.071 U	0.07 U	0.068 U	0.074 U	0.073 U
PCB-1248 (Aroclor 1248)	NS	NS	0.071 U	0.07 U	0.068 U	0.074 U	0.073 U
PCB-1254 (Aroclor 1254)	NS	NS	0.071 U	0.07 U	0.068 U	0.074 U	0.073 U
PCB-1260 (Aroclor 1260)	NS	NS	0.071 U	0.07 U	0.068 U	0.074 U	0.073 U
PCB-1262 (Aroclor 1262)	NS	NS	0.071 U	0.07 U	0.068 U	0.074 U	0.073 U
PCB-1268 (Aroclor 1268)	NS	NS	0.071 U	0.07 U	0.068 U	0.074 U	0.073 U
Total PCBs	0.1	1	0.071 U	0.07 U	0.068 U	0.074 U	0.073 U

Table 5
Soil Analytical Results of Polychlorinated Biphenyls
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-10_13-15_20220725	RI-SB-11_0-2_20220725	RI-SB-11_5-7_20220725	RI-SB-11_13-15_20220725
		Laboratory Sample ID	460-262562-6	460-262562-1	460-262562-2	460-262562-3
		Date Sampled	7/25/2022	7/25/2022	7/25/2022	7/25/2022
		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
PCB-1016 (Aroclor 1016)	NS	NS	0.068 U	0.074 U	0.069 U	0.068 U
PCB-1221 (Aroclor 1221)	NS	NS	0.068 U	0.074 U	0.069 U	0.068 U
PCB-1232 (Aroclor 1232)	NS	NS	0.068 U	0.074 U	0.069 U	0.068 U
PCB-1242 (Aroclor 1242)	NS	NS	0.068 U	0.074 U	0.069 U	0.068 U
PCB-1248 (Aroclor 1248)	NS	NS	0.068 U	0.074 U	0.069 U	0.068 U
PCB-1254 (Aroclor 1254)	NS	NS	0.068 U	0.074 U	0.069 U	0.068 U
PCB-1260 (Aroclor 1260)	NS	NS	0.068 U	0.074 U	0.069 U	0.068 U
PCB-1262 (Aroclor 1262)	NS	NS	0.068 U	0.074 U	0.069 U	0.068 U
PCB-1268 (Aroclor 1268)	NS	NS	0.068 U	0.074 U	0.069 U	0.068 U
Total PCBs	0.1	1	0.068 U	0.074 U	0.069 U	0.068 U

Table 5
Soil Analytical Results of Polychlorinated Biphenyls
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	FB_20220726	FB_20220727
		Laboratory Sample ID	460-262621-5	460-262706-5
		Date Sampled	7/26/2022	7/27/2022
		Unit	µg/L	µg/L
		Dilution Factor	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q
PCB-1016 (Aroclor 1016)	NS	NS	0.4 U	0.4 U
PCB-1221 (Aroclor 1221)	NS	NS	0.4 U	0.4 U
PCB-1232 (Aroclor 1232)	NS	NS	0.4 U	0.4 U
PCB-1242 (Aroclor 1242)	NS	NS	0.4 U	0.4 U
PCB-1248 (Aroclor 1248)	NS	NS	0.4 U	0.4 U
PCB-1254 (Aroclor 1254)	NS	NS	0.4 U	0.4 U
PCB-1260 (Aroclor 1260)	NS	NS	0.4 U	0.4 U
PCB-1262 (Aroclor 1262)	NS	NS	0.4 U	0.4 U
PCB-1268 (Aroclor 1268)	NS	NS	0.4 U	0.4 U
Total PCBs	0.1	1	0.4 U	0.4 U

Table 6
Soil Analytical Results of Pesticides
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-01_0-2_20220727	RI-SB-01_7-9_20220727	RI-SB-01_13-15_20220727	RI-SB-02_0-2_20220727	RI-SB-02_2-4_20220727
		Laboratory Sample ID	460-262706-8	460-262706-9	460-262706-10	460-262706-6	460-262706-7
		Date Sampled	7/27/2022	7/27/2022	7/27/2022	7/27/2022	7/27/2022
		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	CONC Q	CONC Q	CONC Q	CONC Q
Aldrin	0.005	0.097	0.0067 U	0.0068 U	0.0068 U	0.0069 U	0.0069 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.002 U	0.002 U	0.002 U	0.0021 U	0.0021 U
Alpha Endosulfan	NS	NS	0.0067 U	0.0068 U	0.0068 U	0.0069 U	0.0069 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.002 U	0.002 U	0.002 U	0.0021 U	0.0021 U
Beta Endosulfan	NS	NS	0.0067 U	0.0068 U	0.0068 U	0.0069 U	0.0069 U
cis-Chlordane	0.094	4.2	0.0067 U	0.0068 U	0.0068 U	0.0069 U	0.0069 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.002 U	0.002 U	0.002 U	0.0021 U	0.0021 U
Dieldrin	0.005	0.2	0.002 U	0.002 U	0.002 U	0.0021 U	0.0021 U
Endosulfan Sulfate	NS	NS	0.0067 U	0.0068 U	0.0068 U	0.0069 U	0.0069 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	0.0068 U	0.0069 U	0.0069 U
Endrin Aldehyde	NS	NS	0.0067 U	0.0068 U	0.0068 U	0.0069 U	0.0069 U
Endrin Ketone	NS	NS	0.0067 U	0.0068 U	0.0068 U	0.0069 U	0.0069 U
Gamma Bhc (Lindane)	0.1	1.3	0.002 U	0.002 U	0.002 U	0.0021 U	0.0021 U
Heptachlor	0.042	2.1	0.0067 U	0.0068 U	0.0068 U	0.0069 U	0.0069 U
Heptachlor Epoxide	NS	NS	0.0067 U	0.0068 U	0.0068 U	0.0069 U	0.0069 U
Methoxychlor	NS	NS	0.0067 U	0.0068 U	0.0068 U	0.0069 U	0.0069 U
P,P'-DDD	0.0033	13	0.0067 U	0.0068 U	0.0068 U	0.0069 U	0.0069 U
P,P'-DDE	**0.0033**	8.9	0.0067 U	0.0068 U	0.0068 U	0.0069 U	0.0069 U
P,P'-DDT	0.0033	7.9	0.0067 U	0.0068 U	0.0068 U	0.0069 U	0.0069 U
Toxaphene	NS	NS	0.067 U	0.068 U	0.068 U	0.069 U	0.069 U

Table 6
Soil Analytical Results of Pesticides
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-03_0-2_20220725	RI-SB-03_5-7_20220725	RI-SB-03_13-15_20220725	RI-SB-04_0-2_20220726	RI-SB-04_6-8_20220726
		Laboratory Sample ID	460-262562-7	460-262562-8	460-262562-9	460-262621-1	460-262621-2
		Date Sampled	7/25/2022	7/25/2022	7/25/2022	7/26/2022	7/26/2022
		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	CONC Q	CONC Q	CONC Q	CONC Q
Aldrin	0.005	0.097	0.0072 U	0.0068 U	0.0076 U	0.0076 U	0.008 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.0022 U	0.002 U	0.0023 U	0.0023 U	0.0024 U
Alpha Endosulfan	NS	NS	0.0072 U	0.0068 U	0.0076 U	0.0076 U	0.008 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.0022 U	0.002 U	0.0023 U	0.0023 U	0.0024 U
Beta Endosulfan	NS	NS	0.0072 U	0.0068 U	0.0076 U	0.0076 U	0.008 U
cis-Chlordane	0.094	4.2	0.0072 U	0.0068 U	0.0076 U	0.0076 U	0.008 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.0022 U	0.002 U	0.0023 U	0.0023 U	0.0024 U
Dieldrin	0.005	0.2	0.0022 U	0.002 U	0.0023 U	0.0023 U	0.0024 U
Endosulfan Sulfate	NS	NS	0.0072 U	0.0068 U	0.0076 U	0.0076 U	0.008 U
Endosulfans ABS	2.4	24	0 U	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.0072 U	0.0068 U	0.0076 U	0.0076 U	0.008 U
Endrin Aldehyde	NS	NS	0.0072 U	0.0068 U	0.0076 U	0.0076 U	0.008 U
Endrin Ketone	NS	NS	0.0072 U	0.0068 U	0.0076 U	0.0076 U	0.008 U
Gamma Bhc (Lindane)	0.1	1.3	0.0022 U	0.002 U	0.0023 U	0.0023 U	0.0024 U
Heptachlor	0.042	2.1	0.0072 U	0.0068 U	0.0076 U	0.0076 U	0.008 U
Heptachlor Epoxide	NS	NS	0.0072 U	0.0068 U	0.0076 U	0.0076 U	0.008 U
Methoxychlor	NS	NS	0.0072 U	0.0068 U	0.0076 U	0.0076 U	0.008 U
P,P'-DDD	0.0033	13	0.0072 U	0.0068 U	0.0076 U	0.0076 U	0.008 U
P,P'-DDE	**0.0033**	8.9	0.0072 U	0.0068 U	0.0076 U	0.0076 U	0.008 U
P,P'-DDT	0.0033	7.9	0.0072 U	0.0068 U	0.0076 U	0.0076 U	0.008 U
Toxaphene	NS	NS	0.072 U	0.068 U	0.076 U	0.076 U	0.08 U

Table 6
Soil Analytical Results of Pesticides
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-04_13-15_20220726	RI-SB-X_13-15_20220726	RI-SB-05_0-2_20220726	RI-SB-05_5-7_20220726	RI-SB-05_13-15_20220726
		Laboratory Sample ID	460-262621-3	460-262621-4	460-262621-10	460-262621-11	460-262621-12
		Date Sampled	7/26/2022	7/26/2022	7/26/2022	7/26/2022	7/26/2022
		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	CONC Q	CONC Q	CONC Q	CONC Q
Aldrin	0.005	0.097	0.0083 U	0.0084 U	0.0072 U	0.0069 U	0.0069 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.0025 U	0.0025 U	0.0022 U	0.0021 U	0.002 U
Alpha Endosulfan	NS	NS	0.0083 U	0.0084 U	0.0072 U	0.0069 U	0.0069 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.0025 U	0.0025 U	0.0022 U	0.0021 U	0.002 U
Beta Endosulfan	NS	NS	0.0083 U	0.0084 U	0.0072 U	0.0069 U	0.0069 U
cis-Chlordane	0.094	4.2	0.0083 U	0.0084 U	0.0072 U	0.0069 U	0.0069 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.0025 U	0.0025 U	0.0022 U	0.0021 U	0.002 U
Dieldrin	0.005	0.2	0.0025 U	0.0025 U	0.0022 U	0.0021 U	0.002 U
Endosulfan Sulfate	NS	NS	0.0083 U	0.0084 U	0.0072 U	0.0069 U	0.0069 U
Endosulfans ABS	2.4	24	0 U	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.0083 U	0.0084 U	0.0072 U	0.0069 U	0.0069 U
Endrin Aldehyde	NS	NS	0.0083 U	0.0084 U	0.0072 U	0.0069 U	0.0069 U
Endrin Ketone	NS	NS	0.0083 U	0.0084 U	0.0072 U	0.0069 U	0.0069 U
Gamma Bhc (Lindane)	0.1	1.3	0.0025 U	0.0025 U	0.0022 U	0.0021 U	0.002 U
Heptachlor	0.042	2.1	0.0083 U	0.0084 U	0.0072 U	0.0069 U	0.0069 U
Heptachlor Epoxide	NS	NS	0.0083 U	0.0084 U	0.0072 U	0.0069 U	0.0069 U
Methoxychlor	NS	NS	0.0083 U	0.0084 U	0.0072 U	0.0069 U	0.0069 U
P,P'-DDD	0.0033	13	0.0083 U	0.0084 U	0.0072 U	0.0069 U	0.0069 U
P,P'-DDE	**0.0033**	8.9	0.0083 U	0.0084 U	0.0072 U	0.0069 U	0.0069 U
P,P'-DDT	0.0033	7.9	0.0083 U	0.0084 U	0.0072 U	0.0069 U	0.0069 U
Toxaphene	NS	NS	0.083 U	0.084 U	0.072 U	0.069 U	0.069 U

Table 6
Soil Analytical Results of Pesticides
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-06_0-2_20220727	RI-SB-06_4-6_20220727	RI-SB-X_4-6_20220727	RI-SB-06_13-15_20220727	RI-SB-07_0-2_20220725
		Laboratory Sample ID	460-262706-1	460-262706-2	460-262706-4	460-262706-3	460-262562-10
		Date Sampled	7/27/2022	7/27/2022	7/27/2022	7/27/2022	7/25/2022
		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	CONC Q	CONC Q	CONC Q	CONC Q
Aldrin	0.005	0.097	0.0069 U	0.0069 U	0.0069 U	0.0067 U	0.0068 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.0021 U	0.002 U	0.0021 U	0.002 U	0.002 U
Alpha Endosulfan	NS	NS	0.0069 U	0.0069 U	0.0069 U	0.0067 U	0.0068 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.0021 U	0.002 U	0.0021 U	0.002 U	0.002 U
Beta Endosulfan	NS	NS	0.0069 U	0.0069 U	0.0069 U	0.0067 U	0.0068 U
cis-Chlordane	0.094	4.2	0.0069 U	0.0069 U	0.0069 U	0.0067 U	0.0068 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.0021 U	0.002 U	0.0021 U	0.002 U	0.002 U
Dieldrin	0.005	0.2	0.0021 U	0.002 U	0.0021 U	0.002 U	0.002 U
Endosulfan Sulfate	NS	NS	0.0069 U	0.0069 U	0.0069 U	0.0067 U	0.0068 U
Endosulfans ABS	2.4	24	0 U	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.0069 U	0.0069 U	0.0069 U	0.0067 U	0.0068 U
Endrin Aldehyde	NS	NS	0.0069 U	0.0069 U	0.0069 U	0.0067 U	0.0068 U
Endrin Ketone	NS	NS	0.0069 U	0.0069 U	0.0069 U	0.0067 U	0.0068 U
Gamma Bhc (Lindane)	0.1	1.3	0.0021 U	0.002 U	0.0021 U	0.002 U	0.002 U
Heptachlor	0.042	2.1	0.0069 U	0.0069 U	0.0069 U	0.0067 U	0.0068 U
Heptachlor Epoxide	NS	NS	0.0069 U	0.0069 U	0.0069 U	0.0067 U	0.0068 U
Methoxychlor	NS	NS	0.0069 U	0.0069 U	0.0069 U	0.0067 U	0.0068 U
P,P'-DDD	0.0033	13	0.0069 U	0.0069 U	0.0069 U	0.0067 U	0.0068 U
P,P'-DDE	**0.0033**	8.9	0.0069 U	0.0069 U	0.0069 U	0.0067 U	**0.0092**
P,P'-DDT	0.0033	7.9	0.0069 U	0.0069 U	0.0069 U	0.0067 U	0.0068 U
Toxaphene	NS	NS	0.069 U	0.069 U	0.069 U	0.067 U	0.068 U

Table 6
Soil Analytical Results of Pesticides
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-07_6-8_20220725	RI-SB-07_13-15_20220725	RI-SB-08_0-2_20220728	RI-SB-08_5-7_20220728	RI-SB-08_13-15_20220728
		Laboratory Sample ID	460-262562-11	460-262562-12	460-262775-1	460-262775-2	460-262775-3
		Date Sampled	7/25/2022	7/25/2022	7/28/2022	7/28/2022	7/28/2022
		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	CONC Q	CONC Q	CONC Q	CONC Q
Aldrin	0.005	0.097	0.0069 U	0.0069 U	0.0069 U	0.0068 U	0.0067 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.0021 U	0.0021 U	0.0021 U	0.002 U	0.002 U
Alpha Endosulfan	NS	NS	0.0069 U	0.0069 U	0.0069 U	0.0068 U	0.0067 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.0021 U	0.0021 U	0.0021 U	0.002 U	0.002 U
Beta Endosulfan	NS	NS	0.0069 U	0.0069 U	0.0069 U	0.0068 U	0.0067 U
cis-Chlordane	0.094	4.2	0.0069 U	0.0069 U	0.0069 U	0.0068 U	0.0067 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.0021 U	0.0021 U	0.0021 U	0.002 U	0.002 U
Dieldrin	0.005	0.2	0.0021 U	0.0021 U	0.0021 U	0.002 U	0.002 U
Endosulfan Sulfate	NS	NS	0.0069 U	0.0069 U	0.0069 U	0.0068 U	0.0067 U
Endosulfans ABS	2.4	24	0 U	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.0069 U	0.0069 U	0.0069 U	0.0068 U	0.0067 U
Endrin Aldehyde	NS	NS	0.0069 U	0.0069 U	0.0069 U	0.0068 U	0.0067 U
Endrin Ketone	NS	NS	0.0069 U	0.0069 U	0.0069 U	0.0068 U	0.0067 U
Gamma Bhc (Lindane)	0.1	1.3	0.0021 U	0.0021 U	0.0021 U	0.002 U	0.002 U
Heptachlor	0.042	2.1	0.0069 U	0.0069 U	0.0069 U	0.0068 U	0.0067 U
Heptachlor Epoxide	NS	NS	0.0069 U	0.0069 U	0.0069 U	0.0068 U	0.0067 U
Methoxychlor	NS	NS	0.0069 U	0.0069 U	0.0069 U	0.0068 U	0.0067 U
P,P'-DDD	0.0033	13	0.0069 U	0.0069 U	0.0069 U	0.0068 U	0.0067 U
P,P'-DDE	**0.0033**	8.9	0.0069 U	0.0019 J	0.0069 U	0.0068 U	0.0067 U
P,P'-DDT	0.0033	7.9	0.0069 U	0.0069 U	0.0069 U	0.0068 U	0.0067 U
Toxaphene	NS	NS	0.069 U	0.069 U	0.069 U	0.068 U	0.067 U

Table 6
Soil Analytical Results of Pesticides
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-09_0-2_20220726	RI-SB-09_3-5_20220726	RI-SB-09_7-9_20220726	RI-SB-10_0-2_20220725	RI-SB-10_5-7_20220725
		Laboratory Sample ID	460-262621-7	460-262621-8	460-262621-9	460-262562-4	460-262562-5
		Date Sampled	7/26/2022	7/26/2022	7/26/2022	7/25/2022	7/25/2022
		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	CONC Q	CONC Q	CONC Q	CONC Q
Aldrin	0.005	0.097	0.0071 U	0.007 U	0.0068 U	0.0074 U	0.0073 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.0021 U	0.0021 U	0.002 U	0.0022 U	0.0022 U
Alpha Endosulfan	NS	NS	0.0071 U	0.007 U	0.0068 U	0.0074 U	0.0073 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.0021 U	0.0021 U	0.002 U	0.0022 U	0.0022 U
Beta Endosulfan	NS	NS	0.0071 U	0.007 U	0.0068 U	0.0074 U	0.0073 U
cis-Chlordane	0.094	4.2	0.0071 U	0.007 U	0.0068 U	0.0074 U	0.0073 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.0021 U	0.0021 U	0.002 U	0.0022 U	0.0022 U
Dieldrin	0.005	0.2	0.0021 U	0.0021 U	0.002 U	0.0022 U	0.0022 U
Endosulfan Sulfate	NS	NS	0.0071 U	0.007 U	0.0068 U	0.0074 U	0.0073 U
Endosulfans ABS	2.4	24	0 U	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.0071 U	0.007 U	0.0068 U	0.0074 U	0.0073 U
Endrin Aldehyde	NS	NS	0.0071 U	0.007 U	0.0068 U	0.0074 U	0.0073 U
Endrin Ketone	NS	NS	0.0071 U	0.007 U	0.0068 U	0.0074 U	0.0073 U
Gamma Bhc (Lindane)	0.1	1.3	0.0021 U	0.0021 U	0.002 U	0.0022 U	0.0022 U
Heptachlor	0.042	2.1	0.0071 U	0.007 U	0.0068 U	0.0074 U	0.0073 U
Heptachlor Epoxide	NS	NS	0.0071 U	0.007 U	0.0068 U	0.0074 U	0.0073 U
Methoxychlor	NS	NS	0.0071 U	0.007 U	0.0068 U	0.0074 U	0.0073 U
P,P'-DDD	0.0033	13	0.0071 U	0.007 U	0.0068 U	0.0074 U	0.0073 U
P,P'-DDE	**0.0033**	8.9	0.0071 U	0.007 U	0.0068 U	0.0074 U	0.0073 U
P,P'-DDT	0.0033	7.9	0.0071 U	0.007 U	0.0068 U	0.0074 U	0.0073 U
Toxaphene	NS	NS	0.071 U	0.07 U	0.068 U	0.074 U	0.073 U

