HALEY ALDRICH

www.haleyaldrich.com

REMEDIAL INVESTIGATION REPORT
FORMER A&A BRAKE SERVICE SITE, BROOKLYN, NEW YORK
NYSDEC BCP SITE C224372
558 SACKETT STREET
BROOKLYN, NEW YORK

by
H & A of New York Engineering and Geology, LLP
New York, New York

for
Sackett Heights LLC
1365 St. Nicholas Avenue, 2nd Floor
New York, New York 10033

File No. 0206384
May 2024

H & A OF NEW YORK ENGINEERING
AND GEOLOGY, LLP
213 West 35th Street
7th Floor
New York, NY 10001
646.518.7735

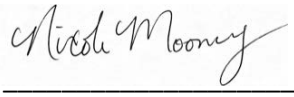
REMEDIAL INVESTIGATION REPORT

FORMER A&A BRAKE SERVICE SITE, BROOKLYN, NEW YORK
NYSDEC BCP SITE C224372
558 SACKETT STREET
BROOKLYN, NEW YORK

PREPARED ON BEHALF OF

SACKETT HEIGHTS LLC
1365 ST. NICHOLAS AVENUE, 2ND FLOOR
NEW YORK, NEW YORK 10033

PREPARED BY:



Nicole A. Mooney
Project Geologist
H & A of New York Engineering and Geology, LLP

REVIEWED AND APPROVED BY:

Zachary P. Simmel
Assistant Project Manager
H & A of New York Engineering and Geology, LLP

Mari C. Conlon, P.G.
Associate
H & A of New York Engineering and Geology, LLP

Certification

This report documents remedial investigation activities conducted at the Site located at 558 Sackett Street, Brooklyn, New York.

I, Mari C. Conlon, certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Remedial Investigation Report[1] was prepared in accordance with all statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved work plan(s) and any DER-approved modifications.

16 May 2024

Mari C. Conlon *Date*

[1] *Certification applies to remedial investigation activities conducted after the execution of the Brownfield Cleanup Agreement dated 7 March 2023.*

Table of Contents

Table of Contents

List of Tables

List of Figures

List of Appendices

List of Acronyms and Abbreviations

A	
Alpha	Alpha Analytical Laboratories, Inc.
AOCs	Areas of Concern
ASP	Analytical Services Protocol
AST	Aboveground Storage Tank
AWQS	Ambient Water Quality Standards
B	
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
BER	Business Environmental Risks
bgs	below ground surface
Brussee	Brussee Environmental Corp.
BTEX	Benzene, Toluene, Ethylbenzene, Xylenes
C	
CAMP	Community Air Monitoring Plan
CEQR	City Environmental Quality Review
cis-1,2-DCE	cis-1,2-dichloroethene
Coastal	Coastal Environmental Solutions, Inc.
COCs	Contaminants of Concern
CVOCs	chlorinated volatile organic compounds
D	
DER	Division of Environmental Remediation
DER-10	Division of Environmental Remediation-10 *(specifically "May 2010 NYSDEC Technical Guidance for Site Investigation and Remediation")*
DOT	Department of Transportation
DPK	DPK Consulting LLC
DUSR	Data Usability Summary Report
E	
ELAP	Environmental Laboratory Approval Program
EPA	U.S. Environmental Protection Agency
ESA	Environmental Site Assessment
F	
ft bgs	feet below ground surface
FSP	Field Sampling Plan
FWRIA	Fish and Wildlife Resource Impact Analysis

G

GPR	Ground Penetrating Radar
GQS	Groundwater Quality Standards
GV	Guidance Value

H

Haley & Aldrich of New York	H & A of New York Engineering and Geology, LLP
HASP	Health and Safety Plan
HAZWOPER	Hazardous Waste Operations and Emergency Response
HREC	Historic Recognized Environmental Condition
HVAC	Heating, ventilation, and air conditioning

I

IDW	Investigative Derived Waste

L

L/min	liters per minute
Lakewood	Lakewood Environmental Services Corp.

M

MCL	Maximum Concentration Limit
MDL	Method Detection Limit
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MGP	Manufactured Gas Plant
MS	Matrix Spike
MSD	Matrix Spike Duplicate

N

NAPL/GCM	Non-aqueous phase liquid/grossly contaminated material
ng/g	nanograms per gram
ng/L	nanograms per liter
NTU	Nephelometric turbidity unit
NYCRR	New York Codes, Rules, and Regulations
NYCOER (OER)	New York City Mayor's Office of Environmental Remediation
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health

O

OSHA	Occupational Safety and Health Administration

P

PAH	polycyclic aromatic hydrocarbon
PBS	Petroleum Bulk Storage
PCB	polychlorinated biphenyl
PCE	perchloroethylene/tetrachloroethene
PFAS	Per- and Polyfluoroalkyl Substances
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctane Sulfonate
PGWSCO	Protection of Groundwater Soil Cleanup Objectives
PID	Photoionization Detector
PPE	Personal Protection Equipment
PPM	parts per million
PQL	Practical Quantitation Limit
PVC	polyvinyl chloride

Q

QA/QC	Quality Assurance/Quality Control
QAO	Quality Assurance Officer
QAPP	Quality Assurance Project Plan
QHHEA	Qualitative Human Health Exposure Assessment

R

RA	Remedial Action
RAWP	Remedial Action Work Plan
REC	Recognized Environmental Condition
RI	Remedial Investigation
RIR	Remedial Investigation Report
RIWP	Remedial Investigation Work Plan
RRSCOs	Restricted-Residential Soil Cleanup Objectives

S

SCO	Soil Cleanup Objective
Site	the property located at 558 Sackett Street, Brooklyn, New York
SMP	Site Management Plan
SRIWP	Supplemental Remedial Investigation Work Plan
SVOC	Semi-Volatile Organic Compound

T

TAL	Total Analyte List
TCE	trichloroethene
TCL	Target Compound List
TCLP	Toxicity Characteristic Leaching Procedure

TOGS 1.1.1	Technical and Operational Guidance Series 1.1.1 *(Specifically "June 1998 NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1 Ambient Water Quality Standards and Guidance Values, Class GA for the protection of a source of drinking water modified per the April 2000 addendum")*
U	
µg/L	micrograms per liter
µg/m^3	micrograms per cubic meter
UUSCOs	Unrestricted Use Soil Cleanup Objectives
UST	Underground Storage Tank
V	
VOCs	Volatile Organic Compounds
Volunteer	Sackett Heights LLC

1. Introduction

This Remedial Investigation Report (RIR) was developed by H & A of New York Engineering and Geology, LLP (Haley & Aldrich of New York) on behalf of Sackett Heights LLC for the Former A&A Brake Service Site located at 558 Sackett Street within the Gowanus neighborhood of Brooklyn, New York (the Site). Sackett Heights LLC applied to and was accepted into the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) as a Volunteer. A Brownfield Cleanup Agreement (BCA) was executed by the NYSDEC and Sackett Heights LLC (the "Volunteer") on 7 March 2023 (BCP Site No. C224372).

The Site, identified as Section 3, Block 433, Lot 14 on the New York City tax map, is approximately 6,400 square feet (sq ft) in size. The Site is bound to the north by Sackett Street followed by the Former Fulton Works Manufactured Gas Plant (MGP) site (Site No. 224051), to the west by a two-story residential building, to the east by a three-story residential building, and to the south by multi-story residential buildings. The Site location is shown on Figure 1. A Site plan is shown on Figure 2. A Surrounding Sensitive Receptor Map is shown on Figure 3.

The Site is located within a residential and manufacturing zoning district (M1-4/R6A). The Site is in an urban area surrounded by commercial, industrial, and residential properties served by municipal water. The Volunteer plans to redevelop the Site for residential purposes (including affordable housing) consistent with current zoning.

The Site is listed with an environmental E-Designation (E-601) for hazardous materials and air quality (Heating, ventilation, and air conditioning [HVAC] limited to natural gas and exhaust stack location limitations) resulting from a City Environmental Quality Review (CEQR) effective March 2019 (CEQR # 19DCP157K). Satisfaction of the E-Designation requirements is subject to review and approval by the New York City Mayor's Office of Environmental Remediation (NYCOER or OER) prior to redevelopment.

The activities of this Remedial Investigation (RI) were completed from 21 June 2023 through 6 July 2023 in accordance with the Division of Environmental Remediation (DER) Technical Guidance for Site Investigation and Remediation (DER-10) and the NYSDEC-approved March 2023 Remedial Investigation Work Plan (RIWP). Supplemental sampling activities were completed from 26 March 2024 through 5 April 2024 in accordance with the above-referenced documents as well as the NYSDEC-approved March 2024 Supplemental Remedial Investigation Work Plan (SRIWP).

1.1 PURPOSE AND OBJECTIVES

A previous investigation conducted at the Site identified the presence of metals and semi-volatile organic compounds (SVOCs), specifically polycyclic aromatic hydrocarbons (PAHs), in soil; petroleum-related volatile organic compounds (VOCs) in groundwater; and, petroleum-related VOCs and chlorinated volatile organic compounds (CVOCs) in soil vapor at the Site. A summary of the soil, groundwater, and soil vapor analytical data collected previously is discussed herein and in the RIWP.

The previous investigation did not comprehensively delineate the extent of soil, groundwater, and soil vapor contamination on the Site. Additional investigation was required to ascertain and delineate the extent of contamination on the Site, with additional targeted soil and groundwater sampling conducted to further characterize the extent of contamination on the Site. Results of the sample analyses in this investigation were used to confirm the results of the previous Site investigation activities, evaluate any on-Site source(s), and determine a course for remedial action.

2. Site Background

2.1 SITE LOCATION AND DESCRIPTION

The Site, identified as Section 3, Block 433, Lot 14 on the New York City tax map, is approximately 6,400 sq ft in size. The Site is bound to the north by Sackett Street, to the west by a two-story residential building, to the east by a three-story residential structure, and to the south by three multiple-story structures.

The Site is located within a residential and manufacturing zoning district (M1-4/R6A, G). The Site is in an urban area surrounded by residential, commercial, and industrial properties served by municipal water. The Volunteer plans to redevelop the Site for mixed-use commercial and residential purposes (including affordable housing) consistent with current zoning.

The Site is listed with an environmental E-Designation (E-601) for hazardous materials and air quality (HVAC limited to natural gas and exhaust stack location limitations) resulting from a CEQR effective March 2019 (CEQR # 19DCP157K). Satisfaction of the E-Designation requirements is subject to review and approval by the New York City Mayor's OER prior to redevelopment.

A Site location map is provided as Figure 1 and a Site plan showing the property boundaries and adjacent properties is provided as Figure 2.

2.2 GEOLOGY AND HYDROGEOLOGY

The Site is underlain by a layer of fill consisting of mainly brown fine to medium sand with gravel and fragments of concrete, brick, wood, and gravel. The depth of fill material varies across the Site extending to a maximum depth of approximately 10 feet (ft) below ground surface (bgs). The fill is underlain by a fine sand with varying amounts of fine- and coarse-grained sediments, an organic meadow mat/peat layer at a depth of about 10 to 14 ft bgs, followed by brown fine to coarse sand grading to a light brown to dark brown fine sand with varying amounts of medium and coarse sand with fine to coarse gravels and cobbles. Bedrock beneath the Site consists of muscovite-biotite-quartz schist. Depth to bedrock beneath the Site is greater than 100 ft bgs.

Groundwater was encountered at 8.18 to 11.3 ft bgs, and groundwater flow beneath the Site is generally to the southeast. A groundwater contour map is provided on Figure 5.

2.3 SITE HISTORY

The Site was first developed as early as the late 1800s in which the Site was divided into three small tax parcels fronting along Sackett Street. Each of the parcels was developed with a low-rise residential or retail building occupying approximately half of their respective parcels, with several small outbuildings also present. By the late 1930s, the eastern parcel was redeveloped with a one-story building occupying the entire parcel footprint and identified as a private garage. By 1950, the center parcel was developed with a two-story building occupying the entire parcel footprint and identified as a private garage. The eastern building was identified as an auto repair shop. The residence on the western lot was demolished

in the mid- to late-1960s, with the central and eastern buildings both identified as auto repair shops. Between the early and mid-1980s, the western and central parcels were redeveloped with a single two-story building identified as a warehouse. By 1988, this structure was identified as an auto repair shop.

2.4 REDEVELOPMENT PLANS

Although the future development plans are in preliminary design phases, the proposed development will consist of constructing a new eight-story residential building comprised of 34 dwelling units. The new development will encompass approximately half of the lot footprint with the rear area (i.e., the western portion of the Site) used for parking. The building is anticipated as slab on grade and will not include a cellar. An approximately 700 sq ft elevator pit will be excavated to approximately 2 ft bgs with other foundation elements requiring a similar excavation depth. The first floor will contain a lobby, mechanical room, recreation room, bicycle storage room, compactor room, and one bedroom. Floors two through eight will contain residential dwelling units.

3. Summary of Previous Investigations

To date, the following reports have been completed for the Site:

1. May 2022 Phase I Environmental Site Assessment (ESA) Prepared by Brussee Environmental Corp. (Brussee).
2. May 2022 Limited Phase II ESA Prepared by Brussee.

Previous reports are appended to the approved RIWP. A summary of the environmental findings is provided below.

May 2022 Phase I ESA
Prepared by Brussee

A Phase I ESA, dated May 2022, was performed by Brussee for the purpose of identifying Recognized Environmental Conditions (RECs) in connection with the Site.

The Phase I identified the following RECs at the Site:

- Historical use of the Site as a former garage and/or auto repair shop from at least the late-1930s through the early-2020s. The former use as a garage and/or auto repair shop is suspected to have impacted the subsurface quality beneath the Site and is considered a REC at this time, which warrants a Phase II along with a geophysical survey in order to determine if any buried tanks exist on the Site.
- Historical use of the surrounding properties for various industrial and manufacturing uses, machine shops, iron works/foundries, services stations, garages/repair shops, and manufactured gas plant facilities. There is the potential for historic operations at the surrounding properties, most notably the Fulton Municipal Works Former MGP site, which was located across Sackett Street, to have impacted the subsurface.

The following Historic Recognized Environmental Condition (HREC) was identified:

- The Site was listed on the Petroleum Bulk Storage (PBS) database as having one 275-gallon waste oil underground storage tank (UST), installed in 1988 and closed-in-place in 2009, and one 275-gallon waste oil aboveground storage tank (AST) installed in 2009. During the Site inspection, there was no evidence of the abandoned UST or the AST, except for a vent pipe observed protruding through the roof of the eastern building.

The following environmental concerns (ASTM Non-Scope Issues/Business Environmental Risks [BERs]) were identified:

- The Site was identified as an E-Designation site by the NYCOER and assigned E-Designation E-601 – Gowanus Neighborhood Rezoning as a result of a CEQR effective November 2021 (CEQR #19DCP157K). The requirements under the E-Designation program are satisfaction of the requirements for hazardous materials, noise, and air quality with the NYCOER.

- Fluorescent ballasts were observed within portions of the building during the Site inspection. Brussee recommended that a polychlorinated biphenyl (PCB) survey be performed prior to demolition and/or remediation activities.
- The potential for fill materials to be present on the Site due to former retail and residential buildings located in the western and central portions of the Site.
- No friable asbestos-containing materials were observed in the areas inspected on the Site; however, due to the age of the buildings, it is possible that roofing, roof flashing, and other building materials may contain asbestos. Brussee recommended that an asbestos survey be performed prior to any proposed work.

May 2022 Limited Phase II ESA
Prepared by Brussee

In May 2022, Brussee conducted a Limited Phase II ESA under oversight from the NYCOER E-Designation program to evaluate potential impacts related to the historic use of the Site. The investigation included the installation of six soil borings up to 20 ft bgs, three temporary groundwater monitoring points, three soil vapor points, and the collection of soil, groundwater, and soil vapor samples. A total of 12 soil samples, three groundwater samples, and three soil vapor samples were collected. Field observations and laboratory analytical results are summarized below:

Soil

Brussee identified urban fill generally consisting of brown silty sand with gravel and brick fragments in each boring extending to depths ranging from 7 to 12 ft bgs. A smear zone of petroleum-impacted soil was encountered at the groundwater table to approximately 6 ft below the groundwater table (10 to 16 ft bgs) within each of the soil borings. Staining and odors were observed around the groundwater interface in each of the borings and Photoionization Detector (PID) readings ranged from non-detect to 15,000 parts per million (ppm). Elevated concentrations of heavy metals including arsenic (maximum concentration of 19.6 milligrams per kilogram [mg/kg]), barium (maximum concentration of 1,540 mg/kg), cadmium (maximum concentration of 14.5 mg/kg), chromium (maximum concentration of 212 mg/kg), lead (maximum concentration of 2,900 mg/kg), and mercury (maximum concentration of 4.42 mg/kg) were detected above Restricted-Residential Soil Cleanup Objectives (RRSCOs) within four of the six soil samples.

Petroleum-related VOCs were detected above RRSCOs within two soil samples across the Site. SVOCs, specifically PAHs, were detected above RRSCOs at one sample location.

Groundwater

Groundwater was encountered at a depth of approximately 10 ft bgs. Petroleum-related VOCs were detected above New York State 6 New York Codes, Rules, and Regulations (NYCRR) Part 703.5 Class GA groundwater quality standards (GQS) within all three groundwater samples. The highest VOC concentrations were reported in sample GW1, located in the northern region of the Site along Sackett Street, and the lowest concentrations of VOCs were reported in sample GW3, located in the southern region of the Site.

Soil Vapor

Brussee installed three soil vapor implants at a depth of approximately 7 ft bgs. Soil vapor analytical results were compared to the New York State Department of Health (NYSDOH) Final Guidance on Soil Vapor Intrusion (October 2006, updated May 2017) Matrix A, Matrix B, and Matrix C guidance values. Elevated concentrations of acetone (maximum concentration of 8,500 micrograms per cubic meter [µg/m^3]), methyl ethyl ketone (maximum concentration of 6,630 µg/m^3), and tetrahydrofuran (maximum concentration of 3,860 µg/m^3) were detected within each of the three soil vapor samples. The CVOCs tetrachloroethene (PCE), with a maximum concentration of 188 µg/m^3, and trichloroethene (TCE), with a maximum concentration of 720 µg/m^3, were detected within soil vapor samples.

Based on the findings of the Limited Phase II ESA, Brussee recommended additional investigation to further characterize soil, groundwater, and soil vapor quality.

4. Remedial Investigation Approach

4.1 PROJECT TEAM

A project team for the Site was created based on qualifications and experience with personnel suited for the successful completion of the project.

The NYSDEC Case Manager/Project Manager was Marnie Chancey. The Case Manager/Project Manager was responsible for overseeing the successful completion of the project work and adherence to the approved RIWP on behalf of NYSDEC.

The NYSDOH Case Manager/Project Manager was Johnathan Robinson. The Case Manager/Project Manager was responsible for overseeing the successful completion of the project work and adherence to the work plan on behalf of NYSDOH.

Mari C. Conlon was the Qualified Environmental Professional and Principal-In-Charge for this work. In this role, Ms. Conlon was responsible for the overall completion of each task as per the requirements outlined in this work plan and in accordance with the DER-10 guidance as well as responsible for communications with the NYSDEC Case Manager/Project Manager regarding project status, schedule, issues, and updates for project work.

Zachary Simmel was the Assistant Project Manager for this work and also acted as the Quality Assurance Officer (QAO). In this role, Mr. Simmel assured the application and effectiveness of the Quality Assurance Project Plan (QAPP) by the analytical laboratory and the project staff, provided input to the field team as to corrective actions that may be required as a result of the above-mentioned evaluations and prepared and/or reviewed data validation and audit reports.

Anna F. Vaculik and Nicole Mooney were the Geologists responsible for implementing the field effort for this work. Ms. Vaculik's and Ms. Mooney's responsibilities included implementing the work plan and supplemental work plan activities and directing the subcontractors to ensure the successful completion of field activities.

The drilling subcontractor utilized for this investigation was Coastal Environmental Solutions, Inc. (Coastal). Coastal provided Sonic rig operators to implement the scope of work of the approved RIWP.

The drilling subcontractor utilized for supplemental investigation activities was Lakewood Environmental Services Corp. (Lakewood). Lakewood provided a track-mounted Geoprobe® direct push drill rig and operator to implement the supplemental sampling scope of work, including advancement of soil borings and installation of groundwater monitoring wells.

Samples were collected in laboratory-prepared sample bottles (pre-preserved when appropriate), placed in ice-packed coolers maintained at approximately 4 degrees Celsius under standard chain of custody procedures, and transported to Alpha Analytical Laboratories, Inc. (Alpha) of Westborough, Massachusetts (Environmental Laboratory Approval Program [ELAP] Certification No. 07010T). Alpha

was responsible for analyzing the samples as per the analyses and methods identified in the approved RIWP.

4.2 GROUND PENETRATING RADAR SURVEY

Haley & Aldrich of New York oversaw a Ground Penetrating Radar (GPR) Survey performed at the Site by Coastal on 21 June 2023. The survey was conducted to identify the presence of any utilities, USTs, or any other anomalies that may be present in the subsurface. The Site was scanned using a ground-penetrating radar dual band 400/800 MHz cart-mounted system, a high-range precision utility detector, and an electromagnetic pipe and cable locator. Soil conditions allowed for a maximum GPR penetration depth of 2 ft bgs below concrete and soil grade. Metallic anomalies/USTs were not detected throughout accessible areas of the Site. Several utilities were marked on the Site in designated colors. Full results of the GPR Survey are provided in Appendix A.

4.3 SOIL BORING INSTALLATION AND SOIL SAMPLING

Soil samples were collected to meet NYSDEC DER-10 requirements for remedial investigations, as well as to further characterize soil conditions. Four soil borings were advanced to 20 ft bgs and an additional four soil borings were advanced to 100 ft bgs using a track-mounted Eijkelkamp CRS-XL-140 Duo Sonic drill rig operated by a licensed operator provided by Coastal, the drilling subcontractor. Soil samples were collected from acetate sleeves using a stainless-steel trowel or sampling spoon. Samples were collected using laboratory-provided clean bottleware. VOC grab samples were collected using terra cores. Sampling locations are displayed in Figure 4.

Soils were logged continuously by a geologist using both the Modified Burmister Soil Classification System and the Unified Soil Classification System. The presence of staining, odors, and PID response was noted. Soil boring logs are provided as Appendix B. Sampling methods are described in the RIWP.

Soil samples representative of Site conditions were collected at eight locations widely distributed across the Site, as shown in Figure 4. As per the approved RIWP, samples were collected from 0 to 0.5 ft bgs, 5 to 7 ft bgs, and 12 to 14 ft bgs at each boring, and samples were collected in borings SB-1, SB-3, SB-7, and SB-8 from 1 to 2 ft bgs. An additional sample was collected from SB-4 at 8 to 10 ft bgs and SB-6 at 10 to 12 ft bgs where petroleum impacts were observed.

Haley & Aldrich of New York collected 80 soil samples (plus quality assurance/quality control [QA/QC] samples) for laboratory analysis. Soil samples were collected in laboratory-supplied containers, which were relinquished under standard chain-of-custody protocol and delivered via laboratory-provided courier to Alpha for analysis.

Alpha is a NYSDOH ELAP-certified laboratory. As detailed in Table 1, soil samples were analyzed for the following:

- Target Compound List (TCL) VOCs using U.S. Environmental Protection Agency (EPA) Method 8260B;
- TCL SVOCs using EPA Method 8270C;
- Total Analyte List (TAL) Metals using EPA Method 6010;

- PCBs using EPA Method 8082;
- TCL Pesticides using EPA Method 8081B;
- Per- and Polyfluoroalkyl Substances (PFAS) by EPA Method 1633; and
- 1,4-dioxane by EPA Method 8270 SIM

As per NYDSEC DER-10 requirements, samples analyzed for PFAS and 1,4-dioxane were collected and analyzed in accordance with the NYSDEC-issued April 2023 "Guidelines for sampling and Analysis of PFAS" and the April 2023 "Sampling for 1,4-dioxane and Per- and Polyfluoroalkyl Substances (PFAS) Under DECs Part 375 Remedial Programs," respectively. Table 1 provides a summary of all soil samples collected as part of this RI, including sample locations, sample depths, and analyses performed on each sample.

To investigate the potential for the presence of non-aqueous phase liquid/grossly contaminated material (NAPL/GCM), four soil borings (SB-1, SB-3, SB-7, and SB-8, depicted on Figure 4) were advanced to 100 ft bgs. NAPL/GCM was not identified in any borings and therefore soil samples were not collected for laboratory analysis.

4.3.1 Supplemental Soil Boring Installation and Soil Sampling

Three additional soil borings were installed by a track-mounted direct push drill rig (Geoprobe®) operated by a licensed operator provided by Lakewood. Borings SB-2A and SB-3A were re-installed at RI soil borings SB-2 and SB-3, respectively, to vertically delineate lead and mercury concentrations detected above Unrestricted Use Soil Cleanup Objectives (UUSCOs) during initial RI activities. Soil samples were collected from the re-installed boring at SB-3 at 0 to 0.5 ft bgs, 1 to 3 ft bgs, 3 to 5 ft bgs, 5 to 7 ft bgs, 7 to 9 ft bgs, and 9 to 11 ft bgs. Samples from re-installed SB-2 were collected from these intervals as well as from 12 to 14 ft bgs. These depths were selected as samples collected from 12 to 14 ft bgs in SB-2 did not observe lead or mercury above the UUSCO and samples collected from 9 to 11 ft bgs in SB-3 did not observe lead or mercury above UUSCOs. Samples were collected from acetate liners using a stainless-steel trowel or sampling spoon. Supplemental sample locations are shown on Figure 4a, and a Supplemental Sample and Analysis Plan is provided in Table 1a.

As a contingency, delineation borings surrounding SB-2A were installed 5 ft to the east (SB-2A-E1), south (SB-2A-S1), and west (SB-2A-W1) of the RI boring location to a depth of 14 ft bgs. Delineation borings surrounding SB-3A were installed 5 ft to the west (SB-3A-W1) and south (SB-3A-W1) of the RI boring location to a depth of 11 ft bgs. As a contingency, step-out soil borings were also installed 5 ft from the delineation borings discussed above, with the exception of the western step-out from delineation boring SB-3A-W1 which was not installed due to the presence of utilities. Delineation and contingency borings were sampled at the same intervals as the reinstalled borings discussed above. Samples collected from delineation and contingency borings were placed on hold with the laboratory to be activated for analysis pending results of the reinstalled borings indicating hazardous levels of lead or mercury. An additional sample was collected from SB-2A-S1 at 11 to 11.5 ft bgs where petroleum impacts were observed and analyzed for VOCs and SVOCs as further detailed below and in Section 4.6.

Soils were logged continuously by field personnel using the Modified Burmister Soil Classification System. The presence of staining, odors, and PID response was noted in soil boring logs. Soil boring logs are provided as Appendix B1.

Haley & Aldrich of New York collected 14 supplemental soil samples (plus QA/QC samples) for laboratory analysis. Samples were collected using laboratory-provided clean bottle ware; VOC grab samples were collected using Terra Core sampling devices. Soil samples were relinquished under standard chain-of-custody protocol and delivered via courier to Alpha for analysis.

Soil samples collected from SB-2A and SB-3A were analyzed for the following:

- Total Lead and Mercury by EPA Method 6010; and,
- Toxicity Characteristic Leaching Procedure (TCLP) Lead and Mercury.

An additional soil sample collected from SB-2A-S1 at 11 to 11.5 ft bgs was analyzed for the following:

- TCL VOCs by EPA Method 8260B; and,
- TCL SVOCs using EPA Method by 8270C.

4.4 PERMANENT MONITORING WELL INSTALLATION AND GROUNDWATER SAMPLING

The purpose of groundwater sampling was to obtain current groundwater data and meet NYSDEC DER-10 requirements for remedial investigations.

Four, two-inch permanent monitoring wells were installed to 15 ft bgs. See Figure 4 for monitoring well locations. Each monitoring well was constructed using a 2-inch diameter polyvinyl chloride (PVC) riser pipe with 10-ft-long, 10-slot (0.01-inch) slotted screens from 5 to 15 ft bgs. Each monitoring well was backfilled with #0 certified clean sand fill, followed by bentonite plug, and sealed at grade with steel flush-mount covers. Monitoring well screens were installed to straddle the water table. During a monitoring well gauging event concurrent with the well survey on 14 July 2023, groundwater was encountered at depths ranging from approximately 8.33 to 9.30 ft bgs. Well construction diagrams are provided in Appendix C.

Following installation, monitoring wells were developed by surging a pump in the well several times to pull fine-grained material from the well. Development was completed until the water turbidity was 50 nephelometric turbidity units (NTU) or less, or 10 well volumes were purged.

One week after development, Haley & Aldrich of New York collected nine groundwater samples (plus QA/QC) for laboratory analysis including the following:

- TCL VOCs using EPA Method 8260B;
- TCL SVOCs using EPA Method 8270C;
- Total Metals using EPA Methods 6010/7471;
- Dissolved Metals using EPA Methods 6010/7471;

- TCL Pesticides using EPA Method 8081B;
- PCBs using EPA Method 8082;
- PFAS using EPA Method 1633; and,
- 1,4-dioxane using EPA Method 8270 SIM.

Groundwater samples analyzed for PFAS and 1,4-dioxane were collected and analyzed in accordance with the NYSDEC issued April 2023 "Guidelines for Sampling and Analysis of PFAS" and the April 2023 "Sampling for 1,4-dioxane and PFAS Under DECs Part 375 Remedial Programs," respectively.

Table 1 provides a summary of all groundwater samples collected as part of this RI, including sample locations, sample depths, and analyses performed on each sample.

Groundwater monitoring wells were sampled utilizing low-flow sampling procedures for groundwater sampling. Prior to sampling, the water level was measured from each monitoring well using an electronic water level meter. Groundwater from each well was purged using low pumping rates (less than 500 milliliters per minute) to limit drawdown of the water level. Dedicated disposable field equipment used at each well included high-density polyethylene and silicon tubing. Wells were purged until turbidity, pH, temperature, dissolved oxygen, and specific conductivity stabilized. Field measurements collected from the flow cell were logged and are included in Appendix D.

DPK Consulting LLC (DPK), a New York State-licensed surveyor, completed a monitoring well survey on 14 July 2023 and 26 April 2024. During surveying, Haley & Aldrich of New York performed a synoptic monitoring well gauging event. Groundwater flows to the southeast. A summary of the data collected by the licensed surveyor is provided as Appendix E. A groundwater contour map is provided in Figure 5 and a summary of the synoptic monitoring well gauging results is provided in Appendix F.

4.4.1 Supplemental Permanent Monitoring Well Installation and Groundwater Sampling

The purpose of the supplemental groundwater sampling was to obtain groundwater data to evaluate the presence of petroleum-based VOCs and PAHs at RI boring locations SB-4 and SB-6. Additionally, a monitoring well was installed at supplemental sampling delineation boring SB-2A-S1 where petroleum impacts were observed in soil during supplemental soil sampling. Monitoring well locations are provided on Figure 4a.

Two 2-inch permanent monitoring wells (MW-5 and MW-6) were installed to approximately 17 ft bgs. An additional 2-inch permanent monitoring well (MW-7) was installed to approximately 17 ft bgs. Groundwater was encountered between 8.18 to 11.3 ft bgs during the supplemental groundwater sampling event. Wells were screened from 5 to 15 ft bgs (MW-7) and 7 to 17 ft bgs (MW-5 and MW-6) so that the screen straddled the groundwater interface, and the top of screen was approximately 2 to 3 ft above the measured depth to water. Monitoring wells were installed via hollow-stem augers. Each monitoring well was constructed with a 2-inch annular space and installed using either #0 or #00 certified clean sand fill. Supplemental sampling well construction diagrams are provided as Appendix C.

Monitoring wells were developed as per procedures used in the initial RI sampling.

Table 1a provides a summary of all groundwater samples collected as part of the supplemental sampling activities, including sample locations, sample depths, and analyses performed on each sample.

Haley & Aldrich of New York collected seven groundwater samples (plus QA/QC samples) for laboratory analysis including the following:

- TCL VOCs using EPA Method 8260B;
- TCL SVOCs using EPA Method 8270C;
- Total Metals using EPA Methods 6010/7471;
- Dissolved Metals using EPA Methods 6010/7471;
- TCL Pesticides using EPA Method 8081B;
- PCBs using EPA Method 8082;
- PFAS using EPA Method 1633; and,
- 1,4-dioxane using EPA Method 8270 SIM.

As per NYSDEC DER-10 requirements, all groundwater samples were analyzed for emerging contaminants. Groundwater samples collected for PFAS and 1,4-dioxane were collected in accordance with the protocols established in the NYSDEC's April 2023 "Guidance for Sampling, Analysis, and Assessment of PFAS Under NYSDEC's Part 375 Remedial Programs" (April 2023 PFAS Guidance).

Groundwater monitoring wells were sampled utilizing low-flow sampling methods as per the approved RIWP and QAPP included as Appendix C of the RIWP.

4.5 SOIL VAPOR PROBE INSTALLATION AND SOIL VAPOR SAMPLING

Soil vapor samples were collected in accordance with the Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH October 2006). Seven soil vapor probes were installed at 6 to 7 ft bgs, approximately 2 ft above the observed groundwater interface. The vapor implants were installed using a stainless-steel probe to the desired sample depth. Based on current Site conditions (i.e., vacant lot), any impact on sampling efforts was assumed to be minimal.

To ensure the stainless-steel soil vapor probe was sealed completely to the surface using bentonite, a tracer gas was used in accordance with NYSDOH protocols to serve as a QA/QC device to verify the integrity of the soil vapor probe seal. In addition, one to three implant volumes were purged prior to the collection of the soil vapor samples. Sampling occurred for a duration of approximately two hours. At the conclusion of the sampling round, tracer monitoring was performed a second time to confirm the continued integrity of the probe seals.

Samples were collected in appropriately sized Summa canisters that were batch-certified clean by the laboratory. Samples were analyzed for VOCs using EPA Method TO-15. Flow rate for both purging and sampling did not exceed 0.2 liters per minute (L/min). Additional details regarding the sampling methods are described in the Field Sampling Plan (FSP) provided in the approved RIWP. Soil vapor sampling logs are provided in Appendix G.

Table 1 provides a summary of all soil vapor samples collected as part of this RI, including sample locations, sample depths, and analyses performed on each sample.

4.6 DEVIATIONS FROM THE RIWP

The RI was performed in substantial conformance with the approved RIWP with the exception of the following:

- Several boring, monitoring well, and soil vapor points were slightly relocated during the RI due to field conditions or multiple refusals at their original locations.
- Additional soil samples were collected at SB-4 from 8 to 10 ft bgs and SB-6 from 10 to 12 ft bgs due to observed staining and petroleum odors and elevated PID readings observed from 8 to 12 ft bgs across the two borings.

4.6.1 Deviations from the SRIWP

The supplemental sampling was performed in substantial conformance with the approved SRIWP with the exception of the following:

- An additional soil sample was collected at delineation boring SB-2A-S1 from 11 to 11.5 ft bgs due to observed impacts, petroleum-like odors, and elevated PID readings observed in that boring. This deviation was discussed with the NYSDEC Case Manager via phone on 26 March 2024.
- An additional monitoring well was installed at the location of delineation boring SB-2A-S1 to assess groundwater in the vicinity of observed soil impacts. This deviation was discussed with the NYSDEC Case Manager via phone on 26 March 2024.
- The delineation step-out boring SB-3A-W2 was not able to be installed due to the presence of utilities.

4.7 QUALITY ASSURANCE/QUALITY CONTROL

The RI and associated supplemental sampling were conducted in accordance with Haley & Aldrich of New York's QAPP provided as an Appendix to the RIWP. Haley & Aldrich of New York's sampling program included several types of QA/QC samples and measures to ensure the usability of the data. QA/QC samples included equipment rinsate/field blanks, trip blanks, sample duplicates, and matrix spike/matrix spike duplicates (MS/MSDs).

When applicable, the sample result summary tables list the laboratory method detection limit (MDL) at which a compound was non-detectable. The laboratory results were reported to the sample-specific practical quantitation limit (PQL), equal to the sample-specific MDL, supported by the instrument calibrations.

The reliability of laboratory data is supported by compliance with sample holding times and laboratory MDLs below cleanup criteria. The accuracy and precision of the laboratory analytical methods were maintained by using calibration and calibration verification procedures, laboratory control samples, and surrogate, matrix, and analytical spikes. A review of the laboratory data packages indicates that holding

times were met and no significant non-conformance issues were reported. Category B laboratory reports are provided in Appendix H. Data will be validated as detailed in Section 6.4 and summarized in Data Usability Summary Reports (DUSRs) which are included in Appendix I.

4.8 INVESTIGATION DERIVED WASTE

Following sample collection, investigation-derived waste was stored in 55-gallon drums. Boreholes were restored to grade with the surrounding area. Groundwater purged from the monitoring wells during development and sample collection was placed into New York State Department of Transportation (DOT)-approved 55-gallon drums pending off-Site disposal. A total of three DOT-approved 55-gallon drums of purge water were produced during the investigation. A total of four DOT-approved 55-gallon drums of soil cuttings were produced during the investigation. On 11 October 2023, the DOT-approved 55-gallon drums containing Investigative Derived Waste (IDW) were transferred off-Site to an approved facility for disposal by Coastal. Manifests are included in Appendix K.

A total of three DOT-approved 55-gallon drums were produced during supplemental sampling: one drum containing soil cuttings and two drums containing purged groundwater and decontamination liquids. The drums are currently labeled and staged on the Site in a manner that prevents leakage, deterioration, or release of waste.

4.9 REPORTING

During the implementation of the NYSDEC-approved RIWP and NYSDEC-approved SRIWP, daily reports were provided to NYSDEC. Daily field reports included a summary of sampling and field activities, investigation progress updates, and photographs of field work. The daily reports from the RI and supplemental sampling are included in Appendix J.

5. Health and Safety

The work outlined above was completed under a Site-specific Health and Safety Plan (HASP) in accordance with Occupational Safety and Health Administration (OSHA) Hazardous Waste Operations and Emergency Response (HAZWOPER) regulations. Work was completed in Modified Level D personal protective equipment (PPE). A copy of the HASP is included in Appendix E of the NYSDEC-approved RIWP.

The remedial investigation and supplemental sampling activities were conducted in accordance with a Site-specific Community Air Monitoring Plan (CAMP). CAMP data was provided to NYSDEC in the daily reports included in Appendix J. During the remedial investigation and supplemental sampling activities, air monitoring was performed at one upwind and one downwind location. No concentrations of VOCs or 15-minute average concentration of particulate matter smaller than 10 microns in diameter (PM10) exceeded the action levels of 0.1 ppm and 150 $\mu g/m^3$, respectively, as specified in the "Special Requirements for Work Within 20 Feet of Potentially Exposed Individuals or Structures." No visible dust was observed leaving the Site perimeter during intrusive remedial investigation activities. During demolition activities, brief exceedances of dust particulate threshold were experienced due to equipment malfunctions and poor air quality conditions. Due to poor air quality conditions (Air Quality Alert in New York City) on 6 June, 7 June, 8 June, 29 June, and 30 June, particulate readings were higher than other days from the start to end of demolition activities. Exceedances were not observed, and no visible dust was observed on those particular days. On 6 July, there was a brief particulate exceedance due to a large portion of the former building wall being demolished. To mitigate the dust, the area was immediately sprayed with water and work was stopped until readings returned to within CAMP thresholds.

6. Contaminants of Concern and Nature and Extent of Contamination

6.1 APPLICABLE STANDARDS

Soil analytical results were compared to NYSDEC 6 NYCRR Part 375 UUSCOs, Protection of Groundwater Soil Cleanup Objectives (PGWSCOs), and RRSCOs. Note that no standards for PFAS in soil currently exist in New York State, however; NYSDEC published soil guidance values for perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) in October 2020 (latest revision April 2023). PFOA and PFOS soil sample results are compared to the unrestricted use and restricted residential use soil guidance values outlined in the Part 375 Remedial Programs Guidelines for Sampling and Analysis of PFAS guidance.

Groundwater analytical results were compared to 6 NYCRR Part 703.5 NYSDEC Technical and Operational Guidance Series 1.1.1 Ambient Water Quality Standards (AWQS) and Guidance Values (GV). Groundwater samples to be analyzed for PFAS and 1,4-dioxane will be collected and analyzed in accordance with the NYSDEC November 2022 “Sampling, Analysis and Assessment of PFAS” and the November 2022 “Sampling for 1,4-dioxane and Per- and Polyfluoroalkyl Substances (PFAS) Under DECs Part 375 Remedial Programs,” respectively. Emerging contaminants PFOA/PFAS and 1,4-dioxane were compared to the NYSDEC February 2023 GV for PFOA, PFOS, and 1,4-dioxane (latest update February 2023).

No direct comparison standard currently exists for soil vapor samples in New York State.

6.2 REMEDIAL INVESTIGATION SOIL SAMPLING RESULTS

Table 2 summarizes the analytical results from the soil sampling event. Figures 6 and 7 provide the soil boring locations as well as a summary of soil laboratory and field screening data from the sampling event.

6.2.1 Volatile Organic Compounds

One VOC, acetone, was detected in multiple soil samples above the UUSCOs at a maximum concentration of 0.12 mg/kg in soil sample SB-2_5-7’. In addition, multiple VOCs were detected above UUSCOs and PGWSCOs, but not RRSCOs, including benzene (maximum concentration of 0.23 mg/kg in soil sample SB-3_12-14’), sec-butylbenzene (maximum concentration of 16 mg/kg in SB-6_10-12’), naphthalene (maximum concentration of 24 mg/kg in SB-6_10-12’), n-Butylbenzene (maximum concentration of 34 mg/kg in SB-6_10-12’), and n-propylbenzene (maximum concentration of 100 mg/kg in SB-6_10-12’). Four VOCs were detected above RRSCOs in soil sample SB-6_10-12’ including 1,2,4-trimethylbenzene (concentration of 360 mg/kg), 1,3,5-trimethlybenzene (concentration of 87 mg/kg), ethylbenzene (concentration of 54 mg/kg), and xylene (concentration of 130 mg/kg).

VOCs were compared to PGWSCOs for compounds detected above the NYSDEC AWQS in groundwater samples. The VOCs benzene (maximum concentration of 0.23 mg/kg in SB-3_12-14’) and n-propylbenzene (maximum concentration of 100 mg/kg in SB-6_10-12’) were detected above the NYSDEC AWQS in groundwater samples from both the 2023 and 2024 groundwater sampling events and were found to exceed the PGWSCOs.

No other VOCs were detected in any soil samples above applicable standards.

6.2.2 Semi-Volatile Organic Compounds

Seven SVOCs, specifically PAHs, were detected in multiple shallow soil samples at concentrations above the UUSCOs, RRSCOs, and/or PGWSCOs including benzo(a)anthracene (maximum concentration of 15 mg/kg in SB-5_5-7'), benzo(a)pyrene (maximum concentration of 14 mg/kg in SB-5_5-7'), benzo(b)fluoranthene (maximum concentration of 14 mg/kg in SB-5_5-7'), benzo(k)fluoranthene (maximum concentration of 4.3 mg/kg in SB-5_5-7'), chrysene (maximum concentration of 14 mg/kg in SB-5_5-7'), dibenz(a,h)anthracene (maximum concentration of 1.7 mg/kg in SB-1_5-7'), and indeno(1,2,3-cd)pyrene (maximum concentration of 8.3 mg/kg in SB-1_5-7').

In addition, SVOCs were compared to PGWSCOs for compounds detected above NYSDEC AWQS in groundwater samples. SVOCs including benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, and indeno(1,2,3-cd)pyrene were detected above NYSDEC AWQS in groundwater samples collected during both the 2023 and 2024 groundwater sampling events and were found to exceed the PGWSCOs.

No other SVOCs were detected in any soil samples above applicable standards.

6.2.3 Pesticides

Three pesticides were detected at concentrations exceeding the UUSCOs, but not the RRSCOs, in multiple soil samples including 4,4'-DDD (maximum concentration of 0.127 mg/kg in SB-4_0-0.5), 4,4'-DDE (maximum concentration of 0.0466 mg/kg in SB-4_0-0.5'), and 4,4'-DDT (maximum concentration of 0.279 mg/kg in SB-4_0-0.5').

No other pesticides were detected in any soil samples above applicable standards.

6.2.4 Metals

Six metals were detected above the UUSCOs, RRSCOs, and/or PGWSCOs in multiple soil samples including arsenic (maximum concentration of 26.5 mg/kg in SB-5_0-0.5), beryllium (maximum concentration of 11.8 mg/kg in SB-4_0-0.5'), copper (maximum concentration of 3,080 mg/kg in SB-1_0-0.5'), lead (maximum concentration of 2,080 mg/kg in SB-3_5-7'), mercury (maximum concentration of 12.2 mg/kg in SB-3_1-2'), nickel (maximum concentration of 423 mg/kg in SB-4_0-0.5'), and zinc (maximum concentration of 6,200 mg/kg in SB-4_0-0.5'). Barium was detected above the RRSCO in soil sample SB-3_5-7' only at a concentration of 481 mg/kg. Beryllium was detected above the UUSCO in soil sample SB-1_1-2' only at a concentration of 9.55 mg/kg. Selenium was detected above the UUSCO and PGWSCO in soil sample SB-3_5-7' only at a concentration of 4.67 mg/kg. Silver was detected above the USUCO and PGWSCO in soil sample SB-1_0-0.5' at a concentration of 10.3 mg/kg. Manganese was detected above UUSCOs, RRSCOs, and PGWSCOs in soil sample SB-5_0-0.5' only at a concentration of 2,680 mg/kg.

Metals were compared to PGWSCOs for compounds detected in groundwater samples. Lead (maximum concentration of 2,080 mg/kg in SB-3_5-7'), manganese (maximum concentration of 2,680 mg/kg in SB-

5_0-0.5'), and selenium (maximum concentration of 4.67 mg/kg in SB-3_5-7') were detected above AWQS in groundwater samples from both the 2023 and 2024 groundwater sampling events and were found to exceed the PGWSCOs.

No other metals were detected in any soil samples above applicable standards.

6.2.5 Polychlorinated Biphenyls

Total PCBs were detected exceeding the UUSCOs in multiple shallow soil samples at a maximum concentration of 3.11 mg/kg in SB-4_0-0.5'.

No other PCBs were detected in any soil sample above applicable standards.

6.2.6 Emerging Contaminants

The emerging contaminant, 1,4-dioxane was not detected above laboratory detection limits in any soil samples collected at the Site.

PFOS was detected above the UUSCO and PGWSCO in two soil samples at a maximum concentration of 1.09 nanograms per gram (ng/g) in SB-2_5-7'. PFOA was detected above the UUSCOs in two soil samples, one of which exceeded the PGWSCO, at a maximum concentration of 1.04 ng/g in SB-2_5-7'. Total PFOS and PFOA ranged from non-detect to a maximum concentration of 2.13 ng/g in SB-2_5-7.

6.2.7 Field Screening

Soils with elevated PID readings and/or petroleum-like odors and staining were observed in soil boring SB-4 from 8 to 15 ft bgs with a maximum PID reading of 615.4 ppm and in soil boring SB-6 from 10 to 14 ft bgs with a maximum PID reading of 317 ppm.

6.2.8 Supplemental Soil Sampling

Table 2a summarizes the analytical results from the supplemental soil sampling event. Figure 6a provides the supplemental soil boring locations as well as a summary of soil laboratory and field screening data from the supplemental sampling event. Soil boring logs from the supplemental sampling event are provided in Appendix B1.

6.2.8.1 Volatile Organic Compounds

Six VOCs were detected above the UUSCOs, RRSCOs, and/or PGWSCOs in soil sample SB-2A-S1_11-11.5', including 1,2,4-trimethylbenzene at a concentration of 100 mg/kg, 1,3,5-trimethylbenzene at a concentration of 27 mg/kg, ethylbenzene at a concentration of 60 mg/kg, naphthalene at a concentration of 3,300 mg/kg, n-propylbenzene at a concentration of 9.5 mg/kg, and total xylenes at a concentration of 56 mg/kg.

VOCs were compared to PGWSCOs for compounds detected above the NYSDEC AWQS in groundwater samples. The VOCs 1,2,4-trimethylbenzene (maximum concentration of 360 mg/kg in SB-6_10-12'),

1,3,5-trimethylbenzene (maximum concentration of 87 mg/kg in SB-6_10-12'), sec-butylbenzene (maximum concentration of 16 mg/kg in SB-6_10-12'), ethylbenzene (maximum concentration of 60 mg/kg in SB-2A-S1_11-11.5'), n-butylbenzene (maximum concentration of 34 mg/kg in SB-6_10-12'), naphthalene (maximum concentration of 3,300 mg/kg in SB-2A-S1_11-11.5'), and total xylenes (maximum concentration of 130 mg/kg in SB-6_10-12') were detected above NYSDEC AWQS in groundwater samples collected during the 2024 groundwater sampling event and were found to exceed the PGWSCOs in soil samples collected during the 2023 and/or 2024 soil sampling events.

No other VOCs were detected in soil sample SB-2A-S1_11-11.5' above applicable standards.

6.2.8.2 Semi-Volatile Organic Compounds

One SVOC, naphthalene, was detected above the UUSCO, RRSCO, and PGWSCO in soil sample SB-2A-S1_11-11.5' at a concentration of 120 mg/kg.

No other SVOCs were detected in soil sample SB-2A-S1_11-11.5' above applicable standards.

6.2.8.3 Metals

Two metals, lead and mercury, were detected above UUSCOs, RRSCOs, and/or PGWSCOs in multiple soil samples with maximum concentrations detected in soil sample SB-3A_5-7' of 1,900 mg/kg and 41.3 mg/kg, respectively. TCLP Lead was detected below the EPA TCLP Regulatory Levels at a maximum concentration of 1.24 milligrams per Liter (mg/L) in SB-2A_0-0.5'. TCLP mercury was non-detect in all supplemental soil samples collected.

6.2.8.4 Field Screening

Soils with elevated PID readings and/or petroleum-like odors and staining were observed in soil boring 2A from 12 to 13 ft bgs with a maximum PID reading of 58.3 ppm, in delineation boring SB-2A-S1 from 11 to 13 ft bgs with a maximum PID reading of 303 ppm, and in SB-3A from 6 to 10 ft bgs with a maximum PID reading of 368.4 ppm.

6.3 GROUNDWATER SAMPLING RESULTS

Table 3 summarizes the analytical results from the groundwater sampling event. Figures 8 and 9 provide the groundwater monitoring well locations as well as a summary of the groundwater data from the sampling event. Groundwater sample logs are provided in Appendix D.

6.3.1 Volatile Organic Compounds

Five VOCs were identified in up to three groundwater samples (MW-1, MW-2, and MW-3) at concentrations exceeding the AWQS. The VOCs, 1,2,4,5-tetramethylbenzene, isopropylbenzene, and n-propylbenzene were detected above AWQS in two groundwater samples, all with maximum concentrations detected in MW-2 of 17 micrograms per liter (µg/L), 15 µg/L, and 12 µg/L, respectively. 1,2-Dichloroethane was detected above the AWQS in two groundwater samples with a maximum

concentration of 1.7 µg/L. Benzene was detected above the AWQS in MW-2, including the duplicate sample, at a maximum concentration of 8.8 µg/L.

No other VOCs were detected in any groundwater samples above the AWQS.

6.3.2 Semi-Volatile Organic Compounds

Four SVOCs were identified in groundwater sample MW-2 (and the duplicate sample) only at concentrations exceeding the AWQS. Benzo(b)fluoranthene and benzo(k)fluoranthene were detected above the AWQS in the duplicate sample only at a concentration of 0.02 µg/L, respectively. Chrysene was detected above the AWQS in MW-2 only at an estimated concentration of 0.01 µg/L. Indeno(1,2,3-cd)pyrene was detected above the AWQS in the duplicate sample only at an estimated concentration of 0.05 µg/L.

No SVOCs were detected above any laboratory detection limits in any groundwater sample.

6.3.3 Organochlorine Pesticides

No pesticides were detected above laboratory detection limits in any groundwater sample.

6.3.4 Polychlorinated Biphenyls

No PCBs were detected above laboratory detection limits in any groundwater sample.

6.3.5 Total Metals

Seven metals were identified in up to four groundwater samples above the AWQS. Antimony and cadmium were detected above the AWQS in MW-3 only at a concentration of 7.49 µg/L and 6.16 µg/L, respectively. Iron was detected above the AWQS in MW-3, including the duplicate sample, with a maximum concentration of 44,400 µg/L in the duplicate sample. Magnesium was detected in three groundwater samples above the AWQS with a maximum concentration of 59,700 µg/L In MW-1. Manganese was detected in three groundwater samples, including the duplicate sample, above the AWQS with a maximum concentration of 8,244 µg/L in MW-1. Selenium was detected above the AWQS in MW-1 only at a concentration of 14.4 µg/L. Sodium was detected in all four groundwater samples, including the duplicate sample, above the AWQS at a maximum concentration of 252,000 µg/L in MW-1.

No other total metals were detected in any groundwater samples above the AWQS.

6.3.6 Dissolved Metals

Six metals were identified in up to four groundwater samples above the AWQS. Antimony, cadmium, and selenium were detected above the AWQS in MW-3 only at a concentration of 7.03 µg/L, 5.52 µg/L, and 12.7 µg/L, respectively. Magnesium was detected in three groundwater samples above the AWQS with a maximum concentration of 53,200 µg/L in MW-1. Manganese was detected in three groundwater samples, including the duplicate, above the AWQS with a maximum concentration of 8,254 µg/L in MW-

1. Sodium was detected in all four groundwater samples including the duplicates sample, above the AWQS at a maximum concentration of 227,000 µg/L in MW-1.

No other dissolved metals were detected in any groundwater samples above the AWQS.

6.3.7 Emerging Contaminants

Concentrations of 1,4-dioxane were compared to the GV of 0.35 µg/L issued on 15 March 2023 by the NYSDEC. Emerging contaminants PFOA/PFAS were compared to the February 2023 NYSDEC GVs. PFOA was detected above the NYSDEC GV in four groundwater samples at a maximum concentration of 105 nanograms per liter (ng/L) in MW-2. The concentration of total PFOS and PFOA compounds ranged from 50.57 ng/L in MW-4 to a maximum concentration of 356.48 ng/L in MW-3. 1,4-dioxane was in two groundwater samples at a maximum concentration of 0.119 µg/L in MW-2.

An on-Site source area for emerging contaminants was not identified at the Site.

6.3.8 Supplemental Groundwater Sampling

Table 3a summarizes the analytical results from the supplemental groundwater sampling event. Figures 8a and 9a provide the groundwater monitoring well locations as well as a summary of the groundwater data from the supplemental sampling event. Groundwater sample logs from the supplemental sampling event are provided in Appendix D1.

6.3.8.1 Volatile Organic Compounds

Fifteen VOCs were identified in five groundwater samples (MW-4, MW-5, MW-6, MW-7, and the duplicate sample collected at MW-7) at concentrations exceeding the AWQS. The VOCs ispropylbenzene (cumene) and n-propylbenzene were detected above the AWQS in four groundwater samples at maximum concentrations in MW-6 of 160 µg/L and 570 µg/L, respectively. Ethylbenzene and PCE were detected above the AWQS in three groundwater samples, with maximum concentrations of 90 µg/L in MW-7 and 29 µg/L in MW-4, respectively. The VOCs 1,2,4,5-tetramethylbenzene, 2-phenylbutane (sec-butylbenzene), and n-butylbenzene were detected above the AWQS in two groundwater samples with maximum concentrations of 160 µg/L, 36 µg/L, and 53 µg/L, respectively, in MW-6. The VOCs 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, benzene, m,p-xylenes, naphthalene, o-xylene, and total xylenes were detected above the AWQS in two groundwater samples, including the duplicate sample, with maximum concentrations in MW-7 of 57 µg/L, 16 µg/L, 3.8 µg/L (in both MW-7 and the associated duplicate sample), 42 µg/L, 800 µg/L, 34 µg/L, and, 76 µg/L, respectively. Cis-1,2-dichloroethene and TCE were detected above the AWQS in MW-4 at concentrations of 8.6 µg/L and 5.7 µg/L, respectively.

No other VOCs were detected above the AWQS in any groundwater samples collected during supplemental sampling.

6.3.8.2 Semi-Volatile Organic Compounds

One SVOC, biphenyl, was identified in MW-7 (including the associated duplicate sample) above the AWQS at a maximum concentration of 8 µg/L. Additionally, six PAHs were detected in multiple

groundwater samples above the AWQS with maximum concentrations detected in the duplicate sample collected from MW-7, including acenaphthene (maximum concentration 32 µg/L in both MW-7 and the associated duplicate sample), benzo(a)anthracene (maximum concentration 2.2 µg/L), benzo(b)fluoranthene (maximum concentration 1.6 µg/L), benzo(k)fluoranthene (maximum concentration 0.51 µg/L), chrysene (maximum concentration 2 µg/L), and indeno(1,2,3-cd)pyrene (maximum concentration 0.88 µg/L).

No other SVOCs were detected above the AWQS in any groundwater samples collected during supplemental sampling.

6.3.8.3 Organochlorine Pesticides

No pesticides were detected above the AWQS in any supplemental groundwater sample.

6.3.8.4 Polychlorinated Biphenyls

Total PCBs were detected slightly above the AWQS in MW-2 only at a concentration of 0.093 µg/L.

No other PCBs were detected above the AWQS in any supplemental groundwater sample.

6.3.8.5 Total Metals

Seven metals were identified out of eight groundwater samples (including the duplicate sample) above the AWQS. Antimony was detected above the AWQS in MW-3 only at an estimated concentration of 3.75 µg/L. Lead, manganese, and selenium were detected above the AWQS in two groundwater samples at maximum concentrations of 46.67 µg/L in the duplicate sample, 6,697 µg/L in MW-6, and 38.8 µg/L in MW-5, respectively. Magnesium was detected above the AWQS in four groundwater samples at a maximum concentration of 56,800 µg/L in MW-1. Iron was detected above the AWQS in five groundwater samples, including the duplicate sample, at a maximum concentration of 14,000 µg/L in MW-5. Sodium was detected above the AWQS in each of the eight groundwater samples collected, including the duplicate sample, at a maximum concentration of 113,000 µg/L in MW-5.

No other total metals were detected in any supplemental groundwater samples above the AWQS.

6.3.8.6 Dissolved Metals

Six metals were identified out of eight groundwater samples (including the duplicate sample) above the AWQS. Antimony and selenium were detected above the AWQS in one groundwater sample each, at maximum concentrations of 5.42 µg/L in MW-3 and 37.3 µg/L in MW-5, respectively. Iron and manganese were detected above the AWQS in two groundwater samples at maximum concentrations of 4,630 µg/L in MW-5 and 7,032 µg/L in MW-6, respectively. Magnesium was detected above the AWQS in four groundwater samples, at a maximum concentration of 53,100 µg/L in MW-1. Sodium was detected above the AWQS in all eight groundwater samples, including the duplicate sample, at a maximum concentration of 112,000 µg/L in MW-5.

No other dissolved metals were detected in any supplemental groundwater samples above the AWQS.

6.3.8.7 Emerging Contaminants

Concentrations of 1,4-dioxane were compared to the GV of 0.35 µg/L issued on 15 March 2023 by the NYSDEC. Emerging contaminants PFOA/PFAS were compared to the February 2023 NYSDEC GVs. 1,4-dioxane was detected below the GV in one groundwater sample at an estimated concentration of 0.132 µg/L in MW-4. PFOS and PFOA were detected above the NYSDEC GVs in eight groundwater samples, including the duplicate sample, at maximum concentrations of 26.8 ng/L in the duplicate sample and 82 ng/L in MW-1, respectively. The concentration of total PFOS and PFOA compounds ranged from 22.3 ng/L in MW-2 to a maximum concentration of 102 ng/L in the duplicate sample.

An on-Site source area for emerging contaminants was not identified at the Site.

6.4 SOIL VAPOR SAMPLING RESULTS

Table 4 provides a summary of the analytical results from the soil vapor sampling event. Figure 10 provides the soil vapor sampling locations as well as a summary of soil vapor data from the sampling event. The soil vapor purge log is provided in Appendix G and includes details on each soil vapor sample collected.

Total VOC concentrations in soil vapor samples ranged from 293.13 µg/m^3 in sample SV-6 to 2,761.48 µg/m^3 in sample SV-5. Total benzene, toluene, ethylbenzene, xylenes (BTEX) concentrations ranged from 43.51 µg/m^3 in sample SV-6 to 208.35 µg/m^3 in sample SV-7.

1,1,1-trichloroethane was detected in SV-4, SV-5, SV-6, and SV-7 with a maximum concentration of 69.8 µg/m^3 in SV-7. 1,1-dichloroethene was detected above laboratory detection limits in SV-7 only at a concentration of 87.2 µg/m^3. Cis-1,2-Dichloroethene was detected above laboratory detection limits in SV-2 and SV-7 with a maximum concentration of 4.4 µg/m^3 in SV-2. Methylene Chloride was detected above laboratory detection limits in SV-2, SV-3, SV-4, SV-6, and SV-7 at a maximum concentration of 69.5 µg/m^3 in SV-2. PCE was detected in all seven soil vapor samples above laboratory detection limits at a maximum concentration of 313 µg/m^3 in SV-4. TCE was detected in all seven soil vapor samples above laboratory detection limits at a maximum concentration of 145 µg/m^3 in SV-2. Vinyl Chloride was detected in SV-2 and SV-7 at a maximum concentration of 82.6 µg/m^3 in SV-2. No other CVOCs were detected above laboratory detection limits in any soil vapor sample collected at the Site.

Multiple petroleum-related VOCs were detected at elevated concentrations in several soil vapor samples, 2,2,4-trimethylpentane (maximum concentration of 2,220 µg/m^3 in SV-5), cyclohexane (maximum concentration of 70.2 µg/m^3 in SV-7), n-heptane (maximum concentration of 82.8 µg/m^3 in SV-7), ethylbenzene (maximum concentration of 25.7 µg/m^3 in SV-3), and toluene (maximum concentration of 77.6 µg/m^3 in SV-7).

6.5 DATA VALIDATION

DUSRs were created to confirm the compliance of methods with the protocols described in the NYSDEC Analytical Services Protocol (ASP). DUSRs are provided in Appendix I. The completeness goal of greater than 90 percent was exceeded as per the approved QAPP. Category B laboratory reports for all soil samples were provided by Alpha and will be forwarded to Haley & Aldrich of New York's data validator.

6.6 DATA USE

Validated analytical data, supplied in ASP Category B Data Packages in Appendix H, were submitted to the NYSDEC EQuIS™ database in an Electronic Data Deliverable package on 11 October 2023.

Validated analytical data from the supplemental sampling were submitted to the NYSDEC EQuIS™ database in an Electronic Data Deliverable package on 16 May 2024.

7. Conceptual Site Model

7.1 SITE CONTAMINANT SUMMARY

The following summarizes contaminants identified at the Site:

7.1.1 Site-Wide Contaminated Fill in Subsurface Soils

Subsurface soils are impacted with elevated concentrations of VOCs, SVOCs (specifically PAHs), heavy metals, and in some areas, pesticides and PCBs. Contaminated fill material varies throughout the Site extending to depths up to 10 ft bgs.

A slight exceedance of benzene as compared to the PGWSCO was detected in SB-3(12-14). It is noted there is a lack of elevated benzene in the non-saturated zone above the groundwater interface and in the sample collected at the interface from 9 to 11 ft bgs. This indicates the source of benzene is likely attributed to groundwater. This detection was noted in the northeast corner of the Site with groundwater flowing to the southeast. Benzene was not observed in soil or groundwater in sample locations located downgradient on the Site, which points to an off-Site upgradient source contributing to these elevated detections which are not being carried further downgradient of the Site.

7.1.2 VOC Impacts to Groundwater

VOCs were detected above the AWQS in six of the 11 groundwater samples collected at the Site. The greatest concentrations of petroleum-related VOCs were detected in MW-7. VOC impacts to groundwater are likely attributable to the former Site use as an auto repair shop.

7.1.3 Soil Vapor Impacts

Based on a review of analytical data collected during this RI, VOCs were detected in soil vapor and have potentially partitioned from soil and/or groundwater into the vapor phase.

7.2 POTENTIAL SOURCES

Based on the analytical results of the RI, the primary contaminants of concern (COCs) for the Site are VOCs, specifically petroleum-related VOCs, SVOCs (specifically PAHs), and heavy metals in soil, and in some areas pesticides and PCBs; VOCs, SVOCs (especially PAHs), and heavy metals in groundwater; and VOCs, including CVOCs, in soil vapor. Based on the identified contaminants, the source of contamination in soil, groundwater, and soil vapor is likely the result of the former use of an auto repair shop at the Site, the presence of fill material, and the use of the adjacent properties as former MGPs.

8. Human Health and Environmental Risk Evaluation

8.1 HUMAN HEALTH RISK EVALUATION

A qualitative human health exposure assessment (QHHEA) consists of characterizing the exposure setting (including the physical environment and potentially exposed human populations), identifying exposure pathways, and evaluating chemical fate and transport. An exposure pathway describes the means by which an individual may be exposed to contaminants originating from a site. An exposure pathway has the following five elements:

1. Receptor population;
2. Contaminant source;
3. Contaminant release and transport mechanism;
4. Point of exposure; and
5. Route of exposure.

An exposure pathway is 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 is not documented but could reasonably occur. An exposure pathway may be eliminated from further evaluation when any one of the five elements comprising an exposure pathway does not exist in the present and will not exist in the future.

8.1.1 Receptor Population

The receptor population includes the people who are or may be exposed to contaminants at a point of exposure. The identification of potential human receptors is based on the characteristics of the Site, the surrounding land uses, and the probable future land uses. The Site is currently vacant; therefore, receptors would only include construction/maintenance workers that may be employed to perform work on the property, and exposure routes would include direct contact activities and/or inhalation of soil vapor during ground intrusive activities (i.e., construction of the building's foundation and sub-grade cellar).

At this time, Site development plans are conceptual; however, it is anticipated that the project will consist of the development of an eight-story residential building encompassing approximately half the Site footprint with no cellar, which is consistent/compatible with surrounding property use and zoning. Exposed receptors under the future use scenario may comprise residents of the future building, indoor employees, outdoor employees (e.g., groundskeepers or maintenance staff), and construction workers who may be employed at or perform work on the property. Site visitors may also be considered receptors; however, their exposure would be similar to that of the indoor employees but at a lesser frequency and duration. In addition, residents or employees in off-Site adjoining buildings have the potential to be exposed to vapors.

8.1.1.1 Sensitive Human and Ecological Receptors

There are multiple sensitive human and ecological receptors within a one-half mile radius of the Site including public and private schools, daycare centers, parks, playgrounds, recreation areas, libraries and healthcare facilities. In addition, the Gowanus Canal, a estuarine marine deepwater habitat, is located approximately 0.1 miles to the west of the Site. Sensitive human and ecological receptors within this radius are shown and labeled on Figure 3.

8.1.2 Contaminant Sources

The source of contamination is defined as either the source of contaminant release to the environment (such as a waste disposal area or point of discharge) or the impacted environmental medium (soil, air, water) at the point of exposure. Sections 6.0 and 7.0 discuss the COCs present in the Site media at elevated concentrations. In general, these are metals, PCBs, pesticides, and SVOCs (including PAHs) in soil; VOCs and metals in groundwater; and petroleum-related VOCs and CVOCs in soil vapor.

8.1.3 Contaminant Release and Transport

Contaminant release and transport mechanisms carry contaminants from the source to points where people may be exposed and are specific to the type of contaminant and site use. For VOCs present in soil vapor, the potential exists for exposure through pathways associated with soil vapor intrusion. This would include the indoor vapor intrusion pathway (also referred to as “soil vapor intrusion”).

8.1.4 Exposure Points, Routes, and Mechanisms

The point of exposure is a location where actual or potential human contact with a contaminated medium may occur. Based on the exceedances of RRSCOs for metals, VOCs, and SVOCs, and exceedances of UUSCOs for PCBs and pesticides in soil, the exceedance of AWQS for metals and SVOCs, and VOCs above laboratory detection limits in soil vapor, the point of exposure is defined as the entire Site.

The route of exposure is the manner in which a contaminant actually enters or contacts the body (e.g., ingestion, inhalation, dermal absorption). Based on the types of receptors and points of exposure identified above, potential routes of exposure are listed below:

Current Use Scenario: The Site is currently vacant and covered with a concrete slab. Exposure to contaminated surface soil and contaminated groundwater is possible only during subsurface investigations and other activities that breach the concrete slab. Release and transport mechanisms include contaminated surface soil transported as dust, contaminated groundwater flow, and volatilization of contaminates from soil and/or groundwater into vapor phase.

- Site Visitors and Public Adjacent to Site –inhalation and incidental ingestion.
- Construction/Utility/Site Investigation Worker – skin contact, inhalation, and incidental ingestion.

Construction/Remediation Scenario: As part of the implementation of the remedial action, the existing engineering controls for the Site (concrete slab) will be removed. In the absence of engineering and institutional controls, there will be exposure pathways during construction/remediation specifically related to surface soil. Construction/remedial activities include excavation and off-Site disposal of soil and installation of engineering controls. Release and transport mechanisms include disturbed and exposed soil during excavation, contaminated soil transported as dust, inhalation of dust from contaminated soil, and volatilization of contaminates from soil and/or groundwater into the vapor phase.

- Site Visitors and Public Adjacent to Site –inhalation and incidental ingestion.
- Construction/Utility/Remediation Worker –skin contact, inhalation, and incidental ingestion

Future Use Scenario: The anticipated remedial approach includes the installation of engineering controls including but not limited to a composite cover system. In the absence of engineering and institutional controls, remaining contaminant release and transport mechanisms include the migration of contaminated groundwater and volatilization of contaminants from soil and/or groundwater into the vapor phase. Routes of future exposure include cracks in the foundation or slab, or emergency repairs to the foundation walls or slab. Persons at risk of exposure, via the indicated exposure routes, are noted below.

- Construction/Utility Worker – skin contact, inhalation, and incidental ingestion.
- Occupant/Employee/Visitor – inhalation.
- Public Adjacent to Site – inhalation.

Contaminant release and transport mechanisms carry contaminants from the source to points where people may be exposed and are specific to the type of contaminant and site use. For VOCs present in soil vapor, the potential exists for exposure through pathways associated with soil vapor intrusion. This would include the indoor vapor intrusion pathway (also referred to as “soil vapor intrusion”).

Concerning the indoor air pathway, under the current and future use scenario, soil vapor intrusion is a relevant transport mechanism. Soil vapor intrusion would entail soil vapor migrating from under the building slab and potentially impacting the indoor air above the slab. This pathway may also exist for the public in adjacent off-Site structures and properties which may also be impacted by sources of soil vapor contamination from their subsurface or other off-Site impacts. Concerning skin contact, inhalation, and incidental ingestion of volatile organics present in soil and groundwater, the potential exists for exposure to VOCs for construction workers involved in subsurface activities where volatiles are present at elevated concentrations.

8.1.5 Exposure Assessment

Based on the above assessment, the potential exposure pathways for the current and future use conditions are listed below.

Current Use Scenario: Site contamination includes VOCs, SVOCs, pesticides, and metals in soil, groundwater, and soil vapor related to fill and the historical Site operations. Under current conditions, the likelihood of exposure to soil or groundwater is limited, as the Site is affixed with a perimeter fence secured with a lock. Site access is only granted to personnel associated with the planned development. Potable water for Kings County will continue to be sourced from reservoirs in the Catskill and Delaware Watersheds. All intrusive work on the Site is done in accordance with a Site-specific HASP and the donning of PPE.

Construction/Remediation Scenario: The exposure element exists for all media during this phase. The overall risk will be minimized by the implementation of a Site-specific Construction Health and Safety Plan, localized monitoring of organic vapors, community air monitoring on the Site perimeter for particulates and VOCs, vapor and dust suppression techniques, installation of a stabilized entrance, cleaning truck tires and undercarriages and donning of appropriate PPE. Additionally, the Site will be under a Remedial Action Work Plan (RAWP) which will include a Soil Materials Management Plan that will highlight measures for PPE, covering of stockpiles, housekeeping, suppression techniques (particulates and vapor), and measures to prevent off-Site migration of contaminates. In addition, the Site will be secured and inaccessible to the public during remedial construction.

Future Use Scenario: Under the proposed future condition (after construction/remediation), residual contaminants may remain on the Site depending on the remedy achieved. The remaining contaminants would include those listed in the current conditions. If contaminants remain on-Site after construction/remediation, the route of exposure will be mitigated by proper installation of engineering controls, such as a Site capping system foundation and sub-slab depressurization system, implementation of institutional controls, such as land use and groundwater use restrictions, and implementation of a Site Management Plan (SMP) to manage referenced controls.

8.2 FISH AND WILDLIFE IMPACT ANALYSIS

NYSDEC DER-10 requires an on-Site and offs-Site Fish and Wildlife Resource Impact Analysis (FWRIA) if the stipulated criteria are met. The Site, which was developed as early as the late 1800s and operated as a private garage and auto repair shop from 1950 until it became vacant in or around 2018, is located in the Gowanus neighborhood of Brooklyn, New York. The Site provides little or no wildlife habitat or food value and/or access to the detected subsurface contamination. No natural waterways are present on or adjacent to the Site. The proposed future use of the Site is for residential purposes. As such, no unacceptable ecological risks are expected under the current and future use scenarios.