Table 6
Soil Analytical Results of Pesticides
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-10_13-15_20220725	RI-SB-11_0-2_20220725	RI-SB-11_5-7_20220725	RI-SB-11_13-15_20220725
		Laboratory Sample ID	460-262562-6	460-262562-1	460-262562-2	460-262562-3
		Date Sampled	7/25/2022	7/25/2022	7/25/2022	7/25/2022
		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	0.0068 U	0.0074 U	0.0069 U	0.0068 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.002 U	0.0022 U	0.002 U	0.002 U
Alpha Endosulfan	NS	NS	0.0068 U	0.0074 U	0.0069 U	0.0068 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.002 U	0.0022 U	0.002 U	0.002 U
Beta Endosulfan	NS	NS	0.0068 U	0.0074 U	0.0069 U	0.0068 U
cis-Chlordane	0.094	4.2	0.0068 U	0.0074 U	0.0069 U	0.0068 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.002 U	0.0022 U	0.002 U	0.002 U
Dieldrin	0.005	0.2	0.002 U	0.0022 U	0.002 U	0.002 U
Endosulfan Sulfate	NS	NS	0.0068 U	0.0074 U	0.0069 U	0.0068 U
Endosulfans ABS	2.4	24	0 U	0 U	0 U	0 U
Endrin	0.014	11	0.0068 U	0.0074 U	0.0069 U	0.0068 U
Endrin Aldehyde	NS	NS	0.0068 U	0.0074 U	0.0069 U	0.0068 U
Endrin Ketone	NS	NS	0.0068 U	0.0074 U	0.0069 U	0.0068 U
Gamma Bhc (Lindane)	0.1	1.3	0.002 U	0.0022 U	0.002 U	0.002 U
Heptachlor	0.042	2.1	0.0068 U	0.0074 U	0.0069 U	0.0068 U
Heptachlor Epoxide	NS	NS	0.0068 U	0.0074 U	0.0069 U	0.0068 U
Methoxychlor	NS	NS	0.0068 U	0.0074 U	0.0069 U	0.0068 U
P,P'-DDD	0.0033	13	0.0068 U	0.0074 U	0.0069 U	0.0068 U
P,P'-DDE	**0.0033**	8.9	0.0068 U	0.0074 U	0.0069 U	0.0068 U
P,P'-DDT	0.0033	7.9	0.0068 U	0.0074 U	0.0069 U	0.0068 U
Toxaphene	NS	NS	0.068 U	0.074 U	0.069 U	0.068 U

Table 6
Soil Analytical Results of Pesticides
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	FB_20220726	FB_20220727
		Laboratory Sample ID	460-262621-5	460-262706-5
		Date Sampled	7/26/2022	7/27/2022
		Unit	µg/L	µg/L
		Dilution Factor	1	1
Compound	**NYSDEC UUSCO**	**NYSDEC RRSCO**	CONC Q	CONC Q
Aldrin	0.005	0.097	0.02 U	0.02 U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02	0.48	0.02 U	0.02 U
Alpha Endosulfan	NS	NS	0.02 U	0.02 U
Beta Bhc (Beta Hexachlorocyclohexane)	0.036	0.36	0.02 U	0.02 U
Beta Endosulfan	NS	NS	0.02 U	0.02 U
cis-Chlordane	0.094	4.2	0.02 U	0.02 U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	100	0.02 U	0.02 U
Dieldrin	0.005	0.2	0.02 U	0.02 U
Endosulfan Sulfate	NS	NS	0.02 U	0.02 U
Endosulfans ABS	2.4	24	0 U	0 U
Endrin	0.014	11	0.02 U	0.02 U
Endrin Aldehyde	NS	NS	0.02 U	0.02 U
Endrin Ketone	NS	NS	0.02 U	0.02 U
Gamma Bhc (Lindane)	0.1	1.3	0.02 U	0.02 U
Heptachlor	0.042	2.1	0.02 U	0.02 U
Heptachlor Epoxide	NS	NS	0.02 U	0.02 U
Methoxychlor	NS	NS	0.02 U	0.02 U
P,P'-DDD	0.0033	13	0.02 U	0.02 U
P,P'-DDE	**0.0033**	8.9	0.02 U	0.02 U
P,P'-DDT	0.0033	7.9	0.02 U	0.02 U
Toxaphene	NS	NS	0.5 U	0.5 U

Table 7
Soil Analytical Results of Per- and Polyfluoroalkyl Substances (PFAS)
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-01_0-2_20220727	RI-SB-01_7-9_20220727	RI-SB-01_13-15_20220727	RI-SB-02_0-2_20220727	RI-SB-02_2-4_20220727
		Laboratory Sample ID	460-262714-8	460-262714-9	460-262714-10	460-262714-6	460-262714-7
		Date Sampled	7/27/2022	7/27/2022	7/27/2022	7/27/2022	7/27/2022
		Dilution Factor	1	1	1	1	5
		Unit	ppb	ppb	ppb	ppb	ppb
Compound	**NYSDEC UUGV**	**NYSDEC RRGV**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	NS	1.98 U	2.16 U	1.95 U	2.03 U	10.1 U
8:2 Fluorotelomer sulfonate	NS	NS	1.98 U	2.16 U	1.95 U	2.03 U	10.1 UJ
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	1.98 U	2.16 U	1.95 U	0.14 J	10.1 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	1.98 U	2.16 U	1.95 U	2.03 U	10.1 U
Perfluorobutanesulfonic acid	NS	NS	0.2 U	0.22 U	0.19 U	0.2 U	1.01 U
Perfluorobutanoic acid	NS	NS	0.49 U	0.54 U	0.49 U	0.51 U	2.52 U
Perfluorodecanesulfonic acid	NS	NS	0.2 U	0.22 U	0.19 U	0.2 U	1.01 U
Perfluorodecanoic acid	NS	NS	0.2 U	0.22 U	0.19 U	0.031 J	1.01 U
Perfluorododecanoic acid	NS	NS	0.2 U	0.22 U	0.19 U	0.2 U	1.01 U
Perfluoroheptanesulfonic acid	NS	NS	0.2 U	0.22 U	0.19 U	0.2 U	1.01 U
Perfluoroheptanoic acid	NS	NS	0.2 U	0.22 U	0.19 U	0.2 U	1.01 U
Perfluorohexanesulfonic acid	NS	NS	0.2 U	0.22 U	0.19 U	0.2 U	1.01 U
Perfluorohexanoic acid	NS	NS	0.2 U	0.22 U	0.19 U	0.25	2.11 J
Perfluorononanoic acid	NS	NS	0.2 U	0.22 U	0.19 U	0.2 U	1.01 U
Perfluorooctanesulfonic acid	0.88	44	0.2 U	0.22 U	0.19 U	0.12 J	1.01 U
Perfluorooctanoic acid	**0.66**	33	0.2 U	0.22 U	0.19 U	0.99 U	2.49 U
Perfluoropentanoic acid	NS	NS	0.2 U	0.22 U	0.19 U	0.12 J	1.25 J
Perfluorotetradecanoic acid	NS	NS	0.2 U	0.22 U	0.19 U	0.2 U	1.01 U
Perfluorotridecanoic acid	NS	NS	0.2 U	0.22 U	0.19 U	0.2 U	1.01 U
Perfluoroundecanoic acid	NS	NS	0.2 U	0.22 U	0.19 U	0.2 U	1.01 U
Perfluroroctanesulfonamide	NS	NS	0.2 U	0.22 U	0.19 U	0.2 U	1.01 U

Table 7
Soil Analytical Results of Per- and Polyfluoroalkyl Substances (PFAS)
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-03_0-2_20220725	RI-SB-03_5-7_20220725	RI-SB-03_13-15_20220725	RI-SB-04_0-2_20220726	RI-SB-04_6-8_20220726
		Laboratory Sample ID	460-262620-7	460-262620-8	460-262620-9	460-262621-1	460-262621-2
		Date Sampled	7/25/2022	7/25/2022	7/25/2022	7/26/2022	7/26/2022
		Dilution Factor	1	1	1	1	1
		Unit	ppb	ppb	ppb	ppb	ppb
Compound	**NYSDEC UUGV**	**NYSDEC RRGV**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	NS	1.98 U	1.99 U	2 U	2.24 U	2.36 U
8:2 Fluorotelomer sulfonate	NS	NS	1.98 U	1.99 U	2 U	2.24 U	2.36 U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	1.98 U	1.99 U	2 U	2.24 U	2.36 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	1.98 U	1.99 U	2 U	2.24 U	2.36 U
Perfluorobutanesulfonic acid	NS	NS	0.2 U	0.2 U	0.2 U	0.22 U	0.24 U
Perfluorobutanoic acid	NS	NS	0.5 U	0.5 U	0.5 U	0.56 U	0.59 U
Perfluorodecanesulfonic acid	NS	NS	0.2 U	0.2 U	0.2 U	0.22 U	0.24 U
Perfluorodecanoic acid	NS	NS	0.2 U	0.2 U	0.2 U	0.22 U	0.24 U
Perfluorododecanoic acid	NS	NS	0.2 U	0.2 U	0.2 U	0.22 U	0.24 U
Perfluoroheptanesulfonic acid	NS	NS	0.2 U	0.2 U	0.2 U	0.22 U	0.24 U
Perfluoroheptanoic acid	NS	NS	0.2 U	0.2 U	0.2 U	0.22 U	0.24 U
Perfluorohexanesulfonic acid	NS	NS	0.2 U	0.2 U	0.2 U	0.22 U	0.24 U
Perfluorohexanoic acid	NS	NS	0.2 U	0.2 U	0.2 U	0.22 U	0.07 J
Perfluorononanoic acid	NS	NS	0.2 U	0.2 U	0.2 U	0.22 U	0.24 U
Perfluorooctanesulfonic acid	0.88	44	0.2 U	0.2 U	0.2 U	0.22 U	0.24 U
Perfluorooctanoic acid	**0.66**	33	0.2 U	0.2 U	0.2 U	0.22 U	0.092 J
Perfluoropentanoic acid	NS	NS	0.2 U	0.2 U	0.2 U	0.22 U	0.21 J
Perfluorotetradecanoic acid	NS	NS	0.2 U	0.2 U	0.2 U	0.22 U	0.24 U
Perfluorotridecanoic acid	NS	NS	0.2 U	0.2 U	0.2 U	0.22 U	0.24 U
Perfluoroundecanoic acid	NS	NS	0.2 U	0.2 U	0.2 U	0.22 U	0.24 U
Perfluroroctanesulfonamide	NS	NS	0.2 U	0.2 U	0.2 U	0.22 U	0.24 U

Table 7
Soil Analytical Results of Per- and Polyfluoroalkyl Substances (PFAS)
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-04_13-15_20220726	RI-SB-X_13-15_20220726	RI-SB-05_0-2_20220726	RI-SB-05_5-7_20220726	RI-SB-05_13-15_20220726
		Laboratory Sample ID	460-262621-3	460-262621-4	460-262621-10	460-262621-11	460-262621-12
		Date Sampled	7/26/2022	7/26/2022	7/26/2022	7/26/2022	7/26/2022
		Dilution Factor	1	1	1	1	1
		Unit	ppb	ppb	ppb	ppb	ppb
Compound	**NYSDEC UUGV**	**NYSDEC RRGV**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	NS	2.35 U	2.53 U	2.16 U	2.03 U	2.03 U
8:2 Fluorotelomer sulfonate	NS	NS	2.35 U	2.53 U	2.16 U	2.03 U	2.03 U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	2.35 U	2.53 U	2.16 U	2.03 U	2.03 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	2.35 U	2.53 U	2.16 U	2.03 U	2.03 U
Perfluorobutanesulfonic acid	NS	NS	0.23 U	0.25 U	0.22 U	0.2 U	0.2 U
Perfluorobutanoic acid	NS	NS	0.59 U	0.63 U	0.54 U	0.51 U	0.51 U
Perfluorodecanesulfonic acid	NS	NS	0.23 U	0.25 U	0.22 U	0.2 U	0.2 U
Perfluorodecanoic acid	NS	NS	0.23 U	0.25 U	0.22 U	0.2 U	0.2 U
Perfluorododecanoic acid	NS	NS	0.23 U	0.25 U	0.22 U	0.2 U	0.2 U
Perfluoroheptanesulfonic acid	NS	NS	0.23 U	0.25 U	0.22 U	0.2 U	0.2 U
Perfluoroheptanoic acid	NS	NS	0.23 U	0.25 U	0.22 U	0.2 U	0.2 U
Perfluorohexanesulfonic acid	NS	NS	0.23 U	0.25 U	0.22 U	0.2 U	0.2 U
Perfluorohexanoic acid	NS	NS	0.12 J	0.25 U	0.22 U	0.2 U	0.057 J
Perfluorononanoic acid	NS	NS	0.23 U	0.25 U	0.22 U	0.2 U	0.2 U
Perfluorooctanesulfonic acid	0.88	44	0.23 U	0.25 U	0.22 U	0.2 U	0.2 U
Perfluorooctanoic acid	**0.66**	33	0.23 U	0.25 U	0.22 U	0.2 U	0.2 U
Perfluoropentanoic acid	NS	NS	0.23 U	0.25 U	0.22 U	0.2 U	0.2 U
Perfluorotetradecanoic acid	NS	NS	0.23 U	0.25 U	0.22 U	0.2 U	0.2 U
Perfluorotridecanoic acid	NS	NS	0.23 U	0.25 U	0.22 U	0.2 U	0.2 U
Perfluoroundecanoic acid	NS	NS	0.23 U	0.25 U	0.22 U	0.2 U	0.2 U
Perfluroroctanesulfonamide	NS	NS	0.23 U	0.25 U	0.22 U	0.2 U	0.2 U

Table 7
Soil Analytical Results of Per- and Polyfluoroalkyl Substances (PFAS)
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-06_0-2_20220727	RI-SB-06_4-6_20220727	RI-SB-X_4-6_20220727	RI-SB-06_13-15_20220727	RI-SB-07_0-2_20220725
		Laboratory Sample ID	460-262714-1	460-262714-2	460-262714-4	460-262714-3	460-262620-10
		Date Sampled	7/27/2022	7/27/2022	7/27/2022	7/27/2022	7/25/2022
		Dilution Factor	1	1	1	1	1
		Unit	ppb	ppb	ppb	ppb	ppb
Compound	**NYSDEC UUGV**	**NYSDEC RRGV**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	NS	1.95 U	2.02 U	2.02 U	1.91 U	1.92 U
8:2 Fluorotelomer sulfonate	NS	NS	1.95 U	2.02 U	2.02 U	1.91 U	1.92 U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	1.95 U	2.02 U	2.02 U	1.91 U	1.92 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	1.95 U	2.02 U	2.02 U	1.91 U	1.92 U
Perfluorobutanesulfonic acid	NS	NS	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U
Perfluorobutanoic acid	NS	NS	0.49 U	0.51 U	0.51 U	0.48 U	0.48 U
Perfluorodecanesulfonic acid	NS	NS	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U
Perfluorodecanoic acid	NS	NS	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U
Perfluorododecanoic acid	NS	NS	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U
Perfluoroheptanesulfonic acid	NS	NS	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U
Perfluoroheptanoic acid	NS	NS	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U
Perfluorohexanesulfonic acid	NS	NS	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U
Perfluorohexanoic acid	NS	NS	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U
Perfluorononanoic acid	NS	NS	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U
Perfluorooctanesulfonic acid	0.88	44	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U
Perfluorooctanoic acid	**0.66**	33	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U
Perfluoropentanoic acid	NS	NS	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U
Perfluorotetradecanoic acid	NS	NS	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U
Perfluorotridecanoic acid	NS	NS	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U
Perfluoroundecanoic acid	NS	NS	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U
Perfluroroctanesulfonamide	NS	NS	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U

Table 7
Soil Analytical Results of Per- and Polyfluoroalkyl Substances (PFAS)
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-07_6-8_20220725	RI-SB-07_13-15_20220725	RI-SB-08_0-2_20220728	RI-SB-08_5-7_20220728	RI-SB-08_13-15_20220728
		Laboratory Sample ID	460-262620-11	460-262620-12	460-262775-1	460-262775-2	460-262775-3
		Date Sampled	7/25/2022	7/25/2022	7/28/2022	7/28/2022	7/28/2022
		Dilution Factor	1	1	1	1	1
		Unit	ppb	ppb	ppb	ppb	ppb
Compound	**NYSDEC UUGV**	**NYSDEC RRGV**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	NS	1.94 U	2.15 U	2.05 U	2.01 U	1.97 U
8:2 Fluorotelomer sulfonate	NS	NS	1.94 U	2.15 U	2.05 U	2.01 U	1.97 U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	1.94 U	2.15 U	2.05 U	2.01 U	1.97 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	1.94 U	2.15 U	2.05 U	2.01 U	1.97 U
Perfluorobutanesulfonic acid	NS	NS	0.19 U	0.22 U	0.2 U	0.2 U	0.2 U
Perfluorobutanoic acid	NS	NS	0.49 U	0.54 U	0.51 U	0.5 U	0.49 U
Perfluorodecanesulfonic acid	NS	NS	0.19 U	0.22 U	0.2 U	0.2 U	0.2 U
Perfluorodecanoic acid	NS	NS	0.19 U	0.22 U	0.2 U	0.2 U	0.2 U
Perfluorododecanoic acid	NS	NS	0.19 U	0.22 U	0.2 U	0.2 U	0.2 U
Perfluoroheptanesulfonic acid	NS	NS	0.19 U	0.22 U	0.2 U	0.2 U	0.2 U
Perfluoroheptanoic acid	NS	NS	0.19 U	0.22 U	0.2 U	0.2 U	0.2 U
Perfluorohexanesulfonic acid	NS	NS	0.19 U	0.22 U	0.2 U	0.2 U	0.2 U
Perfluorohexanoic acid	NS	NS	0.19 U	0.22 U	0.2 U	0.2 U	0.2 U
Perfluorononanoic acid	NS	NS	0.19 U	0.22 U	0.2 U	0.2 U	0.2 U
Perfluorooctanesulfonic acid	0.88	44	0.19 U	0.22 U	0.2 U	0.2 U	0.2 U
Perfluorooctanoic acid	**0.66**	33	0.19 U	0.22 U	0.2 U	0.2 U	0.2 U
Perfluoropentanoic acid	NS	NS	0.19 U	0.22 U	0.2 U	0.2 U	0.2 U
Perfluorotetradecanoic acid	NS	NS	0.19 U	0.22 U	0.2 U	0.2 U	0.2 U
Perfluorotridecanoic acid	NS	NS	0.19 U	0.22 U	0.2 U	0.2 U	0.2 U
Perfluoroundecanoic acid	NS	NS	0.19 U	0.22 U	0.2 U	0.2 U	0.2 U
Perfluroroctanesulfonamide	NS	NS	0.19 U	0.22 U	0.2 U	0.2 U	0.2 U

Table 7
Soil Analytical Results of Per- and Polyfluoroalkyl Substances (PFAS)
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-09_0-2_20220726	RI-SB-09_3-5_20220726	RI-SB-09_7-9_20220726	RI-SB-10_0-2_20220725	RI-SB-10_5-7_20220725
		Laboratory Sample ID	460-262621-7	460-262621-8	460-262621-9	460-262620-4	460-262620-5
		Date Sampled	7/26/2022	7/26/2022	7/26/2022	7/25/2022	7/25/2022
		Dilution Factor	1	1	1	1	1
		Unit	ppb	ppb	ppb	ppb	ppb
Compound	**NYSDEC UUGV**	**NYSDEC RRGV**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	NS	2.08 U	2.1 U	1.97 U	1.91 U	2 U
8:2 Fluorotelomer sulfonate	NS	NS	2.08 U	2.1 U	1.97 U	1.91 U	2 U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	2.08 U	2.1 U	1.97 U	1.91 U	2 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	2.08 U	2.1 U	1.97 U	1.91 U	2 U
Perfluorobutanesulfonic acid	NS	NS	0.21 U	0.21 U	0.2 U	0.19 U	0.2 U
Perfluorobutanoic acid	NS	NS	0.52 U	0.52 U	0.49 U	0.48 U	0.5 U
Perfluorodecanesulfonic acid	NS	NS	0.21 U	0.21 U	0.2 U	0.19 U	0.2 U
Perfluorodecanoic acid	NS	NS	0.21 U	0.21 U	0.2 U	0.19 U	0.2 U
Perfluorododecanoic acid	NS	NS	0.21 U	0.21 U	0.2 U	0.19 U	0.2 U
Perfluoroheptanesulfonic acid	NS	NS	0.21 U	0.21 U	0.2 U	0.19 U	0.2 U
Perfluoroheptanoic acid	NS	NS	0.21 U	0.21 U	0.2 U	0.19 U	0.2 U
Perfluorohexanesulfonic acid	NS	NS	0.21 U	0.21 U	0.2 U	0.19 U	0.2 U
Perfluorohexanoic acid	NS	NS	0.21 U	0.21 U	0.2 U	0.19 U	0.2 U
Perfluorononanoic acid	NS	NS	0.21 U	0.21 U	0.2 U	0.19 U	0.2 U
Perfluorooctanesulfonic acid	0.88	44	0.21 U	0.21 U	0.2 U	0.19 U	0.2 U
Perfluorooctanoic acid	**0.66**	33	0.21 U	0.21 U	0.2 U	0.19 U	0.2 U
Perfluoropentanoic acid	NS	NS	0.21 U	0.21 U	0.2 U	0.19 U	0.2 U
Perfluorotetradecanoic acid	NS	NS	0.21 U	0.21 U	0.2 U	0.19 U	0.2 U
Perfluorotridecanoic acid	NS	NS	0.21 U	0.21 U	0.2 U	0.19 U	0.2 U
Perfluoroundecanoic acid	NS	NS	0.21 U	0.21 U	0.2 U	0.19 U	0.2 U
Perfluroroctanesulfonamide	NS	NS	0.21 U	0.21 U	0.2 U	0.19 U	0.2 U

Table 7
Soil Analytical Results of Per- and Polyfluoroalkyl Substances (PFAS)
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	RI-SB-10_13-15_20220725	RI-SB-11_0-2_20220725	RI-SB-11_5-7_20220725	RI-SB-11_13-15_20220725	RI-SB-DRAIN_1-1.5_20220727
		Laboratory Sample ID	460-262620-6	460-262620-1	460-262620-2	460-262620-3	460-262714-11
		Date Sampled	7/25/2022	7/25/2022	7/25/2022	7/25/2022	7/27/2022
		Dilution Factor	1	1	1	1	10
		Unit	ppb	ppb	ppb	ppb	ppb
Compound	**NYSDEC UUGV**	**NYSDEC RRGV**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	NS	1.95 U	1.91 U	2.07 U	1.93 U	20.5 UJ
8:2 Fluorotelomer sulfonate	NS	NS	1.95 U	1.91 U	2.07 U	1.93 U	20.5 UJ
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	1.95 U	1.91 U	2.07 U	1.93 U	20.5 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	1.95 U	1.91 U	2.07 U	1.93 U	20.5 U
Perfluorobutanesulfonic acid	NS	NS	0.2 U	0.19 U	0.21 U	0.19 U	2.05 U
Perfluorobutanoic acid	NS	NS	0.49 U	0.48 U	0.52 U	0.48 U	5.12 U
Perfluorodecanesulfonic acid	NS	NS	0.2 U	0.19 U	0.21 U	0.19 U	0.58 J
Perfluorodecanoic acid	NS	NS	0.2 U	0.19 U	0.21 U	0.19 U	2.05 U
Perfluorododecanoic acid	NS	NS	0.2 U	0.19 U	0.21 U	0.19 U	0.35 J
Perfluoroheptanesulfonic acid	NS	NS	0.2 U	0.19 U	0.21 U	0.19 U	2.05 U
Perfluoroheptanoic acid	NS	NS	0.2 U	0.19 U	0.21 U	0.19 U	2.05 U
Perfluorohexanesulfonic acid	NS	NS	0.2 U	0.19 U	0.21 U	0.19 U	2.05 U
Perfluorohexanoic acid	NS	NS	0.2 U	0.19 U	0.21 U	0.19 U	3.11 J
Perfluorononanoic acid	NS	NS	0.2 U	0.19 U	0.21 U	0.19 U	2.05 U
Perfluorooctanesulfonic acid	0.88	44	0.2 U	0.19 U	0.21 U	0.19 U	2.05 U
Perfluorooctanoic acid	**0.66**	33	0.2 U	0.19 U	0.21 U	0.19 U	**1.55 J**
Perfluoropentanoic acid	NS	NS	0.2 U	0.19 U	0.21 U	0.19 U	2.05 U
Perfluorotetradecanoic acid	NS	NS	0.2 U	0.19 U	0.21 U	0.19 U	2.05 U
Perfluorotridecanoic acid	NS	NS	0.2 U	0.19 U	0.21 U	0.19 U	2.05 U
Perfluoroundecanoic acid	NS	NS	0.2 U	0.19 U	0.21 U	0.19 U	0.54 J
Perfluroroctanesulfonamide	NS	NS	0.2 U	0.19 U	0.21 U	0.19 U	2.05 UJ

Table 7
Soil Analytical Results of Per- and Polyfluoroalkyl Substances (PFAS)
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

		AKRF Sample ID	FB_20220726	FB_20220727
		Laboratory Sample ID	460-262621-5	460-262714-5
		Date Sampled	7/26/2022	7/27/2022
		Dilution Factor	1	1
		Unit	ppt	ppt
Compound	**NYSDEC UUGV**	**NYSDEC RRGV**	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	NS	NS	4.04 U	4.09 U
8:2 Fluorotelomer sulfonate	NS	NS	1.61 U	1.64 U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	NS	4.04 U	4.09 U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	NS	4.04 U	4.09 U
Perfluorobutanesulfonic acid	NS	NS	1.61 U	1.64 U
Perfluorobutanoic acid	NS	NS	4.04 U	4.09 U
Perfluorodecanesulfonic acid	NS	NS	1.61 U	1.64 U
Perfluorodecanoic acid	NS	NS	1.61 U	1.64 U
Perfluorododecanoic acid	NS	NS	1.61 U	1.64 U
Perfluoroheptanesulfonic acid	NS	NS	1.61 U	1.64 U
Perfluoroheptanoic acid	NS	NS	1.61 U	1.64 U
Perfluorohexanesulfonic acid	NS	NS	1.61 U	1.64 U
Perfluorohexanoic acid	NS	NS	1.61 U	1.64 U
Perfluorononanoic acid	NS	NS	1.61 U	1.64 U
Perfluorooctanesulfonic acid	0.88	44	1.61 U	1.64 U
Perfluorooctanoic acid	**0.66**	33	1.61 U	1.64 U
Perfluoropentanoic acid	NS	NS	1.61 U	1.64 U
Perfluorotetradecanoic acid	NS	NS	1.61 U	1.64 U
Perfluorotridecanoic acid	NS	NS	1.61 U	1.64 U
Perfluoroundecanoic acid	NS	NS	1.61 U	1.64 U
Perfluroroctanesulfonamide	NS	NS	1.61 U	1.64 U

Table 8
Groundwater Analytical Results for Volatile Organic Compounds
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

	AKRF Sample ID	RI-MW-01_20220817		RI-MW-03_20220817		RI-MW-X_20220817		RI-MW-04_20220817		RI-MW-05_20220817	
	Laboratory Sample ID	460-264036-1		460-264036-2		460-264036-5		460-264036-3		460-264036-4	
	Date Sampled	8/17/2022		8/17/2022		8/17/2022		8/17/2022		8/17/2022	
	Unit	µg/L		µg/L		µg/L		µg/L		µg/L	
	Dilution Factor	1		1		1		1		1	
Compound	**AWQSGV**	CONC	Q	CONC	Q	CONC	Q	CONC	Q	CONC	Q
1,1,1-Trichloroethane	5	1	U	1	U	1	U	1	U	1	U
1,1,2,2-Tetrachloroethane	5	1	U	1	U	1	U	1	U	1	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	5	1	U	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	1	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethane	5	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethene	5	1	U	1	U	1	U	1	U	1	U
1,2,3-Trichlorobenzene	5	1	U	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	5	1	U	1	U	1	U	1	U	1	U
1,2,4-Trimethylbenzene	5	1	U	1	U	1	U	1	U	1	U
1,2-Dibromo-3-Chloropropane	0.04	1	U	1	U	1	U	1	U	1	U
1,2-Dibromoethane (Ethylene Dibromide)	0.0006	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene	3	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethane	0.6	1	U	1	U	1	U	1	U	1	U
1,2-Dichloropropane	1	1	U	1	U	1	U	1	U	1	U
1,3,5-Trimethylbenzene (Mesitylene)	5	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	3	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	3	1	U	1	U	1	U	1	U	1	U
2-Hexanone	50	5	U	5	U	5	U	5	U	5	U
Acetone	50	5	U	5	U	5	U	5	U	5	U
Benzene	1	1	U	1	U	1	U	1	U	1	U
Bromochloromethane	5	1	U	1	U	1	U	1	U	1	U
Bromodichloromethane	50	1	U	1	U	1	U	1	U	1	U
Bromoform	50	1	U	1	U	1	U	1	U	1	U
Bromomethane	5	1	UJ	1	UJ	1	UJ	1	UJ	1	UJ
Carbon Disulfide	60	1	U	1	U	1	U	1	U	1	U
Carbon Tetrachloride	5	1	U	1	U	1	U	1	U	1	U
Chlorobenzene	5	1	U	1	U	1	U	1	U	1	U
Chloroethane	5	1	U	1	U	1	U	1	U	1	U
Chloroform	7	0.46	J	1	U	1	U	0.49	J	1	U
Chloromethane	5	1	UJ	1	UJ	1	UJ	1	UJ	1	UJ
Cis-1,2-Dichloroethylene	5	1	U	1	U	1	U	1	U	1	U
Cis-1,3-Dichloropropene	NS	1	U	1	U	1	U	1	U	1	U
Cyclohexane	NS	1	U	1	U	1	U	1	U	1	U
Dibromochloromethane	50	1	U	1	U	1	U	1	U	1	U
Dichlorodifluoromethane	5	1	UJ	1	UJ	1	UJ	1	UJ	1	UJ
Ethylbenzene	5	1	U	1	U	1	U	1	U	1	U
Isopropylbenzene (Cumene)	5	1	U	1	U	1	U	1	U	1	U
M,P-Xylenes	5	1	U	1	U	1	U	1	U	1	U
Methyl Acetate	NS	5	U	5	U	5	U	5	U	5	U
Methyl Ethyl Ketone (2-Butanone)	50	5	U	5	U	5	U	5	U	5	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	5	U	5	U	5	U	5	U	5	U
Methylcyclohexane	NS	1	U	1	U	1	U	1	U	1	U
Methylene Chloride	5	1	U	1	U	1	U	1	U	1	U
N-Butylbenzene	5	1	U	1	U	1	U	1	U	1	U
N-Propylbenzene	5	1	U	1	U	1	U	1	U	1	U
O-Xylene (1,2-Dimethylbenzene)	5	1	U	1	U	1	U	1	U	1	U
Sec-Butylbenzene	5	1	U	1	U	1	U	1	U	1	U
Styrene	5	1	U	1	U	1	U	1	U	1	U
T-Butylbenzene	5	1	U	1	U	1	U	1	U	1	U
Tert-Butyl Methyl Ether	10	1	U	1	U	1	U	1	U	1	U
Tetrachloroethylene (PCE)	5	0.93	J	2		2		0.68	J	1.2	
Toluene	5	1	U	1	U	1	U	1	U	1	U
Trans-1,2-Dichloroethene	5	1	U	1	U	1	U	1	U	1	U
Trans-1,3-Dichloropropene	NS	1	U	1	U	1	U	1	U	1	U
Trichloroethylene (TCE)	5	0.37	J	0.32	J	1	U	1	U	1	U
Trichlorofluoromethane	5	1	U	1	U	1	U	1	U	1	U
Vinyl Chloride	2	1	UJ	1	UJ	1	UJ	1	UJ	1	UJ
Xylenes, Total	NS	2	U	2	U	2	U	2	U	2	U

Table 8
Groundwater Analytical Results for Volatile Organic Compounds
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

	AKRF Sample ID	RI-FB-GW-01_20220817	RI-TB-GW-01_20220817
	Laboratory Sample ID	460-264036-6	460-264036-7
	Date Sampled	8/17/2022	8/17/2022
	Unit	µg/L	µg/L
	Dilution Factor	1	1
Compound	**AWQSGV**	CONC Q	CONC Q
1,1,1-Trichloroethane	5	1 U	1 U
1,1,2,2-Tetrachloroethane	5	1 U	1 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	5	1 U	1 U
1,1,2-Trichloroethane	1	1 U	1 U
1,1-Dichloroethane	5	1 U	1 U
1,1-Dichloroethene	5	1 U	1 U
1,2,3-Trichlorobenzene	5	1 U	1 U
1,2,4-Trichlorobenzene	5	1 U	1 U
1,2,4-Trimethylbenzene	5	1 U	1 U
1,2-Dibromo-3-Chloropropane	0.04	1 U	1 U
1,2-Dibromoethane (Ethylene Dibromide)	0.0006	1 U	1 U
1,2-Dichlorobenzene	3	1 U	1 U
1,2-Dichloroethane	0.6	1 U	1 U
1,2-Dichloropropane	1	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	5	1 U	1 U
1,3-Dichlorobenzene	3	1 U	1 U
1,4-Dichlorobenzene	3	1 U	1 U
2-Hexanone	50	5 U	5 U
Acetone	50	5 U	5 U
Benzene	1	1 U	1 U
Bromochloromethane	5	1 U	1 U
Bromodichloromethane	50	1 U	1 U
Bromoform	50	1 U	1 U
Bromomethane	5	1 UJ	1 UJ
Carbon Disulfide	60	1 U	1 U
Carbon Tetrachloride	5	1 U	1 U
Chlorobenzene	5	1 U	1 U
Chloroethane	5	1 U	1 U
Chloroform	7	1 U	1 U
Chloromethane	5	1 UJ	1 UJ
Cis-1,2-Dichloroethylene	5	1 U	1 U
Cis-1,3-Dichloropropene	NS	1 U	1 U
Cyclohexane	NS	1 U	1 U
Dibromochloromethane	50	1 U	1 U
Dichlorodifluoromethane	5	1 UJ	1 UJ
Ethylbenzene	5	1 U	1 U
Isopropylbenzene (Cumene)	5	1 U	1 U
M,P-Xylenes	5	1 U	1 U
Methyl Acetate	NS	5 U	5 U
Methyl Ethyl Ketone (2-Butanone)	50	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	5 U	5 U
Methylcyclohexane	NS	1 U	1 U
Methylene Chloride	5	0.73 J	1 U
N-Butylbenzene	5	1 U	1 U
N-Propylbenzene	5	1 U	1 U
O-Xylene (1,2-Dimethylbenzene)	5	1 U	1 U
Sec-Butylbenzene	5	1 U	1 U
Styrene	5	1 U	1 U
T-Butylbenzene	5	1 U	1 U
Tert-Butyl Methyl Ether	10	1 U	1 U
Tetrachloroethylene (PCE)	5	1 U	1 U
Toluene	5	1 U	1 U
Trans-1,2-Dichloroethene	5	1 U	1 U
Trans-1,3-Dichloropropene	NS	1 U	1 U
Trichloroethylene (TCE)	5	1 U	1 U
Trichlorofluoromethane	5	1 U	1 U
Vinyl Chloride	2	1 UJ	1 UJ
Xylenes, Total	NS	2 U	2 U

Table 9
Groundwater Analytical Results for Semivolatile Organic Compounds
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

	AKRF Sample ID	RI-MW-01_20220817	RI-MW-03_20220817	RI-MW-X_20220817	RI-MW-04_20220817	RI-MW-05_20220817	RI-FB-GW-01_20220817
	Laboratory Sample ID	460-264036-1	460-264036-2	460-264036-5	460-264036-3	460-264036-4	460-264036-6
	Date Sampled	8/17/2022	8/17/2022	8/17/2022	8/17/2022	8/17/2022	8/17/2022
	Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	Dilution Factor	1	1	1	1	1	1
Compound	**AWQSGV**	CONC Q	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	10 U
1,4-Dioxane (P-Dioxane)	NS	0.36	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	10 U
2,4,5-Trichlorophenol	NS	10 U	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	10 U
2,4-Dichlorophenol	5	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	50	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	10	40 U	40 U	40 U	40 U	40 U	40 U
2,4-Dinitrotoluene	5	10 U	10 U	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	5	2 U	2 U	2 U	2 U	2 U	2 U
2-Chloronaphthalene	10	10 U	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol	NS	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene	NS	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylphenol (O-Cresol)	NS	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitroaniline	5	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitrophenol	NS	10 U	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	10 U
3,3'-Dichlorobenzidine	5	10 U	10 U	10 U	10 U	10 U	10 U
3-Nitroaniline	5	10 U	10 U	10 U	10 U	10 U	10 U
4,6-Dinitro-2-Methylphenol	NS	20 U	20 U	20 U	20 U	20 U	20 U
4-Bromophenyl Phenyl Ether	NS	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloro-3-Methylphenol	NS	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloroaniline	5	10 UJ	10 U	10 U	10 U	10 U	10 U
4-Chlorophenyl Phenyl Ether	NS	10 U	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	10 U
4-Nitroaniline	5	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitrophenol	NS	20 U	20 U	20 U	20 U	20 U	20 U
Acenaphthene	20	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	NS	10 U	10 U	10 U	10 U	10 U	10 U
Acetophenone	NS	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	50	10 U	10 U	10 U	10 U	10 U	10 U
Atrazine	7.5	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	NS	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Benzo(a)Anthracene	0.002	1 U	1 U	1 U	1 U	1 U	1 U
Benzo(a)Pyrene	ND	1 U	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	2 U
Benzo(g,h,i)Perylene	NS	10 U	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	1 U
Benzyl Butyl Phthalate	50	10 U	10 U	10 U	10 U	10 U	10 U
Biphenyl (Diphenyl)	5	10 U	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	10 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	1	1 U	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	10 U
Bis(2-Ethylhexyl) Phthalate	5	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	NS	10 U	10 U	10 U	10 U	10 U	10 U
Carbazole	NS	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.002	2 U	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	1 U
Dibenzofuran	NS	10 U	10 U	10 U	10 U	10 U	10 U
Diethyl Phthalate	50	10 U	10 U	10 U	10 U	10 U	10 U
Dimethyl Phthalate	50	10 U	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	10 U
Di-N-Octylphthalate	50	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	50	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	50	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobenzene	0.04	1 U	1 U	1 U	1 U	1 U	1 U
Hexachlorobutadiene	0.5	1 U	1 U	1 U	1 U	1 U	1 U
Hexachlorocyclopentadiene	5	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	5	2 U	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	2 U
Isophorone	50	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	10	2 U	2 U	2 U	2 U	2 U	2 U
Nitrobenzene	0.4	1 U	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	1 U
N-Nitrosodiphenylamine	50	10 U	10 U	10 U	10 U	10 U	10 U
Pentachlorophenol	NS	20 U	20 U	20 U	20 U	20 U	20 U
Phenanthrene	50	10 U	10 U	10 U	10 U	10 U	10 U
Phenol	1	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	50	10 U	10 U	10 U	10 U	10 U	10 U