9. Conclusions and Recommendations

9.1 CONCLUSIONS

Based on the results of Site investigations, the following conclusions have been identified:

- The primary contaminants of concern for the Site are VOCs, specifically petroleum-related VOCs, SVOCs (specifically PAHs), and heavy metals in soil, and in some areas, pesticides and PCBs; petroleum-related VOCs, SVOCs (especially PAHs), and heavy metals in groundwater; and VOCs, including CVOCs, in soil vapor. Based on the identified contaminants, the source of contamination in soil, groundwater, and soil vapor is likely the result of the former use of an auto repair shop at the Site, the presence of fill material, and the use of the adjacent properties as former MGPs.
- Subsurface soils are impacted with elevated levels of VOCs 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, ethylbenzene, n-Propylbenzene, and total xylenes; SVOCs benzo(a)anthracene, benzo(a)pyrene. benzo(b), benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene; metals, including arsenic, barium, copper, lead, mercury, and nickel; and PCB aroclor 1248 at concentrations exceeding RRCOS. Pesticides were detected at concentrations exceeding UUSCOs. These findings are consistent with the characteristics of the Site's former use as an auto repair shop and contaminated fill. Fill material varies in depth throughout the Site extending to depths as great as 10 ft bgs.
- Based on a review of analytical data collected during this RI, VOCs have been detected in soil vapor. The detected concentrations of VOCs in soil and groundwater coupled with former Site operations indicate the potential for VOCs to have partitioned from soil and/or groundwater into the vapor phase.

9.2 RECOMMENDATIONS

Based on the results of the RI, remedial action will be necessary to proceed with the anticipated redevelopment plan.

To address the areas of concern (AOCs), Haley & Aldrich of New York is evaluating the utilization of a combination of remedial techniques. Applicable strategies and technologies may include, but are not limited to, source removal, and installation of engineering controls which will be detailed in a RAWP.

References

1. Brownfield Cleanup Program Application. Former A&A Brake Service Site, Brooklyn, New York. Prepared by Sackett Heights LLC & Haley & Aldrich of New York, prepared for the New York State Department of Environmental Conservation. Submitted September 2022.

2. Remedial Investigation Work Plan. A&A Brake Service Site, Brooklyn, New York. Prepared by Sackett Heights LLC & Haley & Aldrich of New York, prepared for the New York State Department of Environmental Conservation. Submitted September 2022

3. Supplemental Remedial Investigation Work Plan, Former A&A Brake Service Site, Brooklyn, New York. Prepared by Haley & Aldrich of New York, prepared for the New York State Department of Environmental Conservation, March 2024.

4. Phase I Environmental Site Assessment Report, 558-562 Sackett Street, Brooklyn, New York. Prepared by Brussee Environmental Corp., prepared for Moundfield Equities, May 2022.

5. Limited Phase II Environmental Site Assessment. 558 Sackett Street, Brooklyn, New York. Prepared by Brussee Environmental Corp., prepared for Moundfield Equities, May 2022.

6. Program Policy DER-10, “Technical Guidance for Site Investigation and Remediation,” New York State Department of Environmental Conservation, May 2010.

7. Program Policy Part 375, “Sampling, Analysis, And Assessment Of Per-And Polyfluoroalkyl Substances (PFAS) New York State Department of Environmental Conservation, April 2023.

8. New York State Department of Health (NYSDOH) Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006).

TABLES

TABLE 1
SAMPLE AND ANALYSIS PLAN
558 SACKETT STREET
BROOKLYN, NEW YORK
FILE NO. 0206384

Boring Number	Sample Date	Sample Depth	Target Compound List VOCs (8260B)	Target Compound List SVOCs (8270C)	Total Analyte List Metals (6010)	PCBs (8082)	Pesticides (8081B)	PFAS (1633)	1,4-Dioxane (8270 SIM)	VOCs (TO-15)
SOIL										
SB-1	6/21/2023	0-0.5'	X	X	X	X	X	X	X	
	6/21/2023	1-2'	X	X	X	X	X	X	X	
	6/21/2023	5-7'	X	X	X	X	X	X	X	
	6/21/2023	10-12'	X	X	X	X	X	X	X	
	6/21/2023	12-14'	X	X	X	X	X	X	X	
SB-2	6/21/2023	0-0.5'	X	X	X	X	X	X	X	
	6/21/2023	5-7'	X	X	X	X	X	X	X	
	6/21/2023	12-14'	X	X	X	X	X	X	X	
SB-3	6/26/2023	0-0.5'	X	X	X	X	X	X	X	
	6/26/2023	1-2'	X	X	X	X	X	X	X	
	6/26/2023	5-7'	X	X	X	X	X	X	X	
	6/26/2023	9-11'	X	X	X	X	X	X	X	
	6/26/2023	12-14'	X	X	X	X	X	X	X	
SB-4	6/21/2023	0-0.5'	X	X	X	X	X	X	X	
	6/21/2023	5-7'	X	X	X	X	X	X	X	
	6/21/2023	8-10'	X	X	X	X	X	X	X	
	6/21/2023	12-14'	X	X	X	X	X	X	X	
SB-5	6/21/2023	0-0.5'	X	X	X	X	X	X	X	
	6/21/2023	5-7'	X	X	X	X	X	X	X	
	6/21/2023	12-14'	X	X	X	X	X	X	X	
SB-6	6/21/2023	0-0.5'	X	X	X	X	X	X	X	
	6/21/2023	5-7'	X	X	X	X	X	X	X	
	6/21/2023	10-12'	X	X	X	X	X	X	X	
	6/21/2023	12-14'	X	X	X	X	X	X	X	
SB-7	6/22/2023	0-0.5'	X	X	X	X	X	X	X	
	6/22/2023	1-2'	X	X	X	X	X	X	X	
	6/22/2023	5-7'	X	X	X	X	X	X	X	
	6/22/203	9-11'	X	X	X	X	X	X	X	
	6/22/2023	12-14'	X	X	X	X	X	X	X	
SB-8	6/23/2023	0-0.5'	X	X	X	X	X	X	X	
	6/23/2023	1-2'	X	X	X	X	X	X	X	
	6/23/2023	5-7'	X	X	X	X	X	X	X	
	6/23/2023	9-11'	X	X	X	X	X	X	X	
	6/23/2023	12-14'	X	X	X	X	X	X	X	
DUP01_20230621	6/21/2023	SB-5_5-7'	X	X	X	X	X	X	X	
DUP02_20230622	6/26/2023	SB-3_5-7'	X	X	X	X	X	X	X	
SB-4_5-7'_MS	6/21/2023	5-7'	X	X	X	X	X	X	X	
SB-4_5-7'_MSD	6/21/2023	5-7'	X	X	X	X	X	X	X	
SB-8_12-14'_MS	6/23/2023	12-14'	X	X	X	X	X	X	X	
SB-8_12-14'_MSD	6/23/2023	12-14'	X	X	X	X	X	X	X	
FB01_20230621	6/21/2023	-	X	X	X	X	X	X	X	
FB02_20230622	6/22/2023	-	X	X	X	X	X	X	X	
TB01_20230621	6/21/2023	-	X							
TB02_20230622	6/22/2023	-	X							
TB03_20230623	6/23/2023	-	X							
TB04_20230626	6/26/2023	-	X							
GROUNDWATER										
MW-1	7/17/2023	-	X	X	X	X	X	X	X	
MW-2	7/6/2023	-	X	X	X	X	X	X	X	
MW-3	7/17/2023	-	X	X	X	X	X	X	X	
MW-4	7/17/2023	-	X	X	X	X	X	X	X	
DUP01_20230706	7/6/2023	MW-2	X	X	X	X	X	X	X	
MW-2_MS	7/6/2023	-	X	X	X	X	X	X	X	
MW-2_MSD	7/6/2023	-	X	X	X	X	X	X	X	
FB_20230717	7/17/2023	-	X	X	X	X	X	X	X	
TB01_20230706	7/6/2023	-	X							
TB02_20230717	7/17/2023	-	X							
SOIL VAPOR										
SV-1	6/28/2023	6-7'								X
SV-2	6/26/2023	6-7'								X
SV-3	6/28/2023	6-7'								X
SV-4	6/26/2023	6-7'								X
SV-5	6/26/2023	6-7'								X
SV-6	6/28/2023	6-7'								X
SV-7	6/26/2023	6-7'								X

Notes:
VOCs - Volatile Organic Compounds
SVOCs - Semi-volatile Organic Compounds
PCBs - Polychlorinated biphenyls
PFAS - Per- and Polyfluoroalkyl Substances

QAQC samples include:
MS/MSD - 1 for every 20 samples
Field Duplicate - 1 for every 20 samples
Trip Blanks - 1 per cooler of samples to be analyzed for VOCs
Field Blanks - 1 for every 20 samples

Groundwater samples analyzed for total and dissolved metals
Soil Borings SB-1, SB-3, SB-7, and SB-8 were installed to 100 ft bgs as part of the NAPL/GCM investigation.

TABLE 1a
SUPPLEMENTAL SAMPLE AND ANALYSIS PLAN
558 SACKETT STREET
BROOKLYN, NEW YORK
FILE NO. 0206384

Boring Number	Sample Date	Sample Depth	Target Compound List VOCs (8260B)	Target Compound List SVOCs (8270C)	Total Analyte List Metals (6010)	PCBs (8082)	Pesticides (8081B)	PFAS (1633)	1,4-Dioxane (8270 SIM)	Total/TCLP Lead & Mercury
SOIL										
SB-2A	3/26/2024	0-0.5'								X
	3/26/2024	1-3'								X
	3/26/2024	3-5'								X
	3/26/2024	5-7'								X
	3/26/2024	7-9'								X
	3/26/2024	9-11'								X
	3/26/2024	12-14'								X
SB-2A-S1	3/26/2024	11-11.5'	X	X						
SB-3A	3/26/2024	0-0.5'								X
	3/26/2024	1-3'								X
	3/26/2024	3-5'								X
	3/26/2024	5-7'								X
	3/26/2024	7-9'								X
	3/26/2024	9-11'								X
DUP03_20240326	3/26/2024	SB-2A_12-14'								X
TB-01_20240326	3/26/2024	-	X							
GROUNDWATER										
MW-1	4/4/2024	-	X	X	X	X	X	X	X	
MW-2	4/5/2024	-	X	X	X	X	X	X	X	
MW-3	4/3/202	-	X	X	X	X	X	X	X	
MW-4	4/4/2024	-	X	X	X	X	X	X	X	
MW-5	4/3/2024	-	X	X	X	X	X	X	X	
MW-6	4/5/2024	-	X	X	X	X	X	X	X	
MW-7	4/3/2024	-	X	X	X	X	X	X	X	
DUP1_20240403	4/3/2024	MW-7	X	X	X	X	X	X	X	
MW-4_20240404_MS	4/4/2024	-	X	X	X	X	X	X	X	
MW-4_20240404_MSD	4/4/2024	-	X	X	X	X	X	X	X	
Field blank	4/4/2024	-	X	X	X	X	X	X	X	
trip blank	4/3/2024	-	X							
trip blank	4/4/2024	-	X							
trip blank	4/5/2024	-	X							

Notes:
VOCs - Volatile Organic Compounds
SVOCs - Semi-volatile Organic Compounds
PCBs - Polychlorinated biphenyls
PFAS - Per- and Polyfluoroalkyl Substances

QAQC samples include:
MS/MSD - 1 for every 20 samples
Field Duplicate - 1 for every 20 samples
Trip Blanks - 1 per cooler of samples to be analyzed for VOCs
Field Blanks - 1 for every 20 samples

Groundwater samples analyzed for total and dissolved metals

TABLE 2
REMEDIAL INVESTIGATION RESULTS - ANALYTICAL RESULTS IN SOIL
558 SACKETT STREET
BROOKLYN, NEW YORK
FILE NO. 0206384

	Action Level																		
Location Name	Restricted Use	NY Part 375	NY Part 375	SB-1	SB-1	SB-1	SB-1	SB-1	SB-2	SB-2	SB-2	SB-3	SB-3	SB-3	SB-3	SB-3	SB-3	SB-4	SB-4
Sample Name	Soil Cleanup	Restricted	Unrestricted	SB-1_0-0.5	SB-1_1-2	SB-1_5-7	SB-1_10-12	SB-1_12-15	SB-2_0-0.5	SB-2_5-7	SB-2_12-14	SB-3_0-0.5	SB-3_1-2	SB-3_5-7	DUP02_20230625	SB-3_9-11	SB-3_12-14	SB-4_0-0.5	SB-4_5-7
Sample Date	Objectives -	Residential Use	Use	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/25/2023	06/25/2023	06/25/2023	06/25/2023	06/25/2023	06/25/2023	06/21/2023	06/21/2023
Lab Sample ID	Protection of	Soil Cleanup	Soil Cleanup	L2335535-01	L2335535-02	L2335535-03	L2335535-04	L2335535-05	L2335535-06	L2335535-07	L2335535-08	L2336505-01	L2336505-02	L2336505-03	L2336505-06	L2336505-04	L2336505-05	L2335535-09	L2335535-10
Sample Depth (bgs)	Groundwater	Objectives	Objectives	0 - 0.5 (ft)	1 - 2 (ft)	5 - 7 (ft)	10 - 12 (ft)	12 - 15 (ft)	0 - 0.5 (ft)	5 - 7 (ft)	12 - 14 (ft)	0 - 0.5 (ft)	1 - 2 (ft)	5 - 7 (ft)	5 - 7 (ft)	9 - 11 (ft)	12 - 14 (ft)	0 - 0.5 (ft)	5 - 7 (ft)
Volatile Organic Compounds (mg/kg)																			
1,1,1,2-Tetrachloroethane	NA	NA	NA	ND (0.00066)	ND (0.00062)	ND (0.00048)	ND (0.00045)	ND (0.00042)	ND (0.00063)	ND (0.00052)	ND (0.00047)	ND (0.00085)	ND (0.0006)	ND (0.00072)	ND (0.00067)	ND (0.0005)	ND (0.0019)	ND (0.00055)	ND (0.00047)
1,1,1-Trichloroethane	0.68	100	0.68	ND (0.00066)	ND (0.00062)	ND (0.00048)	ND (0.00045)	ND (0.00042)	ND (0.00063)	ND (0.00052)	ND (0.00047)	ND (0.00085)	ND (0.0006)	ND (0.00072)	ND (0.00067)	ND (0.0005)	ND (0.0019)	ND (0.00055)	ND (0.00047)
1,1,2,2-Tetrachloroethane	NA	NA	NA	ND (0.00066)	ND (0.00062)	ND (0.00048)	ND (0.00045)	ND (0.00042)	ND (0.00063)	ND (0.00052)	ND (0.00047)	ND (0.00085)	ND (0.0006)	ND (0.00072)	ND (0.00067)	ND (0.0005)	ND (0.0019)	ND (0.00055)	ND (0.00047) J
1,1,2-Trichloroethane	NA	NA	NA	ND (0.0013)	ND (0.0012)	ND (0.00096)	ND (0.00089)	ND (0.00085)	ND (0.0013)	ND (0.001)	ND (0.00094)	ND (0.0017)	ND (0.0012)	ND (0.0014)	ND (0.0013)	ND (0.001)	ND (0.0039)	ND (0.0011)	ND (0.00095)
1,1-Dichloroethane	0.27	26	0.27	ND (0.0013)	ND (0.0012)	ND (0.00096)	ND (0.00089)	ND (0.00085)	ND (0.0013)	ND (0.001)	ND (0.00094)	ND (0.0017)	ND (0.0012)	ND (0.0014)	ND (0.0013)	ND (0.001)	ND (0.0039)	ND (0.0011)	ND (0.00095)
1,1-Dichloroethene	0.33	100	0.33	ND (0.0013)	ND (0.0012)	ND (0.00096)	ND (0.00089)	ND (0.00085)	ND (0.0013)	ND (0.001)	ND (0.00094)	ND (0.0017)	ND (0.0012)	ND (0.0014)	ND (0.0013)	ND (0.001)	ND (0.0039)	ND (0.0011)	ND (0.00095)
1,1-Dichloropropene	NA	NA	NA	ND (0.00066)	ND (0.00062)	ND (0.00048)	ND (0.00045)	ND (0.00042)	ND (0.00063)	ND (0.00052)	ND (0.00047)	ND (0.00085)	ND (0.0006)	ND (0.00072)	ND (0.00067)	ND (0.0005)	ND (0.0019)	ND (0.00055)	ND (0.00047)
1,2,3-Trichlorobenzene	NA	NA	NA	ND (0.0026)	ND (0.0025)	ND (0.0019)	ND (0.0018)	ND (0.0017)	ND (0.0025)	ND (0.0021)	ND (0.0019)	ND (0.0034)	ND (0.0024)	ND (0.0029)	ND (0.0027)	ND (0.002)	ND (0.0078)	ND (0.0022)	ND (0.0019) J
1,2,3-Trichloropropane	NA	NA	NA	ND (0.0026)	ND (0.0025)	ND (0.0019)	ND (0.0018)	ND (0.0017)	ND (0.0025)	ND (0.0021)	ND (0.0019)	ND (0.0034)	ND (0.0024)	ND (0.0029)	ND (0.0027)	ND (0.002)	ND (0.0078)	ND (0.0022)	ND (0.0019) J
1,2,4,5-Tetramethylbenzene	NA	NA	NA	ND (0.0026)	0.00043 J	0.1 J+	0.01	0.0027	ND (0.0025)	ND (0.0021)	ND (0.0019)	ND (0.0034)	ND (0.0024)	ND (0.0029)	0.00072 J	0.014	ND (0.0078)	ND (0.0022)	ND (0.0019) J
1,2,4-Trichlorobenzene	NA	NA	NA	ND (0.0026)	ND (0.0025)	ND (0.0019)	ND (0.0018)	ND (0.0017)	ND (0.0025)	ND (0.0021)	ND (0.0019)	ND (0.0034)	ND (0.0024)	ND (0.0029)	ND (0.0027)	ND (0.002)	ND (0.0078)	ND (0.0022)	ND (0.0019) J
1,2,4-Trimethylbenzene	3.6	52	3.6	ND (0.0026)	0.0017 J	0.0011 J+	0.0042	0.00073 J	ND (0.0025)	0.00041 J	ND (0.0019)	ND (0.0034)	ND (0.0024)	ND (0.0029)	ND (0.0027)	0.0018 J	ND (0.0078)	ND (0.0022)	ND (0.0019) J
1,2-Dibromo-3-chloropropane (DBCP)	NA	NA	NA	ND (0.0039)	ND (0.0037)	ND (0.0029)	ND (0.0027)	ND (0.0025)	ND (0.0038)	ND (0.0031)	ND (0.0028)	ND (0.0051)	ND (0.0036)	ND (0.0043)	ND (0.004)	ND (0.003)	ND (0.012)	ND (0.0033)	ND (0.0028) J
1,2-Dibromoethane (Ethylene Dibromide)	NA	NA	NA	ND (0.0013)	ND (0.0012)	ND (0.00096)	ND (0.00089)	ND (0.00085)	ND (0.0013)	ND (0.001)	ND (0.00094)	ND (0.0017)	ND (0.0012)	ND (0.0014)	ND (0.0013)	ND (0.001)	ND (0.0039)	ND (0.0011)	ND (0.00095) J
1,2-Dichlorobenzene	1.1	100	1.1	ND (0.0026)	ND (0.0025)	ND (0.0019)	ND (0.0018)	ND (0.0017)	ND (0.0025)	ND (0.0021)	ND (0.0019)	ND (0.0034)	ND (0.0024)	ND (0.0029)	ND (0.0027)	ND (0.002)	ND (0.0078)	ND (0.0022)	ND (0.0019) J
1,2-Dichloroethane	0.02	3.1	0.02	0.00055 J	ND (0.0012)	ND (0.00096)	ND (0.00089)	ND (0.00085)	ND (0.0013)	ND (0.001)	ND (0.00094)	ND (0.0017)	ND (0.0012)	ND (0.0014)	ND (0.0013)	ND (0.001)	ND (0.0039)	ND (0.0011)	ND (0.00095)
1,2-Dichloroethene (total)	NA	NA	NA	ND (0.0013)	ND (0.0012)	ND (0.00096)	ND (0.00089)	ND (0.00085)	0.0033	0.001	0.00098	ND (0.0017)	ND (0.0012)	ND (0.0014)	ND (0.0013)	ND (0.001)	0.0036 J	ND (0.0011)	ND (0.00095)
1,2-Dichloropropane	NA	NA	NA	ND (0.0013)	ND (0.0012)	ND (0.00096)	ND (0.00089)	ND (0.00085)	ND (0.0013)	ND (0.001)	ND (0.00094)	ND (0.0017)	ND (0.0012)	ND (0.0014)	ND (0.0013)	ND (0.001)	ND (0.0039)	ND (0.0011)	ND (0.00095)
1,3,5-Trimethylbenzene	8.4	52	8.4	ND (0.0026)	0.00079 J	0.00027 J+	0.00026 J	0.0002 J	ND (0.0025)	ND (0.0021)	ND (0.0019)	ND (0.0034)	ND (0.0024)	ND (0.0029)	ND (0.0027)	0.00022 J	ND (0.0078)	ND (0.0022)	ND (0.0019)
1,3-Dichlorobenzene	2.4	49	2.4	ND (0.0026)	ND (0.0025)	ND (0.0019)	ND (0.0018)	ND (0.0017)	ND (0.0025)	ND (0.0021)	ND (0.0019)	ND (0.0034)	ND (0.0024)	ND (0.0029)	ND (0.0027)	ND (0.002)	ND (0.0078)	ND (0.0022)	ND (0.0019) J
1,3-Dichloropropane	NA	NA	NA	ND (0.0026)	ND (0.0025)	ND (0.0019)	ND (0.0018)	ND (0.0017)	ND (0.0025)	ND (0.0021)	ND (0.0019)	ND (0.0034)	ND (0.0024)	ND (0.0029)	ND (0.0027)	ND (0.002)	ND (0.0078)	ND (0.0022)	ND (0.0019)
1,3-Dichloropropene	NA	NA	NA	ND (0.00066)	ND (0.00062)	ND (0.00048)	ND (0.00045)	ND (0.00042)	ND (0.00063)	ND (0.00052)	ND (0.00047)	ND (0.00085)	ND (0.0006)	ND (0.00072)	ND (0.00067)	ND (0.0005)	ND (0.0019)	ND (0.00055)	ND (0.00047)
1,4-Dichlorobenzene	1.8	13	1.8	ND (0.0026)	ND (0.0025)	ND (0.0019)	ND (0.0018)	ND (0.0017)	ND (0.0025)	ND (0.0021)	ND (0.0019)	ND (0.0034)	ND (0.0024)	ND (0.0029)	ND (0.0027)	ND (0.002)	ND (0.0078)	ND (0.0022)	ND (0.0019) J
1,4-Diethylbenzene	NA	NA	NA	ND (0.0026)	ND (0.0025)	0.029	0.0053	0.00094 J	ND (0.0025)	ND (0.0021)	ND (0.0019)	ND (0.0034)	ND (0.0024)	ND (0.0029)	ND (0.0027)	0.00051 J	ND (0.0078)	ND (0.0022)	ND (0.0019) J
1,4-Dioxane	0.1	13	0.1	ND (0.1) J	ND (0.099)	ND (0.077) J	ND (0.071) J	ND (0.068)	ND (0.1) J	ND (0.083)	ND (0.075)	ND (0.14)	ND (0.096)	ND (0.12)	ND (0.11)	ND (0.08)	ND (0.31)	ND (0.088)	ND (0.076)
2,2-Dichloropropane	NA	NA	NA	ND (0.0026)	ND (0.0025)	ND (0.0019)	ND (0.0018)	ND (0.0017)	ND (0.0025)	ND (0.0021)	ND (0.0019)	ND (0.0034)	ND (0.0024)	ND (0.0029)	ND (0.0027)	ND (0.002)	ND (0.0078)	ND (0.0022)	ND (0.0019)
2-Butanone (Methyl Ethyl Ketone)	0.12	100	0.12	0.0066 J	ND (0.012)	ND (0.0096)	0.0043 J	0.003 J	ND (0.013)	0.0072 J	0.003 J	ND (0.017)	ND (0.012)	ND (0.014)	ND (0.013)	0.007 J	0.022 J	0.0049 J	ND (0.0095)
2-Chlorotoluene	NA	NA	NA	ND (0.0026)	ND (0.0025)	ND (0.0019)	ND (0.0018)	ND (0.0017)	ND (0.0025)	ND (0.0021)	ND (0.0019)	ND (0.0034)	ND (0.0024)	ND (0.0029)	ND (0.0027)	ND (0.002)	ND (0.0078)	ND (0.0022)	ND (0.0019) J
2-Hexanone (Methyl Butyl Ketone)	NA	NA	NA	ND (0.013) J	ND (0.012)	ND (0.0096) J	ND (0.0089) J	ND (0.0085)	ND (0.013) J	ND (0.01)	ND (0.0094)	ND (0.017)	ND (0.012)	ND (0.014)	ND (0.013)	ND (0.01)	ND (0.039)	ND (0.011)	ND (0.0095)
2-Phenylbutane (sec-Butylbenzene)	11	100	11	ND (0.0013)	ND (0.0012)	0.027	0.001	0.00027 J	ND (0.0013)	ND (0.001)	ND (0.00094)	ND (0.0017)	ND (0.0012)	ND (0.0014)	0.00025 J	0.0017	ND (0.0039)	ND (0.0011)	ND (0.00095) J
4-Chlorotoluene	NA	NA	NA	ND (0.0026)	ND (0.0025)	ND (0.0019)	ND (0.0018)	ND (0.0017)	ND (0.0025)	ND (0.0021)	ND (0.0019)	ND (0.0034)	ND (0.0024)	ND (0.0029)	ND (0.0027)	ND (0.002)	ND (0.0078)	ND (0.0022)	ND (0.0019) J
4-Ethyltoluene (1-Ethyl-4-Methylbenzene)	NA	NA	NA	ND (0.0026)	0.00092 J	ND (0.0019)	0.0029	0.00042 J	ND (0.0025)	ND (0.0021)	ND (0.0019)	ND (0.0034)	ND (0.0024)	ND (0.0029)	ND (0.0027)	0.00055 J	ND (0.0078)	ND (0.0022)	ND (0.0019) J
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	NA	NA	NA	ND (0.013)	ND (0.012)	ND (0.0096)	ND (0.0089)	ND (0.0085)	ND (0.013)	ND (0.01)	ND (0.0094)	ND (0.017)	ND (0.012)	ND (0.014)	ND (0.013)	ND (0.01)	ND (0.039)	ND (0.011)	ND (0.0095)
Acetone	0.05	100	0.05	***0.084 J***	0.0078 J	ND (0.0096)	0.013	0.04 J	ND (0.013)	***0.12 J***	0.023 J	0.033	ND (0.012)	ND (0.014)	ND (0.013)	0.032	***0.1***	***0.056 J***	0.0081 J
Acrylonitrile	NA	NA	NA	ND (0.0052)	ND (0.005)	ND (0.0038)	ND (0.0036)	ND (0.0034)	ND (0.005)	ND (0.0041)	ND (0.0038)	ND (0.0068)	ND (0.0048)	ND (0.0058)	ND (0.0053)	ND (0.004)	ND (0.016)	ND (0.0044)	ND (0.0038)
Benzene	0.06	4.8	0.06	ND (0.00066)	0.00027 J	ND (0.00048)	0.029	0.019	ND (0.00063)	0.00018 J	***0.18***	0.0014	ND (0.0006)	ND (0.00072)	ND (0.00067)	0.00028 J	***0.23***	0.00089	0.00027 J
Bromobenzene	NA	NA	NA	ND (0.0026)	ND (0.0025)	ND (0.0019)	ND (0.0018)	ND (0.0017)	ND (0.0025)	ND (0.0021)	ND (0.0019)	ND (0.0034)	ND (0.0024)	ND (0.0029)	ND (0.0027)	ND (0.002)	ND (0.0078)	ND (0.0022)	ND (0.0019) J
Bromodichloromethane	NA	NA	NA	ND (0.00066)	ND (0.00062)	ND (0.00048)	ND (0.00045)	ND (0.00042)	ND (0.00063)	ND (0.00052)	ND (0.00047)	ND (0.00085)	ND (0.0006)	ND (0.00072)	ND (0.00067)	ND (0.0005)	ND (0.0019)	ND (0.00055)	ND (0.00047)
Bromoform	NA	NA	NA	ND (0.0052)	ND (0.005)	ND (0.0038)	ND (0.0036)	ND (0.0034)	ND (0.005)	ND (0.0041)	ND (0.0038)	ND (0.0068)	ND (0.0048)	ND (0.0058)	ND (0.0053)	ND (0.004)	ND (0.016)	ND (0.0044)	ND (0.0038)
Bromomethane (Methyl Bromide)	NA	NA	NA	ND (0.0026)	ND (0.0025)	ND (0.0019)	ND (0.0018)	ND (0.0017)	ND (0.0025)	ND (0.0021)	ND (0.0019)	ND (0.0034)	ND (0.0024) J	ND (0.0029)	ND (0.0027)	ND (0.002)	ND (0.0078)	ND (0.0022)	ND (0.0019)
Carbon disulfide	NA	NA	NA	ND (0.013)	ND (0.012)	ND (0.0096)	ND (0.0089)	ND (0.0085)	ND (0.013)	ND (0.01)	ND (0.0094)	ND (0.017)	ND (0.012)	ND (0.014)	ND (0.013)	ND (0.01)	0.031 J	ND (0.011)	ND (0.0095)
Carbon tetrachloride	0.76	2.4	0.76	ND (0.0013)	ND (0.0012)	ND (0.00096)	ND (0.00089)	ND (0.00085)	ND (0.0013)	ND (0.001)	ND (0.00094)	ND (0.0017)	ND (0.0012)	ND (0.0014)	ND (0.0013)	ND (0.001)	ND (0.0039)	ND (0.0011)	ND (0.00095)
Chlorobenzene	1.1	100	1.1	ND (0.00066)	ND (0.00062)	ND (0.00048)	ND (0.00045)	ND (0.00042)	ND (0.00063)	ND (0.00052)	ND (0.00047)	ND (0.00085)	ND (0.0006)	ND (0.00072)	ND (0.00067)	ND (0.0005)	ND (0.0019)	ND (0.00055)	ND (0.00047)
Chlorobromomethane	NA	NA	NA	ND (0.0026)	ND (0.0025)	ND (0.0019)	ND (0.0018)	ND (0.0017)	ND (0.0025)	ND (0.0021)	ND (0.0019)	ND (0.0034)	ND (0.0024)	ND (0.0029)	ND (0.0027)	ND (0.002)	ND (0.0078)	ND (0.0022)	ND (0.0019)
Chloroethane	NA	NA	NA	ND (0.0026)	ND (0.0025)	ND (0.0019)	ND (0.0018)	ND (0.0017)	ND (0.0025)	ND (0.0021)	ND (0.0019)	ND (0.0034)	ND (0.0024)	ND (0.0029)	ND (0.0027)	ND (0.002)	ND (0.0078)	ND (0.0022)	ND (0.0019)
Chloroform (Trichloromethane)	0.37	49	0.37	ND (0.002)	ND (0.0018)	ND (0.0014)	ND (0.0013)	ND (0.0013)	ND (0.0019)	ND (0.0015)	ND (0.0014)	ND (0.0025)	ND (0.0018)	ND (0.0022)	ND (0.002)	ND (0.0015)	ND (0.0058)	ND (0.0016)	ND (0.0014)
Chloromethane (Methyl Chloride)	NA	NA	NA	ND (0.0052)	ND (0.005)	ND (0.0038)	ND (0.0036)	ND (0.0034)	ND (0.005)	ND (0.0041)	ND (0.0038)	ND (0.0068)	ND (0.0048)	ND (0.0058)	ND (0.0053)	ND (0.004)	ND (0.016)	ND (0.0044)	ND (0.0038)
cis-1,2-Dichloroethene	0.25	100	0.25	ND (0.0013)	ND (0.0012)	ND (0.00096)	ND (0.00089)	ND (0.00085)	0.0033	0.001	0.00098	ND (0.0017)	ND (0.0012)	ND (0.0014)	ND (0.0013)	ND (0.001)	0.0029 J	ND (0.0011)	ND (0.00095)
cis-1,3-Dichloropropene	NA	NA	NA	ND (0.00066)	ND (0.00062)	ND (0.00048)	ND (0.00045)	ND (0.00042)	ND (0.00063)	ND (0.00052)	ND (0.00047)	ND (0.00085)	ND (0.0006)	ND (0.00072)	ND (0.00067)	ND (0.0005)	ND (0.0019)	ND (0.00055)	ND (0.00047)
Cymene (p-Isopropyltoluene)	NA	NA	NA	ND (0.0013)	ND (0.0012)	0.00047 J	0.00086 J	ND (0.00085)	ND (0.0013)	ND (0.001)	ND (0.00094)	ND (0.0017)	ND (0.0012)	ND (0.0014)	ND (0.0013)	ND (0.001)	ND (0.0039)	ND (0.0011)	ND (0.00095) J
Dibromochloromethane	NA	NA	NA	ND (0.0013)	ND (0.0012)	ND (0.00096)	ND (0.00089)	ND (0.00085)	ND (0.0013)	ND (0.001)	ND (0.00094)	ND (0.0017)	ND (0.0012)	ND (0.0014)	ND (0.0013)	ND (0.001)	ND (0.0039)	ND (0.0011)	ND (0.00095)

TABLE 2
REMEDIAL INVESTIGATION RESULTS - ANALYTICAL RESULTS IN SOIL
558 SACKETT STREET
BROOKLYN, NEW YORK
FILE NO. 0206384

	Action Level																		
Location Name	Restricted Use	NY Part 375	NY Part 375	SB-1	SB-1	SB-1	SB-1	SB-1	SB-2	SB-2	SB-2	SB-3	SB-3	SB-3	SB-3	SB-3	SB-3	SB-4	SB-4
Sample Name	Soil Cleanup	Restricted	Unrestricted	SB-1_0-0.5	SB-1_1-2	SB-1_5-7	SB-1_10-12	SB-1_12-15	SB-2_0-0.5	SB-2_5-7	SB-2_12-14	SB-3_0-0.5	SB-3_1-2	SB-3_5-7	DUP02_20230625	SB-3_9-11	SB-3_12-14	SB-4_0-0.5	SB-4_5-7
Sample Date	Objectives -	Residential Use	Use	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/25/2023	06/25/2023	06/25/2023	06/25/2023	06/25/2023	06/25/2023	06/21/2023	06/21/2023
Lab Sample ID	Protection of	Soil Cleanup	Soil Cleanup	L2335535-01	L2335535-02	L2335535-03	L2335535-04	L2335535-05	L2335535-06	L2335535-07	L2335535-08	L2336505-01	L2336505-02	L2336505-03	L2336505-06	L2336505-04	L2336505-05	L2335535-09	L2335535-10
Sample Depth (bgs)	Groundwater	Objectives	Objectives	0 - 0.5 (ft)	1 - 2 (ft)	5 - 7 (ft)	10 - 12 (ft)	12 - 15 (ft)	0 - 0.5 (ft)	5 - 7 (ft)	12 - 14 (ft)	0 - 0.5 (ft)	1 - 2 (ft)	5 - 7 (ft)	5 - 7 (ft)	9 - 11 (ft)	12 - 14 (ft)	0 - 0.5 (ft)	5 - 7 (ft)
Dibromomethane	NA	NA	NA	ND (0.0026)	ND (0.0025)	ND (0.0019)	ND (0.0018)	ND (0.0017)	ND (0.0025)	ND (0.0021)	ND (0.0019)	ND (0.0034)	ND (0.0024)	ND (0.0029)	ND (0.0027)	ND (0.002)	ND (0.0078)	ND (0.0022)	ND (0.0019)
Dichlorodifluoromethane (CFC-12)	NA	NA	NA	ND (0.013)	ND (0.012)	ND (0.0096)	ND (0.0089)	ND (0.0085)	ND (0.013)	ND (0.01)	ND (0.0094)	ND (0.017)	ND (0.012)	ND (0.014)	ND (0.013)	ND (0.01)	ND (0.039)	ND (0.011)	ND (0.0095)
Ethyl Ether	NA	NA	NA	ND (0.0026)	ND (0.0025)	ND (0.0019)	ND (0.0018)	ND (0.0017)	ND (0.0025)	ND (0.0021)	ND (0.0019)	ND (0.0034)	ND (0.0024) J	ND (0.0029)	ND (0.0027)	ND (0.002)	ND (0.0078)	ND (0.0022)	ND (0.0019)
Ethylbenzene	1	41	1	ND (0.0013)	ND (0.0012)	ND (0.00096)	0.0067	0.00047 J	ND (0.0013)	0.0008 J	0.0012	ND (0.0017)	ND (0.0012)	ND (0.0014)	ND (0.0013)	0.00024 J	0.001 J	0.00021 J	ND (0.00095)
Hexachlorobutadiene	NA	NA	NA	ND (0.0052)	ND (0.005)	ND (0.0038)	ND (0.0036)	ND (0.0034)	ND (0.005)	ND (0.0041)	ND (0.0038)	ND (0.0068)	ND (0.0048)	ND (0.0058)	ND (0.0053)	ND (0.004)	ND (0.016)	ND (0.0044)	ND (0.0038) J
Isopropylbenzene (Cumene)	NA	NA	NA	ND (0.0013)	ND (0.0012)	0.0062 J+	0.017	0.0022	ND (0.0013)	0.00013 J	ND (0.00094)	ND (0.0017)	ND (0.0012)	ND (0.0014)	ND (0.0013)	0.0064	ND (0.0039)	ND (0.0011)	0.00013 J
m,p-Xylenes	NA	NA	NA	ND (0.0026)	ND (0.0025)	ND (0.0019)	0.00097 J	0.00064 J	ND (0.0025)	0.00058 J	ND (0.0019)	ND (0.0034)	ND (0.0024)	ND (0.0029)	ND (0.0027)	0.00085 J	ND (0.0078)	ND (0.0022)	ND (0.0019)
Methyl Tert Butyl Ether (MTBE)	0.93	100	0.93	ND (0.0026)	ND (0.0025)	ND (0.0019)	ND (0.0018)	ND (0.0017)	ND (0.0025)	ND (0.0021)	ND (0.0019)	ND (0.0034)	ND (0.0024)	ND (0.0029)	ND (0.0027)	ND (0.002)	0.0023 J	ND (0.0022)	ND (0.0019)
Methylene chloride (Dichloromethane)	0.05	100	0.05	ND (0.0066)	ND (0.0062)	ND (0.0048)	ND (0.0045)	ND (0.0042)	ND (0.0063)	ND (0.0052)	ND (0.0047)	ND (0.0085)	ND (0.006)	ND (0.0072)	ND (0.0067)	ND (0.005)	ND (0.019)	ND (0.0055)	ND (0.0047)
Naphthalene	12	100	12	ND (0.0052)	0.018	0.0023 J+	0.0099	0.002 J	ND (0.005)	0.0042	0.00064 J	ND (0.0068)	ND (0.0048)	ND (0.0058)	ND (0.0053)	0.0021 J	ND (0.016)	0.0034 J	ND (0.0038) J
n-Butylbenzene	12	100	12	ND (0.0013)	ND (0.0012)	0.032 J+	0.0021	ND (0.00085)	ND (0.0013)	ND (0.001)	ND (0.00094)	ND (0.0017)	ND (0.0012)	ND (0.0014)	0.00027 J	0.0035	ND (0.0039)	ND (0.0011)	ND (0.00095) J
n-Propylbenzene	3.9	100	3.9	ND (0.0013)	ND (0.0012)	0.018 J+	0.0075	0.00034 J	ND (0.0013)	ND (0.001)	ND (0.00094)	ND (0.0017)	ND (0.0012)	ND (0.0014)	0.00026 J	0.0046	ND (0.0039)	0.00026 J	0.00037 J
o-Xylene	NA	NA	NA	ND (0.0013)	0.00054 J	ND (0.00096)	0.0016	0.001	ND (0.0013)	0.00032 J	0.00028 J	ND (0.0017)	ND (0.0012)	ND (0.0014)	ND (0.0013)	0.00034 J	ND (0.0039)	ND (0.0011)	ND (0.00095)
Styrene	NA	NA	NA	ND (0.0013)	ND (0.0012)	ND (0.00096)	0.0002 J	ND (0.00085)	ND (0.0013)	ND (0.001)	ND (0.00094)	ND (0.0017)	ND (0.0012)	ND (0.0014)	ND (0.0013)	ND (0.001)	ND (0.0039)	ND (0.0011)	ND (0.00095)
tert-Butylbenzene	5.9	100	5.9	ND (0.0026)	ND (0.0025)	0.00057 J+	ND (0.0018)	ND (0.0017)	ND (0.0025)	ND (0.0021)	ND (0.0019)	ND (0.0034)	ND (0.0024)	ND (0.0029)	ND (0.0027)	0.00022 J	ND (0.0078)	ND (0.0022)	ND (0.0019) J
Tetrachloroethene	1.3	19	1.3	0.0058	0.0024	0.00086	ND (0.00045)	ND (0.00042)	0.0084	0.0088	ND (0.00047)	0.0007 J	ND (0.0006)	0.0011	0.00086	ND (0.0005)	ND (0.0019)	0.0083	0.0013
Toluene	0.7	100	0.7	ND (0.0013)	ND (0.0012)	ND (0.00096)	ND (0.00089)	ND (0.00085)	ND (0.0013)	ND (0.001)	ND (0.00094)	0.001 J	ND (0.0012)	ND (0.0014)	ND (0.0013)	ND (0.001)	0.0031 J	0.00067 J	ND (0.00095)
trans-1,2-Dichloroethene	0.19	100	0.19	ND (0.002)	ND (0.0018)	ND (0.0014)	ND (0.0013)	ND (0.0013)	ND (0.0019)	ND (0.0015)	ND (0.0014)	ND (0.0025)	ND (0.0018)	ND (0.0022)	ND (0.002)	ND (0.0015)	0.00066 J	ND (0.0016)	ND (0.0014)
trans-1,3-Dichloropropene	NA	NA	NA	ND (0.0013)	ND (0.0012)	ND (0.00096)	ND (0.00089)	ND (0.00085)	ND (0.0013)	ND (0.001)	ND (0.00094)	ND (0.0017)	ND (0.0012)	ND (0.0014)	ND (0.0013)	ND (0.001)	ND (0.0039)	ND (0.0011)	ND (0.00095)
trans-1,4-Dichloro-2-butene	NA	NA	NA	ND (0.0066)	ND (0.0062)	ND (0.0048)	ND (0.0045)	ND (0.0042)	ND (0.0063)	ND (0.0052)	ND (0.0047)	ND (0.0085)	ND (0.006)	ND (0.0072)	ND (0.0067)	ND (0.005)	ND (0.019)	ND (0.0055)	ND (0.0047) J
Trichloroethene	0.47	21	0.47	0.014	0.0027	ND (0.00048)	ND (0.00045)	ND (0.00042)	0.0048	0.0065	ND (0.00047)	0.0091	0.0014	0.0055	0.0081	ND (0.0005)	ND (0.0019)	0.002	0.00069
Trichlorofluoromethane (CFC-11)	NA	NA	NA	ND (0.0052)	ND (0.005)	ND (0.0038)	ND (0.0036)	ND (0.0034)	ND (0.005)	ND (0.0041)	ND (0.0038)	ND (0.0068)	ND (0.0048) J	ND (0.0058)	ND (0.0053)	ND (0.004)	ND (0.016)	ND (0.0044)	ND (0.0038)
Vinyl acetate	NA	NA	NA	ND (0.013)	ND (0.012)	ND (0.0096)	ND (0.0089)	ND (0.0085)	ND (0.013)	ND (0.01)	ND (0.0094)	ND (0.017)	ND (0.012) J	ND (0.014)	ND (0.013)	ND (0.01)	ND (0.039)	ND (0.011)	ND (0.0095) J
Vinyl chloride	0.02	0.9	0.02	ND (0.0013)	ND (0.0012)	ND (0.00096)	ND (0.00089)	ND (0.00085)	ND (0.0013)	ND (0.001)	ND (0.00094)	ND (0.0017) J	ND (0.0012)	ND (0.0014) J	ND (0.0013) J	ND (0.001) J	ND (0.0039) J	ND (0.0011)	ND (0.00095)
Xylene (Total)	1.6	100	0.26	ND (0.0013)	0.00054 J	ND (0.00096)	0.0026 J	0.0016 J	ND (0.0013)	0.0009 J	0.00028 J	ND (0.0017)	ND (0.0012)	ND (0.0014)	ND (0.0013)	0.0012 J	ND (0.0039)	ND (0.0011)	ND (0.00095)
Semi-Volatile Organic Compounds (mg/kg)																			
1,2,4,5-Tetrachlorobenzene	NA	NA	NA	ND (0.18)	ND (0.91)	ND (0.92)	ND (0.2)	ND (0.19)	ND (0.19)	ND (0.97)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.2)	ND (0.19)	ND (0.2)	ND (1.3)	ND (0.89)	ND (0.18)
1,2,4-Trichlorobenzene	NA	NA	NA	ND (0.18)	ND (0.91)	-	ND (0.2)	ND (0.19)	ND (0.19)	ND (0.97)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.2)	ND (0.19)	ND (0.2)	ND (1.3)	ND (0.89)	ND (0.18)
1,2-Dichlorobenzene	1.1	100	1.1	ND (0.18)	ND (0.91)	-	ND (0.2)	ND (0.19)	ND (0.19) J	ND (0.97)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.2)	ND (0.19)	ND (0.2)	ND (1.3)	ND (0.89)	ND (0.18)
1,3-Dichlorobenzene	2.4	49	2.4	ND (0.18)	ND (0.91)	-	ND (0.2)	ND (0.19)	ND (0.19) J	ND (0.97)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.2)	ND (0.19)	ND (0.2)	ND (1.3)	ND (0.89)	ND (0.18)
1,4-Dichlorobenzene	1.8	13	1.8	ND (0.18)	ND (0.91)	-	ND (0.2)	ND (0.19)	ND (0.19) J	ND (0.97)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.2)	ND (0.19)	ND (0.2)	ND (1.3)	ND (0.89)	ND (0.18)
1,4-Dioxane	0.1	13	0.1	ND (0.028)	ND (0.14)	ND (0.14)	ND (0.029)	ND (0.029)	ND (0.028)	ND (0.14)	ND (0.029)	ND (0.028)	ND (0.028)	ND (0.03)	ND (0.029)	ND (0.029)	ND (0.2)	ND (0.13)	ND (0.028)
2,2'-oxybis(1-Chloropropane)	NA	NA	NA	ND (0.22)	ND (1.1)	ND (1.1)	ND (0.24)	ND (0.23)	ND (0.22)	ND (1.2)	ND (0.23)	ND (0.22)	ND (0.22)	ND (0.24)	ND (0.23)	ND (0.23)	ND (1.6)	ND (1.1)	ND (0.22)
2,4,5-Trichlorophenol	NA	NA	NA	ND (0.18)	ND (0.91)	ND (0.92)	ND (0.2)	ND (0.19)	ND (0.19)	ND (0.97)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.2)	ND (0.19)	ND (0.2)	ND (1.3)	ND (0.89)	ND (0.18)
2,4,6-Trichlorophenol	NA	NA	NA	ND (0.11)	ND (0.55)	ND (0.55)	ND (0.12)	ND (0.11)	ND (0.11)	ND (0.58)	ND (0.12)	ND (0.11)	ND (0.11)	ND (0.12)	ND (0.12)	ND (0.12)	ND (0.8)	ND (0.54)	ND (0.11)
2,4-Dichlorophenol	NA	NA	NA	ND (0.16)	ND (0.82)	ND (0.83)	ND (0.18)	ND (0.17)	ND (0.17)	ND (0.88)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.18)	ND (0.17)	ND (0.18)	ND (1.2)	ND (0.8)	ND (0.16)
2,4-Dimethylphenol	NA	NA	NA	ND (0.18)	ND (0.91)	ND (0.92)	ND (0.2)	ND (0.19)	ND (0.19)	ND (0.97)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.2)	ND (0.19)	ND (0.2)	ND (1.3)	ND (0.89)	ND (0.18)
2,4-Dinitrophenol	NA	NA	NA	ND (0.88)	ND (4.4)	ND (4.4)	ND (0.94)	ND (0.92)	ND (0.9)	ND (4.7)	ND (0.93)	ND (0.89)	ND (0.89)	ND (0.95)	ND (0.93)	ND (0.94)	ND (6.4)	ND (4.3)	0.88 R
2,4-Dinitrotoluene	NA	NA	NA	ND (0.18)	ND (0.91)	ND (0.92)	ND (0.2)	ND (0.19)	ND (0.19)	ND (0.97)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.2)	ND (0.19)	ND (0.2)	ND (1.3)	ND (0.89)	ND (0.18)
2,6-Dinitrotoluene	NA	NA	NA	ND (0.18)	ND (0.91)	ND (0.92)	ND (0.2)	ND (0.19)	ND (0.19)	ND (0.97)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.2)	ND (0.19)	ND (0.2)	ND (1.3)	ND (0.89)	ND (0.18)
2-Chloronaphthalene	NA	NA	NA	ND (0.18)	ND (0.91)	ND (0.92)	ND (0.2)	ND (0.19)	ND (0.19)	ND (0.97)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.2)	ND (0.19)	ND (0.2)	ND (1.3)	ND (0.89)	ND (0.18)
2-Chlorophenol	NA	NA	NA	ND (0.18)	ND (0.91)	ND (0.92)	ND (0.2)	ND (0.19)	ND (0.19) J	ND (0.97)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.2)	ND (0.19)	ND (0.2)	ND (1.3)	ND (0.89)	ND (0.18)
2-Methylnaphthalene	NA	NA	NA	0.048 J	0.26 J	0.52 J	ND (0.24)	ND (0.23)	0.029 J	ND (1.2)	ND (0.23)	0.034 J	0.078 J	0.19 J	0.03 J	ND (0.23)	ND (1.6)	ND (1.1)	ND (0.22)
2-Methylphenol (o-Cresol)	0.33	100	0.33	ND (0.18)	ND (0.91)	ND (0.92)	ND (0.2)	ND (0.19)	ND (0.19) J	ND (0.97)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.2)	ND (0.19)	ND (0.2)	ND (1.3)	ND (0.89)	ND (0.18)
2-Nitroaniline	NA	NA	NA	ND (0.18)	ND (0.91)	ND (0.92)	ND (0.2)	ND (0.19)	ND (0.19)	ND (0.97)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.2)	ND (0.19)	ND (0.2)	ND (1.3)	ND (0.89)	ND (0.18)
2-Nitrophenol	NA	NA	NA	ND (0.4)	ND (2)	ND (2)	ND (0.42)	ND (0.41)	ND (0.4)	ND (2.1)	ND (0.42)	ND (0.4)	ND (0.4)	ND (0.43)	ND (0.42)	ND (0.42)	ND (2.9)	ND (1.9)	ND (0.4)
3&4-Methylphenol	NA	NA	NA	ND (0.26)	ND (1.3)	ND (1.3)	ND (0.28)	ND (0.28)	ND (0.27)	ND (1.4)	ND (0.28)	ND (0.27)	ND (0.27)	0.054 J	ND (0.28)	ND (0.28)	2.3	ND (1.3)	ND (0.26)
3,3'-Dichlorobenzidine	NA	NA	NA	ND (0.18)	ND (0.91)	ND (0.92)	ND (0.2)	ND (0.19)	ND (0.19)	ND (0.97)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.2)	ND (0.19)	ND (0.2)	ND (1.3)	ND (0.89)	ND (0.18)
3-Nitroaniline	NA	NA	NA	ND (0.18)	ND (0.91)	ND (0.92)	ND (0.2)	ND (0.19)	ND (0.19)	ND (0.97)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.2)	ND (0.19)	ND (0.2)	ND (1.3)	ND (0.89)	ND (0.18)
4,6-Dinitro-2-methylphenol	NA	NA	NA	ND (0.48)	ND (2.4)	ND (2.4)	ND (0.51)	ND (0.5)	ND (0.49)	ND (2.5)	ND (0.5)	ND (0.48)	ND (0.48)	ND (0.51)	ND (0.5)	ND (0.51)	ND (3.4)	ND (2.3)	0.48 R
4-Bromophenyl phenyl ether (BDE-3)	NA	NA	NA	ND (0.18)	ND (0.91)	ND (0.92)	ND (0.2)	ND (0.19)	ND (0.19)	ND (0.97)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.2)	ND (0.19)	ND (0.2)	ND (1.3)	ND (0.89)	ND (0.18)
4-Chloro-3-methylphenol	NA	NA	NA	ND (0.18)	ND (0.91)	ND (0.92)	ND (0.2)	ND (0.19)	ND (0.19)	ND (0.97)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.2)	ND (0.19)	ND (0.2)	ND (1.3)	ND (0.89)	ND (0.18)
4-Chloroaniline	NA	NA	NA	ND (0.18)	ND (0.91)	ND (0.92)	ND (0.2)	ND (0.19)	ND (0.19)	ND (0.97)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.2)	ND (0.19)	ND (0.2)	ND (1.3)	ND (0.89)	ND (0.18)
4-Chlorophenyl phenyl ether	NA	NA	NA	ND (0.18)	ND (0.91)	ND (0.92)	ND (0.2)	ND (0.19)	ND (0.19)	ND (0.97)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.2)	ND (0.19)	ND (0.2)	ND (1.3)	ND (0.89)	ND (0.18)
4-Nitroaniline	NA	NA	NA	ND (0.18)	ND (0.91)	ND (0.92)	ND (0.2)	ND (0.19)	ND (0.19)	ND (0.97)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.2)	ND (0.19)	ND (0.2)	ND (1.3)	ND (0.89)	ND (0.18)
4-Nitrophenol	NA	NA	NA	ND (0.26)	ND (1.3)	ND (1.3)	ND (0.28)	ND (0.27)	ND (0.26)	ND (1.4)	ND (0.27)	ND (0.26)	ND (0.26)	ND (0.28)	ND (0.27)	ND (0.27)	ND (1.9)	ND (1.2)	ND (0.26)

TABLE 2
REMEDIAL INVESTIGATION RESULTS - ANALYTICAL RESULTS IN SOIL
558 SACKETT STREET
BROOKLYN, NEW YORK
FILE NO. 0206384

	Action Level																		
Location Name	Restricted Use	NY Part 375	NY Part 375	SB-1	SB-1	SB-1	SB-1	SB-1	SB-2	SB-2	SB-2	SB-3	SB-3	SB-3	SB-3	SB-3	SB-3	SB-4	SB-4
Sample Name	Soil Cleanup	Restricted	Unrestricted	SB-1_0-0.5	SB-1_1-2	SB-1_5-7	SB-1_10-12	SB-1_12-15	SB-2_0-0.5	SB-2_5-7	SB-2_12-14	SB-3_0-0.5	SB-3_1-2	SB-3_5-7	DUP02_20230625	SB-3_9-11	SB-3_12-14	SB-4_0-0.5	SB-4_5-7
Sample Date	Objectives -	Residential Use	Use	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/25/2023	06/25/2023	06/25/2023	06/25/2023	06/25/2023	06/25/2023	06/21/2023	06/21/2023
Lab Sample ID	Protection of	Soil Cleanup	Soil Cleanup	L2335535-01	L2335535-02	L2335535-03	L2335535-04	L2335535-05	L2335535-06	L2335535-07	L2335535-08	L2336505-01	L2336505-02	L2336505-03	L2336505-06	L2336505-04	L2336505-05	L2335535-09	L2335535-10
Sample Depth (bgs)	Groundwater	Objectives	Objectives	0 - 0.5 (ft)	1 - 2 (ft)	5 - 7 (ft)	10 - 12 (ft)	12 - 15 (ft)	0 - 0.5 (ft)	5 - 7 (ft)	12 - 14 (ft)	0 - 0.5 (ft)	1 - 2 (ft)	5 - 7 (ft)	5 - 7 (ft)	9 - 11 (ft)	12 - 14 (ft)	0 - 0.5 (ft)	5 - 7 (ft)
Acenaphthene	98	100	20	0.11 J	0.81	1.7	0.15 J	0.044 J	0.077 J	0.1 J	ND (0.15)	0.029 J	0.21	0.22	0.072 J	0.24	ND (1.1)	0.24 J	ND (0.15)
Acenaphthylene	107	100	100	0.15	0.27 J	0.34 J	ND (0.16)	ND (0.15)	0.21	0.5 J	ND (0.15)	ND (0.15)	0.16	0.22	0.084 J	ND (0.16)	ND (1.1)	0.78	ND (0.15)
Acetophenone	NA	NA	NA	ND (0.18)	ND (0.91)	ND (0.92)	ND (0.2)	ND (0.19)	ND (0.19)	ND (0.97)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.2)	ND (0.19)	ND (0.2)	ND (1.3)	ND (0.89)	ND (0.18)
Anthracene	1000	100	100	0.3	1.5	4.4	ND (0.12)	ND (0.11)	0.35	0.53 J	ND (0.12)	0.084 J	0.7	0.46 J	0.15 J	ND (0.12)	ND (0.8)	1.1	ND (0.11)
Benzo(a)anthracene	1	1	1	***1.3***	***4.2***	***12***	ND (0.12)	ND (0.11)	***1.2***	***2.4***	ND (0.12)	0.44	***3.8***	***1.4 J***	0.66 J	ND (0.12)	ND (0.8)	***4.2***	ND (0.11)
Benzo(a)pyrene	22	1	1	1.4	4.2	12	ND (0.16)	ND (0.15)	1.1	2.6	ND (0.15)	0.48	3.8	1.5 J	0.71 J	ND (0.16)	ND (1.1)	4	ND (0.15)
Benzo(b)fluoranthene	1.7	1	1	1.7	***5***	***13***	ND (0.12)	ND (0.11)	1.4	***3.2***	ND (0.12)	0.55	***4.2***	***1.8 J***	0.85 J	ND (0.12)	ND (0.8)	***5.5***	ND (0.11)
Benzo(g,h,i)perylene	1000	100	100	0.83	2.7	7	ND (0.16)	ND (0.15)	0.82	2	ND (0.15)	0.3	2.5	0.92 J	0.45 J	ND (0.16)	ND (1.1)	2.6	ND (0.15)
Benzo(k)fluoranthene	1.7	3.9	0.8	0.51	1.6	***4.2***	ND (0.12)	ND (0.11)	0.47	1.2	ND (0.12)	0.17	1.2	0.47 J	0.25 J	ND (0.12)	ND (0.8)	1.3	ND (0.11)
Benzoic acid	NA	NA	NA	ND (0.6)	ND (3)	ND (3)	ND (0.64)	ND (0.62)	ND (0.61)	ND (3.2)	ND (0.62)	ND (0.6)	ND (0.6)	ND (0.64)	ND (0.62)	ND (0.63)	ND (4.3)	ND (2.9)	0.59 R
Benzyl Alcohol	NA	NA	NA	ND (0.18)	ND (0.91)	ND (0.92)	ND (0.2)	ND (0.19)	ND (0.19) J	ND (0.97)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.2)	ND (0.19)	ND (0.2)	ND (1.3)	ND (0.89)	ND (0.18)
Biphenyl	NA	NA	NA	ND (0.42)	ND (2.1)	0.14 J	ND (0.45)	ND (0.44)	ND (0.43)	ND (2.2)	ND (0.44)	ND (0.42)	ND (0.42)	0.051 J	ND (0.44)	ND (0.44)	ND (3)	ND (2)	ND (0.42)
bis(2-Chloroethoxy)methane	NA	NA	NA	ND (0.2)	ND (0.98)	ND (0.99)	ND (0.21)	ND (0.21)	ND (0.2)	ND (1)	ND (0.21)	ND (0.2)	ND (0.2)	ND (0.21)	ND (0.21)	ND (0.21)	ND (1.4)	ND (0.96)	ND (0.2)
bis(2-Chloroethyl)ether	NA	NA	NA	ND (0.16)	ND (0.82)	ND (0.83)	ND (0.18)	ND (0.17)	ND (0.17) J	ND (0.88)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.18)	ND (0.17)	ND (0.18)	ND (1.2)	ND (0.8)	ND (0.16)
bis(2-Ethylhexyl)phthalate	NA	NA	NA	0.23	0.33 J	ND (0.92)	ND (0.2)	ND (0.19)	0.38	ND (0.97)	0.15 J	ND (0.19)	ND (0.18)	ND (0.2)	ND (0.19)	ND (0.2)	ND (1.3)	ND (0.89)	0.15 J
Butyl benzylphthalate (BBP)	NA	NA	NA	0.09 J	ND (0.91)	ND (0.92)	ND (0.2)	ND (0.19)	0.06 J	ND (0.97)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.2)	ND (0.19)	ND (0.2)	ND (1.3)	ND (0.89)	ND (0.18)
Carbazole	NA	NA	NA	0.14 J	0.7 J	1	ND (0.2)	ND (0.19)	0.14 J	0.25 J	ND (0.19)	0.045 J	0.24	0.34 J	0.071 J	ND (0.2)	ND (1.3)	0.41 J	ND (0.18)
Chrysene	1	3.9	1	***1.2***	***4***	***11***	ND (0.12)	ND (0.11)	***1.1***	***2.3***	ND (0.12)	0.46	***3.6***	***1.6 J***	0.72 J	ND (0.12)	ND (0.8)	***3.8***	ND (0.11)
Dibenz(a,h)anthracene	1000	0.33	0.33	0.21	0.64	1.7	ND (0.12)	ND (0.11)	0.18	0.42 J	ND (0.12)	0.073 J	0.55	0.2	0.1 J	ND (0.12)	ND (0.8)	0.6	ND (0.11)
Dibenzofuran	210	59	7	0.078 J	0.48 J	0.83 J	ND (0.2)	ND (0.19)	0.056 J	0.099 J	ND (0.19)	0.023 J	0.11 J	0.26 J	0.039 J	ND (0.2)	ND (1.3)	0.2 J	ND (0.18)
Diethyl phthalate	NA	NA	NA	ND (0.18)	ND (0.91)	ND (0.92)	ND (0.2)	ND (0.19)	ND (0.19)	ND (0.97)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.2)	ND (0.19)	ND (0.2)	ND (1.3)	ND (0.89)	ND (0.18)
Dimethyl phthalate	NA	NA	NA	ND (0.18)	ND (0.91)	ND (0.92)	ND (0.2)	ND (0.19)	ND (0.19)	ND (0.97)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.2)	ND (0.19)	ND (0.2)	ND (1.3)	ND (0.89)	ND (0.18)
Di-n-butylphthalate (DBP)	NA	NA	NA	0.18	ND (0.91)	ND (0.92)	ND (0.2)	ND (0.19)	0.078 J	ND (0.97)	ND (0.19)	ND (0.19)	ND (0.18)	0.18 J	ND (0.19)	ND (0.2)	ND (1.3)	ND (0.89)	ND (0.18)
Di-n-octyl phthalate (DnOP)	NA	NA	NA	ND (0.18)	ND (0.91)	ND (0.92)	ND (0.2)	ND (0.19)	ND (0.19)	ND (0.97)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.2)	ND (0.19)	ND (0.2)	ND (1.3)	ND (0.89)	ND (0.18)
Fluoranthene	1000	100	100	2.6	9.3	25	ND (0.12)	ND (0.11)	2.3	4	ND (0.12)	0.81	6	3.3 J	1.3 J	ND (0.12)	ND (0.8)	8.3	ND (0.11)
Fluorene	386	100	30	0.093 J	0.62 J	1.6	0.054 J	ND (0.19)	0.079 J	0.11 J	ND (0.19)	0.029 J	0.18	0.22	0.057 J	0.022 J	ND (1.3)	0.28 J	ND (0.18)
Hexachlorobenzene	3.2	1.2	0.33	ND (0.11)	ND (0.55)	ND (0.55)	ND (0.12)	ND (0.11)	ND (0.11)	ND (0.58)	ND (0.12)	ND (0.11)	ND (0.11)	ND (0.12)	ND (0.12)	ND (0.12)	ND (0.8)	ND (0.54)	ND (0.11)
Hexachlorobutadiene	NA	NA	NA	ND (0.18)	ND (0.91)	ND (0.92)	ND (0.2)	ND (0.19)	ND (0.19)	ND (0.97)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.2)	ND (0.19)	ND (0.2)	ND (1.3)	ND (0.89)	ND (0.18)
Hexachlorocyclopentadiene	NA	NA	NA	ND (0.53) J	ND (2.6) J	ND (2.6) J	ND (0.56) J	ND (0.55) J	ND (0.54) J	ND (2.8)	ND (0.55) J	ND (0.53) J	ND (0.53) J	ND (0.56) J	ND (0.55) J	ND (0.56) J	ND (3.8) J	ND (2.6) J	0.52 R
Hexachloroethane	NA	NA	NA	ND (0.15)	ND (0.73)	ND (0.73)	ND (0.16)	ND (0.15)	ND (0.15)	ND (0.78)	ND (0.15)	ND (0.15)	ND (0.15)	ND (0.16)	ND (0.15)	ND (0.16)	ND (1.1)	ND (0.71)	ND (0.15)
Indeno(1,2,3-cd)pyrene	8.2	0.5	0.5	1	3.3	***8.3***	ND (0.16)	ND (0.15)	0.87	1.8	ND (0.15)	0.34	2.6	1 J	0.49 J	ND (0.16)	ND (1.1)	3.1	ND (0.15)
Isophorone	NA	NA	NA	ND (0.16)	ND (0.82)	ND (0.83)	ND (0.18)	ND (0.17)	ND (0.17)	ND (0.88)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.18)	ND (0.17)	ND (0.18)	ND (1.2)	ND (0.8)	ND (0.16)
Naphthalene	12	100	12	0.067 J	0.53 J	0.74 J	ND (0.2)	ND (0.19)	0.078 J	0.19 J	ND (0.19)	0.032 J	0.14 J	0.56 J	0.065 J	ND (0.2)	ND (1.3)	0.16 J	ND (0.18)
Nitrobenzene	NA	NA	NA	ND (0.16)	ND (0.82)	ND (0.83)	ND (0.18)	ND (0.17)	ND (0.17)	ND (0.88)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.18)	ND (0.17)	ND (0.18)	ND (1.2)	ND (0.8)	ND (0.16)
N-Nitrosodi-n-propylamine	NA	NA	NA	ND (0.18)	ND (0.91)	ND (0.92)	ND (0.2)	ND (0.19)	ND (0.19)	ND (0.97)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.2)	ND (0.19)	ND (0.2)	ND (1.3)	ND (0.89)	ND (0.18)
N-Nitrosodiphenylamine	NA	NA	NA	ND (0.15)	ND (0.73)	ND (0.73)	ND (0.16)	ND (0.15)	ND (0.15)	ND (0.78)	ND (0.15)	ND (0.15)	ND (0.15)	ND (0.16)	ND (0.15)	ND (0.16)	ND (1.1)	ND (0.71)	ND (0.15)
Pentachlorophenol	0.8	6.7	0.8	ND (0.15)	ND (0.73)	0.54 J	ND (0.16)	ND (0.15)	ND (0.15)	0.43 J	ND (0.15)	ND (0.15)	ND (0.15)	ND (0.16)	ND (0.15)	ND (0.16)	ND (1.1)	0.53 J	ND (0.15)
Phenanthrene	1000	100	100	1.4	7.2	19	0.057 J	ND (0.11)	1.2	2	ND (0.12)	0.49	4.2	3 J	0.82 J	ND (0.12)	ND (0.8)	4.8	ND (0.11)
Phenol	0.33	100	0.33	ND (0.18)	ND (0.91)	ND (0.92)	ND (0.2)	ND (0.19)	ND (0.19) J	ND (0.97)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.2)	ND (0.19)	ND (0.2)	ND (1.3)	ND (0.89)	ND (0.18)
Pyrene	1000	100	100	2.2	8.1	24	ND (0.12)	ND (0.11)	2	3.5	ND (0.12)	0.76	6.9	2.9 J	1.2 J	ND (0.12)	ND (0.8)	6.9	ND (0.11)

TABLE 2
REMEDIAL INVESTIGATION RESULTS - ANALYTICAL RESULTS IN SOIL
558 SACKETT STREET
BROOKLYN, NEW YORK
FILE NO. 0206384