Table 10
Groundwater Analytical Results of Total Metals
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

	AKRF Sample ID	RI-MW-01_20220817	RI-MW-03_20220817	RI-MW-X_20220817	RI-MW-04_20220817	RI-MW-05_20220817	RI-FB-GW-01_20220817
	Laboratory Sample ID	460-264036-1	460-264036-2	460-264036-5	460-264036-3	460-264036-4	460-264036-6
	Date Sampled	8/17/2022	8/17/2022	8/17/2022	8/17/2022	8/17/2022	8/17/2022
	Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	Dilution Factor	1	1	1	1	1	1
Compound	**AWQSGV**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	177	563	637	260	509	40 U
Antimony	3	2 U	2 U	2 U	2 U	2 U	2 U
Arsenic	25	2 U	2 U	2 U	2 U	2 U	2 U
Barium	1,000	87.9	84.2	91.1	71.6	38.1	4 U
Beryllium	3	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Cadmium	5	2 U	1.4 J	1.4 J	2 U	2 U	2 U
Calcium	NS	60,800	80,100	83,100	70,900	47,200	500 U
Chromium, Total	50	4 U	4 U	4 U	4 U	4 U	4 U
Cobalt	NS	4 U	1.3 J	1.5 J	4 U	1 J	4 U
Copper	200	4.8	4 U	4 U	4 U	4 U	4 U
Iron	**300**	248	**1,140**	**1,280**	**664**	**1,040**	120 U
Lead	25	0.92 J	1.4	1.9	1.2 U	1.5	1.2 U
Magnesium	35,000	8,450	17,600	18,200	11,700	5,150	200 U
Manganese	**300**	30.9	**381**	**399**	40.9	160	8 U
Mercury	0.7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	100	4 UJ	2.7 J	3.3 J	1.1 J	1.4 J	4 U
Potassium	NS	9,720	9,530	9,540	12,700	7,730	200 U
Selenium	10	0.67 J	1.3 J	1.1 J	1.3 J	1.8 J	2.5 U
Silver	50	2 U	2 U	2 U	2 U	2 U	2 U
Sodium	**20,000**	**123,000**	**210,000**	**211,000**	**146,000**	**95,000**	500 U
Thallium	0.5	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Vanadium	NS	4 U	1.2 J	1.3 J	4 U	1.1 J	4 U
Zinc	2,000	16 U	20.8	24.8	16 U	16 U	16 U

Table 11
Groundwater Analytical Results of Dissolved Metals
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

	AKRF Sample ID	RI-MW-01_20220817	RI-MW-03_20220817	RI-MW-X_20220817	RI-MW-04_20220817	RI-MW-05_20220817	RI-FB-GW-01_20220817
	Laboratory Sample ID	460-264036-1	460-264036-2	460-264036-5	460-264036-3	460-264036-4	460-264036-6
	Date Sampled	8/17/2022	8/17/2022	8/17/2022	8/17/2022	8/17/2022	8/17/2022
	Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	Dilution Factor	1	1	1	1	1	1
Compound	**AWQSGV**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	40 U	40 U	40 U	40 U	40 U	40 U
Antimony	3	2 UJ	2 U	2 U	2 U	2 U	2 U
Arsenic	25	2 U	2 U	2 U	2 U	2 U	2 U
Barium	1,000	83.8	81.3	78.7	70.5	35.6	4 U
Beryllium	3	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Cadmium	5	2 U	1.1 J	1.1 J	2 U	2 U	2 U
Calcium	NS	59,300	79,400	79,900	69,700	46,500	500 U
Chromium, Total	50	4 U	4 U	4 U	4 U	4 U	4 U
Cobalt	NS	4 U	4 U	4 U	4 U	4 U	4 U
Copper	200	9.8 J	4 U	4 U	4 U	4 U	4 U
Iron	300	120 U	120 U	120 U	120 U	120 U	120 U
Lead	25	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Magnesium	35,000	8,680	18,900	18,500	12,100	5,220	200 U
Manganese	300	11.9 J	257	256	11.7	94.8	8 U
Mercury	0.7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	100	65.2 JL	1.1 J	1.2 J	4 U	4 U	4 U
Potassium	NS	9,640	9,460	9,580	12,900	7,630	200 U
Selenium	10	1 J	1.1 J	1.3 J	1.5 J	1.4 J	2.5 U
Silver	50	2 U	2 U	2 U	2 U	2 U	2 U
Sodium	**20,000**	**130,000**	**229,000**	**228,000**	**157,000**	**98,900**	500 U
Thallium	0.5	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Vanadium	NS	4 U	4 U	4 U	4 U	4 U	4 U
Zinc	2,000	16 U	15.2 J	15.3 J	16 U	16 U	16 U

Table 12
Groundwater Analytical Results of Polychlorinated Bipyhenols
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

	AKRF Sample ID	RI-MW-01_20220817	RI-MW-03_20220817	RI-MW-X_20220817	RI-MW-04_20220817	RI-MW-05_20220817	RI-FB-GW-01_20220817
	Laboratory Sample ID	460-264036-1	460-264036-2	460-264036-5	460-264036-3	460-264036-4	460-264036-6
	Date Sampled	8/17/2022	8/17/2022	8/17/2022	8/17/2022	8/17/2022	8/17/2022
	Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	Dilution Factor	1	1	1	1	1	1
Compound	**AWQSGV**	CONC Q	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	0.4 U
PCB-1221 (Aroclor 1221)	NS	0.4 U	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	0.4 U
PCB-1242 (Aroclor 1242)	NS	0.4 U	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	0.4 U
PCB-1254 (Aroclor 1254)	NS	0.4 U	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	0.4 U
PCB-1262 (Aroclor 1262)	NS	0.4 U	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	0.4 U
Total PCBs	0.09	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U

Table 13
Groundwater Results for Pesticides
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

	AKRF Sample ID	RI-MW-01_20220817	RI-MW-03_20220817	RI-MW-X_20220817	RI-MW-04_20220817	RI-MW-05_20220817	RI-FB-GW-0
	Laboratory Sample ID	460-264036-1	460-264036-2	460-264036-5	460-264036-3	460-264036-4	460-26
	Date Sampled	8/17/2022	8/17/2022	8/17/2022	8/17/2022	8/17/2022	8/17/
	Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg
	Dilution Factor	1	1	1	1	1	1
Compound	**AWQSGV**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC
Aldrin	ND	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.01	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02
Alpha Endosulfan	NS	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02
Beta Bhc (Beta Hexachlorocyclohexane)	0.04	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02
Beta Endosulfan	NS	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02
cis-Chlordane	NS	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02
Delta BHC (Delta Hexachlorocyclohexane)	0.04	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02
Dieldrin	0.004	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02
Endosulfan Sulfate	NS	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02
Endosulfans ABS	NS	NR	NR	NR	NR	NR	0
Endrin	ND	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02
Endrin Aldehyde	5	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02
Endrin Ketone	5	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02
Gamma Bhc (Lindane)	0.05	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02
Heptachlor	0.04	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02
Heptachlor Epoxide	0.03	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02
Methoxychlor	35	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02
P,P'-DDD	0.3	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02
P,P'-DDE	0.2	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02
P,P'-DDT	0.2	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02
Toxaphene	0.06	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5

Table 13
Groundwater Results for Pesticides
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

	AKRF Sample ID	1_20220817
	Laboratory Sample ID	4036-6
	Date Sampled	2022
	Unit	l/L
	Dilution Factor	l
Compound	**AWQSGV**	Q
Aldrin	ND	U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.01	U
Alpha Endosulfan	NS	U
Beta Bhc (Beta Hexachlorocyclohexane)	0.04	U
Beta Endosulfan	NS	U
cis-Chlordane	NS	U
Delta BHC (Delta Hexachlorocyclohexane)	0.04	U
Dieldrin	0.004	U
Endosulfan Sulfate	NS	U
Endosulfans ABS	NS	U
Endrin	ND	U
Endrin Aldehyde	5	U
Endrin Ketone	5	U
Gamma Bhc (Lindane)	0.05	U
Heptachlor	0.04	U
Heptachlor Epoxide	0.03	U
Methoxychlor	35	U
P,P'-DDD	0.3	U
P,P'-DDE	0.2	U
P,P'-DDT	0.2	U
Toxaphene	0.06	U

Table 14
Groundwater Analytical Results of PFAS
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

	AKRF Sample ID	RI-MW-01_20220817	RI-MW-03_20220817	RI-MW-X_20220817	RI-MW-04_20220817	RI-MW-05_20220817
	Laboratory Sample ID	460-264021-1	460-264021-2	460-264021-5	460-264021-3	460-264021-4
	Date Sampled	8/17/2022	8/17/2022	8/17/2022	8/17/2022	8/17/2022
	Unit	ppt	ppt	ppt	ppt	ppt
	Dilution Factor	1	1	1	1	1
Compound	**NYSDEC PFAS Screening Level**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
6:2 Fluorotelomer sulfonate	100	1.79 J	4.31 U	4.64 U	5.25 U	24.5 U
8:2 Fluorotelomer sulfonate	100	1.7 U	1.72 U	1.86 U	2.1 U	9.78 U
N-ethyl perfluorooctanesulfonamidoacetic acid	100	4.24 U	4.31 U	4.64 U	5.25 U	24.5 U
N-methyl perfluorooctanesulfonamidoacetic acid	100	4.24 U	4.31 U	4.64 U	5.25 U	24.5 U
Perfluorobutanesulfonic acid	100	4.89	6.46	6.98	6.43	9.96
Perfluorobutanoic acid	100	11.3	13.2	13	15.2	16.2 J
Perfluorodecanesulfonic acid	100	1.7 U	1.72 U	1.86 U	2.1 U	9.78 U
Perfluorodecanoic acid	100	0.44 J	1.72 U	1.86 U	1.04 J	9.78 U
Perfluorododecanoic acid	100	1.7 U	1.72 U	1.86 U	2.1 U	9.78 U
Perfluoroheptanesulfonic acid	100	0.64 J	0.71 J	0.9 J	0.73 J	9.78 U
Perfluoroheptanoic acid	100	8.5	7.42	7.55	13.7	7 J
Perfluorohexanesulfonic acid	100	4.39	7.58	7.44	5.97	3.9 J
Perfluorohexanoic acid	100	12.1	13.9	14.2	24	18.7
Perfluorononanoic acid	100	2.5	5.04	4.9	3	2.79 J
Perfluorooctanesulfonic acid	***10***	***20.6***	***33.7***	***33.2***	***27.2***	***26.7***
Perfluorooctanoic acid	***10***	***30.4***	***31.3***	***30***	***46.1***	***25.2***
Perfluoropentanoic acid	100	16.9	17	17	31.2	23.9
Perfluorotetradecanoic acid	100	1.7 U	1.72 U	1.86 U	2.1 U	9.78 U
Perfluorotridecanoic acid	100	1.7 UJ	1.72 U	1.86 U	2.1 U	9.78 U
Perfluoroundecanoic acid	100	0.54 J	1.49 J	1.52 J	2.1 U	9.78 U
Perfluroroctanesulfonamide	100	1.7 U	1.72 U	1.86 U	1.01 J	9.78 U

Table 14
Groundwater Analytical Results of PFAS
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

	AKRF Sample ID	RI-FB-GW-01_20220817
	Laboratory Sample ID	460-264021-6
	Date Sampled	8/17/2022
	Unit	ppt
	Dilution Factor	1
Compound	**NYSDEC PFAS Screening Level**	CONC Q
6:2 Fluorotelomer sulfonate	100	4.11 U
8:2 Fluorotelomer sulfonate	100	1.64 U
N-ethyl perfluorooctanesulfonamidoacetic acid	100	4.11 U
N-methyl perfluorooctanesulfonamidoacetic acid	100	4.11 U
Perfluorobutanesulfonic acid	100	1.64 U
Perfluorobutanoic acid	100	4.11 U
Perfluorodecanesulfonic acid	100	1.64 U
Perfluorodecanoic acid	100	1.64 U
Perfluorododecanoic acid	100	1.64 U
Perfluoroheptanesulfonic acid	100	1.64 U
Perfluoroheptanoic acid	100	1.64 U
Perfluorohexanesulfonic acid	100	1.64 U
Perfluorohexanoic acid	100	1.64 U
Perfluorononanoic acid	100	1.64 U
Perfluorooctanesulfonic acid	***10***	1.64 U
Perfluorooctanoic acid	***10***	1.64 U
Perfluoropentanoic acid	100	1.64 U
Perfluorotetradecanoic acid	100	1.64 U
Perfluorotridecanoic acid	100	1.64 U
Perfluoroundecanoic acid	100	1.64 U
Perfluroroctanesulfonamide	100	1.64 U

Table 15
Soil Vapor Analytical Results for Volatile Organic Compounds
Jamaica Works - Remedia Investigation
95-25 149th Street, Queens, NY

Sample ID	RI-SV-01_20220728	RI-SV-02_20220728	RI-SV-03_20220728	RI-SV-03_20220728	RI-SV-04_20220728	RI-SV-05_20220728	RI-SV-06_20220728
Lab Sample ID	200-64356-1	200-64356-2	200-64356-3	200-64356-3	200-64356-4	200-64356-5	200-64356-6
Date Sampled	7/28/2022	7/28/2022	7/28/2022	7/28/2022	7/28/2022	7/28/2022	7/28/2022
Unit	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3
Dilution Factor	1	1	1	5	1	1	1
Compound	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	0.79 J	1.1 U	1.1 U	NR	1.1 U	1.1 U	0.26 J
1,1,2,2-Tetrachloroethane	1.4 U	1.4 U	1.4 U	NR	1.4 U	1.4 U	1.4 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	0.42 J	0.42 J	1.5 U	NR	1.5 U	0.43 J	1.5 U
1,1,2-Trichloroethane	1.1 U	1.1 U	1.1 U	NR	1.1 U	1.1 U	1.1 U
1,1-Dichloroethane	0.81 U	0.81 U	0.81 U	NR	0.81 U	0.81 U	0.81 U
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	NR	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	3.7 U	3.7 U	3.7 U	NR	3.7 U	3.7 U	3.7 U
1,2,4-Trimethylbenzene	12	29	17	NR	19	10	6.9
1,2-Dibromoethane (Ethylene Dibromide)	1.5 U	1.5 U	1.5 U	NR	1.5 U	1.5 U	1.5 U
1,2-Dichlorobenzene	1.2 U	1.2 U	1.2 U	NR	1.2 U	1.2 U	1.2 U
1,2-Dichloroethane	0.81 U	0.81 U	0.81 U	NR	0.81 U	0.81 U	0.81 U
1,2-Dichloropropane	0.92 U	0.92 U	0.92 U	NR	0.92 U	0.92 U	0.92 U
1,2-Dichlorotetrafluoroethane	1.4 U	1.4 U	1.4 U	NR	1.4 U	1.4 U	1.4 U
1,3,5-Trimethylbenzene (Mesitylene)	3.6	8.4	5.7	NR	5.2	2.5	2
1,3-Butadiene	0.44 U	0.44 U	0.51	NR	0.44 U	1.3	0.44 U
1,3-Dichlorobenzene	1.2 U	1.1 J	1.2 U	NR	1.2 U	1.2 U	3.9
1,4-Dichlorobenzene	1.2 U	1.1 J	1.2 U	NR	1.2 U	1.1 J	0.72 J
2,2,4-Trimethylpentane	0.39 J	9.6	5	NR	1.3	4.7	0.18 J
2-Chlorotoluene	1 U	1 U	1 U	NR	1 U	1 U	1 U
2-Hexanone	2 U	2 U	2 U	NR	2 U	2 U	2 U
4-Ethyltoluene	2.6	8.7	4.9	NR	3.8	1.5	1
Acetone	16	12	38	NR	17	35	14
Allyl Chloride (3-Chloropropene)	1.6 U	1.6 U	1.6 U	NR	1.6 U	1.6 U	1.6 U
Benzene	1.2	11	5.6	NR	1.1	4.7	0.35 J
Benzyl Chloride	1 U	1 U	1 U	NR	1 U	1 U	1 U
Bromodichloromethane	1.3 U	1.3 U	1.3 U	NR	1.3 U	1.3 U	1.3 U
Bromoform	2.1 U	2.1 U	2.1 U	NR	2.1 U	2.1 U	2.1 U
Bromomethane	0.78 U	0.78 U	0.78 U	NR	0.78 U	0.78 U	0.78 U
Butane	6.3	15	9.2	NR	18	8.9	1.2 U
Carbon Disulfide	4.8	0.85 J	2.3	NR	5.8	1.6 U	1.1 J
Carbon Tetrachloride	1.7	0.32	0.36	NR	0.37	0.31	0.33
Chlorobenzene	0.38 J	0.59 J	0.24 J	NR	0.43 J	0.38 J	0.44 J
Chlorodifluoromethane	1.2 J	1.2 J	1 J	NR	0.95 J	1.2 J	1.4 J
Chloroethane	1.3 U	1.3 U	1.3 U	NR	1.3 U	1.3 U	1.3 U
Chloroform	3.4	0.22 J	0.46 J	NR	0.75 J	1.4	0.98 U
Chloromethane	0.25 J	0.51 J	0.6 J	NR	0.38 J	0.77 J	0.52 J
Cis-1,2-Dichloroethylene	0.2 U	0.2 U	0.2 U	NR	0.2 U	0.2 U	0.23
Cis-1,3-Dichloropropene	0.91 U	0.91 U	0.91 U	NR	0.91 U	0.91 U	0.91 U
Cyclohexane	3	5.2	2.5	NR	1	2.2	0.69 U
Cymene	0.58 J	7.2	0.69 J	NR	0.73 J	5.4	3.7
Dibromochloromethane	1.7 U	1.7 U	1.7 U	NR	1.7 U	1.7 U	1.7 U
Dichlorodifluoromethane	1.5 J	1.7 J	1.9 J	NR	1.6 J	1.7 J	2 J
Ethylbenzene	Sv	28	8.2	NR	2.5	3.2	1
Hexachlorobutadiene	2.1 U	2.1 U	2.1 U	NR	2.1 U	2.1 U	2.1 U
Isopropanol	5.4 J	11 J	9 J	NR	12 U	17	7.6 J
Isopropylbenzene (Cumene)	0.98 U	3.2	3.2	NR	0.98 U	0.98 U	0.34 J
M,P-Xylenes	4.7	110	25	NR	11	12	4.6
Methyl Ethyl Ketone (2-Butanone)	3.3	2.5	3.9	NR	2.4	6.6	2.6
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	2 U	1.3 J	1.1 J	NR	2 U	1.5 J	0.93 J
Methyl Methacrylate	2 U	2 U	2 U	NR	2 U	2 U	2 U
Methylene Chloride	9.1	2	1.7 U	NR	1.7 U	1.4 J	1 J
Naphthalene	2.6 U	1 J	2.6 U	NR	1.3 J	2.1 J	1.7 J
N-Butylbenzene	1.1 U	0.8 J	0.89 J	NR	0.51 J	1.1 U	0.37 J
N-Heptane	4.2	26	6.2	NR	4.9	4.3	0.52 J
N-Hexane	1.2 J	28	6.1	NR	2.7	7.4	1.8 U
N-Propylbenzene	1.5	6.1	3.2	NR	2.2	1.1	0.78 J
O-Xylene (1,2-Dimethylbenzene)	2.4	37	11	NR	5.7	5.1	2.5
Sec-Butylbenzene	1.1 U	1.1 U	0.46 J	NR	1.1 U	1.1 U	0.21 J
Styrene	1	2.6	1.2	NR	1.5	1.8	1
T-Butylbenzene	1.1 U	1.1 U	1.1 U	NR	1.1 U	1.1 U	1.1 U
Tert-Butyl Alcohol	15 U	4.6 J	6.7 J	NR	15 U	15 U	15 U
Tert-Butyl Methyl Ether	0.72 U	0.72 U	0.72 U	NR	0.72 U	0.72 U	0.72 U
Tetrachloroethylene (PCE)	110	3.3	NR	530 D	5.2	6.3	29
Tetrahydrofuran	15 U	15 U	15 U	NR	15 U	15 U	15 U
Toluene	8.5	130	26	NR	6.4	16	2
Trans-1,2-Dichloroethene	0.79 U	0.79 U	0.79 U	NR	0.79 U	0.79 U	0.79 U
Trans-1,3-Dichloropropene	0.91 U	0.91 U	0.91 U	NR	0.91 U	0.91 U	0.91 U
Trichloroethylene (TCE)	50	0.26	1.8	NR	0.2 U	0.53	0.2 U
Trichlorofluoromethane	0.97 J	0.97 J	0.95 J	NR	1 J	1 J	0.96 J
Vinyl Bromide	0.87 U	0.87 U	0.87 U	NR	0.87 U	0.87 U	0.87 U
Vinyl Chloride	0.2 U	0.2 U	0.2 U	NR	0.2 U	0.2 U	0.2 U

Table 15
Soil Vapor Analytical Results for Volatile Organic Compounds
Jamaica Works - Remedia Investigation
95-25 149th Street, Queens, NY

Sample ID	RI-SV-07_20220728	RI-SV-07_20220728	RI-SV-08_20220728	RI-SV-08_20220728	RI-SV-09_20220728
Lab Sample ID	200-64356-7	200-64356-7	200-64356-8	200-64356-8	200-64356-9
Date Sampled	7/28/2022	7/28/2022	7/28/2022	7/28/2022	7/28/2022
Unit	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3
Dilution Factor	1	4	1	5	1
Compound	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1-Trichloroethane	1.1 U	NR	1.1 U	NR	1.1 U
1,1,2,2-Tetrachloroethane	1.4 U	NR	1.4 U	NR	1.4 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon TF)	1.5 U	NR	1.5 U	NR	0.45 J
1,1,2-Trichloroethane	1.1 U	NR	1.1 U	NR	1.1 U
1,1-Dichloroethane	0.81 U	NR	0.81 U	NR	0.25 J
1,1-Dichloroethene	0.2 U	NR	0.2 U	NR	0.2 U
1,2,4-Trichlorobenzene	3.7 U	NR	3.7 U	NR	3.7 U
1,2,4-Trimethylbenzene	16	NR	45	NR	18
1,2-Dibromoethane (Ethylene Dibromide)	1.5 U	NR	1.5 U	NR	1.5 U
1,2-Dichlorobenzene	1.2 U	NR	1.2 U	NR	1.2 U
1,2-Dichloroethane	0.81 U	NR	0.81 U	NR	0.81 U
1,2-Dichloropropane	0.92 U	NR	0.92 U	NR	0.92 U
1,2-Dichlorotetrafluoroethane	1.4 U	NR	1.4 U	NR	1.4 U
1,3,5-Trimethylbenzene (Mesitylene)	4.7	NR	13	NR	5.3
1,3-Butadiene	0.44 U	NR	3.6	NR	0.44 U
1,3-Dichlorobenzene	1.2 U	NR	14	NR	1.2 U
1,4-Dichlorobenzene	1.2 U	NR	1.2	NR	1.2 U
2,2,4-Trimethylpentane	1.9	NR	17	NR	1
2-Chlorotoluene	1 U	NR	1 U	NR	1 U
2-Hexanone	2.3	NR	6.2	NR	1.3 J
4-Ethyltoluene	3.1	NR	13	NR	3.6
Acetone	NR	180 D	NR	170 D	39
Allyl Chloride (3-Chloropropene)	1.6 U	NR	1.6 U	NR	1.6 U
Benzene	3	NR	20	NR	0.69
Benzyl Chloride	1 U	NR	1 U	NR	1 U
Bromodichloromethane	1.3 U	NR	1.3 U	NR	1.3 U
Bromoform	2.1 U	NR	2.1 U	NR	2.1 U
Bromomethane	0.78 U	NR	0.78 U	NR	0.78 U
Butane	1.2 U	NR	24	NR	0.82 J
Carbon Disulfide	6.5	NR	4.3	NR	5
Carbon Tetrachloride	0.22	NR	0.32	NR	0.3
Chlorobenzene	0.6 J	NR	0.8 J	NR	0.92 U
Chlorodifluoromethane	0.67 J	NR	0.8 J	NR	1.4 J
Chloroethane	1.3 U	NR	1.3 U	NR	1.3 U
Chloroform	0.41 J	NR	3.3	NR	58
Chloromethane	0.63 J	NR	1.4	NR	1 U
Cis-1,2-Dichloroethylene	0.2 U	NR	0.2 U	NR	1.7
Cis-1,3-Dichloropropene	0.91 U	NR	0.91 U	NR	0.91 U
Cyclohexane	1.1	NR	9.1	NR	0.71
Cymene	6.4	NR	6.6	NR	0.77 J
Dibromochloromethane	1.7 U	NR	1.7 U	NR	1.7 U
Dichlorodifluoromethane	1.4 J	NR	1.5 J	NR	12
Ethylbenzene	5.1	NR	43	NR	3.5
Hexachlorobutadiene	2.1 U	NR	2.1 U	NR	2.1 U
Isopropanol	15	NR	21	NR	7.5 J
Isopropylbenzene (Cumene)	0.98 U	NR	0.98 U	NR	0.98 U
M,P-Xylenes	21	NR	160	NR	15
Methyl Ethyl Ketone (2-Butanone)	14	NR	17	NR	4.5
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	1.6 J	NR	2 U	NR	2 U
Methyl Methacrylate	2 U	NR	2 U	NR	2 U
Methylene Chloride	1.7 U	NR	1.7 U	NR	1.7 U
Naphthalene	2.6 U	NR	4.9	NR	2 J
N-Butylbenzene	1.1 U	NR	1.1 U	NR	0.56 J
N-Heptane	4.3	NR	45	NR	4.8
N-Hexane	2	NR	44	NR	1.1 J
N-Propylbenzene	2.2	NR	9.1	NR	2.5
O-Xylene (1,2-Dimethylbenzene)	9.2	NR	58	NR	8
Sec-Butylbenzene	1.1 U	NR	1.1 U	NR	1.1 U
Styrene	0.85 U	NR	3	NR	0.99
T-Butylbenzene	1.1 U	NR	1.1 U	NR	1.1 U
Tert-Butyl Alcohol	39	NR	38	NR	21
Tert-Butyl Methyl Ether	0.72 U	NR	0.72 U	NR	0.72 U
Tetrachloroethylene (PCE)	120	NR	8	NR	150
Tetrahydrofuran	15 U	NR	15 U	NR	15 U
Toluene	16	NR	NR	210 D	6.7
Trans-1,2-Dichloroethene	0.79 U	NR	0.79 U	NR	0.79 U
Trans-1,3-Dichloropropene	0.91 U	NR	0.91 U	NR	0.91 U
Trichloroethylene (TCE)	1.2	NR	0.74	NR	8.9
Trichlorofluoromethane	1 J	NR	1 J	NR	1.3
Vinyl Bromide	0.87 U	NR	0.87 U	NR	0.87 U
Vinyl Chloride	0.2 U	NR	0.2 U	NR	0.2 U

Tables 2-15
Notes
Jamaica Works - Remedial Investigation
95-25 149th Street, Queens, NY

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.

mg/kg : milligrams per kilogram

ppb : parts per billion

ppt : parts per trillion

µg/L : micrograms per liter

µg/m^3 : 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 (RRSCOs) 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 NYSDEC's Part 375 Remedial Programs Issued January 2021.

Exceedances of NYSDEC PFAS Unrestricted Use Guidance Values (UUGVs) are highlighted in bold font.
Exceedances of NYSDEC PFAS Restricted Residential Guidance Values (RRGVs) are highlighted in gray shading.
Exceedances of NYSDEC PFAS Groundwater Screening Levels are highlighted in bold italic font.

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 NYSDEC Class GA AWQSGVs are highlighted in bold font.

DUPLICATES

RI-SB-X_13-15_20220726 is a blind duplicate of sample RI-SB-04_13-15_20220726
RI-SB-X_4-6_20220727 is a blind duplicate of sample RI-SB-06_4-6_20220727
RI-MW-X_20220817 is a blind duplicate of sample RI-MW-03_20220817

APPENDIX A
PREVIOUS ENVIRONMENTAL REPORTS

APPENDIX B
GEOPHYSICAL INVESTIGATION REPORT

GEOPHYSICAL INVESTIGATION REPORT

PERFORMED AT:

95-25 149th Street ,
Queens , NY

PREPARED FOR:

John Sulich
AKRF
440 Park Avenue South 7th Floor,
New York ,NY 10016
Reporting: jsulich@akrf.com

PREPARED BY:

Aidan O'Sullivan
Geophysical Technician
Enviroprobe Service, Inc.
81 Marter Avenue
Mount Laurel, NJ 08054
(856) 858-8584
(800) 596-7472

July 28, 2022

1.0 INTRODUCTION

Enviroprobe Service, Inc. (Enviroprobe) is an environmental investigation services firm which provides monitoring well installation (HSA), Geoprobe (DPT) drilling services and Environmental & Engineering Geophysics (EEG) services to the environmental consulting and engineering community.

Enviroprobe conducted a subsurface geophysical investigation at the subject property within client-specified areas of concern. Due to conditions and objectives, the investigation utilized a GSSI UtilityScan HS cart-mounted Ground Penetrating Radar (GPR) unit with a 350 MHz antenna, a Fisher TW-6 metallic locator, a Radiodetection RD7000TX3 multi-frequency transmitter, and a Radiodetection RD7000PXL receiver.

Ground penetrating radar (commonly called GPR) is a geophysical method that has been developed over the past thirty years for shallow, high-resolution, subsurface investigations of the earth. GPR uses high frequency pulsed electromagnetic waves (generally 10 MHz to 2,000 MHz) to acquire subsurface information. An EM wave is propagated downward into the ground by a transmitting antenna. Where abrupt changes in electrical properties occur in the subsurface, a portion of the energy is reflected back to the surface. This reflected wave is detected by a receiver antenna and transmitted to a control unit for real time processing and display. The penetration depth of the GSSI unit varies from several inches to tens of feet according to site-specific conditions. The penetration depth decreases with increased soil conductivity. The penetration depth is the greatest in ice, dry sands, and fine gravels. Clayey, highly saline or saturated soils, areas covered by concrete, foundry slag, or other highly conductive materials greatly reduce GPR penetration. GPR is a method that is commonly used for environmental, engineering, archaeological, and other shallow investigations.

The Fisher TW-6 metallic locator is designed to find pipes, cables and other metallic objects such as underground storage tanks (USTs). The TW-6 transmitter generates an electromagnetic field that induces electrical currents in the subsurface. These currents produce a secondary electromagnetic field that is measured by the TW-6 receiver. One surveyor can carry both the transmitter and receiver together to search for underground metallic objects, although the TW-6 response can also be affected by the electrical properties of non-metallic materials in the subsurface.

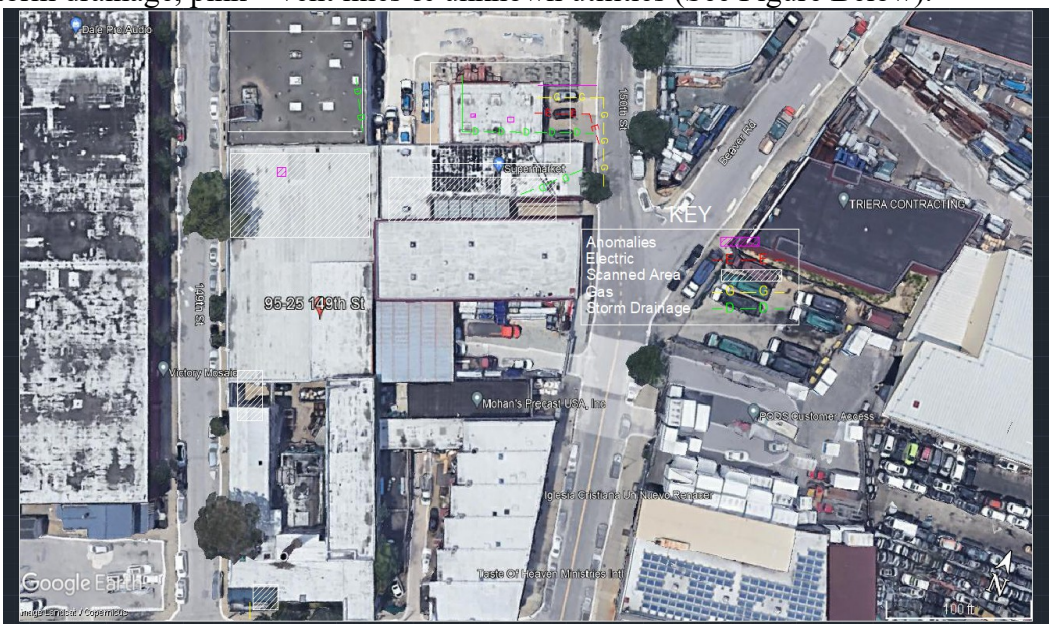
The Radiodetection (RD) transmitter and receiver are commonly used for pipe and cable locating. The multi-frequency transmitter can be directly connected, clamped, or used to induce a signal in a target line while the multi-frequency receiver is used to measure the signal from energized lines.

2.0 SCOPE OF WORK

On July 25, 2022, a geophysical technician from Enviroprobe Service Inc. was mobilized to the subject property to perform a geophysical investigation. The purpose of the investigation was to clear boring locations and detect possible anomalies and Possible UST's, and designate underground conduits/utilities in the client selected exterior portions of the subject property. The ground surface of the survey area consisted of asphalt, concrete, stone and natural soil surfaces. 75% of the site survey was conducted indoors.

3.0 SURVEY RESULTS

The survey was conducted using a cart-mounted GPR unit, a Fisher TW-6 metallic locator, and a RD unit. The RD unit was used to trace common utilities from sources in and around the survey area. The RD receiver was also used in the passive mode to search for live underground electrical power cables and other utilities emitting 60Hz electromagnetic signals. When possible, the locations of utilities were confirmed with the GPR. Designated utilities were marked on-site with spray paint using the following colors: blue – water, yellow – natural gas, red – electric, green – sanitary sewer & storm drainage, pink – vent lines & unknown utilities (See Figure Below).



The GPR and TW-6 were used in a grid pattern over all client specified areas of the site. Based on the results of the GPR and TW-6 surveys, no metallic anomalies That were consistent with UST's, vent piping, or product piping were detected on site (See Figure above)

4.0 LIMITATIONS

The client-selected areas contained obstructions including Factory equipment, materials, Reinforced concrete and vehicles. These objects prevented a thorough investigation of the spaces beneath and immediately adjacent to them.

Due to surface conditions and subsurface content, the GPR signal penetration was estimated at less than 3 ft in the majority of the survey area. This penetration was reduced in areas of concrete cover.

The TW-6 survey was kept up to 6 feet away from above ground objects containing metals depending on the sizes, shapes and positions of the metal objects. The TW-6 survey was not effective in areas with reinforced concrete.

Due to the dielectric properties of the subsurface, clay, plastic polymer, and fiberglass utilities may not have been detected.

All field services were conducted in compliance with the industry standard of care guidelines found in ASCE 38-02 (Level B).

5.0 WARRANTIES

The field observations and measurements reported herein are considered sufficient in detail and scope for this project. Enviroprobe Service, Inc. warrants that the findings and conclusions contained herein have been promulgated in accordance with generally accepted environmental engineering methods. There is a possibility that conditions may exist which could not be identified within the scope of this project and were not apparent during the site activities performed for this project.

Enviroprobe represents that the services were performed in a manner consistent with that level of care and skill ordinarily exercised by environmental consultants under similar circumstances. No other representations to Client, express or implied, and no warranty or guarantee is included or intended in this agreement, or in any report, document, or otherwise.

Enviroprobe Service, Inc. believes that the information provided in this report is reliable. However, Enviroprobe cannot warrant or guarantee that the information provided by others is complete or accurate. No other warranties or guarantees are implied or expressed.

GPR data is subject to signal anomalies and operator interpretation. The GPR data is intended to provide the locations of areas of concern requiring additional investigation or the approximate location of underground structures and utilities. Great care must be utilized when excavating and/or drilling around underground structures and utilities since

GPR data can only be used for estimation purposes and GPR data is subject to misinterpretation. Enviroprobe can not guarantee that utilities, post-tension cables, and/or rebar will not be incurred during drilling, cutting, coring, or excavating activities.

This report was prepared pursuant to the contract Enviroprobe has with the Client. That contractual relationship included an exchange of information about the property that was unique and between Enviroprobe and its client and serves as the basis upon which this report was prepared. Because of the importance of the communication between Enviroprobe and its client, reliance or any use of this report by anyone other than the Client, for whom it was prepared, is prohibited and therefore not foreseeable to Enviroprobe.

Reliance or use by any such third party without explicit authorization in the report does not make said third party a third party beneficiary to Enviroprobe contract with the Client. Any such unauthorized reliance on or use of this report, including any of its information or conclusions, will be at the third party's risk. For the same reasons, no warranties or representations, expressed or implied in this report, are made to any such third party.

APPENDIX C
SOIL BORING LOGS AND GROUNDWATER MONITORING WELL CONSTRUCTION LOGS

SOIL BORING AND WELL INSTALLATION LOG	Jamaica Works Queens, New York AKRF Project Number: 200278	Groundwater Monitoring Well ID: Sheet 1 of 2	RI-MW-01	Soil Boring ID:	RI-SB-01

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	DPP
Sampling Method:	5' Macro-cores
Driller:	Eastern
Weather:	80°F, Partly Cloudy
Logged by:	J. Sulich, AKRF

Drilling

Start Time: 11:00 **Finish Time:** 14:30

Date: 7/27/2022

Surface Condition: Concrete

Depth (feet)	Well Construction	Recovery (Inches)	Soil Boring Log	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
1	Locking J-plug and flush mount cover at grade.	30	Brown SAND, little Concrete, Gravel, trace Silt (FILL)	ND	DRY	ND	ND	RI-SB-01_0-2_20220727
2	Cement: 0' to 1' below grade			ND	DRY	ND	ND	
3	Backfill: 1' to 6' below grade			ND	DRY	ND	ND	
4	2" PVC riser: 0' to 10' below grade			ND	DRY	ND	ND	
5				ND	DRY	ND	ND	
6		55	Top 36": Brown SAND, some Concrete, little Ash, Gravel, trace Silt (FILL)	ND	DRY	ND	ND	
7	Bentonite seal: 6' to 8' below grade			ND	DRY	ND	ND	
8				ND	DRY	ND	ND	RI-SB-01_7-9_20220727
9	Sandpack filter: 8' to 25' below grade		Bottom 19": Brown SAND, little Gravel, trace Silt	ND	DRY	ND	ND	
10				ND	DRY	ND	ND	
11	0.020-inch slotted 2" PVC well screen: 10' to 25' below grade	60	Brown SAND, little Gravel, trace Silt.	ND	DRY	ND	ND	
12				ND	DRY	ND	ND	
13				ND	DRY	ND	ND	
14				ND	DRY	ND	ND	RI-SB-01_13-15_20220727
15				ND	DRY	ND	ND	
16								
17								
18								
19								
20								

Notes: Groundwater Depth Indicator

Groundwater measured at 19 feet below grade in RI-MW-01 on 07/28/2022.