	Action Level																		
Location Name	Restricted Use	NY Part 375	NY Part 375	SB-1	SB-1	SB-1	SB-1	SB-1	SB-2	SB-2	SB-2	SB-3	SB-3	SB-3	SB-3	SB-3	SB-3	SB-4	SB-4
Sample Name	Soil Cleanup	Restricted	Unrestricted	SB-1_0-0.5	SB-1_1-2	SB-1_5-7	SB-1_10-12	SB-1_12-15	SB-2_0-0.5	SB-2_5-7	SB-2_12-14	SB-3_0-0.5	SB-3_1-2	SB-3_5-7	DUP02_20230625	SB-3_9-11	SB-3_12-14	SB-4_0-0.5	SB-4_5-7
Sample Date	Objectives -	Residential Use	Use	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/25/2023	06/25/2023	06/25/2023	06/25/2023	06/25/2023	06/25/2023	06/21/2023	06/21/2023
Lab Sample ID	Protection of	Soil Cleanup	Soil Cleanup	L2335535-01	L2335535-02	L2335535-03	L2335535-04	L2335535-05	L2335535-06	L2335535-07	L2335535-08	L2336505-01	L2336505-02	L2336505-03	L2336505-06	L2336505-04	L2336505-05	L2335535-09	L2335535-10
Sample Depth (bgs)	Groundwater	Objectives	Objectives	0 - 0.5 (ft)	1 - 2 (ft)	5 - 7 (ft)	10 - 12 (ft)	12 - 15 (ft)	0 - 0.5 (ft)	5 - 7 (ft)	12 - 14 (ft)	0 - 0.5 (ft)	1 - 2 (ft)	5 - 7 (ft)	5 - 7 (ft)	9 - 11 (ft)	12 - 14 (ft)	0 - 0.5 (ft)	5 - 7 (ft)
Inorganic Compounds (mg/kg)																			
Aluminum	NA	NA	NA	7240	10800	5110	9260	8930	7100	4860	6180	5440	5360	4660	4060	7520	15400	12300	6630
Antimony	NA	NA	NA	13.1 J	5.8 J	0.759 J	0.594 J	0.609 J	3.54 J	2.02 J	ND (4.54) J	0.389 J	1.23 J	6.15	3.61 J	ND (4.67)	ND (10.7)	9.79 J	0.397 J
Arsenic	16	16	13	***17***	12.8	8.59	3.7	7	***19***	8.26	2.07	6.18	7.16	***25.5***	***16.7***	2.67	***17.9***	***19.3***	2.65
Barium	820	400	350	292	342	230	11.2	8.6	306	116	4.82	106 J	231 J	481 J	276 J	28 J	23.1 J	156	71.5
Beryllium	47	72	7.2	2.41	9.55	0.434	0.4 J	0.384 J	1.54	0.634	0.305 J	0.325 J	0.312 J	0.348 J	0.288 J	0.348 J	0.873 J	11.8	0.403 J
Cadmium	7.5	4.3	2.5	3.67	1.68	0.474 J	ND (0.931)	ND (0.928)	0.938	1.5	ND (0.907)	0.319 J	0.603 J	1.97	1.32	ND (0.935)	0.375 J	1.52	0.111 J
Calcium	NA	NA	NA	48800 J	45100 J	5770 J	692 J	809 J	54700 J	54300 J	202 J	26600 J	22800	6740	8660	585	4240	34200 J	2010 J
Chromium	NA	NA	NA	59.4	73.8	15.7	15.3	16.2	24.6	27.2	12.4	17.3 J	19.1	34.7	21.2	13.9	36.3	95	11.2
Cobalt	NA	NA	NA	15.1	39.4	5.76	3.67	5.52	10.6	6.44	3.72	6.1 J	5.13	9.18	7.29	5.35	13.9	50.1	3.43
Copper	1720	270	50	***3080***	929	47.6	7.12	7.18	182	113	5.19	27.5	46.3	218 J	101 J	8.66	16	1070	9
Iron	NA	NA	NA	36200	48400	11800	15200	13300	23100	21100	8360	10000	14200	22000 J	38800 J	10300	30000	88700	10800
Lead	450	400	63	***1370 J***	***1570 J***	331 J	6.03 J	6.79 J	***692 J***	***1330 J***	3.48 J	***569***	***1220***	***2080***	***1990***	29.6	16.7	***1870 J***	40.3 J
Magnesium	NA	NA	NA	5230 J	4700 J	3050 J	1820 J	1710 J	8230 J	8280 J	1620 J	6000	4220	1730	1520	1890	8020	3930 J	1670 J
Manganese	2000	2000	1600	516	643	320	147	168	449	305	45.4	210	292	423 J	216 J	71.8	198	853	151
Mercury	0.73	0.81	0.18	***1.89***	***2.21***	***1.13***	ND (0.084)	ND (0.092)	0.688	***1.05***	ND (0.087)	***7.94 J***	***12.2***	***5.77***	***4.01***	ND (0.081)	ND (0.22)	***4.68***	ND (0.085)
Nickel	130	310	30	***167***	***356***	22.8	9.98	9.81	64.6	38.2	10.2	20.1	16.9	23.2	20.4	13.2	36.6	***423***	11.9
Potassium	NA	NA	NA	1330	1310	883	624	666	1330	1230	471	863	747	565	478	416	2510	1190	381
Selenium	4	180	3.9	2.29	1.99	1.42 J	ND (1.86)	0.284 J	0.841 J	1.13 J	ND (1.81)	0.301 J	0.733 J	***4.67 J***	2.07 J	ND (1.87)	1.2 J	3.12	0.561 J
Silver	8.3	180	2	***10.3***	0.535	ND (0.433)	ND (0.465)	ND (0.464)	0.33 J	0.42 J	ND (0.454)	ND (0.43)	0.799	0.845	0.552	ND (0.467)	ND (1.07)	ND (0.429)	ND (0.434)
Sodium	NA	NA	NA	729	1070	552	118 J	122 J	647	586	130 J	363 J	318	415	357	85 J	1160	1420	137 J
Thallium	NA	NA	NA	0.985 J	1.18 J	0.409 J	0.449 J	0.482 J	0.743 J	0.572 J	ND (1.81)	0.364 J	0.31 J	0.353 J	0.732 J	0.396 J	0.731 J	1.6 J	0.337 J
Vanadium	NA	NA	NA	39.3	34.3	17.9	20.4	22.4	22.2	21.9	15.6	19.7	19.3	21.9	17.3	19.1	55.5	37.7	15.1
Zinc	2480	10000	109	***2610 J***	***3880 J***	230 J	21.5 J	22.9 J	741 J	750 J	15.9 J	305 J	360	880	839	26.4	80.7	***6200 J***	51.4 J
PCBs (mg/kg)																			
Aroclor-1016 (PCB-1016)	NA	NA	NA	ND (0.053)	ND (0.052)	ND (0.0547)	ND (0.0573)	ND (0.056)	ND (0.0556)	ND (0.0583)	ND (0.0563)	ND (0.0536)	ND (0.0552)	ND (0.0575)	ND (0.0576)	ND (0.0542)	ND (0.136)	ND (0.256)	ND (0.0531)
Aroclor-1221 (PCB-1221)	NA	NA	NA	ND (0.053)	ND (0.052)	ND (0.0547)	ND (0.0573)	ND (0.056)	ND (0.0556)	ND (0.0583)	ND (0.0563)	ND (0.0536)	ND (0.0552)	ND (0.0575)	ND (0.0576)	ND (0.0542)	ND (0.136)	ND (0.256)	ND (0.0531)
Aroclor-1232 (PCB-1232)	NA	NA	NA	ND (0.053)	ND (0.052)	ND (0.0547)	ND (0.0573)	ND (0.056)	ND (0.0556)	ND (0.0583)	ND (0.0563)	ND (0.0536)	ND (0.0552)	ND (0.0575)	ND (0.0576)	ND (0.0542)	ND (0.136)	ND (0.256)	ND (0.0531)
Aroclor-1242 (PCB-1242)	NA	NA	NA	ND (0.053)	ND (0.052)	ND (0.0547)	ND (0.0573)	ND (0.056)	ND (0.0556)	ND (0.0583)	ND (0.0563)	ND (0.0536)	ND (0.0552)	ND (0.0575)	ND (0.0576)	ND (0.0542)	ND (0.136)	ND (0.256)	ND (0.0531)
Aroclor-1248 (PCB-1248)	NA	NA	NA	0.105	0.719	ND (0.0547)	ND (0.0573)	ND (0.056)	ND (0.0556)	ND (0.0583)	ND (0.0563)	ND (0.0536)	ND (0.0552)	ND (0.0575)	ND (0.0576)	ND (0.0542)	ND (0.136)	2.2	ND (0.0531)
Aroclor-1254 (PCB-1254)	NA	NA	NA	0.127	0.718	0.0602	ND (0.0573)	ND (0.056)	0.0357 J	ND (0.0583)	ND (0.0563)	ND (0.0536)	ND (0.0552)	ND (0.0575)	ND (0.0576)	ND (0.0542)	ND (0.136)	0.906	ND (0.0531)
Aroclor-1260 (PCB-1260)	NA	NA	NA	0.123	ND (0.052)	0.0306 J	ND (0.0573)	ND (0.056)	0.0287 J	0.0233 J	ND (0.0563)	ND (0.0536)	ND (0.0552)	ND (0.0575)	ND (0.0576)	ND (0.0542)	ND (0.136)	ND (0.256)	ND (0.0531)
Aroclor-1262 (PCB-1262)	NA	NA	NA	ND (0.053)	ND (0.052)	ND (0.0547)	ND (0.0573)	ND (0.056)	ND (0.0556)	ND (0.0583)	ND (0.0563)	ND (0.0536)	ND (0.0552)	ND (0.0575)	ND (0.0576)	ND (0.0542)	ND (0.136)	ND (0.256)	ND (0.0531)
Aroclor-1268 (PCB-1268)	NA	NA	NA	0.0552	ND (0.052)	0.0114 J	ND (0.0573)	ND (0.056)	0.00877 J	ND (0.0583)	ND (0.0563)	ND (0.0536)	ND (0.0552)	ND (0.0575)	ND (0.0576)	ND (0.0542)	ND (0.136)	ND (0.256)	ND (0.0531)
Polychlorinated biphenyls (PCBs)	3.2	1	0.1	0.41	1.44	0.102 J	ND (0.0573)	ND (0.056)	0.0732 J	0.0233 J	ND (0.0563)	ND (0.0536)	ND (0.0552)	ND (0.0575)	ND (0.0576)	ND (0.0542)	ND (0.136)	3.11	ND (0.0531)
Other																			
Total Solids (%)	NA	NA	NA	89.5	90.9	90	84.6	84.8	88.7	84.6	85.2	89.3	88.6	83.7	85.4	85.1	35.8	91.2	89.4
Pesticides (mg/kg)																			
4,4'-DDD	14	13	0.0033	0.00305	0.00941	ND (0.00175)	ND (0.00179)	ND (0.00179)	0.000843 J	0.00111 J	ND (0.00182)	ND (0.00177)	ND (0.00175)	ND (0.00184)	ND (0.00183)	ND (0.00184)	ND (0.00428)	0.127	ND (0.00178)
4,4'-DDE	17	8.9	0.0033	0.00647 J	0.016	0.00618 J+	ND (0.00179)	ND (0.00179)	0.00132 J	0.00209	ND (0.00182)	ND (0.00177)	ND (0.00175)	ND (0.00184)	ND (0.00183)	ND (0.00184)	ND (0.00428)	0.0466	ND (0.00178)
4,4'-DDT	136	7.9	0.0033	0.0291	0.112	0.0743 J+	ND (0.00179)	ND (0.00179)	0.0106	0.0222	ND (0.00182)	ND (0.00177)	ND (0.00175)	ND (0.00184)	ND (0.00183)	ND (0.00184)	ND (0.00428)	0.279	ND (0.00178)
Aldrin	0.19	0.097	0.005	ND (0.00177)	ND (0.00168)	ND (0.00175)	ND (0.00179)	ND (0.00179)	ND (0.00179)	ND (0.00179)	ND (0.00182)	ND (0.00177)	ND (0.00175)	ND (0.00184)	ND (0.00183)	ND (0.00184)	ND (0.00428)	ND (0.00173)	ND (0.00178)
alpha-BHC	0.02	0.48	0.02	ND (0.000738)	ND (0.0007)	ND (0.000728)	ND (0.000746)	ND (0.000747)	ND (0.000746)	ND (0.000745)	ND (0.00076)	ND (0.000739)	ND (0.000729)	ND (0.000767)	ND (0.000764)	ND (0.000766)	ND (0.00178)	ND (0.000719)	ND (0.000743)
alpha-Chlordane (cis)	2.9	4.2	0.094	0.00501	0.00697	0.00565 J+	ND (0.00224)	ND (0.00224)	0.00292	0.00516	ND (0.00228)	ND (0.00222)	ND (0.00219)	ND (0.0023)	ND (0.00229)	ND (0.0023)	ND (0.00535)	0.0142	ND (0.00223)
beta-BHC	0.09	0.36	0.036	ND (0.00177)	ND (0.00168)	ND (0.00175)	ND (0.00179)	ND (0.00179)	ND (0.00179)	ND (0.00179)	ND (0.00182)	ND (0.00177)	ND (0.00175)	ND (0.00184)	ND (0.00183)	ND (0.00184)	ND (0.00428)	ND (0.00173)	ND (0.00178)
Chlordane	NA	NA	NA	ND (0.0148)	ND (0.014)	0.155 J+	ND (0.0149)	ND (0.0149)	ND (0.0149)	ND (0.0149)	ND (0.0152)	ND (0.0148)	ND (0.0146)	ND (0.0153)	ND (0.0153)	ND (0.0153)	ND (0.0357)	ND (0.0144)	ND (0.0149)
delta-BHC	0.25	100	0.04	ND (0.00177)	ND (0.00168)	ND (0.00175)	ND (0.00179)	ND (0.00179)	ND (0.00179)	ND (0.00179)	ND (0.00182)	ND (0.00177)	ND (0.00175)	ND (0.00184)	ND (0.00183)	ND (0.00184)	ND (0.00428)	ND (0.00173)	ND (0.00178)
Dieldrin	0.1	0.2	0.005	ND (0.00111)	ND (0.00105)	ND (0.00109)	ND (0.00112)	ND (0.00112)	ND (0.00112)	ND (0.00112)	ND (0.00114)	ND (0.00111)	ND (0.00109)	ND (0.00115)	ND (0.00114)	ND (0.00115)	ND (0.00268)	ND (0.00108)	ND (0.00111)
Endosulfan I	102	24	2.4	ND (0.00177)	ND (0.00168)	ND (0.00175)	ND (0.00179)	ND (0.00179)	ND (0.00179)	ND (0.00179)	ND (0.00182)	ND (0.00177)	ND (0.00175)	ND (0.00184)	ND (0.00183)	ND (0.00184)	ND (0.00428)	ND (0.00173)	ND (0.00178)
Endosulfan II	102	24	2.4	ND (0.00177)	ND (0.00168)	ND (0.00175)	ND (0.00179)	ND (0.00179)	ND (0.00179)	ND (0.00179)	ND (0.00182)	ND (0.00177)	ND (0.00175)	ND (0.00184)	ND (0.00183)	ND (0.00184)	ND (0.00428)	ND (0.00173)	ND (0.00178)
Endosulfan sulfate	1000	24	2.4	ND (0.000738)	ND (0.0007)	ND (0.000728)	ND (0.000746)	ND (0.000747)	ND (0.000746)	ND (0.000745)	ND (0.00076)	ND (0.000739)	ND (0.000729)	ND (0.000767)	ND (0.000764)	ND (0.000766)	ND (0.00178)	ND (0.000719)	ND (0.000743)
Endrin	0.06	11	0.014	ND (0.000738)	ND (0.0007)	ND (0.000728)	ND (0.000746)	ND (0.000747)	ND (0.000746)	ND (0.000745)	ND (0.00076)	ND (0.000739)	ND (0.000729)	ND (0.000767)	ND (0.000764)	ND (0.000766)	ND (0.00178)	ND (0.000719)	ND (0.000743)
Endrin aldehyde	NA	NA	NA	ND (0.00222)	ND (0.0021)	ND (0.00218)	ND (0.00224)	ND (0.00224)	ND (0.00224)	ND (0.00224)	ND (0.00228)	ND (0.00222)	ND (0.00219)	ND (0.0023)	ND (0.00229)	ND (0.0023)	ND (0.00535)	ND (0.00216)	ND (0.00223)
Endrin ketone	NA	NA	NA	ND (0.00177)	ND (0.00168)	ND (0.00175)	ND (0.00179)	ND (0.00179)	ND (0.00179)	ND (0.00179)	ND (0.00182)	ND (0.00177)	ND (0.00175)	ND (0.00184)	ND (0.00183)	ND (0.00184)	ND (0.00428)	ND (0.00173)	ND (0.00178)
gamma-BHC (Lindane)	0.1	1.3	0.1	ND (0.000738)	ND (0.0007)	ND (0.000728)	ND (0.000746)	ND (0.000747)	ND (0.000746)	ND (0.000745)	ND (0.00076)	ND (0.000739)	ND (0.000729)	ND (0.000767)	ND (0.000764)	ND (0.000766)	ND (0.00178)	ND (0.000719)	ND (0.000743)
gamma-Chlordane (trans)	NA	NA	NA	0.00491	0.00624 J	0.00822 J+	ND (0.00224)	ND (0.00224)	0.00267	0.00724	ND (0.00228)	ND (0.00222)	ND (0.00219)	ND (0.0023)	ND (0.00229)	ND (0.0023)	ND (0.00535)	0.0118 J	ND (0.00223)
Heptachlor	0.38	2.1	0.042	ND (0.000886)	ND (0.00084)	ND (0.000874)	ND (0.000895)	ND (0.000897)	ND (0.000895)	ND (0.000894)	ND (0.000912)	ND (0.000886)	ND (0.000875)	ND (0.00092)	ND (0.000917)	ND (0.000919)	ND (0.00214)	ND (0.000863)	ND (0.000892)
Heptachlor epoxide	NA	NA	NA	ND (0.00332)	ND (0.00315)	ND (0.00328)	ND (0.00336)	ND (0.00336)	ND (0.00336)	ND (0.00335)	ND (0.00342)	ND (0.00332)	ND (0.00328)	ND (0.00345)	ND (0.00344)	ND (0.00344)	ND (0.00803)	ND (0.00324)	ND (0.00334)
Methoxychlor	NA	NA	NA	ND (0.00332)	ND (0.00315)	ND (0.00328)	ND (0.00336)	ND (0.00336)	ND (0.00336)	ND (0.00335)	ND (0.00342)	ND (0.00332)	ND (0.00328)	ND (0.00345)	ND (0.00344)	ND (0.00344)	ND (0.00803)	ND (0.00324)	ND (0.00334)
Toxaphene	NA	NA	NA	ND (0.0332)	ND (0.0315)	ND (0.0328)	ND (0.0336)	ND (0.0336)	ND (0.0336)	ND (0.0335)	ND (0.0342)	ND (0.0332)	ND (0.0328)	ND (0.0345)	ND (0.0344)	ND (0.0344)	ND (0.0803)	ND (0.0324)	ND (0.0334)

TABLE 2
REMEDIAL INVESTIGATION RESULTS - ANALYTICAL RESULTS IN SOIL
558 SACKETT STREET
BROOKLYN, NEW YORK
FILE NO. 0206384

	Action Level																		
Location Name	Restricted Use	NY Part 375	NY Part 375	SB-1	SB-1	SB-1	SB-1	SB-1	SB-2	SB-2	SB-2	SB-3	SB-3	SB-3	SB-3	SB-3	SB-3	SB-4	SB-4
Sample Name	Soil Cleanup	Restricted	Unrestricted	SB-1_0-0.5	SB-1_1-2	SB-1_5-7	SB-1_10-12	SB-1_12-15	SB-2_0-0.5	SB-2_5-7	SB-2_12-14	SB-3_0-0.5	SB-3_1-2	SB-3_5-7	DUP02_20230625	SB-3_9-11	SB-3_12-14	SB-4_0-0.5	SB-4_5-7
Sample Date	Objectives -	Residential Use	Use	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/25/2023	06/25/2023	06/25/2023	06/25/2023	06/25/2023	06/25/2023	06/21/2023	06/21/2023
Lab Sample ID	Protection of	Soil Cleanup	Soil Cleanup	L2335535-01	L2335535-02	L2335535-03	L2335535-04	L2335535-05	L2335535-06	L2335535-07	L2335535-08	L2336505-01	L2336505-02	L2336505-03	L2336505-06	L2336505-04	L2336505-05	L2335535-09	L2335535-10
Sample Depth (bgs)	Groundwater	Objectives	Objectives	0 - 0.5 (ft)	1 - 2 (ft)	5 - 7 (ft)	10 - 12 (ft)	12 - 15 (ft)	0 - 0.5 (ft)	5 - 7 (ft)	12 - 14 (ft)	0 - 0.5 (ft)	1 - 2 (ft)	5 - 7 (ft)	5 - 7 (ft)	9 - 11 (ft)	12 - 14 (ft)	0 - 0.5 (ft)	5 - 7 (ft)
PFAS (ng/g)																			
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	NA	NA	NA	ND (0.792)	ND (0.794)	ND (0.789)	ND (0.774)	ND (0.794)	ND (0.794)	ND (0.774)	ND (0.794)	ND (0.76)	ND (0.8)	ND (0.791)	ND (0.786)	ND (0.813)	ND (1.93)	ND (0.787)	ND (0.795)
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	NA	NA	NA	ND (0.792)	ND (0.794) J	ND (0.789)	ND (0.774)	ND (0.794)	ND (0.794)	ND (0.774) J	ND (0.794)	ND (0.76)	ND (0.8)	ND (0.791)	ND (0.786)	ND (0.813)	ND (1.93) J	ND (0.787) J	ND (0.795)
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	NA	NA	NA	ND (0.198)	ND (0.198)	ND (0.197)	ND (0.193)	ND (0.198)	ND (0.198)	ND (0.193)	ND (0.198)	ND (0.19)	ND (0.2)	ND (0.198)	ND (0.196)	ND (0.203)	ND (0.482)	ND (0.197)	ND (0.199)
N-Methyl Perfluorooctanesulfonamidoacetic Acid (MeFOSAA)	NA	NA	NA	ND (0.198)	ND (0.198)	ND (0.197)	ND (0.193)	ND (0.198)	ND (0.198)	ND (0.193)	ND (0.198)	ND (0.19)	ND (0.2)	ND (0.198)	ND (0.196)	ND (0.203)	ND (0.482)	ND (0.197)	ND (0.199)
Perfluorobutanesulfonic acid (PFBS)	NA	NA	NA	ND (0.198)	0.095 J	ND (0.197)	ND (0.193)	ND (0.198)	ND (0.198)	0.085 J	ND (0.198)	ND (0.19)	0.128 J	ND (0.198)	ND (0.196)	ND (0.203)	ND (0.482)	0.087 J	ND (0.199)
Perfluorobutanoic acid (PFBA)	NA	NA	NA	ND (0.792)	ND (0.794)	ND (0.789)	ND (0.774)	ND (0.794)	ND (0.794)	ND (0.774)	ND (0.794)	0.106 J	0.2 J	ND (0.791)	0.071 J	ND (0.813)	ND (1.93)	ND (0.787)	ND (0.795)
Perfluorodecanesulfonic acid (PFDS)	NA	NA	NA	ND (0.198)	ND (0.198)	ND (0.197)	ND (0.193)	ND (0.198)	ND (0.198)	ND (0.193)	ND (0.198)	ND (0.19)	ND (0.2)	ND (0.198)	ND (0.196)	ND (0.203)	ND (0.482)	ND (0.197)	ND (0.199)
Perfluorodecanoic acid (PFDA)	NA	NA	NA	ND (0.198)	ND (0.198)	ND (0.197)	ND (0.193)	ND (0.198)	ND (0.198)	ND (0.193)	ND (0.198)	ND (0.19)	ND (0.2)	ND (0.198)	ND (0.196)	ND (0.203)	ND (0.482)	ND (0.197)	ND (0.199)
Perfluorododecanoic acid (PFDoDA)	NA	NA	NA	ND (0.198)	ND (0.198)	ND (0.197)	ND (0.193)	ND (0.198)	ND (0.198)	ND (0.193)	ND (0.198)	ND (0.19)	ND (0.2)	ND (0.198)	ND (0.196)	ND (0.203)	ND (0.482)	ND (0.197)	ND (0.199)
Perfluoroheptanesulfonic acid (PFHpS)	NA	NA	NA	ND (0.198)	ND (0.198)	ND (0.197)	ND (0.193)	ND (0.198)	ND (0.198)	ND (0.193)	ND (0.198)	ND (0.19)	ND (0.2)	ND (0.198)	ND (0.196)	ND (0.203)	ND (0.482)	ND (0.197)	ND (0.199)
Perfluoroheptanoic acid (PFHpA)	NA	NA	NA	0.024 J	0.024 J	ND (0.197)	ND (0.193)	ND (0.198)	0.032 J	0.093 J	ND (0.198)	ND (0.19)	ND (0.2)	ND (0.198)	ND (0.196)	ND (0.203)	ND (0.482)	0.032 J	ND (0.199)
Perfluorohexanesulfonic acid (PFHxS)	NA	NA	NA	ND (0.198)	ND (0.198)	ND (0.197)	ND (0.193)	ND (0.198)	ND (0.198)	ND (0.193)	ND (0.198)	ND (0.19)	ND (0.2)	ND (0.198)	ND (0.196)	ND (0.203)	ND (0.482)	ND (0.197)	ND (0.199)
Perfluorohexanoic acid (PFHxA)	NA	NA	NA	ND (0.198)	ND (0.198)	ND (0.197)	ND (0.193)	ND (0.198)	ND (0.198)	ND (0.193)	ND (0.198)	ND (0.19)	ND (0.2)	ND (0.198)	ND (0.196)	ND (0.203)	ND (0.482)	ND (0.197)	ND (0.199)
Perfluorononanoic acid (PFNA)	NA	NA	NA	ND (0.198)	ND (0.198)	ND (0.197)	ND (0.193)	ND (0.198)	ND (0.198)	0.093 J	ND (0.198)	ND (0.19)	ND (0.2)	ND (0.198)	ND (0.196)	ND (0.203)	ND (0.482)	0.102 J	ND (0.199)
Perfluorooctane sulfonamide (PFOSA)	NA	NA	NA	ND (0.198)	ND (0.198)	ND (0.197)	ND (0.193)	ND (0.198)	ND (0.198)	ND (0.193)	ND (0.198)	ND (0.19)	ND (0.2)	ND (0.198)	ND (0.196)	ND (0.203)	ND (0.482)	ND (0.197)	ND (0.199)
Perfluorooctanesulfonic acid (PFOS)	1	44	0.88	0.238	0.5	0.079 J	ND (0.193)	ND (0.198)	0.127 J	***1.09***	ND (0.198)	ND (0.19)	ND (0.2)	ND (0.198)	ND (0.196)	ND (0.203)	ND (0.482)	***1.02***	ND (0.199)
Perfluorooctanoic acid (PFOA)	0.8	33	0.66	0.198	0.389	0.11 J	ND (0.193)	ND (0.198)	0.318	***1.04***	ND (0.198)	ND (0.19)	ND (0.2)	ND (0.198)	ND (0.196)	ND (0.203)	ND (0.482)	0.496	ND (0.199)
Perfluoropentanoic acid (PFPeA)	NA	NA	NA	ND (0.396)	ND (0.397)	ND (0.395)	ND (0.387)	ND (0.397)	ND (0.397)	ND (0.387)	ND (0.397)	0.213 J	0.392 J	ND (0.396)	ND (0.393)	ND (0.407)	ND (0.963)	ND (0.394)	ND (0.397)
Perfluorotetradecanoic acid (PFTeDA)	NA	NA	NA	ND (0.198)	ND (0.198)	ND (0.197)	ND (0.193)	ND (0.198)	ND (0.198)	ND (0.193)	ND (0.198)	ND (0.19)	ND (0.2)	ND (0.198)	ND (0.196)	ND (0.203)	ND (0.482)	ND (0.197)	ND (0.199)
Perfluorotridecanoic acid (PFTrDA)	NA	NA	NA	ND (0.198)	ND (0.198)	ND (0.197)	ND (0.193)	ND (0.198)	ND (0.198)	ND (0.193)	ND (0.198)	ND (0.19)	ND (0.2)	ND (0.198)	ND (0.196)	ND (0.203)	ND (0.482)	ND (0.197)	ND (0.199)
Perfluoroundecanoic acid (PFUnDA)	NA	NA	NA	ND (0.198)	ND (0.198)	ND (0.197)	ND (0.193)	ND (0.198)	ND (0.198)	ND (0.193)	ND (0.198)	ND (0.19)	ND (0.2)	ND (0.198)	ND (0.196)	ND (0.203)	ND (0.482)	ND (0.197)	ND (0.199)
US EPA PFAS (PFOS + PFOA)	NA	NA	NA	0.436	0.889	0.189 J	ND (0.193)	ND (0.198)	0.445 J	2.13	ND (0.198)	ND (0.19)	ND (0.2)	ND (0.198)	ND (0.196)	ND (0.203)	ND (0.482)	1.52	ND (0.199)

ABBREVIATIONS AND NOTES:
mg/kg: milligram per kilogram
ng/g: nanogram per gram

-: Not Analyzed
bgs: below ground surface
ft: feet
J: Value is estimated.
J+: Value is estimated, high bias
J-: Value is estimated, low bias
NA: Not Applicable
ND (2.5): Not detected, number in parentheses is the laboratory reporting limit
R: Rejected

- For test methods used, see the laboratory data sheets.
- Soil analytical results are compared to the New York State Department of Environmental Conservation (NYSDEC) Title 6 of the Official Compilation of New York Codes, Rules, and Regulations (NYCRR) Part 375 Unrestricted Use Soil Cleanup Objectives (SCO), Restricted-Use Residential SCOs, and Protection of Groundwater SCO's.
- **Bold italic** values indicate an exceedance of the Protection of Groundwater Criteria.
- Grey shading indicates an exceedance of the Unrestricted Use Soil Cleanup Objectives.
- Yellow shading indicates an exceedance of the Restricted Use Residential Soil Cleanup Objectives.

TABLE 2
REMEDIAL INVESTIGATION RESULTS - ANALYTICAL RESULTS IN SOIL
558 SACKETT STREET
BROOKLYN, NEW YORK
FILE NO. 0206384

	Action Level																
Location Name	Restricted Use	NY Part 375	NY Part 375	SB-4	SB-4	SB-5	SB-5	SB-5	SB-5	SB-6	SB-6	SB-6	SB-6	SB-7	SB-7	SB-7	SB-7
Sample Name	Soil Cleanup	Restricted	Unrestricted	SB-4_8-10	SB-4_12-14	SB-5_0-0.5	SB-5_5-7	DUP01_20230621	SB-5_12-14	SB-6_0-0.5	SB-6_5-7	SB-6_10-12	SB-6_12-14	SB-7_0-0.5	SB-7_1-2	SB-7_5-7	SB-7_9-11
Sample Date	Objectives -	Residential Use	Use	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/22/2023	06/22/2023	06/22/2023	06/22/2023
Lab Sample ID	Protection of	Soil Cleanup	Soil Cleanup	L2335535-11	L2335535-12	L2335535-13	L2335535-14	L2335535-20	L2335535-15	L2335535-16	L2335535-17	L2335535-18	L2335535-19	L2335921-01	L2335921-02	L2335921-03	L2335921-04
Sample Depth (bgs)	Groundwater	Objectives	Objectives	8 - 10 (ft)	12 - 14 (ft)	0 - 0.5 (ft)	5 - 7 (ft)	5 - 7 (ft)	12 - 14 (ft)	0 - 0.5 (ft)	5 - 7 (ft)	10 - 12 (ft)	12 - 14 (ft)	0 - 0.5 (ft)	1 - 2 (ft)	5 - 7 (ft)	9 - 11 (ft)
Volatile Organic Compounds (mg/kg)																	
1,1,1,2-Tetrachloroethane	NA	NA	NA	ND (0.00046)	ND (0.00046)	ND (0.0009)	ND (0.00055)	ND (0.00042)	ND (0.00049)	ND (0.00059)	ND (0.00044)	ND (0.29)	ND (0.0005)	ND (0.00048)	ND (0.00054)	ND (0.0005)	ND (0.00042)
1,1,1-Trichloroethane	0.68	100	0.68	ND (0.00046)	ND (0.00046)	ND (0.0009)	ND (0.00055) J	ND (0.00042)	ND (0.00049)	ND (0.00059)	ND (0.00044)	ND (0.29)	ND (0.0005)	ND (0.00048)	ND (0.00054)	ND (0.0005)	ND (0.00042)
1,1,2,2-Tetrachloroethane	NA	NA	NA	ND (0.00046)	ND (0.00046)	ND (0.0009)	ND (0.00055)	ND (0.00042)	ND (0.00049)	ND (0.00059)	ND (0.00044)	ND (0.29)	ND (0.0005)	ND (0.00048)	ND (0.00054)	ND (0.0005)	ND (0.00042)
1,1,2-Trichloroethane	NA	NA	NA	ND (0.00091)	ND (0.00092)	ND (0.0018)	ND (0.0011)	ND (0.00084)	ND (0.00099)	ND (0.0012)	ND (0.00087)	ND (0.57)	ND (0.00099)	ND (0.00096)	ND (0.0011)	ND (0.001)	ND (0.00084)
1,1-Dichloroethane	0.27	26	0.27	ND (0.00091)	ND (0.00092)	ND (0.0018)	ND (0.0011) J	ND (0.00084)	ND (0.00099)	ND (0.0012)	ND (0.00087)	ND (0.57)	ND (0.00099)	ND (0.00096)	ND (0.0011)	ND (0.001)	ND (0.00084)
1,1-Dichloroethene	0.33	100	0.33	ND (0.00091)	ND (0.00092)	ND (0.0018)	ND (0.0011) J	ND (0.00084)	ND (0.00099)	ND (0.0012)	ND (0.00087)	ND (0.57)	ND (0.00099)	ND (0.00096)	ND (0.0011)	ND (0.001)	ND (0.00084)
1,1-Dichloropropene	NA	NA	NA	ND (0.00046)	ND (0.00046)	ND (0.0009)	ND (0.00055) J	ND (0.00042)	ND (0.00049)	ND (0.00059)	ND (0.00044)	ND (0.29)	ND (0.0005)	ND (0.00048)	ND (0.00054)	ND (0.0005)	ND (0.00042)
1,2,3-Trichlorobenzene	NA	NA	NA	ND (0.0018)	ND (0.0018)	ND (0.0036)	ND (0.0022)	ND (0.0017)	ND (0.002)	ND (0.0024)	ND (0.0017)	ND (1.1)	ND (0.002)	ND (0.0019)	ND (0.0022)	ND (0.002)	ND (0.0017)
1,2,3-Trichloropropane	NA	NA	NA	ND (0.0018)	ND (0.0018)	ND (0.0036)	ND (0.0022)	ND (0.0017)	ND (0.002)	ND (0.0024)	ND (0.0017)	ND (1.1)	ND (0.002)	ND (0.0019)	ND (0.0022)	ND (0.002)	ND (0.0017)
1,2,4,5-Tetramethylbenzene	NA	NA	NA	1.7	ND (0.0018)	ND (0.0036)	0.0018 J	ND (0.0017)	ND (0.002)	ND (0.0024)	ND (0.0017)	51	ND (0.002)	ND (0.0019)	ND (0.0022)	ND (0.002)	ND (0.0017)
1,2,4-Trichlorobenzene	NA	NA	NA	ND (0.0018)	ND (0.0018)	ND (0.0036)	ND (0.0022)	ND (0.0017)	ND (0.002)	ND (0.0024)	ND (0.0017)	ND (1.1)	ND (0.002)	ND (0.0019)	ND (0.0022)	ND (0.002)	ND (0.0017)
1,2,4-Trimethylbenzene	3.6	52	3.6	0.0012 J	ND (0.0018)	ND (0.0036)	ND (0.0022)	ND (0.0017)	ND (0.002)	0.00079 J	ND (0.0017)	***360***	0.001 J	ND (0.0019)	ND (0.0022)	ND (0.002)	ND (0.0017)
1,2-Dibromo-3-chloropropane (DBCP)	NA	NA	NA	ND (0.0027)	ND (0.0027)	ND (0.0054)	ND (0.0033)	ND (0.0025)	ND (0.003)	ND (0.0035)	ND (0.0026)	ND (1.7)	ND (0.003)	ND (0.0029)	ND (0.0032)	ND (0.003)	ND (0.0025)
1,2-Dibromoethane (Ethylene Dibromide)	NA	NA	NA	ND (0.00091)	ND (0.00092)	ND (0.0018)	ND (0.0011)	ND (0.00084)	ND (0.00099)	ND (0.0012)	ND (0.00087)	ND (0.57)	ND (0.00099)	ND (0.00096)	ND (0.0011)	ND (0.001)	ND (0.00084)
1,2-Dichlorobenzene	1.1	100	1.1	ND (0.0018)	ND (0.0018)	ND (0.0036)	ND (0.0022)	ND (0.0017)	ND (0.002)	ND (0.0024)	ND (0.0017)	ND (1.1)	ND (0.002)	ND (0.0019)	ND (0.0022)	ND (0.002)	ND (0.0017)
1,2-Dichloroethane	0.02	3.1	0.02	ND (0.00091)	ND (0.00092)	ND (0.0018)	ND (0.0011) J	ND (0.00084)	ND (0.00099)	ND (0.0012)	ND (0.00087)	ND (0.57)	ND (0.00099)	ND (0.00096)	ND (0.0011)	0.00032 J	ND (0.00084)
1,2-Dichloroethene (total)	NA	NA	NA	ND (0.00091)	ND (0.00092)	ND (0.0018)	ND (0.0011)	ND (0.00084)	ND (0.00099)	ND (0.0012)	ND (0.00087)	ND (0.57)	ND (0.00099)	ND (0.00096)	ND (0.0011)	ND (0.001)	ND (0.00084)
1,2-Dichloropropane	NA	NA	NA	ND (0.00091)	ND (0.00092)	ND (0.0018)	ND (0.0011) J	ND (0.00084)	ND (0.00099)	ND (0.0012)	ND (0.00087)	ND (0.57)	ND (0.00099)	ND (0.00096)	ND (0.0011)	ND (0.001)	ND (0.00084)
1,3,5-Trimethylbenzene	8.4	52	8.4	ND (0.0018)	ND (0.0018)	ND (0.0036)	ND (0.0022)	ND (0.0017)	ND (0.002)	0.00028 J	ND (0.0017)	***87***	0.00054 J	ND (0.0019)	ND (0.0022)	ND (0.002)	ND (0.0017)
1,3-Dichlorobenzene	2.4	49	2.4	ND (0.0018)	ND (0.0018)	ND (0.0036)	ND (0.0022)	ND (0.0017)	ND (0.002)	ND (0.0024)	ND (0.0017)	ND (1.1)	ND (0.002)	ND (0.0019)	ND (0.0022)	ND (0.002)	ND (0.0017)
1,3-Dichloropropane	NA	NA	NA	ND (0.0018)	ND (0.0018)	ND (0.0036)	ND (0.0022)	ND (0.0017)	ND (0.002)	ND (0.0024)	ND (0.0017)	ND (1.1)	ND (0.002)	ND (0.0019)	ND (0.0022)	ND (0.002)	ND (0.0017)
1,3-Dichloropropene	NA	NA	NA	ND (0.00046)	ND (0.00046)	ND (0.0009)	ND (0.00055)	ND (0.00042)	ND (0.00049)	ND (0.00059)	ND (0.00044)	ND (0.29)	ND (0.0005)	ND (0.00048)	ND (0.00054)	ND (0.0005)	ND (0.00042)
1,4-Dichlorobenzene	1.8	13	1.8	ND (0.0018)	ND (0.0018)	ND (0.0036)	ND (0.0022)	ND (0.0017)	ND (0.002)	ND (0.0024)	ND (0.0017)	ND (1.1)	ND (0.002)	ND (0.0019)	ND (0.0022)	ND (0.002)	ND (0.0017)
1,4-Diethylbenzene	NA	NA	NA	0.23	ND (0.0018)	ND (0.0036)	0.00087 J	ND (0.0017)	ND (0.002)	ND (0.0024)	ND (0.0017)	20	ND (0.002)	ND (0.0019)	ND (0.0022)	ND (0.002)	ND (0.0017)
1,4-Dioxane	0.1	13	0.1	ND (0.073) J	ND (0.073)	ND (0.14)	ND (0.087) J	ND (0.067)	ND (0.079)	ND (0.094)	ND (0.07)	ND (46) J	ND (0.079)	ND (0.077)	ND (0.087)	ND (0.081)	ND (0.067)
2,2-Dichloropropane	NA	NA	NA	ND (0.0018)	ND (0.0018)	ND (0.0036)	ND (0.0022) J	ND (0.0017)	ND (0.002)	ND (0.0024)	ND (0.0017)	ND (1.1)	ND (0.002)	ND (0.0019)	ND (0.0022)	ND (0.002)	ND (0.0017)
2-Butanone (Methyl Ethyl Ketone)	0.12	100	0.12	ND (0.0091)	ND (0.0092)	ND (0.018)	0.0089 J-	0.0034 J	0.0033 J	ND (0.012)	ND (0.0087)	ND (5.7)	0.0035 J	ND (0.0096)	ND (0.011)	0.0057 J	ND (0.0084)
2-Chlorotoluene	NA	NA	NA	ND (0.0018)	ND (0.0018)	ND (0.0036)	ND (0.0022)	ND (0.0017)	ND (0.002)	ND (0.0024)	ND (0.0017)	ND (1.1)	ND (0.002)	ND (0.0019)	ND (0.0022)	ND (0.002)	ND (0.0017)
2-Hexanone (Methyl Butyl Ketone)	NA	NA	NA	ND (0.0091) J	ND (0.0092)	ND (0.018)	ND (0.011)	ND (0.0084)	ND (0.0099)	ND (0.012)	ND (0.0087)	ND (5.7) J	ND (0.0099)	ND (0.0096)	ND (0.011)	ND (0.01)	ND (0.0084)
2-Phenylbutane (sec-Butylbenzene)	11	100	11	0.2	ND (0.00092)	ND (0.0018)	0.00093 J	ND (0.00084)	0.00015 J	ND (0.0012)	ND (0.00087)	***16***	ND (0.00099)	ND (0.00096)	ND (0.0011)	ND (0.001)	ND (0.00084)
4-Chlorotoluene	NA	NA	NA	ND (0.0018)	ND (0.0018)	ND (0.0036)	ND (0.0022)	ND (0.0017)	ND (0.002)	ND (0.0024)	ND (0.0017)	ND (1.1)	ND (0.002)	ND (0.0019)	ND (0.0022)	ND (0.002)	ND (0.0017)
4-Ethyltoluene (1-Ethyl-4-Methylbenzene)	NA	NA	NA	ND (0.0018)	ND (0.0018)	ND (0.0036)	ND (0.0022)	ND (0.0017)	ND (0.002)	ND (0.0024)	ND (0.0017)	100	0.00061 J	ND (0.0019)	ND (0.0022)	ND (0.002)	ND (0.0017)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	NA	NA	NA	ND (0.0091)	ND (0.0092)	ND (0.018)	ND (0.011) J	ND (0.0084)	ND (0.0099)	ND (0.012)	ND (0.0087)	ND (5.7)	ND (0.0099)	ND (0.0096)	ND (0.011)	ND (0.01)	ND (0.0084)
Acetone	0.05	100	0.05	ND (0.0091)	ND (0.0092)	0.033 J	***0.088 J***	0.039 J	0.042 J	ND (0.012)	0.012 J	ND (5.7)	0.026 J	0.0054 J	0.0062 J	0.035	0.0046 J
Acrylonitrile	NA	NA	NA	ND (0.0036)	ND (0.0037)	ND (0.0072)	ND (0.0044) J	ND (0.0033)	ND (0.0039)	ND (0.0047)	ND (0.0035)	ND (2.3)	ND (0.004)	ND (0.0038)	ND (0.0043)	ND (0.004)	ND (0.0034)
Benzene	0.06	4.8	0.06	0.0018	ND (0.00046)	0.00038 J	0.00029 J-	ND (0.00042)	ND (0.00049)	ND (0.00059)	ND (0.00044)	ND (0.29)	0.00056	ND (0.00048)	ND (0.00054)	ND (0.0005)	ND (0.00042)
Bromobenzene	NA	NA	NA	ND (0.0018)	ND (0.0018)	ND (0.0036)	ND (0.0022)	ND (0.0017)	ND (0.002)	ND (0.0024)	ND (0.0017)	ND (1.1)	ND (0.002)	ND (0.0019)	ND (0.0022)	ND (0.002)	ND (0.0017)
Bromodichloromethane	NA	NA	NA	ND (0.00046)	ND (0.00046)	ND (0.0009)	ND (0.00055) J	ND (0.00042)	ND (0.00049)	ND (0.00059)	ND (0.00044)	ND (0.29)	ND (0.0005)	ND (0.00048)	ND (0.00054)	0.00015 J	0.0001 J
Bromoform	NA	NA	NA	ND (0.0036)	ND (0.0037)	ND (0.0072)	ND (0.0044)	ND (0.0033)	ND (0.0039)	ND (0.0047)	ND (0.0035)	ND (2.3)	ND (0.004)	ND (0.0038)	ND (0.0043)	ND (0.004)	ND (0.0034)
Bromomethane (Methyl Bromide)	NA	NA	NA	ND (0.0018)	ND (0.0018)	ND (0.0036)	ND (0.0022) J	ND (0.0017)	ND (0.002)	ND (0.0024)	ND (0.0017)	ND (1.1)	ND (0.002)	ND (0.0019)	ND (0.0022)	ND (0.002)	ND (0.0017)
Carbon disulfide	NA	NA	NA	ND (0.0091)	ND (0.0092)	ND (0.018)	ND (0.011) J	ND (0.0084)	ND (0.0099)	ND (0.012)	ND (0.0087)	ND (5.7)	ND (0.0099)	ND (0.0096)	ND (0.011)	ND (0.01)	ND (0.0084)
Carbon tetrachloride	0.76	2.4	0.76	ND (0.00091)	ND (0.00092)	ND (0.0018)	ND (0.0011) J	ND (0.00084)	ND (0.00099)	ND (0.0012)	ND (0.00087)	ND (0.57)	ND (0.00099)	ND (0.00096)	ND (0.0011)	ND (0.001)	ND (0.00084)
Chlorobenzene	1.1	100	1.1	ND (0.00046)	ND (0.00046)	ND (0.0009)	ND (0.00055)	ND (0.00042)	ND (0.00049)	ND (0.00059)	ND (0.00044)	ND (0.29)	ND (0.0005)	ND (0.00048)	ND (0.00054)	ND (0.0005)	ND (0.00042)
Chlorobromomethane	NA	NA	NA	ND (0.0018)	ND (0.0018)	ND (0.0036)	ND (0.0022)	ND (0.0017)	ND (0.002)	ND (0.0024)	ND (0.0017)	ND (1.1)	ND (0.002)	ND (0.0019)	ND (0.0022)	ND (0.002)	ND (0.0017)
Chloroethane	NA	NA	NA	ND (0.0018)	ND (0.0018)	ND (0.0036)	ND (0.0022) J	ND (0.0017)	ND (0.002)	ND (0.0024)	ND (0.0017)	ND (1.1)	ND (0.002)	ND (0.0019)	ND (0.0022)	ND (0.002)	ND (0.0017)
Chloroform (Trichloromethane)	0.37	49	0.37	ND (0.0014)	ND (0.0014)	ND (0.0027)	ND (0.0016) J	ND (0.0012)	ND (0.0015)	ND (0.0018)	ND (0.0013)	ND (0.86)	ND (0.0015)	ND (0.0014)	ND (0.0016)	0.002	0.0016
Chloromethane (Methyl Chloride)	NA	NA	NA	ND (0.0036)	ND (0.0037)	ND (0.0072)	ND (0.0044) J	ND (0.0033)	ND (0.0039)	ND (0.0047)	ND (0.0035)	ND (2.3)	ND (0.004)	ND (0.0038)	ND (0.0043)	ND (0.004)	ND (0.0034)
cis-1,2-Dichloroethene	0.25	100	0.25	ND (0.00091)	ND (0.00092)	ND (0.0018)	ND (0.0011) J	ND (0.00084)	ND (0.00099)	ND (0.0012)	ND (0.00087)	ND (0.57)	ND (0.00099)	ND (0.00096)	ND (0.0011)	ND (0.001)	ND (0.00084)
cis-1,3-Dichloropropene	NA	NA	NA	ND (0.00046)	ND (0.00046)	ND (0.0009)	ND (0.00055) J	ND (0.00042)	ND (0.00049)	ND (0.00059)	ND (0.00044)	ND (0.29)	ND (0.0005)	ND (0.00048)	ND (0.00054)	ND (0.0005)	ND (0.00042)
Cymene (p-Isopropyltoluene)	NA	NA	NA	0.0009 J	ND (0.00092)	ND (0.0018)	ND (0.0011)	ND (0.00084)	ND (0.00099)	ND (0.0012)	ND (0.00087)	5.6	ND (0.00099)	ND (0.00096)	ND (0.0011)	ND (0.001)	ND (0.00084)
Dibromochloromethane	NA	NA	NA	ND (0.00091)	ND (0.00092)	ND (0.0018)	ND (0.0011)	ND (0.00084)	ND (0.00099)	ND (0.0012)	ND (0.00087)	ND (0.57)	ND (0.00099)	ND (0.00096)	ND (0.0011)	ND (0.001)	ND (0.00084)

TABLE 2
REMEDIAL INVESTIGATION RESULTS - ANALYTICAL RESULTS IN SOIL
558 SACKETT STREET
BROOKLYN, NEW YORK
FILE NO. 0206384

	Action Level																
Location Name	Restricted Use	NY Part 375	NY Part 375	SB-4	SB-4	SB-5	SB-5	SB-5	SB-5	SB-6	SB-6	SB-6	SB-6	SB-7	SB-7	SB-7	SB-7
Sample Name	Soil Cleanup	Restricted	Unrestricted	SB-4_8-10	SB-4_12-14	SB-5_0-0.5	SB-5_5-7	DUP01_20230621	SB-5_12-14	SB-6_0-0.5	SB-6_5-7	SB-6_10-12	SB-6_12-14	SB-7_0-0.5	SB-7_1-2	SB-7_5-7	SB-7_9-11
Sample Date	Objectives -	Residential Use	Use	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/22/2023	06/22/2023	06/22/2023	06/22/2023
Lab Sample ID	Protection of	Soil Cleanup	Soil Cleanup	L2335535-11	L2335535-12	L2335535-13	L2335535-14	L2335535-20	L2335535-15	L2335535-16	L2335535-17	L2335535-18	L2335535-19	L2335921-01	L2335921-02	L2335921-03	L2335921-04
Sample Depth (bgs)	Groundwater	Objectives	Objectives	8 - 10 (ft)	12 - 14 (ft)	0 - 0.5 (ft)	5 - 7 (ft)	5 - 7 (ft)	12 - 14 (ft)	0 - 0.5 (ft)	5 - 7 (ft)	10 - 12 (ft)	12 - 14 (ft)	0 - 0.5 (ft)	1 - 2 (ft)	5 - 7 (ft)	9 - 11 (ft)
Dibromomethane	NA	NA	NA	ND (0.0018)	ND (0.0018)	ND (0.0036)	ND (0.0022) J	ND (0.0017)	ND (0.002)	ND (0.0024)	ND (0.0017)	ND (1.1)	ND (0.002)	ND (0.0019)	ND (0.0022)	ND (0.002)	ND (0.0017)
Dichlorodifluoromethane (CFC-12)	NA	NA	NA	ND (0.0091)	ND (0.0092)	ND (0.018)	ND (0.011) J	ND (0.0084)	ND (0.0099)	ND (0.012)	ND (0.0087)	ND (5.7)	ND (0.0099)	ND (0.0096)	ND (0.011)	ND (0.01)	ND (0.0084)
Ethyl Ether	NA	NA	NA	ND (0.0018)	ND (0.0018)	ND (0.0036)	ND (0.0022) J	ND (0.0017)	ND (0.002)	ND (0.0024)	ND (0.0017)	ND (1.1)	ND (0.002)	ND (0.0019)	ND (0.0022)	ND (0.002)	ND (0.0017)
Ethylbenzene	1	41	1	0.0024	ND (0.00092)	ND (0.0018)	ND (0.0011)	ND (0.00084)	ND (0.00099)	0.00021 J	0.00013 J	***54***	0.00082 J	ND (0.00096)	ND (0.0011)	ND (0.001)	ND (0.00084)
Hexachlorobutadiene	NA	NA	NA	ND (0.0036)	ND (0.0037)	ND (0.0072)	ND (0.0044)	ND (0.0033)	ND (0.0039)	ND (0.0047)	ND (0.0035)	ND (2.3)	ND (0.004)	ND (0.0038)	ND (0.0043)	ND (0.004)	ND (0.0034)
Isopropylbenzene (Cumene)	NA	NA	NA	0.92	ND (0.00092)	ND (0.0018)	0.001 J	ND (0.00084)	ND (0.00099)	ND (0.0012)	ND (0.00087)	22	0.00017 J	ND (0.00096)	ND (0.0011)	ND (0.001)	ND (0.00084)
m,p-Xylenes	NA	NA	NA	0.00077 J	ND (0.0018)	ND (0.0036)	ND (0.0022)	ND (0.0017)	ND (0.002)	ND (0.0024)	ND (0.0017)	130	0.0026	ND (0.0019)	ND (0.0022)	ND (0.002)	ND (0.0017)
Methyl Tert Butyl Ether (MTBE)	0.93	100	0.93	ND (0.0018)	ND (0.0018)	ND (0.0036)	ND (0.0022) J	ND (0.0017)	ND (0.002)	ND (0.0024)	ND (0.0017)	ND (1.1)	ND (0.002)	ND (0.0019)	ND (0.0022)	ND (0.002)	ND (0.0017)
Methylene chloride (Dichloromethane)	0.05	100	0.05	ND (0.0046)	ND (0.0046)	ND (0.009)	ND (0.0055) J	ND (0.0042)	ND (0.0049)	ND (0.0059)	ND (0.0044)	ND (2.9)	ND (0.005)	ND (0.0048)	ND (0.0054)	ND (0.005)	ND (0.0042)
Naphthalene	12	100	12	0.0048	ND (0.0037)	0.0057 J	0.0092	ND (0.0033)	ND (0.0039)	0.0073	0.0045	***24***	ND (0.004)	ND (0.0038)	ND (0.0043)	0.00087 J	ND (0.0034)
n-Butylbenzene	12	100	12	0.035	ND (0.00092)	ND (0.0018)	0.00083 J	ND (0.00084)	ND (0.00099)	ND (0.0012)	ND (0.00087)	***34***	ND (0.00099)	ND (0.00096)	ND (0.0011)	ND (0.001)	ND (0.00084)
n-Propylbenzene	3.9	100	3.9	1.7	ND (0.00092)	ND (0.0018)	0.0038	ND (0.00084)	ND (0.00099)	0.00025 J	ND (0.00087)	***100***	0.00036 J	ND (0.00096)	ND (0.0011)	ND (0.001)	ND (0.00084)
o-Xylene	NA	NA	NA	ND (0.00091)	ND (0.00092)	ND (0.0018)	ND (0.0011)	ND (0.00084)	ND (0.00099)	ND (0.0012)	ND (0.00087)	4.4	0.00077 J	ND (0.00096)	ND (0.0011)	ND (0.001)	ND (0.00084)
Styrene	NA	NA	NA	ND (0.00091)	ND (0.00092)	ND (0.0018)	ND (0.0011)	ND (0.00084)	ND (0.00099)	ND (0.0012)	ND (0.00087)	ND (0.57)	ND (0.00099)	ND (0.00096)	ND (0.0011)	ND (0.001)	ND (0.00084)
tert-Butylbenzene	5.9	100	5.9	0.0013 J	ND (0.0018)	ND (0.0036)	ND (0.0022)	0.00015 J	0.00022 J	ND (0.0024)	ND (0.0017)	ND (1.1)	ND (0.002)	ND (0.0019)	ND (0.0022)	ND (0.002)	ND (0.0017)
Tetrachloroethene	1.3	19	1.3	ND (0.00046)	0.0017	0.0075	0.0044	ND (0.00042)	ND (0.00049)	0.064	0.036	ND (0.29)	0.002	0.0007	0.0027	0.0021	0.00059
Toluene	0.7	100	0.7	0.00085 J	ND (0.00092)	ND (0.0018)	ND (0.0011)	ND (0.00084)	ND (0.00099)	ND (0.0012)	ND (0.00087)	ND (0.57)	0.0024	ND (0.00096)	ND (0.0011)	ND (0.001)	ND (0.00084)
trans-1,2-Dichloroethene	0.19	100	0.19	ND (0.0014)	ND (0.0014)	ND (0.0027)	ND (0.0016) J	ND (0.0012)	ND (0.0015)	ND (0.0018)	ND (0.0013)	ND (0.86)	ND (0.0015)	ND (0.0014)	ND (0.0016)	ND (0.0015)	ND (0.0013)
trans-1,3-Dichloropropene	NA	NA	NA	ND (0.00091)	ND (0.00092)	ND (0.0018)	ND (0.0011)	ND (0.00084)	ND (0.00099)	ND (0.0012)	ND (0.00087)	ND (0.57)	ND (0.00099)	ND (0.00096)	ND (0.0011)	ND (0.001)	ND (0.00084)
trans-1,4-Dichloro-2-butene	NA	NA	NA	ND (0.0046)	ND (0.0046)	ND (0.009)	ND (0.0055)	ND (0.0042)	ND (0.0049)	ND (0.0059)	ND (0.0044)	ND (2.9)	ND (0.005)	ND (0.0048)	ND (0.0054)	ND (0.005)	ND (0.0042)
Trichloroethene	0.47	21	0.47	ND (0.00046)	ND (0.00046)	0.0017	0.0014 J-	ND (0.00042)	ND (0.00049)	0.001	0.00058	ND (0.29)	ND (0.0005)	ND (0.00048)	ND (0.00054)	0.00014 J	ND (0.00042)
Trichlorofluoromethane (CFC-11)	NA	NA	NA	ND (0.0036)	ND (0.0037)	ND (0.0072)	ND (0.0044) J	ND (0.0033)	ND (0.0039)	ND (0.0047)	ND (0.0035)	ND (2.3)	ND (0.004)	ND (0.0038)	ND (0.0043)	ND (0.004)	ND (0.0034)
Vinyl acetate	NA	NA	NA	ND (0.0091)	ND (0.0092)	ND (0.018)	ND (0.011) J	ND (0.0084)	ND (0.0099)	ND (0.012)	ND (0.0087)	ND (5.7)	ND (0.0099)	ND (0.0096)	ND (0.011)	ND (0.01)	ND (0.0084)
Vinyl chloride	0.02	0.9	0.02	ND (0.00091)	ND (0.00092)	ND (0.0018)	ND (0.0011) J	ND (0.00084)	ND (0.00099)	ND (0.0012)	ND (0.00087)	ND (0.57)	ND (0.00099)	ND (0.00096) J	ND (0.0011) J	ND (0.001) J	ND (0.00084) J
Xylene (Total)	1.6	100	0.26	0.00077 J	ND (0.00092)	ND (0.0018)	ND (0.0011)	ND (0.00084)	ND (0.00099)	ND (0.0012)	ND (0.00087)	***130***	0.0034 J	ND (0.00096)	ND (0.0011)	ND (0.001)	ND (0.00084)
Semi-Volatile Organic Compounds (mg/kg)																	
1,2,4,5-Tetrachlorobenzene	NA	NA	NA	ND (0.2)	ND (0.19)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.18)	ND (1)	ND (0.2)
1,2,4-Trichlorobenzene	NA	NA	NA	ND (0.2)	ND (0.19)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.18)	ND (1)	ND (0.2)
1,2-Dichlorobenzene	1.1	100	1.1	ND (0.2)	ND (0.19)	ND (0.18) J	0.18 R	ND (0.19)	ND (0.2)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.18)	ND (1)	ND (0.2)
1,3-Dichlorobenzene	2.4	49	2.4	ND (0.2)	ND (0.19)	ND (0.18) J	0.18 R	ND (0.19)	ND (0.2)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.18)	ND (1)	ND (0.2)
1,4-Dichlorobenzene	1.8	13	1.8	ND (0.2)	ND (0.19)	ND (0.18) J	0.18 R	ND (0.19)	ND (0.2)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.18)	ND (1)	ND (0.2)
1,4-Dioxane	0.1	13	0.1	ND (0.03)	ND (0.029)	ND (0.028)	ND (0.028)	ND (0.029)	ND (0.03)	ND (0.027)	ND (0.028)	ND (0.029)	ND (0.028)	ND (0.027)	ND (0.026)	ND (0.15)	ND (0.03)
2,2'-oxybis(1-Chloropropane)	NA	NA	NA	ND (0.24)	ND (0.23)	ND (0.22)	ND (0.22)	ND (0.23)	ND (0.24)	ND (0.22)	ND (0.22)	ND (0.23)	ND (0.22)	ND (0.21)	ND (0.21)	ND (1.2)	ND (0.24)
2,4,5-Trichlorophenol	NA	NA	NA	ND (0.2)	ND (0.19)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.18)	ND (1)	ND (0.2)
2,4,6-Trichlorophenol	NA	NA	NA	ND (0.12)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.12)	ND (0.12)	ND (0.11)	ND (0.11)	ND (0.12)	ND (0.11)	ND (0.11)	ND (0.1)	ND (0.62)	ND (0.12)
2,4-Dichlorophenol	NA	NA	NA	ND (0.18)	ND (0.17)	ND (0.16)	ND (0.17)	ND (0.17)	ND (0.18)	ND (0.16)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.16)	ND (0.16)	ND (0.93)	ND (0.18)
2,4-Dimethylphenol	NA	NA	NA	ND (0.2)	ND (0.19)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.18)	ND (1)	ND (0.2)
2,4-Dinitrophenol	NA	NA	NA	ND (0.97)	ND (0.92)	ND (0.88)	ND (0.89)	ND (0.92)	ND (0.94)	ND (0.87)	ND (0.89)	ND (0.93)	ND (0.9)	ND (0.85)	ND (0.84)	ND (5)	ND (0.97)
2,4-Dinitrotoluene	NA	NA	NA	ND (0.2)	ND (0.19)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.18)	ND (1)	ND (0.2)
2,6-Dinitrotoluene	NA	NA	NA	ND (0.2)	ND (0.19)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.18)	ND (1)	ND (0.2)
2-Chloronaphthalene	NA	NA	NA	ND (0.2)	ND (0.19)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.18)	ND (1)	ND (0.2)
2-Chlorophenol	NA	NA	NA	ND (0.2)	ND (0.19)	ND (0.18) J	0.18 R	ND (0.19)	ND (0.2)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.18)	ND (1)	ND (0.2)
2-Methylnaphthalene	NA	NA	NA	0.026 J	ND (0.23)	0.088 J	0.086 J	ND (0.23)	ND (0.24)	0.32	0.11 J	1.8	ND (0.22)	ND (0.21)	0.041 J	1.3	ND (0.24)
2-Methylphenol (o-Cresol)	0.33	100	0.33	ND (0.2)	ND (0.19)	ND (0.18) J	0.18 R	ND (0.19)	ND (0.2)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.18)	ND (1)	ND (0.2)
2-Nitroaniline	NA	NA	NA	ND (0.2)	ND (0.19)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.18)	ND (1)	ND (0.2)
2-Nitrophenol	NA	NA	NA	ND (0.44)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.41)	ND (0.42)	ND (0.39)	ND (0.4)	ND (0.42)	ND (0.4)	ND (0.38)	ND (0.38)	ND (2.2)	ND (0.44)
3&4-Methylphenol	NA	NA	NA	ND (0.29)	ND (0.27)	ND (0.26)	ND (0.27)	ND (0.28)	ND (0.28)	0.11 J	ND (0.27)	ND (0.28)	ND (0.27)	ND (0.26)	ND (0.25)	ND (1.5)	ND (0.29)
3,3'-Dichlorobenzidine	NA	NA	NA	ND (0.2)	ND (0.19)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.18)	ND (1)	ND (0.2)
3-Nitroaniline	NA	NA	NA	ND (0.2)	ND (0.19)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.18)	ND (1)	ND (0.2)
4,6-Dinitro-2-methylphenol	NA	NA	NA	ND (0.52)	ND (0.5)	ND (0.48)	ND (0.48)	ND (0.5)	ND (0.51)	ND (0.47)	ND (0.48)	ND (0.5)	ND (0.49)	ND (0.46)	ND (0.46)	ND (2.7)	ND (0.53)
4-Bromophenyl phenyl ether (BDE-3)	NA	NA	NA	ND (0.2)	ND (0.19)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.18)	ND (1)	ND (0.2)
4-Chloro-3-methylphenol	NA	NA	NA	ND (0.2)	ND (0.19)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.18)	ND (1)	ND (0.2)
4-Chloroaniline	NA	NA	NA	ND (0.2)	ND (0.19)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.18)	ND (1)	ND (0.2)
4-Chlorophenyl phenyl ether	NA	NA	NA	ND (0.2)	ND (0.19)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.18)	ND (1)	ND (0.2)
4-Nitroaniline	NA	NA	NA	ND (0.2)	ND (0.19)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.18)	ND (1)	ND (0.2)
4-Nitrophenol	NA	NA	NA	ND (0.28)	ND (0.27)	ND (0.26)	ND (0.26)	ND (0.27)	ND (0.28)	ND (0.25)	ND (0.26)	ND (0.27)	ND (0.26)	ND (0.25)	ND (0.24)	ND (1.4)	ND (0.28)

TABLE 2
REMEDIAL INVESTIGATION RESULTS - ANALYTICAL RESULTS IN SOIL
558 SACKETT STREET
BROOKLYN, NEW YORK
FILE NO. 0206384

	Action Level																
Location Name	Restricted Use	NY Part 375	NY Part 375	SB-4	SB-4	SB-5	SB-5	SB-5	SB-5	SB-6	SB-6	SB-6	SB-6	SB-7	SB-7	SB-7	SB-7
Sample Name	Soil Cleanup	Restricted	Unrestricted	SB-4_8-10	SB-4_12-14	SB-5_0-0.5	SB-5_5-7	DUP01_20230621	SB-5_12-14	SB-6_0-0.5	SB-6_5-7	SB-6_10-12	SB-6_12-14	SB-7_0-0.5	SB-7_1-2	SB-7_5-7	SB-7_9-11
Sample Date	Objectives -	Residential Use	Use	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/22/2023	06/22/2023	06/22/2023	06/22/2023
Lab Sample ID	Protection of	Soil Cleanup	Soil Cleanup	L2335535-11	L2335535-12	L2335535-13	L2335535-14	L2335535-20	L2335535-15	L2335535-16	L2335535-17	L2335535-18	L2335535-19	L2335921-01	L2335921-02	L2335921-03	L2335921-04
Sample Depth (bgs)	Groundwater	Objectives	Objectives	8 - 10 (ft)	12 - 14 (ft)	0 - 0.5 (ft)	5 - 7 (ft)	5 - 7 (ft)	12 - 14 (ft)	0 - 0.5 (ft)	5 - 7 (ft)	10 - 12 (ft)	12 - 14 (ft)	0 - 0.5 (ft)	1 - 2 (ft)	5 - 7 (ft)	9 - 11 (ft)
Acenaphthene	98	100	20	ND (0.16)	ND (0.15)	0.27	0.3	ND (0.15)	ND (0.16)	0.72	0.17	0.07 J	ND (0.15)	0.033 J	0.087 J	4.2	ND (0.16)
Acenaphthylene	107	100	100	ND (0.16)	ND (0.15)	0.29	0.18	ND (0.15)	ND (0.16)	1	0.15	ND (0.15)	ND (0.15)	0.05 J	0.093 J	1.4	ND (0.16)
Acetophenone	NA	NA	NA	ND (0.2)	ND (0.19)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.18)	ND (1)	ND (0.2)
Anthracene	1000	100	100	ND (0.12)	ND (0.11)	1.1	1.2 J-	ND (0.12)	ND (0.12)	1.9	0.58	ND (0.12)	ND (0.11)	0.13	0.23 J-	6.7	ND (0.12)
Benzo(a)anthracene	1	1	1	ND (0.12)	ND (0.11)	***3.4***	***3.4***	ND (0.12)	ND (0.12)	***5***	***1.6***	ND (0.12)	ND (0.11)	0.41	0.68	***9.1***	0.042 J
Benzo(a)pyrene	22	1	1	ND (0.16)	ND (0.15)	3.1	2.9	ND (0.15)	ND (0.16)	4.3	1.3	ND (0.15)	ND (0.15)	0.43	0.64	9.5	ND (0.16)
Benzo(b)fluoranthene	1.7	1	1	ND (0.12)	ND (0.11)	***3.9***	***3.5***	ND (0.12)	ND (0.12)	***5.1***	1.7	ND (0.12)	ND (0.11)	0.51	0.81	***11***	0.04 J
Benzo(g,h,i)perylene	1000	100	100	ND (0.16)	ND (0.15)	1.9	1.9	ND (0.15)	ND (0.16)	2.6	0.88	ND (0.15)	ND (0.15)	0.24	0.41	4.7	ND (0.16)
Benzo(k)fluoranthene	1.7	3.9	0.8	ND (0.12)	ND (0.11)	0.8	0.79	ND (0.12)	ND (0.12)	1.3	0.51	ND (0.12)	ND (0.11)	0.19	0.22	***3.1***	ND (0.12)
Benzoic acid	NA	NA	NA	ND (0.65)	ND (0.62)	ND (0.59)	ND (0.6)	ND (0.62)	ND (0.64)	ND (0.58)	ND (0.6)	ND (0.62)	ND (0.61)	ND (0.58)	ND (0.57)	ND (3.3)	ND (0.66)
Benzyl Alcohol	NA	NA	NA	ND (0.2)	ND (0.19)	ND (0.18) J	0.18 R	ND (0.19)	ND (0.2)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.18)	ND (1)	ND (0.2)
Biphenyl	NA	NA	NA	ND (0.46)	ND (0.44)	0.028 J	0.036 J	ND (0.44)	ND (0.45)	0.1 J	0.028 J	0.046 J	ND (0.43)	ND (0.4)	ND (0.4)	0.45 J	ND (0.46)
bis(2-Chloroethoxy)methane	NA	NA	NA	ND (0.22)	ND (0.21)	ND (0.2)	ND (0.2)	ND (0.21)	ND (0.21)	ND (0.2)	ND (0.2)	ND (0.21)	ND (0.2)	ND (0.19)	ND (0.19)	ND (1.1)	ND (0.22)
bis(2-Chloroethyl)ether	NA	NA	NA	ND (0.18)	ND (0.17)	ND (0.16) J	0.17 R	ND (0.17)	ND (0.18)	ND (0.16)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.16)	ND (0.16)	ND (0.93)	ND (0.18)
bis(2-Ethylhexyl)phthalate	NA	NA	NA	0.18 J	0.16 J	ND (0.18)	ND (0.18)	0.25	0.2	0.31	ND (0.18)	0.24	0.24	ND (0.18)	0.07 J	ND (1)	ND (0.2)
Butyl benzylphthalate (BBP)	NA	NA	NA	ND (0.2)	ND (0.19)	ND (0.18)	0.18 R	ND (0.19)	ND (0.2)	ND (0.18)	0.16 J	ND (0.19)	ND (0.19)	ND (0.18)	0.18 R	ND (1)	ND (0.2)
Carbazole	NA	NA	NA	ND (0.2)	ND (0.19)	0.33	0.24 J-	ND (0.19)	ND (0.2)	0.76	0.32	ND (0.19)	ND (0.19)	0.071 J	0.14 J-	2.2	ND (0.2)
Chrysene	1	3.9	1	ND (0.12)	ND (0.11)	***3.2***	***3.2***	ND (0.12)	ND (0.12)	***4.3***	***1.5***	ND (0.12)	ND (0.11)	0.4	0.74	***8.5***	0.033 J
Dibenz(a,h)anthracene	1000	0.33	0.33	ND (0.12)	ND (0.11)	0.42	0.42	ND (0.12)	ND (0.12)	0.54	0.22	ND (0.12)	ND (0.11)	0.059 J	0.092 J	0.88	ND (0.12)
Dibenzofuran	210	59	7	ND (0.2)	ND (0.19)	0.17 J	0.19	ND (0.19)	ND (0.2)	0.59	0.18	0.05 J	ND (0.19)	0.025 J	0.069 J	2.6	ND (0.2)
Diethyl phthalate	NA	NA	NA	ND (0.2)	ND (0.19)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.18)	ND (1)	ND (0.2)
Dimethyl phthalate	NA	NA	NA	ND (0.2)	ND (0.19)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.18)	ND (1)	ND (0.2)
Di-n-butylphthalate (DBP)	NA	NA	NA	ND (0.2)	ND (0.19)	ND (0.18)	0.18 R	ND (0.19)	ND (0.2)	0.074 J	ND (0.18)	ND (0.19)	ND (0.19)	ND (0.18)	0.18 R	ND (1)	ND (0.2)
Di-n-octyl phthalate (DnOP)	NA	NA	NA	ND (0.2)	ND (0.19)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.18)	ND (1)	ND (0.2)
Fluoranthene	1000	100	100	ND (0.12)	ND (0.11)	6.2	5.4 J-	ND (0.12)	ND (0.12)	14	2.7	0.04 J	ND (0.11)	0.81	1.4 J-	25	0.071 J
Fluorene	386	100	30	ND (0.2)	ND (0.19)	0.26	0.33	ND (0.19)	ND (0.2)	0.74	0.23	0.14 J	ND (0.19)	0.037 J	0.088 J	3.2	ND (0.2)
Hexachlorobenzene	3.2	1.2	0.33	ND (0.12)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.12)	ND (0.12)	ND (0.11)	ND (0.11)	ND (0.12)	ND (0.11)	ND (0.11)	ND (0.1)	ND (0.62)	ND (0.12)
Hexachlorobutadiene	NA	NA	NA	ND (0.2)	ND (0.19)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.18)	ND (1)	ND (0.2)
Hexachlorocyclopentadiene	NA	NA	NA	ND (0.58) J	ND (0.54) J	ND (0.52) J	ND (0.53) J	ND (0.55) J	ND (0.56) J	ND (0.52) J	ND (0.53) J	ND (0.55) J	ND (0.54) J	ND (0.51)	ND (0.5)	ND (2.9)	ND (0.58)
Hexachloroethane	NA	NA	NA	ND (0.16)	ND (0.15)	ND (0.15)	ND (0.15)	ND (0.15)	ND (0.16)	ND (0.14)	ND (0.15)	ND (0.15)	ND (0.15)	ND (0.14)	ND (0.14)	ND (0.82)	ND (0.16)
Indeno(1,2,3-cd)pyrene	8.2	0.5	0.5	ND (0.16)	ND (0.15)	2.1	1.9	ND (0.15)	ND (0.16)	2.8	0.93	ND (0.15)	ND (0.15)	0.27	0.42	5.1	ND (0.16)
Isophorone	NA	NA	NA	ND (0.18)	ND (0.17)	ND (0.16)	ND (0.17)	ND (0.17)	ND (0.18)	ND (0.16)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.16)	ND (0.16)	ND (0.93)	ND (0.18)
Naphthalene	12	100	12	ND (0.2)	ND (0.19)	0.2	0.12 J	ND (0.19)	ND (0.2)	0.88	0.2	1.5	ND (0.19)	0.03 J	0.087 J	2.2	ND (0.2)
Nitrobenzene	NA	NA	NA	ND (0.18)	ND (0.17)	ND (0.16)	ND (0.17)	ND (0.17)	ND (0.18)	ND (0.16)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.16)	ND (0.16)	ND (0.93)	ND (0.18)
N-Nitrosodi-n-propylamine	NA	NA	NA	ND (0.2)	ND (0.19)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.19)	ND (0.18)	ND (0.18)	ND (1)	ND (0.2)
N-Nitrosodiphenylamine	NA	NA	NA	ND (0.16)	ND (0.15)	ND (0.15)	ND (0.15)	ND (0.15)	ND (0.16)	ND (0.14)	ND (0.15)	ND (0.15)	ND (0.15)	ND (0.14)	ND (0.14)	ND (0.82)	ND (0.16)
Pentachlorophenol	0.8	6.7	0.8	ND (0.16)	ND (0.15)	ND (0.15)	0.15 R	ND (0.15)	ND (0.16)	ND (0.14)	ND (0.15)	ND (0.15)	ND (0.15)	ND (0.14) J	0.14 R	ND (0.82)	ND (0.16)
Phenanthrene	1000	100	100	ND (0.12)	ND (0.11)	4.5	4.5 J-	ND (0.12)	ND (0.12)	7.2	2.2	0.32	ND (0.11)	0.57	1.1 J-	27	0.05 J
Phenol	0.33	100	0.33	ND (0.2)	ND (0.19)	ND (0.18) J	0.18 R	ND (0.19)	ND (0.2)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.19)	ND (0.18) J	ND (0.18) J	ND (1)	ND (0.2)
Pyrene	1000	100	100	ND (0.12)	ND (0.11)	6	5.3 J-	ND (0.12)	ND (0.12)	14	2.4	0.071 J	ND (0.11)	0.69	1.2 J-	22	0.058 J

TABLE 2
REMEDIAL INVESTIGATION RESULTS - ANALYTICAL RESULTS IN SOIL
558 SACKETT STREET
BROOKLYN, NEW YORK
FILE NO. 0206384