Groundwater monitoring well installed to 25 feet below grade.

Notes: Soil samples analyzed for VOCs, SVOCs, PCBs, Pesticides, TAL Metals, Cyanide, Hex Chromium, PFAS, and 1,4 Dioxane.

Groundwater was not encountered at RI-SB-01.

End of soil boring at 15 feet below grade.

PID = photoionization detector **NAPL = non-aqueous phase liquid** **ppm = parts per million** **ND = not detected**

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING AND WELL INSTALLATION LOG	Jamaica Works Queens, New York AKRF Project Number: 200278	Groundwater Monitoring Well ID: Sheet 2 of 2	RI-MW-01	Soil Boring ID:	RI-SB-01

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	DPP
Sampling Method:	5' Macro-cores
Driller:	Eastern
Weather:	80°F, Partly Cloudy
Logged by:	J. Sulich, AKRF

Drilling

Start Time: 11:00 **Finish Time:** 14:30

Date: 7/27/2022

Depth (feet)	Well Construction	Surface Condition: Concrete	Recovery (Inches)	Soil Boring Log	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
21									
22									
23									
24		End cap: 25' below grade							
25									

Notes: ▼ Groundwater Depth Indicator

Groundwater measured at 19 feet below grade in RI-MW-01 on 07/28/2022.

Groundwater monitoring well installed to 25 feet below grade.

Notes: Soil samples analyzed for VOCs, SVOCs, PCBs, Pesticides, TAL Metals, Cyanide, Hex Chromium, PFAS, and 1,4 Dioxane.

Groundwater was not encountered at RI-SB-01.

End of soil boring at 15 feet below grade.

PID = photoionization detector **NAPL = non-aqueous phase liquid** **ppm = parts per million** **ND = not detected**

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

Jamaica Works
Queens, New York
AKRF Project Number: 200278

Soil Boring ID: **RI-SB-02**
Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Hand Auger
Sampling Method:	Hand Auger
Driller:	Eastern Environmental Solutions, Inc.
Weather:	80°F, Partly Cloudy
Logged By:	J. Sulich

Drilling
Start Time: 10:00 **Finish Time:** 10:30
Date: 7/27/2022

Depth (feet)	Recovery (Inches)	**Surface Condition:** Wood	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
1	36	Top 12" : VOID	ND	DRY	ND	ND	RI-SB-02_0-2_20220727
			ND	DRY	ND	ND	
2		36": Brown SAND, some Wood, little Refuse, Organics, trace Silt (FILL)	ND	DRY	ND	ND	RI-SB-02_2-4_20220727
3							
4			ND	DRY	ND	ND	

Notes: Soil sample analyzed for Soil samples analyzed for VOCs, SVOCs, PCBs, Pesticides, TAL Metals, Cyanide, Hex Chromium, PFAS, and 1,4 Dioxane.
Groundwater was not encountered at RI-SB-02.
End of soil boring at 4 feet below ground surface due to refusal.

PID = photoionization detector ppm = parts per million NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING AND WELL INSTALLATION LOG	Jamaica Works Queens, New York AKRF Project Number: 200278	Groundwater Monitoring Well ID: Sheet 1 of 2	RI-MW-03	Soil Boring ID:	RI-SB-03

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	DPP
Sampling Method:	5' Macro-cores
Driller:	Eastern
Weather:	85°F, Cloudy
Logged by:	J. Sulich, AKRF

Drilling

Start Time: 10:40 **Finish Time:** 12:30

Date: 7/25/2022

Surface Condition: Concrete

Well Construction:
- Locking J-plug and flush mount cover at grade.
- Cement: 0' to 1' below grade
- Backfill: 1' to 6' below grade
- 2" PVC riser: 0' to 10' below grade
- Bentonite seal: 6' to 8' below grade
- Sandpack filter: 8' to 25' below grade
- 0.020-inch slotted 2" PVC well screen: 10' to 25' below grade

Depth (feet)	Recovery (Inches)	Soil Boring Log	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
1	26	Top 7": Concrete (FILL)	ND	DRY	ND	ND	RI-SB-03_0-2_20220725
2		Middle 9": Dark brown SAND (FILL)	ND	DRY	ND	ND	
3			ND	DRY	ND	ND	
4		Bottom 10": Dark brown SAND, some Silt (FILL)	ND	DRY	ND	ND	
5			ND	DRY	ND	ND	
6	60	Top 20": Brown SAND, little Concrete, Gravel, trace Silt (FILL)	ND	DRY	ND	ND	RI-SB-03_5-7_20220725
7			ND	DRY	ND	ND	
8			ND	DRY	ND	ND	
9		Bottom 40": Brown SAND, little Gravel, trace Silt	ND	DRY	ND	ND	
10			ND	DRY	ND	ND	
11	48	Brown SAND, little Gravel, trace Silt.	ND	DRY	ND	ND	
12			ND	DRY	ND	ND	
13			ND	DRY	ND	ND	
14			ND	DRY	ND	ND	RI-SB-03_13-15_20220725
15			ND	DRY	ND	ND	
16	60	Brown SAND, trace Gravel, Silt.	ND	DRY	ND	ND	
17			ND	DRY	ND	ND	
18			ND	WET	ND	ND	
19			ND	WET	ND	ND	
20			ND	WET	ND	ND	

Notes: Groundwater Depth Indicator

Groundwater measured at 17 feet below grade in RI-MW-03 on 07/28/2022.

Groundwater monitoring well installed to 25 feet below grade.

Notes: Soil samples analyzed for VOCs, SVOCs, PCBs, Pesticides, TAL Metals, Cyanide, Hex Chromium, PFAS, and 1,4 Dioxane.

Groundwater was encountered at approximately 17 feet below ground surface at RI-SB-03.

End of soil boring at 20 feet below grade.

PID = photoionization detector **NAPL = non-aqueous phase liquid** **ppm = parts per million** **ND = not detected**

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING AND WELL INSTALLATION LOG	Jamaica Works Queens, New York AKRF Project Number: 200278	Groundwater Monitoring Well ID: Sheet 2 of 2	RI-MW-03	Soil Boring ID:	RI-SB-03

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	DPP
Sampling Method:	5' Macro-cores
Driller:	Eastern
Weather:	85°F, Cloudy
Logged by:	J. Sulich, AKRF

Drilling

Start Time: 10:40 **Finish Time:** 12:30

Date: 7/25/2022

Surface Condition: Concrete

Depth (feet)	Well Construction	Recovery (Inches)	Soil Boring Log	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
21								
22								
23								
24			End cap: 25' below grade					
25								

Notes: ▼ Groundwater Depth Indicator

Groundwater measured at 17 feet below grade in RI-MW-03 on 07/28/2022.

Groundwater monitoring well installed to 25 feet below grade.

Notes: Soil samples analyzed for VOCs, SVOCs, PCBs, Pesticides, TAL Metals, Cyanide, Hex Chromium, PFAS, and 1,4 Dioxane.

Groundwater was encountered at approximately 17 feet below ground surface at RI-SB-03.

End of soil boring at 20 feet below grade.

PID = photoionization detector **NAPL = non-aqueous phase liquid** **ppm = parts per million** **ND = not detected**

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING AND WELL INSTALLATION LOG	Jamaica Works Queens, New York AKRF Project Number: 200278	Groundwater Monitoring Well ID: Sheet 1 of 1	RI-MW-04	Soil Boring ID:	RI-SB-04

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	DPP (Remote Rig)
Sampling Method:	3' Macro-cores
Driller:	Eastern
Weather:	80°F, Partly Cloudy
Logged by:	J. Sulich, AKRF

Drilling

Start Time: 13:15 **Finish Time:** 8:30

Date: 7/26/2022 – 7/27/2022

Surface Condition: Concrete

Well Construction:
- Locking J-plug and flush mount cover at grade.
- Cement: 0' to 1' below grade
- 1" PVC riser: 0' to 3' below grade
- Sandpack filter: 1' to 18' below grade
- 0.020-inch slotted 1" PVC well screen: 3' to 18' below grade
- End cap: 18' below grade

Depth (feet)	Recovery (Inches)	Soil Boring Log	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
1	19	Brown SAND, little Gravel, trace Concrete, Silt (FILL)	ND	DRY	ND	ND	RI-SB-04_0-2_20220726
2			ND	DRY	ND	ND	
3			ND	DRY	ND	ND	
4	22	Brown SAND, little Gravel, trace Concrete, Silt (FILL)	ND	DRY	ND	ND	
5			ND	DRY	ND	ND	
6			ND	DRY	ND	ND	RI-SB-04_6-8_20220726
7	27	Top 18": Brown SAND, little Gravel, trace Concrete, Silt (FILL)	ND	DRY	ND	ND	
8			ND	DRY	ND	ND	
9		Bottom 9": Brown SAND, little Gravel, trace Silt	ND	WET	ND	ND	
10	30	Brown SAND, little Gravel, trace Silt	ND	WET	ND	ND	
11			ND	WET	ND	ND	
12			ND	WET	ND	ND	
13	31	Brown SAND, little Gravel, trace Silt	ND	WET	ND	ND	
14			ND	WET	ND	ND	RI-SB-04_13-15_20220726
15			ND	WET	ND	ND	
16							
17							
18							

Notes: Groundwater Depth Indicator

Groundwater measured at 11 feet below grade in RI-MW-04 on 07/28/2022.

Groundwater monitoring well installed to 18 feet below grade (refusal).

Notes: Soil samples analyzed for VOCs, SVOCs, PCBs, Pesticides, TAL Metals, Cyanide, Hex Chromium, PFAS, and 1,4 Dioxane.

Groundwater was encountered at approximately 8 feet below ground surface at RI-SB-04.

End of soil boring at 15 feet below grade.

PID = photoionization detector **NAPL = non-aqueous phase liquid** **ppm = parts per million** **ND = not detected**

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING AND WELL INSTALLATION LOG	Jamaica Works Queens, New York AKRF Project Number: 200278	Groundwater Monitoring Well ID: Sheet 1 of 2	RI-MW-05	Soil Boring ID:	RI-SB-05

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	DPP (Remote Rig)
Sampling Method:	3' Macro-cores
Driller:	Eastern
Weather:	80°F, Partly Cloudy
Logged by:	J. Sulich, AKRF

Drilling

Start Time: 13:15 **Finish Time:** 8:30

Date: 7/26/2022 – 7/27/2022

Depth (feet)	Well Construction	Surface Condition: Concrete	Recovery (Inches)	Soil Boring Log	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
1		Locking J-plug and flush mount cover at grade.	24	Dark brown SAND, little Gravel, trace Silt (FILL)	ND	DRY	ND	ND	RI-SB-05_0-2_20220726
2		Cement: 0' to 1' below grade			ND	DRY	ND	ND	
3		Sand: 1' to 8' below grade			ND	DRY	ND	ND	
4		1" PVC riser: 0' to 12' below grade	34	Dark brown SAND, little Concrete, Gravel, trace Silt (FILL)	ND	DRY	ND	ND	
5					ND	DRY	ND	ND	
6					ND	DRY	ND	ND	RI-SB-05_5-7_20220726
7			36	Top 12": Brown SAND, little Concrete, Gravel, trace Silt (FILL)	ND	DRY	ND	ND	
8				Bottom 24": Brown SAND, little Gravel, trace Silt	ND	DRY	ND	ND	
9		Bentonite seal: 8' to 10' below grade			ND	DRY	ND	ND	
10			36	Brown SAND, little Gravel, trace Silt	ND	DRY	ND	ND	
11		Sandpack filter: 10' to 22' below grade			ND	DRY	ND	ND	
12					ND	DRY	ND	ND	
13			18	Brown SAND, little Gravel, trace Silt	ND	DRY	ND	ND	
14		0.020-inch slotted 1" PVC well screen: 12' to 22' below grade			ND	DRY	ND	ND	RI-SB-05_13-15_20220726
15					ND	DRY	ND	ND	
16									
17									
18									
19									
20									

Notes: Groundwater Depth Indicator

Groundwater measured at 15 feet below grade in RI-MW-05 on 07/28/2022.

Groundwater monitoring well installed to 22 feet below grade (refusal).

Notes: Soil samples analyzed for VOCs, SVOCs, PCBs, Pesticides, TAL Metals, Cyanide, Hex Chromium, PFAS, and 1,4 Dioxane.

Groundwater was not encountered at RI-SB-05.

End of soil boring at 15 feet below grade.

PID = photoionization detector **NAPL = non-aqueous phase liquid** **ppm = parts per million** **ND = not detected**

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING AND WELL INSTALLATION LOG	Jamaica Works Queens, New York AKRF Project Number: 200278	Groundwater Monitoring Well ID: Sheet 1 of 2	RI-MW-05	Soil Boring ID:	RI-SB-05

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	DPP (Remote Rig)
Sampling Method:	3' Macro-cores
Driller:	Eastern
Weather:	80°F, Partly Cloudy
Logged by:	J. Sulich, AKRF

Drilling

Start Time: 13:15 **Finish Time:** 8:30

Date: 7/26/2022 – 7/27/2022

Depth (feet)	Well Construction	Surface Condition: Concrete	Recovery (Inches)	Soil Boring Log	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
21									
22		End cap: 22' below grade							

Notes: ▼ Groundwater Depth Indicator

Groundwater measured at 15 feet below grade in RI-MW-05 on 07/28/2022.

Groundwater monitoring well installed to 22 feet below grade (refusal).

Notes: Soil samples analyzed for VOCs, SVOCs, PCBs, Pesticides, TAL Metals, Cyanide, Hex Chromium, PFAS, and 1,4 Dioxane.

Groundwater was not encountered at RI-SB-05.

End of soil boring at 15 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ppm = parts per million ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

Jamaica Works
Queens, New York
AKRF Project Number: 200278

Soil Boring ID: **RI-SB-06**
Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Track-Mounted Direct Push Probe (Remote Rig)
Sampling Method:	3' Macro-cores
Driller:	Eastern Environmental Solutions, Inc.
Weather:	80°F, Partly Cloudy
Logged By:	J. Sulich

Drilling
Start Time: 8:45 **Finish Time:** 9:30
Date: 7/27/2022

Depth (feet)	Recovery (Inches)	Surface Condition: Concrete	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
1	12	Top 3" : CONCRETE (FILL)	ND	DRY	ND	ND	RI-SB-06_0-2_20220727
		Bottom 9": Brown SAND, little Gravel, trace Silt, Brick (FILL)	ND	DRY	ND	ND	
2			ND	DRY	ND	ND	
3							
4	33	Brown SAND, little Gravel, trace Silt, Brick (FILL)	ND	DRY	ND	ND	
			ND	DRY	ND	ND	RI-SB-06_4-6_20220727
5			ND	DRY	ND	ND	
6							
7	36	Brown SAND, little Gravel, trace Silt	ND	DRY	ND	ND	
			ND	DRY	ND	ND	
8			ND	DRY	ND	ND	
9							
10	36	Brown SAND, little Gravel, trace Silt	ND	DRY	ND	ND	
			ND	DRY	ND	ND	
11			ND	DRY	ND	ND	
12							
13	36	Brown SAND, little Gravel, trace Silt	ND	DRY	ND	ND	
			ND	DRY	ND	ND	RI-SB-06_13-15 _20220727
14			ND	DRY	ND	ND	
15							

Notes: Soil sample analyzed for Soil samples analyzed for VOCs, SVOCs, PCBs, Pesticides, TAL Metals, Cyanide, Hex Chromium, PFAS, and 1,4 Dioxane.
Groundwater was not encountered at RI-SB-06.
End of soil boring at 15 feet below ground surface.

PID = photoionization detector ppm = parts per million NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

Jamaica Works
Queens, New York
AKRF Project Number: 200278

Soil Boring ID: **RI-SB-07**
Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Track-Mounted Direct Push Probe (Remote Rig)
Sampling Method:	3' Macro-cores
Driller:	Eastern Environmental Solutions, Inc.
Weather:	85°F, Partly Cloudy
Logged By:	J. Sulich

Drilling
Start Time: 13:00 **Finish Time:** 14:35
Date: 7/25/2022

Depth (feet)	Recovery (Inches)	Surface Condition: Concrete	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
1	18	Top 4" : CONCRETE (FILL)	ND	DRY	ND	ND	RI-SB-07_0-2_20220727
		Bottom 14": Brown SAND, little Grvael, trace Silt (FILL)	ND	DRY	ND	ND	
2			ND	DRY	ND	ND	
3							
4	36	Brown SAND, little Gravel, trace Silt (FILL)	ND	DRY	ND	ND	
			ND	DRY	ND	ND	
5			ND	DRY	ND	ND	
6							
7	36	Brown SAND, little Gravel, trace Silt, Concrete (FILL)	ND	DRY	ND	ND	RI-SB-07_6-8_20220725
			ND	DRY	ND	ND	
8			ND	DRY	ND	ND	
9							
10	36	Brown SAND, little Gravel, trace Silt	ND	DRY	ND	ND	
			ND	DRY	ND	ND	
11			ND	MOIST	ND	ND	
12							
13	36	Brown SAND, little Gravel, trace Silt	ND	WET	ND	ND	
			ND	WET	ND	ND	RI-SB-07_13-15 _20220725
14			ND	WET	ND	ND	
15							

Notes: Soil sample analyzed for Soil samples analyzed for VOCs, SVOCs, PCBs, Pesticides, TAL Metals, Cyanide, Hex Chromium, PFAS, and 1,4 Dioxane.
Groundwater was encountered at approximately 12 feet below ground surface at RI-SB-07.
End of soil boring at 15 feet below ground surface.

PID = photoionization detector ppm = parts per million NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

Jamaica Works
Queens, New York
AKRF Project Number: 200278

Soil Boring ID: **RI-SB-08**
Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Track-Mounted Direct Push Probe
Sampling Method:	5' Macro-cores
Driller:	Eastern Environmental Solutions, Inc.
Weather:	85°F, Partly Cloudy
Logged By:	J. Sulich

Drilling
Start Time: 7:00 **Finish Time:** 7:40
Date: 7/28/2022

Depth (feet)	Recovery (Inches)	Surface Condition: Concrete	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
1	47	Brown SAND, little Gravel, trace Silt, Concrete (FILL)	ND	DRY	ND	ND	RI-SB-08_0-2_20220728
2			ND	DRY	ND	ND	
3			ND	DRY	ND	ND	
4			ND	DRY	ND	ND	
5			ND	DRY	ND	ND	
6	47	Top 17": Brown SAND, little Gravel, trace Silt, Concrete (FILL)	ND	DRY	ND	ND	RI-SB-08_5-7_20220728
7			ND	DRY	ND	ND	
8			ND	DRY	ND	ND	
9		Bottom 30": Brown SAND, little Gravel, trace Silt	ND	DRY	ND	ND	
10			ND	DRY	ND	ND	
11	55	Brown SAND, little Gravel, trace Silt	ND	DRY	ND	ND	
12			ND	DRY	ND	ND	
13			ND	DRY	ND	ND	
14			ND	DRY	ND	ND	RI-SB-08_13-15_20220728
15			ND	DRY	ND	ND	

Notes: Soil sample analyzed for Soil samples analyzed for VOCs, SVOCs, PCBs, Pesticides, TAL Metals, Cyanide, Hex Chromium, PFAS, and 1,4 Dioxane.
Groundwater was not encountered at RI-SB-08.
End of soil boring at 15 feet below ground surface.

PID = photoionization detector ppm = parts per million NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

Jamaica Works
Queens, New York
AKRF Project Number: 200278

Soil Boring ID: **RI-SB-09**
Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Track-Mounted Direct Push Probe (Remote Rig)
Sampling Method:	3' Macro-cores
Driller:	Eastern Environmental Solutions, Inc.
Weather:	80°F, Partly Cloudy
Logged By:	J. Sulich

Drilling
Start Time: 11:30 **Finish Time:** 12:15
Date: 7/26/2022

Depth (feet)	Recovery (Inches)	Surface Condition: Concrete	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
1	36	Dark brown SAND, little Gravel, trace Silt (FILL)	ND	DRY	ND	ND	RI-SB-09_0-2_20220726
2			ND	DRY	ND	ND	
3			ND	DRY	ND	ND	
4	34	Top 22": Dark brown SAND, little Gravel, trace Silt (FILL)	ND	DRY	ND	ND	RI-SB-09_3-5_20220726
5		Bottom 12": Brown SAND, little Gravel, trace Silt	ND	DRY	ND	ND	
6			ND	DRY	ND	ND	
7	22	Brown SAND, little Gravel, trace Silt	ND	DRY	ND	ND	
8			ND	DRY	ND	ND	RI-SB-09_7-9_20220726
9			ND	DRY	ND	ND	

Notes: Soil sample analyzed for Soil samples analyzed for VOCs, SVOCs, PCBs, Pesticides, TAL Metals, Cyanide, Hex Chromium, PFAS, and 1,4 Dioxane.
Groundwater was not encountered at RI-SB-09.
End of soil boring at 9 feet below ground surface due to refusal.

PID = photoionization detector ppm = parts per million NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

Jamaica Works
Queens, New York
AKRF Project Number: 200278

Soil Boring ID: **RI-SB-10**
Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Track-Mounted Direct Push Probe
Sampling Method:	5' Macro-cores
Driller:	Eastern Environmental Solutions, Inc.
Weather:	85°F, Partly Cloudy
Logged By:	J. Sulich

Drilling
Start Time: 9:50 **Finish Time:** 10:15
Date: 7/25/2022

Depth (feet)	Recovery (Inches)	Surface Condition: Concrete	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
1	44	Top 7": CONCRETE (FILL)	ND	DRY	ND	ND	RI-SB-10_0-2_20220725
2		Brown SAND, little Gravel, trace Silt (FILL)	ND	DRY	0.7	ND	
3			ND	DRY	0.6	ND	
4			ND	DRY	ND	ND	
5			ND	DRY	ND	ND	
6	44	Top 8": Dark brown SAND, little Gravel, trace Silt (FILL)	ND	DRY	ND	ND	RI-SB-10_5-7_20220725
7			ND	DRY	ND	ND	
8		Bottom 36": Brown SAND, little Gravel, trace Silt	ND	DRY	ND	ND	
9			ND	DRY	ND	ND	
10			ND	DRY	ND	ND	
11	50	Brown SAND, little Gravel, trace Silt	ND	DRY	ND	ND	
12			ND	DRY	ND	ND	
13			ND	DRY	ND	ND	
14			ND	DRY	ND	ND	RI-SB-10_13-15 _20220725
15			ND	DRY	ND	ND	

Notes: Soil sample analyzed for Soil samples analyzed for VOCs, SVOCs, PCBs, Pesticides, TAL Metals, Cyanide, Hex Chromium, PFAS, and 1,4 Dioxane.
Groundwater was not encountered at RI-SB-10.
End of soil boring at 15 feet below ground surface.

PID = photoionization detector **ppm = parts per million** **NAPL = non-aqueous phase liquid** **ND = not detected**

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

Jamaica Works
Queens, New York
AKRF Project Number: 200278

Soil Boring ID: **RI-SB-11**
Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Track-Mounted Direct Push Probe
Sampling Method:	5' Macro-cores
Driller:	Eastern Environmental Solutions, Inc.
Weather:	85°F, Partly Cloudy
Logged By:	J. Sulich

Drilling
Start Time: 9:35 **Finish Time:** 9:50
Date: 7/25/2022

Depth (feet)	Recovery (Inches)	**Surface Condition:** Concrete	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
1	44	Top 4": CONCRETE (FILL)	ND	DRY	ND	ND	RI-SB-11_0-2_20220725
2		Bottom 26": Dark brown SAND, little Gravel, trace Silt, Brick (FILL)	ND	DRY	ND	ND	
3			ND	DRY	ND	ND	
4			ND	DRY	ND	ND	
5			ND	DRY	ND	ND	
6	44	Top 4": Dark brown SAND, little Gravel, trace Silt (FILL)	ND	DRY	ND	ND	RI-SB-11_5-7_20220725
7		Middle 1": CONCRETE (FILL)	ND	DRY	ND	ND	
8		Bottom 27": Brown SAND, little Gravel, trace Silt	ND	DRY	ND	ND	
9			ND	DRY	ND	ND	
10			ND	DRY	ND	ND	
11	50	Brown SAND, little Gravel, trace Silt	ND	DRY	ND	ND	
12			ND	DRY	ND	ND	
13			ND	DRY	ND	ND	
14			ND	DRY	ND	ND	RI-SB-11_13-15 _20220725
15			ND	DRY	ND	ND	

Notes: Soil sample analyzed for Soil samples analyzed for VOCs, SVOCs, PCBs, Pesticides, TAL Metals, Cyanide, Hex Chromium, PFAS, and 1,4 Dioxane.
Groundwater was not encountered at RI-SB-11.
End of soil boring at 15 feet below ground surface.

PID = photoionization detector **ppm = parts per million** **NAPL = non-aqueous phase liquid** **ND = not detected**

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

Jamaica Works
Queens, New York
AKRF Project Number: 200278

Soil Boring ID: **RI-SB-DRAIN**
Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Hand Auger
Sampling Method:	Hand Auger
Driller:	Eastern Environmental Solutions, Inc.
Weather:	85°F, Partly Cloudy
Logged By:	J. Sulich

Drilling
Start Time: 13:30 **Finish Time:** 13:45
Date: 7/28/2022

Depth (feet)	Recovery (Inches)	Surface Condition: Concrete	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
1 – 2	6	Brown SAND, little Refuse, trace Metal (FILL)	ND	DRY	0.3	ND	RI-SB-DRAIN_1-1.5_20220727

Notes: Soil sample analyzed for Soil samples analyzed for VOCs, SVOCs, and TAL Metals.
Groundwater was not encountered at RI-SB-DRAIN.
End of soil boring at 2 feet below ground surface.

PID = photoionization detector ppm = parts per million NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

APPENDIX D
GROUNDWATER MONITORING WELL DEVELOPMENT LOGS

Well Development Log

Job No: 200278		**Client:** Radix 95-25 149th St LLC	**Well No:**
Project Location: 95-25 149th Street, Jamaica, Queens NY		**Sampled By:** J. Sulich	
Date: 7/28/2022		**Sampling Time:** 15:25	**RI-MW-01**
LEL at surface: NA			
PID at surface: ND			
Total Depth:	23.61 ft. below top of casing	**Water Column (WC):** 4.46 feet	*= 0.163 * WC for 2" wells
Depth to Water:	19.15 ft. below top of casing	**Well Volume*:** 0.73 gallons	*= 0.653 * WC for 4" wells
Depth to Product:	ND ft. below top of casing	**Volume Purged:** 10 gallons	*= 1.469 * WC for 6" wells
Depth to top of screen:	10 ft. below top of casing	**Well Diam.:** 2 inches	Target maximum flow rate is 100 ml/min
Depth to bottom of screen:	25 ft. below top of casing	**Purging Device (pump type):** 2" Monsoon	
Approx. Pump Intake:	20 ft. below top of casing		

Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (^{o}C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
15:25	19.15	1,000	21.40	1.08	6.84	6.32	206	936	No odor or sheen noted on purge water.
15:30	19.15	1,000	19.95	1.11	5.54	6.24	214	782	
15:35	19.15	1,000	19.05	1.15	5.47	6.13	227	121	
15:40	19.15	1,000	18.93	1.16	5.54	6.08	231	49.2	
15:45	19.15	1,000	19.13	1.15	5.52	6.07	232	43.8	
15:50	19.15	1,000	19.14	1.15	5.52	6.07	232	43.1	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Well Development Log

Job No: 200278	**Client:** Radix 95-25 149th St LLC	**Well No:**	
Project Location: 95-25 149th Street, Jamaica, Queens NY	**Sampled By:** J. Sulich		
Date: 7/28/2022	**Sampling Time:** 11:23	**RI-MW-03**	
LEL at surface: NA			
PID at surface: ND			
Total Depth: 24.79 ft. below top of casing	**Water Column (WC):** 8.08 feet	*= 0.163 * WC for 2" wells	
Depth to Water: 16.71 ft. below top of casing	**Well Volume*:** 1.32 gallons	*= 0.653 * WC for 4" wells	
Depth to Product: ND ft. below top of casing	**Volume Purged:** 10 gallons	*= 1.469 * WC for 6" wells	
Depth to top of screen: 10 ft. below top of casing	**Well Diam.:** 2 inches	Target maximum flow rate is 100 ml/min	
Depth to bottom of screen: 25 ft. below top of casing	**Purging Device (pump type):** 2" Monsoon		
Approx. Pump Intake: 20 ft. below top of casing			

Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (°C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
11:23	16.71	1,000	24.01	1.85	6.38	6.73	116	101	No odor or sheen noted on purge water. Pump clogged with silt at 11:50
11:30	16.71	1,000	24.09	1.88	6.28	6.73	106	91.9	
11:35	16.71	1,000	24.46	1.86	6.14	6.76	101	60.8	
12:48	16.71	1,000	18.99	1.78	8.20	6.51	160	619	
12:53	16.71	1,000	18.10	1.69	7.39	6.36	169	116	
12:58	16.71	1,000	17.96	1.83	7.31	6.29	173	63.8	
13:03	16.71	1,000	17.49	1.83	7.26	6.24	174	56.5	
13:08	16.71	1,000	17.90	1.82	7.33	6.23	173	48.8	
13:13	16.71	1,000	17.84	1.82	7.22	6.23	171	40.3	
13:18	16.71	1,000	17.86	1.82	7.21	6.25	171	32.7	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Well Development Log

Job No: 200278		**Client:** Radix 95-25 149th St LLC	**Well No:**
Project Location: 95-25 149th Street, Jamaica, Queens NY		**Sampled By:** J. Sulich	**RI-MW-04**
Date: 7/28/2022		**Sampling Time:** 7:55	
LEL at surface: NA			
PID at surface: ND			
Total Depth:	17.28 ft. below top of casing	**Water Column (WC):** 6.68 feet	*= 0.163 * WC for 2" wells
Depth to Water:	10.60 ft. below top of casing	**Well Volume*:** 0.27 gallons	*= 0.653 * WC for 4" wells
Depth to Product:	ND ft. below top of casing	**Volume Purged:** 5 gallons	*= 1.469 * WC for 6" wells
Depth to top of screen:	3 ft. below top of casing	**Well Diam.:** 1 inches	Target maximum flow rate is 100 ml/min
Depth to bottom of screen:	18 ft. below top of casing	**Purging Device (pump type):** Peristaltic	
Approx. Pump Intake:	14 ft. below top of casing		

Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (°C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
7:55	10.60	1,000	20.90	1.21	7.81	6.69	108	1000	No odor or sheen noted on purge water.
8:00	10.60	1,000	19.60	1.22	7.98	6.58	109	448	
8:05	10.60	1,000	19.29	1.21	7.40	6.46	104	253	
8:10	10.60	1,000	19.41	1.27	7.33	6.43	97	230	
8:15	10.60	1,000	19.43	1.20	7.29	6.40	94	142	
8:20	10.60	1,000	19.41	1.20	7.27	6.39	94	126	
8:25	10.60	1,000	19.35	1.20	7.24	6.37	94	99.2	
8:30	10.60	1,000	19.30	1.20	7.23	6.36	94	38	
8:35	10.60	1,000	19.30	1.20	7.20	6.35	95	33.8	
8:40	10.60	1,000	19.66	1.19	7.23	6.55	85	26.3	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Well Development Log

Job No: 200278		**Client:** Radix 95-25 149th St LLC	**Well No:**
Project Location: 95-25 149th Street, Jamaica, Queens NY		**Sampled By:** J. Sulich	**RI-MW-05**
Date: 7/28/2022		**Sampling Time:** 9:40	
LEL at surface: NA			
PID at surface: ND			
Total Depth:	19.75 ft. below top of casing	**Water Column (WC):** 3.55 feet	*= 0.163 * WC for 2" wells
Depth to Water:	16.20 ft. below top of casing	**Well Volume*:** 0.15 gallons	*= 0.653 * WC for 4" wells
Depth to Product:	ND ft. below top of casing	**Volume Purged:** 5 gallons	*= 1.469 * WC for 6" wells
Depth to top of screen:	12 ft. below top of casing	**Well Diam.:** 1 inches	Target maximum flow rate is 100 ml/min
Depth to bottom of screen:	22 ft. below top of casing	**Purging Device (pump type):** Peristaltic	
Approx. Pump Intake:	19 ft. below top of casing		

Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (°C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
9:40	16.20	1,000	20.79	0.776	6.74	6.55	88	96.7	No odor or sheen noted on purge water.
9:45	16.20	1,000	21.39	0.770	6.45	6.52	71	92.5	
9:50	16.20	1,000	21.68	0.777	6.45	6.54	63	83.4	
9:55	16.20	1,000	21.80	0.781	6.65	6.57	60	41.4	
10:00	16.20	1,000	21.64	0.795	6.64	6.55	64	14.6	
10:05	16.20	1,000	21.45	0.794	6.64	6.57	61	9.9	
10:10	16.20	1,000	21.49	0.784	6.57	6.56	60	11.9	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

APPENDIX E
GROUNDWATER MONITORING WELL ELEVATION SURVEY

MONITORING WELL LOCATION

Northing	Easting	Elevation	Description
193,959.32	1,038,695.04	38.62	RI-MW-01 - CASING
193,959.58	1,038,695.19	38.82	RI-MW-01 - COVER
193,959.31	1,038,694.22	38.84	RI-MW-01 - GRADE
194,095.07	1,038,835.64	36.27	RI-MW-03 - CASING
194,095.01	1,038,835.64	36.48	RI-MW-03 - COVER
194,094.50	1,038,835.22	36.47	RI-MW-03 - GRADE
194,087.38	1,038,716.92	30.18	RI-MW-04 - CASING
194,087.34	1,038,716.89	30.56	RI-MW-04 - COVER
194,087.81	1,038,717.62	30.57	RI-MW-04 - GRADE
194,022.39	1,038,803.16	35.30	RI-MW-05 - CASING
194,022.17	1,038,803.18	35.53	RI-MW-05 - COVER
194,021.91	1,038,803.89	35.52	RI-MW-05 - GRADE

HORIZONTAL COORDINATES ARE IN THE NORTH AMERICAN DATUM OF 1983 (NAD83), NY LONG ISLAND ZONE. ELEVATIONS ARE IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

SURVEYED: AUGUST 17, 2022

SCALE: 1" = 30' DRAWN BY: JD

BLOCK: 10002

LOTS: 1, 10, 13

FEHRINGER SURVEYING, P.C.

ROBERT FEHRINGER
LICENSED LAND SURVEYOR
WWW.FEHRINGERSURVEYING.COM
2200 JACKSON AVENUE
SEAFORD, N.Y. 11783
(516) 763 - 5515 FAX NO. (516) 763 - 5525
FS@FEHRINGERSURVEYING.COM

SURVEY OF PROPERTY SITUATED IN:

95-25 149TH STREET

BOROUGH OF QUEENS
COUNTY OF QUEENS
CITY OF NEW YORK
STATE OF NEW YORK

APPENDIX F
GROUNDWATER SAMPLING LOGS

Well Sampling Log

Job No: 200278			**Client:** Radix 95-25 149th St LLC		**Well No:** RI-MW-01
Project Location: 95-25 149th Street, Jamaica, Queens NY			**Sampled By:** M. Balletta		
Date: 8/17/2022			**Sampling Time:** 8:56		
LEL at surface: NA					
PID at surface: ND					
Total Depth:	24.77 ft. below top of casing		**Water Column (WC):**	5.52 feet	*= 0.163 * WC for 2" wells
Depth to Water:	19.25 ft. below top of casing		**Well Volume*:**	0.90 gallons	*= 0.653 * WC for 4" wells
Depth to Product:	ND ft. below top of casing		**Volume Purged:**	2.5 gallons	*= 1.469 * WC for 6" wells
Depth to top of screen:	10 ft. below top of casing		**Well Diam.:**	2 inches	Target maximum flow rate is 100 ml/min
Depth to bottom of screen:	25 ft. below top of casing		**Purging Device (pump type):**	QED Sample Pro 1.75L	
Approx. Pump Intake:	22.01 ft. below top of casing				

Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (°C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
8:30	19.29	100	17.78	0.950	4.99	6.65	63.3	67.7	No odor, no color, or sheen. MS/MSD collected here.
8:35	19.29	100	16.96	0.936	4.94	6.61	62.2	38.6	
8:40	19.29	100	17.03	1.004	4.30	6.61	62.8	37.6	
8:45	19.29	100	17.01	1.007	3.99	6.62	65.3	35.8	
8:50	19.29	100	17.19	1.008	3.91	6.61	66.6	27.3	
8:55	19.29	100	17.21	1.011	3.91	6.62	66.8	23.6	
Sampling									
9:35	19.29	100	17.45	1.010	3.70	6.59	69	10.0	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for: VOCs (8260), SVOCs (8270), PCBs (8082), Pesticides (8081), Total & Dissolved TAL Metals (6000/7000), Cyanide (9012), PFAS

Well Sampling Log

Job No: 200278	**Client:** Radix 95-25 149th St LLC	**Well No:**	
Project Location: 95-25 149th Street, Jamaica, Queens NY	**Sampled By:** M. Balletta	**RI-MW-03**	
Date: 8/17/2022	**Sampling Time:** 11:21		
LEL at surface: NA			
PID at surface: ND			
Total Depth: 25.2 ft. below top of casing	**Water Column (WC):** 8.38 feet	*= 0.163 * WC for 2" wells	
Depth to Water: 16.82 ft. below top of casing	**Well Volume*:** 1.37 gallons	*= 0.653 * WC for 4" wells	
Depth to Product: ND ft. below top of casing	**Volume Purged:** 3.5 gallons	*= 1.469 * WC for 6" wells	
Depth to top of screen: 10 ft. below top of casing	**Well Diam.:** 2 inches	Target maximum flow rate is 100 ml/min	
Depth to bottom of screen: 25 ft. below top of casing	**Purging Device (pump type):** QED Sample Pro 1.75L		
Approx. Pump Intake: 20.91 ft. below top of casing			

Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (°C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
10:30	16.88	100	17.34	0.634	9.90	7.45	63.4	5.2	No odor, no color, or sheen. RI-MW-X_20220817 taken here.
10:35	16.88	100	17.83	0.011	9.94	7.45	62.4	3.3	
10:40	16.88	100	17.65	1.637	3.51	6.72	47.3	158.0	
10:45	16.88	100	17.46	1.639	2.39	6.68	40.0	131.1	
10:50	16.88	100	17.37	1.626	2.12	6.68	37.4	118.7	
10:55	16.88	100	17.36	1.636	2.07	6.68	33.5	110.1	
11:00	16.88	100	17.35	1.634	0.95	6.66	28.7	71.8	
11:05	16.88	100	17.35	1.631	1.45	6.67	27.6	52.4	
11:10	16.88	100	17.31	1.632	1.48	6.66	26.2	33.1	
11:15	16.88	100	17.32	1.631	1.30	6.66	24.6	23.4	
11:20	16.88	100	17.32	1.623	1.37	6.66	24.6	17.2	
Sampling									
11:50	16.88	100	17.81	1.634	1.41	6.62	26.7	23.5	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for: VOCs (8260), SVOCs (8270), PCBs (8082), Pesticides (8081), Total & Dissolved TAL Metals (6000/7000), Cyanide (9012), PFAS