	Action Level																
Location Name	Restricted Use	NY Part 375	NY Part 375	SB-4	SB-4	SB-5	SB-5	SB-5	SB-5	SB-6	SB-6	SB-6	SB-6	SB-7	SB-7	SB-7	SB-7
Sample Name	Soil Cleanup	Restricted	Unrestricted	SB-4_8-10	SB-4_12-14	SB-5_0-0.5	SB-5_5-7	DUP01_20230621	SB-5_12-14	SB-6_0-0.5	SB-6_5-7	SB-6_10-12	SB-6_12-14	SB-7_0-0.5	SB-7_1-2	SB-7_5-7	SB-7_9-11
Sample Date	Objectives -	Residential Use	Use	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/22/2023	06/22/2023	06/22/2023	06/22/2023
Lab Sample ID	Protection of	Soil Cleanup	Soil Cleanup	L2335535-11	L2335535-12	L2335535-13	L2335535-14	L2335535-20	L2335535-15	L2335535-16	L2335535-17	L2335535-18	L2335535-19	L2335921-01	L2335921-02	L2335921-03	L2335921-04
Sample Depth (bgs)	Groundwater	Objectives	Objectives	8 - 10 (ft)	12 - 14 (ft)	0 - 0.5 (ft)	5 - 7 (ft)	5 - 7 (ft)	12 - 14 (ft)	0 - 0.5 (ft)	5 - 7 (ft)	10 - 12 (ft)	12 - 14 (ft)	0 - 0.5 (ft)	1 - 2 (ft)	5 - 7 (ft)	9 - 11 (ft)
Inorganic Compounds (mg/kg)																	
Aluminum	NA	NA	NA	8740	5970	3580	4350	8650	8700	6580	7230	3100	2890	7640	7460	5760	7930
Antimony	NA	NA	NA	ND (4.78) J	0.671 J	16 J	2.72 J	0.698 J	0.577 J	1.39 J	3.61 J	ND (4.5) J	0.423 J	1.12 J	1.36 J	2.44 J	0.738 J
Arsenic	16	16	13	2.14	3.03	***26.5***	7.62	3.88	4.04	9.69	7.32	0.88 J	0.652 J	6.43 J	5.33	8.48	3.74
Barium	820	400	350	34.5	20.2	35.2	115	10.6	10.6	216	114	14.6	13.8	108 J	172	260	59.9
Beryllium	47	72	7.2	0.639	0.47	0.22 J	0.289 J	0.375 J	0.432 J	0.418 J	0.427 J	0.257 J	0.274 J	0.498	0.525	0.726	0.565
Cadmium	7.5	4.3	2.5	ND (0.956)	0.096 J	1.26 J	0.473 J	ND (0.895)	ND (0.921)	1.3	1.07	ND (0.899)	ND (0.886)	0.243 J	0.59 J	0.922 J	0.159 J
Calcium	NA	NA	NA	2550 J	701 J	18300 J	32200 J	720 J	724 J	17600 J	13600 J	490 J	690 J	30400 J	11200	33700	8290
Chromium	NA	NA	NA	11.7	11.7	297	40.3	14.7	19.7	21	16.7	9.61	9.44	38 J	25 J	30.9 J	54.4 J
Cobalt	NA	NA	NA	4.91	7.59	39.3	3.96	4.04	4.2	5.84	5.16	3.32	3	7.88	8.45	9.79	10.2
Copper	1720	270	50	7.35	8.95	1210	116	7.97	13.1	92.4	77.9	8.71	7.94	242 J	112	74.4	40.8
Iron	NA	NA	NA	11000	12100	319000	36400	14400	16200	15800	15700	8190	7600	14000	15000	31700	17100
Lead	450	400	63	19.2 J	3.66 J	64 J	145 J	6.54 J	7.54 J	***727 J***	***814 J***	5.27 J	2.77 J	132 J	169 J	***628 J***	31.2 J
Magnesium	NA	NA	NA	1650 J	2610 J	2670 J	5060 J	1830 J	2630 J	7670 J	5240 J	1380 J	1240 J	5260	4280	9290	5260
Manganese	2000	2000	1600	212	167	***2680***	274	93.1	132	546	274	103	77.2	363	416	451	459
Mercury	0.73	0.81	0.18	ND (0.091)	ND (0.083)	0.145	0.185	ND (0.086)	ND (0.082)	***2.03***	***1.13***	ND (0.084)	ND (0.083)	0.645 J+	***0.934 J+***	***1.43 J+***	ND (0.085)
Nickel	130	310	30	13.3	18.8	***317***	27.5	11.3	13.6	20.6	19.2	15.1	12.7	62.5 J	37.7 J	28.7 J	41.6 J
Potassium	NA	NA	NA	423	553	483 J	816	624	673	731	700	444	448	1770	1750	1010	2340
Selenium	4	180	3.9	0.76 J	ND (1.83)	3.13 J	0.435 J	0.234 J	ND (1.84)	1.19 J	0.745 J	0.248 J	ND (1.77)	0.314 J	0.436 J	1.07 J	ND (1.91)
Silver	8.3	180	2	ND (0.478)	ND (0.456)	ND (2.16)	ND (0.452)	ND (0.447)	ND (0.46)	0.262 J	ND (0.435)	ND (0.45)	ND (0.443)	ND (0.402)	ND (0.414)	ND (0.492)	ND (0.478)
Sodium	NA	NA	NA	225	84.1 J	519	492	116 J	145 J	181	154 J	81.5 J	110 J	680 J	240 J	206 J	428 J
Thallium	NA	NA	NA	0.516 J	0.487 J	4.88	0.667 J	ND (1.79)	ND (1.84)	0.808 J	0.467 J	ND (1.8)	ND (1.77)	0.71 J	0.773 J	1.02 J	0.843 J
Vanadium	NA	NA	NA	15.3	22.9	12.9	17	21.4	27.1	22.8	22.3	15.5	13.8	27	29.3	24.6	29.7
Zinc	2480	10000	109	24.9 J	20.6 J	37.8 J	110 J	23.4 J	22 J	588 J	314 J	18 J	17.4 J	105	146	602	53.6
PCBs (mg/kg)																	
Aroclor-1016 (PCB-1016)	NA	NA	NA	ND (0.115)	ND (0.0557)	ND (0.0536)	ND (0.0546)	ND (0.0559)	ND (0.0572)	ND (0.0531)	ND (0.0562)	ND (0.0537)	ND (0.0538)	ND (0.0518)	ND (0.0512)	ND (0.0608)	ND (0.0578)
Aroclor-1221 (PCB-1221)	NA	NA	NA	ND (0.115)	ND (0.0557)	ND (0.0536)	ND (0.0546)	ND (0.0559)	ND (0.0572)	ND (0.0531)	ND (0.0562)	ND (0.0537)	ND (0.0538)	ND (0.0518)	ND (0.0512)	ND (0.0608)	ND (0.0578)
Aroclor-1232 (PCB-1232)	NA	NA	NA	ND (0.115)	ND (0.0557)	ND (0.0536)	ND (0.0546)	ND (0.0559)	ND (0.0572)	ND (0.0531)	ND (0.0562)	ND (0.0537)	ND (0.0538)	ND (0.0518)	ND (0.0512)	ND (0.0608)	ND (0.0578)
Aroclor-1242 (PCB-1242)	NA	NA	NA	ND (0.115)	ND (0.0557)	ND (0.0536)	ND (0.0546)	ND (0.0559)	ND (0.0572)	ND (0.0531)	ND (0.0562)	ND (0.0537)	ND (0.0538)	ND (0.0518)	ND (0.0512)	ND (0.0608)	ND (0.0578)
Aroclor-1248 (PCB-1248)	NA	NA	NA	ND (0.115)	ND (0.0557)	ND (0.0536)	ND (0.0546)	ND (0.0559)	ND (0.0572)	ND (0.0531)	ND (0.0562)	ND (0.0537)	ND (0.0538)	ND (0.0518)	ND (0.0512)	ND (0.0608)	ND (0.0578)
Aroclor-1254 (PCB-1254)	NA	NA	NA	ND (0.115)	ND (0.0557)	0.0128 J	ND (0.0546)	ND (0.0559)	ND (0.0572)	0.0276 J	0.0226 J	ND (0.0537)	ND (0.0538)	ND (0.0518)	ND (0.0512)	ND (0.0608)	ND (0.0578)
Aroclor-1260 (PCB-1260)	NA	NA	NA	ND (0.115)	ND (0.0557)	0.0138 J	ND (0.0546)	ND (0.0559)	ND (0.0572)	0.02 J	0.0292 J	0.0118 J	ND (0.0538)	ND (0.0518)	ND (0.0512)	ND (0.0608)	ND (0.0578)
Aroclor-1262 (PCB-1262)	NA	NA	NA	ND (0.115)	ND (0.0557)	ND (0.0536)	ND (0.0546)	ND (0.0559)	ND (0.0572)	ND (0.0531)	ND (0.0562)	ND (0.0537)	ND (0.0538)	ND (0.0518)	ND (0.0512)	ND (0.0608)	ND (0.0578)
Aroclor-1268 (PCB-1268)	NA	NA	NA	ND (0.115)	ND (0.0557)	0.0124 J	ND (0.0546)	ND (0.0559)	ND (0.0572)	ND (0.0531)	ND (0.0562)	ND (0.0537)	ND (0.0538)	ND (0.0518)	ND (0.0512)	ND (0.0608)	ND (0.0578)
Polychlorinated biphenyls (PCBs)	3.2	1	0.1	ND (0.115)	ND (0.0557)	0.039 J	ND (0.0546)	ND (0.0559)	ND (0.0572)	0.0476 J	0.0518 J	0.0118 J	ND (0.0538)	ND (0.0518)	ND (0.0512)	ND (0.0608)	ND (0.0578)
Other																	
Total Solids (%)	NA	NA	NA	81.8	84.7	88.6	88	86.1	84	90.2	88.8	85.3	87.5	93.8	94.7	79.9	82.3
Pesticides (mg/kg)																	
4,4'-DDD	14	13	0.0033	0.0019 R	ND (0.0018)	0.000686 J	ND (0.00179) J	ND (0.00175)	ND (0.00181)	0.00931	0.00931	ND (0.00177)	ND (0.00178)	ND (0.00166)	ND (0.0016)	ND (0.00197)	ND (0.00191)
4,4'-DDE	17	8.9	0.0033	0.0019 R	ND (0.0018)	0.00215	0.00525	ND (0.00175)	ND (0.00181)	0.0122	0.00771	ND (0.00177)	ND (0.00178)	ND (0.00166)	0.000402 J	0.000637 J	ND (0.00191)
4,4'-DDT	136	7.9	0.0033	0.0019 R	ND (0.0018)	0.00957	0.00783	ND (0.00175)	ND (0.00181)	0.0315	0.0143	ND (0.00177)	ND (0.00178)	ND (0.00166)	0.00211	0.00357 J	ND (0.00191)
Aldrin	0.19	0.097	0.005	0.0019 R	ND (0.0018)	ND (0.00179)	ND (0.00179)	ND (0.00175)	ND (0.00181)	ND (0.00175)	ND (0.00178)	ND (0.00177)	ND (0.00178)	ND (0.00166)	ND (0.0016)	ND (0.00197)	ND (0.00191)
alpha-BHC	0.02	0.48	0.02	0.000791 R	ND (0.00075)	ND (0.000746)	ND (0.000746)	ND (0.00073)	ND (0.000753)	ND (0.00073)	ND (0.000744)	ND (0.000737)	ND (0.000744)	ND (0.00069)	ND (0.000667)	ND (0.00082)	ND (0.000795)
alpha-Chlordane (cis)	2.9	4.2	0.094	0.00237 R	ND (0.00225)	0.00261	0.00303	ND (0.00219)	ND (0.00226)	0.00108 J	0.0007 J	ND (0.00221)	ND (0.00223)	ND (0.00207)	ND (0.002)	0.00089 J	ND (0.00238)
beta-BHC	0.09	0.36	0.036	0.0019 R	ND (0.0018)	ND (0.00179)	ND (0.00179)	ND (0.00175)	ND (0.00181)	ND (0.00175)	ND (0.00178)	ND (0.00177)	ND (0.00178)	ND (0.00166)	ND (0.0016)	ND (0.00197)	ND (0.00191)
Chlordane	NA	NA	NA	0.0158 R	ND (0.015)	ND (0.0149)	ND (0.0149)	ND (0.0146)	ND (0.015)	ND (0.0146)	ND (0.0149)	ND (0.0147)	ND (0.0149)	ND (0.0138)	ND (0.0133)	ND (0.0164)	ND (0.0159)
delta-BHC	0.25	100	0.04	0.0019 R	ND (0.0018)	ND (0.00179)	ND (0.00179)	ND (0.00175)	ND (0.00181)	ND (0.00175)	ND (0.00178)	ND (0.00177)	ND (0.00178)	ND (0.00166)	ND (0.0016)	ND (0.00197)	ND (0.00191)
Dieldrin	0.1	0.2	0.005	0.00119 R	ND (0.00112)	ND (0.00112)	ND (0.00112)	ND (0.0011)	ND (0.00113)	ND (0.0011)	ND (0.00112)	ND (0.0011)	ND (0.00112)	ND (0.00104)	ND (0.001)	ND (0.00123)	ND (0.00119)
Endosulfan I	102	24	2.4	0.0019 R	ND (0.0018)	ND (0.00179)	ND (0.00179)	ND (0.00175)	ND (0.00181)	ND (0.00175)	ND (0.00178)	ND (0.00177)	ND (0.00178)	ND (0.00166)	ND (0.0016)	ND (0.00197)	ND (0.00191)
Endosulfan II	102	24	2.4	0.0019 R	ND (0.0018)	ND (0.00179)	ND (0.00179)	ND (0.00175)	ND (0.00181)	ND (0.00175)	ND (0.00178)	ND (0.00177)	ND (0.00178)	ND (0.00166)	ND (0.0016)	ND (0.00197)	ND (0.00191)
Endosulfan sulfate	1000	24	2.4	0.000791 R	ND (0.00075)	ND (0.000746)	ND (0.000746)	ND (0.00073)	ND (0.000753)	ND (0.00073)	ND (0.000744)	ND (0.000737)	ND (0.000744)	ND (0.00069)	ND (0.000667)	ND (0.00082)	ND (0.000795)
Endrin	0.06	11	0.014	0.000791 R	ND (0.00075)	ND (0.000746)	ND (0.000746)	ND (0.00073)	ND (0.000753)	ND (0.00073)	ND (0.000744)	ND (0.000737)	ND (0.000744)	ND (0.00069)	ND (0.000667)	ND (0.00082)	ND (0.000795)
Endrin aldehyde	NA	NA	NA	0.00237 R	ND (0.00225)	ND (0.00224)	ND (0.00224)	ND (0.00219)	ND (0.00226)	ND (0.00219)	ND (0.00223)	ND (0.00221)	ND (0.00223)	ND (0.00207)	ND (0.002)	ND (0.00246)	ND (0.00238)
Endrin ketone	NA	NA	NA	0.0019 R	ND (0.0018)	ND (0.00179)	ND (0.00179)	ND (0.00175)	ND (0.00181)	ND (0.00175)	ND (0.00178)	ND (0.00177)	ND (0.00178)	ND (0.00166)	ND (0.0016)	ND (0.00197)	ND (0.00191)
gamma-BHC (Lindane)	0.1	1.3	0.1	0.000791 R	ND (0.00075)	ND (0.000746)	ND (0.000746)	ND (0.00073)	ND (0.000753)	ND (0.00073)	ND (0.000744)	ND (0.000737)	ND (0.000744)	ND (0.00069)	ND (0.000667)	ND (0.00082)	ND (0.000795)
gamma-Chlordane (trans)	NA	NA	NA	0.00237 R	ND (0.00225)	0.00178 J	0.000846 J	ND (0.00219)	ND (0.00226)	0.00202 J	0.00188 J	ND (0.00221)	ND (0.00223)	ND (0.00207)	ND (0.002)	ND (0.00246) J	ND (0.00238)
Heptachlor	0.38	2.1	0.042	0.00095 R	ND (0.0009)	ND (0.000895)	ND (0.000895)	ND (0.000876)	ND (0.000904)	ND (0.000876)	ND (0.000892)	ND (0.000884)	ND (0.000892)	ND (0.000828)	ND (0.0008)	ND (0.000984)	ND (0.000954)
Heptachlor epoxide	NA	NA	NA	0.00356 R	ND (0.00337)	ND (0.00336)	ND (0.00336)	ND (0.00328)	ND (0.00339)	ND (0.00329)	ND (0.00335)	ND (0.00332)	ND (0.00335)	ND (0.00311)	ND (0.003)	ND (0.00369)	ND (0.00358)
Methoxychlor	NA	NA	NA	0.00356 R	ND (0.00337)	ND (0.00336)	ND (0.00336)	ND (0.00328)	ND (0.00339)	ND (0.00329)	ND (0.00335)	ND (0.00332)	ND (0.00335)	ND (0.00311)	ND (0.003)	ND (0.00369)	ND (0.00358)
Toxaphene	NA	NA	NA	0.0356 R	ND (0.0337)	ND (0.0336)	ND (0.0336)	ND (0.0328)	ND (0.0339)	ND (0.0329)	ND (0.0335)	ND (0.0332)	ND (0.0335)	ND (0.0311)	ND (0.03)	ND (0.0369)	ND (0.0358)

TABLE 2
REMEDIAL INVESTIGATION RESULTS - ANALYTICAL RESULTS IN SOIL
558 SACKETT STREET
BROOKLYN, NEW YORK
FILE NO. 0206384

	Action Level																
Location Name	Restricted Use	NY Part 375	NY Part 375	SB-4	SB-4	SB-5	SB-5	SB-5	SB-5	SB-6	SB-6	SB-6	SB-6	SB-7	SB-7	SB-7	SB-7
Sample Name	Soil Cleanup	Restricted	Unrestricted	SB-4_8-10	SB-4_12-14	SB-5_0-0.5	SB-5_5-7	DUP01_20230621	SB-5_12-14	SB-6_0-0.5	SB-6_5-7	SB-6_10-12	SB-6_12-14	SB-7_0-0.5	SB-7_1-2	SB-7_5-7	SB-7_9-11
Sample Date	Objectives -	Residential Use	Use	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/22/2023	06/22/2023	06/22/2023	06/22/2023
Lab Sample ID	Protection of	Soil Cleanup	Soil Cleanup	L2335535-11	L2335535-12	L2335535-13	L2335535-14	L2335535-20	L2335535-15	L2335535-16	L2335535-17	L2335535-18	L2335535-19	L2335921-01	L2335921-02	L2335921-03	L2335921-04
Sample Depth (bgs)	Groundwater	Objectives	Objectives	8 - 10 (ft)	12 - 14 (ft)	0 - 0.5 (ft)	5 - 7 (ft)	5 - 7 (ft)	12 - 14 (ft)	0 - 0.5 (ft)	5 - 7 (ft)	10 - 12 (ft)	12 - 14 (ft)	0 - 0.5 (ft)	1 - 2 (ft)	5 - 7 (ft)	9 - 11 (ft)
PFAS (ng/g)																	
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	NA	NA	NA	ND (0.785)	ND (0.778)	ND (0.784)	ND (0.776)	ND (0.787)	ND (0.783)	ND (0.777)	ND (0.778)	ND (0.783)	ND (0.783)	ND (0.787)	ND (0.768)	ND (0.767)	ND (0.761)
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	NA	NA	NA	ND (0.785)	ND (0.778)	ND (0.784)	ND (0.776)	ND (0.787)	ND (0.783)	ND (0.777)	ND (0.778)	ND (0.783)	ND (0.783)	ND (0.787)	ND (0.768)	ND (0.767)	ND (0.761)
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	NA	NA	NA	ND (0.196)	ND (0.194)	ND (0.196)	ND (0.194)	ND (0.197)	ND (0.196)	ND (0.194)	ND (0.194)	ND (0.196)	ND (0.196)	ND (0.197)	ND (0.192)	ND (0.192)	ND (0.19)
N-Methyl Perfluorooctanesulfonamidoacetic Acid (MeFOSAA)	NA	NA	NA	ND (0.196)	ND (0.194)	ND (0.196)	ND (0.194)	ND (0.197)	ND (0.196)	ND (0.194)	ND (0.194)	ND (0.196)	ND (0.196)	ND (0.197)	ND (0.192)	ND (0.192)	ND (0.19)
Perfluorobutanesulfonic acid (PFBS)	NA	NA	NA	ND (0.196)	ND (0.194)	ND (0.196)	ND (0.194)	ND (0.197)	ND (0.196)	0.054 J	ND (0.194)	ND (0.196)	ND (0.196)	ND (0.197)	ND (0.192)	ND (0.192)	ND (0.19)
Perfluorobutanoic acid (PFBA)	NA	NA	NA	ND (0.785)	ND (0.778)	ND (0.784)	ND (0.776)	ND (0.787)	ND (0.783)	ND (0.777)	ND (0.778)	ND (0.783)	ND (0.783)	ND (0.787)	ND (0.768)	ND (0.767)	ND (0.761)
Perfluorodecanesulfonic acid (PFDS)	NA	NA	NA	ND (0.196)	ND (0.194)	ND (0.196)	ND (0.194)	ND (0.197)	ND (0.196)	ND (0.194)	ND (0.194)	ND (0.196)	ND (0.196)	ND (0.197)	ND (0.192)	ND (0.192)	ND (0.19)
Perfluorodecanoic acid (PFDA)	NA	NA	NA	ND (0.196)	ND (0.194)	ND (0.196)	ND (0.194)	ND (0.197)	ND (0.196)	ND (0.194)	ND (0.194)	ND (0.196)	ND (0.196)	ND (0.197)	ND (0.192)	ND (0.192)	ND (0.19)
Perfluorododecanoic acid (PFDoDA)	NA	NA	NA	ND (0.196)	ND (0.194)	ND (0.196)	ND (0.194)	ND (0.197)	ND (0.196)	ND (0.194)	ND (0.194)	ND (0.196)	ND (0.196)	ND (0.197)	ND (0.192)	ND (0.192)	ND (0.19)
Perfluoroheptanesulfonic acid (PFHpS)	NA	NA	NA	ND (0.196)	ND (0.194)	ND (0.196)	ND (0.194)	ND (0.197)	ND (0.196)	ND (0.194)	ND (0.194)	ND (0.196)	ND (0.196)	ND (0.197)	ND (0.192)	ND (0.192)	ND (0.19)
Perfluoroheptanoic acid (PFHpA)	NA	NA	NA	ND (0.196)	ND (0.194)	0.055 J	ND (0.194)	ND (0.197)	ND (0.196)	0.062 J	0.039 J	ND (0.196)	ND (0.196)	ND (0.197)	ND (0.192)	0.046 J	ND (0.19)
Perfluorohexanesulfonic acid (PFHxS)	NA	NA	NA	ND (0.196)	ND (0.194)	ND (0.196)	ND (0.194)	ND (0.197)	ND (0.196)	ND (0.194)	ND (0.194)	ND (0.196)	ND (0.196)	ND (0.197)	ND (0.192)	ND (0.192)	ND (0.19)
Perfluorohexanoic acid (PFHxA)	NA	NA	NA	ND (0.196)	ND (0.194)	ND (0.196)	ND (0.194)	ND (0.197)	ND (0.196)	0.054 J	ND (0.194)	ND (0.196)	ND (0.196)	ND (0.197)	ND (0.192)	ND (0.192)	ND (0.19)
Perfluorononanoic acid (PFNA)	NA	NA	NA	ND (0.196)	ND (0.194)	ND (0.196)	ND (0.194)	ND (0.197)	ND (0.196)	ND (0.194)	ND (0.194)	ND (0.196)	ND (0.196)	ND (0.197)	ND (0.192)	ND (0.192)	ND (0.19)
Perfluorooctane sulfonamide (PFOSA)	NA	NA	NA	ND (0.196)	ND (0.194)	ND (0.196)	ND (0.194)	ND (0.197)	ND (0.196)	ND (0.194)	ND (0.194)	ND (0.196)	ND (0.196)	ND (0.197)	ND (0.192)	ND (0.192)	ND (0.19)
Perfluorooctanesulfonic acid (PFOS)	1	44	0.88	ND (0.196)	ND (0.194)	0.274	0.248	ND (0.197)	ND (0.196)	0.458	0.202	ND (0.196)	ND (0.196)	0.11 J	0.138 J	0.245	ND (0.19)
Perfluorooctanoic acid (PFOA)	0.8	33	0.66	ND (0.196)	ND (0.194)	0.196	0.14 J	ND (0.197)	ND (0.196)	0.676	0.404	ND (0.196)	ND (0.196)	0.126 J	0.069 J	0.445	ND (0.19)
Perfluoropentanoic acid (PFPeA)	NA	NA	NA	ND (0.392)	ND (0.389)	ND (0.392)	ND (0.388)	ND (0.394)	ND (0.392)	ND (0.388)	ND (0.389)	ND (0.391)	ND (0.391)	ND (0.393)	ND (0.384)	ND (0.383)	ND (0.38)
Perfluorotetradecanoic acid (PFTeDA)	NA	NA	NA	ND (0.196)	ND (0.194)	ND (0.196)	ND (0.194)	ND (0.197)	ND (0.196)	ND (0.194)	ND (0.194)	ND (0.196)	ND (0.196)	ND (0.197)	ND (0.192)	ND (0.192)	ND (0.19)
Perfluorotridecanoic acid (PFTrDA)	NA	NA	NA	ND (0.196)	ND (0.194)	ND (0.196)	ND (0.194)	ND (0.197)	ND (0.196)	ND (0.194)	ND (0.194)	ND (0.196)	ND (0.196)	ND (0.197)	ND (0.192)	ND (0.192)	ND (0.19)
Perfluoroundecanoic acid (PFUnDA)	NA	NA	NA	ND (0.196)	ND (0.194)	ND (0.196)	ND (0.194)	ND (0.197)	ND (0.196)	ND (0.194)	ND (0.194)	ND (0.196)	ND (0.196)	ND (0.197)	ND (0.192)	ND (0.192)	ND (0.19)
US EPA PFAS (PFOS + PFOA)	NA	NA	NA	ND (0.196)	ND (0.194)	0.47	0.388 J	ND (0.197)	ND (0.196)	1.13	0.606	ND (0.196)	ND (0.196)	0.236 J	0.207 J	0.69	ND (0.19)

ABBREVIATIONS AND NOTES:
mg/kg: milligram per kilogram
ng/g: nanogram per gram

-: Not Analyzed
bgs: below ground surface
ft: feet
J: Value is estimated.
J+: Value is estimated, high bias
J-: Value is estimated, low bias
NA: Not Applicable
ND (2.5): Not detected, number in parentheses is the laboratory reporting limit
R: Rejected

- For test methods used, see the laboratory data sheets.
- Soil analytical results are compared to the New York State Department of Environmental Conservation (NYSDEC) Title 6 of the Official Compilation of New York Codes, Rules, and Regulations (NYCRR) Part 375 Unrestricted Use Soil Cleanup Objectives (SCO), Restricted-Use Residential SCOs, and Protection of Groundwater SCO's.
- **Bold italic** values indicate an exceedance of the Protection of Groundwater Criteria.
- Grey shading indicates an exceedance of the Unrestricted Use Soil Cleanup Objectives.
- Yellow shading indicates an exceedance of the Restricted Use Residential Soil Cleanup Objectives.

TABLE 2
REMEDIAL INVESTIGATION RESULTS - ANALYTICAL RESULTS IN SOIL
558 SACKETT STREET
BROOKLYN, NEW YORK
FILE NO. 0206384

	Action Level								
Location Name	Restricted Use	NY Part 375	NY Part 375	SB-7	SB-8	SB-8	SB-8	SB-8	SB-8
Sample Name	Soil Cleanup	Restricted	Unrestricted	SB-7_12-14	SB-8_0-0.5	SB-8_1-2	SB-8_5-7	SB-8_9-11	SB-8_12-14
Sample Date	Objectives -	Residential Use	Use	06/22/2023	06/23/2023	06/23/2023	06/23/2023	06/23/2023	06/23/2023
Lab Sample ID	Protection of	Soil Cleanup	Soil Cleanup	L2335921-05	L2336234-01	L2336234-02	L2336234-03	L2336234-04	L2336234-05
Sample Depth (bgs)	Groundwater	Objectives	Objectives	12 - 14 (ft)	0 - 0.5 (ft)	1 - 2 (ft)	5 - 7 (ft)	9 - 11 (ft)	12 - 14 (ft)
Volatile Organic Compounds (mg/kg)									
1,1,1,2-Tetrachloroethane	NA	NA	NA	ND (0.00061)	ND (0.00065)	ND (0.00061)	ND (0.00055)	ND (0.00049)	ND (0.00052)
1,1,1-Trichloroethane	0.68	100	0.68	ND (0.00061)	ND (0.00065)	ND (0.00061)	ND (0.00055)	ND (0.00049)	ND (0.00052)
1,1,2,2-Tetrachloroethane	NA	NA	NA	ND (0.00061)	ND (0.00065)	ND (0.00061)	ND (0.00055)	ND (0.00049)	ND (0.00052)
1,1,2-Trichloroethane	NA	NA	NA	ND (0.0012)	ND (0.0013)	ND (0.0012)	ND (0.0011)	ND (0.00099)	ND (0.001)
1,1-Dichloroethane	0.27	26	0.27	ND (0.0012)	ND (0.0013)	ND (0.0012)	ND (0.0011)	ND (0.00099)	ND (0.001)
1,1-Dichloroethene	0.33	100	0.33	ND (0.0012)	ND (0.0013)	ND (0.0012)	ND (0.0011)	ND (0.00099)	ND (0.001)
1,1-Dichloropropene	NA	NA	NA	ND (0.00061)	ND (0.00065)	ND (0.00061)	ND (0.00055)	ND (0.00049)	ND (0.00052)
1,2,3-Trichlorobenzene	NA	NA	NA	ND (0.0024)	ND (0.0026)	ND (0.0024)	ND (0.0022)	ND (0.002)	ND (0.0021) J
1,2,3-Trichloropropane	NA	NA	NA	ND (0.0024)	ND (0.0026)	ND (0.0024)	ND (0.0022)	ND (0.002)	ND (0.0021)
1,2,4,5-Tetramethylbenzene	NA	NA	NA	ND (0.0024)	ND (0.0026)	ND (0.0024)	ND (0.0022)	ND (0.002)	ND (0.0021) J
1,2,4-Trichlorobenzene	NA	NA	NA	ND (0.0024)	ND (0.0026)	ND (0.0024)	ND (0.0022)	ND (0.002)	ND (0.0021) J
1,2,4-Trimethylbenzene	3.6	52	3.6	ND (0.0024)	ND (0.0026)	ND (0.0024)	ND (0.0022)	ND (0.002)	ND (0.0021) J
1,2-Dibromo-3-chloropropane (DBCP)	NA	NA	NA	ND (0.0036)	ND (0.0039)	ND (0.0036)	ND (0.0033)	ND (0.003)	ND (0.0031) J
1,2-Dibromoethane (Ethylene Dibromide)	NA	NA	NA	ND (0.0012)	ND (0.0013)	ND (0.0012)	ND (0.0011)	ND (0.00099)	ND (0.001)
1,2-Dichlorobenzene	1.1	100	1.1	ND (0.0024)	ND (0.0026)	ND (0.0024)	ND (0.0022)	ND (0.002)	ND (0.0021) J
1,2-Dichloroethane	0.02	3.1	0.02	ND (0.0012)	ND (0.0013)	ND (0.0012)	ND (0.0011)	ND (0.00099)	ND (0.001)
1,2-Dichloroethene (total)	NA	NA	NA	ND (0.0012)	ND (0.0013)	ND (0.0012)	ND (0.0011)	0.00032 J	0.00035 J
1,2-Dichloropropane	NA	NA	NA	ND (0.0012)	ND (0.0013)	ND (0.0012)	ND (0.0011)	ND (0.00099)	ND (0.001)
1,3,5-Trimethylbenzene	8.4	52	8.4	ND (0.0024)	ND (0.0026)	ND (0.0024)	ND (0.0022)	ND (0.002)	ND (0.0021) J
1,3-Dichlorobenzene	2.4	49	2.4	ND (0.0024)	ND (0.0026)	ND (0.0024)	ND (0.0022)	ND (0.002)	ND (0.0021) J
1,3-Dichloropropane	NA	NA	NA	ND (0.0024)	ND (0.0026)	ND (0.0024)	ND (0.0022)	ND (0.002)	ND (0.0021)
1,3-Dichloropropene	NA	NA	NA	ND (0.00061)	ND (0.00065)	ND (0.00061)	ND (0.00055)	ND (0.00049)	ND (0.00052)
1,4-Dichlorobenzene	1.8	13	1.8	ND (0.0024)	ND (0.0026)	ND (0.0024)	ND (0.0022)	ND (0.002)	ND (0.0021) J
1,4-Diethylbenzene	NA	NA	NA	ND (0.0024)	ND (0.0026)	ND (0.0024)	ND (0.0022)	ND (0.002)	ND (0.0021) J
1,4-Dioxane	0.1	13	0.1	ND (0.097)	ND (0.1)	ND (0.097)	ND (0.088)	ND (0.079)	ND (0.084)
2,2-Dichloropropane	NA	NA	NA	ND (0.0024)	ND (0.0026)	ND (0.0024)	ND (0.0022)	ND (0.002)	ND (0.0021)
2-Butanone (Methyl Ethyl Ketone)	0.12	100	0.12	ND (0.012)	ND (0.013)	ND (0.012)	ND (0.011)	ND (0.0099)	ND (0.01)
2-Chlorotoluene	NA	NA	NA	ND (0.0024)	ND (0.0026)	ND (0.0024)	ND (0.0022)	ND (0.002)	ND (0.0021) J
2-Hexanone (Methyl Butyl Ketone)	NA	NA	NA	ND (0.012)	ND (0.013)	ND (0.012)	ND (0.011)	ND (0.0099)	ND (0.01)
2-Phenylbutane (sec-Butylbenzene)	11	100	11	ND (0.0012)	ND (0.0013)	ND (0.0012)	ND (0.0011)	ND (0.00099)	ND (0.001) J
4-Chlorotoluene	NA	NA	NA	ND (0.0024)	ND (0.0026)	ND (0.0024)	ND (0.0022)	ND (0.002)	ND (0.0021) J
4-Ethyltoluene (1-Ethyl-4-Methylbenzene)	NA	NA	NA	ND (0.0024)	ND (0.0026)	ND (0.0024)	ND (0.0022)	ND (0.002)	ND (0.0021) J
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	NA	NA	NA	ND (0.012)	ND (0.013)	ND (0.012)	ND (0.011)	ND (0.0099)	ND (0.01)
Acetone	0.05	100	0.05	ND (0.012)	0.013	ND (0.012)	ND (0.011)	ND (0.0099)	ND (0.01)
Acrylonitrile	NA	NA	NA	ND (0.0049)	ND (0.0052)	ND (0.0049)	ND (0.0044)	ND (0.0039)	ND (0.0042)
Benzene	0.06	4.8	0.06	ND (0.00061)	ND (0.00065)	ND (0.00061)	ND (0.00055)	ND (0.00049)	ND (0.00052)
Bromobenzene	NA	NA	NA	ND (0.0024)	ND (0.0026)	ND (0.0024)	ND (0.0022)	ND (0.002)	ND (0.0021) J
Bromodichloromethane	NA	NA	NA	0.00016 J	ND (0.00065)	ND (0.00061)	ND (0.00055)	ND (0.00049)	ND (0.00052)
Bromoform	NA	NA	NA	ND (0.0049)	ND (0.0052)	ND (0.0049)	ND (0.0044)	ND (0.0039)	ND (0.0042)
Bromomethane (Methyl Bromide)	NA	NA	NA	ND (0.0024)	ND (0.0026)	ND (0.0024)	ND (0.0022)	ND (0.002)	ND (0.0021)
Carbon disulfide	NA	NA	NA	ND (0.012)	ND (0.013)	ND (0.012)	ND (0.011)	ND (0.0099)	ND (0.01)
Carbon tetrachloride	0.76	2.4	0.76	ND (0.0012)	ND (0.0013)	ND (0.0012)	ND (0.0011)	ND (0.00099)	ND (0.001)
Chlorobenzene	1.1	100	1.1	ND (0.00061)	ND (0.00065)	ND (0.00061)	ND (0.00055)	ND (0.00049)	ND (0.00052) J
Chlorobromomethane	NA	NA	NA	ND (0.0024)	ND (0.0026)	ND (0.0024)	ND (0.0022)	ND (0.002)	ND (0.0021)
Chloroethane	NA	NA	NA	ND (0.0024)	ND (0.0026)	ND (0.0024)	ND (0.0022)	ND (0.002)	ND (0.0021)
Chloroform (Trichloromethane)	0.37	49	0.37	0.0026	ND (0.0019)	ND (0.0018)	0.00034 J	0.00032 J	ND (0.0016)
Chloromethane (Methyl Chloride)	NA	NA	NA	ND (0.0049)	ND (0.0052)	ND (0.0049)	ND (0.0044)	ND (0.0039)	ND (0.0042)
cis-1,2-Dichloroethene	0.25	100	0.25	ND (0.0012)	ND (0.0013)	ND (0.0012)	ND (0.0011)	0.00032 J	0.00035 J
cis-1,3-Dichloropropene	NA	NA	NA	ND (0.00061)	ND (0.00065)	ND (0.00061)	ND (0.00055)	ND (0.00049)	ND (0.00052)
Cymene (p-Isopropyltoluene)	NA	NA	NA	ND (0.0012)	ND (0.0013)	ND (0.0012)	ND (0.0011)	ND (0.00099)	ND (0.001) J
Dibromochloromethane	NA	NA	NA	ND (0.0012)	ND (0.0013)	ND (0.0012)	ND (0.0011)	ND (0.00099)	ND (0.001)

TABLE 2
REMEDIAL INVESTIGATION RESULTS - ANALYTICAL RESULTS IN SOIL
558 SACKETT STREET
BROOKLYN, NEW YORK
FILE NO. 0206384

	Action Level								
Location Name	Restricted Use	NY Part 375	NY Part 375	SB-7	SB-8	SB-8	SB-8	SB-8	SB-8
Sample Name	Soil Cleanup	Restricted	Unrestricted	SB-7_12-14	SB-8_0-0.5	SB-8_1-2	SB-8_5-7	SB-8_9-11	SB-8_12-14
Sample Date	Objectives -	Residential Use	Use	06/22/2023	06/23/2023	06/23/2023	06/23/2023	06/23/2023	06/23/2023
Lab Sample ID	Protection of	Soil Cleanup	Soil Cleanup	L2335921-05	L2336234-01	L2336234-02	L2336234-03	L2336234-04	L2336234-05
Sample Depth (bgs)	Groundwater	Objectives	Objectives	12 - 14 (ft)	0 - 0.5 (ft)	1 - 2 (ft)	5 - 7 (ft)	9 - 11 (ft)	12 - 14 (ft)
Dibromomethane	NA	NA	NA	ND (0.0024)	ND (0.0026)	ND (0.0024)	ND (0.0022)	ND (0.002)	ND (0.0021) J
Dichlorodifluoromethane (CFC-12)	NA	NA	NA	ND (0.012)	ND (0.013)	ND (0.012)	ND (0.011)	ND (0.0099)	ND (0.01)
Ethyl Ether	NA	NA	NA	ND (0.0024)	ND (0.0026)	ND (0.0024)	ND (0.0022)	ND (0.002)	ND (0.0021)
Ethylbenzene	1	41	1	ND (0.0012)	ND (0.0013)	ND (0.0012)	ND (0.0011)	ND (0.00099)	ND (0.001) J
Hexachlorobutadiene	NA	NA	NA	ND (0.0049)	ND (0.0052)	ND (0.0049)	ND (0.0044)	ND (0.0039)	ND (0.0042) J
Isopropylbenzene (Cumene)	NA	NA	NA	ND (0.0012)	ND (0.0013)	ND (0.0012)	ND (0.0011)	ND (0.00099)	ND (0.001) J
m,p-Xylenes	NA	NA	NA	ND (0.0024)	ND (0.0026)	ND (0.0024)	ND (0.0022)	ND (0.002)	ND (0.0021) J
Methyl Tert Butyl Ether (MTBE)	0.93	100	0.93	ND (0.0024)	ND (0.0026)	ND (0.0024)	ND (0.0022)	ND (0.002)	ND (0.0021)
Methylene chloride (Dichloromethane)	0.05	100	0.05	ND (0.0061)	ND (0.0065)	ND (0.0061)	ND (0.0055)	ND (0.0049)	ND (0.0052)
Naphthalene	12	100	12	ND (0.0049)	ND (0.0052)	ND (0.0049)	ND (0.0044)	ND (0.0039)	ND (0.0042) J
n-Butylbenzene	12	100	12	ND (0.0012)	ND (0.0013)	ND (0.0012)	ND (0.0011)	ND (0.00099)	ND (0.001) J
n-Propylbenzene	3.9	100	3.9	ND (0.0012)	ND (0.0013)	ND (0.0012)	ND (0.0011)	ND (0.00099)	ND (0.001) J
o-Xylene	NA	NA	NA	ND (0.0012)	ND (0.0013)	ND (0.0012)	ND (0.0011)	ND (0.00099)	ND (0.001) J
Styrene	NA	NA	NA	ND (0.0012)	ND (0.0013)	ND (0.0012)	ND (0.0011)	ND (0.00099)	ND (0.001) J
tert-Butylbenzene	5.9	100	5.9	ND (0.0024)	ND (0.0026)	ND (0.0024)	ND (0.0022)	ND (0.002)	ND (0.0021) J
Tetrachloroethene	1.3	19	1.3	0.0011	0.00067	0.00032 J	0.00039 J	0.0012	0.003 J
Toluene	0.7	100	0.7	ND (0.0012)	ND (0.0013)	ND (0.0012)	ND (0.0011)	ND (0.00099)	ND (0.001)
trans-1,2-Dichloroethene	0.19	100	0.19	ND (0.0018)	ND (0.0019)	ND (0.0018)	ND (0.0016)	ND (0.0015)	ND (0.0016)
trans-1,3-Dichloropropene	NA	NA	NA	ND (0.0012)	ND (0.0013)	ND (0.0012)	ND (0.0011)	ND (0.00099)	ND (0.001)
trans-1,4-Dichloro-2-butene	NA	NA	NA	ND (0.0061)	ND (0.0065)	ND (0.0061)	ND (0.0055)	ND (0.0049)	ND (0.0052)
Trichloroethene	0.47	21	0.47	ND (0.00061)	ND (0.00065)	ND (0.00061)	0.00026 J	0.00038 J	0.00045 J
Trichlorofluoromethane (CFC-11)	NA	NA	NA	ND (0.0049)	ND (0.0052)	ND (0.0049)	ND (0.0044)	ND (0.0039)	ND (0.0042)
Vinyl acetate	NA	NA	NA	ND (0.012)	ND (0.013)	ND (0.012)	ND (0.011)	ND (0.0099)	ND (0.01) J
Vinyl chloride	0.02	0.9	0.02	ND (0.0012)	ND (0.0013)	ND (0.0012)	ND (0.0011)	ND (0.00099)	ND (0.001)
Xylene (Total)	1.6	100	0.26	ND (0.0012)	ND (0.0013)	ND (0.0012)	ND (0.0011)	ND (0.00099)	ND (0.001)
Semi-Volatile Organic Compounds (mg/kg)									
1,2,4,5-Tetrachlorobenzene	NA	NA	NA	ND (0.19)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.2)	ND (0.19)
1,2,4-Trichlorobenzene	NA	NA	NA	ND (0.19)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.2)	ND (0.19)
1,2-Dichlorobenzene	1.1	100	1.1	ND (0.19)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.2)	ND (0.19)
1,3-Dichlorobenzene	2.4	49	2.4	ND (0.19)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.2)	ND (0.19)
1,4-Dichlorobenzene	1.8	13	1.8	ND (0.19)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.2)	ND (0.19)
1,4-Dioxane	0.1	13	0.1	ND (0.029)	ND (0.028)	ND (0.028)	ND (0.03)	ND (0.03)	ND (0.028)
2,2'-oxybis(1-Chloropropane)	NA	NA	NA	ND (0.23)	ND (0.22)	ND (0.22)	ND (0.24)	ND (0.24)	ND (0.23)
2,4,5-Trichlorophenol	NA	NA	NA	ND (0.19)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.2)	ND (0.19)
2,4,6-Trichlorophenol	NA	NA	NA	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.12)	ND (0.12)	ND (0.11)
2,4-Dichlorophenol	NA	NA	NA	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.18)	ND (0.18)	ND (0.17)
2,4-Dimethylphenol	NA	NA	NA	ND (0.19)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.2)	ND (0.19)
2,4-Dinitrophenol	NA	NA	NA	ND (0.92)	ND (0.89)	ND (0.89)	ND (0.96)	ND (0.96)	0.91 R
2,4-Dinitrotoluene	NA	NA	NA	ND (0.19)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.2)	ND (0.19)
2,6-Dinitrotoluene	NA	NA	NA	ND (0.19)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.2)	ND (0.19)
2-Chloronaphthalene	NA	NA	NA	ND (0.19)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.2)	ND (0.19)
2-Chlorophenol	NA	NA	NA	ND (0.19)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.2)	ND (0.19)
2-Methylnaphthalene	NA	NA	NA	0.045 J	0.064 J	0.04 J	ND (0.24)	ND (0.24)	ND (0.23)
2-Methylphenol (o-Cresol)	0.33	100	0.33	ND (0.19)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.2)	ND (0.19)
2-Nitroaniline	NA	NA	NA	ND (0.19)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.2)	ND (0.19)
2-Nitrophenol	NA	NA	NA	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.43)	ND (0.43)	ND (0.41)
3&4-Methylphenol	NA	NA	NA	ND (0.28)	ND (0.27)	ND (0.27)	ND (0.29)	ND (0.29)	ND (0.27)
3,3'-Dichlorobenzidine	NA	NA	NA	ND (0.19)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.2)	ND (0.19)
3-Nitroaniline	NA	NA	NA	ND (0.19)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.2)	ND (0.19)
4,6-Dinitro-2-methylphenol	NA	NA	NA	ND (0.5)	ND (0.48)	ND (0.48)	ND (0.52)	ND (0.52)	0.49 R
4-Bromophenyl phenyl ether (BDE-3)	NA	NA	NA	ND (0.19)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.2)	ND (0.19)
4-Chloro-3-methylphenol	NA	NA	NA	ND (0.19)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.2)	ND (0.19)
4-Chloroaniline	NA	NA	NA	ND (0.19)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.2)	ND (0.19)
4-Chlorophenyl phenyl ether	NA	NA	NA	ND (0.19)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.2)	ND (0.19)
4-Nitroaniline	NA	NA	NA	ND (0.19)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.2)	ND (0.19)
4-Nitrophenol	NA	NA	NA	ND (0.27)	ND (0.26)	ND (0.26)	ND (0.28)	ND (0.28)	ND (0.26)

TABLE 2
REMEDIAL INVESTIGATION RESULTS - ANALYTICAL RESULTS IN SOIL
558 SACKETT STREET
BROOKLYN, NEW YORK
FILE NO. 0206384

	Action Level								
Location Name	Restricted Use	NY Part 375	NY Part 375	SB-7	SB-8	SB-8	SB-8	SB-8	SB-8
Sample Name	Soil Cleanup	Restricted	Unrestricted	SB-7_12-14	SB-8_0-0.5	SB-8_1-2	SB-8_5-7	SB-8_9-11	SB-8_12-14
Sample Date	Objectives -	Residential Use	Use	06/22/2023	06/23/2023	06/23/2023	06/23/2023	06/23/2023	06/23/2023
Lab Sample ID	Protection of	Soil Cleanup	Soil Cleanup	L2335921-05	L2336234-01	L2336234-02	L2336234-03	L2336234-04	L2336234-05
Sample Depth (bgs)	Groundwater	Objectives	Objectives	12 - 14 (ft)	0 - 0.5 (ft)	1 - 2 (ft)	5 - 7 (ft)	9 - 11 (ft)	12 - 14 (ft)
Acenaphthene	98	100	20	ND (0.15)	0.14 J	0.066 J	ND (0.16)	ND (0.16)	ND (0.15)
Acenaphthylene	107	100	100	ND (0.15)	0.054 J	0.054 J	ND (0.16)	ND (0.16)	ND (0.15)
Acetophenone	NA	NA	NA	ND (0.19)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.2)	ND (0.19)
Anthracene	1000	100	100	ND (0.11)	0.5	0.18	ND (0.12)	ND (0.12)	ND (0.11)
Benzo(a)anthracene	1	1	1	0.032 J	***1.4***	0.45	0.042 J	ND (0.12)	ND (0.11)
Benzo(a)pyrene	22	1	1	ND (0.15)	1.2	0.46	ND (0.16)	ND (0.16)	ND (0.15)
Benzo(b)fluoranthene	1.7	1	1	ND (0.11)	1.4	0.54	0.048 J	ND (0.12)	ND (0.11)
Benzo(g,h,i)perylene	1000	100	100	ND (0.15)	0.7	0.27	0.025 J	ND (0.16)	ND (0.15)
Benzo(k)fluoranthene	1.7	3.9	0.8	ND (0.11)	0.41	0.15	ND (0.12)	ND (0.12)	ND (0.11)
Benzoic acid	NA	NA	NA	ND (0.62)	ND (0.6)	ND (0.6)	ND (0.64)	ND (0.65)	0.61 R
Benzyl Alcohol	NA	NA	NA	ND (0.19)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.2)	ND (0.19)
Biphenyl	NA	NA	NA	ND (0.44)	ND (0.42)	ND (0.42)	ND (0.45)	ND (0.46)	ND (0.43)
bis(2-Chloroethoxy)methane	NA	NA	NA	ND (0.21)	ND (0.2)	ND (0.2)	ND (0.22)	ND (0.22)	ND (0.2)
bis(2-Chloroethyl)ether	NA	NA	NA	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.18)	ND (0.18)	ND (0.17)
bis(2-Ethylhexyl)phthalate	NA	NA	NA	ND (0.19)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.2)	ND (0.19)
Butyl benzylphthalate (BBP)	NA	NA	NA	ND (0.19)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.2)	ND (0.19)
Carbazole	NA	NA	NA	ND (0.19)	0.13 J	0.086 J	ND (0.2)	ND (0.2)	ND (0.19)
Chrysene	1	3.9	1	0.028 J	***1.4***	0.42	0.04 J	ND (0.12)	ND (0.11)
Dibenz(a,h)anthracene	1000	0.33	0.33	ND (0.11)	0.19	0.067 J	ND (0.12)	ND (0.12)	ND (0.11)
Dibenzofuran	210	59	7	ND (0.19)	0.12 J	0.049 J	ND (0.2)	ND (0.2)	ND (0.19)
Diethyl phthalate	NA	NA	NA	ND (0.19)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.2)	ND (0.19)
Dimethyl phthalate	NA	NA	NA	ND (0.19)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.2)	ND (0.19)
Di-n-butylphthalate (DBP)	NA	NA	NA	ND (0.19)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.2)	ND (0.19)
Di-n-octyl phthalate (DnOP)	NA	NA	NA	ND (0.19)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.2)	ND (0.19)
Fluoranthene	1000	100	100	0.062 J	3.1	0.96	0.08 J	ND (0.12)	ND (0.11)
Fluorene	386	100	30	ND (0.19)	0.1 J	0.058 J	ND (0.2)	ND (0.2)	ND (0.19)
Hexachlorobenzene	3.2	1.2	0.33	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.12)	ND (0.12)	ND (0.11)
Hexachlorobutadiene	NA	NA	NA	ND (0.19)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.2)	ND (0.19)
Hexachlorocyclopentadiene	NA	NA	NA	ND (0.55)	ND (0.53)	ND (0.53)	ND (0.57)	ND (0.57)	0.54 R
Hexachloroethane	NA	NA	NA	ND (0.15)	ND (0.15)	ND (0.15)	ND (0.16)	ND (0.16)	ND (0.15)
Indeno(1,2,3-cd)pyrene	8.2	0.5	0.5	ND (0.15)	0.58	0.22	ND (0.16)	ND (0.16)	ND (0.15)
Isophorone	NA	NA	NA	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.18)	ND (0.18)	ND (0.17)
Naphthalene	12	100	12	0.095 J	0.056 J	0.066 J	ND (0.2)	ND (0.2)	ND (0.19)
Nitrobenzene	NA	NA	NA	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.18)	ND (0.18)	ND (0.17)
N-Nitrosodi-n-propylamine	NA	NA	NA	ND (0.19)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.2)	ND (0.19)
N-Nitrosodiphenylamine	NA	NA	NA	ND (0.15)	ND (0.15)	ND (0.15)	ND (0.16)	ND (0.16)	ND (0.15)
Pentachlorophenol	0.8	6.7	0.8	ND (0.15)	ND (0.15)	ND (0.15)	ND (0.16)	ND (0.16)	ND (0.15)
Phenanthrene	1000	100	100	0.073 J	3.1	0.8	0.074 J	ND (0.12)	ND (0.11)
Phenol	0.33	100	0.33	ND (0.19)	ND (0.18)	ND (0.19)	ND (0.2)	ND (0.2)	ND (0.19)
Pyrene	1000	100	100	0.055 J	2.8	0.82	0.074 J	ND (0.12)	ND (0.11)

TABLE 2
REMEDIAL INVESTIGATION RESULTS - ANALYTICAL RESULTS IN SOIL
558 SACKETT STREET
BROOKLYN, NEW YORK
FILE NO. 0206384

	Action Level								
Location Name	Restricted Use	NY Part 375	NY Part 375	SB-7	SB-8	SB-8	SB-8	SB-8	SB-8
Sample Name	Soil Cleanup	Restricted	Unrestricted	SB-7_12-14	SB-8_0-0.5	SB-8_1-2	SB-8_5-7	SB-8_9-11	SB-8_12-14
Sample Date	Objectives -	Residential Use	Use	06/22/2023	06/23/2023	06/23/2023	06/23/2023	06/23/2023	06/23/2023
Lab Sample ID	Protection of	Soil Cleanup	Soil Cleanup	L2335921-05	L2336234-01	L2336234-02	L2336234-03	L2336234-04	L2336234-05
Sample Depth (bgs)	Groundwater	Objectives	Objectives	12 - 14 (ft)	0 - 0.5 (ft)	1 - 2 (ft)	5 - 7 (ft)	9 - 11 (ft)	12 - 14 (ft)
Inorganic Compounds (mg/kg)									
Aluminum	NA	NA	NA	5840	4620	4700	3120	4900	2160
Antimony	NA	NA	NA	0.565 J	ND (4.36) J	ND (4.4) J	ND (4.85) J	ND (4.89) J	ND (4.54) J
Arsenic	16	16	13	2.73	8.42	8.78	1.35	2.42	2.31
Barium	820	400	350	44	247	153	66.8	66.7	9.19
Beryllium	47	72	7.2	0.42 J	0.199 J	0.15 J	0.104 J	0.373 J	0.09 J
Cadmium	7.5	4.3	2.5	0.137 J	0.384 J	1.74	ND (0.969)	ND (0.978)	ND (0.908)
Calcium	NA	NA	NA	12000	12500 J	24200 J	2400 J	1540 J	436 J
Chromium	NA	NA	NA	18 J	12.4	19.5	7.3	25	7.12
Cobalt	NA	NA	NA	8.11	4.37	6.35	3.32	9.64	2.51
Copper	1720	270	50	24.7	34.8	46.9	7.21	16.7	6.41
Iron	NA	NA	NA	12200	10200	12200	6150	9350	5460
Lead	450	400	63	21 J	406	***1950***	42.8	24.6	2.16 J
Magnesium	NA	NA	NA	3940	2760 J	2930 J	1780 J	2270 J	1170 J
Manganese	2000	2000	1600	381	202 J	215 J	159 J	268 J	92.6 J
Mercury	0.73	0.81	0.18	0.146 J+	***2.31***	***1.31***	ND (0.092)	ND (0.093)	ND (0.093)
Nickel	130	310	30	40.8 J	15.1	26.3	11.4	30.9	11.7
Potassium	NA	NA	NA	1290	613	905	468	650	390
Selenium	4	180	3.9	0.327 J	ND (1.74)	0.311 J	ND (1.94)	ND (1.96)	ND (1.82)
Silver	8.3	180	2	ND (0.459)	ND (0.436)	ND (0.44)	ND (0.485)	ND (0.489)	ND (0.454)
Sodium	NA	NA	NA	186 J	316	273	82.4 J	111 J	61.4 J
Thallium	NA	NA	NA	0.658 J	ND (1.74)	ND (1.76)	ND (1.94)	ND (1.96)	ND (1.82)
Vanadium	NA	NA	NA	17	12.9	18.1	9.9	12.6	8.77
Zinc	2480	10000	109	46.4	256	873	46.6	36.8	11.2
PCBs (mg/kg)									
Aroclor-1016 (PCB-1016)	NA	NA	NA	ND (0.0572)	ND (0.0555)	ND (0.0528)	ND (0.0604)	ND (0.0605)	ND (0.0543)
Aroclor-1221 (PCB-1221)	NA	NA	NA	ND (0.0572)	ND (0.0555)	ND (0.0528)	ND (0.0604)	ND (0.0605)	ND (0.0543)
Aroclor-1232 (PCB-1232)	NA	NA	NA	ND (0.0572)	ND (0.0555)	ND (0.0528)	ND (0.0604)	ND (0.0605)	ND (0.0543)
Aroclor-1242 (PCB-1242)	NA	NA	NA	ND (0.0572)	ND (0.0555)	ND (0.0528)	ND (0.0604)	ND (0.0605)	ND (0.0543)
Aroclor-1248 (PCB-1248)	NA	NA	NA	ND (0.0572)	ND (0.0555)	ND (0.0528)	ND (0.0604)	ND (0.0605)	ND (0.0543)
Aroclor-1254 (PCB-1254)	NA	NA	NA	ND (0.0572)	ND (0.0555)	ND (0.0528)	ND (0.0604)	ND (0.0605)	ND (0.0543)
Aroclor-1260 (PCB-1260)	NA	NA	NA	ND (0.0572)	ND (0.0555)	ND (0.0528)	ND (0.0604)	ND (0.0605)	ND (0.0543)
Aroclor-1262 (PCB-1262)	NA	NA	NA	ND (0.0572)	ND (0.0555)	ND (0.0528)	ND (0.0604)	ND (0.0605)	ND (0.0543)
Aroclor-1268 (PCB-1268)	NA	NA	NA	ND (0.0572)	ND (0.0555)	ND (0.0528)	ND (0.0604)	ND (0.0605)	ND (0.0543)
Polychlorinated biphenyls (PCBs)	3.2	1	0.1	ND (0.0572)	ND (0.0555)	ND (0.0528)	ND (0.0604)	ND (0.0605)	ND (0.0543)
Other									
Total Solids (%)	NA	NA	NA	84.5	88.6	88.6	81.3	80.6	85.8
Pesticides (mg/kg)									
4,4'-DDD	14	13	0.0033	ND (0.0018)	ND (0.0018)	ND (0.00176)	ND (0.00195)	ND (0.00194)	ND (0.00182)
4,4'-DDE	17	8.9	0.0033	ND (0.0018)	ND (0.0018)	ND (0.00176)	ND (0.00195)	ND (0.00194)	ND (0.00182)
4,4'-DDT	136	7.9	0.0033	ND (0.0018)	ND (0.0018)	ND (0.00176)	ND (0.00195)	ND (0.00194)	ND (0.00182)
Aldrin	0.19	0.097	0.005	ND (0.0018)	ND (0.0018)	ND (0.00176)	ND (0.00195)	ND (0.00194)	ND (0.00182)
alpha-BHC	0.02	0.48	0.02	ND (0.00075)	ND (0.00075)	ND (0.000735)	ND (0.000812)	ND (0.00081)	ND (0.00076)
alpha-Chlordane (cis)	2.9	4.2	0.094	ND (0.00225)	ND (0.00225)	ND (0.0022)	ND (0.00244)	ND (0.00243)	ND (0.00228)
beta-BHC	0.09	0.36	0.036	ND (0.0018)	ND (0.0018)	ND (0.00176)	ND (0.00195)	ND (0.00194)	ND (0.00182)
Chlordane	NA	NA	NA	ND (0.015)	ND (0.015)	ND (0.0147)	ND (0.0162)	ND (0.0162)	ND (0.0152)
delta-BHC	0.25	100	0.04	ND (0.0018)	ND (0.0018)	ND (0.00176)	ND (0.00195)	ND (0.00194)	ND (0.00182)
Dieldrin	0.1	0.2	0.005	ND (0.00112)	ND (0.00112)	ND (0.0011)	ND (0.00122)	ND (0.00122)	ND (0.00114)
Endosulfan I	102	24	2.4	ND (0.0018)	ND (0.0018)	ND (0.00176)	ND (0.00195)	ND (0.00194)	ND (0.00182)
Endosulfan II	102	24	2.4	ND (0.0018)	ND (0.0018)	ND (0.00176)	ND (0.00195)	ND (0.00194)	ND (0.00182)
Endosulfan sulfate	1000	24	2.4	ND (0.00075)	ND (0.00075)	ND (0.000735)	ND (0.000812)	ND (0.00081)	ND (0.00076)
Endrin	0.06	11	0.014	ND (0.00075)	ND (0.00075)	ND (0.000735)	ND (0.000812)	ND (0.00081)	ND (0.00076)
Endrin aldehyde	NA	NA	NA	ND (0.00225)	ND (0.00225)	ND (0.0022)	ND (0.00244)	ND (0.00243)	ND (0.00228)
Endrin ketone	NA	NA	NA	ND (0.0018)	ND (0.0018)	ND (0.00176)	ND (0.00195)	ND (0.00194)	ND (0.00182)
gamma-BHC (Lindane)	0.1	1.3	0.1	ND (0.00075)	ND (0.00075)	ND (0.000735)	ND (0.000812)	ND (0.00081)	ND (0.00076)
gamma-Chlordane (trans)	NA	NA	NA	ND (0.00225)	ND (0.00225)	ND (0.0022)	ND (0.00244)	ND (0.00243)	ND (0.00228)
Heptachlor	0.38	2.1	0.042	ND (0.0009)	ND (0.0009)	ND (0.000882)	ND (0.000975)	ND (0.000972)	ND (0.000912)
Heptachlor epoxide	NA	NA	NA	ND (0.00338)	ND (0.00337)	ND (0.00331)	ND (0.00366)	ND (0.00365)	ND (0.00342)
Methoxychlor	NA	NA	NA	ND (0.00338)	ND (0.00337)	ND (0.00331)	ND (0.00366)	ND (0.00365)	ND (0.00342)
Toxaphene	NA	NA	NA	ND (0.0338)	ND (0.0337)	ND (0.0331)	ND (0.0366)	ND (0.0365)	ND (0.0342)

TABLE 2
REMEDIAL INVESTIGATION RESULTS - ANALYTICAL RESULTS IN SOIL
558 SACKETT STREET
BROOKLYN, NEW YORK
FILE NO. 0206384

	Action Level								
Location Name	Restricted Use	NY Part 375	NY Part 375	SB-7	SB-8	SB-8	SB-8	SB-8	SB-8
Sample Name	Soil Cleanup	Restricted	Unrestricted	SB-7_12-14	SB-8_0-0.5	SB-8_1-2	SB-8_5-7	SB-8_9-11	SB-8_12-14
Sample Date	Objectives -	Residential Use	Use	06/22/2023	06/23/2023	06/23/2023	06/23/2023	06/23/2023	06/23/2023
Lab Sample ID	Protection of	Soil Cleanup	Soil Cleanup	L2335921-05	L2336234-01	L2336234-02	L2336234-03	L2336234-04	L2336234-05
Sample Depth (bgs)	Groundwater	Objectives	Objectives	12 - 14 (ft)	0 - 0.5 (ft)	1 - 2 (ft)	5 - 7 (ft)	9 - 11 (ft)	12 - 14 (ft)
PFAS (ng/g)									
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	NA	NA	NA	ND (0.764)	ND (0.776)	ND (0.802)	ND (0.772)	ND (0.768)	ND (0.812)
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	NA	NA	NA	ND (0.764)	ND (0.776)	ND (0.802)	ND (0.772)	ND (0.768)	ND (0.812)
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	NA	NA	NA	ND (0.191)	ND (0.194)	ND (0.2)	ND (0.193)	ND (0.192)	ND (0.203)
N-Methyl Perfluorooctanesulfonamidoacetic Acid (MeFOSAA)	NA	NA	NA	ND (0.191)	ND (0.194)	ND (0.2)	ND (0.193)	ND (0.192)	ND (0.203)
Perfluorobutanesulfonic acid (PFBS)	NA	NA	NA	ND (0.191)	ND (0.194)	ND (0.2)	ND (0.193)	ND (0.192)	ND (0.203)
Perfluorobutanoic acid (PFBA)	NA	NA	NA	ND (0.764)	ND (0.776)	ND (0.802)	ND (0.772)	ND (0.768)	ND (0.812)
Perfluorodecanesulfonic acid (PFDS)	NA	NA	NA	ND (0.191)	ND (0.194)	ND (0.2)	ND (0.193)	ND (0.192)	ND (0.203)
Perfluorodecanoic acid (PFDA)	NA	NA	NA	ND (0.191)	ND (0.194)	ND (0.2)	ND (0.193)	ND (0.192)	ND (0.203)
Perfluorododecanoic acid (PFDoDA)	NA	NA	NA	ND (0.191)	ND (0.194)	ND (0.2)	ND (0.193)	ND (0.192)	ND (0.203)
Perfluoroheptanesulfonic acid (PFHpS)	NA	NA	NA	ND (0.191)	ND (0.194)	ND (0.2)	ND (0.193)	ND (0.192)	ND (0.203)
Perfluoroheptanoic acid (PFHpA)	NA	NA	NA	ND (0.191)	ND (0.194)	ND (0.2)	ND (0.193)	ND (0.192)	ND (0.203)
Perfluorohexanesulfonic acid (PFHxS)	NA	NA	NA	ND (0.191)	ND (0.194)	ND (0.2)	ND (0.193)	ND (0.192)	ND (0.203)
Perfluorohexanoic acid (PFHxA)	NA	NA	NA	ND (0.191)	ND (0.194)	ND (0.2)	ND (0.193)	ND (0.192)	ND (0.203)
Perfluorononanoic acid (PFNA)	NA	NA	NA	ND (0.191)	ND (0.194)	ND (0.2)	ND (0.193)	ND (0.192)	ND (0.203)
Perfluorooctane sulfonamide (PFOSA)	NA	NA	NA	ND (0.191)	ND (0.194)	ND (0.2)	ND (0.193)	ND (0.192)	ND (0.203)
Perfluorooctanesulfonic acid (PFOS)	1	44	0.88	ND (0.191)	ND (0.194)	ND (0.2)	ND (0.193)	ND (0.192)	ND (0.203)
Perfluorooctanoic acid (PFOA)	0.8	33	0.66	ND (0.191)	ND (0.194)	ND (0.2)	0.093 J	0.061 J	ND (0.203)
Perfluoropentanoic acid (PFPeA)	NA	NA	NA	ND (0.382)	ND (0.388)	ND (0.401)	ND (0.386)	ND (0.384)	ND (0.406)
Perfluorotetradecanoic acid (PFTeDA)	NA	NA	NA	ND (0.191)	ND (0.194)	ND (0.2)	ND (0.193)	ND (0.192)	ND (0.203)
Perfluorotridecanoic acid (PFTrDA)	NA	NA	NA	ND (0.191)	ND (0.194)	ND (0.2)	ND (0.193)	ND (0.192)	ND (0.203)
Perfluoroundecanoic acid (PFUnDA)	NA	NA	NA	ND (0.191)	ND (0.194)	ND (0.2)	ND (0.193)	ND (0.192)	ND (0.203)
US EPA PFAS (PFOS + PFOA)	NA	NA	NA	ND (0.191)	ND (0.194)	ND (0.2)	0.093 J	0.061 J	ND (0.203)

ABBREVIATIONS AND NOTES:
mg/kg: milligram per kilogram
ng/g: nanogram per gram

-: Not Analyzed
bgs: below ground surface
ft: feet
J: Value is estimated.
J+: Value is estimated, high bias
J-: Value is estimated, low bias
NA: Not Applicable
ND (2.5): Not detected, number in parentheses is the laboratory reporting limit
R: Rejected

- For test methods used, see the laboratory data sheets.
- Soil analytical results are compared to the New York State Department of Environmental Conservation (NYSDEC) Title 6 of the Official Compilation of New York Codes, Rules, and Regulations (NYCRR) Part 375 Unrestricted Use Soil Cleanup Objectives (SCO), Restricted-Use Residential SCOs, and Protection of Groundwater SCO's.
- **Bold italic** values indicate an exceedance of the Protection of Groundwater Criteria.
- Grey shading indicates an exceedance of the Unrestricted Use Soil Cleanup Objectives.
- Yellow shading indicates an exceedance of the Restricted Use Residential Soil Cleanup Objectives.

TABLE 2a
REMEDIAL INVESTIGATION RESULTS - SUPPLEMENTAL ANALYTICAL RESULTS IN SOIL
558 SACKETT STREET
BROOKLYN, NEW YORK
FILE NO. 0206384

	Action Level																	
Location Name	Restricted Use	NY Part 375	NY Part 375	SB-2A	SB-2A	SB-2A	SB-2A	SB-2A	SB-2A	SB-2A	SB-2A	SB-2A-S1	SB-3A	SB-3A	SB-3A	SB-3A	SB-3A	SB-3A
Sample Name	Soil Cleanup	Restricted	Unrestricted	SB-2A_0-0.5	SB-2A_1-3	SB-2A_3-5	SB-2A_5-7	SB-2A_7-9	SB-2A_9-11	SB-2A_12-14	DUP03_20240326	SB-2A-S1_11-11.5	SB-3A_0-0.5	SB-3A_1-3	SB-3A_3-5	SB-3A_5-7	SB-3A_7-9	SB-3A_9-11
Sample Date	Objectives -	Residential Use	Use	03/26/2024	03/26/2024	03/26/2024	03/26/2024	03/26/2024	03/26/2024	03/26/2024	03/26/2024	03/26/2024	03/26/2024	03/26/2024	03/26/2024	03/26/2024	03/26/2024	03/26/2024
Lab Sample ID	Protection of	Soil Cleanup	Soil Cleanup	L2416482-01	L2416482-02	L2416482-03	L2416482-04	L2416482-05	L2416482-06	L2416482-07	L2416482-74	L2416482-76	L2416482-50	L2416482-51	L2416482-52	L2416482-53	L2416482-54	L2416482-55
Sample Depth (bgs)	Groundwater	Objectives	Objectives	0 - 0.5 (ft)	1 - 3 (ft)	3 - 5 (ft)	5 - 7 (ft)	7 - 9 (ft)	9 - 11 (ft)	12 - 14 (ft)	12 - 14 (ft)	11 - 11.5 (ft)	0 - 0.5 (ft)	1 - 3 (ft)	3 - 5 (ft)	5 - 7 (ft)	7 - 9 (ft)	9 - 11 (ft)
Volatile Organic Compounds (mg/kg)																		
1,1,1,2-Tetrachloroethane	NA	NA	NA	-	-	-	-	-	-	-	-	ND (4.3)	-	-	-	-	-	-
1,1,1-Trichloroethane	0.68	100	0.68	-	-	-	-	-	-	-	-	ND (4.3)	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	NA	NA	NA	-	-	-	-	-	-	-	-	ND (4.3)	-	-	-	-	-	-
1,1,2-Trichloroethane	NA	NA	NA	-	-	-	-	-	-	-	-	ND (8.6)	-	-	-	-	-	-
1,1-Dichloroethane	0.27	26	0.27	-	-	-	-	-	-	-	-	ND (8.6)	-	-	-	-	-	-
1,1-Dichloroethene	0.33	100	0.33	-	-	-	-	-	-	-	-	ND (8.6)	-	-	-	-	-	-
1,1-Dichloropropene	NA	NA	NA	-	-	-	-	-	-	-	-	ND (4.3)	-	-	-	-	-	-
1,2,3-Trichlorobenzene	NA	NA	NA	-	-	-	-	-	-	-	-	ND (17)	-	-	-	-	-	-
1,2,3-Trichloropropane	NA	NA	NA	-	-	-	-	-	-	-	-	ND (17)	-	-	-	-	-	-
1,2,4,5-Tetramethylbenzene	NA	NA	NA	-	-	-	-	-	-	-	-	14 J	-	-	-	-	-	-
1,2,4-Trichlorobenzene	NA	NA	NA	-	-	-	-	-	-	-	-	ND (17)	-	-	-	-	-	-
1,2,4-Trimethylbenzene	3.6	52	3.6	-	-	-	-	-	-	-	-	***100***	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	NA	NA	NA	-	-	-	-	-	-	-	-	ND (26)	-	-	-	-	-	-
1,2-Dibromoethane (Ethylene Dibromide)	NA	NA	NA	-	-	-	-	-	-	-	-	ND (8.6)	-	-	-	-	-	-
1,2-Dichlorobenzene	1.1	100	1.1	-	-	-	-	-	-	-	-	ND (17)	-	-	-	-	-	-
1,2-Dichloroethane	0.02	3.1	0.02	-	-	-	-	-	-	-	-	ND (8.6)	-	-	-	-	-	-
1,2-Dichloroethene (total)	NA	NA	NA	-	-	-	-	-	-	-	-	ND (8.6)	-	-	-	-	-	-
1,2-Dichloropropane	NA	NA	NA	-	-	-	-	-	-	-	-	ND (8.6)	-	-	-	-	-	-
1,3,5-Trimethylbenzene	8.4	52	8.4	-	-	-	-	-	-	-	-	***27***	-	-	-	-	-	-
1,3-Dichlorobenzene	2.4	49	2.4	-	-	-	-	-	-	-	-	ND (17)	-	-	-	-	-	-
1,3-Dichloropropane	NA	NA	NA	-	-	-	-	-	-	-	-	ND (17)	-	-	-	-	-	-
1,3-Dichloropropene	NA	NA	NA	-	-	-	-	-	-	-	-	ND (4.3)	-	-	-	-	-	-
1,4-Dichlorobenzene	1.8	13	1.8	-	-	-	-	-	-	-	-	ND (17)	-	-	-	-	-	-
1,4-Diethylbenzene	NA	NA	NA	-	-	-	-	-	-	-	-	37	-	-	-	-	-	-
1,4-Dioxane	0.1	13	0.1	-	-	-	-	-	-	-	-	ND (690) J	-	-	-	-	-	-
2,2-Dichloropropane	NA	NA	NA	-	-	-	-	-	-	-	-	ND (17)	-	-	-	-	-	-
2-Butanone (Methyl Ethyl Ketone)	0.12	100	0.12	-	-	-	-	-	-	-	-	ND (86) J	-	-	-	-	-	-
2-Chlorotoluene	NA	NA	NA	-	-	-	-	-	-	-	-	ND (17)	-	-	-	-	-	-
2-Hexanone (Methyl Butyl Ketone)	NA	NA	NA	-	-	-	-	-	-	-	-	ND (86) J	-	-	-	-	-	-
2-Phenylbutane (sec-Butylbenzene)	11	100	11	-	-	-	-	-	-	-	-	ND (8.6)	-	-	-	-	-	-
4-Chlorotoluene	NA	NA	NA	-	-	-	-	-	-	-	-	ND (17)	-	-	-	-	-	-
4-Ethyltoluene (1-Ethyl-4-Methylbenzene)	NA	NA	NA	-	-	-	-	-	-	-	-	60	-	-	-	-	-	-
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	NA	NA	NA	-	-	-	-	-	-	-	-	ND (86)	-	-	-	-	-	-
Acetone	0.05	100	0.05	-	-	-	-	-	-	-	-	ND (86)	-	-	-	-	-	-
Acrylonitrile	NA	NA	NA	-	-	-	-	-	-	-	-	ND (34)	-	-	-	-	-	-
Benzene	0.06	4.8	0.06	-	-	-	-	-	-	-	-	ND (4.3)	-	-	-	-	-	-
Bromobenzene	NA	NA	NA	-	-	-	-	-	-	-	-	ND (17)	-	-	-	-	-	-
Bromodichloromethane	NA	NA	NA	-	-	-	-	-	-	-	-	ND (4.3)	-	-	-	-	-	-
Bromoform	NA	NA	NA	-	-	-	-	-	-	-	-	ND (34)	-	-	-	-	-	-
Bromomethane (Methyl Bromide)	NA	NA	NA	-	-	-	-	-	-	-	-	ND (17)	-	-	-	-	-	-
Carbon disulfide	NA	NA	NA	-	-	-	-	-	-	-	-	ND (86)	-	-	-	-	-	-
Carbon tetrachloride	0.76	2.4	0.76	-	-	-	-	-	-	-	-	ND (8.6)	-	-	-	-	-	-
Chlorobenzene	1.1	100	1.1	-	-	-	-	-	-	-	-	ND (4.3)	-	-	-	-	-	-
Chlorobromomethane	NA	NA	NA	-	-	-	-	-	-	-	-	ND (17)	-	-	-	-	-	-
Chloroethane	NA	NA	NA	-	-	-	-	-	-	-	-	ND (17)	-	-	-	-	-	-
Chloroform (Trichloromethane)	0.37	49	0.37	-	-	-	-	-	-	-	-	ND (13)	-	-	-	-	-	-
Chloromethane (Methyl Chloride)	NA	NA	NA	-	-	-	-	-	-	-	-	ND (34)	-	-	-	-	-	-
cis-1,2-Dichloroethene	0.25	100	0.25	-	-	-	-	-	-	-	-	ND (8.6)	-	-	-	-	-	-
cis-1,3-Dichloropropene	NA	NA	NA	-	-	-	-	-	-	-	-	ND (4.3)	-	-	-	-	-	-
Cymene (p-Isopropyltoluene)	NA	NA	NA	-	-	-	-	-	-	-	-	9.1	-	-	-	-	-	-
Dibromochloromethane	NA	NA	NA	-	-	-	-	-	-	-	-	ND (8.6)	-	-	-	-	-	-

TABLE 2a
REMEDIAL INVESTIGATION RESULTS - SUPPLEMENTAL ANALYTICAL RESULTS IN SOIL
558 SACKETT STREET
BROOKLYN, NEW YORK
FILE NO. 0206384

	Action Level																	
Location Name	Restricted Use	NY Part 375	NY Part 375	SB-2A	SB-2A	SB-2A	SB-2A	SB-2A	SB-2A	SB-2A	SB-2A	SB-2A-S1	SB-3A	SB-3A	SB-3A	SB-3A	SB-3A	SB-3A
Sample Name	Soil Cleanup	Restricted	Unrestricted	SB-2A_0-0.5	SB-2A_1-3	SB-2A_3-5	SB-2A_5-7	SB-2A_7-9	SB-2A_9-11	SB-2A_12-14	DUP03_20240326	SB-2A-S1_11-11.5	SB-3A_0-0.5	SB-3A_1-3	SB-3A_3-5	SB-3A_5-7	SB-3A_7-9	SB-3A_9-11
Sample Date	Objectives -	Residential Use	Use	03/26/2024	03/26/2024	03/26/2024	03/26/2024	03/26/2024	03/26/2024	03/26/2024	03/26/2024	03/26/2024	03/26/2024	03/26/2024	03/26/2024	03/26/2024	03/26/2024	03/26/2024
Lab Sample ID	Protection of	Soil Cleanup	Soil Cleanup	L2416482-01	L2416482-02	L2416482-03	L2416482-04	L2416482-05	L2416482-06	L2416482-07	L2416482-74	L2416482-76	L2416482-50	L2416482-51	L2416482-52	L2416482-53	L2416482-54	L2416482-55
Sample Depth (bgs)	Groundwater	Objectives	Objectives	0 - 0.5 (ft)	1 - 3 (ft)	3 - 5 (ft)	5 - 7 (ft)	7 - 9 (ft)	9 - 11 (ft)	12 - 14 (ft)	12 - 14 (ft)	11 - 11.5 (ft)	0 - 0.5 (ft)	1 - 3 (ft)	3 - 5 (ft)	5 - 7 (ft)	7 - 9 (ft)	9 - 11 (ft)
Dibromomethane	NA	NA	NA	-	-	-	-	-	-	-	-	ND (17)	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	NA	NA	NA	-	-	-	-	-	-	-	-	ND (86)	-	-	-	-	-	-
Ethyl Ether	NA	NA	NA	-	-	-	-	-	-	-	-	ND (17)	-	-	-	-	-	-
Ethylbenzene	1	41	1	-	-	-	-	-	-	-	-	***60***	-	-	-	-	-	-
Hexachlorobutadiene	NA	NA	NA	-	-	-	-	-	-	-	-	ND (34)	-	-	-	-	-	-
Isopropylbenzene (Cumene)	NA	NA	NA	-	-	-	-	-	-	-	-	16	-	-	-	-	-	-
m,p-Xylenes	NA	NA	NA	-	-	-	-	-	-	-	-	32	-	-	-	-	-	-
Methyl Tert Butyl Ether (MTBE)	0.93	100	0.93	-	-	-	-	-	-	-	-	ND (17)	-	-	-	-	-	-
Methylene chloride (Dichloromethane)	0.05	100	0.05	-	-	-	-	-	-	-	-	ND (43)	-	-	-	-	-	-
Naphthalene	12	100	12	-	-	-	-	-	-	-	-	***3300***	-	-	-	-	-	-
n-Butylbenzene	12	100	12	-	-	-	-	-	-	-	-	3.6 J	-	-	-	-	-	-
n-Propylbenzene	3.9	100	3.9	-	-	-	-	-	-	-	-	***9.5***	-	-	-	-	-	-
o-Xylene	NA	NA	NA	-	-	-	-	-	-	-	-	24	-	-	-	-	-	-
Styrene	NA	NA	NA	-	-	-	-	-	-	-	-	ND (8.6)	-	-	-	-	-	-
tert-Butylbenzene	5.9	100	5.9	-	-	-	-	-	-	-	-	ND (17)	-	-	-	-	-	-
Tetrachloroethene	1.3	19	1.3	-	-	-	-	-	-	-	-	ND (4.3)	-	-	-	-	-	-
Toluene	0.7	100	0.7	-	-	-	-	-	-	-	-	ND (8.6)	-	-	-	-	-	-
trans-1,2-Dichloroethene	0.19	100	0.19	-	-	-	-	-	-	-	-	ND (13)	-	-	-	-	-	-
trans-1,3-Dichloropropene	NA	NA	NA	-	-	-	-	-	-	-	-	ND (8.6)	-	-	-	-	-	-
trans-1,4-Dichloro-2-butene	NA	NA	NA	-	-	-	-	-	-	-	-	ND (43)	-	-	-	-	-	-
Trichloroethene	0.47	21	0.47	-	-	-	-	-	-	-	-	ND (4.3)	-	-	-	-	-	-
Trichlorofluoromethane (CFC-11)	NA	NA	NA	-	-	-	-	-	-	-	-	ND (34)	-	-	-	-	-	-
Vinyl acetate	NA	NA	NA	-	-	-	-	-	-	-	-	ND (86)	-	-	-	-	-	-
Vinyl chloride	0.02	0.9	0.02	-	-	-	-	-	-	-	-	ND (8.6)	-	-	-	-	-	-
Xylene (Total)	1.6	100	0.26	-	-	-	-	-	-	-	-	***56***	-	-	-	-	-	-
Semi-Volatile Organic Compounds (mg/kg)																		
1,2,4,5-Tetrachlorobenzene	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.24)	-	-	-	-	-	-
1,2,4-Trichlorobenzene	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.24)	-	-	-	-	-	-
1,2-Dichlorobenzene	1.1	100	1.1	-	-	-	-	-	-	-	-	ND (0.24)	-	-	-	-	-	-
1,3-Dichlorobenzene	2.4	49	2.4	-	-	-	-	-	-	-	-	ND (0.24)	-	-	-	-	-	-
1,4-Dichlorobenzene	1.8	13	1.8	-	-	-	-	-	-	-	-	ND (0.24)	-	-	-	-	-	-
1,4-Dioxane	0.1	13	0.1	-	-	-	-	-	-	-	-	ND (0.036) J	-	-	-	-	-	-
2,2'-oxybis(1-Chloropropane)	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.29)	-	-	-	-	-	-
2,4,5-Trichlorophenol	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.24)	-	-	-	-	-	-
2,4,6-Trichlorophenol	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.14)	-	-	-	-	-	-
2,4-Dichlorophenol	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.21)	-	-	-	-	-	-
2,4-Dimethylphenol	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.24)	-	-	-	-	-	-
2,4-Dinitrophenol	NA	NA	NA	-	-	-	-	-	-	-	-	ND (1.1)	-	-	-	-	-	-
2,4-Dinitrotoluene	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.24)	-	-	-	-	-	-
2,6-Dinitrotoluene	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.24)	-	-	-	-	-	-
2-Chloronaphthalene	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.24)	-	-	-	-	-	-
2-Chlorophenol	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.24)	-	-	-	-	-	-
2-Methylnaphthalene	NA	NA	NA	-	-	-	-	-	-	-	-	24	-	-	-	-	-	-
2-Methylphenol (o-Cresol)	0.33	100	0.33	-	-	-	-	-	-	-	-	ND (0.24)	-	-	-	-	-	-
2-Nitroaniline	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.24)	-	-	-	-	-	-
2-Nitrophenol	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.51)	-	-	-	-	-	-
3&4-Methylphenol	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.34)	-	-	-	-	-	-
3,3'-Dichlorobenzidine	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.24)	-	-	-	-	-	-
3-Nitroaniline	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.24)	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.62)	-	-	-	-	-	-
4-Bromophenyl phenyl ether (BDE-3)	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.24)	-	-	-	-	-	-
4-Chloro-3-methylphenol	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.24)	-	-	-	-	-	-
4-Chloroaniline	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.24)	-	-	-	-	-	-
4-Chlorophenyl phenyl ether	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.24)	-	-	-	-	-	-
4-Nitroaniline	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.24)	-	-	-	-	-	-
4-Nitrophenol	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.33)	-	-	-	-	-	-
Acenaphthene	98	100	20	-	-	-	-	-	-	-	-	4.5	-	-	-	-	-	-
Acenaphthylene	107	100	100	-	-	-	-	-	-	-	-	0.78	-	-	-	-	-	-
Acetophenone	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.24)	-	-	-	-	-	-
Anthracene	1000	100	100	-	-	-	-	-	-	-	-	1.5	-	-	-	-	-	-

TABLE 2a
REMEDIAL INVESTIGATION RESULTS - SUPPLEMENTAL ANALYTICAL RESULTS IN SOIL
558 SACKETT STREET
BROOKLYN, NEW YORK
FILE NO. 0206384

	Action Level																	
Location Name	Restricted Use	NY Part 375	NY Part 375	SB-2A	SB-2A	SB-2A	SB-2A	SB-2A	SB-2A	SB-2A	SB-2A	SB-2A-S1	SB-3A	SB-3A	SB-3A	SB-3A	SB-3A	SB-3A
Sample Name	Soil Cleanup	Restricted	Unrestricted	SB-2A_0-0.5	SB-2A_1-3	SB-2A_3-5	SB-2A_5-7	SB-2A_7-9	SB-2A_9-11	SB-2A_12-14	DUP03_20240326	SB-2A-S1_11-11.5	SB-3A_0-0.5	SB-3A_1-3	SB-3A_3-5	SB-3A_5-7	SB-3A_7-9	SB-3A_9-11
Sample Date	Objectives -	Residential Use	Use	03/26/2024	03/26/2024	03/26/2024	03/26/2024	03/26/2024	03/26/2024	03/26/2024	03/26/2024	03/26/2024	03/26/2024	03/26/2024	03/26/2024	03/26/2024	03/26/2024	03/26/2024
Lab Sample ID	Protection of	Soil Cleanup	Soil Cleanup	L2416482-01	L2416482-02	L2416482-03	L2416482-04	L2416482-05	L2416482-06	L2416482-07	L2416482-74	L2416482-76	L2416482-50	L2416482-51	L2416482-52	L2416482-53	L2416482-54	L2416482-55
Sample Depth (bgs)	Groundwater	Objectives	Objectives	0 - 0.5 (ft)	1 - 3 (ft)	3 - 5 (ft)	5 - 7 (ft)	7 - 9 (ft)	9 - 11 (ft)	12 - 14 (ft)	12 - 14 (ft)	11 - 11.5 (ft)	0 - 0.5 (ft)	1 - 3 (ft)	3 - 5 (ft)	5 - 7 (ft)	7 - 9 (ft)	9 - 11 (ft)
Benzo(a)anthracene	1	1	1	-	-	-	-	-	-	-	-	0.98	-	-	-	-	-	-
Benzo(a)pyrene	22	1	1	-	-	-	-	-	-	-	-	0.98	-	-	-	-	-	-
Benzo(b)fluoranthene	1.7	1	1	-	-	-	-	-	-	-	-	0.8	-	-	-	-	-	-
Benzo(g,h,i)perylene	1000	100	100	-	-	-	-	-	-	-	-	0.46	-	-	-	-	-	-
Benzo(k)fluoranthene	1.7	3.9	0.8	-	-	-	-	-	-	-	-	0.21	-	-	-	-	-	-
Benzoic acid	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.77)	-	-	-	-	-	-
Benzyl Alcohol	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.24)	-	-	-	-	-	-
Biphenyl	NA	NA	NA	-	-	-	-	-	-	-	-	1.2	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.26)	-	-	-	-	-	-
bis(2-Chloroethyl)ether	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.21)	-	-	-	-	-	-
bis(2-Ethylhexyl)phthalate	NA	NA	NA	-	-	-	-	-	-	-	-	0.18 J	-	-	-	-	-	-
Butyl benzylphthalate (BBP)	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.24)	-	-	-	-	-	-
Carbazole	NA	NA	NA	-	-	-	-	-	-	-	-	0.066 J	-	-	-	-	-	-
Chrysene	1	3.9	1	-	-	-	-	-	-	-	-	0.86	-	-	-	-	-	-
Dibenz(a,h)anthracene	1000	0.33	0.33	-	-	-	-	-	-	-	-	0.089 J	-	-	-	-	-	-
Dibenzofuran	210	59	7	-	-	-	-	-	-	-	-	0.17 J	-	-	-	-	-	-
Diethyl phthalate	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.24)	-	-	-	-	-	-
Dimethyl phthalate	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.24)	-	-	-	-	-	-
Di-n-butylphthalate (DBP)	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.24)	-	-	-	-	-	-
Di-n-octyl phthalate (DnOP)	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.24)	-	-	-	-	-	-
Fluoranthene	1000	100	100	-	-	-	-	-	-	-	-	1.9	-	-	-	-	-	-
Fluorene	386	100	30	-	-	-	-	-	-	-	-	1.8	-	-	-	-	-	-
Hexachlorobenzene	3.2	1.2	0.33	-	-	-	-	-	-	-	-	ND (0.14)	-	-	-	-	-	-
Hexachlorobutadiene	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.24)	-	-	-	-	-	-
Hexachlorocyclopentadiene	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.68)	-	-	-	-	-	-
Hexachloroethane	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.19)	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	8.2	0.5	0.5	-	-	-	-	-	-	-	-	0.39	-	-	-	-	-	-
Isophorone	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.21)	-	-	-	-	-	-
Naphthalene	12	100	12	-	-	-	-	-	-	-	-	***120***	-	-	-	-	-	-
Nitrobenzene	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.21)	-	-	-	-	-	-
N-Nitrosodi-n-propylamine	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.24)	-	-	-	-	-	-
N-Nitrosodiphenylamine	NA	NA	NA	-	-	-	-	-	-	-	-	ND (0.19)	-	-	-	-	-	-
Pentachlorophenol	0.8	6.7	0.8	-	-	-	-	-	-	-	-	ND (0.19)	-	-	-	-	-	-
Phenanthrene	1000	100	100	-	-	-	-	-	-	-	-	4.8	-	-	-	-	-	-
Phenol	0.33	100	0.33	-	-	-	-	-	-	-	-	ND (0.24)	-	-	-	-	-	-
Pyrene	1000	100	100	-	-	-	-	-	-	-	-	2.7	-	-	-	-	-	-
Inorganic Compounds (mg/kg)																		
Lead	450	400	63	***1250***	***922***	***1740***	***864***	38.9	32.1	302 J	109 J	-	***849***	94.4	32.1	***1900***	32.7	34
Mercury	0.73	0.81	0.18	***1.26***	***2.14***	***3***	***11***	0.091	ND (0.084)	0.383	0.493	-	***2.64***	0.323	0.073 J	***41.3***	0.091	0.091
TCLP Inorganic Compounds (mg/L)																		
Lead	NA	NA	NA	1.24	0.362 J	0.743	0.354 J	0.509	0.0424 J	0.0567 J	0.0477 J	-	1.06	0.329 J	0.143 J	0.918	0.124 J	0.0455 J
Mercury	NA	NA	NA	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	-	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)
Other																		
Total Solids (%)	NA	NA	NA	86.1	79.6	80.6	77.5	85.9	78	57.1	72.3	68.2	86.4	82.4	89.3	84.4	88.1	88.1

ABBREVIATIONS AND NOTES:

mg/kg: milligram per kilogram
mg/L: milligram per liter
-: Not Analyzed
bgs: below ground surface
J: Value is estimated.
ft: feet
NA: Not Applicable
ND (2.5): Not detected, number in parentheses is the laboratory reporting limit

- For test methods used, see the laboratory data sheets.
- Soil analytical results are compared to the New York State Department of Environmental Conservation (NYSDEC) Title 6 of the Official Compilation of New York Codes, Rules, and Regulations (NYCRR) Part 375 Restricted-Use Residential SCOs and Protection of Groundwater SCO's.
*- **Bold italic** values indicate an exceedance of the Protection of Groundwater Criteria.*
- Grey shading indicates an exceedance of the Unrestricted Use Soil Cleanup Objectives.
- Yellow shading indicates an exceedance of the Restricted Use Residential Soil Cleanup Objectives.

TABLE 3
REMEDIAL INVESTIGATION RESULTS - ANALYTICAL RESULTS IN GROUNDWATER
SACKETT HEIGHTS LLC
558 SACKETT STREET
BROOKLYN, NEW YORK

	Action Level					
Location Name	New York TOGS 111 Ambient Water Quality Standards	MW-1	MW-2	MW-2	MW-3	MW-4
Sample Name		MW-1-20230717	DUP01-20230706	MW-2-20230706	MW-3-20230717	MW-4-20230717
Sample Date		07/17/2023	07/06/2023	07/06/2023	07/17/2023	07/17/2023
Lab Sample ID		L2340792-01 L2343860-03	L2338623-02 L2343860-02	L2338623-01 L2343860-01	L2340792-02 L2343860-04	L2340792-03 L2343860-05
Volatile Organic Compounds (ug/L)						
1,1,1,2-Tetrachloroethane	5	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
1,1,1-Trichloroethane	5	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
1,1,2,2-Tetrachloroethane	5	ND (0.5)	ND (2.5)	ND (2.5)	ND (0.5)	ND (0.5)
1,1,2-Trichloroethane	1	ND (1.5)	ND (7.5)	ND (7.5)	ND (1.5)	ND (1.5)
1,1-Dichloroethane	5	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
1,1-Dichloroethene	5	ND (0.5)	ND (2.5)	ND (2.5)	ND (0.5)	ND (0.5)
1,1-Dichloropropene	5	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
1,2,3-Trichlorobenzene	5	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
1,2,3-Trichloropropane	0.04	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
1,2,4,5-Tetramethylbenzene	5	4.1	**8.7 J**	**17**	**9.9**	ND (2)
1,2,4-Trichlorobenzene	5	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
1,2,4-Trimethylbenzene	5	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
1,2-Dibromoethane (Ethylene Dibromide)	0.0006	ND (2)	ND (10)	ND (10)	ND (2)	ND (2)
1,2-Dichlorobenzene	3	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
1,2-Dichloroethane	0.6	**1.3**	ND (2.5)	**1.7 J**	ND (0.5)	ND (0.5)
1,2-Dichloroethene (total)	NA	ND (2.5)	ND (12)	ND (12)	ND (2.5)	2.5
1,2-Dichloropropane	1	ND (1)	ND (5)	ND (5)	ND (1)	ND (1)
1,3,5-Trimethylbenzene	5	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
1,3-Dichlorobenzene	3	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
1,3-Dichloropropane	5	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
1,3-Dichloropropene	0.4	ND (0.5)	ND (2.5)	ND (2.5)	ND (0.5)	ND (0.5)
1,4-Dichlorobenzene	3	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
1,4-Diethylbenzene	NA	ND (2)	ND (10)	ND (10)	2	ND (2)
1,4-Dioxane	0.35	ND (250)	ND (1200)	ND (1200)	ND (250)	ND (250)
2,2-Dichloropropane	5	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
2-Butanone (Methyl Ethyl Ketone)	50	ND (5)	ND (25)	ND (25)	ND (5)	ND (5)
2-Chlorotoluene	5	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
2-Hexanone (Methyl Butyl Ketone)	50	ND (5)	ND (25)	ND (25)	ND (5)	ND (5)
2-Phenylbutane (sec-Butylbenzene)	5	ND (2.5)	ND (12)	ND (12)	1.1 J	ND (2.5)
4-Chlorotoluene	5	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
4-Ethyltoluene (1-Ethyl-4-Methylbenzene)	NA	ND (2)	ND (10)	ND (10)	ND (2)	ND (2)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	NA	ND (5)	ND (25)	ND (25)	ND (5)	ND (5)
Acetone	50	ND (5)	ND (25)	ND (25)	ND (5)	ND (5)
Acrylonitrile	5	ND (5)	ND (25)	ND (25)	ND (5)	ND (5)
Benzene	1	0.99	**7.3**	**8.8**	ND (0.5)	ND (0.5)
Bromobenzene	5	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
Bromodichloromethane	50	ND (0.5)	ND (2.5)	ND (2.5)	ND (0.5)	ND (0.5)
Bromoform	50	ND (2)	ND (10)	ND (10)	ND (2)	ND (2)
Bromomethane (Methyl Bromide)	5	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
Carbon disulfide	60	ND (5)	ND (25)	ND (25)	ND (5)	ND (5)
Carbon tetrachloride	5	ND (0.5)	ND (2.5)	ND (2.5)	ND (0.5)	ND (0.5)
Chlorobenzene	5	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
Chlorobromomethane	5	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
Chloroethane	5	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
Chloroform (Trichloromethane)	7	0.8 J	ND (12)	ND (12)	ND (2.5)	ND (2.5)
Chloromethane (Methyl Chloride)	5	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
cis-1,2-Dichloroethene	5	ND (2.5)	ND (12)	ND (12)	ND (2.5)	2.5
cis-1,3-Dichloropropene	0.4	ND (0.5)	ND (2.5)	ND (2.5)	ND (0.5)	ND (0.5)
Cymene (p-Isopropyltoluene)	5	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
Dibromochloromethane	50	ND (0.5)	ND (2.5)	ND (2.5)	ND (0.5)	ND (0.5)
Dibromomethane	5	ND (5)	ND (25)	ND (25)	ND (5)	ND (5)
Dichlorodifluoromethane (CFC-12)	5	ND (5)	ND (25)	ND (25)	ND (5)	ND (5)
Ethyl Ether	NA	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
Ethylbenzene	5	1.1 J	ND (12)	ND (12)	ND (2.5)	ND (2.5)
Hexachlorobutadiene	0.5	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
Isopropylbenzene (Cumene)	5	1.9 J	**8.7 J**	**15**	**5.7**	ND (2.5)
m,p-Xylenes	5	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
Methyl Tert Butyl Ether (MTBE)	10	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
Methylene chloride (Dichloromethane)	5	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
Naphthalene	10	8.9	ND (12)	ND (12)	ND (2.5)	ND (2.5)
n-Butylbenzene	5	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
n-Propylbenzene	5	ND (2.5)	4.6 J	**12**	**8.2**	ND (2.5)
o-Xylene	5	1 J	ND (12)	ND (12)	ND (2.5)	ND (2.5)
Styrene	5	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
tert-Butylbenzene	5	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
Tetrachloroethene	5	ND (0.5)	ND (2.5)	ND (2.5)	1.2	4
Toluene	5	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
trans-1,2-Dichloroethene	5	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
trans-1,3-Dichloropropene	0.4	ND (0.5)	ND (2.5)	ND (2.5)	ND (0.5)	ND (0.5)
trans-1,4-Dichloro-2-butene	5	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
Trichloroethene	5	ND (0.5)	ND (2.5)	ND (2.5)	ND (0.5)	0.97
Trichlorofluoromethane (CFC-11)	5	ND (2.5)	ND (12)	ND (12)	ND (2.5)	ND (2.5)
Vinyl acetate	NA	ND (5)	ND (25)	ND (25)	ND (5)	ND (5)
Vinyl chloride	2	ND (1)	ND (5)	ND (5)	ND (1)	ND (1)
Xylene (Total)	5	1 J	ND (12)	ND (12)	ND (2.5)	ND (2.5)

ABBREVIATIONS AND NOTES:

µg/L: micrograms per liter
ng/L: nanogram per liter

-: Not Analyzed
bgs: below ground surface
ft: feet
J: Value is estimated.
J+: Value is estimated, biased high
NA: Not Applicable
ND (2.5): Not detected, number in parentheses is the laboratory reporting limit
R: Rejected

- For test methods used, see the laboratory data sheets.
- Water analytical results are compared to the New York TOGS 111 Ambient Water Quality Standards.
- Bold indicates an exceedance of AWQS criteria.

TABLE 3
REMEDIAL INVESTIGATION RESULTS - ANALYTICAL RESULTS IN GROUNDWATER
SACKETT HEIGHTS LLC
558 SACKETT STREET
BROOKLYN, NEW YORK

Location Name / Sample Name / Sample Date / Lab Sample ID	Action Level: New York TOGS 111 Ambient Water Quality Standards	MW-1 MW-1-20230717 07/17/2023 L2340792-01 L2343860-03	MW-2 DUP01-20230706 07/06/2023 L2338623-02 L2343860-02	MW-2 MW-2-20230706 07/06/2023 L2338623-01 L2343860-01	MW-3 MW-3-20230717 07/17/2023 L2340792-02 L2343860-04	MW-4 MW-4-20230717 07/17/2023 L2340792-03 L2343860-05
Semi-Volatile Organic Compounds (ug/L)						
1,2,4,5-Tetrachlorobenzene	5	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
1,2,4-Trichlorobenzene	5	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
1,2-Dichlorobenzene	3	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
1,3-Dichlorobenzene	3	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
1,4-Dichlorobenzene	3	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
2,2'-oxybis(1-Chloropropane)	5	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
2,4,5-Trichlorophenol	NA	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
2,4,6-Trichlorophenol	NA	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
2,4-Dichlorophenol	5	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
2,4-Dimethylphenol	50	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
2,4-Dinitrophenol	10	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)
2,4-Dinitrotoluene	5	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
2,6-Dinitrotoluene	5	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
2-Chlorophenol	NA	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
2-Methylphenol (o-Cresol)	NA	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
2-Nitroaniline	5	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
2-Nitrophenol	NA	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
3&4-Methylphenol	NA	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
3,3'-Dichlorobenzidine	5	ND (5)	ND (5)	5 R	ND (5)	ND (5)
3-Nitroaniline	5	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
4,6-Dinitro-2-methylphenol	NA	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Bromophenyl phenyl ether (BDE-3)	NA	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
4-Chloro-3-methylphenol	NA	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
4-Chloroaniline	5	ND (5)	5 R	5 R	ND (5)	ND (5)
4-Chlorophenyl phenyl ether	NA	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
4-Nitroaniline	5	ND (5)	ND (5)	5 R	ND (5)	ND (5)
4-Nitrophenol	NA	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Acetophenone	NA	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Benzoic acid	NA	50 R	ND (50)	ND (50)	50 R	50 R
Benzyl Alcohol	NA	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
Biphenyl	5	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
bis(2-Chloroethoxy)methane	5	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
bis(2-Chloroethyl)ether	1	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
bis(2-Ethylhexyl)phthalate	5	ND (3)	ND (3)	ND (3)	ND (3)	ND (3)
Butyl benzylphthalate (BBP)	50	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Carbazole	NA	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
Dibenzofuran	NA	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
Diethyl phthalate	50	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Dimethyl phthalate	50	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Di-n-butylphthalate (DBP)	50	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Di-n-octyl phthalate (DnOP)	50	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Hexachlorocyclopentadiene	5	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)
Isophorone	50	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Nitrobenzene	0.4	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
N-Nitrosodi-n-propylamine	NA	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
N-Nitrosodiphenylamine	50	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
Phenol	1	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Inorganic Compounds (ug/L)						
Aluminum, Dissolved	NA	ND (15)	ND (15)	ND (15)	ND (15)	ND (15)
Antimony, Dissolved	3	0.74 J	ND (4)	0.52 J	**7.03**	0.86 J
Arsenic, Dissolved	25	0.97	1.07	1.52	1.26	0.98
Barium, Dissolved	1000	116.1	69.14 J	104.9 J	83.32	58.85
Beryllium, Dissolved	3	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
Cadmium, Dissolved	5	0.16 J	ND (0.2)	ND (0.2)	**5.52**	0.16 J
Calcium, Dissolved	NA	330000	144000	161000	253000	73500
Chromium, Dissolved	50	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
Cobalt, Dissolved	NA	2.62	1.02	1.2	2.25	1.4
Copper, Dissolved	200	4.24	0.41 J	ND (1)	22.27	4.2
Iron, Dissolved	300	25.9 J	24.2 J	47.4 J	45.4 J	ND (50)
Lead, Dissolved	25	0.4 J	ND (1)	0.37 J	0.59 J	ND (1)
Magnesium, Dissolved	35000	**53200**	27000	29000	**44800**	**40800**
Manganese, Dissolved	300	**8254**	**1714**	**1602**	119.5	283.2
Mercury, Dissolved	0.7	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)
Nickel, Dissolved	100	5.36	2.32	2.96	39.22	6.03
Potassium, Dissolved	NA	30400	30100	28800	41300	13200
Selenium, Dissolved	10	3.97 J	ND (5)	ND (5)	**12.7**	ND (5)
Silver, Dissolved	50	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)
Sodium, Dissolved	20000	**227000 J**	**148000 J**	**158000 J**	**122000 J**	**105000 J**
Thallium, Dissolved	0.5	0.15 J	ND (1)	ND (1)	ND (1)	ND (1)
Vanadium, Dissolved	NA	ND (5)	ND (5)	ND (5)	ND (5)	1.84 J
Zinc, Dissolved	2000	11.94	4.09 J	4.63 J	1448	18.24
Aluminum, Total	NA	22	6.15 J	4.48 J	5.87 J	9 J
Antimony, Total	3	0.67 J	ND (4)	ND (4)	**7.49**	0.86 J
Arsenic, Total	25	1.12	12.86	12.4	1.51	1.29
Barium, Total	1000	121.9	154.5	162.6	90.87	65.05
Beryllium, Total	3	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
Cadmium, Total	5	0.18 J	ND (0.2)	ND (0.2)	**6.16**	0.19 J
Calcium, Total	NA	383000	135000	140000	292000	86000
Chromium, Total	50	1.1	0.48 J	0.39 J	2.17	2.09
Cobalt, Total	NA	2.56	1.11	1.2	2.36	1.7
Copper, Total	200	4.68 J+	ND (1)	ND (1)	22.51 J+	2.67 J+
Iron, Total	300	58.8	**44400**	**42000**	147	ND (50)
Lead, Total	25	1.6	ND (1)	0.36 J	2.95	0.7 J
Magnesium, Total	35000	**59700**	24100 J	26400 J	**48400**	**47000**
Manganese, Total	300	**8244**	**1833**	**1773**	128	**349.4**
Mercury, Total	0.7	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)
Nickel, Total	100	5.92	1.97 J	2.4	41.74	7.05
Potassium, Total	NA	35500	26800	27300	49300	15600
Selenium, Total	10	5.83	ND (5)	ND (5)	**14.4**	2.42 J
Silver, Total	50	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)
Sodium, Total	20000	**252000**	**135000**	**150000**	**133000**	**117000**
Thallium, Total	0.5	0.17 J	ND (1)	0.14 J	ND (1)	ND (1)
Vanadium, Total	NA	ND (5)	ND (5)	ND (5)	ND (5)	2.08 J
Zinc, Total	2000	9.58 J	11.22	6.46 J	1417	19.37

ABBREVIATIONS AND NOTES:

µg/L: micrograms per liter
ng/L: nanogram per liter

-: Not Analyzed
bgs: below ground surface
ft: feet
J: Value is estimated.
J+: Value is estimated, biased high
NA: Not Applicable
ND (2.5): Not detected, number in parentheses is the laboratory reporting limit
R: Rejected

- For test methods used, see the laboratory data sheets.
- Water analytical results are compared to the New York TOGS 111 Ambient Water Quality Standards.
- Bold indicates an exceedance of AWQS criteria.

TABLE 3
REMEDIAL INVESTIGATION RESULTS - ANALYTICAL RESULTS IN GROUNDWATER
SACKETT HEIGHTS LLC
558 SACKETT STREET
BROOKLYN, NEW YORK

	Action Level					
Location Name	New York TOGS 111 Ambient Water Quality Standards	MW-1	MW-2	MW-2	MW-3	MW-4
Sample Name		MW-1-20230717	DUP01-20230706	MW-2-20230706	MW-3-20230717	MW-4-20230717
Sample Date		07/17/2023	07/06/2023	07/06/2023	07/17/2023	07/17/2023
Lab Sample ID		L2340792-01 L2343860-03	L2338623-02 L2343860-02	L2338623-01 L2343860-01	L2340792-02 L2343860-04	L2340792-03 L2343860-05
PCBs (ug/L)						
Aroclor-1016 (PCB-1016)	NA	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)
Aroclor-1221 (PCB-1221)	NA	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)
Aroclor-1232 (PCB-1232)	NA	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)
Aroclor-1242 (PCB-1242)	NA	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)
Aroclor-1248 (PCB-1248)	NA	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)
Aroclor-1254 (PCB-1254)	NA	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)
Aroclor-1260 (PCB-1260)	NA	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)
Aroclor-1262 (PCB-1262)	NA	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)
Aroclor-1268 (PCB-1268)	NA	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)
Polychlorinated biphenyls (PCBs)	0.09	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)
Pesticides (ug/L)						
4,4'-DDD	0.3	ND (0.029)	ND (0.033)	ND (0.029)	ND (0.029)	ND (0.029)
4,4'-DDE	0.2	ND (0.029)	ND (0.033)	ND (0.029)	ND (0.029)	ND (0.029)
4,4'-DDT	0.2	ND (0.029)	ND (0.033)	ND (0.029)	ND (0.029)	ND (0.029)
Aldrin	0	ND (0.014)	ND (0.017)	ND (0.014)	ND (0.014)	ND (0.014)
alpha-BHC	0.01	ND (0.014)	ND (0.017)	ND (0.014)	ND (0.014)	ND (0.014)
alpha-Chlordane (cis)	NA	ND (0.014)	ND (0.017)	ND (0.014)	ND (0.014)	ND (0.014)
beta-BHC	0.04	ND (0.014)	ND (0.017)	ND (0.014)	ND (0.014)	ND (0.014)
Chlordane	0.05	ND (0.143)	ND (0.167)	ND (0.143)	ND (0.143)	ND (0.143)
delta-BHC	0.04	ND (0.014)	ND (0.017)	ND (0.014)	ND (0.014)	ND (0.014)
Dieldrin	0.004	ND (0.029)	ND (0.033)	ND (0.029)	ND (0.029)	ND (0.029)
Endosulfan I	NA	ND (0.014)	ND (0.017)	ND (0.014)	ND (0.014)	ND (0.014)
Endosulfan II	NA	ND (0.029)	ND (0.033)	ND (0.029)	ND (0.029)	ND (0.029)
Endosulfan sulfate	NA	ND (0.029)	ND (0.033)	ND (0.029)	ND (0.029)	ND (0.029)
Endrin	0	ND (0.029)	ND (0.033)	ND (0.029)	ND (0.029)	ND (0.029)
Endrin aldehyde	5	ND (0.029)	ND (0.033)	ND (0.029)	ND (0.029)	ND (0.029)
Endrin ketone	5	ND (0.029)	ND (0.033)	ND (0.029)	ND (0.029)	ND (0.029)
gamma-BHC (Lindane)	0.05	ND (0.014)	ND (0.017)	ND (0.014)	ND (0.014)	ND (0.014)
gamma-Chlordane (trans)	NA	ND (0.014)	ND (0.017)	ND (0.014)	ND (0.014)	ND (0.014)
Heptachlor	0.04	ND (0.014)	ND (0.017)	ND (0.014)	ND (0.014)	ND (0.014)
Heptachlor epoxide	0.03	ND (0.014)	ND (0.017)	ND (0.014)	ND (0.014)	ND (0.014)
Methoxychlor	35	ND (0.143)	ND (0.167)	ND (0.143)	ND (0.143)	ND (0.143)
Toxaphene	0.06	ND (0.143)	ND (0.167)	ND (0.143)	ND (0.143)	ND (0.143)
PFAS (ng/L)						
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	NA	2.44 J	ND (6.7) J	ND (6.39) J	ND (6.37) J	ND (7.07)
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	NA	ND (6.11)	ND (6.7) J	ND (6.39) J	ND (6.37) J	ND (7.07)
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	NA	ND (1.53)	ND (1.68)	ND (1.6)	ND (1.59)	ND (1.77)
N-Methyl Perfluorooctanesulfonamidoacetic Acid (MeFOSAA)	NA	ND (1.53)	ND (1.68)	ND (1.6) J	ND (1.59)	ND (1.77)
Perfluorobutanesulfonic acid (PFBS)	NA	8.1	4.77	5.91	7.32	1.06 J
Perfluorobutanoic acid (PFBA)	NA	16.6	22.7 J	33.6 J	73	8.22
Perfluorodecanesulfonic acid (PFDS)	NA	ND (1.53)	ND (1.68)	ND (1.6) J	ND (1.59)	ND (1.77)
Perfluorodecanoic acid (PFDA)	NA	ND (1.53)	ND (1.68)	ND (1.6)	ND (1.59)	ND (1.77)
Perfluorododecanoic acid (PFDoDA)	NA	ND (1.53)	ND (1.68)	ND (1.6)	ND (1.59)	ND (1.77)
Perfluoroheptanesulfonic acid (PFHpS)	NA	ND (1.53)	ND (1.68)	ND (1.6)	ND (1.59)	ND (1.77)
Perfluoroheptanoic acid (PFHpA)	NA	9.93	11.7	13.7	27.6	3.62
Perfluorohexanesulfonic acid (PFHxS)	NA	ND (1.53)	0.502 J	5.27 J	ND (1.59)	ND (1.77)
Perfluorohexanoic acid (PFHxA)	NA	20.7	20.4	26.4	88.3	6.45
Perfluorononanoic acid (PFNA)	NA	1.38 J	1.59 J	1.6 J	0.716 J	ND (1.77)
Perfluorooctane sulfonamide (PFOSA)	NA	ND (1.53)	ND (1.68)	ND (1.6)	ND (1.59)	ND (1.77)
Perfluorooctanesulfonic acid (PFOS)	2.7	ND (1.53)	ND (1.68)	ND (1.6)	ND (1.59)	ND (1.77)
Perfluorooctanoic acid (PFOA)	6.7	**57.1**	**69.7 J**	**105 J**	**88.4**	**11.9**
Perfluoropentanoic acid (PFPeA)	NA	18.7	22.1 J	60 J	93.7	8.48
Perfluorotetradecanoic acid (PFTeDA)	NA	ND (1.53)	ND (1.68)	ND (1.6)	ND (1.59)	ND (1.77)
Perfluorotridecanoic acid (PFTrDA)	NA	ND (1.53)	ND (1.68)	ND (1.6)	ND (1.59)	ND (1.77)
Perfluoroundecanoic acid (PFUnDA)	NA	ND (1.53)	ND (1.68)	ND (1.6)	ND (1.59)	ND (1.77)
US EPA PFAS (PFOS + PFOA)	NA	57.1	69.7 J	105 J	88.4	11.9

ABBREVIATIONS AND NOTES:

µg/L: micrograms per liter
ng/L: nanogram per liter

-: Not Analyzed
bgs: below ground surface
ft: feet
J: Value is estimated.
J+: Value is estimated, biased high
NA: Not Applicable
ND (2.5): Not detected, number in parentheses is the laboratory reporting limit
R: Rejected

- For test methods used, see the laboratory data sheets.
- Water analytical results are compared to the New York TOGS 111 Ambient Water Quality Standards.
- Bold indicates an exceedance of AWQS criteria.

TABLE 3
REMEDIAL INVESTIGATION RESULTS - ANALYTICAL RESULTS IN GROUNDWATER
SACKETT HEIGHTS LLC
558 SACKETT STREET
BROOKLYN, NEW YORK

Location Name / Sample Name / Sample Date / Lab Sample ID	Action Level: New York TOGS 111 Ambient Water Quality Standards	MW-1 MW-1-20230717 07/17/2023 L2340792-01 L2343860-03	MW-2 DUP01-20230706 07/06/2023 L2338623-02 L2343860-02	MW-2 MW-2-20230706 07/06/2023 L2338623-01 L2343860-01	MW-3 MW-3-20230717 07/17/2023 L2340792-02 L2343860-04	MW-4 MW-4-20230717 07/17/2023 L2340792-03 L2343860-05
Semi-Volatile Organic Compounds (SIM) (ug/L)						
1,4-Dioxane	0.35	ND (0.144)	0.0896 J	0.119 J	ND (0.15)	ND (0.144)
2-Chloronaphthalene	10	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)
2-Methylnaphthalene	NA	ND (0.1)	ND (0.1)	ND (0.1)	0.13 J+	ND (0.1)
Acenaphthene	20	ND (0.1)	9.8 J	17 J	ND (0.1)	ND (0.1)
Acenaphthylene	NA	0.05 J+	0.05 J	0.11	0.04 J	ND (0.1)
Anthracene	50	0.02 J+	0.03 J	0.04 J	0.05 J	ND (0.1)
Benzo(a)anthracene	0.002	**0.02 J+**	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
Benzo(a)pyrene	0	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
Benzo(b)fluoranthene	0.002	ND (0.1)	**0.02 J**	ND (0.1)	ND (0.1)	ND (0.1)
Benzo(g,h,i)perylene	NA	ND (0.1)	0.04 J	ND (0.1)	ND (0.1)	ND (0.1)
Benzo(k)fluoranthene	0.002	ND (0.1)	**0.02 J**	ND (0.1)	ND (0.1)	ND (0.1)
Chrysene	0.002	ND (0.1)	ND (0.1)	**0.01 J**	ND (0.1)	ND (0.1)
Dibenz(a,h)anthracene	NA	ND (0.1)	0.06 J	ND (0.1)	ND (0.1)	ND (0.1)
Fluoranthene	50	ND (0.1)	ND (0.1)	ND (0.1)	0.03 J	ND (0.1)
Fluorene	50	0.01 J+	0.74 J	2.9 J	0.05 J	ND (0.1)
Hexachlorobenzene	0.04	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	0.01 J
Hexachlorobutadiene	0.5	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
Hexachloroethane	5	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)
Indeno(1,2,3-cd)pyrene	0.002	ND (0.1)	**0.05 J**	ND (0.1)	ND (0.1)	ND (0.1)
Naphthalene	10	0.33 J+	0.22 J	0.52 J	0.41 J+	ND (0.1)
Pentachlorophenol	1	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)
Phenanthrene	50	ND (0.1)	0.03 J	0.38 J	0.04 J	ND (0.1)
Pyrene	50	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)

ABBREVIATIONS AND NOTES:
µg/L: micrograms per liter
ng/L: nanogram per liter
-: Not Analyzed
bgs: below ground surface
ft: feet
J: Value is estimated.
J+: Value is estimated, biased high
NA: Not Applicable
ND (2.5): Not detected, number in parentheses is the laboratory reporting limit
R: Rejected

- For test methods used, see the laboratory data sheets.
- Water analytical results are compared to the New York TOGS 111 Ambient Water Quality Standards.
- Bold indicates an exceedance of AWQS criteria.

TABLE 3a
SUMMARY OF WATER QUALITY DATA
558 SACKETT STREET
BROOKLYN, NEW YORK
FILE NO. 0206384

	Action Level								
Location Name	New York TOGS	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-7
Sample Name	111 Ambient	MW-1_20240404	MW-2_20240405	MW-3-20240403	MW-4_20240404	MW-5-20240403	MW-6_20240405	MW-7-20240403	DUP1_20240403
Sample Date	Water Quality	04/04/2024	04/05/2024	04/03/2024	04/04/2024	04/03/2024	04/05/2024	04/03/2024	04/03/2024
Lab Sample ID	Standards	L2418559-02	L2418782-02	L2418246-03	L2418559-01	L2418246-02	L2418782-01	L2418246-01	L2418246-04
Volatile Organic Compounds (ug/L)									
1,1,1,2-Tetrachloroethane	5	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (12)	ND (12)	ND (12)
1,1,1-Trichloroethane	5	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (12)	ND (12)	ND (12)
1,1,2,2-Tetrachloroethane	5	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (2.5)	ND (2.5)	ND (2.5)
1,1,2-Trichloroethane	1	ND (1.5)	ND (1.5)	ND (1.5)	ND (1.5)	ND (1.5)	ND (7.5)	ND (7.5)	ND (7.5)
1,1-Dichloroethane	5	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (12)	ND (12)	ND (12)
1,1-Dichloroethene	5	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (2.5)	ND (2.5)	ND (2.5)
1,1-Dichloropropene	5	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (12)	ND (12)	ND (12)
1,2,3-Trichlorobenzene	5	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (12)	ND (12)	ND (12)
1,2,3-Trichloropropane	0.04	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (12)	ND (12)	ND (12)
1,2,4,5-Tetramethylbenzene	5	ND (2)	1.3 J	ND (2)	ND (2)	**58**	**160**	4.2 J	3.8 J
1,2,4-Trichlorobenzene	5	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (12)	ND (12)	ND (12)
1,2,4-Trimethylbenzene	5	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (12)	**57**	**54**
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (12)	ND (12)	ND (12)
1,2-Dibromoethane (Ethylene Dibromide)	0.0006	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (10)	ND (10)	ND (10)
1,2-Dichlorobenzene	3	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (12)	ND (12)	ND (12)
1,2-Dichloroethane	0.6	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (2.5)	ND (2.5)	ND (2.5)
1,2-Dichloroethene (total)	NA	ND (2.5)	ND (2.5)	ND (2.5)	8.6	1.5 J	3.9 J	ND (12)	ND (12)
1,2-Dichloropropane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
1,3,5-Trimethylbenzene	5	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (12)	**16**	**15**
1,3-Dichlorobenzene	3	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (12)	ND (12)	ND (12)
1,3-Dichloropropane	5	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (12)	ND (12)	ND (12)
1,3-Dichloropropene	0.4	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (2.5)	ND (2.5)	ND (2.5)
1,4-Dichlorobenzene	3	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (12)	ND (12)	ND (12)
1,4-Diethylbenzene	NA	ND (2)	ND (2)	ND (2)	ND (2)	14	50	9.8 J	9.2 J
1,4-Dioxane	0.35	ND (250)	ND (250)	ND (250)	ND (250)	ND (250)	ND (1200)	ND (1200)	ND (1200)
2,2-Dichloropropane	5	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (12)	ND (12)	ND (12)
2-Butanone (Methyl Ethyl Ketone)	50	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (25)	ND (25)	ND (25)
2-Chlorotoluene	5	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (12)	ND (12)	ND (12)
2-Hexanone (Methyl Butyl Ketone)	50	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (25)	ND (25)	ND (25)
2-Phenylbutane (sec-Butylbenzene)	5	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	**11**	**36**	ND (12)	ND (12)
4-Chlorotoluene	5	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (12)	ND (12)	ND (12)
4-Ethyltoluene (1-Ethyl-4-Methylbenzene)	NA	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (10)	34	32
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	NA	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (25)	ND (25)	ND (25)
Acetone	50	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	8.8 J	ND (25)	ND (25)
Acrylonitrile	5	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (25)	ND (25)	ND (25)
Benzene	1	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	1	ND (2.5)	**3.8**	**3.8**
Bromobenzene	5	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (12)	ND (12)	ND (12)
Bromodichloromethane	50	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (2.5)	ND (2.5)	ND (2.5)
Bromoform	50	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (10)	ND (10)	ND (10)
Bromomethane (Methyl Bromide)	5	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (12)	ND (12)	ND (12)
Carbon disulfide	60	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (25)	ND (25)	ND (25)
Carbon tetrachloride	5	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (2.5)	ND (2.5)	ND (2.5)
Chlorobenzene	5	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (12)	ND (12)	ND (12)
Chlorobromomethane	5	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (12)	ND (12)	ND (12)
Chloroethane	5	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (12)	ND (12)	ND (12)
Chloroform (Trichloromethane)	7	0.78 J	ND (2.5)	1.4 J	ND (2.5)	ND (2.5)	ND (12)	ND (12)	ND (12)
Chloromethane (Methyl Chloride)	5	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (12)	ND (12)	ND (12)
cis-1,2-Dichloroethene	5	ND (2.5)	ND (2.5)	ND (2.5)	**8.6**	1.5 J	3.9 J	ND (12)	ND (12)
cis-1,3-Dichloropropene	0.4	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (2.5)	ND (2.5)	ND (2.5)
Cymene (p-Isopropyltoluene)	5	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (12)	ND (12)	ND (12)
Dibromochloromethane	50	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (2.5)	ND (2.5)	ND (2.5)
Dibromomethane	5	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (25)	ND (25)	ND (25)
Dichlorodifluoromethane (CFC-12)	5	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (25)	ND (25)	ND (25)
Ethyl Ether	NA	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (12)	ND (12)	ND (12)
Ethylbenzene	5	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	**7 J**	**90**	**83**
Hexachlorobutadiene	0.5	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (12)	ND (12)	ND (12)
Isopropylbenzene (Cumene)	5	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	**29**	**160**	**13**	**12**
m,p-Xylenes	5	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	0.75 J	ND (12)	**42 J**	**39 J**
Methyl Tert Butyl Ether (MTBE)	10	ND (2.5)	ND (2.5)	ND (2.5)	0.45 J	ND (2.5)	1.4 J	ND (12)	ND (12)
Methylene chloride (Dichloromethane)	5	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (12)	ND (12)	ND (12)
Naphthalene	10	ND (2.5)	ND (2.5)	0.78 J	ND (2.5)	1.3 J	ND (12)	**800**	**720**
n-Butylbenzene	5	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	**7.9**	**53**	ND (12)	ND (12)
n-Propylbenzene	5	ND (2.5)	2.8	ND (2.5)	ND (2.5)	**84**	**570**	**5.6 J**	**5.1 J**
o-Xylene	5	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (12)	**34**	**32**
Styrene	5	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (12)	ND (12)	ND (12)
tert-Butylbenzene	5	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (12)	ND (12)	ND (12)
Tetrachloroethene	5	0.4 J	ND (0.5)	5	**29**	**10**	**11**	1.2 J	0.98 J
Toluene	5	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	0.71 J	ND (12)	ND (12)	ND (12)
trans-1,2-Dichloroethene	5	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (12)	ND (12)	ND (12)
trans-1,3-Dichloropropene	0.4	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (2.5)	ND (2.5)	ND (2.5)
trans-1,4-Dichloro-2-butene	5	ND (2.5)	ND (2.5) J	ND (2.5)	ND (2.5)	ND (2.5)	ND (12) J	ND (12)	ND (12)
Trichloroethene	5	0.82	ND (0.5)	0.7	**5.7**	1.5	3.2	1.8 J	1.7 J
Trichlorofluoromethane (CFC-11)	5	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (12)	ND (12)	ND (12)
Vinyl acetate	NA	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (25)	ND (25)	ND (25)
Vinyl chloride	2	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
Xylene (Total)	5	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	0.75 J	ND (12)	**76**	**71**

TABLE 3a
SUMMARY OF WATER QUALITY DATA
558 SACKETT STREET
BROOKLYN, NEW YORK
FILE NO. 0206384

	Action Level								
Location Name	New York TOGS	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-7
Sample Name	111 Ambient	MW-1_20240404	MW-2_20240405	MW-3-20240403	MW-4_20240404	MW-5-20240403	MW-6_20240405	MW-7-20240403	DUP1_20240403
Sample Date	Water Quality	04/04/2024	04/05/2024	04/03/2024	04/04/2024	04/03/2024	04/05/2024	04/03/2024	04/03/2024
Lab Sample ID	Standards	L2418559-02	L2418782-02	L2418246-03	L2418559-01	L2418246-02	L2418782-01	L2418246-01	L2418246-04
Semi-Volatile Organic Compounds (ug/L)									
1,2,4,5-Tetrachlorobenzene	5	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
1,2,4-Trichlorobenzene	5	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
1,2-Dichlorobenzene	3	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
1,3-Dichlorobenzene	3	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
1,4-Dichlorobenzene	3	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
2,2'-oxybis(1-Chloropropane)	5	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
2,4,5-Trichlorophenol	NA	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
2,4,6-Trichlorophenol	NA	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
2,4-Dichlorophenol	5	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
2,4-Dimethylphenol	50	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
2,4-Dinitrophenol	10	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)
2,4-Dinitrotoluene	5	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
2,6-Dinitrotoluene	5	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
2-Chlorophenol	NA	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
2-Methylphenol (o-Cresol)	NA	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
2-Nitroaniline	5	ND (5)	ND (5)	ND (5)	ND (5) J	ND (5)	ND (5)	ND (5)	ND (5)
2-Nitrophenol	NA	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
3&4-Methylphenol	NA	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
3,3'-Dichlorobenzidine	5	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
3-Nitroaniline	5	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
4,6-Dinitro-2-methylphenol	NA	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Bromophenyl phenyl ether (BDE-3)	NA	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
4-Chloro-3-methylphenol	NA	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
4-Chloroaniline	5	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
4-Chlorophenyl phenyl ether	NA	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
4-Nitroaniline	5	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
4-Nitrophenol	NA	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Acetophenone	NA	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Benzoic acid	NA	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)
Benzyl Alcohol	NA	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
Biphenyl	5	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	**8**	**6.6**
bis(2-Chloroethoxy)methane	5	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
bis(2-Chloroethyl)ether	1	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
bis(2-Ethylhexyl)phthalate	5	ND (3)	ND (3)	ND (3)	ND (3)	ND (3)	2.2 J	ND (3)	ND (3)
Butyl benzylphthalate (BBP)	50	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Carbazole	NA	ND (2)	ND (2)	ND (2)	ND (2) J	ND (2)	ND (2)	ND (2)	ND (2)
Dibenzofuran	NA	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	0.62 J	0.8 J	0.8 J
Diethyl phthalate	50	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Dimethyl phthalate	50	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Di-n-butylphthalate (DBP)	50	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Di-n-octyl phthalate (DnOP)	50	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Hexachlorocyclopentadiene	5	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)
Isophorone	50	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Nitrobenzene	0.4	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
N-Nitrosodi-n-propylamine	NA	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
N-Nitrosodiphenylamine	50	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
Phenol	1	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Inorganic Compounds (ug/L)									
Aluminum, Dissolved	NA	7.58 J	16.5	6.29 J	5.82 J	9.64 J	14.9	10.4	11
Antimony, Dissolved	3	2.42 J	2.01 J	**5.42**	0.75 J	ND (4)	0.47 J	2.17 J	2.67 J
Arsenic, Dissolved	25	0.71	3.03	1.11	1.36	3.29	6.14	1.58	1.82
Barium, Dissolved	1000	54.98	20.44	48.99	41.06	59.12	92.36	58.98	58.02
Beryllium, Dissolved	3	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
Cadmium, Dissolved	5	0.08 J	ND (0.2)	2.05	ND (0.2)	ND (0.2)	ND (0.2)	0.46	0.47
Calcium, Dissolved	NA	206000	38200	170000	84400	174000	85200	147000	149000
Chromium, Dissolved	50	9.02	7.32	5.59	0.93 J	0.24 J	0.3 J	7.25	7.23
Cobalt, Dissolved	NA	0.19 J	0.22 J	0.32 J	ND (0.5)	2.41	2.76	0.26 J	0.25 J
Copper, Dissolved	200	8.35	4.75	17.28	1.97	2.72	0.5 J	6.15	6.84
Iron, Dissolved	300	21.4 J	24.9 J	ND (50)	ND (50)	**4630**	**2960**	ND (50)	ND (50)
Lead, Dissolved	25	0.61 J	4.61	2.76	ND (1)	ND (1)	1.5	1.48	1.41
Magnesium, Dissolved	35000	**53100 J**	5200	32300	**37400 J**	**38700**	**47100**	30600	31200
Manganese, Dissolved	300	36.33	4.41	1.74	5.4	**1600**	**7032**	19.3	18.55
Mercury, Dissolved	0.7	ND (0.2)	ND (0.2)	0.09 J	ND (0.2)	0.1 J	ND (0.2)	0.1 J	ND (0.2)
Nickel, Dissolved	100	4.06	0.82 J	41.03	2.04	2.53	4.45	15.41	15.64
Potassium, Dissolved	NA	23000	6400	27800	7370	18900	14100	18800	18600
Selenium, Dissolved	10	9.98	2.43 J	9.31	ND (5)	**37.3**	ND (5)	4.3 J	4.21 J
Silver, Dissolved	50	ND (0.4)	ND (0.4)	ND (0.4)	0.31 J	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)
Sodium, Dissolved	20000	**93200**	**21700**	**61100**	**78000**	**112000**	**93200**	**66800**	**68100**
Thallium, Dissolved	0.5	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Vanadium, Dissolved	NA	ND (5)	3.16 J	1.58 J	2.06 J	ND (5)	ND (5)	2.21 J	2.14 J
Zinc, Dissolved	2000	12.91	ND (10)	513.5	10.2	ND (10)	ND (10)	134	137.8
Aluminum, Total	NA	409	134	49.8	19.6	5360	93.3	523 J	1630 J
Antimony, Total	3	2.32 J	1.86 J	**3.75 J**	1.12 J	ND (4)	0.44 J	2.23 J	2.32 J
Arsenic, Total	25	1.07	3.29	1.12 J+	1.37	6.01	6.71	2.09 J	2.94 J
Barium, Total	1000	65.64	22.01	50.12	37.16	76.76	90.66	80.77 J	117.7 J
Beryllium, Total	3	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	0.31 J	ND (0.5)	ND (0.5)	0.14 J
Cadmium, Total	5	0.11 J	0.13 J	1.96	ND (0.2)	ND (0.2)	ND (0.2)	0.54	0.68
Calcium, Total	NA	235000	37400	167000	94300	183000	83200	139000	140000
Chromium, Total	50	10.34	7.42	5.7	1.18	8.38	0.5 J	8.96	12.51
Cobalt, Total	NA	0.61	0.29 J	0.28 J	0.2 J	5.57	2.72	0.67 J	1.61 J
Copper, Total	200	9.38	9.28	18.11	2.29	5.82	1.73	16.37 J	37.29 J
Iron, Total	300	**506**	201	106	38.6 J	**14000**	**2850**	**914 J**	**2890 J**
Lead, Total	25	19.1	**26.72**	6.08	0.46 J	9.85	2.51	17.66 J	**46.67 J**
Magnesium, Total	35000	**56800**	5370	32300	**38600**	**40300**	**48300**	28800	29600
Manganese, Total	300	48.38	7.94	3.49 J+	7.88	**1731**	**6697**	30.45 J	53.72 J
Mercury, Total	0.7	0.4	0.13 J	ND (0.2)	ND (0.2)	ND (0.2)	0.1 J	0.15 J	0.14 J
Nickel, Total	100	5.64	1.19 J	38.4	2.32	9.04	4.6	18.57	24.32
Potassium, Total	NA	25300	6380	27500	6970	19700	13900	17900	18000
Selenium, Total	10	**10.2**	2.64 J	9.54	ND (5)	**38.8**	ND (5)	4.05 J	4.32 J
Silver, Total	50	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	0.29 J
Sodium, Total	20000	**99200**	**22100**	**60500**	**80000**	**113000**	**93800**	**63500**	**65000**
Thallium, Total	0.5	ND (1)	ND (1)	ND (1)	0.42 J	ND (1)	ND (1)	ND (1)	ND (1)
Vanadium, Total	NA	2.49 J	3.22 J	1.69 J	1.99 J	11.52	ND (5)	3.65 J	7.14
Zinc, Total	2000	27.84	7.77 J	500.5	11.03	18.72	ND (10)	158.5	226.2

TABLE 3a
SUMMARY OF WATER QUALITY DATA
558 SACKETT STREET
BROOKLYN, NEW YORK
FILE NO. 0206384

	Action Level								
Location Name	New York TOGS	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-7
Sample Name	111 Ambient	MW-1_20240404	MW-2_20240405	MW-3-20240403	MW-4_20240404	MW-5-20240403	MW-6_20240405	MW-7-20240403	DUP1_20240403
Sample Date	Water Quality	04/04/2024	04/05/2024	04/03/2024	04/04/2024	04/03/2024	04/05/2024	04/03/2024	04/03/2024
Lab Sample ID	Standards	L2418559-02	L2418782-02	L2418246-03	L2418559-01	L2418246-02	L2418782-01	L2418246-01	L2418246-04
PCBs (ug/L)									
Aroclor-1016 (PCB-1016)	NA	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)
Aroclor-1221 (PCB-1221)	NA	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)
Aroclor-1232 (PCB-1232)	NA	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)
Aroclor-1242 (PCB-1242)	NA	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)
Aroclor-1248 (PCB-1248)	NA	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)
Aroclor-1254 (PCB-1254)	NA	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)
Aroclor-1260 (PCB-1260)	NA	ND (0.071)	0.093	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)
Aroclor-1262 (PCB-1262)	NA	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)
Aroclor-1268 (PCB-1268)	NA	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)
Polychlorinated biphenyls (PCBs)	0.09	ND (0.071)	**0.093**	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)	ND (0.071)
Pesticides (ug/L)									
4,4'-DDD	0.3	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)
4,4'-DDE	0.2	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)
4,4'-DDT	0.2	ND (0.029)	0.006 J	ND (0.029)	ND (0.029)	ND (0.029)	0.007 J	ND (0.029)	ND (0.029)
Aldrin	0	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)
alpha-BHC	0.01	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)
alpha-Chlordane (cis)	NA	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)
beta-BHC	0.04	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)
Chlordane	0.05	ND (0.143)	ND (0.143)	ND (0.143)	ND (0.143)	ND (0.143)	ND (0.143)	ND (0.143)	ND (0.143)
delta-BHC	0.04	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)
Dieldrin	0.004	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)
Endosulfan I	NA	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)
Endosulfan II	NA	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)
Endosulfan sulfate	NA	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)
Endrin	0	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)
Endrin aldehyde	5	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)
Endrin ketone	5	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)	ND (0.029)
gamma-BHC (Lindane)	0.05	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)
gamma-Chlordane (trans)	NA	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)
Heptachlor	0.04	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)
Heptachlor epoxide	0.03	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)	ND (0.014)
Methoxychlor	35	ND (0.143)	ND (0.143)	ND (0.143)	ND (0.143)	ND (0.143)	ND (0.143)	ND (0.143)	ND (0.143)
Toxaphene	0.06	ND (0.143)	ND (0.143)	ND (0.143)	ND (0.143)	ND (0.143)	ND (0.143)	ND (0.143)	ND (0.143)
PFAS (ng/L)									
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	NA	ND (6.54)	ND (5.99)	ND (5.76)	ND (5.79)	ND (5.75)	ND (5.86)	ND (5.87)	ND (6.05)
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	NA	ND (40.9)	ND (37.4)	ND (36)	ND (36.2)	ND (35.9)	ND (36.6)	ND (36.7)	ND (37.8)
3-(Perfluoroheptyl)propanoic acid (7:3 FTCA)	NA	ND (40.9) J	ND (37.4)	ND (36)	ND (36.2) J	ND (35.9)	ND (36.6)	ND (36.7)	ND (37.8)
3:3 Fluorotelomer carboxylic acid (3:3 FTCA)	NA	ND (8.18)	ND (7.49)	ND (7.2)	ND (7.24)	ND (7.18)	ND (7.33)	ND (7.34)	ND (7.56)
4,8-Dioxa-3H-Perfluorononanoic Acid (ADONA)	NA	ND (6.54)	ND (5.99)	ND (5.76)	ND (5.79)	ND (5.75)	ND (5.86)	ND (5.87)	ND (6.05)
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	NA	ND (6.54)	ND (5.99)	ND (5.76)	ND (5.79)	ND (5.75)	ND (5.86)	ND (5.87)	ND (6.05)
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	NA	ND (6.54)	ND (5.99)	ND (5.76)	ND (5.79)	ND (5.75)	ND (5.86)	ND (5.87)	ND (6.05)
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	NA	ND (6.54)	ND (5.99)	ND (5.76)	ND (5.79)	ND (5.75)	ND (5.86)	ND (5.87)	ND (6.05)
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	NA	ND (6.54)	ND (5.99)	ND (5.76)	ND (5.79)	ND (5.75)	ND (5.86)	ND (5.87)	ND (6.05)
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	NA	ND (1.64)	ND (1.5)	ND (1.44)	ND (1.45)	ND (1.44)	ND (1.47)	ND (1.47)	ND (1.51)
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	NA	ND (1.64)	ND (1.5)	ND (1.44)	ND (1.45)	ND (1.44)	ND (1.47)	ND (1.47)	ND (1.51)
N-Ethylperfluorooctane sulfonamidoethanol (N-EtFOSE)	NA	ND (16.4)	ND (15)	ND (14.4)	ND (14.5)	ND (14.4)	ND (14.7)	ND (14.7)	ND (15.1)
N-Methyl Perfluorooctanesulfonamidoacetic Acid (MeFOSAA)	NA	ND (1.64)	ND (1.5)	ND (1.44)	ND (1.45)	ND (1.44)	ND (1.47)	ND (1.47)	ND (1.51)
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	NA	ND (1.64)	ND (1.5)	ND (1.44)	ND (1.45)	ND (1.44)	ND (1.47)	ND (1.47)	ND (1.51)
N-Methylperfluorooctane sulfonamidoethanol (N-MeFOSE)	NA	ND (16.4)	ND (15)	ND (14.4)	ND (14.5)	ND (14.4)	ND (14.7)	ND (14.7)	ND (15.1)
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NA	ND (3.27)	ND (3)	ND (2.88)	ND (2.89)	ND (2.87)	ND (2.93)	ND (2.94)	ND (3.02)
Perfluoro(2-ethoxyethane) sulphonic acid (PFEESA)	NA	ND (3.27)	ND (3)	ND (2.88)	ND (2.89)	ND (2.87)	ND (2.93)	ND (2.94)	ND (3.02)
Perfluoro(4-methoxybutanoic) acid (PFMBA)	NA	ND (3.27)	ND (3)	ND (2.88)	ND (2.89)	ND (2.87)	ND (2.93)	ND (2.94)	ND (3.02)
Perfluoro-2-propoxypropanoic acid (PFPrOPrA)(GenX) (HFPO-DA)	NA	ND (6.54)	ND (5.99)	ND (5.76)	ND (5.79)	ND (5.75)	ND (5.86)	ND (5.87)	ND (6.05)
Perfluoro-3-methoxypropanoic acid (PFMPA)	NA	ND (3.27)	ND (3)	ND (2.88)	ND (2.89)	ND (2.87)	ND (2.93)	ND (2.94)	ND (3.02)
Perfluorobutanesulfonic acid (PFBS)	NA	1.79	0.532 J	1.65	1.93	3.33	2.89	1.63	1.48 J
Perfluorobutanoic acid (PFBA)	NA	10.4	7.75	7.63	8.71	9.58	10.1	7.05	7.79
Perfluorodecanesulfonic acid (PFDS)	NA	ND (1.64)	ND (1.5)	ND (1.44)	ND (1.45)	ND (1.44)	ND (1.47)	ND (1.47)	ND (1.51) J
Perfluorodecanoic acid (PFDA)	NA	ND (1.64)	ND (1.5)	ND (1.44)	ND (1.45)	ND (1.44)	ND (1.47)	1.67	1.62
Perfluorododecane sulfonic acid (PFDoDS)	NA	ND (1.64)	ND (1.5)	ND (1.44)	ND (1.45)	ND (1.44)	ND (1.47)	ND (1.47)	ND (1.51) J
Perfluorododecanoic acid (PFDoDA)	NA	ND (1.64)	ND (1.5)	ND (1.44)	ND (1.45)	ND (1.44)	ND (1.47)	ND (1.47)	ND (1.51)
Perfluoroheptanesulfonic acid (PFHpS)	NA	ND (1.64)	ND (1.5)	ND (1.44)	ND (1.45)	0.524 J	ND (1.47)	ND (1.47)	0.446 J
Perfluoroheptanoic acid (PFHpA)	NA	12.6	3.68	8.57	7	10.5	9.3	8.42	9.8
Perfluorohexanesulfonic acid (PFHxS)	NA	1.75	0.577 J	1.71	3.51	4.91	3.52	1.55	1.75
Perfluorohexanoic acid (PFHxA)	NA	17.9	7.11	17.8	10	14.1	16.1	11.3	12.8
Perfluorononane sulfonic acid (PFNS)	NA	ND (1.64)	ND (1.5)	ND (1.44)	ND (1.45)	ND (1.44)	ND (1.47)	ND (1.47)	ND (1.51) J
Perfluorononanoic acid (PFNA)	NA	2.9	0.974 J	2.16	ND (1.45)	1.27 J	ND (1.47)	3.57	3.73
Perfluorooctane sulfonamide (PFOSA)	NA	ND (1.64)	ND (1.5)	ND (1.44)	ND (1.45)	ND (1.44)	ND (1.47)	ND (1.47)	ND (1.51) J
Perfluorooctanesulfonic acid (PFOS)	2.7	**16.4**	**11.4**	**15.3**	**3.93**	**10.5**	**5.02**	**26.6**	**26.8 J**
Perfluorooctanoic acid (PFOA)	6.7	**82**	**10.9**	**41.3**	**36.4**	**58.2**	**49.3**	**68.8**	**75.6**
Perfluoropentanesulfonic acid (PFPeS)	NA	1.55 J	ND (1.5)	ND (1.44)	0.724 J	1.23 J	0.777 J	0.411 J	ND (1.51)
Perfluoropentanoic acid (PFPeA)	NA	25	11.7	19.3	11.2	17.1	15.8	14.2	14.3
Perfluorotetradecanoic acid (PFTeDA)	NA	ND (1.64)	ND (1.5)	ND (1.44)	ND (1.45)	ND (1.44)	ND (1.47)	ND (1.47)	ND (1.51) J
Perfluorotridecanoic acid (PFTrDA)	NA	ND (1.64)	ND (1.5)	ND (1.44)	ND (1.45)	ND (1.44)	ND (1.47)	ND (1.47)	ND (1.51)
Perfluoroundecanoic acid (PFUnDA)	NA	ND (1.64)	ND (1.5)	ND (1.44)	ND (1.45)	ND (1.44)	ND (1.47)	ND (1.47)	ND (1.51)
US EPA PFAS (PFOS + PFOA)	NA	98.4	22.3	56.6	40.3	68.7	54.3	95.4	102

TABLE 3a
SUMMARY OF WATER QUALITY DATA
558 SACKETT STREET
BROOKLYN, NEW YORK
FILE NO. 0206384

	Action Level								
Location Name	New York TOGS	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-7
Sample Name	111 Ambient	MW-1_20240404	MW-2_20240405	MW-3-20240403	MW-4_20240404	MW-5-20240403	MW-6_20240405	MW-7-20240403	DUP1_20240403
Sample Date	Water Quality	04/04/2024	04/05/2024	04/03/2024	04/04/2024	04/03/2024	04/05/2024	04/03/2024	04/03/2024
Lab Sample ID	Standards	L2418559-02	L2418782-02	L2418246-03	L2418559-01	L2418246-02	L2418782-01	L2418246-01	L2418246-04
Semi-Volatile Organic Compounds (SIM) (ug/L)									
1,4-Dioxane	0.35	ND (0.144)	ND (0.144)	ND (0.144)	0.132 J	ND (0.139)	ND (0.139)	ND (0.144)	ND (0.144)
2-Chloronaphthalene	10	ND (0.2)	ND (0.2)	0.03 J	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)
2-Methylnaphthalene	NA	0.04 J	ND (0.1)	0.25	ND (0.1)	0.35	0.25 J+	16	3.1
Acenaphthene	20	0.02 J	0.03 J	0.19	ND (0.1)	0.32	0.94	**32 J**	**32**
Acenaphthylene	NA	0.05 J	ND (0.1)	0.02 J	ND (0.1) J	0.04 J	0.1	1.2	2.5
Anthracene	50	0.03 J	ND (0.1)	0.1 J	ND (0.1)	0.14	0.08 J	3.6	4.3
Benzo(a)anthracene	0.002	**0.03 J**	ND (0.1)	**0.03 J**	ND (0.1)	**0.03 J**	**0.03 J**	**0.67 J**	**2.2**
Benzo(a)pyrene	0	0.02 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	0.02 J	0.54 J	2.2
Benzo(b)fluoranthene	0.002	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	**0.03 J**	**0.41 J+**	**1.6**
Benzo(g,h,i)perylene	NA	0.02 J	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	0.03 J	0.26 J+	1
Benzo(k)fluoranthene	0.002	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	**0.03 J**	**0.15**	**0.51**
Chrysene	0.002	**0.02 J**	ND (0.1)	**0.01 J**	ND (0.1)	ND (0.1)	**0.03 J**	**0.62 J**	**2**
Dibenz(a,h)anthracene	NA	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	0.03 J	ND (0.1)	0.2
Fluoranthene	50	0.04 J	0.02 J	0.07 J	0.03 J	0.15	0.17	3.1 J	6.2
Fluorene	50	0.02 J	ND (0.1)	0.12	ND (0.1)	0.24	1.2	7.5	5.6
Hexachlorobenzene	0.04	ND (0.8)	ND (0.8)	0.02 J	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)
Hexachlorobutadiene	0.5	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5) J	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
Hexachloroethane	5	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)
Indeno(1,2,3-cd)pyrene	0.002	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	**0.03 J**	**0.22 J+**	**0.88**
Naphthalene	10	ND (0.12)	ND (0.1)	0.4 J+	0.09 J	0.78	6.6	9.1 J	1.6
Pentachlorophenol	1	ND (0.8)	0.1 J	ND (0.8)	ND (0.8)	0.1 J	ND (0.8)	0.1 J	ND (0.8)
Phenanthrene	50	0.04 J	ND (0.1)	0.25	ND (0.1)	0.38	ND (0.11)	0.55 J	2.2
Pyrene	50	0.04 J	0.02 J	0.09 J	0.03 J	0.11	0.18	4.4 J	9.2

ABBREVIATIONS AND NOTES:

µg/L: micrograms per liter
ng/L: nanogram per liter

-: Not Analyzed
bgs: below ground surface
ft: feet
J: Value is estimated.
J+: Value is estimated, high bias.
NA: Not Applicable
ND (2.5): Not detected, number in parentheses is the laboratory reporting limit

- For test methods used, see the laboratory data sheets.
- Water analytical results are compared to the New York TOGS 111 Ambient Water Quality Standards.
- Bold indicates an exceedance of AWQS criteria.