Well Sampling Log

Job No: 200278	**Client:** Radix 95-25 149th St LLC	**Well No:**	
Project Location: 95-25 149th Street, Jamaica, Queens NY	**Sampled By:** J. Sulich	**RI-MW-04**	
Date: 8/17/2022	**Sampling Time:** 14:01		
LEL at surface: NA			
PID at surface: ND			
Total Depth: 17.08 ft. below top of casing	**Water Column (WC):** 6.4 feet	*= 0.163 * WC for 2" wells	
Depth to Water: 10.68 ft. below top of casing	**Well Volume*:** 0.26 gallons	*= 0.653 * WC for 4" wells	
Depth to Product: ND ft. below top of casing	**Volume Purged:** 2.5 gallons	*= 1.469 * WC for 6" wells	
Depth to top of screen: 3 ft. below top of casing	**Well Diam.:** 1 inches	Target maximum flow rate is 100 ml/min	
Depth to bottom of screen: 18 ft. below top of casing	**Purging Device (pump type):** QED Sample Pro 0.75L		
Approx. Pump Intake: 13.88 ft. below top of casing			

Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (°C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
13:20	10.72	100	22.39	1.280	2.97	6.57	136.5	1014.3	No odor, no color, or sheen.
13:25	10.72	100	21.30	1.238	2.86	6.51	133.6	880.3	
13:30	10.72	100	20.82	1.218	2.85	6.46	131.8	709.4	
13:35	10.72	100	20.54	1.229	2.90	6.45	128.5	436.0	
13:40	10.72	100	20.55	1.234	2.84	6.49	128.5	301.2	
13:45	10.72	100	20.55	1.250	2.78	6.52	128.5	120.7	
13:50	10.72	100	20.56	1.261	2.72	6.54	128.5	86.7	
13:55	10.72	100	20.36	1.260	2.69	6.46	127.0	54.0	
Sampling									
15:10	10.72	100	20.30	1.260	2.68	6.50	123.0	39.5	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for: VOCs (8260), SVOCs (8270), PCBs (8082), Pesticides (8081), Total & Dissolved TAL Metals (6000/7000), Cyanide (9012), PFAS

Well Sampling Log

Job No: 200278	**Client:** Radix 95-25 149th St LLC	**Well No:**	
Project Location: 95-25 149th Street, Jamaica, Queens NY	**Sampled By:** M. Balletta		
Date: 8/17/2022	**Sampling Time:** 12:26	**RI-MW-05**	
LEL at surface: NA			
PID at surface: ND			
Total Depth: 19.19 ft. below top of casing	**Water Column (WC):** 3.24 feet	*= 0.163 * WC for 2" wells	
Depth to Water: 15.95 ft. below top of casing	**Well Volume*:** 0.13 gallons	*= 0.653 * WC for 4" wells	
Depth to Product: ND ft. below top of casing	**Volume Purged:** 1 gallons	*= 1.469 * WC for 6" wells	
Depth to top of screen: 12 ft. below top of casing	**Well Diam.:** 1 inches	Target maximum flow rate is 100 ml/min	
Depth to bottom of screen: 22 ft. below top of casing	**Purging Device (pump type):** QED Sample Pro 0.75L		
Approx. Pump Intake: 17.57 ft. below top of casing			

Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (°C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
12:10	15.99	100	18.96	0.749	2.21	6.64	39.4	48.6	
12:15	15.99	100	18.67	0.747	1.80	6.64	35.9	25.4	
12:20	15.99	100	18.56	0.715	1.66	6.64	35.0	17.3	
12:25	15.99	100	18.56	0.743	1.56	6.64	35.7	14.0	
Sampling									
13:41	15.99	100	20.43	0.750	1.80	6.64	44.8	4.6	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for: VOCs (8260), SVOCs (8270), PCBs (8082), Pesticides (8081), Total & Dissolved TAL Metals (6000/7000), Cyanide (9012), PFAS

APPENDIX G
TEMPORARY SOIL VAPOR POINT CONSTRUCTION AND VAPOR SAMPLING LOGS

Soil Vapor Sample Log

AKRF Project No:	200278	**Point Installed By:**	Eastern Environmental Solutions, Inc.
Project Location:	95-25 149th Street, Jamaica, Queens NY	**Installation Method:**	Hammer Drill
Client:	Radix 95-25 149th St LLC	**Sampled By:**	J. Sulich
Date:	7/28/2022	**Weather:**	85°F, Partly Cloudy

Sample Setup

Vapor Point Depth:	9	Inches	**Total Time of Purge:**	10 Minutes	
Purging Pump:	Gilair Plus (or equal)		**Purge Volume:**	2L	
Pump Flow Rate*:	0.2	L/min	**Purged Vapor PID:**	1.0	ppm
			Helium Concentration:	0	%

Sample Identification

Soil Vapor Point ID:	RI-SV-01	**SUMMA® Canister ID:**	4800
Flow Controller ID:	4532	**Soil Vapor Sample ID:**	RI-SV-01_20220728

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	11:15	-28.0	ND	
Time Halfway:	12:40	-13.0	ND	
Time Stopped:	13:21	-5.0	ND	

Notes:

*Purge flow rate not to exceed 0.2 L/min.

ND = non-detect ppm = parts per million L/min = Liters per minute

Soil vapor sample RI-SV-01 20220728 collected in a 6-L SUMMA® canister using a 2-hour flow controller.

Soil Vapor Sample Log

AKRF Project No:	200278	**Point Installed By:**	Eastern Environmental Solutions, Inc.
Project Location:	95-25 149th Street, Jamaica, Queens NY	**Installation Method:**	Hand Auger
Client:	Radix 95-25 149th St LLC	**Sampled By:**	J. Sulich
Date:	7/28/2022	**Weather:**	85°F, Partly Cloudy

Sample Setup

Vapor Point Depth:	48	Inches	**Total Time of Purge:**	10 Minutes	
Purging Pump:	Gilair Plus (or equal)		**Purge Volume:**	2L	
Pump Flow Rate*:	0.2	L/min	**Purged Vapor PID:**	1.2	ppm
			Helium Concentration:	0	%

Sample Identification

Soil Vapor Point ID:	RI-SV-02	**SUMMA® Canister ID:**	5641
Flow Controller ID:	3976	**Soil Vapor Sample ID:**	RI-SV-02_20220728

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	10:28	-26.0	ND	
Time Halfway:	11:20	-17.0	ND	
Time Stopped:	12:32	-5.0	ND	

Notes:

*Purge flow rate not to exceed 0.2 L/min.

ND = non-detect ppm = parts per million L/min = Liters per minute

Soil vapor sample RI-SV-02 20220728 collected in a 6-L SUMMA® canister using a 2-hour flow controller.

Soil Vapor Sample Log

AKRF Project No:	200278	**Point Installed By:**	Eastern Environmental Solutions, Inc.
Project Location:	95-25 149th Street, Jamaica, Queens NY	**Installation Method:**	Hammer Drill
Client:	Radix 95-25 149th St LLC	**Sampled By:**	J. Sulich
Date:	7/28/2022	**Weather:**	85°F, Partly Cloudy

Sample Setup

Vapor Point Depth:	6	Inches	**Total Time of Purge:**	10 Minutes	
Purging Pump:	Gilair Plus (or equal)		**Purge Volume:**	2L	
Pump Flow Rate*:	0.2	L/min	**Purged Vapor PID:**	2.1	ppm
			Helium Concentration:	0	%

Sample Identification

Soil Vapor Point ID:	RI-SV-03	**SUMMA® Canister ID:**	24001511
Flow Controller ID:	5193	**Soil Vapor Sample ID:**	RI-SV-03_20220728

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	8:27	-30.0	ND	
Time Halfway:	9:56	-14.0	ND	
Time Stopped:	10:52	-5.0	ND	

Notes:

*Purge flow rate not to exceed 0.2 L/min.

ND = non-detect ppm = parts per million L/min = Liters per minute

Soil vapor sample RI-SV-03 20220728 collected in a 6-L SUMMA® canister using a 2-hour flow controller.

Soil Vapor Sample Log

AKRF Project No:	200278	**Point Installed By:**	Eastern Environmental Solutions, Inc.
Project Location:	95-25 149th Street, Jamaica, Queens NY	**Installation Method:**	Hammer Drill
Client:	Radix 95-25 149th St LLC	**Sampled By:**	J. Sulich
Date:	7/28/2022	**Weather:**	85°F, Partly Cloudy

Sample Setup

Vapor Point Depth:	6	Inches	**Total Time of Purge:**	10 Minutes	
Purging Pump:	Gilair Plus (or equal)		**Purge Volume:**	2L	
Pump Flow Rate*:	0.2	L/min	**Purged Vapor PID:**	1.9	ppm
			Helium Concentration:	0	%

Sample Identification

Soil Vapor Point ID:	RI-SV-04	**SUMMA® Canister ID:**	34001124
Flow Controller ID:	6081	**Soil Vapor Sample ID:**	RI-SV-04_20220728

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	9:06	-26.0	ND	
Time Halfway:	10:34	-10.0	ND	
Time Stopped:	11:22	-3.0	ND	

Notes:

*Purge flow rate not to exceed 0.2 L/min.

ND = non-detect ppm = parts per million L/min = Liters per minute

Soil vapor sample RI-SV-04 20220728 collected in a 6-L SUMMA® canister using a 2-hour flow controller.

Soil Vapor Sample Log

AKRF Project No:	200278	**Point Installed By:**	Eastern Environmental Solutions, Inc.
Project Location:	95-25 149th Street, Jamaica, Queens NY	**Installation Method:**	Hammer Drill
Client:	Radix 95-25 149th St LLC	**Sampled By:**	J. Sulich
Date:	7/28/2022	**Weather:**	85°F, Partly Cloudy

Sample Setup

Vapor Point Depth:	6	Inches	**Total Time of Purge:**	10 Minutes	
Purging Pump:	Gilair Plus (or equal)		**Purge Volume:**	2L	
Pump Flow Rate*:	0.2	L/min	**Purged Vapor PID:**	0.9	ppm
			Helium Concentration:	0	%

Sample Identification

Soil Vapor Point ID:	RI-SV-05	**SUMMA® Canister ID:**	4357
Flow Controller ID:	6034	**Soil Vapor Sample ID:**	RI-SV-05_20220728

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	11:47	-30.0	ND	
Time Halfway:	13:12	-14.0	ND	
Time Stopped:	14:00	-4.0	ND	

Notes:

*Purge flow rate not to exceed 0.2 L/min.

ND = non-detect ppm = parts per million L/min = Liters per minute

Soil vapor sample RI-SV-05 20220728 collected in a 6-L SUMMA® canister using a 2-hour flow controller.

Soil Vapor Sample Log

AKRF Project No:	200278	**Point Installed By:**	Eastern Environmental Solutions, Inc.
Project Location:	95-25 149th Street, Jamaica, Queens NY	**Installation Method:**	Hammer Drill
Client:	Radix 95-25 149th St LLC	**Sampled By:**	J. Sulich
Date:	7/28/2022	**Weather:**	85°F, Partly Cloudy

Sample Setup

Vapor Point Depth:	9	Inches	**Total Time of Purge:**	10 Minutes	
Purging Pump:	Gilair Plus (or equal)		**Purge Volume:**	2L	
Pump Flow Rate*:	0.2	L/min	**Purged Vapor PID:**	0.8	ppm
			Helium Concentration:	0	%

Sample Identification

Soil Vapor Point ID:	RI-SV-06	**SUMMA® Canister ID:**	3198
Flow Controller ID:	3133	**Soil Vapor Sample ID:**	RI-SV-06_20220728

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	12:59	-30.0	ND	
Time Halfway:	14:35	-13.0	ND	
Time Stopped:	15:01	-7.0	ND	

Notes:

*Purge flow rate not to exceed 0.2 L/min.

ND = non-detect ppm = parts per million L/min = Liters per minute

Soil vapor sample RI-SV-06 20220728 collected in a 6-L SUMMA® canister using a 2-hour flow controller.

Soil Vapor Sample Log

AKRF Project No:	200278	**Point Installed By:**	Eastern Environmental Solutions, Inc.
Project Location:	95-25 149th Street, Jamaica, Queens NY	**Installation Method:**	DPP (Remote Rig)
Client:	Radix 95-25 149th St LLC	**Sampled By:**	J. Sulich
Date:	7/28/2022	**Weather:**	85°F, Partly Cloudy

Sample Setup

Vapor Point Depth:	6	Feet	**Total Time of Purge:**	10 Minutes	
Purging Pump:	Gilair Plus (or equal)		**Purge Volume:**	2L	
Pump Flow Rate*:	0.2	L/min	**Purged Vapor PID:**	1.2	ppm
			Helium Concentration:	0	%

Sample Identification

Soil Vapor Point ID:	RI-SV-07	**SUMMA® Canister ID:**	4824
Flow Controller ID:	3168	**Soil Vapor Sample ID:**	RI-SV-07_20220728

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	12:06	-29.0	ND	
Time Halfway:	13:27	-14.0	ND	
Time Stopped:	14:15	-4.0	ND	

Notes:

*Purge flow rate not to exceed 0.2 L/min.

ND = non-detect ppm = parts per million L/min = Liters per minute

Soil vapor sample RI-SV-07_20220728 collected in a 6-L SUMMA® canister using a 2-hour flow controller.

Soil Vapor Sample Log

AKRF Project No:	200278	**Point Installed By:**	Eastern Environmental Solutions, Inc.
Project Location:	95-25 149th Street, Jamaica, Queens NY	**Installation Method:**	DPP
Client:	Radix 95-25 149th St LLC	**Sampled By:**	J. Sulich
Date:	7/28/2022	**Weather:**	85°F, Partly Cloudy

Sample Setup

Vapor Point Depth:	15	Feet	**Total Time of Purge:**	10 Minutes	
Purging Pump:	Gilair Plus (or equal)		**Purge Volume:**	2L	
Pump Flow Rate*:	0.2	L/min	**Purged Vapor PID:**	1.6	ppm
			Helium Concentration:	0	%

Sample Identification

Soil Vapor Point ID:	RI-SV-08	**SUMMA® Canister ID:**	2955
Flow Controller ID:	2937	**Soil Vapor Sample ID:**	RI-SV-08_20220728

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	11:27	-28.0	ND	
Time Halfway:	12:43	-14.0	ND	
Time Stopped:	13:35	-5.0	ND	

Notes:

*Purge flow rate not to exceed 0.2 L/min.

ND = non-detect ppm = parts per million L/min = Liters per minute

Soil vapor sample RI-SV-08 20220728 collected in a 6-L SUMMA® canister using a 2-hour flow controller.

Soil Vapor Sample Log

AKRF Project No:	200278	**Point Installed By:**	Eastern Environmental Solutions, Inc.
Project Location:	95-25 149th Street, Jamaica, Queens NY	**Installation Method:**	DPP
Client:	Radix 95-25 149th St LLC	**Sampled By:**	J. Sulich
Date:	7/28/2022	**Weather:**	85°F, Partly Cloudy

Sample Setup

Vapor Point Depth:	15	Feet	**Total Time of Purge:**	10 Minutes	
Purging Pump:	Gilair Plus (or equal)		**Purge Volume:**	2L	
Pump Flow Rate*:	0.2	L/min	**Purged Vapor PID:**	2.0	ppm
			Helium Concentration:	0	%

Sample Identification

Soil Vapor Point ID:	RI-SV-09	**SUMMA® Canister ID:**	5062
Flow Controller ID:	6231	**Soil Vapor Sample ID:**	RI-SV-09_20220728

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	8:53	-29.0	ND	
Time Halfway:	10:30	-12.0	ND	
Time Stopped:	11:24	-4.0	ND	

Notes:

*Purge flow rate not to exceed 0.2 L/min.

ND = non-detect ppm = parts per million L/min = Liters per minute

Soil vapor sample RI-SV-09 20220728 collected in a 6-L SUMMA® canister using a 2-hour flow controller.

APPENDIX H
LABORATORY DATA DELIVERABLES AND DATA USABILITY SUMMARY REPORTS (DUSRS)

APPENDIX I
INVESTIGATION-DERIVED WASTE (IDW) DISPOSAL MANIFESTS

36197

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number

2. Page 1 of 1

3. Emergency Response Phone 631-727-2700

4. Waste Tracking Number 39035

5. Generator's Name and Mailing Address 95-25 149th Street Queens NY

Generator's Site Address (if different than mailing address)

Generator's Phone:

6. Transporter 1 Company Name Eastern Environmental Solutions Inc

U.S. EPA ID Number NJR 000135624

7. Transporter 2 Company Name Radiac Research Corp

U.S. EPA ID Number NYD049 178296

8. Designated Facility Name and Site Address 450-447-2513 G.F.L. Environmental Inc. 8925 Boulevard Industrial Chambly, Q.C. J3L 1B3

U.S. EPA ID Number

Facility's Phone:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	UN3077 Environmentally Hazardous Substance Solid, NOS, 9, PG III (Drill Cuttings)	2	DM	300	P	
2.	UN3082 Environmentally Hazardous Substance Liquid, NOS, 9, PG III (Purge Water)	1	DM	300	P	
3.						
4.						

13. Special Handling Instructions and Additional Information

1) ERG#171-Bulk In An Emergency Contact Chemtel: 1-800-255-3924 Contract# MIS6317361

2) ERG#171-Bulk

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name JOHN SUESH (AS AGENT FOR GENERATOR) Signature Month 8 Day 26 Year 22

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name Mike Bilello Signature Month 08 Day 29 Year 22

Transporter 2 Printed/Typed Name JOHN V. TEKIN, JR Signature Month 9 Day 8 Year 22

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name Signature Month Day Year

DESIGNATED FACILITY TO GENERATOR

APPENDIX J
PHOTOGRAPHIC LOG

Photograph 1: Geophysical mark out near floor drain located on Lot 10 indicating potential subsurface piping.

Photograph 2: Soil cores obtained from the Geoprobe at boring location RI-SB-10.

Photograph 3: Installing 2-inch PVC permanent monitoring well at location RI-MW-03.

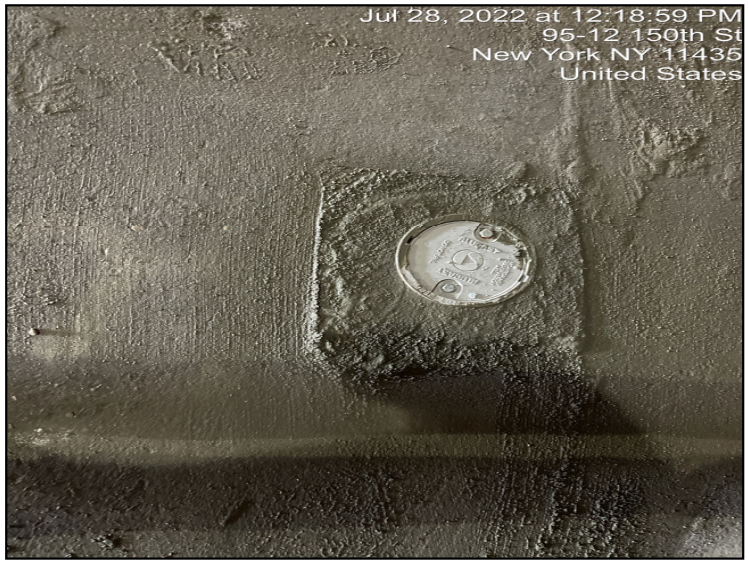
Photograph 4: Sub-slab soil vapor point installed at SV-06.

Photograph 5: Remote-access direct push probe at advancing RI-SB-09.

Photograph 6: Open floor drain prior in Lot 10 prior to collection of sample RI-SB-DRAIN.

Photograph 7: Purging groundwater from RI-MW-04 during well development activities.

Photograph 8: Use of a shroud during purging and helium testing of RI-SV-04.



Photograph 9: Flush-mounted permanent well cover at RI-MW-05.

Photograph 10: Restoring Site conditions with cement patching.