TABLE 4
SUMMARY OF SOIL GAS QUALITY DATA
558 SACKETT STREET
BROOKLYN, NEW YORK
FILE NO. 0206384

Location Name	SV-1	SV-2	SV-3	SV-4	SV-5	SV-6	SV-7
Sample Name	SV-1-20230628	SV-2-20230626	SV-3-20230628	SV-4-20230626	SV-5-20230626	SV-6-20230628	SV-7-20230626
Sample Date	06/28/2023	06/26/2023	06/28/2023	06/26/2023	06/26/2023	06/28/2023	06/26/2023
Lab Sample ID	L2336978-01	L2336824-01	L2336978-02	L2336824-02	L2336824-03	L2336978-03	L2336824-04
Volatile Organic Compounds (ug/m3)							
1,1,1-Trichloroethane	ND (2.73)	ND (1.09)	ND (1.09)	31.5	1.43	1.21	69.8
1,1,2,2-Tetrachloroethane	ND (3.43)	ND (1.37)	ND (1.37)	ND (1.37)	ND (1.37)	ND (1.37)	ND (1.37)
1,1,2-Trichloroethane	ND (2.73)	ND (1.09)	ND (1.09)	ND (1.09)	ND (1.09)	ND (1.09)	ND (1.09)
1,1-Dichloroethane	ND (2.02)	ND (0.809)	ND (0.809)	1.31	ND (0.809)	ND (0.809)	7.16
1,1-Dichloroethene	ND (1.98)	ND (0.793)	ND (0.793)	ND (0.793)	ND (0.793)	ND (0.793)	87.2
1,2,4-Trichlorobenzene	ND (3.71)	ND (1.48)	2.39	ND (1.48)	ND (1.48)	ND (1.48)	ND (1.48)
1,2,4-Trimethylbenzene	3.28	1.93	10.6	3	2.93	2.9	7.08
1,2-Dibromoethane (Ethylene Dibromide)	ND (3.84)	ND (1.54)	ND (1.54)	ND (1.54)	ND (1.54)	ND (1.54)	ND (1.54)
1,2-Dichlorobenzene	ND (3.01)	ND (1.2)	6.49	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)
1,2-Dichloroethane	ND (2.02)	30.9	ND (0.809)	6.68	ND (0.809)	ND (0.809)	9.63
1,2-Dichloropropane	ND (2.31)	1.52	ND (0.924)	1.16	ND (0.924)	ND (0.924)	4.71
1,2-Dichlorotetrafluoroethane (CFC 114)	ND (3.49)	ND (1.4)	ND (1.4)	ND (1.4)	ND (1.4)	ND (1.4)	ND (1.4)
1,3,5-Trimethylbenzene	ND (2.46)	ND (0.983)	2.67	1.29	ND (0.983)	ND (0.983)	3.68
1,3-Butadiene	ND (1.11)	7.94	ND (0.442)	47.3	4.4	ND (0.442)	103
1,3-Dichlorobenzene	ND (3.01)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)
1,4-Dichlorobenzene	ND (3.01)	ND (1.2)	13	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)
1,4-Dioxane	ND (1.8)	ND (0.721)	ND (0.721)	ND (0.721)	ND (0.721)	ND (0.721)	1.5
2,2,4-Trimethylpentane	799	220	10	218	2220	2.63	13.9
2-Butanone (Methyl Ethyl Ketone)	7.99	38.3	24.6	45.4	34.5	14.5	104
2-Hexanone (Methyl Butyl Ketone)	ND (2.05)	ND (0.82)	1.03	ND (0.82)	ND (0.82)	1.27	17.5
4-Ethyltoluene (1-Ethyl-4-Methylbenzene)	ND (2.46)	ND (0.983)	5.7	ND (0.983)	ND (0.983)	ND (0.983)	1.48
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	ND (5.12)	28.4	ND (2.05)	10.6	14.7	ND (2.05)	22.2
Acetone	43.2	271	96	297	211	89.8	969
Allyl chloride	ND (1.57)	ND (0.626)	ND (0.626)	ND (0.626)	ND (0.626)	ND (0.626)	ND (0.626)
Benzene	5.85	36.4	3.1	18.2	4.54	1.17	91.7
Benzyl Chloride (alpha-Chlorotoluene)	ND (2.59)	ND (1.04)	ND (1.04)	ND (1.04)	ND (1.04)	ND (1.04)	ND (1.04)
Bromodichloromethane	ND (3.35)	ND (1.34)	ND (1.34)	ND (1.34)	ND (1.34)	ND (1.34)	ND (1.34)
Bromoform	ND (5.17)	ND (2.07)	ND (2.07)	ND (2.07)	ND (2.07)	ND (2.07)	ND (2.07)
Bromomethane (Methyl Bromide)	ND (1.94)	ND (0.777)	ND (0.777)	ND (0.777)	ND (0.777)	ND (0.777)	ND (0.777)
Carbon disulfide	1.78	8.84	3.08	43	3.04	4.3	131
Carbon tetrachloride	ND (3.15)	ND (1.26)	ND (1.26)	ND (1.26)	ND (1.26)	ND (1.26)	ND (1.26)
Chlorobenzene	ND (2.3)	ND (0.921)	3.03	ND (0.921)	ND (0.921)	ND (0.921)	ND (0.921)
Chloroethane	ND (1.32)	0.552	ND (0.528)	ND (0.528)	ND (0.528)	ND (0.528)	ND (0.528)
Chloroform (Trichloromethane)	44.9	291	5.23	11.6	1.8	4.81	41.5
Chloromethane (Methyl Chloride)	ND (1.03)	2.03	ND (0.413)	0.993	ND (0.413)	0.481	3.9
cis-1,2-Dichloroethene	ND (1.98)	4.4	ND (0.793)	ND (0.793)	ND (0.793)	ND (0.793)	4.24
cis-1,3-Dichloropropene	ND (2.27)	ND (0.908)	ND (0.908)	ND (0.908)	ND (0.908)	ND (0.908)	ND (0.908)
Cyclohexane	5.92	56.5	0.895	8.88	10.8	ND (0.688)	70.2
Dibromochloromethane	ND (4.26)	ND (1.7)	ND (1.7)	ND (1.7)	ND (1.7)	ND (1.7)	ND (1.7)
Dichlorodifluoromethane (CFC-12)	ND (2.47)	20	2.45	2.59	2.31	2.44	2.31
Ethanol	ND (23.6)	26.9	33	48.8	31.7	15.8	33.4
Ethyl acetate	ND (4.5)	ND (1.8)	ND (1.8)	ND (1.8)	ND (1.8)	ND (1.8)	ND (1.8)
Ethylbenzene	8.86	7.34	25.7	4.82	3.71	2.78	11.5
Hexachlorobutadiene	ND (5.33)	ND (2.13)	ND (2.13)	ND (2.13)	ND (2.13)	ND (2.13)	ND (2.13)
Hexane	1.83	64.8	1.74	94.8	7.05	1.56	207
Isopropyl Alcohol (2-Propanol)	3.71	5.85	9.54	14.5	6.44	5.01	13.1
m,p-Xylenes	12.2	16.5	28.5	13.2	10.8	8.6	18.6
Methyl Tert Butyl Ether (MTBE)	ND (1.8)	ND (0.721)	ND (0.721)	ND (0.721)	ND (0.721)	ND (0.721)	ND (0.721)
Methylene chloride (Dichloromethane)	ND (4.34)	69.5	2.01	2.39	ND (1.74)	10.4	18.7
N-Heptane	ND (2.05)	71.7	1.43	30.9	10.1	0.959	82.8
o-Xylene	7.51	8.21	13.7	7.73	4.86	4.06	8.95
Styrene	ND (2.13)	ND (0.852)	13.2	1.51	1.37	1.76	5.88
Tert-Butyl Alcohol (tert-Butanol)	17.6	33.6	37.6	35.2	37.6	23.3	45.5
Tetrachloroethene	49	4.18	21.6	313	35.5	32.7	113
Tetrahydrofuran	19.8	35.7	54.9	52.5	49.8	26.2	41.3
Toluene	19.3	69.7	61.4	44.8	35.1	26.9	77.6
trans-1,2-Dichloroethene	ND (1.98)	ND (0.793)	ND (0.793)	ND (0.793)	ND (0.793)	ND (0.793)	ND (0.793)
trans-1,3-Dichloropropene	ND (2.27)	ND (0.908)	ND (0.908)	ND (0.908)	ND (0.908)	ND (0.908)	ND (0.908)
Trichloroethene	77.9	145	29.1	55.9	12.8	3.32	37.1
Trichlorofluoromethane (CFC-11)	5.68	1.58	5.2	14.9	3.2	4.27	7.64
Trifluorotrichloroethane (Freon 113)	ND (3.83)	ND (1.53)	ND (1.53)	ND (1.53)	ND (1.53)	ND (1.53)	ND (1.53)
Vinyl Bromide (Bromoethene)	ND (2.19)	0.927	ND (0.874)	ND (0.874)	ND (0.874)	ND (0.874)	ND (0.874)
Vinyl chloride	ND (1.28)	82.6	ND (0.511)	ND (0.511)	ND (0.511)	ND (0.511)	2.61
SUM of VOCs	1135.31	1663.799	528.885	1483.453	2761.48	293.13	2491.37
SUM of CVOCs	126.9	305.68	52.71	402.79	49.73	47.63	332.65
SUM of BTEX	53.72	138.15	132.4	88.75	59.01	43.51	208.35

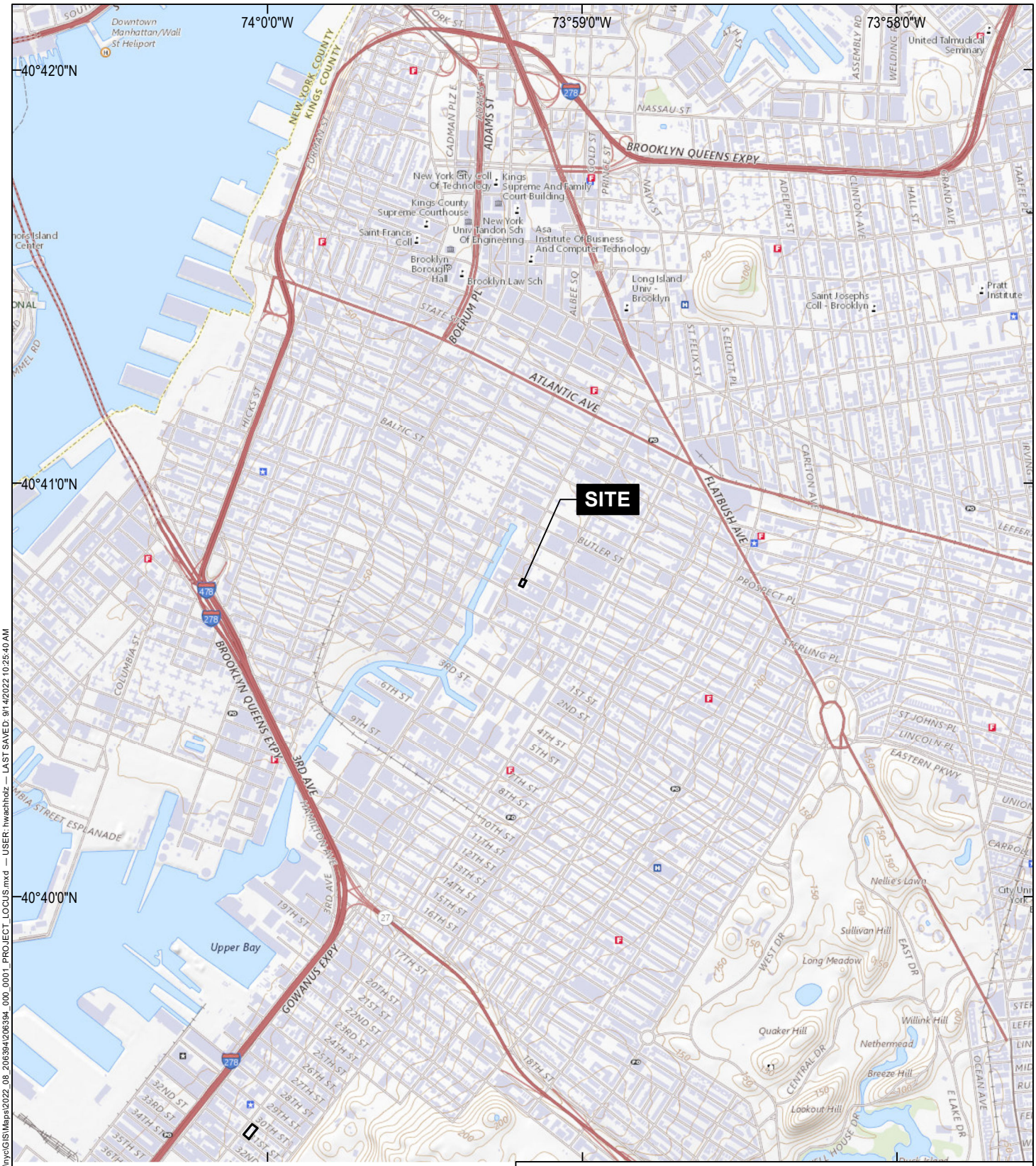
ABBREVIATIONS AND NOTES:

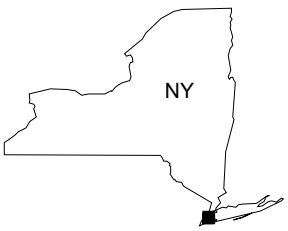
$\mu g/m^3$: micrograms per cubic meter

BTEX: Benzene, Toluene, Ethylbenzene, Xylenes
CVOCs: Chlorinated volatile organic compounds
ND (2.5): Not detected, number in parentheses is the laboratory reporting limit
VOCs: Volatile Organic Compounds

- For test methods used, see the laboratory data sheets.
- SUM of CVOCs includes the following compounds: carbon tetrachloride, 1,1-dichloroethene, cis-1,2-dichloroethene, trichloroethene, methylene chloride, tetrachloroethene, 1,1,1-trichloroethane, vinyl chloride

FIGURES





MAP SOURCE: USGS
SITE COORDINATES: 40°40'45"N, 73°59'10"W

HALEY ALDRICH

558 SACKETT STREET
BROOKLYN, NEW YORK

PROJECT LOCUS

APPROXIMATE SCALE: 1 IN = 2000 FT
SEPTEMBER 2022

FIGURE 1

GIS FILE PATH: \\haleyaldrich.com\share\CF\Groups\nyc\GIS\Maps\2022_08_206394206394_000_0001_PROJECT_LOCUS.mxd — USER: hwachholz — LAST SAVED: 9/14/2022 10:25:40 AM

LEGEND

PARCEL BOUNDARY

SITE BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.

2. ASSESSOR PARCEL DATA SOURCE: NYC DEPARTMENT OF CITY PLANNING

3. AERIAL IMAGERY SOURCE: ESRI

N

0 20 40

SCALE IN FEET

HALEY ALDRICH

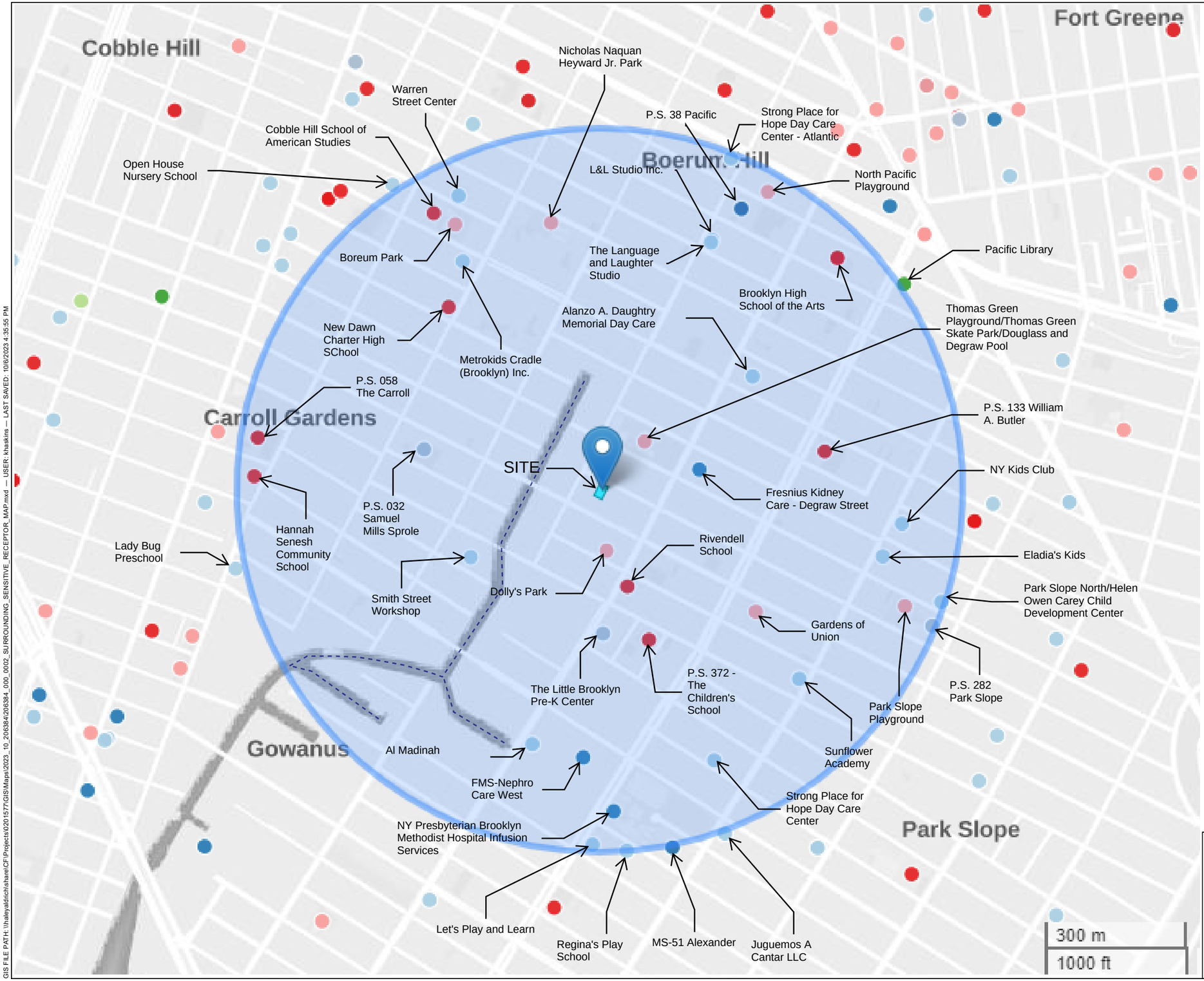
558 SACKETT STREET
BROOKLYN, NEW YORK

SITE PLAN

AUGUST 2022

FIGURE 2

GIS FILE PATH: \\haleyaldrich.com\share\CF\Projects\0201577\GIS\Maps\2022_08_206394\206394_000_0002_SITE_PLAN.mxd — USER: hwachholz — LAST SAVED: 8/23/2022 3:49:50 PM



LEGEND

- ONE-HALF MILE RADIUS FROM SITE
- GOWANUS CANAL (ESTUARINE MARINE DEEPWATER HABITAT)
- DAY CARE AND PRE-KINDERGARTEN
- HEALTH CARE
- HIGHER EDUCATION
- LIBRARIES
- PARKS AND PLAZAS
- SCHOOLS (K-12)

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. IMAGERY SOURCE: NYC ENVIRONMENTAL REMEDIATION COMMUNITY MAPPING PORTAL (NYC SPEED)

HALEY ALDRICH

558 SACKETT STREET
BROOKLYN, NEW YORK

SURROUNDING SENSITIVE RECEPTOR MAP

MAY 2024

FIGURE 3

GIS FILE PATH: \\haleyaldrich\share\CF\Projects\0201577\GIS\Maps\2023_10_20638\4206384_000_0002_SURROUNDING_SENSITIVE_RECEPTOR_MAP.mxd — USER: khaskins — LAST SAVED: 10/6/2023 4:35:55 PM

LEGEND

- MONITORING WELL/SOIL BORING SAMPLE LOCATION
- SOIL BORING SAMPLE LOCATION
- SOIL VAPOR SAMPLE LOCATION
- PARCEL BOUNDARY
- SITE BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. ASSESSOR PARCEL DATA SOURCE: NYC DEPARTMENT OF CITY PLANNING
3. AERIAL IMAGERY SOURCE: NEARMAP, 19 JULY 2022

N

0 20 40
SCALE IN FEET

HALEY ALDRICH

REMEDIAL INVESTIGATION REPORT
558 SACKETT STREET
BROOKLYN, NEW YORK

SAMPLING LOCATION MAP

JULY 2023

FIGURE 4

GIS FILE PATH: \\haleyaldrich.com\share\CF\Projects\0201577\GIS\Maps\2023_07_206384\206384_000_0003_SAMPLE_LOCATION_MAP.mxd — USER: khensen — LAST SAVED: 7/24/2023 8:19:22 AM

LEGEND

SUPPLEMENTAL SAMPLE

MONITORING WELL

SOIL BORING

SOIL BORING/MONITORING WELL

SITE BOUNDARY

PARCEL BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.

2. ASSESSOR PARCEL DATA SOURCE: NYC DEPARTMENT OF CITY PLANNING

3. AERIAL IMAGERY SOURCE: NEARMAP, 8 MARCH 2024

N

0 20 40

SCALE IN FEET

HALEY ALDRICH

558 SACKETT STREET
BROOKLYN, NEW YORK

SUPPLEMENTAL SAMPLE LOCATION MAP

APRIL 2024

FIGURE 4A

GIS FILE PATH: \\haleyaldrich.com\s hare\CF\Projects\0206384\GIS\Maps\2024_04\206384_000_004A_SUPP_SAMPLE_LOCATION_MAP.mxd — USER: mmjones — LAST SAVED: 4/18/2024 10:03:57 AM

LEGEND

- MONITORING WELL WITH **GROUNDWATER ELEVATION** IN FEET ABOVE MEAN SEA LEVEL
- GROUNDWATER ELEVATON CONTOUR, IN FEET, DASHED WHERE INFERRED
- GROUNDWATER FLOW
- SITE BOUNDARY
- PARCEL BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. GROUNDWATER LEVELS WERE COLLECTED ON 26 APRIL 2024.
3. ASSESSOR PARCEL DATA SOURCE: NYC DEPARTMENT OF CITY PLANNING
4. AERIAL IMAGERY SOURCE: NEARMAP, 8 MARCH 2024

N

0 20 40

SCALE IN FEET

HALEY ALDRICH

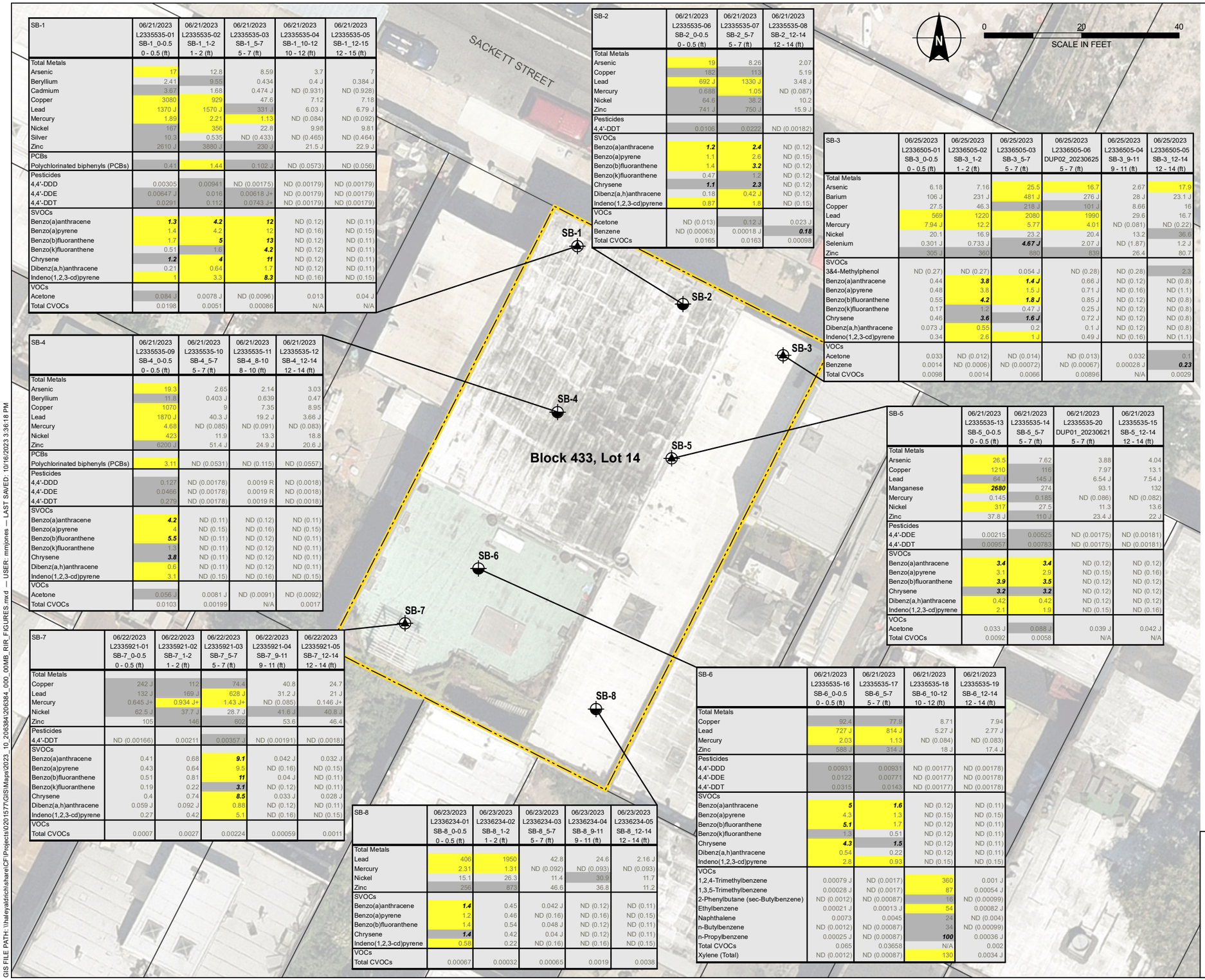
558 SACKETT STREET
BROOKLYN, NEW YORK

GROUNDWATER CONTOUR MAP

MAY 2024

FIGURE 5

GIS FILE PATH: \\haleyaldrich\share\CF\Projects\0206384\GIS\Maps\2024_05\206384_000_0004_GW_CONTOURS.mxd — USER: mmjones — LAST SAVED: 5/7/2024 3:34:49 PM



SB-1	06/21/2023 L2335535-01 SB-1_0-0.5 0 - 0.5 (ft)	06/21/2023 L2335535-02 SB-1_1-2 1 - 2 (ft)	06/21/2023 L2335535-03 SB-1_5-7 5 - 7 (ft)	06/21/2023 L2335535-04 SB-1_10-12 10 - 12 (ft)	06/21/2023 L2335535-05 SB-1_12-15 12 - 15 (ft)
Total Metals					
Arsenic	17	12.8	8.59	3.7	7
Beryllium	2.41	9.55	0.434	0.4 J	0.384 J
Cadmium	3.67	1.68	0.474 J	ND (0.931)	ND (0.928)
Copper	3080	929	47.6	7.12	7.18
Lead	1370 J	1570 J	331 J	6.03 J	6.79 J
Mercury	1.89	2.21	1.13	ND (0.084)	ND (0.092)
Nickel	167	356	22.8	9.98	9.81
Silver	10.3	0.535	ND (0.433)	ND (0.465)	ND (0.464)
Zinc	2610 J	3880 J	230 J	21.5 J	22.9 J
PCBs					
Polychlorinated biphenyls (PCBs)	0.41	1.44	0.102 J	ND (0.0573)	ND (0.056)
Pesticides					
4,4'-DDD	0.00305	0.00941	ND (0.00175)	ND (0.00179)	ND (0.00179)
4,4'-DDE	0.00647 J	0.016	0.00618 J+	ND (0.00179)	ND (0.00179)
4,4'-DDT	0.0291	0.112	0.0743 J+	ND (0.00179)	ND (0.00179)
SVOCs					
Benzo(a)anthracene	***1.3***	***4.2***	***12***	ND (0.12)	ND (0.11)
Benzo(a)pyrene	1.4	4.2	12	ND (0.16)	ND (0.15)
Benzo(b)fluoranthene	1.7	***5***	***13***	ND (0.12)	ND (0.11)
Benzo(k)fluoranthene	0.51	1.6	***4.2***	ND (0.12)	ND (0.11)
Chrysene	***1.2***	***4***	***11***	ND (0.12)	ND (0.11)
Dibenz(a,h)anthracene	0.21	0.64	1.7	ND (0.12)	ND (0.11)
Indeno(1,2,3-cd)pyrene	1	3.3	***8.3***	ND (0.16)	ND (0.15)
VOCs					
Acetone	0.084 J	0.0078 J	ND (0.0096)	0.013	0.04 J
Total CVOCs	0.0198	0.0051	0.00086	N/A	N/A

SB-2	06/21/2023 L2335535-06 SB-2_0-0.5 0 - 0.5 (ft)	06/21/2023 L2335535-07 SB-2_5-7 5 - 7 (ft)	06/21/2023 L2335535-08 SB-2_12-14 12 - 14 (ft)
Total Metals			
Arsenic	19	8.26	2.07
Copper	182	113	5.19
Lead	692 J	1330 J	3.48 J
Mercury	0.688	1.05	ND (0.087)
Nickel	64.6	38.2	10.2
Zinc	741 J	750 J	15.9 J
Pesticides			
4,4'-DDT	0.0106	0.0222	ND (0.00182)
SVOCs			
Benzo(a)anthracene	***1.2***	***2.4***	ND (0.12)
Benzo(a)pyrene	1.1	2.6	ND (0.15)
Benzo(b)fluoranthene	1.4	***3.2***	ND (0.12)
Benzo(k)fluoranthene	0.47	1.2	ND (0.12)
Chrysene	***1.1***	***2.3***	ND (0.12)
Dibenz(a,h)anthracene	0.18	0.42 J	ND (0.12)
Indeno(1,2,3-cd)pyrene	0.87	1.8	ND (0.15)
VOCs			
Acetone	ND (0.013)	0.12 J	0.023 J
Benzene	ND (0.00063)	0.00018 J	***0.18***
Total CVOCs	0.0165	0.0163	0.00098

SB-3	06/25/2023 L2336505-01 SB-3_0-0.5 0 - 0.5 (ft)	06/25/2023 L2336505-02 SB-3_1-2 1 - 2 (ft)	06/25/2023 L2336505-03 SB-3_5-7 5 - 7 (ft)	06/25/2023 L2336505-06 DUP02_20230625 5 - 7 (ft)	06/25/2023 L2336505-04 SB-3_9-11 9 - 11 (ft)	06/25/2023 L2336505-05 SB-3_12-14 12 - 14 (ft)
Total Metals						
Arsenic	6.18	7.16	25.5	16.7	2.67	17.9
Barium	106 J	231 J	481 J	276 J	28 J	23.1 J
Copper	27.5	46.3	218 J	101 J	8.66	16
Lead	569	1220	2080	1990	29.6	16.7
Mercury	7.94 J	12.2	5.77	4.01	ND (0.081)	ND (0.22)
Nickel	20.1	16.9	23.2	20.4	13.2	36.6
Selenium	0.301 J	0.733 J	***4.67 J***	2.07 J	ND (1.87)	1.2 J
Zinc	305 J	360	880	838	26.4	80.7
SVOCs						
3&4-Methylphenol	ND (0.27)	ND (0.27)	0.054 J	ND (0.28)	ND (0.28)	2.3
Benzo(a)anthracene	0.44	***3.8***	***1.4 J***	0.66 J	ND (0.12)	ND (0.8)
Benzo(a)pyrene	0.48	3.8	1.5 J	0.71 J	ND (0.16)	ND (1.1)
Benzo(b)fluoranthene	0.55	***4.2***	***1.8 J***	0.85 J	ND (0.12)	ND (0.8)
Benzo(k)fluoranthene	0.17	1.2	0.47 J	0.25 J	ND (0.12)	ND (0.8)
Chrysene	0.46	***3.6***	***1.6 J***	0.72 J	ND (0.12)	ND (0.8)
Dibenz(a,h)anthracene	0.073 J	0.55	0.2	0.1 J	ND (0.12)	ND (0.8)
Indeno(1,2,3-cd)pyrene	0.34	2.6	1 J	0.49 J	ND (0.16)	ND (1.1)
VOCs						
Acetone	0.033	ND (0.012)	ND (0.014)	ND (0.013)	0.032	0.1
Benzene	0.0014	ND (0.0006)	ND (0.00072)	ND (0.00067)	0.00028 J	***0.23***
Total CVOCs	0.0098	0.0014	0.0066	0.00896	N/A	0.0029

SB-4	06/21/2023 L2335535-09 SB-4_0-0.5 0 - 0.5 (ft)	06/21/2023 L2335535-10 SB-4_5-7 5 - 7 (ft)	06/21/2023 L2335535-11 SB-4_8-10 8 - 10 (ft)	06/21/2023 L2335535-12 SB-4_12-14 12 - 14 (ft)
Total Metals				
Arsenic	19.3	2.65	2.14	3.03
Beryllium	11.8	0.403 J	0.639	0.47
Copper	1070	9	7.35	8.95
Lead	1870 J	40.3 J	19.2 J	3.66 J
Mercury	4.68	ND (0.085)	ND (0.091)	ND (0.083)
Nickel	423	11.9	13.3	18.8
Zinc	6200 J	51.4 J	24.9 J	20.6 J
PCBs				
Polychlorinated biphenyls (PCBs)	3.11	ND (0.0531)	ND (0.115)	ND (0.0557)
Pesticides				
4,4'-DDD	0.127	ND (0.00178)	0.0019 R	ND (0.0018)
4,4'-DDE	0.0466	ND (0.00178)	0.0019 R	ND (0.0018)
4,4'-DDT	0.279	ND (0.00178)	0.0019 R	ND (0.0018)
SVOCs				
Benzo(a)anthracene	***4.2***	ND (0.11)	ND (0.12)	ND (0.11)
Benzo(a)pyrene	4	ND (0.15)	ND (0.16)	ND (0.15)
Benzo(b)fluoranthene	***5.5***	ND (0.11)	ND (0.12)	ND (0.11)
Benzo(k)fluoranthene	1.3	ND (0.11)	ND (0.12)	ND (0.11)
Chrysene	***3.8***	ND (0.11)	ND (0.12)	ND (0.11)
Dibenz(a,h)anthracene	0.6	ND (0.11)	ND (0.12)	ND (0.11)
Indeno(1,2,3-cd)pyrene	3.1	ND (0.15)	ND (0.16)	ND (0.15)
VOCs				
Acetone	0.056 J	0.0081 J	ND (0.0091)	ND (0.0092)
Total CVOCs	0.0103	0.00199	N/A	0.0017

SB-5	06/21/2023 L2335535-13 SB-5_0-0.5 0 - 0.5 (ft)	06/21/2023 L2335535-14 SB-5_5-7 5 - 7 (ft)	06/21/2023 L2335535-20 DUP01_20230621 5 - 7 (ft)	06/21/2023 L2335535-15 SB-5_12-14 12 - 14 (ft)
Total Metals				
Arsenic	26.5	7.62	3.88	4.04
Copper	1210	116	7.97	13.1
Lead	64 J	145 J	6.54 J	7.54 J
Manganese	***2680***	274	93.1	132
Mercury	0.145	0.185	ND (0.086)	ND (0.082)
Nickel	317	27.5	11.3	13.6
Zinc	37.8 J	110 J	23.4 J	22 J
Pesticides				
4,4'-DDE	0.00215	0.00525	ND (0.00175)	ND (0.00181)
4,4'-DDT	0.00957	0.00783	ND (0.00175)	ND (0.00181)
SVOCs				
Benzo(a)anthracene	***3.4***	***3.4***	ND (0.12)	ND (0.12)
Benzo(a)pyrene	3.1	2.9	ND (0.15)	ND (0.16)
Benzo(b)fluoranthene	***3.9***	***3.5***	ND (0.12)	ND (0.12)
Chrysene	***3.2***	***3.2***	ND (0.12)	ND (0.12)
Dibenz(a,h)anthracene	0.42	0.42	ND (0.12)	ND (0.12)
Indeno(1,2,3-cd)pyrene	2.1	1.9	ND (0.15)	ND (0.16)
VOCs				
Acetone	0.033 J	0.088 J	0.039 J	0.042 J
Total CVOCs	0.0092	0.0058	N/A	N/A

SB-7	06/22/2023 L2335921-01 SB-7_0-0.5 0 - 0.5 (ft)	06/22/2023 L2335921-02 SB-7_1-2 1 - 2 (ft)	06/22/2023 L2335921-03 SB-7_5-7 5 - 7 (ft)	06/22/2023 L2335921-04 SB-7_9-11 9 - 11 (ft)	06/22/2023 L2335921-05 SB-7_12-14 12 - 14 (ft)
Total Metals					
Copper	242 J	112	74.4	40.8	24.7
Lead	132 J	169 J	628 J	31.2 J	21 J
Mercury	0.645 J+	0.934 J+	1.43 J+	ND (0.085)	0.146 J+
Nickel	62.5 J	37.7 J	28.7 J	41.6 J	40.8 J
Zinc	105	146	602	53.6	46.4
Pesticides					
4,4'-DDT	ND (0.00166)	0.00211	0.00357 J	ND (0.00191)	ND (0.0018)
SVOCs					
Benzo(a)anthracene	0.41	0.68	***9.1***	0.042 J	0.032 J
Benzo(a)pyrene	0.43	0.64	9.5	ND (0.16)	ND (0.15)
Benzo(b)fluoranthene	0.51	0.81	***11***	0.04 J	ND (0.11)
Benzo(k)fluoranthene	0.19	0.22	***3.1***	ND (0.12)	ND (0.11)
Chrysene	0.4	0.74	***8.5***	0.033 J	0.028 J
Dibenz(a,h)anthracene	0.059 J	0.092 J	0.86	ND (0.12)	ND (0.11)
Indeno(1,2,3-cd)pyrene	0.27	0.42	5.1	ND (0.16)	ND (0.15)
VOCs					
Total CVOCs	0.0007	0.0027	0.00224	0.00059	0.0011

SB-6	06/21/2023 L2335535-16 SB-6_0-0.5 0 - 0.5 (ft)	06/21/2023 L2335535-17 SB-6_5-7 5 - 7 (ft)	06/21/2023 L2335535-18 SB-6_10-12 10 - 12 (ft)	06/21/2023 L2335535-19 SB-6_12-14 12 - 14 (ft)
Total Metals				
Copper	92.4	77.9	8.71	7.94
Lead	727 J	814 J	5.27 J	2.77 J
Mercury	2.03	1.13	ND (0.084)	ND (0.083)
Zinc	588 J	314 J	18 J	17.4 J
Pesticides				
4,4'-DDD	0.00931	0.00931	ND (0.00177)	ND (0.00178)
4,4'-DDE	0.0122	0.00771	ND (0.00177)	ND (0.00178)
4,4'-DDT	0.0315	0.0143	ND (0.00177)	ND (0.00178)
SVOCs				
Benzo(a)anthracene	***5***	***1.6***	ND (0.12)	ND (0.11)
Benzo(a)pyrene	4.3	1.3	ND (0.15)	ND (0.15)
Benzo(b)fluoranthene	***5.1***	1.7	ND (0.12)	ND (0.11)
Benzo(k)fluoranthene	1.8	0.51	ND (0.12)	ND (0.11)
Chrysene	***4.3***	***1.5***	ND (0.12)	ND (0.11)
Dibenz(a,h)anthracene	0.54	0.22	ND (0.12)	ND (0.11)
Indeno(1,2,3-cd)pyrene	2.8	0.93	ND (0.15)	ND (0.15)
VOCs				
1,2,4-Trimethylbenzene	0.00079 J	ND (0.0017)	360	0.001 J
1,3,5-Trimethylbenzene	0.00028 J	ND (0.0017)	87	0.00054 J
2-Phenylbutane (sec-Butylbenzene)	ND (0.0012)	ND (0.00087)	16	ND (0.00099)
Ethylbenzene	0.00021 J	0.00013 J	54	0.00082 J
Naphthalene	0.0073	0.0045	24	ND (0.004)
n-Butylbenzene	ND (0.0012)	ND (0.00087)	34	ND (0.00099)
n-Propylbenzene	0.00025 J	ND (0.00087)	***100***	0.00036 J
Total CVOCs	0.065	0.03658	N/A	0.002
Xylene (Total)	ND (0.0012)	ND (0.00087)	130	0.0034 J

SB-8	06/23/2023 L2336234-01 SB-8_0-0.5 0 - 0.5 (ft)	06/23/2023 L2336234-02 SB-8_1-2 1 - 2 (ft)	06/23/2023 L2336234-03 SB-8_5-7 5 - 7 (ft)	06/23/2023 L2336234-04 SB-8_9-11 9 - 11 (ft)	06/23/2023 L2336234-05 SB-8_12-14 12 - 14 (ft)
Total Metals					
Lead	406	1950	42.8	24.6	2.16 J
Mercury	2.31	1.31	ND (0.092)	ND (0.093)	ND (0.093)
Nickel	15.1	26.3	11.4	30.9	11.7
Zinc	256	879	46.6	36.8	11.2
SVOCs					
Benzo(a)anthracene	***1.4***	0.45	0.042 J	ND (0.12)	ND (0.11)
Benzo(a)pyrene	1.2	0.46	ND (0.16)	ND (0.16)	ND (0.15)
Benzo(b)fluoranthene	1.4	0.54	0.048 J	ND (0.12)	ND (0.11)
Chrysene	***1.4***	0.42	0.04 J	ND (0.12)	ND (0.11)
Indeno(1,2,3-cd)pyrene	0.58	0.22	ND (0.16)	ND (0.16)	ND (0.15)
VOCs					
Total CVOCs	0.00067	0.00032	0.00065	0.0019	0.0038

LEGEND

- MONITORING WELL/SOIL BORING SAMPLE LOCATION
- SOIL BORING SAMPLE LOCATION
- PARCEL BOUNDARY
- SITE BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. SOIL SAMPLE ANALYTICAL RESULTS ARE COMPARED TO THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC) TITLE 6 OF THE OFFICIAL COMPILATION OF NEW YORK CODES, RULES, AND REGULATIONS (NYCRR) PART 375 UNRESTRICTED USE SOIL CLEANUP OBJECTIVES (SCOS), RESTRICTED-RESIDENTIAL SCOS, AND 40 CFR 261 SUBPART C AND TABLE 1 OF 40 CFR 261.24.
3. NY-RESR = NYSDEC PART 375 RESTRICTED-RESIDENTIAL USE SCO
4. NY-UNRES = NYSDEC PART 375 UNRESTRICTED USE SCO
5. NY-PGW = NYDEC PART 375 PROTECTION OF GROUNDWATER CRITERIA
6. EXCEEDANCES OF THE NY-UNRES SCOS ARE SHADED GRAY
7. EXCEEDANCES OF THE NY-UNRES AND NY-RESRR ARE SHADED YELLOW
8. EXCEEDANCES OF THE NY-PGW ARE SHOWN IN BLACK TEXT AND IN ITALICS
9. RESULTS ARE DISPLAYED IN MILLIGRAMS PER KILOGRAM (mg/kg)
10. ASSESSOR PARCEL DATA SOURCE: NYC DEPARTMENT OF CITY PLANNING
11. AERIAL IMAGERY SOURCE: NEARMAP, 19 JULY 2022

	Action Level		
	Restricted Use Soil Cleanup Objectives - Protection of Groundwater	NY Part 375 Restricted Residential Use Soil Cleanup Objectives	NY Part 375 Unrestricted Use Soil Cleanup Objectives
Volatile Organic Compounds (mg/kg)			
1,2,4-trimethylbenzene	3.6	52	3.6
1,3,5-trimethylbenzene	8.4	52	8.4
2-Phenylbutane (sec-Butylbenzene)	11	100	11
Ethlybenzene	1	41	1
Naphthalene	12	100	12
n-Butylbenzene	12	100	12
n-Propylbenzene	3.9	100	3.9
Acetone	0.05	100	0.05
Benzene	0.06	4.8	0.06
Semi-Volatile Organic Compounds (mg/kg)			
Benzo(a)anthracene	1	1	1
Benzo(a)pyrene	22	1	1
Benzo(b)fluoranthene	1.7	1	1
Benzo(k)fluoranthene	1.7	3.9	0.8
Chrysene	1	3.9	1
Dibenz(a,h)anthracene	1000	0.33	0.33
Indeno(1,2,3-cd)pyrene	8.2	0.5	0.5
Pesticides (mg/kg)			
4,4'-DDD	14	13	0.0033
4,4'-DDE	17	8.9	0.0033
4,4'-DDT	0.19	0.097	0.005
Total Metals (mg/kg)			
Arsenic	16	16	13
Barium	820	400	350
Beryllium	47	72	7.2
Cadmium	7.5	4.3	2.5
Copper	1720	270	50
Lead	450	400	63
Manganese	2000	2000	1600
Mercury	0.73	0.81	0.18
Nickel	130	310	30
Zinc	2480	10000	109
Polychlorinated Byphenyls (mg/kg)			
Total PCBs	3.2	1	1

HALEY ALDRICH

REMEDIAL INVESTIGATION REPORT
558 SACKETT STREET
BROOKLYN, NEW YORK

SOIL SAMPLE RESULTS EXCEEDANCES MAP

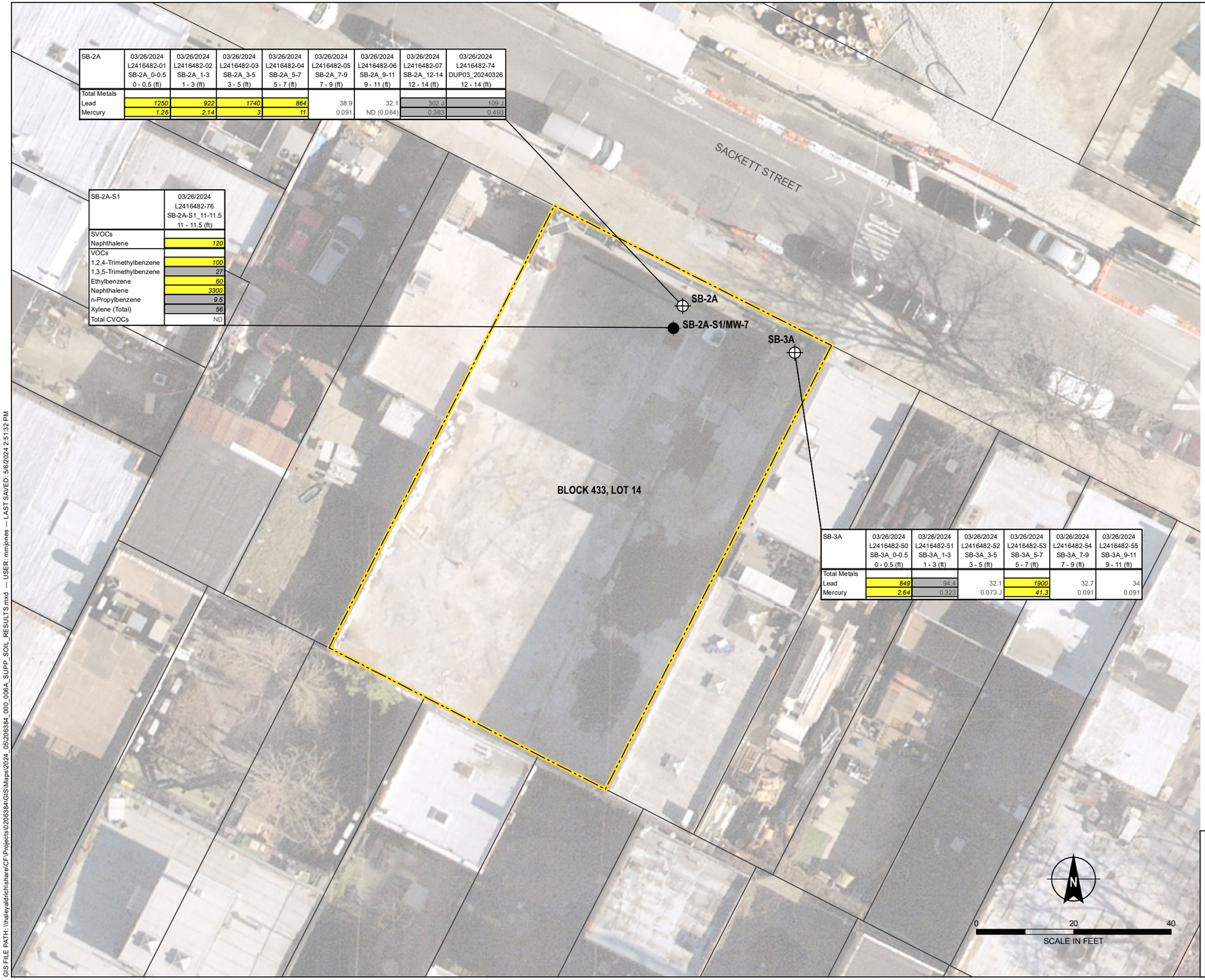
OCTOBER 2023

FIGURE 6

SB-2A	03/26/2024 L2416482-01 SB-2A_0-0.5 0 - 0.5 (ft)	03/26/2024 L2416482-02 SB-2A_1-3 1 - 3 (ft)	03/26/2024 L2416482-03 SB-2A_3-5 3 - 5 (ft)	03/26/2024 L2416482-04 SB-2A_5-7 5 - 7 (ft)	03/26/2024 L2416482-05 SB-2A_7-9 7 - 9 (ft)	03/26/2024 L2416482-06 SB-2A_9-11 9 - 11 (ft)	03/26/2024 L2416482-07 SB-2A_12-14 12 - 14 (ft)	03/26/2024 L2416482-74 DUP03_20240326 12 - 14 (ft)
Total Metals								
Lead	*1250*	*922*	*1740*	*864*	38.9	32.1	302 J	109 J
Mercury	*1.26*	*2.14*	*3*	*11*	0.091	ND (0.084)	0.383	0.493

SB-2A-S1	03/26/2024 L2416482-76 SB-2A-S1_11-11.5 11 - 11.5 (ft)
SVOCs	
Naphthalene	*120*
VOCs	
1,2,4-Trimethylbenzene	*100*
1,3,5-Trimethylbenzene	*27*
Ethylbenzene	*60*
Naphthalene	*3300*
n-Propylbenzene	*9.5*
Xylene (Total)	*56*
Total CVOCs	ND

SB-3A	03/26/2024 L2416482-50 SB-3A_0-0.5 0 - 0.5 (ft)	03/26/2024 L2416482-51 SB-3A_1-3 1 - 3 (ft)	03/26/2024 L2416482-52 SB-3A_3-5 3 - 5 (ft)	03/26/2024 L2416482-53 SB-3A_5-7 5 - 7 (ft)	03/26/2024 L2416482-54 SB-3A_7-9 7 - 9 (ft)	03/26/2024 L2416482-55 SB-3A_9-11 9 - 11 (ft)
Total Metals						
Lead	*849*	94.4	32.1	*1900*	32.7	34
Mercury	*2.64*	0.323	0.073 J	*41.3*	0.091	0.091



LEGEND

SUPPLEMENTAL SAMPLE

SOIL BORING

SOIL BORING/MONITORING WELL

SITE BOUNDARY

PARCEL BOUNDARY

	Restricted Use Soil Cleanup Objectives - Protection of Groundwater	NY Part 375 Restricted Residential Use Soil Cleanup Objectives	NY Part 375 Unrestricted Use Soil Cleanup Objectives
Total Metals (mg/kg)			
Lead	450	400	63
Mercury	0.73	0.81	0.18
SVOCs (mg/kg)			
Naphthalene	12	100	12
VOCs (mg/kg)			
1,2,4-Trimethylbenzene	3.6	52	3.6
1,3,5-Trimethylbenzene	8.4	52	8.4
Ethylbenzene	1	41	1
Naphthalene	12	100	12
n-Propylbenzene	3.9	100	3.9
Xylene (Total)	1.6	100	0.26

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.

2. SOIL SAMPLE ANALYTICAL RESULTS ARE COMPARED TO THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYS DEC) TITLE 6 OF THE OFFICIAL COMPILATION OF NEW YORK CODES, RULES, AND REGULATIONS (NYCRR) PART 375 UNRESTRICTED USE SOIL CLEANUP OBJECTIVES (SCOS), RESTRICTED-RESIDENTIAL SCOS, AND 40 CFR 261 SUBPART C AND TABLE 1 OF 40 CFR 261.24.

3. NY-RES R = NYS DEC PART 375 RESTRICTED-RES IDENTIAL USE SCO

4. NY-UNRES = NYS DEC PART 375 UNRESTRICTED USE SCO

5. NY-PGW = NY DEC PART 375 PROTECTION OF GROUNDWATER CRITERIA

6. EXCEEDANCES OF THE NY -UNRES SCOS ARE SHADED GRAY

7. EXCEEDANCES OF THE NY-UNRES AND NY-RESRR ARE SHADED YELLOW.

8. EXCEEDANCES OF THE NY-PGW ARE SHOWN IN BLACK TEXT AND IN ITALICS.

9. RESULTS ARE DISPLAYED IN MILLIGRAMS PER KILOGRAM (mg/kg)

10. ASSESSOR PARCEL DATA SOURCE: NYC DEPARTMENT OF CITY PLANNING

11. AERIAL IMAGERY SOURCE: NEARMAP, 8 MARCH 2024

HALEY ALDRICH

558 SACKETT STREET
BROOKLYN, NEW YORK

SUPPLEMENTAL SOIL RESULTS EXCEEDANCE MAP

MAY 2024

FIGURE 6A

SB-2	06/21/2023 L2335535-06 SB-2_0-0.5 0 - 0.5 (ft)	06/21/2023 L2335535-07 SB-2_5-7 5 - 7 (ft)	06/21/2023 L2335535-08 SB-2_12-14 12 - 14 (ft)
Perfluorooctanesulfonic acid (PFOS)	0.127 J	*1.09*	ND (0.198)
Perfluorooctanoic acid (PFOA)	0.318	*1.04*	ND (0.198)

SB-4	06/21/2023 L2335535-09 SB-4_0-0.5 0 - 0.5 (ft)	06/21/2023 L2335535-10 SB-4_5-7 5 - 7 (ft)	06/21/2023 L2335535-11 SB-4_8-10 8 - 10 (ft)	06/21/2023 L2335535-12 SB-4_12-14 12 - 14 (ft)
Perfluorooctanesulfonic acid (PFOS)	*1.02*	ND (0.199)	ND (0.196)	ND (0.194)

SB-6	06/21/2023 L2335535-16 SB-6_0-0.5 0 - 0.5 (ft)	06/21/2023 L2335535-17 SB-6_5-7 5 - 7 (ft)	06/21/2023 L2335535-18 SB-6_10-12 10 - 12 (ft)	06/21/2023 L2335535-19 SB-6_12-14 12 - 14 (ft)
Perfluorooctanoic acid (PFOA)	0.676	0.404	ND (0.196)	ND (0.196)

LEGEND

- MONITORING WELL/SOIL BORING SAMPLE LOCATION
- SOIL BORING SAMPLE LOCATION
- PARCEL BOUNDARY
- SITE BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.

2. SOIL SAMPLE ANALYTICAL RESULTS ARE COMPARED TO THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC) TITLE 6 OF THE OFFICIAL COMPILATION OF NEW YORK CODES, RULES, AND REGULATIONS (NYCRR) PART 375 UNRESTRICTED USE SOIL CLEANUP OBJECTIVES (SCOS), RESTRICTED-RESIDENTIAL SCOS, AND 40 CFR 261 SUBPART C AND TABLE 1 OF 40 CFR 261.24.

3. NY-RESR = NYSDEC PART 375 RESTRICTED-RESIDENTIAL USE SCO

4. NY-UNRES = NYSDEC PART 375 UNRESTRICTED USE SCO

5. NY-PGW = NYDEC PART 375 PROTECTION OF GROUNDWATER CRITERIA

6. EXCEEDANCES OF THE NY-UNRES SCOS ARE SHADED GRAY

7. EXCEEDANCES OF THE NY-UNRES AND NY-RESRR ARE SHADED YELLOW

8. EXCEEDANCES OF THE NY-PGW ARE SHOWN IN BLACK TEXT AND IN ITALICS

9. RESULTS ARE DISPLAYED IN MILLIGRAMS PER KILOGRAM (ng/g)

10. SOIL SAMPLE ANALYTICAL RESULTS ARE COMPARED TO THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC) TITLE 6 OF THE OFFICIAL COMPILATION OF NEW YORK CODES, RULES, AND REGULATIONS (NYCRR) PART 375 UNRESTRICTED USE SOIL CLEANUP OBJECTIVES (SCOS), RESTRICTED-RESIDENTIAL SCOS, AND 40 CFR 261 SUBPART C AND TABLE 1 OF 40 CFR 261.24.

11. ASSESSOR PARCEL DATA SOURCE: NYC DEPARTMENT OF CITY PLANNING

12. AERIAL IMAGERY SOURCE: NEARMAP, 19 JULY 2022

N

0 20 40

SCALE IN FEET

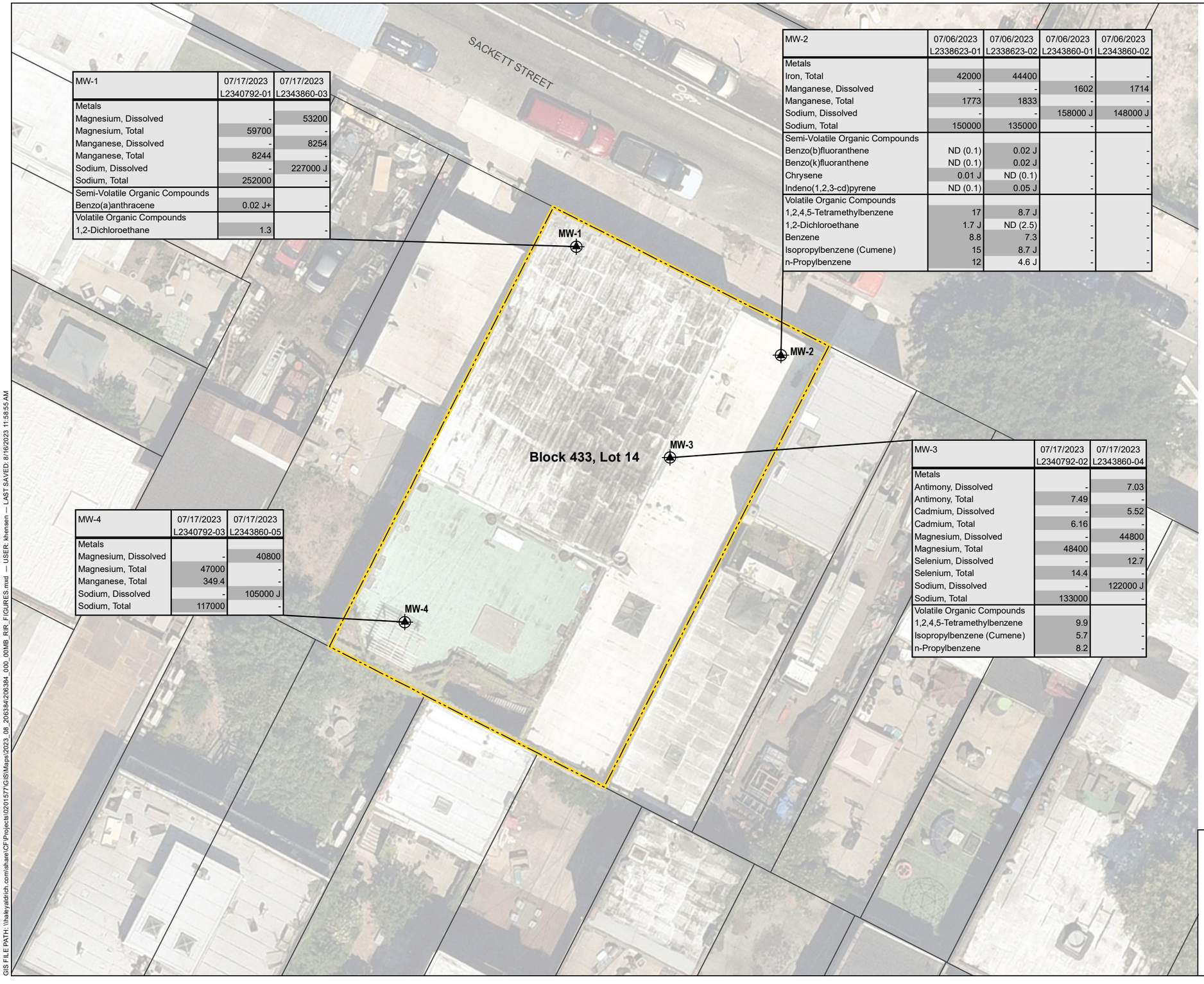
HALEY ALDRICH

REMEDIAL INVESTIGATION REPORT
558 SACKETT STREET
BROOKLYN, NEW YORK

EMERGING CONTAMINANTS IN SOIL RESULTS EXCEEDANCES MAP

AUGUST 2023

FIGURE 7



MW-1	07/17/2023 L2340792-01	07/17/2023 L2343860-03
Metals		
Magnesium, Dissolved	-	53200
Magnesium, Total	59700	-
Manganese, Dissolved	-	8254
Manganese, Total	8244	-
Sodium, Dissolved	-	227000 J
Sodium, Total	252000	-
Semi-Volatile Organic Compounds		
Benzo(a)anthracene	0.02 J+	-
Volatile Organic Compounds		
1,2-Dichloroethane	1.3	-

MW-2	07/06/2023 L2338623-01	07/06/2023 L2338623-02	07/06/2023 L2343860-01	07/06/2023 L2343860-02
Metals				
Iron, Total	42000	44400	-	-
Manganese, Dissolved	-	-	1602	1714
Manganese, Total	1773	1833	-	-
Sodium, Dissolved	-	-	158000 J	148000 J
Sodium, Total	150000	135000	-	-
Semi-Volatile Organic Compounds				
Benzo(b)fluoranthene	ND (0.1)	0.02 J	-	-
Benzo(k)fluoranthene	ND (0.1)	0.02 J	-	-
Chrysene	0.01 J	ND (0.1)	-	-
Indeno(1,2,3-cd)pyrene	ND (0.1)	0.05 J	-	-
Volatile Organic Compounds				
1,2,4,5-Tetramethylbenzene	17	8.7 J	-	-
1,2-Dichloroethane	1.7 J	ND (2.5)	-	-
Benzene	8.8	7.3	-	-
Isopropylbenzene (Cumene)	15	8.7 J	-	-
n-Propylbenzene	12	4.6 J	-	-

MW-3	07/17/2023 L2340792-02	07/17/2023 L2343860-04
Metals		
Antimony, Dissolved	-	7.03
Antimony, Total	7.49	-
Cadmium, Dissolved	-	5.52
Cadmium, Total	6.16	-
Magnesium, Dissolved	-	44800
Magnesium, Total	48400	-
Selenium, Dissolved	-	12.7
Selenium, Total	14.4	-
Sodium, Dissolved	-	122000 J
Sodium, Total	133000	-
Volatile Organic Compounds		
1,2,4,5-Tetramethylbenzene	9.9	-
Isopropylbenzene (Cumene)	5.7	-
n-Propylbenzene	8.2	-

MW-4	07/17/2023 L2340792-03	07/17/2023 L2343860-05
Metals		
Magnesium, Dissolved	-	40800
Magnesium, Total	47000	-
Manganese, Total	349.4	-
Sodium, Dissolved	-	105000 J
Sodium, Total	117000	-

LEGEND

- MONITORING WELL
- PARCEL BOUNDARY
- SITE BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. GROUNDWATER SAMPLE ANALYTICAL RESULTS ARE COMPARED TO THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION(NYSDEC) TECHNICAL AND OPERATIONAL GUIDANCE SERIES (TOGS) 1.1.1 AMBIENT WATER QUALITY STANDARDS (AWQS)
3. RESULTS SHADED GRAY EXCEED THE NYSDEC AWQS.
4. RESULTS ARE DISPLAYED IN MICROGRAMS PER LITER (µg/L).
5. ASSESSOR PARCEL DATA SOURCE: NYC DEPARTMENT OF CITY PLANNING
6. AERIAL IMAGERY SOURCE: NEARMAP, 19 JULY 2022

	Action Level New York TOGS 111 Ambient Water Quality Standards
Volatile Organic Compounds (ug/L)	
1,2,4,5-Tetramethlybenzene	5
1,2-Dichloroethane	0.6
Benzene	1
Isopropylbenzene (Cumene)	5
n-Propylbenzene	5
Semi-Volatile Organic Compounds (ug/L)	
Benzo(a)anthracene	0.002
Benzo(b)fluoranthene	0.002
Benzo(k)fluoranthene	0.002
Chrysene	0.002
Indeno(1,2,3-cd)pyrene	0.002
Total Metals (ug/L)	
Antimony, Total	3
Cadmium, Total	5
Magnesium, Total	35000
Manganese, Total	300
Iron, Total	300
Selenium, Total	10
Sodium, Total	20000

N

0 20 40
SCALE IN FEET

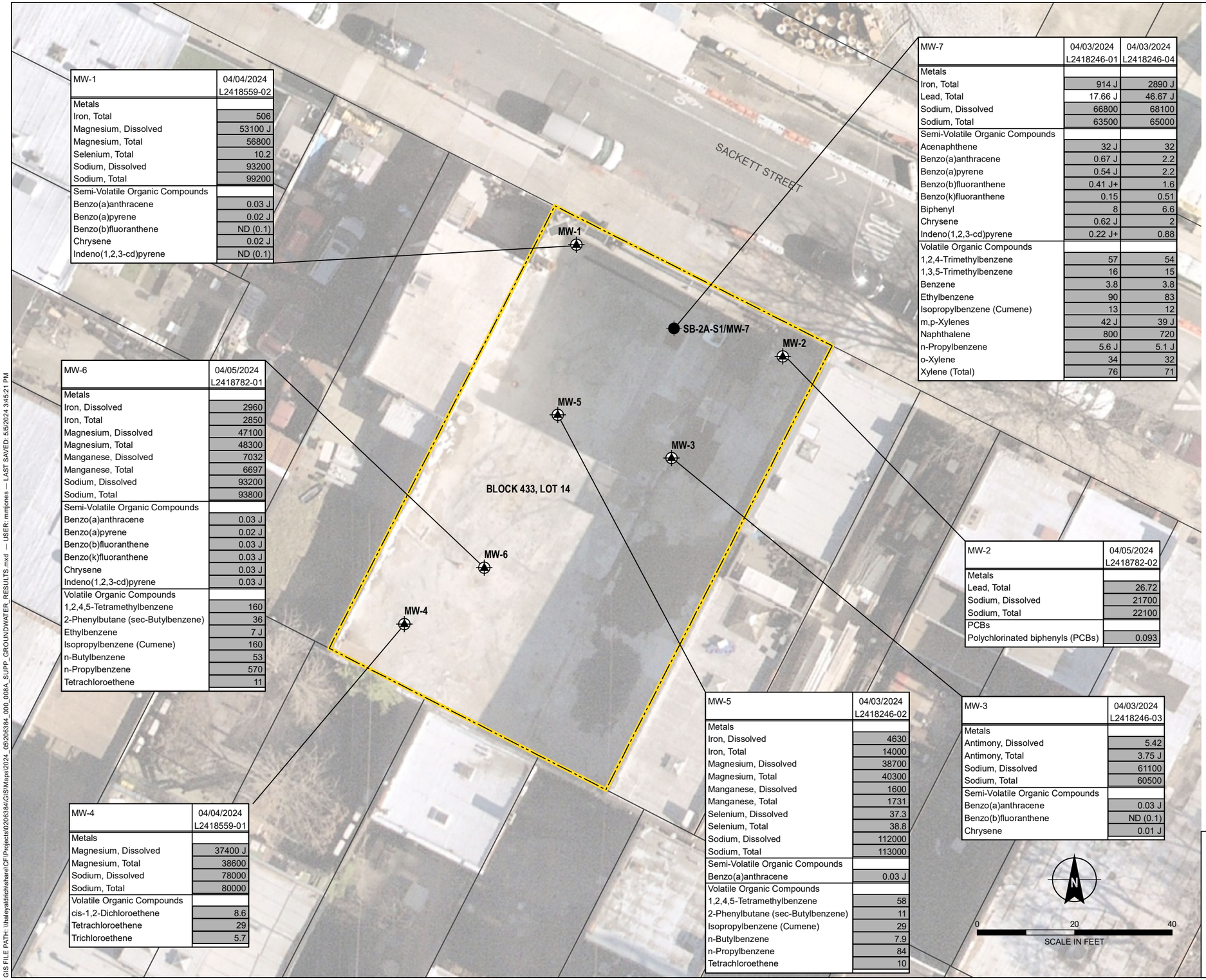
HALEY ALDRICH

REMEDIAL INVESTIGATION REPORT
558 SACKETT STREET
BROOKLYN, NEW YORK

GROUNDWATER RESULTS EXCEEDANCES MAP

AUGUST 2023

FIGURE 8



MW-1	04/04/2024 L2418559-02
Metals	
Iron, Total	506
Magnesium, Dissolved	53100 J
Magnesium, Total	56800
Selenium, Total	10.2
Sodium, Dissolved	93200
Sodium, Total	99200
Semi-Volatile Organic Compounds	
Benzo(a)anthracene	0.03 J
Benzo(a)pyrene	0.02 J
Benzo(b)fluoranthene	ND (0.1)
Chrysene	0.02 J
Indeno(1,2,3-cd)pyrene	ND (0.1)

MW-7	04/03/2024 L2418246-01	04/03/2024 L2418246-04
Metals		
Iron, Total	914 J	2890 J
Lead, Total	17.66 J	46.67 J
Sodium, Dissolved	66800	68100
Sodium, Total	63500	65000
Semi-Volatile Organic Compounds		
Acenaphthene	32 J	32
Benzo(a)anthracene	0.67 J	2.2
Benzo(a)pyrene	0.54 J	2.2
Benzo(b)fluoranthene	0.41 J+	1.6
Benzo(k)fluoranthene	0.15	0.51
Biphenyl	8	6.6
Chrysene	0.62 J	2
Indeno(1,2,3-cd)pyrene	0.22 J+	0.88
Volatile Organic Compounds		
1,2,4-Trimethylbenzene	57	54
1,3,5-Trimethylbenzene	16	15
Benzene	3.8	3.8
Ethylbenzene	90	83
Isopropylbenzene (Cumene)	13	12
m,p-Xylenes	42 J	39 J
Naphthalene	800	720
n-Propylbenzene	5.6 J	5.1 J
o-Xylene	34	32
Xylene (Total)	76	71

MW-6	04/05/2024 L2418782-01
Metals	
Iron, Dissolved	2960
Iron, Total	2850
Magnesium, Dissolved	47100
Magnesium, Total	48300
Manganese, Dissolved	7032
Manganese, Total	6697
Sodium, Dissolved	93200
Sodium, Total	93800
Semi-Volatile Organic Compounds	
Benzo(a)anthracene	0.03 J
Benzo(a)pyrene	0.02 J
Benzo(b)fluoranthene	0.03 J
Benzo(k)fluoranthene	0.03 J
Chrysene	0.03 J
Indeno(1,2,3-cd)pyrene	0.03 J
Volatile Organic Compounds	
1,2,4,5-Tetramethylbenzene	160
2-Phenylbutane (sec-Butylbenzene)	36
Ethylbenzene	7 J
Isopropylbenzene (Cumene)	160
n-Butylbenzene	53
n-Propylbenzene	570
Tetrachloroethene	11

MW-2	04/05/2024 L2418782-02
Metals	
Lead, Total	26.72
Sodium, Dissolved	21700
Sodium, Total	22100
PCBs	
Polychlorinated biphenyls (PCBs)	0.093

MW-5	04/03/2024 L2418246-02
Metals	
Iron, Dissolved	4630
Iron, Total	14000
Magnesium, Dissolved	38700
Magnesium, Total	40300
Manganese, Dissolved	1600
Manganese, Total	1731
Selenium, Dissolved	37.3
Selenium, Total	38.8
Sodium, Dissolved	112000
Sodium, Total	113000
Semi-Volatile Organic Compounds	
Benzo(a)anthracene	0.03 J
Volatile Organic Compounds	
1,2,4,5-Tetramethylbenzene	58
2-Phenylbutane (sec-Butylbenzene)	11
Isopropylbenzene (Cumene)	29
n-Butylbenzene	7.9
n-Propylbenzene	84
Tetrachloroethene	10

MW-3	04/03/2024 L2418246-03
Metals	
Antimony, Dissolved	5.42
Antimony, Total	3.75 J
Sodium, Dissolved	61100
Sodium, Total	60500
Semi-Volatile Organic Compounds	
Benzo(a)anthracene	0.03 J
Benzo(b)fluoranthene	ND (0.1)
Chrysene	0.01 J

MW-4	04/04/2024 L2418559-01
Metals	
Magnesium, Dissolved	37400 J
Magnesium, Total	38600
Sodium, Dissolved	78000
Sodium, Total	80000
Volatile Organic Compounds	
cis-1,2-Dichloroethene	8.6
Tetrachloroethene	29
Trichloroethene	5.7

LEGEND

SUPPLEMENTAL SAMPLE

MONITORING WELL

SOIL BORING/MONITORING WELL

SITE BOUNDARY

PARCEL BOUNDARY

	New York TOGS 111 Ambient Water Quality Standards
Metals (ug/L)	
Antimony, Dissolved & Total	3
Iron, Dissolved & Total	300
Lead, Total	25
Magnesium, Dissolved & Total	35000
Manganese, Dissolved & Total	300
Selenium, Dissolved & Total	10
Sodium, Dissolved & Total	20000
PCBs (ug/L)	
Polychlorinated biphenyls (PCBs)	0.09
Semi-Volatile Organic Compounds (ug/L)	
Acenaphthene	20
Benzo(a)anthracene	0.002
Benzo(a)pyrene	0
Benzo(b)fluoranthene	0.002
Benzo(k)fluoranthene	0.002
Biphenyl	5
Chrysene	0.002
Indeno(1,2,3-cd)pyrene	0.002
Naphthalene	10
Volatile Organic Compounds (ug/L)	
1,2,4,5-Tetramethylbenzene	5
1,2,4-Trimethylbenzene	5
1,3,5-Trimethylbenzene	5
2-Phenylbutane (sec-Butylbenzene)	5
Benzene	1
cis-1,2-Dichloroethene	5
Ethylbenzene	5
Isopropylbenzene (Cumene)	5
m,p-Xylenes	5
Naphthalene	10
n-Butylbenzene	5
n-Propylbenzene	5
o-Xylene	5
Tetrachloroethene	5
Trichloroethene	5
Xylene (Total)	5

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. GROUNDWATER SAMPLE ANALYTICAL RESU LTS ARE COMPARED TO THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC) TECHNICAL AND OPERATIONAL GUIDANCE SERIES (TOGS) 1.1.1 AM BIENT WATER QU ALITY STANDARDS (AWQS).
3. RESULTS SHADED GRAY EXCEED THE NYSDEC AWQS.
4. RESULTS ARE DISPLAYED IN MICROGRAMS PER LITER (µg/L).
5. ASSESSOR PARCEL DATA SOURCE: NYC DEPARTMENT OF CITY PLANNING
6. AERIAL IMAGERY SOURCE: NEARMAP, 8 MARCH 2024

HALEY ALDRICH

558 SACKETT STREET
BROOKLYN, NEW YORK

SUPPLEMENTAL GROUNDWATER RESULTS EXCEEDANCE MAP

MAY 2024

FIGURE 8A

GIS FILE PATH: \\haleyaldrich\share\CF\Projects\0206384\GIS\Maps\2024_05\206384_000_008A_SUPP_GROUNDWATER_RESULTS.mxd — USER: mmjones — LAST SAVED: 5/5/2024 3:45:21 PM

LEGEND

- MONITORING WELL
- PARCEL BOUNDARY
- SITE BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. EMERGING CONTAMINANTS ANALYTICAL RESULTS COMPARED TO THE NYSDEC FEBRUARY 2023 GUIDANCE VALUES (NYSDEC GV) FOR PFOA, PFOS, AND 1,4-DIOXANE.
3. RESULTS ARE DISPLAYED IN NANOGRAMS PER LITER (ng/L).
4. ONLY EXCEEDANCES SHOWN ON FIGURE.
5. ASSESSOR PARCEL DATA SOURCE: NYC DEPARTMENT OF CITY PLANNING
6. AERIAL IMAGERY SOURCE: NEARMAP, 19 JULY 2022

N

0 20 40
SCALE IN FEET

HALEY ALDRICH

REMEDIAL INVESTIGATION REPORT
558 SACKETT STREET
BROOKLYN, NEW YORK

EMERGING CONTAMINANTS IN GROUNDWATER RESULTS EXCEEDANCES MAP

AUGUST 2023

FIGURE 9

GIS FILE PATH: \\haleyaldrich.com\share\CF\Projects\0201577\GIS\Maps\2023_08_20\638412\06384_000_00MB_RIR_FIGURES.mxd — USER: khensen — LAST SAVED: 8/16/2023 11:58:55 AM

LEGEND

SUPPLEMENTAL SAMPLE

MONITORING WELL

SOIL BORING/MONITORING WELL

SITE BOUNDARY

PARCEL BOUNDARY

	NYSDEC April 2023 Ambient Water Quality Guidance Values (AWQGV)
PFAS (ng/L)	
Perfluorooctanesulfonic acid (PFOS)	2.7
Perfluorooctanoic acid (PFOA)	6.7

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.

2. EMERGING CONTAMINANTS ANALYTICAL RESULTS COMPARED TO THE NYSDEC APRIL 2023 GUIDANCE VALUES (NYSDEC GV) FOR PFOA AND PFOS.

3. RESULTS ARE DISPLAYED IN NANOGRAMS PER LITER (ng/L).

4. ONLY EXCEEDANCES SHOWN ON FIGURE.

5. ASSESSOR PARCEL DATA SOURCE: NYC DEPARTMENT OF CITY PLANNING

6. AERIAL IMAGERY SOURCE: NEARMAP, 8 MARCH 2024

N

0 20 40

SCALE IN FEET

HALEY ALDRICH

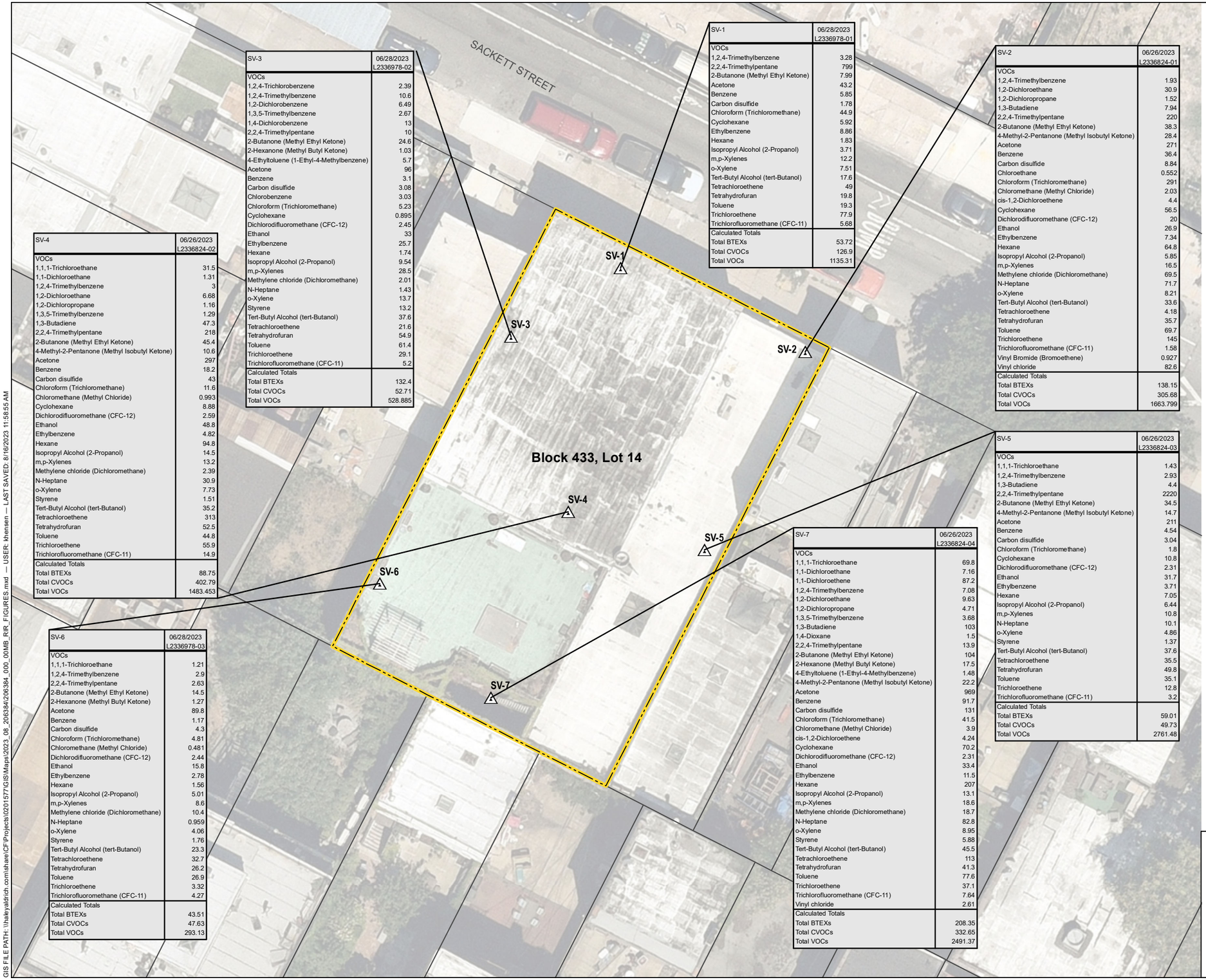
558 SACKETT STREET
BROOKLYN, NEW YORK

SUPPLEMENTAL EMERGING CONTAMINANTS IN GROUNDWATER RESULTS EXCEEDANCE MAP

MAY 2024

FIGURE 9A

GIS FILE PATH: \\haleyaldrich\share\CF\Projects\0206384\GIS\Maps\2024_05\206384_000_009A_GW_EMERGING_CONTAMINANTS_RESULTS.mxd — USER: mmjones — LAST SAVED: 5/6/2024 4:16:09 PM



SV-1	06/28/2023 L2336978-01
VOCs	
1,2,4-Trimethylbenzene	3.28
2,2,4-Trimethylpentane	799
2-Butanone (Methyl Ethyl Ketone)	7.99
Acetone	43.2
Benzene	5.85
Carbon disulfide	1.78
Chloroform (Trichloromethane)	44.9
Cyclohexane	5.92
Ethylbenzene	8.86
Hexane	1.83
Isopropyl Alcohol (2-Propanol)	3.71
m,p-Xylenes	12.2
o-Xylene	7.51
Tert-Butyl Alcohol (tert-Butanol)	17.6
Tetrachloroethene	49
Tetrahydrofuran	19.8
Toluene	19.3
Trichloroethene	77.9
Trichlorofluoromethane (CFC-11)	5.68
Calculated Totals	
Total BTEXs	53.72
Total CVOCs	126.9
Total VOCs	1135.31

SV-2	06/26/2023 L2336824-01
VOCs	
1,2,4-Trimethylbenzene	1.93
1,2-Dichloroethane	30.9
1,2-Dichloropropane	1.52
1,3-Butadiene	7.94
2,2,4-Trimethylpentane	220
2-Butanone (Methyl Ethyl Ketone)	38.3
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	28.4
Acetone	271
Benzene	36.4
Carbon disulfide	8.84
Chloroethane	0.552
Chloroform (Trichloromethane)	291
Chloromethane (Methyl Chloride)	2.03
cis-1,2-Dichloroethene	4.4
Cyclohexane	56.5
Dichlorodifluoromethane (CFC-12)	20
Ethanol	26.9
Ethylbenzene	7.34
Hexane	64.8
Isopropyl Alcohol (2-Propanol)	5.85
m,p-Xylenes	16.5
Methylene chloride (Dichloromethane)	69.5
N-Heptane	71.7
o-Xylene	8.21
Tert-Butyl Alcohol (tert-Butanol)	33.6
Tetrachloroethene	4.18
Tetrahydrofuran	35.7
Toluene	69.7
Trichloroethene	145
Trichlorofluoromethane (CFC-11)	1.58
Vinyl Bromide (Bromoethene)	0.927
Vinyl chloride	82.6
Calculated Totals	
Total BTEXs	138.15
Total CVOCs	305.68
Total VOCs	1663.799

SV-3	06/28/2023 L2336978-02
VOCs	
1,2,4-Trichlorobenzene	2.39
1,2,4-Trimethylbenzene	10.6
1,2-Dichlorobenzene	6.49
1,3,5-Trimethylbenzene	2.67
1,4-Dichlorobenzene	13
2,2,4-Trimethylpentane	10
2-Butanone (Methyl Ethyl Ketone)	24.6
2-Hexanone (Methyl Butyl Ketone)	1.03
4-Ethyltoluene (1-Ethyl-4-Methylbenzene)	5.7
Acetone	96
Benzene	3.1
Carbon disulfide	3.08
Chlorobenzene	3.03
Chloroform (Trichloromethane)	5.23
Cyclohexane	0.895
Dichlorodifluoromethane (CFC-12)	2.45
Ethanol	33
Ethylbenzene	25.7
Hexane	1.74
Isopropyl Alcohol (2-Propanol)	9.54
m,p-Xylenes	28.5
Methylene chloride (Dichloromethane)	2.01
N-Heptane	1.43
o-Xylene	13.7
Styrene	13.2
Tert-Butyl Alcohol (tert-Butanol)	37.6
Tetrachloroethene	21.6
Tetrahydrofuran	54.9
Toluene	61.4
Trichloroethene	29.1
Trichlorofluoromethane (CFC-11)	5.2
Calculated Totals	
Total BTEXs	132.4
Total CVOCs	52.71
Total VOCs	528.885

SV-4	06/26/2023 L2336824-02
VOCs	
1,1,1-Trichloroethane	31.5
1,1-Dichloroethane	1.31
1,2,4-Trimethylbenzene	3
1,2-Dichloroethane	6.68
1,2-Dichloropropane	1.16
1,3,5-Trimethylbenzene	1.29
1,3-Butadiene	47.3
2,2,4-Trimethylpentane	218
2-Butanone (Methyl Ethyl Ketone)	45.4
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	10.6
Acetone	297
Benzene	18.2
Carbon disulfide	43
Chloroform (Trichloromethane)	11.6
Chloromethane (Methyl Chloride)	0.993
Cyclohexane	8.88
Dichlorodifluoromethane (CFC-12)	2.59
Ethanol	48.8
Ethylbenzene	4.82
Hexane	94.8
Isopropyl Alcohol (2-Propanol)	14.5
m,p-Xylenes	13.2
Methylene chloride (Dichloromethane)	2.39
N-Heptane	30.9
o-Xylene	7.73
Styrene	1.51
Tert-Butyl Alcohol (tert-Butanol)	35.2
Tetrachloroethene	313
Tetrahydrofuran	52.5
Toluene	44.8
Trichloroethene	55.9
Trichlorofluoromethane (CFC-11)	14.9
Calculated Totals	
Total BTEXs	88.75
Total CVOCs	402.79
Total VOCs	1483.453

SV-5	06/26/2023 L2336824-03
VOCs	
1,1,1-Trichloroethane	1.43
1,2,4-Trimethylbenzene	2.93
1,3-Butadiene	4.4
2,2,4-Trimethylpentane	2220
2-Butanone (Methyl Ethyl Ketone)	34.5
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	14.7
Acetone	211
Benzene	4.54
Carbon disulfide	3.04
Chloroform (Trichloromethane)	1.8
Cyclohexane	10.8
Dichlorodifluoromethane (CFC-12)	2.31
Ethanol	31.7
Ethylbenzene	3.71
Hexane	7.05
Isopropyl Alcohol (2-Propanol)	6.44
m,p-Xylenes	10.8
N-Heptane	10.1
o-Xylene	4.86
Styrene	1.37
Tert-Butyl Alcohol (tert-Butanol)	37.6
Tetrachloroethene	35.5
Tetrahydrofuran	49.8
Toluene	35.1
Trichloroethene	12.8
Trichlorofluoromethane (CFC-11)	3.2
Calculated Totals	
Total BTEXs	59.01
Total CVOCs	49.73
Total VOCs	2761.48

SV-6	06/28/2023 L2336978-03
VOCs	
1,1,1-Trichloroethane	1.21
1,2,4-Trimethylbenzene	2.9
2,2,4-Trimethylpentane	2.63
2-Butanone (Methyl Ethyl Ketone)	14.5
2-Hexanone (Methyl Butyl Ketone)	1.27
Acetone	89.8
Benzene	1.17
Carbon disulfide	4.3
Chloroform (Trichloromethane)	4.81
Chloromethane (Methyl Chloride)	0.481
Dichlorodifluoromethane (CFC-12)	2.44
Ethanol	15.8
Ethylbenzene	2.78
Hexane	1.56
Isopropyl Alcohol (2-Propanol)	5.01
m,p-Xylenes	8.6
Methylene chloride (Dichloromethane)	10.4
N-Heptane	0.959
o-Xylene	4.06
Styrene	1.76
Tert-Butyl Alcohol (tert-Butanol)	23.3
Tetrachloroethene	32.7
Tetrahydrofuran	26.2
Toluene	26.9
Trichloroethene	3.32
Trichlorofluoromethane (CFC-11)	4.27
Calculated Totals	
Total BTEXs	43.51
Total CVOCs	47.63
Total VOCs	293.13

SV-7	06/26/2023 L2336824-04
VOCs	
1,1,1-Trichloroethane	69.8
1,1-Dichloroethane	7.16
1,1-Dichloroethene	87.2
1,2,4-Trimethylbenzene	7.08
1,2-Dichloroethane	9.63
1,2-Dichloropropane	4.71
1,3,5-Trimethylbenzene	3.68
1,3-Butadiene	103
1,4-Dioxane	1.5
2,2,4-Trimethylpentane	13.9
2-Butanone (Methyl Ethyl Ketone)	104
2-Hexanone (Methyl Butyl Ketone)	17.5
4-Ethyltoluene (1-Ethyl-4-Methylbenzene)	1.48
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	22.2
Acetone	969
Benzene	91.7
Carbon disulfide	131
Chloroform (Trichloromethane)	41.5
Chloromethane (Methyl Chloride)	3.9
cis-1,2-Dichloroethene	4.24
Cyclohexane	70.2
Dichlorodifluoromethane (CFC-12)	2.31
Ethanol	33.4
Ethylbenzene	11.5
Hexane	207
Isopropyl Alcohol (2-Propanol)	13.1
m,p-Xylenes	18.6
Methylene chloride (Dichloromethane)	18.7
N-Heptane	82.8
o-Xylene	8.95
Styrene	5.88
Tert-Butyl Alcohol (tert-Butanol)	45.5
Tetrachloroethene	113
Tetrahydrofuran	41.3
Toluene	77.6
Trichloroethene	37.1
Trichlorofluoromethane (CFC-11)	7.64
Vinyl chloride	2.61
Calculated Totals	
Total BTEXs	208.35
Total CVOCs	332.65
Total VOCs	2491.37

LEGEND

- SOIL VAPOR SAMPLE LOCATION
- PARCEL BOUNDARY
- SITE BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. ALL DETECTED ANYLTES SHOWN ON FIGURE.
3. SOIL VAPOR ANALYSIS - VOLATILE ORGANIC COMPOUNDS (VOCs)
4. RESULTS ARE DISPLAYED IN MICROGRAMS PER CUBIC METER (µg/m³).
5. TOTAL DETECTED CONCENTRATION OF BENZENE, TOLUENE, ETHYLBENZENE AND XYLENES (BTEX).
6. TOTAL CVOCS CONCENTRATIONS OF CARBON TETRACHLORIDE, 1,1-DICHLOROETHENE, CIS-1,2-DICHLOROETHENE, TRICHLOROETHENE, METHYLENE CHLORIDE, TETRACHLOROETHENE, 1,1,1-TRICHLOROETHANE AND VINYL CHLORIDE.
7. TOTAL VOCs IS THE SUM OF ALL THE DECTECTED CONCENTRATIONS.
8. EMERGING CONTAMINANTS ANALYTICAL RESULTS COMPARED TO THE NYSDEC FEBRUARY 2023 GUIDANCE VALUES (NYSDEC GV) FOR PFOA, PFOS, AND 1,4-DIOXANE.
9. RESULTS ARE DISPLAYED IN NANOGRAMS PER LITER (ng/L).
10. ONLY EXCEEDANCES SHOWN ON FIGURE.
11. ASSESSOR PARCEL DATA SOURCE: NYC DEPARTMENT OF CITY PLANNING
12. AERIAL IMAGERY SOURCE: NEARMAP, 19 JULY 2022

N

0 20 40

SCALE IN FEET

HALEY ALDRICH

REMEDIAL INVESTIGATION REPORT
558 SACKETT STREET
BROOKLYN, NEW YORK

SOIL VAPOR RESULTS MAP

AUGUST 2023

FIGURE 10

APPENDIX A
Ground Penetrating Radar Survey Report

Coastal Environmental Solutions, Inc.

GEOPHYSICAL INVESTIGATION REPORT

7.17.2023

558 Sackett Street, Brooklyn, NY
Dates of Investigation: 6/21/2023

Prepared for:

Haley & Aldrich of New York
70 Blanchard Road, Suite 204
Burlington, MA 01803

Prepared By:

Dennis Berthold
Director of Geophysical Operations
Coastal Environmental Solutions, Inc.
PO Box 342
Medford, New York 11763

1.0 INTRODUCTION

On 6/21/2023, Coastal Environmental Solutions, Inc (Coastal) personnel performed a limited geophysical investigation at 558 Sackett Street, Brooklyn, NY. The areas of interest included the entirety of the site including remnants of the former building foundations and other areas. Surface conditions consisted of concrete and soil.

2.0 SCOPE OF WORK

1. Locate and mark detectable underground utilities within accessible areas throughout the property for the purposes of clearing soil boring locations.

3.0 EQUIPMENT

ImpulseRadar PinPointR Ultra-Wide Band (UWB) Penetrating Radar System

Ground Penetrating RADAR (GPR) is a non-destructive geophysical method that produces a continuous cross-sectional profile of subsurface features in real time. GPR operates by transmitting both high and low frequency electromagnetic wave pulses down into the ground through a transmitter in the antenna. The transmitted electromagnetic waves reflect off materials with contrasting dielectric properties from surrounding medium such as underground storage tanks, utilities, distinct contacts between different earth materials, and other various subsurface objects. The antenna receiver collects the reflected electromagnetic waves which are then interpreted by the operator.

The ImpulseRadar PinPointR UWB GPR utilizes a dual band 400/800 MHz HS antenna mounted to a stroller frame which rolls over the surface. The total depth of penetration achieved with the antenna can be up to 10 feet but widely varies based on site-specific subsurface conditions. Conductive materials in the soil attenuate the GPR signal causing a decrease in effective depth of penetration and clarity.

Vivax-Metrotech vLoc3-Pro Receiver/Transmitter

The vLoc3-Pro Receiver is a hand-operated antenna capable of detecting electromagnetic (EM) fields emitted from a source. The EM antenna can detect pipes and cables in the ground at depths of up to 20 feet using active or passive tracing techniques. Passive tracing is the act of locating an underground utility through the detection of electrical or radio signals travelling along conductive utilities. Active tracing is used in conjunction with the Transmitter that is directly connected to the target utility or to a conductive rodder within a non-conductive line. A signal is sent through the utility at a specific frequency that can be detected by the Receiver. The detectability of a target utility depends on many factors including access to the target utility, grounding, depth of utility, conductivity, and other site-specific factors.

TW-6 Pipe and Cable Locator

The TW-6 Pipe and Cable locator is a handheld magnetometer which utilizes a transmitter-receiver pair attached to opposite ends of a handle and carried approximately 1-2ft from the surface. The magnetometer induces an electromagnetic (EM) field into the ground that is generated by the transmitter. Once the induced EM field passes through a buried metallic object, it generates a

secondary EM field which is detected by the receiver, generating an audible tone. Based on the calibration of the magnetometer, the audible tone reflects the strongest response as the highest pitched sound, trailing off on all sides of the peak. This piece of technology can be used to detect subsurface features such as metallic USTs, large diameter conductive pipes, and buried manholes, especially in areas in which traditional GPR methods cannot be utilized, such as overgrown or uneven surfaces.

4.0 METHODOLOGY

1. A subsurface investigation was performed in close proximity to the client proposed soil boring locations. Active and passive detection methods were utilized with the VLoc3-Pro receiver/transmitter. Coastal personnel direct connected to all accessible and traceable pipes, conduits, valve covers, and any other surface feature throughout the site. A passive scan was performed throughout the site to detect any potential underground utilities that could not be located with active scan.
2. The TW-6 was utilized (if applicable) to sweep any accessible areas for suspected UST locations in 3-to-5-foot spacings for readings that may represent a buried metallic anomaly. Upon detection of a reading, the approximate size and shape of the anomalous area was marked on the surface to be investigated further with GPR.
3. GPR was utilized to further characterize the approximate dimensions, depth, and shape of the anomalies located with the TW-6. The remainder of the areas around suspected UST locations (if applicable) were scanned with GPR in 3-to-5-foot spacing to locate any anomalous features not previously detected such as non-conductive piping and former excavations.
4. All findings were marked on the surface utilizing the American Public Works Association (APWA) recommended color code, seen below:

WHITE	Proposed Excavation
PINK	Temporary Survey Markings (Approximate UST Locations, Soil Boring Locations)
RED	Electric Power Lines, Cables, Conduit and Lighting Cables
YELLOW	Gas, Oil, Steam, Petroleum or Gaseous Materials
ORANGE	Communication, Alarm or Signal Lines, Cables or Conduit
BLUE	Water (Domestic and Fire Lines)
PURPLE	Irrigation (Not commonly used)
GREEN	Sewers and Drain Lines

5.0 SUMMARY OF FINDINGS

Subsurface Investigation

Coastal personnel conducted a subsurface investigation within all accessible areas of concern. All detections were marked in the field in accordance with the APWA guide above. All detections were then reviewed with H&A personnel prior to drilling activities. All utilities were taken out of service leading onto the above referenced property prior to our investigation. Remnants of drain lines and building foundations were located and marked in order to avoid them. Portions of a

backfilled basement were located based on the existing walls and marked out in the field prior to drilling operations.

Limitations

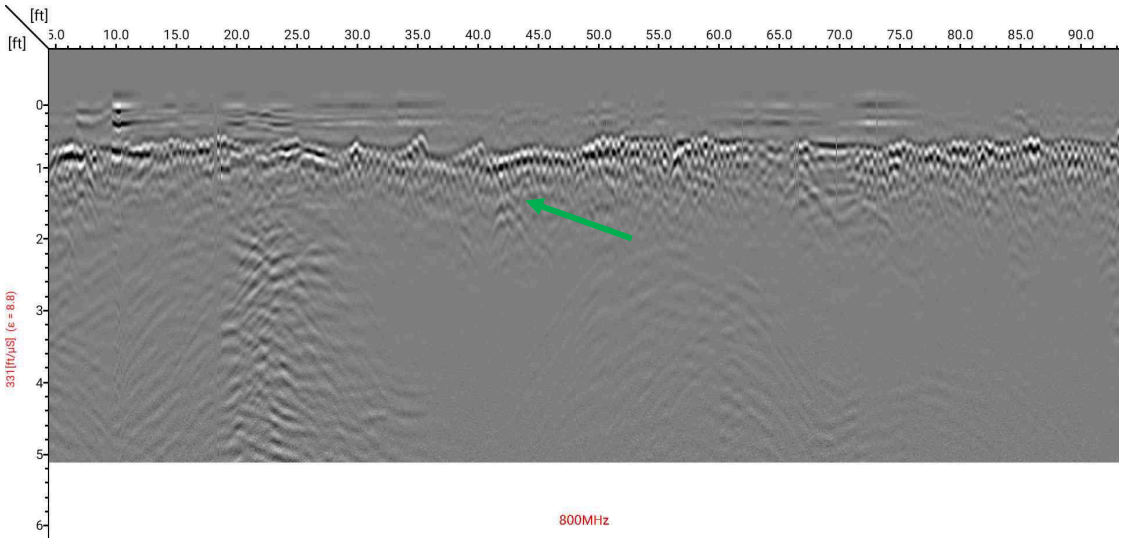
The effective depth of GPR penetration was limited to approximately 2 feet below the soil and concrete grade. The limiting factor was likely due to soil conductivity attenuating the GPR signal, shallow bedrock containing moisture, or non-conductive materials utilized for the utilities. The TW-6 is unable to be utilized within close proximity to parked vehicles and exterior walls, or on top of reinforced concrete.

Disclaimer

The subsurface investigation was performed by Coastal after considering the limits of the scope of work and the time constraint for the investigation. The investigation that is described in this report was undertaken in accordance with current accepted standards and practices of the geophysical survey industry. The results and interpretations that are presented are based on professional judgment and are as accurate as can reasonably be achieved. However, no geophysical equipment can accurately depict all subsurface features due to the geology and environmental conditions of the subsurface. Any intrusive work in proximity to identified anomalies should be carefully considered and cross-referenced with all available site-specific documentation. Coastal is not liable for the use, interpretation, or application of the data and information in this report.

PHOTOS & GPR SCREENSHOTS

Photo 1 – Photo of the site during drilling operations showing the demolished lot. Multiple detections were located with GPR during the first investigation which were determined to be former storm drain utilities.



GPR Screenshot 1 – GPR screenshot showing storm drain detections which were identified and marked in the field. Clear areas were identified to perform drilling operations.

Photo 2 – Additional drainage structures identified in the field.

Photo 3 – Photo of the partially backfilled basements present on site which were covered and labeled for safety. Also visible in this photo are the disconnected lines formerly used for water (blue) and sewer (green) utilities.

Photo 4 – Photo of one of the debris piles present which prevented subsurface investigation in their immediate area. GPR scans were performed by Coastal around this debris pile to determine the absence of any utilities.

APPENDIX B
Soil Boring Logs

HALEY ALDRICH

SOIL BORING LOG

BORING NO. SB-1

PROJECT	Remedial Investigation - 558 Sackett Street	**PROJECT #**	0206384
LOCATION	558 Sackett Street, Brooklyn, NY	**PROJECT MGR.**	M. Conlon
CLIENT	Sackett Heights LLC	**FIELD REP.**	A. Vaculik, Z.Simmel
CONTRACTOR	Coastal Environmental Solutions, Inc.	**DATE STARTED**	6/21/2023
DRILLER	Pat Slavin	**DATE FINISHED**	6/21/2023

Elevation ft. **Datum** **Boring Location** See Plan

Item	Casing	Sampler
Type	Steel	Steel
Inside Diameter (in.)	6"	3"
Hammer Weight (lb.)	NA	NA
Hammer Fall (in.)	NA	NA

Rig Make & Model Eijkelkamp CRS XL 140 Duo

☐ Truck ☐ Tripod ☐ Cat-Head
☐ ATV ☐ Geoprobe ☑ Winch
☐ Track ☐ Air Track ☐ Roller Bit
☑ Skid ☑ Other ☐ Cutting Head

Hammer Type: ☐ Safety ☐ Doughnut ☐ Automatic

Drilling Mud: ☐ Bentonite ☐ Polymer ☑ None

Casing Advance: Type Method Depth — Sonic

Drilling Notes:

Depth (ft.)	Recovery (in/tot)	PID (ppm)	Sample Depth (ft)	Sample ID	Visual-Manual Identification & Description (Color, primary component NAME, secondary component, optional descriptions, odor, moisture [SYMBOL])	Remarks
0					8" Concrete	
		0.0			Brown to dark brown fine to medium SAND, crushed concrete, brick fragments, no odor, dry [FILL]	
1			0-0.5	SB-1_0-0.5		
		0.0				
2	20/60		1-2	SB-1_ 1-2		
		0.0				
3						
		0.0				
4						
		0.0				
5						
		0.0			Brown to dark brown, fine to medium SAND, brick and concrete fragments, gravel, no odor, dry [FILL]	
6						
		0.0	5-7	SB-1_5-7		
7	20/60					
		0.0				
8						
		0.0				
9						
		0.0				
10						
		0.8	10-12	SB-1_10-12	Brown to dark brown fine silty SAND, some medium sand, moderate petroleum-like odor, moist [SP]	Moist @ 10'
11						Slighty stained 10-13'
		0.9				
12						
	40/60	1.1				
13						
		0.9	12-14	SB-2_12-14		
14						
		1.4				
15						
		0.3			Brown to black, fine to medium SAND, some gravel, no odor, wet [SP]	Wet @ 15'
16						
		0.1				
17						
	31/60	0.0			Brown to red brown, fine silty SAND, some medium, no odor, wet [SP]	
18						
		0.0				
19						
		0.0				
20						
		0.0			Brown to red brown, fine to medium SAND, some silt and gravel, no odor, wet [SP]	
21						
		0.0				
22						
		0.0				
23	40/60				Brown to red brown, medium to course SAND, some fine sand and gravel, no odor, wet [SP]	
		0.0				
24						
		0.0				
25						
		0.0			Brown to red brown, medium to coarse SAND, some fine sand and gravel, no odor, wet [SP]	
26						
		0.0				
27	37/60					
		0.0				
28						
		0.0				
29						
		0.0				
30						
		0.0				

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth in feet to: Water

Sample ID

O	Open End Rod
T	Thin Wall Tube
U	Undisturbed Sample
S	Split Spoon Sample
G	Geoprobe

Summary

Overburden (Linear ft.)	100
Rock Cored (Linear ft.)	-
Number of Samples	5

BORING NO. SB-1

*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.

Form #3000

NOTE: Soil descriptions based on a modified Burmister method of visual-manual identification as practiced by Haley & Aldrich, Inc.

HALEY ALDRICH

Soil Boring Log

BORING NO. SB-1

Depth (ft.)	Recovery (in/tot)	PID (ppm)	Sample Depth (ft)	Sample ID	Visual-Manual Identification & Description (Color, primary component NAME, secondary component, optional descriptions, odor, moisture [SYMBOL])	Remarks
30		0.0			Brown fine to medium SAND, no odor, wet [SP]	
31		0.0				
32	42/60	0.0				
33		0.0				
34		0.0				
35		0.0			Brown, medium to coarse SAND with rounded gravel, no odor, wet [SP]	
36		0.0				
37	32/60	0.0				
38		0.0				
39		0.0				
40		0.0			Brown , fine to medium SAND, no odor, wet [SP]	
41		0.0				
42	45/60	0.0				
43		0.0				
44		0.0				
45		0.0			Brown, fine to medium SAND, some gravel, no odor, wet [SP]	
46		0.0				
47	32/60	0.0				
48		0.0				
49		0.0				
50		0.0			Brown, fine to medium SAND, some coarse sand, no odor, wet [SP]	
51		0.0				
52	44/60	0.0				
53		0.0				
54		0.0				
55		0.0			Brown to red brown fine to medium, some gravel, no odor, wet [SP]	
56		0.0				
57	48/60	0.0				
58		0.0				
59		0.0				
60		0.0			Brown to red brown, medium to coarse SAND, some cobbles, no odor, wet [SP]	
61		0.0				
62	48/60	0.0				
63		0.0				
64		0.0				
65		0.0			Brown medium to coarse SAND, some gravel, no odor, wet [SP]	
66		0.0				
67	33/60	0.0				
68		0.0				
69		0.0				
70						

NOTES:

FILE NO. 206384 BORING NO. SB-1

*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.

NOTE: Soil descriptions based on a modified Burmister method of visual-manual identification as practiced by Haley & Aldrich, Inc.

Form #3000

HALEY ALDRICH

Soil Boring Log

BORING NO. SB-1

Depth (ft.)	Recovery (in/tot)	PID (ppm)	Sample Depth (ft)	Sample ID	Visual-Manual Identification & Description (Color, primary component NAME, secondary component, optional descriptions, odor, moisture [SYMBOL])	Remarks
70		0.0			Brown to red brown fine SAND, some medium sand gravel, no odor, wet [SP]	
71		0.0				
72	60/60	0.0			Red to red brown fine to medium SAND, some coarse sand and gravel, no odor, wet [SP]	
73		0.0				
74		0.0				
75		0.0			Brown to light brown, fine to medium SAND, some silt and gravel, no odor, wet [SP]	
76		0.0				
77	44/60	0.0				
78		0.0				
79		0.0				
80		0.0			Red brown to brown, fine to medium SAND, some gravel and cobbles, no odor, wet [SP]	
81		0.0				
82		0.0				
83	60/60	0.0				
84		0.0				
85		0.0			Brown to grey brown, fine SAND, some medium sand and gravel, no odor, wet [SP]	
86		0.0				
87	60/60	0.0			Brown to red brown, fine to medium SAND, some gravel and cobbles, no odor, wet [SP]	
88		0.0				
89		0.0				
90		0.0			Brown to dark brown, medium to coarse SAND, some gravel and cobbles, no odor, wet [SP]	
91		0.0				
92		0.0			Brown to dark brown, fine SAND, some medium sand, silt, gravel and cobbles, no odor, wet [SP]	
93	60/60	0.0				
94		0.0				
95		0.0			Brown to dark brown, fine to medium SAND, some coarse sand and cobbles, no odor, wet [SP]	
96		0.0				
97	60/60	0.0				
98		0.0				
99		0.0				
100					**END OF BORING AT 100 FT**	

NOTES:

FILE NO. 206384 | BORING NO. SB-1

*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.

NOTE: Soil descriptions based on a modified Burmister method of visual-manual identification as practiced by Haley & Aldrich, Inc.

Form #3000

HALEY ALDRICH

SOIL BORING LOG

BORING NO. SB-2

PROJECT	Remedial Investigation - 558 Sackett Street	**PROJECT #**	0206384
LOCATION	558 Sackett Street, Brooklyn, NY	**PROJECT MGR.**	M. Conlon
CLIENT	Sackett Heights LLC	**FIELD REP.**	A. Vaculik, Z.Simmel
CONTRACTOR	Coastal Environmental Solutions	**DATE STARTED**	6/21/2023
DRILLER	Pat Slavin	**DATE FINISHED**	6/21/2023

Elevation ft. **Datum** **Boring Location** See Plan

Item	Casing	Sampler
Type	Steel	Steel
Inside Diameter (in.)	6"	3"
Hammer Weight (lb.)	NA	NA
Hammer Fall (in.)	NA	NA

Rig Make & Model Eijkelkamp CRS XL 140 Duo

- ☐ Truck ☐ Tripod ☐ Cat-Head
- ☐ ATV ☐ Geoprobe ☑ Winch
- ☑ Track ☐ Air Track ☐ Roller Bit
- ☐ Skid ☑ Other ☐ Cutting Head

Hammer Type

- ☐ Safety
- ☐ Doughnut
- ☐ Automatic

Drilling Mud

- ☐ Bentonite
- ☐ Polymer
- ☑ None

Casing Advance Type Method Depth: Sonic

Drilling Notes:

Depth (ft.)	Recovery (in/tot)	PID (ppm)	Sample Depth (ft)	Sample ID	Visual-Manual Identification & Description (Color, primary component NAME, secondary component, optional descriptions, odor, moisture [SYMBOL])	Remarks
0					8" Concrete	
		0.0	0-0.5	SB-2_0-0.5	Brown, silty SAND, large brick, rock, concrete and metal fragments, no odor, dry [FILL]	
1						
		0.0				
2	36/60					
		0.0				
3						
		0.0				
4						
		0.0				
5						
		0.0				
6			5-7	SB-2_5-7		
		0.0			Brown to dark brown, fine to medium SAND, some silt, brick fragments, broken wood, gravel, no odor, dry [FILL]	
7						
	48/60	0.0				
8						
		0.0				
9						
		0.0				
10						
		0.0				
11						
		0.0				
12						
	49/60	0.0	12-14	SB-2_12-14	Brown to dark brown fine to medium silty SAND, no odor, moist [SM]	Moist at 9'
13						
		0.0				
14						
		0.0				
15						Wet at 15'
		1.8			15'-17' Dark brown to black PEAT, organic matter, slight organic-like odor, wet [PT]	
16						
		1.2				
17						
	60/60	0.9				
18						
		1.8			Brown fine to medium SAND, trace silt and clay, no odor, wet [SP]	
19						
		0.2				
20						
					END OF BORING AT 20 FT	

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth in feet to: Water

Sample ID

- **O** Open End Rod
- **T** Thin Wall Tube
- **U** Undisturbed Sample
- **S** Split Spoon Sample
- **G** Geoprobe

Summary

Overburden (Linear ft.)	10
Rock Cored (Linear ft.)	-
Number of Samples	3

BORING NO. SB-2

*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.

Form #3000

NOTE: Soil descriptions based on a modified Burmister method of visual-manual identification as practiced by Haley & Aldrich, Inc.

HALEY ALDRICH

SOIL BORING LOG

BORING NO. SB-3

PROJECT	Remedial Investigation - 558 Sackett Street	**PROJECT #**	0206384
LOCATION	558 Sackett Street, Brooklyn, NY	**PROJECT MGR.**	M. Conlon
CLIENT	Sackett Heights LLC	**FIELD REP.**	A. Vaculik Z.Simmel
CONTRACTOR	Coastal Environmental Solutions, Inc.	**DATE STARTED**	6/21/2023
DRILLER	Pat Slavin	**DATE FINISHED**	6/21/2023

Elevation ft. **Datum** **Boring Location** See Plan

Item	Casing	Sampler
Type	Steel	Steel
Inside Diameter (in.)	6"	3"
Hammer Weight (lb.)	NA	NA
Hammer Fall (in.)	NA	NA

Rig Make & Model Eijkelkamp CRS XL 140 Duo

☐ Truck ☐ Tripod ☐ Cat-Head ☐ Safety ☐ Bentonite
☐ ATV ☐ Geoprobe ☑ Winch ☐ Doughnut ☐ Polymer
☐ Track ☐ Air Track ☐ Roller Bit ☐ Automatic ☑ None
☑ Skid ☑ Other ☐ Cutting Head

Hammer Type | **Drilling Mud** | **Casing Advance** Type Method Depth: Sonic

Drilling Notes:

Depth (ft.)	Recovery (in/tot)	PID (ppm)	Sample Depth (ft)	Sample ID	Visual-Manual Identification & Description (Color, primary component NAME, secondary component, optional descriptions, odor, moisture [SYMBOL])	Remarks
0					8" Concrete	
		0.0			Brown to dark brown, medium SAND, crushed concrete, brick fragments, no odor, dry [FILL]	
1			0-0.5	SB-1_0-0.5		
		0.0				
2	20/60		1-2	SB-1_ 1-2		
		0.0				
3						
		0.0				
4						
		0.0				
5						
		0.0				Moist at 5'
6					Dark brown, fine to medium SAND, crushed concrete, brick fragments, slight petroleum like odor, moist [FILL]	
		0.0	5-7	SB-1_5-7		
7				Dup02-20230625		
	28/60	0.0			Brown to light brown, fine to medium SAND, trace coarse sand and brick, no odor, moist [FILL]	
8						
		0.0				
9						
		0.0				
10						
		1.2	9-11	SB-1_9-11	Brown to dark brown, medium to fine SAND, trace coarse sand, no odor, moist [SP]	
11						
		1.1			Black to dark brown peat and organic matter, organic like odor, slightly moist [PT]	
12	46/60					
		0.8				
13						
		0.4	12-14	SB-2_12-14		
14						
		0.0				
15						
		0.0			Brown to grey brown, fine SAND, no odor, wet [SP]	Wet at 15'
16						
		0.0				
17	33/60					
		0.0				
18						
		0.0				
19						
		0.0				
20						
		0.0			Brown to dark brown, fine to medium SAND, some gravel, no odor, wet [SP]	
21						
		0.0				
22						
		0.0				
23	50/60				Brown to red brown fine to medium SAND, no odor, wet [SP]	
		0.0				
24						
		0.0				
25						
		0.0			Brown to gray brown medium SAND, no odor, wet [SP]	
26						
		0.1				
27	49/60				Black to dark brown peat and organic matter, organic like odor, moist [PT]	
		0.0				
28					Brown to gray brown medium SAND, no odor, wet [SP]	
		0.0				
29						
		0.0				
30						
		0.0				

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth in feet to: Water

Sample ID

O	Open End Rod
T	Thin Wall Tube
U	Undisturbed Sample
S	Split Spoon Sample
G	Geoprobe

Summary

Overburden (Linear ft.)	10
Rock Cored (Linear ft.)	-
Number of Samples	6

BORING NO. SB-3

*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.

Form #3000

NOTE: Soil descriptions based on a modified Burmister method of visual-manual identification as practiced by Haley & Aldrich, Inc.

HALEY ALDRICH

Soil Boring Log

BORING NO. SB-3

Depth (ft.)	Recovery (in/tot)	PID (ppm)	Sample Depth (ft)	Sample ID	Visual-Manual Identification & Description (Color, primary component NAME, secondary component, optional descriptions, odor, moisture [SYMBOL])	Remarks
30		0.0			Red brown to brown fine SAND, some medium, no odor, wet [SP]	
31		0.0				
32	60/60	0.0				
33		0.0			Red brown to brown, fine to medium SAND, no odor, wet [SP]	
34		0.0				
35		0.0			Red brown to brown, medium SAND, no odor, wet [SP]	
36	60/60	0.0				
37		0.0				
38		0.0				
39		0.0				
40		0.0			Brown to red brown, fine to medium SAND, no odor, wet [SP]	
41		0.0				
42	60/60	0.0				
43		0.0				
44		0.0				
45		0.0			Brown to light brown fine to medium SAND, some coarse sand and gravel, no odor, wet [SP]	
46		0.0				
47		0.0				
48	50/60	0.0				
49		0.0				
50		0.0			Brown to light brown, fine SAND, some silt and gravel, no odor, wet [SP]	
51		0.0				
52	4060	0.0				
53		0.0				
54		0.0				
55		0.0			Brown to light brown medium sand, some coarse sand, no odor, wet [SP]	
56		0.0				
57	40/60	0.0				
58		0.0				
59		0.0				
60		0.0				
61		0.0			Brown to dark brown, medium SAND, some coarse sand, gravel and cobbles, no odor, wet [SP]	
62	32/60	0.0				
63		0.0				
64		0.0				
65		0.0				
66		0.0			65'-69.5' Brown to dark brown, medium to coarse SAND, some gravel and cobbles, no odor, wet [SP]	
67	38/60	0.0				
68		0.0				
69		0.0			Brown to gray brown fine SAND, some medium sand, no odor, wet [SP]	
70						

NOTES:

FILE NO. 206384 **BORING NO.** SB-3

***NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.**

NOTE: Soil descriptions based on a modified Burmister method of visual-manual identification as practiced by Haley & Aldrich, Inc.

Form #3000

HALEY ALDRICH

Soil Boring Log

BORING NO. SB-3

Depth (ft.)	Recovery (in/tot)	PID (ppm)	Sample Depth (ft)	Sample ID	Visual-Manual Identification & Description (Color, primary component NAME, secondary component, optional descriptions, odor, moisture [SYMBOL])	Remarks
70		0.0			Brown to dark brown medium to coarse SAND, some gravel, no odor, wet [SP]	
71		0.0				
72	60/60	0.0				
73		0.0			Brown to light brown fine SAND, some medium sand, trace gravel, no odor, wet [SP]	
74		0.0				
75		0.0			Brown to light brown fine to medium SAND, some silt, gravel and cobbles, no odor, wet [SP]	
76		0.0				
77	48/60	0.0			Brown to light brown, fine silty SAND, some gravel and cobbles, no odor, wet [SM]	
78		0.0				
79		0.0				
80		0.0			Brown to light brown fine silty SAND, some cobbles, no odor, wet [SM]	
81		0.0				
82		0.0				
83	60/60	0.0				
84		0.0				
85		0.0			Light brown to grayish brown fine silty SAND, compact, no odor, slightly moist [SM]	
86		0.0				
87		0.0			Gray brown medium SAND, some cobbles, no odor, slightly moist [SP]	
88	55/60	0.0				
89		0.0				
90		0.0			Brown to light brown fine to medium SAND, some cobbles, no odor, moist [SP]	
91		0.0				
92		0.0				
93	50/60	0.0				
94		0.0				
95		0.0			Brown fine to medium SAND, some gravel and cobbles, no odor, wet [SP]	
96		0.0				
97	54/60	0.0				
98		0.0				
99		0.0				
100					**END OFBORING AT 100 FT**	

NOTES:

FILE NO. 206384 **BORING NO.** SB-3

***NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.**

NOTE: Soil descriptions based on a modified Burmister method of visual-manual identification as practiced by Haley & Aldrich, Inc.

Form #3000

HALEY ALDRICH

SOIL BORING LOG

BORING NO. SB-4

PROJECT	Remedial Investigation - 558 Sackett Street	**PROJECT #**	0206384
LOCATION	558 Sackett Street, Brooklyn, NY	**PROJECT MGR.**	M. Conlon
CLIENT	Sackett Heights LLC	**FIELD REP.**	A. Vaculik, Z.Simmel
CONTRACTOR	Coastal Environmental Solutions	**DATE STARTED**	6/21/2023
DRILLER	Pat Slavin	**DATE FINISHED**	6/21/2023

Elevation ft. **Datum** **Boring Location** See Plan

Item	Casing	Sampler
Type	Steel	Steel
Inside Diameter (in.)	6"	3"
Hammer Weight (lb.)	NA	NA
Hammer Fall (in.)	NA	NA

Rig Make & Model Eijkelkamp CRS XL 140 Duo

- ☐ Truck ☐ Tripod ☐ Cat-Head
- ☐ ATV ☐ Geoprobe ☑ Winch
- ☑ Track ☐ Air Track ☐ Roller Bit
- ☐ Skid ☑ Other ☐ Cutting Head

Hammer Type: ☐ Safety ☐ Doughnut ☐ Automatic

Drilling Mud: ☐ Bentonite ☐ Polymer ☑ None

Casing Advance Type Method Depth: Sonic

Drilling Notes:

Depth (ft.)	Recovery (in/tot)	PID (ppm)	Sample Depth (ft)	Sample ID	Visual-Manual Identification & Description (Color, primary component NAME, secondary component, optional descriptions, odor, moisture [SYMBOL])	Remarks
0					8" Concrete	
		0	0-0.5	SB-4_0-0.5	Brown to dark brown, fine to medium sand, some silt, some gravel, large brick fragments, wood, no odor, dry [FILL]	
1						
		0				
2	46/60					
		0				
3						
		0				
4						
		0				
5						
		1.7				
6				SB-4_5-7	Brown to light brown fine to medium silty SAND, trace fine gravel, no odor, moist [FILL]	
		5.3	5-7	SB-4_5-7 MS		
7				SB-4_5-7 MSD		
	36/60	0				
8						Moist at 9'
		212.7			Dark gray to black fine silty SAND, petroleum-like odor, stained, moist [SM]	
9						
		615.4	8-10	SB-4_8-10	Brown to light gray, fine silty SAND, petroleum-like odor, moderately stained, wet [SM]	Wet at 10'
10						
		149.8				
11					Brown, fine silty SAND, trace clay, no odor, wet [SM]	
		377				
12						
		5.1				
13	48/60		12-14	SB-4_12-14		
		4.8				
14						
		5.3				
15						
		0			Light brown to orange brown fine to medium SAND, some silt, no odor, wet [SP]	
16						
		0				
17						
		0				
18	42/60					
		0				
19						
		0				
20						
					END OF BORING AT 20 FT	

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth in feet to: Water

Sample ID

- **O** Open End Rod
- **T** Thin Wall Tube
- **U** Undisturbed Sample
- **S** Split Spoon Sample
- **G** Geoprobe

Summary

Overburden (Linear ft.)	20
Rock Cored (Linear ft.)	-
Number of Samples	4

BORING NO. SB-4

***NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.**

Form #3000

NOTE: Soil descriptions based on a modified Burmister method of visual-manual identification as practiced by Haley & Aldrich, Inc.

HALEY ALDRICH

SOIL BORING LOG

BORING NO. SB-5

Page 1 of 1

PROJECT	Remedial Investigation - 558 Sackett Street	**PROJECT #**	0206384
LOCATION	558 Sackett Street, Brooklyn, NY	**PROJECT MGR.**	M. Conlon
CLIENT	Sackett Heights LLC	**FIELD REP.**	A. Vaculik, Z.Simmel
CONTRACTOR	Coastal Environmental Solutions	**DATE STARTED**	6/21/2023
DRILLER	Pat Slavin	**DATE FINISHED**	6/21/2023

Elevation	ft.	**Datum**	**Boring Location**	See Plan			
Item	**Casing**	**Sampler**	**Rig Make & Model**	Eijkelkamp CRS XL 140 Duo	**Hammer Type**	**Drilling Mud**	**Casing Advance**
Type	Steel	Steel	☐ Truck ☐ Tripod ☐ Cat-Head		☐ Safety	☐ Bentonite	**Type Method Depth**
Inside Diameter (in.)	6"	3"	☐ ATV ☐ Geoprobe ☑ Winch		☐ Doughnut	☐ Polymer	**Sonic**
Hammer Weight (lb.)	NA	NA	☑ Track ☐ Air Track ☐ Roller Bit		☐ Automatic	☑ None	
Hammer Fall (in.)	NA	NA	☐ Skid ☑ Other ☐ Cutting Head		**Drilling Notes:**		

Depth (ft.)	Recovery (in/tot)	PID (ppm)	Sample Depth (ft)	Sample ID	Visual-Manual Identification & Description (Color, primary component NAME, secondary component, optional descriptions, odor, moisture [SYMBOL])	Remarks
0					8" Concrete	
		0.0	0-0.5	SB-5_0-0.5	Brown, silty SAND, large brick fragments, metal, no odor, dry [FILL]	
1						
		0.0				
2						
	32/60	0.0				
3						
		0.0			Concrete fragments	
4						
		0.0				
5						
		0.0				
6			5-7	SB-5_5-7	Brown to dark brown, fine to medium SAND, some silt, metal, brick fragment, plastic, rubber, no odor, dry [FILL]	
		0.0				
7	16/60					
		0.0				
8						
		0.0				
9						
		0.0				Moist at 9.5'
10						
		0.0			Brown to orange brown, fine to medium SAND, some silt, no odor, wet [SP]	Wet at 10'
11						
		0.0				
12						
	51/60	0.0	12-14	SB-5_12-14		
13						
		0.0				
14						
		0.0				
15						
		0.0			Brown to orange brown, silty SAND, no odor, wet [SM]	
16						
		0.0				
17						
	30/60	0.0				
18						
		0.0				
19						
		0.0				
20						
					END OF BORING AT 20 FT	

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth in feet to: Water

Sample ID

O	Open End Rod
T	Thin Wall Tube
U	Undisturbed Sample
S	Split Spoon Sample
G	Geoprobe

Summary

Overburden (Linear ft.)	20
Rock Cored (Linear ft.)	-
Number of Samples	3

BORING NO. SB-5

***NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.**

Form #3000

NOTE: Soil descriptions based on a modified Burmister method of visual-manual identification as practiced by Haley & Aldrich, Inc.

HALEY ALDRICH

SOIL BORING LOG

BORING NO. SB-6

Page 1 of 1

PROJECT	Remedial Investigation - 558 Sackett Street	**PROJECT #**	0206384
LOCATION	558 Sackett Street, Brooklyn, NY	**PROJECT MGR.**	M. Conlon
CLIENT	Sackett Heights LLC	**FIELD REP.**	A. Vaculik, Z.Simmel
CONTRACTOR	Coastal Environmental Solutions	**DATE STARTED**	6/21/2023
DRILLER	Pat Slavin	**DATE FINISHED**	6/21/2023

Elevation ft. **Datum** | **Boring Location** See Plan

Item	Casing	Sampler
Type	Steel	Steel
Inside Diameter (in.)	6"	3"
Hammer Weight (lb.)	NA	NA
Hammer Fall (in.)	NA	NA

Rig Make & Model Eijkelkamp CRS XL 140 Duo

☐ Truck ☐ Tripod ☐ Cat-Head
☐ ATV ☐ Geoprobe ☑ Winch
☑ Track ☐ Air Track ☐ Roller Bit
☐ Skid ☑ Other ☐ Cutting Head

Hammer Type: ☐ Safety ☐ Doughnut ☐ Automatic

Drilling Mud: ☐ Bentonite ☐ Polymer ☑ None

Casing Advance Type Method Depth: Sonic

Drilling Notes:

Depth (ft.)	Recovery (in/tot)	PID (ppm)	Sample Depth (ft)	Sample ID	Visual-Manual Identification & Description (Color, primary component NAME, secondary component, optional descriptions, odor, moisture [SYMBOL])	Remarks
0					8" Concrete	
		0.0	0-0.5	SB-6_0-0.5	Brown to red brown, fine to medium SAND, crushed concrete, brick and metal fragments, gravel, no odor, dry [FILL]	
1						
		0.0				
2	33/60					
		0.0				
3						
		0.0				
4						
		0.0				
5						
		0.0				
6			5-7	SB-6_5-7	Brown to red brown fine to medium SAND, crushed concrete fragments, no odor, dry [FILL]	
		0.0				
7						
	38/60	0.0				
8						
		0.0				
9						
		0.0				
10					Gray to dark gray, fine to medium SAND, trace angular gravel, petroleum-like odor, slightly stained, moist [SP]	Moist at 10'
		0.0	10-12	SB-6_10-12		
11						
		0.0				
12						
	44/60	0.0				
13			12-14	SB-6_12-14	Red brown to brown, fine to medium SAND, slight petroleum like odor, moist [SP]	
		0.0				
14						
		0.0				
15						
		0.0			Red brown to brown silty fine SAND, some medium sand, some gravel, wet [SM]	Wet at 15'
16						
		0.0			16'-16.5 Lense of brown peat and organic matter	
17						
		0.0			Red brown to brown silty fine SAND, some medium sand, some gravel, wet [SM]	
18	24/60					
		0.0				
19						
		0.0				
20						
					END OF BORING AT 15 FT	

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth in feet to: Water

Sample ID

- **O** Open End Rod
- **T** Thin Wall Tube
- **U** Undisturbed Sample
- **S** Split Spoon Sample
- **G** Geoprobe

Summary

Overburden (Linear ft.)	20
Rock Cored (Linear ft.)	-
Number of Samples	4

BORING NO. SB-6

*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.

Form #3000

NOTE: Soil descriptions based on a modified Burmister method of visual-manual identification as practiced by Haley & Aldrich, Inc.

HALEY ALDRICH

SOIL BORING LOG

BORING NO. SB-7

PROJECT	Remedial Investigation - 558 Sackett Street	**PROJECT #**	0206384
LOCATION	558 Sackett Street, Brooklyn, NY	**PROJECT MGR.**	M. Conlon
CLIENT	Sackett Heights LLC	**FIELD REP.**	A. Vaculik Z.Simmel
CONTRACTOR	Coastal Environmental Solutions, Inc.	**DATE STARTED**	6/21/2023
DRILLER	Pat Slavin	**DATE FINISHED**	6/21/2023

Elevation ft. **Datum** **Boring Location** See Plan

Item	Casing	Sampler
Type	Steel	Steel
Inside Diameter (in.)	6"	3"
Hammer Weight (lb.)	NA	NA
Hammer Fall (in.)	NA	NA

Rig Make & Model Eijkelkamp CRS XL 140 Duo

- ☐ Truck ☐ Tripod ☐ Cat-Head ☑ Winch
- ☐ ATV ☐ Geoprobe ☐ Roller Bit
- ☐ Track ☐ Air Track ☐ Cutting Head
- ☑ Skid ☑ Other

Hammer Type: ☐ Safety ☐ Doughnut ☐ Automatic

Drilling Mud: ☐ Bentonite ☐ Polymer ☑ None

Casing Advance Type Method Depth: Sonic

Drilling Notes:

Depth (ft.)	Recovery (in/tot)	PID (ppm)	Sample Depth (ft)	Sample ID	Visual-Manual Identification & Description (Color, primary component NAME, secondary component, optional descriptions, odor, moisture [SYMBOL])	Remarks
0		0.0			8" Concrete	
1			0-0.5	SB-7_0-0.5		
		0.0			Brown to red brown fine to medium SAND, crushed concrete, brick fragments, some gravel, no odor, dry [FILL]	
2	32/60		1-2	SB-7_ 1-2		
3		0.0				
4						
		0.0				
5					Brown to black, fine to medium SAND, crushed concrete, brick fragments, no odor, moist [FILL]	Moist at 5'
6		0.0				
			5-7	SB-7_5-7		
7						
	24/60	0.0				
8						
9		0.0				
10		0.0	10-12	SB-7_10-12	Brown, fine SAND, some silt, medium sand, gravel and cobbles, no odor, moist [SP]	
11						
12		0.0				
	30/60					
13						
		0.0	12-14	SB-7_12-14		
14						
		0.0				
15					Brown, fine to coarse SAND, some silt, gravel and cobbles, no odor, wet [SP]	Wet at 15'
16						
		0.0				
17						
	43/60					
18		0.0				
19						
		0.0				
20					Brown to tan brown, fine to coarse SAND, some gravel and cobbles, no odor, wet [SW]	
21		0.0				
22						
	35/60	0.0				
23						
24		0.0				
25		0.0			Brown to red brown, medium to coarse SAND, some gravel, no odor, wet [SP]	
26						
27	31/60	0.0				
28						
		0.0				
29						
30		0.0				

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth in feet to: Water

Sample ID

- **O** Open End Rod
- **T** Thin Wall Tube
- **U** Undisturbed Sample
- **S** Split Spoon Sample
- **G** Geoprobe

Summary

Overburden (Linear ft.)	10
Rock Cored (Linear ft.)	-
Number of Samples	5

BORING NO. SB-7

***NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.**

Form #3000

NOTE: Soil descriptions based on a modified Burmister method of visual-manual identification as practiced by Haley & Aldrich, Inc.

HALEY ALDRICH

Soil Boring Log

BORING NO. SB-7

Depth (ft.)	Recovery (in/tot)	PID (ppm)	Sample Depth (ft)	Sample ID	Visual-Manual Identification & Description (Color, primary component NAME, secondary component, optional descriptions, odor, moisture [SYMBOL])	Remarks
30		0.0				
31					Brown to dark brown, medium to coarse SAND, some gravel and cobbles, no odor, wet [SP]	
		0.0				
32	40/60					
33		0.0				
34						
		0.0				
35						
36		0.0			Brown to light brown, fine to medium SAND, some silt, gravel and cobbles, no odor, wet [SP]	
					Brown to dark brown medium SAND, some gravel and cobbles, no odor, wet [SP]	
37						
	38/60	0.0				
38						
39		0.0				
40						
		0.0				
41					Brown to dark brown, medium to coarse SAND, trace gravel and cobbles, no odor, moist [SP]	
42		0.0				
43	43/60					
		0.0				
44						
		0.0				
45						
46					Brown to dark brown fine to medium SAND, some coarse sand and gravel, no odor, wet [SP]	
		0.0				
47						
					Brown, fine silty SAND, no odor, wet [SM]	
48	39/60	0.0				
49						
		0.0				
50						
51		0.0			Brown to dark brown, medium to coarse SAND, some gravel and cobbles, no odor, wet [SP]	
52						
	42/60	0.0				
53						
54		0.0				
55						
		0.0			Brown to light brown, fine silty SAND, no odor, wet [SM]	
56						
57		0.0				
	48/60					
58						
		0.0				
59						
		0.0				
60						
					Brown, fine to medium SAND, some silt, gravel and cobbles, no odor, wet [SP]	
61		0.0				
62		0.0				
63	38/60	0.0				
64		0.0				
		0.0				
65						
					Brown to light brown, fine to coarse SAND, some gravel and cobbles, no odor, wet [SW]	
66		0.0				
67		0.0				
	31/60					
68		0.0				
69		0.0				
		0.0				
70						

NOTES:

FILE NO. 206384 BORING NO. SB-7

*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.

NOTE: Soil descriptions based on a modified Burmister method of visual-manual identification as practiced by Haley & Aldrich, Inc.

Form #3000

HALEY ALDRICH

Soil Boring Log

BORING NO. SB-7

Depth (ft.)	Recovery (in/tot)	PID (ppm)	Sample Depth (ft)	Sample ID	Visual-Manual Identification & Description (Color, primary component NAME, secondary component, optional descriptions, odor, moisture [SYMBOL])	Remarks
70		0.0			Brown to light brown, medium SAND, some fine and coarse sand and gravel, no odor, wet [SP]	
71		0.0				
72	60/60	0.0				
73		0.0				
74		0.0				
75		0.0			Brown to light brown, fine to medium SAND, some silt, gravel and cobbles, no odor, wet [SP]	
76		0.0				
77	48/60	0.0			Dark brown to light brown, fine silty SAND, some gravel and cobbles, no odor, wet [SM]	
78		0.0				
79		0.0				
80		0.0			Brown to light brown, fine silty SAND, some gravel and cobbles, no odor, wet [SM]	
81		0.0				
82	60/60	0.0				
83		0.0				
84		0.0				
85		0.0			Brown to light brown, fine SAND, some medium sand, gravel and cobbles, no odor, wet [SP]	
86		0.0				
87	55/60	0.0				
88		0.0				
89		0.0				
90		0.0			Brown to light brown, fine to medium SAND, some fine grave and cobbles, no odor, wet [SP]	
91		0.0				
92	50/60	0.0				
93		0.0				
94		0.0				
95		0.0			Light brown fine to medium SAND, some silt, gravel and cobbles, no odor, wet [SP]	
96		0.0				
97	54/60	0.0				
98		0.0				
99		0.0				
100					**END OF BORING AT 100 FT**	

NOTES:

FILE NO. 206384 BORING NO. SB-7

*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.

NOTE: Soil descriptions based on a modified Burmister method of visual-manual identification as practiced by Haley & Aldrich, Inc.

Form #3000

HALEY ALDRICH

SOIL BORING LOG

BORING NO. SB-8

PROJECT	Remedial Investigation - 558 Sackett Street	**PROJECT #**	0206384
LOCATION	558 Sackett Street, Brooklyn, NY	**PROJECT MGR.**	M. Conlon
CLIENT	Sackett Heights LLC	**FIELD REP.**	A. Vaculik, Z.Simmel
CONTRACTOR	Coastal Environmental Solutions, Inc.	**DATE STARTED**	6/21/2023
DRILLER	Pat Slavin	**DATE FINISHED**	6/21/2023

Elevation ft. **Datum** **Boring Location** See Plan

Item	Casing	Sampler
Type	Steel	Steel
Inside Diameter (in.)	6"	3"
Hammer Weight (lb.)	NA	NA
Hammer Fall (in.)	NA	NA

Rig Make & Model Eijkelkamp CRS XL 140 Duo

- ☐ Truck ☐ Tripod ☐ Cat-Head ☑ Winch
- ☐ ATV ☐ Geoprobe ☐ Roller Bit
- ☐ Track ☐ Air Track ☐ Cutting Head
- ☑ Skid ☑ Other

Hammer Type: ☐ Safety ☐ Doughnut ☐ Automatic

Drilling Mud: ☐ Bentonite ☐ Polymer ☑ None

Casing Advance Type Method Depth: Sonic

Drilling Notes:

Depth (ft.)	Recovery (in/tot)	PID (ppm)	Sample Depth (ft)	Sample ID	Visual-Manual Identification & Description (Color, primary component NAME, secondary component, optional descriptions, odor, moisture [SYMBOL])	Remarks
0					8" Concrete	
		0.0				
1			0-0.5	SB-8_0-0.5	Black to brown, fine to medium SAND, some gravel, crushed concrete, brick fragments, no odor, dry [FILL]	
		0.0				
2	48/60		1-2	SB-8_ 1-2		
3		0.0				
4						
		0.0				
5					Brown to light brown, fine to medium SAND, some coarse sand and gravel, no odor, moist [FILL]	Moist at 5'
6		0.0				
			5-7	SB-8_5-7		
7						
	35/60	0.0				
8						
9		0.0				
10		0.0	9-11	SB-8_9-11	Brown to light brown, fine to medium SAND, some gravel and cobbles, no odor, wet [SP]	Wet at 10'
11						
12		0.0				
	50/60					
13						
		0.0	12-14	SB-8_12-14		
14				SB-8_12-14 MS		
				SB-8_12-14 MSD		
		0.0				
15					Brown to light brown, fine SAND, some medium sand, trace silt and cobbles, no odor, wet [SP]	
16						
		0.0				
17						
	49/60					
18		0.0				
19						
		0.0				
20					Brown to light brown, medium SAND, some gravel, no odor, wet [SP]	
21		0.0				
22						
	45/60	0.0				
23						
24		0.0				
25		0.0			Brown medium SAND, some medium gravel, no odor, wet [SP]	
26						
27	51/60	0.0				
28						
		0.0				
29						
30		0.0				

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth in feet to: Water

Sample ID

- **O** Open End Rod
- **T** Thin Wall Tube
- **U** Undisturbed Sample
- **S** Split Spoon Sample
- **G** Geoprobe

Summary

Overburden (Linear ft.)	100
Rock Cored (Linear ft.)	-
Number of Samples	7

BORING NO. SB-8

*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.

Form #3000

NOTE: Soil descriptions based on a modified Burmister method of visual-manual identification as practiced by Haley & Aldrich, Inc.

HALEY ALDRICH

Soil Boring Log

BORING NO. **SB-8**

Depth (ft.)	Recovery (in/tot)	PID (ppm)	Sample Depth (ft)	Sample ID	Visual-Manual Identification & Description (Color, primary component NAME, secondary component, optional descriptions, odor, moisture [SYMBOL])	Remarks
30						
		0.0			Brown to red brown, fine to coarse SAND, some gravel and cobbles, no odor, wet [SW]	
31						
	42/60	0.0				
32						
33		0.0				
34						
		0.0				
35						
36		0.0			Brown to light brown, fine to medium SAND, some silt, gravel and cobbles, no odor, wet [SP]	
					Light brown to grayish brown, fine to coarse SAND, some gravel, no odor, wet [SW]	
37	51/60					
		0.0				
38						
39		0.0				
40						
		0.0			Light brown to dark brown, medium to coarse SAND, some fine sand, trace gravel, no odor, wet [SP]	
41						
42		0.0				
	48/60					
43						
		0.0				
44						
		0.0				
45						
					Brown medium to coarse SAND, some gravel and cobbles, no odor, wet [SP]	
46						
		0.0				
47	49/60					
48		0.0				
49						
		0.0				
50						
					Brown to light brown, medium SAND, some cobbles, no odor, wet [SP]	
51		0.0				
52						
	6060	0.0				
53						
54		0.0				
55						
		0.0				
56					Brown to light brown, medium to coarse SAND, trace gravel and cobbles, no odor, wet [SP]	
57	60/60	0.0				
58						
		0.0				
59						
		0.0				
60						
					Brown to light brown, fine to medium SAND, no odor, wet [SP]	
61		0.0				
62	50/60	0.0				
63		0.0				
64		0.0				
		0.0				
65						
					Brown to red brown fine to medium SAND, some silt, no odor, wet [SP]	
66		0.0				
67	50/60	0.0				
68		0.0				
69		0.0				
		0.0				
70						

NOTES:

FILE NO. 206384 **BORING NO.** SB-8

***NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.**

NOTE: Soil descriptions based on a modified Burmister method of visual-manual identification as practiced by Haley & Aldrich, Inc.

Form #3000

HALEY ALDRICH

Soil Boring Log

BORING NO. **SB-8**

Depth (ft.)	Recovery (in/tot)	PID (ppm)	Sample Depth (ft)	Sample ID	Visual-Manual Identification & Description (Color, primary component NAME, secondary component, optional descriptions, odor, moisture [SYMBOL])	Remarks
70		0.0			Brown to dark brown fine to medium SAND, some cobbles, no odor, wet [SP]	
71		0.0				
72	47/60	0.0				
73		0.0				
74		0.0				
75		0.0			Brown to light brown fine to medium SAND, some silt, gravel and cobbles, no odor, wet [SP]	
76		0.0				
77	39/60	0.0				
78		0.0				
79		0.0				
80		0.0			Brown to gray brown fine silty SAND, crushed concrete and cobbles, no odor, moist [SM]	
81		0.0				
82	42/60	0.0				
83		0.0				
84		0.0				
85		0.0			Brown to red brown, fine silty SAND, some crushed concrete and cobbles, no odor, moist [SM]	
86		0.0				
87	49/60	0.0				
88		0.0				
89		0.0				
90		0.0			Brown to dark brown fine to medium SAND, some silt, no odor, wet, [SP]	
91		0.0				
92	53/60	0.0				
93		0.0				
94		0.0				
95		0.0			Light brown to dark brown, fine to medium SAND, some silt, gravel and cobbles, no odor, wet [SP]	
96		0.0				
97	60/60	0.0				
98		0.0				
99		0.0				
100					**END OF BORING AT 100 FT**	

NOTES:

FILE NO.	206384	BORING NO.	SB-8

*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.

NOTE: Soil descriptions based on a modified Burmister method of visual-manual identification as practiced by Haley & Aldrich, Inc.

Form #3000

APPENDIX B1
Supplemental Soil Boring Logs

SOIL BORING LOG

BORING NO. SB-2A

PROJECT	Supplemental Remedial Investigation - 558 Sackett Street	**PROJECT #**	0206384
LOCATION	558 Sackett Street, Brooklyn, NY	**PROJECT MGR.**	M. Conlon
CLIENT	Sackett Heights LLC	**FIELD REP.**	N. Mooney
CONTRACTOR	Lakewood Environmental Services Corp.	**DATE STARTED**	3/26/2024
DRILLER	Adam Hutchinson	**DATE FINISHED**	3/26/2024

Elevation ft. **Datum** **Boring Location** See Plan

Item	Casing	Sampler
Type	Steel	4' Macrocore
Inside Diameter (in.)	2	2"
Hammer Weight (lb.)	N/A	N/A
Hammer Fall (in.)	N/A	N/A

Rig Make & Model Geoprobe 5410

☐ Truck	☐ Tripod	☐ Cat-Head	
☐ ATV	☑ Geoprobe	☐ Winch	
☑ Track	☐ Air Track	☐ Roller Bit	
☐ Skid	☐ Other	☐ Cutting Head	

Hammer Type: ☐ Safety ☐ Doughnut ☐ Automatic

Drilling Mud: ☐ Bentonite ☐ Polymer ☑ None

Casing Advance: Type Method Depth — Direct Push

Drilling Notes:

Depth (ft.)	Recovery (in/tot)	PID (ppm)	Sample Depth (ft)	Sample ID	Visual-Manual Identification & Description (Color, primary component NAME, secondary component, optional descriptions, odor, moisture [SYMBOL])	Remarks
0					8" Concrete	
		0	0-8	SB-2A_0-0.5'	Brown to dark brown medium SAND with trace gravel, wood, slag, brick, glass, no odor, dry [FILL]	
1				SB-2A_1-3'		
		0				
2	22/48					
		0				
3				SB-2A_3-5'		
		0				
4						
		0				
5				SB-2A_5-7'		
		0				
6	20/48					
		0				
7				SB-2A_7-9'		
		0				
8			8-12		Grayish brown SILT with very fine sand, trace clay, no odor, wet [ML]	
		0				
9				SB-2A_9-11'		
		0				
10	27/48					
		0				
11						
		0				
12			12-13	SB-2A_12-14'	Dark grayish brown SILT, petroleum-like odor, wet [ML]	
		48.4				
13	21/24	58.3	13-14	DUP03_20240326	Dark brown to black PEAT with organic matter, slight organic-like odor, moist [PT]	DUP03_20240326 collected from 12-14'
		19.2				
14					END OF BORING AT 14 FT	
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth in feet to: Water

Sample ID

O	Open End Rod
T	Thin Wall Tube
U	Undisturbed Sample
S	Split Spoon Sample
G	Geoprobe

Summary

Overburden (Linear ft.) _____

Rock Cored (Linear ft.) _____

Number of Samples _____

BORING NO.

***NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.**

NOTE: Soil descriptions based on a modified Burmister method of visual-manual identification as practiced by Haley & Aldrich, Inc.

SOIL BORING LOG

BORING NO. SB-2A-S1

PROJECT	Supplemental Remedial Investigation - 558 Sackett Street	**PROJECT #**	0206384
LOCATION	558 Sackett Street, Brooklyn, NY	**PROJECT MGR.**	M. Conlon
CLIENT	Sackett Heights LLC	**FIELD REP.**	N. Mooney
CONTRACTOR	Lakewood Environmental Services Corp.	**DATE STARTED**	3/26/2024
DRILLER	Adam Hutchinson	**DATE FINISHED**	3/26/2024

Elevation	ft.	**Datum**		**Boring Location**	See Plan				
Item	**Casing**	**Sampler**		**Rig Make & Model**	Geoprobe 5410			**Hammer Type**	**Drilling Mud**	**Casing Advance**
Type	Steel	4' Macrocore		☐ Truck	☐ Tripod	☐ Cat-Head		☐ Safety	☐ Bentonite	**Type Method Depth**
Inside Diameter (in.)	2	2"		☐ ATV	☑ Geoprobe	☐ Winch		☐ Doughnut	☐ Polymer	**Direct Push**
Hammer Weight (lb.)	N/A	N/A		☑ Track	☐ Air Track	☐ Roller Bit		☐ Automatic	☑ None	
Hammer Fall (in.)	N/A	N/A		☐ Skid	☐ Other	☐ Cutting Head		**Drilling Notes:**		

Depth (ft.)	Recovery (in/tot)	PID (ppm)	Sample Depth (ft)	Sample ID	Visual-Manual Identification & Description (Color, primary component NAME, secondary component, optional descriptions, odor, moisture [SYMBOL])	Remarks
0					8" Concrete	
		0	0-2	SB-2A-S1_0-0.5'	Brown medium to coarse SAND with silt, brick, slag, no odor, dry [FILL]	
1				SB-2A-S1_1-3'		
		0				
2	17/48		2-4		Reddish brown medium to coarse SAND with silt, some white sand, brick, slag, wood, no odor, dry [FILL]	
		0				
3				SB-2A-S1_3-5'		
		0				
			4-8		Reddish brown to black to white medium to coarse SAND with silt, brick, slag, wood, glass,	
4		0			no odor, dry [FILL]	
5				SB-2A-S1_5-7'		
		0				
6	11/48					
		0				
7				SB-2A-S1_7-9'		
		0				
			8-10		Brown SILT, slight petroleum-like odor, wet [ML]	
8		0				
9	12/24	0		SB-2A-S1_9-11'		
10		107.9	10-10.5		Brown medium to coarse SAND, slight petroleum-like odor, wet [SP]	
11		303	10.5-11.5	SB-2A-S1_11-11.5'	Grey to black fine to coarse silty SAND with gravel, petroleum-like odor, wet [SP]	
12	44/48	88.8	11.5-13	SB-2A-S1_12-14'	Black PEAT with organic matter, petroleum-like odor, moist [PT]	
		112.4				
13			13-14		Medium brown PEAT with organic matter, organic-like odor, moist [PT]	
		115.5				
14						
		15.2				
15					END OF BORING AT 14.5 FT	
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

Water Level Data			
Date	**Time**	**Elapsed Time (hr.)**	**Depth in feet to: Water**

Sample ID	
O	Open End Rod
T	Thin Wall Tube
U	Undisturbed Sample
S	Split Spoon Sample
G	Geoprobe

Summary	
Overburden (Linear ft.)	
Rock Cored (Linear ft.)	
Number of Samples	
BORING NO.	

***NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.**

NOTE: Soil descriptions based on a modified Burmister method of visual-manual identification as practiced by Haley & Aldrich, Inc.

SOIL BORING LOG

BORING NO. SB-3A

PROJECT	Supplemental Remedial Investigation - 558 Sackett Street	**PROJECT #**	0206384
LOCATION	558 Sackett Street, Brooklyn, NY	**PROJECT MGR.**	M. Conlon
CLIENT	Sackett Heights LLC	**FIELD REP.**	N. Mooney, A. Stewart
CONTRACTOR	Lakewood Environmental Services Corp.	**DATE STARTED**	3/26/2024
DRILLER	Adam Hutchinson	**DATE FINISHED**	3/26/2024

Elevation ft. **Datum** **Boring Location** See Plan

Item	**Casing**	**Sampler**
Type	Steel	4' Macrocore
Inside Diameter (in.)	2	2"
Hammer Weight (lb.)	N/A	N/A
Hammer Fall (in.)	N/A	N/A

Rig Make & Model Geoprobe 5410

☐ Truck ☐ Tripod ☐ Cat-Head
☐ ATV ☑ Geoprobe ☐ Winch
☑ Track ☐ Air Track ☐ Roller Bit
☐ Skid ☐ Other ☐ Cutting Head

Hammer Type: ☐ Safety ☐ Doughnut ☐ Automatic

Drilling Mud: ☐ Bentonite ☐ Polymer ☑ None

Casing Advance: Type Method Depth — Direct Push

Drilling Notes:

Depth (ft.)	Recovery (in/tot)	PID (ppm)	Sample Depth (ft)	Sample ID	Visual-Manual Identification & Description (Color, primary component NAME, secondary component, optional descriptions, odor, moisture [SYMBOL])	Remarks
0					8" Concrete	
		0	0-3.5	SB-3A_0-0.5'	Brown to dark brown medium SAND with some silt, brick, slag, no odor, moist [FILL]	
1				SB-3A_1-3'		
		0				
2	21/48					
		0				
3				SB-3A_3-5'		
		0	3.5-6		Brown fine to coarse SAND with silt and some clay, slight petroleum-like odor, moist [FILL]	
4						
		0				
5		0		SB-3A_5-7'		
6	33/48	6.8	6-7		Tan to brown fine SAND with silt, slight petroleum-like odor, moist [FILL]	
7		0	7-8	SB-3A_7-9'	brown to gray SILT with fine sand, slight petroleum-like odor, wet [ML]	
		105.8	8-10		Yellowish gray-brown SILT with fine sand, some gravel, slight petroleum-like odor, wet [ML]	
8						
9		368.4		SB-3A_9-11'		
10	24/48	85.4	10-11	DUP04_20240326 collected from 9-11'	Yellowish gray-brown SILT with fine sand, some gravel, slight petroleum-like odor, moist [ML]	
11		22.6	11-12		Grayish brown coarse SAND with silt, gravel, wet [SP]	
		3.3				
12					END OF BORING AT 12 FT	
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth in feet to: Water

Sample ID

O Open End Rod
T Thin Wall Tube
U Undisturbed Sample
S Split Spoon Sample
G Geoprobe

Summary

Overburden (Linear ft.) _____
Rock Cored (Linear ft.) _____
Number of Samples _____

BORING NO.

***NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.**

NOTE: Soil descriptions based on a modified Burmister method of visual-manual identification as practiced by Haley & Aldrich, Inc.

HALEY ALDRICH

SOIL BORING LOG

BORING NO. MW-5

PROJECT	Supplemental Remedial Investigation - 558 Sackett Street	**PROJECT #**	0206384
LOCATION	558 Sackett Street, Brooklyn, NY	**PROJECT MGR.**	M. Conlon
CLIENT	Sackett Heights LLC	**FIELD REP.**	N. Mooney, A. Stewart
CONTRACTOR	Lakewood Environmental Services Corp.	**DATE STARTED**	3/26/2024
DRILLER	Adam Hutchinson	**DATE FINISHED**	3/26/2024

Elevation ft. **Datum** **Boring Location** See Plan

Item	Casing	Sampler
Type	Steel	4' Macrocore
Inside Diameter (in.)	2	2"
Hammer Weight (lb.)	N/A	N/A
Hammer Fall (in.)	N/A	N/A

Rig Make & Model Geoprobe 5410

☐ Truck	☐ Tripod	☐ Cat-Head	
☐ ATV	☑ Geoprobe	☐ Winch	
☑ Track	☐ Air Track	☐ Roller Bit	
☐ Skid	☐ Other	☐ Cutting Head	

Hammer Type	Drilling Mud	Casing Advance
☐ Safety	☐ Bentonite	Type Method Depth
☐ Doughnut	☐ Polymer	Direct Push
☐ Automatic	☑ None	

Drilling Notes:

Depth (ft.)	Recovery (in/tot)	PID (ppm)	Sample Depth (ft)	Sample ID	Visual-Manual Identification & Description (Color, primary component NAME, secondary component, optional descriptions, odor, moisture [SYMBOL])	Remarks
0					8" Concrete	
		0			Brown to dark brown fine to medium sand, some gravel, large brick fragments, wood, no odor, dry [FILL]	
1		0				
2	23/48	0				
3		0				
4		0				
		0				
5		0				
6	18/48					
		0			Brown to light brown fine to medium silty SAND, no odor, moist [SM]	
7		0				
8		320			Gray to brown fine silty sand, slight petroleum-like odor, moist [SM]	
9		100.6				
10	23/48				Brown to light brown fine to medium SAND, trace silt, no odor, wet [SP]	
		15.9				
11		3.8				
12		0				
13		0				
14	26/48					
		0				
15						
16		0				
	8/12					
17		0				
					END OF BORING AT 17 FT	
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth in feet to: Water

Sample ID

O	Open End Rod
T	Thin Wall Tube
U	Undisturbed Sample
S	Split Spoon Sample
G	Geoprobe

Summary

Overburden (Linear ft.) _____
Rock Cored (Linear ft.) _____
Number of Samples _____

BORING NO.

***NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.**

NOTE: Soil descriptions based on a modified Burmister method of visual-manual identification as practiced by Haley & Aldrich, Inc.

HALEY ALDRICH

SOIL BORING LOG

BORING NO. MW-6

PROJECT	Supplemental Remedial Investigation - 558 Sackett Street	**PROJECT #**	0206384
LOCATION	558 Sackett Street, Brooklyn, NY	**PROJECT MGR.**	M. Conlon
CLIENT	Sackett Heights LLC	**FIELD REP.**	N. Mooney, A. Stewart
CONTRACTOR	Lakewood Environmental Services Corp.	**DATE STARTED**	3/26/2024
DRILLER	Adam Hutchinson	**DATE FINISHED**	3/26/2024

Elevation ft. **Datum** **Boring Location** See Plan

Item	Casing	Sampler
Type	Steel	4' Macrocore
Inside Diameter (in.)	2	2"
Hammer Weight (lb.)	N/A	N/A
Hammer Fall (in.)	N/A	N/A

Rig Make & Model Geoprobe 5410

☐ Truck ☐ Tripod ☐ Cat-Head
☐ ATV ☑ Geoprobe ☐ Winch
☑ Track ☐ Air Track ☐ Roller Bit
☐ Skid ☐ Other ☐ Cutting Head

Hammer Type: ☐ Safety ☐ Doughnut ☐ Automatic

Drilling Mud: ☐ Bentonite ☐ Polymer ☑ None

Casing Advance: Type Method Depth — Direct Push

Drilling Notes:

Depth (ft.)	Recovery (in/tot)	PID (ppm)	Sample Depth (ft)	Sample ID	Visual-Manual Identification & Description (Color, primary component NAME, secondary component, optional descriptions, odor, moisture [SYMBOL])	Remarks
0					8" Concrete	
		0			Brown to red brown fine to medium SAND, crushed concrete, trace brick, no odor, dry [FILL]	
1		0				
2	18/48	0				
3		0				
4		0				
		0				
5					Brown to red brown fine to medium SAND, trace silt, concrete fragments, no odor, dry [FILL]	
		0				
6	33/48					
		0				
7						
		0			Brown to orange brown fine to medium SAND, no odor, dry [SP]	
8						
		0			Light brown medium sand, no odor, moist [SP]	
9						
		272.2			Grey to brown medium sand, petroleum-like odor, wet [SP]	
10	40/48					
		108.5				
11						
		36.2				
					Light brown medium sand, no odor, moist [SP]	
12		1.2				
13		0				
14	28/48	0				
15		0				
					Brown to light brown silty fine SAND, wet, no odor [SM]	
16		0				
	7/12					
17		0				
					END OF BORING AT 17 FT	
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth in feet to: Water

Sample ID

O Open End Rod
T Thin Wall Tube
U Undisturbed Sample
S Split Spoon Sample
G Geoprobe

Summary

Overburden (Linear ft.) _____
Rock Cored (Linear ft.) _____
Number of Samples _____

BORING NO.

*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.

NOTE: Soil descriptions based on a modified Burmister method of visual-manual identification as practiced by Haley & Aldrich, Inc.

APPENDIX C
Well Construction Diagram

PERMANENT WELL INSTALLATION REPORT

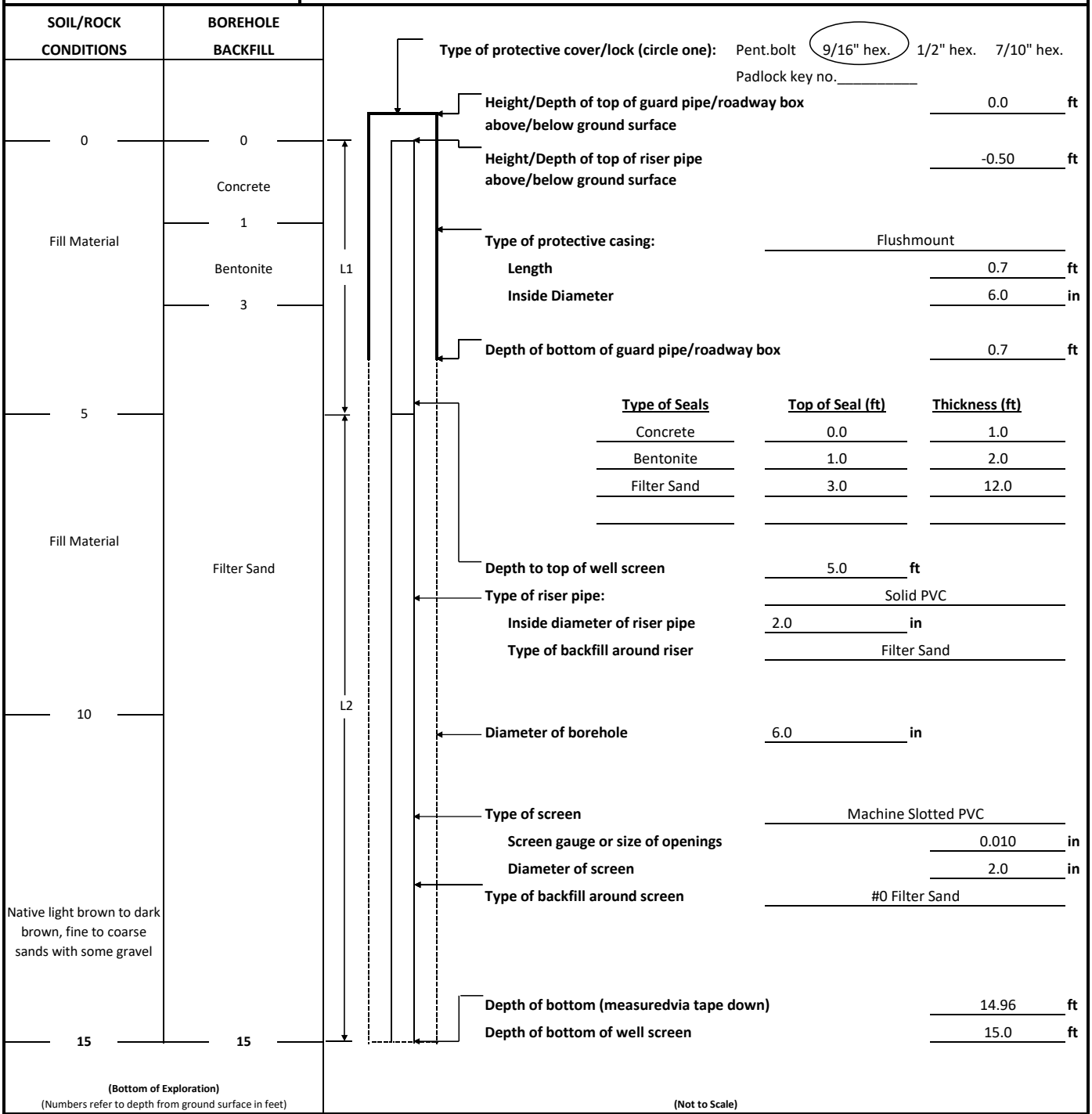
HALEY ALDRICH

Well No. MW-1
Boring No. SB-1

PROJECT	558 Sackett Street - Remedial Investigation	**H&A FILE NO.**	0206384
LOCATION	558 Sackett Street, Brooklyn, NY	**PROJECT MGR.**	M. Conlon
CLIENT	Sackett Heights LLC	**FIELD REP.**	A. Vaculik, Z. Simmel
CONTRACTOR	Coastal Environmental Solutions, Inc.	**DATE INSTALLED**	6/22/2023
DRILLER	Pat Slavin	**WATER LEVEL**	8.33'

Ground El.	11.81 ft	**Location**	See Plan	**Drilling Equipment**	Sonic Rig
El. Datum	NAVD 88				

Guard Pipe ☐
Roadway Box ☑



Type of protective cover/lock (circle one): Pent.bolt (9/16" hex.) 1/2" hex. 7/10" hex.
Padlock key no._____

Height/Depth of top of guard pipe/roadway box above/below ground surface	0.0 ft
Height/Depth of top of riser pipe above/below ground surface	-0.50 ft
Type of protective casing:	Flushmount
Length	0.7 ft
Inside Diameter	6.0 in
Depth of bottom of guard pipe/roadway box	0.7 ft

Type of Seals	Top of Seal (ft)	Thickness (ft)
Concrete	0.0	1.0
Bentonite	1.0	2.0
Filter Sand	3.0	12.0

Depth to top of well screen	5.0 ft
Type of riser pipe:	Solid PVC
Inside diameter of riser pipe	2.0 in
Type of backfill around riser	Filter Sand
Diameter of borehole	6.0 in
Type of screen	Machine Slotted PVC
Screen gauge or size of openings	0.010 in
Diameter of screen	2.0 in
Type of backfill around screen	#0 Filter Sand
Depth of bottom (measuredvia tape down)	14.96 ft
Depth of bottom of well screen	15.0 ft

5 ft	+	10 ft	=	15 ft	
Riser Pay Length (L1)		Length of Screen (L2)		Pay length	

COMMENTS:

Form 2007

PERMANENT WELL INSTALLATION REPORT

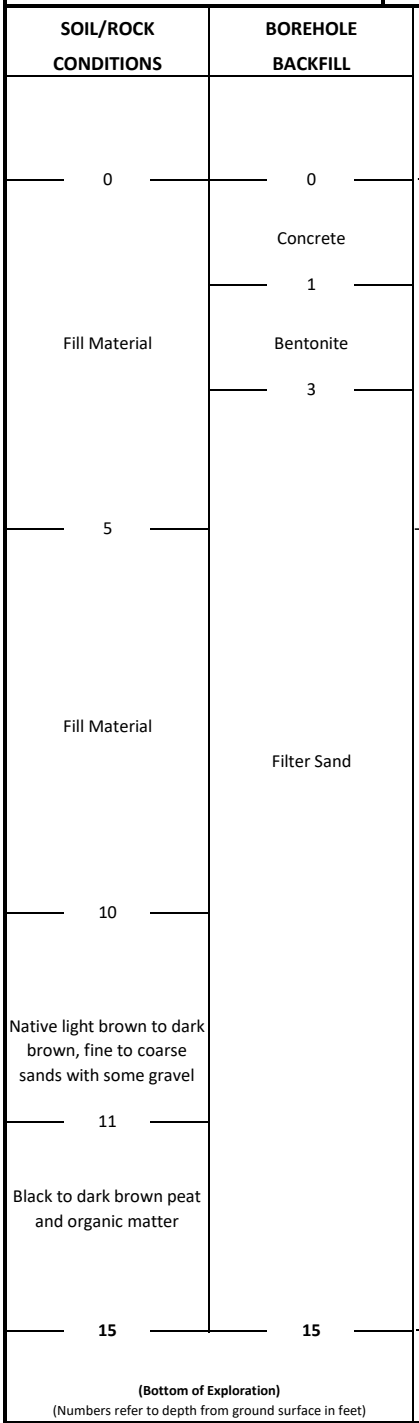
HALEY ALDRICH

Well No. MW-2
Boring No. SB-3

PROJECT	558 Sackett Street - Remedial Investigation	**H&A FILE NO.**	0206384
LOCATION	558 Sackett Street, Brooklyn, NY	**PROJECT MGR.**	M. Conlon
CLIENT	Sackett Heights LLC	**FIELD REP.**	A. Vaculik
CONTRACTOR	Coastal Environmental Solutions, Inc.	**DATE INSTALLED**	6/27/2023
DRILLER	Pat Slavin	**WATER LEVEL**	8.64'

Ground El.	11.88 ft	**Location**	See Plan	**Drilling Equipment**	Sonic Rig
El. Datum	NAVD 88				

Guard Pipe ☐
Roadway Box ☑



Type of protective cover/lock (circle one): Pent.bolt (9/16" hex.) 1/2" hex. 7/10" hex.
Padlock key no._____

Height/Depth of top of guard pipe/roadway box above/below ground surface	0.0	ft
Height/Depth of top of riser pipe above/below ground surface	-0.50	ft
Type of protective casing:	Flushmount	
Length	0.7	ft
Inside Diameter	6.0	in
Depth of bottom of guard pipe/roadway box	0.7	ft

Type of Seals	Top of Seal (ft)	Thickness (ft)
Concrete	0.0	1.0
Bentonite	1.0	2.0
Filter Sand	3.0	12.0

Depth to top of well screen	5.0	ft
Type of riser pipe:	Solid PVC	
Inside diameter of riser pipe	2.0	in
Type of backfill around riser	Filter Sand	
Diameter of borehole	6.0	in
Type of screen	Machine Slotted PVC	
Screen gauge or size of openings	0.010	in
Diameter of screen	2.0	in
Type of backfill around screen	#0 Filter Sand	
Depth of bottom (measured via tape down)	14.34	ft
Depth of bottom of well screen	15.0	ft

(Not to Scale)

5 ft	Riser Pay Length (L1)	+	10 ft	Length of Screen (L2)	=	15 ft Pay length

COMMENTS:

Form 2007

PERMANENT WELL INSTALLATION REPORT

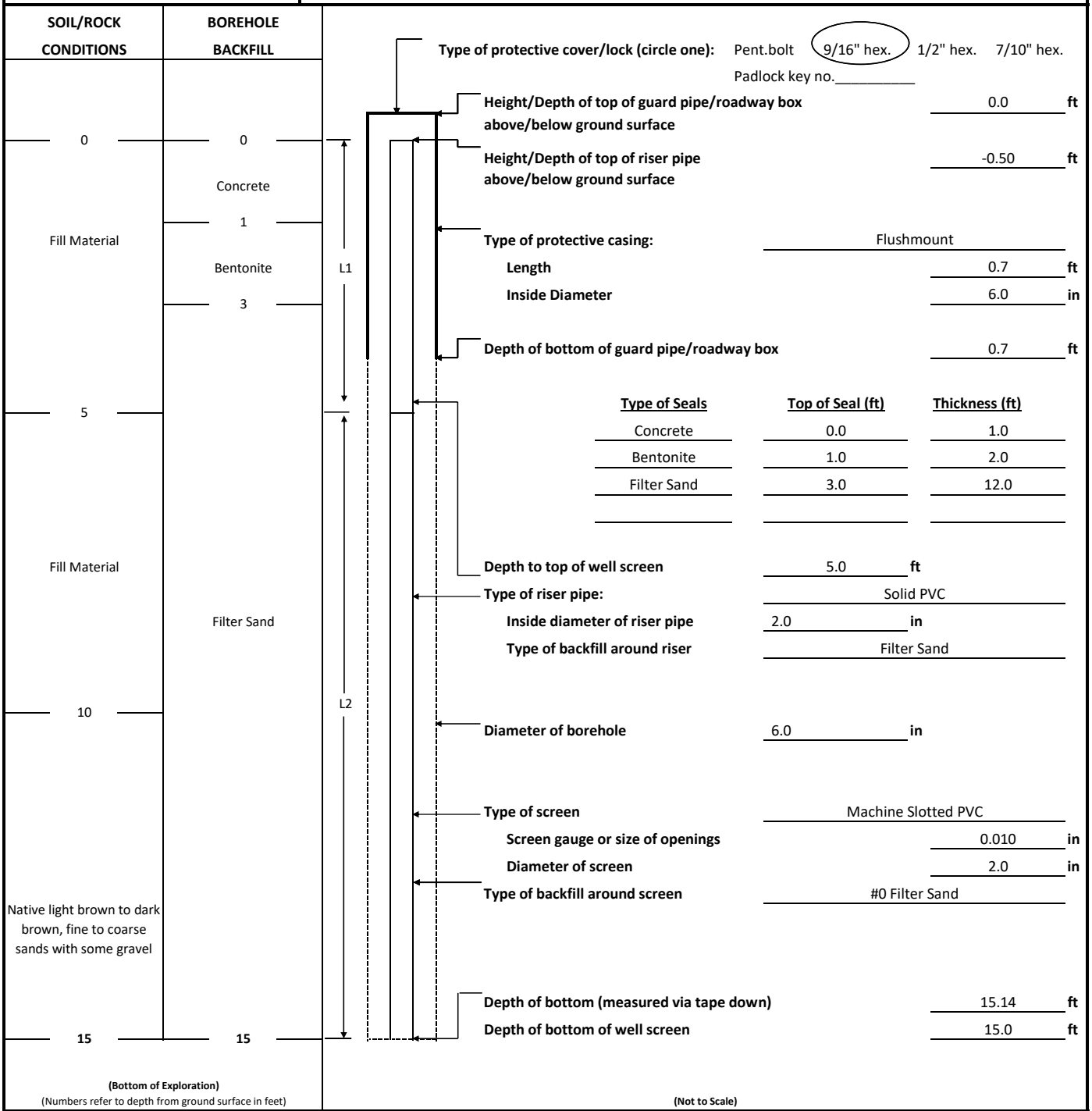
HALEY ALDRICH

Well No. MW-3
Boring No. SB-5

PROJECT	558 Sackett Street - Remedial Investigation	**H&A FILE NO.**	0206384
LOCATION	558 Sackett Street, Brooklyn, NY	**PROJECT MGR.**	M. Conlon
CLIENT	Sackett Heights LLC	**FIELD REP.**	Z. Simmel, A. Vaculik
CONTRACTOR	Coastal Environmental Solutions, Inc.	**DATE INSTALLED**	6/21/2023
DRILLER	Pat Slavin	**WATER LEVEL**	8.69'

Ground El.	11.93 ft	**Location**	See Plan	**Drilling Equipment**	Sonic Rig
El. Datum	NAVD 88				

Guard Pipe ☐
Roadway Box ☑



Type of protective cover/lock (circle one): Pent.bolt (9/16" hex.) 1/2" hex. 7/10" hex.
Padlock key no. _____

Height/Depth of top of guard pipe/roadway box above/below ground surface: 0.0 ft

Height/Depth of top of riser pipe above/below ground surface: -0.50 ft

Type of protective casing: Flushmount
- **Length:** 0.7 ft
- **Inside Diameter:** 6.0 in

Depth of bottom of guard pipe/roadway box: 0.7 ft

Type of Seals	Top of Seal (ft)	Thickness (ft)
Concrete	0.0	1.0
Bentonite	1.0	2.0
Filter Sand	3.0	12.0

Depth to top of well screen: 5.0 ft

Type of riser pipe: Solid PVC
- **Inside diameter of riser pipe:** 2.0 in
- **Type of backfill around riser:** Filter Sand

Diameter of borehole: 6.0 in

Type of screen: Machine Slotted PVC
- **Screen gauge or size of openings:** 0.010 in
- **Diameter of screen:** 2.0 in

Type of backfill around screen: #0 Filter Sand

Depth of bottom (measured via tape down): 15.14 ft

Depth of bottom of well screen: 15.0 ft

5 ft	+	10 ft	=	15 ft
Riser Pay Length (L1)		Length of Screen (L2)		Pay length

COMMENTS:

Form 2007

PERMANENT WELL INSTALLATION REPORT

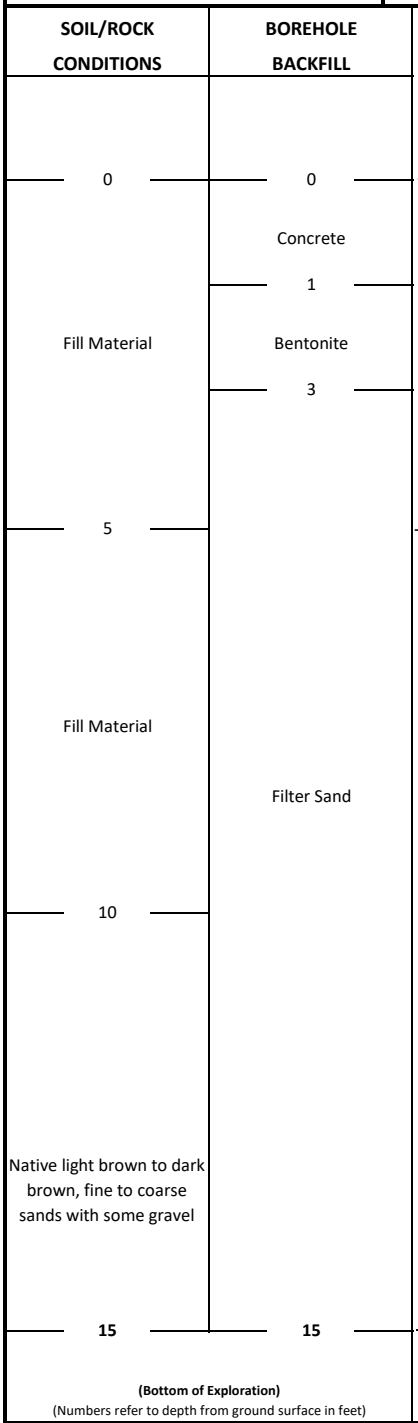
HALEY ALDRICH

Well No. MW-4
Boring No. SB-7

PROJECT	558 Sackett Street - Remedial Investigation	**H&A FILE NO.**	0206384
LOCATION	558 Sackett Street, Brooklyn, NY	**PROJECT MGR.**	M. Conlon
CLIENT	Sackett Heights LLC	**FIELD REP.**	Z. Simmel, A. Vaculik
CONTRACTOR	Coastal Environmental Solutions, Inc.	**DATE INSTALLED**	6/23/2023
DRILLER	Pat Slavin	**WATER LEVEL**	9.3'

Ground El.	11.99 ft	**Location**	See Plan	**Drilling Equipment**	Sonic Rig
El. Datum	NAVD 88				

Guard Pipe ☐
Roadway Box ☑



Type of protective cover/lock (circle one): Pent.bolt (9/16" hex.) 1/2" hex. 7/10" hex.
Padlock key no._____

Height/Depth of top of guard pipe/roadway box above/below ground surface: 0.0 ft

Height/Depth of top of riser pipe above/below ground surface: -0.50 ft

Type of protective casing: Flushmount
Length: 0.7 ft
Inside Diameter: 6.0 in

Depth of bottom of guard pipe/roadway box: 0.7 ft

Type of Seals	Top of Seal (ft)	Thickness (ft)
Concrete	0.0	1.0
Bentonite	1.0	2.0
Filter Sand	3.0	12.0

Depth to top of well screen: 5.0 ft
Type of riser pipe: Solid PVC
Inside diameter of riser pipe: 2.0 in
Type of backfill around riser: Filter Sand

Diameter of borehole: 6.0 in

Type of screen: Machine Slotted PVC
Screen gauge or size of openings: 0.010 in
Diameter of screen: 2.0 in
Type of backfill around screen: #0 Filter Sand

Depth of bottom (measured via tape down): 14.31 ft
Depth of bottom of well screen: 15.0 ft

(Not to Scale)

5 ft	Riser Pay Length (L1)	+	10 ft	Length of Screen (L2)	=	15 ft Pay length

COMMENTS:

Form 2007

PERMANENT WELL INSTALLATION REPORT

HALEY ALDRICH

Well No. MW-5
Boring No. N/A

PROJECT	558 Sackett Street - Supplemental Remedial Investigation	**H&A FILE NO.**	0206384
LOCATION	558 Sackett Street, Brooklyn, NY	**PROJECT MGR.**	M. Conlon
CLIENT	Sackett Heights LLC	**FIELD REP.**	A. Stewart, N. Mooney
CONTRACTOR	Lakewood Enviornmental Services Corp.	**DATE INSTALLED**	3/26/2024
DRILLER	Tim Kelly, Mike Kolasinski	**WATER LEVEL**	9.8 ft btoc

Ground El.	11.96 ft	**Location**	See Plan	**Drilling Equipment**	Geoprobe® 6610DT
El. Datum	NAVD 88				

Guard Pipe ☐
Roadway Box ☑

SOIL/ROCK CONDITIONS	BOREHOLE BACKFILL
0	0
Urban Fill	Concrete
	3
	Bentonite
5	5
	7
Native light brown to dark brown, fine to coarse sands with some gravel	Filter Sand
17	17
(Bottom of Exploration)	

L1 = 7 ft (Riser Pay Length)
L2 = 10 ft (Length of Screen)

Type of protective cover/lock (circle one): Pent.bolt (9/16" hex.) 1/2" hex. 7/10" hex.
Padlock key no._____

Height/Depth of top of guard pipe/roadway box above/below ground surface	0.0 ft
Height/Depth of top of riser pipe above/below ground surface	-0.25 ft
Type of protective casing:	Flushmount
Length	0.58 ft
Inside Diameter	6.00 in
Depth of bottom of guard pipe/roadway box	0.58 ft

Type of Seals	Top of Seal (ft)	Thickness (ft)
Concrete	0.00	3.00
Bentonite Seal	3.00	2.00
Filter Sand	5.00	12.00

Depth to top of well screen	7.0 ft
Type of riser pipe:	2-inch Solid PVC
Inside diameter of riser pipe	2.0 in
Type of backfill around riser	Filter Sand
Diameter of borehole	6.00 in
Type of screen	Machine Slotted PVC
Screen gauge or size of openings	0.010 in
Diameter of screen	2.0 in
Type of backfill around screen	#0 Filter Sand
Depth of bottom (measured via tape down)	16.71 ft
Depth of bottom of borehole	17.0 ft

(Numbers refer to depth from ground surface in feet)

(Not to Scale)

7 ft (Riser Pay Length (L1)) + 10 ft (Length of Screen (L2)) = 17 ft (Pay length)

COMMENTS:

Form 2007

PERMANENT WELL INSTALLATION REPORT

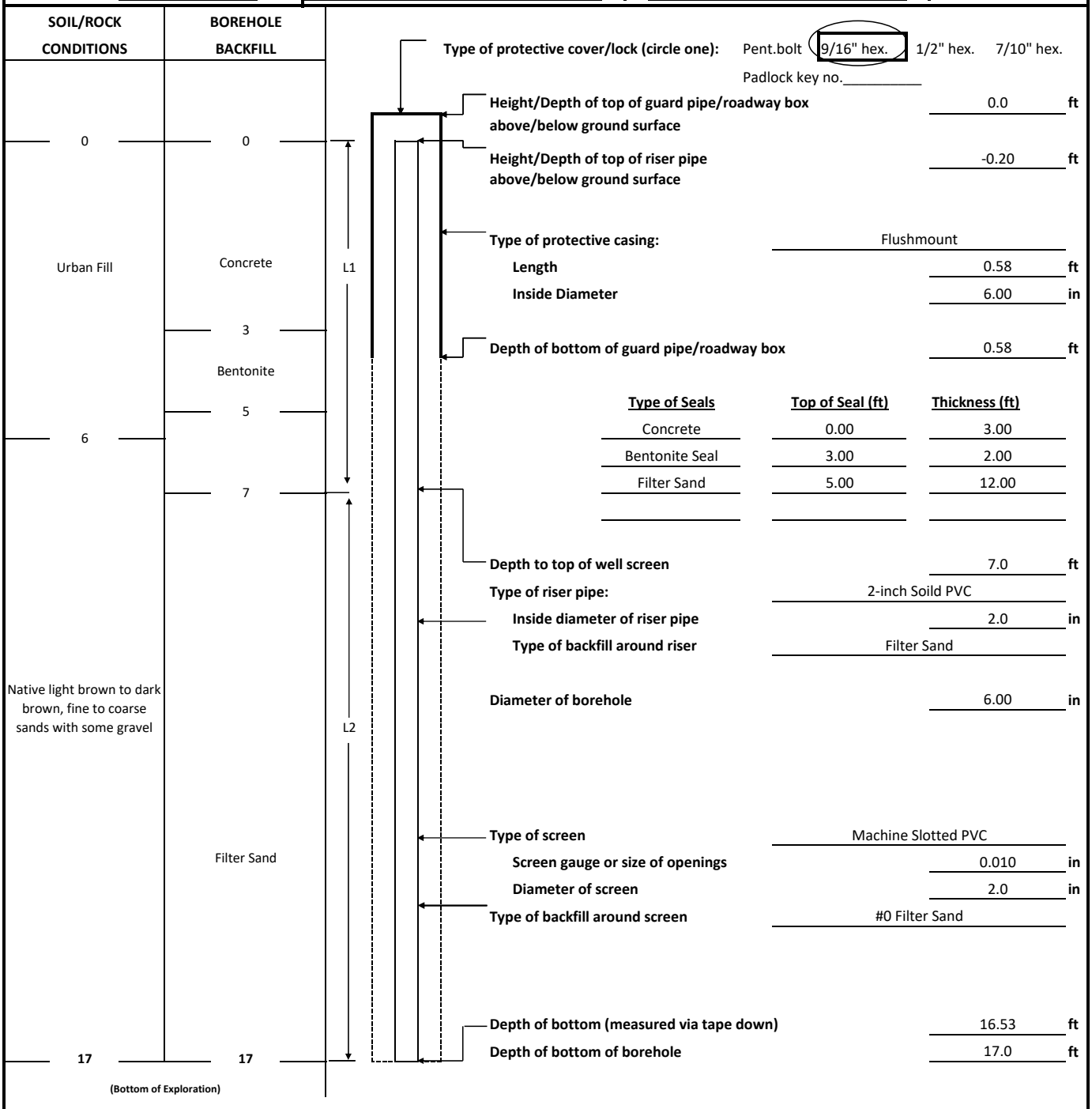
HALEY ALDRICH

Well No. MW-6
Boring No. N/A

PROJECT	558 Sackett Street - Supplemental Remedial Investigation	**H&A FILE NO.**	0206384
LOCATION	558 Sackett Street, Brooklyn, NY	**PROJECT MGR.**	M. Conlon
CLIENT	Sackett Heights LLC	**FIELD REP.**	A. Stewart, N. Mooney
CONTRACTOR	Lakewood Enviornmental Services Corp.	**DATE INSTALLED**	3/26/2024
DRILLER	Tim Kelly, Mike Kolasinski	**WATER LEVEL**	9.8 ft btoc

Ground El.	12.06 ft	**Location**	See Plan	**Drilling Equipment**	Geoprobe® 6610DT
El. Datum	NAVD 88				

Guard Pipe ☐
Roadway Box ☑



Type of protective cover/lock (circle one): Pent.bolt (9/16" hex.) 1/2" hex. 7/10" hex.
Padlock key no._____

Height/Depth of top of guard pipe/roadway box above/below ground surface	0.0	ft
Height/Depth of top of riser pipe above/below ground surface	-0.20	ft
Type of protective casing:	Flushmount	
Length	0.58	ft
Inside Diameter	6.00	in
Depth of bottom of guard pipe/roadway box	0.58	ft

Type of Seals	Top of Seal (ft)	Thickness (ft)
Concrete	0.00	3.00
Bentonite Seal	3.00	2.00
Filter Sand	5.00	12.00

Depth to top of well screen	7.0	ft
Type of riser pipe:	2-inch Soild PVC	
Inside diameter of riser pipe	2.0	in
Type of backfill around riser	Filter Sand	
Diameter of borehole	6.00	in
Type of screen	Machine Slotted PVC	
Screen gauge or size of openings	0.010	in
Diameter of screen	2.0	in
Type of backfill around screen	#0 Filter Sand	
Depth of bottom (measured via tape down)	16.53	ft
Depth of bottom of borehole	17.0	ft

7 ft	+	10 ft	=	17 ft
Riser Pay Length (L1)		Length of Screen (L2)		Pay length

COMMENTS:

Form 2007

PERMANENT WELL INSTALLATION REPORT

HALEY ALDRICH

Well No. MW-7

Boring No. SB-2A-S1

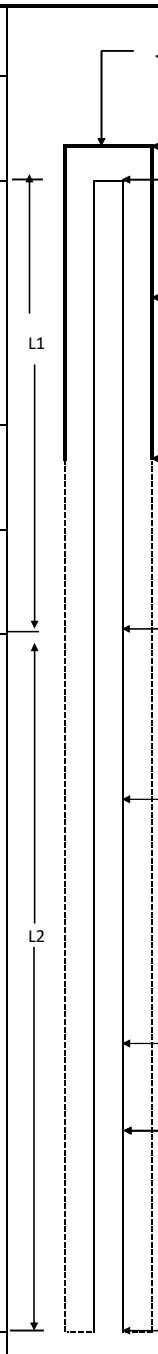
PROJECT	558 Sackett Street - Supplemental Remedial Investigation	**H&A FILE NO.**	0206384
LOCATION	558 Sackett Street, Brooklyn, NY	**PROJECT MGR.**	M. Conlon
CLIENT	Sackett Heights LLC	**FIELD REP.**	A. Stewart, N. Mooney
CONTRACTOR	Lakewood Enviornmental Services Corp.	**DATE INSTALLED**	3/26/2024
DRILLER	Tim Kelly, Mike Kolasinski	**WATER LEVEL**	8.0 ft btoc

Ground El.	11.86 ft	**Location**	See Plan	**Drilling Equipment**	Geoprobe® 6610DT
El. Datum	NAVD 88				

Guard Pipe ☐ **Roadway Box** ☑

SOIL/ROCK CONDITIONS	BOREHOLE BACKFILL
0	0
Urban Fill	Concrete
	3
	Bentonite
	5
8	7
Native light brown to dark brown, fine to coarse sands with some gravel	Filter Sand
11.5	
Dark brown peat and organic matter	
17	**17**
(Bottom of Exploration)	

(Numbers refer to depth from ground surface in feet)



(Not to Scale)

Type of protective cover/lock (circle one): Pent.bolt (9/16" hex.) 1/2" hex. 7/10" hex.

Padlock key no._____

Height/Depth of top of guard pipe/roadway box above/below ground surface	0.0	ft
Height/Depth of top of riser pipe above/below ground surface	-0.20	ft
Type of protective casing:	Flushmount	
Length	0.58	ft
Inside Diameter	6.00	in
Depth of bottom of guard pipe/roadway box	0.58	ft

Type of Seals	Top of Seal (ft)	Thickness (ft)
Concrete	0.00	3.00
Bentonite Seal	3.00	2.00
Filter Sand	5.00	12.00

Depth to top of well screen	7.0	ft
Type of riser pipe:	2-inch Solid PVC	
Inside diameter of riser pipe	2.0	in
Type of backfill around riser	Filter Sand	
Diameter of borehole	6.00	in
Type of screen	Machine Slotted PVC	
Screen gauge or size of openings	0.010	in
Diameter of screen	2.0	in
Type of backfill around screen	#0 Filter Sand	
Depth of bottom (measured via tape down)	16.53	ft
Depth of bottom of borehole	17.0	ft

7 ft	+	10 ft	=	17 ft
Riser Pay Length (L1)		Length of Screen (L2)		Pay length

COMMENTS:

Form 2007

APPENDIX D
Groundwater Sampling Logs

HALEY ALDRICH

LOW-FLOW GROUNDWATER SAMPLING RECORD

PROJECT	558 Sackett Street - Remedial Investigation	**H&A FILE NO.**	0206384
LOCATION	558 Sackett Street, Brooklyn, NY	**PROJECT MGR.**	M. Conlon
CLIENT	Sackett Heights LLC	**FIELD REP**	A. Vaculik
CONTRACTOR	N/A	**DATE**	7/17/2023

GROUNDWATER SAMPLING INFORMATION

Well ID:	MW-1	**Well Volume:**	1.1 gal	**Start Time:**	1137
Well Depth:	14.97'	**Equipment:**	Peristaltic Pump; YSI; HDPE Tubing	**Sample Time:**	1220
Depth to Water:	8.21'	**Purge Rate (ml/min):**	243		

Time	Volume purged, gallons	Temp, C (+/-3%)	Conductivity, ms/cm (+/- 3%)	Dissolved Oxygen, mg/L (+/- 10%)	pH (+/-0.1)	ORP/eH, mv (+/-10mv)	Turbidity, NTU (<5 NTU)	Depth to Water (ft)
11:40	0.28	18.22	2.443	3.30	7.20	11.4	15.30	8.21
11:45	0.56	17.90	2.425	1.74	6.88	90.2	15.10	8.80
11:50	0.84	17.80	2.401	1.67	6.88	95.7	15.50	8.85
11:55	1.13	17.91	2.404	1.94	6.87	108.1	9.00	9.20
12:00	1.41	17.99	2.409	1.94	6.80	105.1	6.05	9.90
12:05	1.69	17.81	2.399	1.95	6.71	106.7	7.11	10.50
12:10	1.97	17.85	2.400	1.94	6.78	107.1	8.56	11.25
12:15	2.25	17.83	2.401	1.94	6.74	107.3	8.79	11.87

NOTES:

HALEY ALDRICH

LOW-FLOW GROUNDWATER SAMPLING RECORD

PROJECT	558 Sackett Street - Remedial Investigation	**H&A FILE NO.**	0206384
LOCATION	558 Sackett Street, Brooklyn, NY	**PROJECT MGR.**	M. Conlon
CLIENT	Sackett Heights LLC	**FIELD REP**	A. Vaculik
CONTRACTOR	N/A	**DATE**	7/6/2023

GROUNDWATER SAMPLING INFORMATION

Well ID:	MW-2	**Well Volume:**	0.83 gal	**Start Time:**	1130
Well Depth:	14.90'	**Equipment:**	Peristaltic Pump; YSI; HDPE Tubing	**Sample Time:**	1210
Depth to Water:	9.80'	**Purge Rate (ml/min):**	232		

Time	Volume purged, gallons	Temp, C (+/-3%)	Conductivity, ms/cm (+/- 3%)	Dissolved Oxygen, mg/L (+/- 10%)	pH (+/-0.1)	ORP/eH, mv (+/-10mv)	Turbidity, NTU (<5 NTU)	Depth to Water (ft)
11:30	0.27	18.37	1.552	6.5	6.77	-150.8	46.3	9.8
11:35	0.54	17.72	1.524	1.4	6.75	-149.8	45.0	9.4
11:40	0.82	17.81	1.691	1.9	6.64	-147.7	61.8	9.5
11:45	1.09	17.90	1.893	2.3	6.80	-143.6	625 AU	9.8
11:50	1.36	18.10	2.000	1.9	6.82	-119.8	67.0	9.8
11:55	1.63	17.92	1.998	2.0	6.81	-116.7	65.0	9.7
12:00	1.91	17.77	2.002	1.9	6.82	-119.8	66.1	9.8
12:05	2.18	17.69	2.004	1.8	6.83	-116.8	59.2	9.7
12:10	2.45	17.75	2.006	1.9	6.82	-114.9	50.1	9.8

NOTES:

HALEY ALDRICH

LOW-FLOW GROUNDWATER SAMPLING RECORD

PROJECT	558 Sackett Street - Remedial Investigation	**H&A FILE NO.**	0206384
LOCATION	558 Sackett Street, Brooklyn, NY	**PROJECT MGR.**	M. Conlon
CLIENT	Sackett Heights LLC	**FIELD REP**	A. Vaculik
CONTRACTOR	N/A	**DATE**	7/17/2023

GROUNDWATER SAMPLING INFORMATION

Well ID:	MW-3	**Well Volume:**	0.95 gal	**Start Time:**	737
Well Depth:	14.63'	**Equipment:**	Peristaltic Pump; YSI; HDPE Tubing	**Sample Time:**	820
Depth to Water:	8.81'	**Purge Rate (ml/min):**	334		

Time	Volume purged, gallons	Temp, C (+/-3%)	Conductivity, ms/cm (+/- 3%)	Dissolved Oxygen, mg/L (+/- 10%)	pH (+/-0.1)	ORP/eH, mv (+/-10mv)	Turbidity, NTU (<5 NTU)	Depth to Water (ft)
7:40	0.38	18.03	2.158	0.92	6.87	-3.0	60.5	8.81
7:45	0.76	17.99	2.166	1.30	6.94	-0.2	58.7	9.01
7:50	1.14	17.95	2.165	1.32	6.99	-4.3	38.7	8.90
7:55	1.51	17.87	2.165	1.31	6.93	-4.4	16.9	8.97
8:00	1.89	17.81	2.166	1.31	6.93	-4.5	15.3	8.91
8:05	2.27	17.83	2.165	1.31	6.91	-4.5	15.2	8.96
8:10	2.65	17.82	2.169	1.32	6.93	-4.5	15.3	8.99

NOTES:

HALEY ALDRICH

LOW-FLOW GROUNDWATER SAMPLING RECORD

PROJECT	558 Sackett Street - Remedial Investigation	**H&A FILE NO.**	0206384
LOCATION	558 Sackett Street, Brooklyn, NY	**PROJECT MGR.**	M. Conlon
CLIENT	Sackett Heights LLC	**FIELD REP**	A. Vaculik
CONTRACTOR	N/A	**DATE**	7/17/2023

GROUNDWATER SAMPLING INFORMATION

Well ID:	MW-4	**Well Volume:**	0.82 gal	**Start Time:**	910
Well Depth:	14.51	**Equipment:**	Peristaltic Pump; YSI; HDPE Tubing	**Sample Time:**	1015
Depth to Water:	9.21	**Purge Rate (ml/min):**	297		

Time	Volume purged, gallons	Temp, C (+/-3%)	Conductivity, ms/cm (+/- 3%)	Dissolved Oxygen, mg/L (+/- 10%)	pH (+/-0.1)	ORP/eH, mv (+/-10mv)	Turbidity, NTU (<5 NTU)	Depth to Water (ft)
9:15	0.34	19.57	1.127	0.38	7.07	-23.7	656 AU	9.21
9:20	0.69	19.12	1.173	16.50	6.93	-28.4	103.0	9.20
9:25	1.03	19.07	1.173	0.50	6.94	-29.4	73.0	9.18
9:30	1.38	18.95	1.169	0.41	6.80	-24.3	30.2	9.18
9:35	1.72	18.99	1.170	0.45	6.82	-26.3	32.5	9.32
9:40	2.06	19.30	1.170	0.42	6.79	-26.4	43.6	9.33
9:45	2.41	19.10	1.169	0.46	6.80	-26.7	40.1	9.30
9:50	2.75	18.94	1.173	0.48	6.82	-26.5	40.3	9.28

NOTES:

APPENDIX D1
Supplemental Groundwater Sampling Logs

LOW-FLOW GROUNDWATER SAMPLING RECORD

PROJECT	Former A&A Brake Service Site - Remedial Investigation	**H&A FILE NO.**	0206384
LOCATION	558 Sackett St. Brooklyn, NY	**PROJECT MGR.**	M. Conlon
CLIENT	Sackett Heights LLC	**FIELD REP**	N. Manzione
CONTRACTOR	N/A	**DATE**	4/4/2024

GROUNDWATER SAMPLING INFORMATION

Well ID:	MW-1	**Well Volume:**	1.40 gal	**Start Time:**	15:15
Well Depth:	14.98 ft btoc	**Equipment:**	Peristaltic Pump, Horiba U-52	**Sample Time:**	16:20
Depth to Water:	6.38 ft btoc				

Time	Volume purged, gallons	Temp, C (+/-3%)	Conductivity, us/cm (+/- 3%)	Dissolved Oxygen, mg/L (+/- 10%)	pH (+/-0.1)	ORP/eH, mv (+/-10mv)	Turbidity, NTU (<5 NTU)	Depth to Water (ft)
15:20	0.25	13.77	0.897	10.96	7.64	159	>1000	6.38
15:25	0.6	13.34	0.982	10.62	7.66	163	>1000	6.73
15:30	0.9	13.47	1.03	10.42	7.69	167	844	6.73
15:35	1.2	13.22	1.07	11.76	7.64	174	581	6.76
15:40	1.45	13.14	1.12	10.37	7.63	178	543	6.81
15:45	1.65	12.98	1.15	10.37	7.62	181	446	6.84
15:50	2.05	12.77	1.2	10.42	7.59	182	392	6.89
15:55	2.45	12.53	1.22	10.33	7.6	200	155	7.01
16:00	2.8	12.38	1.24	9.43	7.59	243	38.8	7.08
16:05	3.05	12.33	1.24	9.69	7.56	263	37.1	7.1
16:10	3.45	12.3	1.24	9.8	7.54	264	10.7	7.1
16:15	3.75	12.28	1.24	9.79	7.54	271	6.9	7.15

HALEY ALDRICH

LOW-FLOW GROUNDWATER SAMPLING RECORD

PROJECT	Former A&A Brake Service Site - Remedial Investigation	H&A FILE NO.	0206384
LOCATION	558 Sackett St. Brooklyn, NY	PROJECT MGR.	M. Conlon
CLIENT	Sackett Heights LLC	FIELD REP	N. Manzione
CONTRACTOR	N/A	DATE	4/5/2024

GROUNDWATER SAMPLING INFORMATION

Well ID:	MW-2	Well Volume:	1.31 gal	Start Time:	12:20
Well Depth:	14.91 ft btoc	Equipment:	Peristaltic Pump, Horiba U-52	Sample Time:	13:15
Depth to Water:	6.89 ft btoc				

Time	Volume purged, gallons	Temp, C (+/-3%)	Conductivity, us/cm (+/- 3%)	Dissolved Oxygen, mg/L (+/- 10%)	pH (+/-0.1)	ORP/eH, mv (+/-10mv)	Turbidity, NTU (<5 NTU)	Depth to Water (ft)
12:25	0.25	11.72	0.261	7.25	8.01	10	260	6.89
12:30	0.5	11.08	0.256	5.43	8.07	36	236	6.96
12:35	0.9	10.64	0.251	5.07	8.16	64	86.4	6.96
12:40	1.25	10.62	0.251	6.72	8.16	68	75.7	7.05
12:45	1.7	10.61	0.252	6.54	8.18	71	57.3	7.05
12:50	2.05	10.61	0.252	6.41	8.21	76	20.3	7.05
12:55	2.5	10.6	0.252	6.28	8.22	77	16.4	7.05
13:00	2.9	10.59	0.252	6.31	8.25	64	5.1	7.05
13:05	3.2	10.53	0.252	6.34	8.26	60	2.5	7.05
13:10	3.65	10.49	0.252	6.46	8.26	54	1.3	7.05

HALEY ALDRICH

LOW-FLOW GROUNDWATER SAMPLING RECORD

PROJECT	Former A&A Brake Service Site - Remedial Investigation	H&A FILE NO.	0206384
LOCATION	558 Sackett St. Brooklyn, NY	PROJECT MGR.	M. Conlon
CLIENT	Sackett Heights LLC	FIELD REP	N. Manzione
CONTRACTOR	N/A	DATE	4/3/2024

GROUNDWATER SAMPLING INFORMATION

Well ID:	MW-3	Well Volume:	1.33 gal	Start Time:	14:40
Well Depth:	14.65 ft btoc	Equipment:	Peristaltic Pump, Horiba U-52	Sample Time:	15:30
Depth to Water:	6.49 ft btoc				

Time	Volume purged, gallons	Temp, C (+/-3%)	Conductivity, us/cm (+/- 3%)	Dissolved Oxygen, mg/L (+/- 10%)	pH (+/-0.1)	ORP/eH, mv (+/-10mv)	Turbidity, NTU (<5 NTU)	Depth to Water (ft)
14:45	0.2	12	1.82	4.33	7.22	150	284	6.49
14:50	0.45	11.93	1.81	4.12	7.2	150	166	6.49
14:55	0.75	11.9	1.81	4.05	7.2	147	97.2	6.49
15:00	1.1	11.39	1.8	4.08	7.19	158	65.7	6.49
15:05	1.35	11.16	1.77	4.06	7.21	162	45.4	6.49
15:10	1.55	11.16	1.76	4.05	7.21	163	20.3	6.49
15:15	1.75	11.23	1.79	3.97	7.2	169	15.9	6.49
15:20	2.05	11.38	1.8	3.9	7.2	173	8.1	6.49
15:25	2.45	11.39	1.81	3.72	7.2	175	6.5	6.49
15:30	3.05	11.41	1.83	3.64	7.19	178	4.1	6.49

HALEY ALDRICH

LOW-FLOW GROUNDWATER SAMPLING RECORD

PROJECT	Former A&A Brake Service Site - Remedial Investigation	H&A FILE NO.	0206384
LOCATION	558 Sackett St. Brooklyn, NY	PROJECT MGR.	M. Conlon
CLIENT	Sackett Heights LLC	FIELD REP	N. Manzione
CONTRACTOR	N/A	DATE	4/4/2024

GROUNDWATER SAMPLING INFORMATION

Well ID:	MW-4	Well Volume:	0.83 gal	Start Time:	12:10
Well Depth:	14.52 ft btoc	Equipment:	Peristaltic Pump, Horiba U-52	Sample Time:	12:55
Depth to Water:	9.41 ft btoc				

Time	Volume purged, gallons	Temp, C (+/-3%)	Conductivity, us/cm (+/- 3%)	Dissolved Oxygen, mg/L (+/- 10%)	pH (+/-0.1)	ORP/eH, mv (+/-10mv)	Turbidity, NTU (<5 NTU)	Depth to Water (ft)
12:15	0.35	16.84	0.588	10.32	4.92	119	162	9.41
12:20	0.65	14.72	0.866	1.11	7.05	98	10.2	9.41
12:25	1.05	14.56	0.847	0.98	7.18	108	2.4	9.41
12:30	1.45	14.53	0.814	1.95	7.24	118	0	9.41
12:35	1.9	14.41	0.745	1.63	7.25	126	0	9.41
12:40	2.15	14.37	0.784	1.61	7.26	129	0	9.41
12:45	2.5	14.34	0.782	1.59	7.27	131	0	9.41
12:50	2.9	14.33	0.779	1.59	7.28	132	0	9.41
12:55	3.3	14.34	0.778	1.6	7.28	132	0	9.41

LOW-FLOW GROUNDWATER SAMPLING RECORD

PROJECT	Former A&A Brake Service Site - Remedial Investigation	H&A FILE NO.	0206384
LOCATION	558 Sackett St. Brooklyn, NY	PROJECT MGR.	M. Conlon
CLIENT	Sackett Heights LLC	FIELD REP	N. Manzione
CONTRACTOR	N/A	DATE	4/3/2024

GROUNDWATER SAMPLING INFORMATION

Well ID:	MW-5	Well Volume:	1.16 gal	Start Time:	12:30
Well Depth:	16.71 ft btoc	Equipment:	Peristaltic Pump, Horiba U-52	Sample Time:	14:00
Depth to Water:	9.72 ft btoc				

Time	Volume purged, gallons	Temp, C (+/-3%)	Conductivity, us/cm (+/- 3%)	Dissolved Oxygen, mg/L (+/- 10%)	pH (+/-0.1)	ORP/eH, mv (+/-10mv)	Turbidity, NTU (<5 NTU)	Depth to Water (ft)
12:35	0.35	13.07	3.08	0.00	7.14	-70	>1000	9.72
12:40	0.75	13.06	3.09	0.00	7.09	-70	>1000	9.72
12:45	0.95	12.99	3.13	0.00	7.05	-74	748	10.15
12:50	1.25	12.98	3.17	0.00	7.02	-76	>1000	10.43
12:55	1.65	13	3.18	0.00	7	-74	350	10.71
13:00	1.95	13.07	3.11	0.00	6.95	-76	>1000	10.71
13:05	2.2	13.1	3.07	0.00	6.94	-74	611	10.71
13:10	2.55	12.97	2.95	0.00	6.92	-71	286	10.71
13:15	2.8	12.91	2.87	0.00	6.93	-70	638	10.71
13:20	3.25	13.13	2.72	0.00	6.93	-68	200	10.71
13:25	3.5	12.98	2.64	0.00	6.93	-69	152	10.71
13:30	3.95	13.14	2.58	0.00	6.93	-68	123	10.71
13:35	4.2	13.14	2.52	0.00	6.93	-68	89.5	10.71
13:40	4.45	13.66	2.23	0.00	6.92	-70	273	10.71
13:45	4.85	13.55	2.23	0.00	6.92	-68	342	10.71
13:50	5.2	13.7	2.21	0.00	6.9	-64	245	10.71
13:55	5.65	13.71	2.19	0.00	6.89	-64	321	10.71

HALEY ALDRICH

LOW-FLOW GROUNDWATER SAMPLING RECORD

PROJECT	Former A&A Brake Service Site - Remedial Investigation	H&A FILE NO.	0206384
LOCATION	558 Sackett St. Brooklyn, NY	PROJECT MGR.	M. Conlon
CLIENT	Sackett Heights LLC	FIELD REP	N. Manzione
CONTRACTOR	N/A	DATE	4/5/2024

GROUNDWATER SAMPLING INFORMATION

Well ID:	MW-6	Well Volume:	1.19 gal	Start Time:	9:55
Well Depth:	16.53 ft btoc	Equipment:	Peristaltic Pump, Horiba U-52	Sample Time:	11:05
Depth to Water:	9.48 ft btoc				

Time	Volume purged, gallons	Temp, C (+/-3%)	Conductivity, us/cm (+/- 3%)	Dissolved Oxygen, mg/L (+/- 10%)	pH (+/-0.1)	ORP/eH, mv (+/-10mv)	Turbidity, NTU (<5 NTU)	Depth to Water (ft)
10:00	0.35	12.4	0.841	2.1	6.07	-7	776	9.48
10:05	0.75	13.52	0.82	0.91	7.02	-59	807	9.48
10:10	1.15	13.57	0.819	0.56	7.12	-71	141	9.49
10:15	1.55	13.69	0.826	0.22	7.18	-77	106	9.49
10:20	2	13.79	0.83	0.08	7.24	-84	87.1	9.49
10:25	2.45	13.83	0.83	0.06	7.27	-86	62.4	9.49
10:30	3	13.9	0.829	0.42	7.29	-91	54	9.49
10:35	3.35	13.92	0.829	0.41	7.31	-94	50.7	9.49
10:40	3.65	13.93	0.831	0.42	7.32	-97	44.6	9.49
10:45	4.05	13.98	0.832	1.7	7.33	-99	38.7	9.49
10:50	4.45	14.03	0.83	1.69	7.33	-99	25.5	9.49
10:55	4.75	14.05	0.829	1.49	7.33	-101	11.9	9.49
11:00	5.1	14.07	0.827	1.4	7.33	-105	7.4	9.49

HALEY ALDRICH

LOW-FLOW GROUNDWATER SAMPLING RECORD

PROJECT	Former A&A Brake Service Site - Remedial Investigation	H&A FILE NO.	0206384
LOCATION	558 Sackett St. Brooklyn, NY	PROJECT MGR.	M. Conlon
CLIENT	Sackett Heights LLC	FIELD REP	N. Manzione
CONTRACTOR	N/A	DATE	4/3/2024

GROUNDWATER SAMPLING INFORMATION

Well ID:	MW-7	Well Volume:	1.27 gal	Start Time:	10:15
Well Depth:	16.53 ft btoc	Equipment:	Peristaltic Pump, Horiba U-52	Sample Time:	11:20
Depth to Water:	6.97 ft btoc				

Time	Volume purged, gallons	Temp, C (+/-3%)	Conductivity, us/cm (+/- 3%)	Dissolved Oxygen, mg/L (+/- 10%)	pH (+/-0.1)	ORP/eH, mv (+/-10mv)	Turbidity, NTU (<5 NTU)	Depth to Water (ft)
10:20	0.125	11.23	1.96	2.43	7.56	96	>1000	6.97
10:25	0.35	10.97	1.95	3.27	7.42	86	878	6.97
10:30	0.5	10.9	1.94	3.2	7.43	90	683	6.97
10:35	0.75	10.79	1.91	3.13	7.44	98	190	6.97
10:40	1.15	10.72	1.87	3.17	7.44	109	90.9	6.97
10:45	1.35	10.6	1.84	3.17	7.45	116	32.7	6.97
10:50	1.85	10.56	1.82	3.2	7.46	118	90.7	6.97
10:55	2.25	10.54	1.8	3.17	7.46	123	32.7	6.97
11:00	2.5	10.53	1.77	3.17	7.42	127	40.7	6.97
11:05	3	10.39	1.74	3.08	7.47	130	14.8	6.97
11:10	3.5	10.39	1.72	3	7.48	131	8.5	6.97
11:15	3.85	10.37	1.72	2.95	7.48	132	7.4	6.97

APPENDIX E
Survey Maps

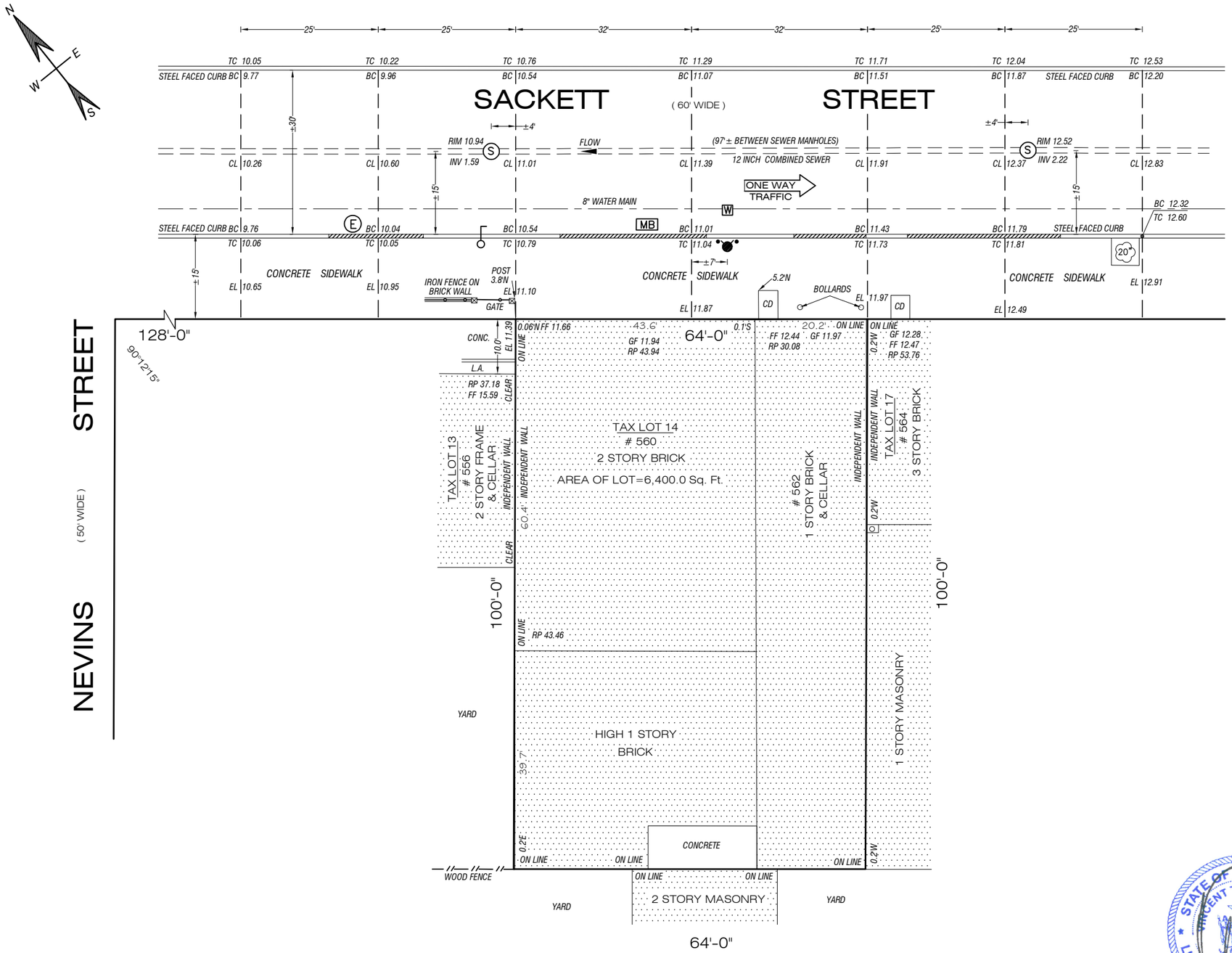
JOB * CM 2641 ADDRESS:560,562 SACKETT STREET

CAPTION	ARCHITECTURAL SURVEY
DATE	REVISIONS
04-20-2022	ARCHITECTURAL SURVEY

GENERAL NOTES:

1. This survey was prepared only for the party (parties) and purpose indicated hereon.
2. Property corner monuments or markers were (not) placed as part of this survey.
3. Certifications on this survey map signify that the map was prepared in accordance with the current existing Code of Practice for Land Surveys adopted by the New York State Association of Professional Land Surveyors, Inc. Said certifications are limited to the party (parties) for whom the survey is prepared and are not transferable.
4. The location and nature of underground structures, internal walls and improvements or encroachments not visible to the surveyor are not covered under this certification.
5. Easements of record are only guaranteed if an Abstract of Title is furnished to the surveyor.
6. This is to certify that there are no streams nor natural water courses on the property except as shown on this survey.
7. Elevations refer to NAVD 1988 datum.

	DATE	BY		DATE	BY
SURVEYED	04-20-2022	V.B & V.J	DRAWN	04-24-2022	V.B



STANDARD: U.S. FEET

8 0 20 40

SCALE: 1 INCH = 20 FEET

LEGEND

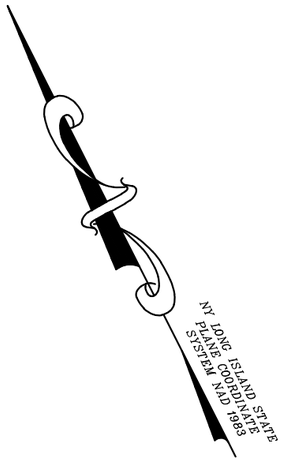
FF	FIRST FLOOR ELEVATION
RS	ROOF SOFFIT ELEVATION
RP	ROOF PARAPET ELEVATION
TC	TOP OF CURB
BC	BOTTOM OF CURB
CL	CENTERLINE
EL	SPOT ELEVATION
LA	LOWER AREA
BW	BOTTOM OF WALL
CONC	CONCRETE
INV	INVERT ELEVATION
S	SEWER MANHOLE
U	UTILITY POLE
W	WATER VALVE
G	GAS VALVE
MB	METAL BOX
	LIGHT POLE
	STREET SIGN
	HYDRANT
4"	TREE & SIZE
	WOOD FENCE
	CHAIN LINK FENCE
	DROP CURB

STATE OF NEW YORK VINCENT TEUTONICO 050307 LICENSED LAND SURVEYOR

VINCENT TEUTONICO, L.S.
NEW YORK LICENSE 050307

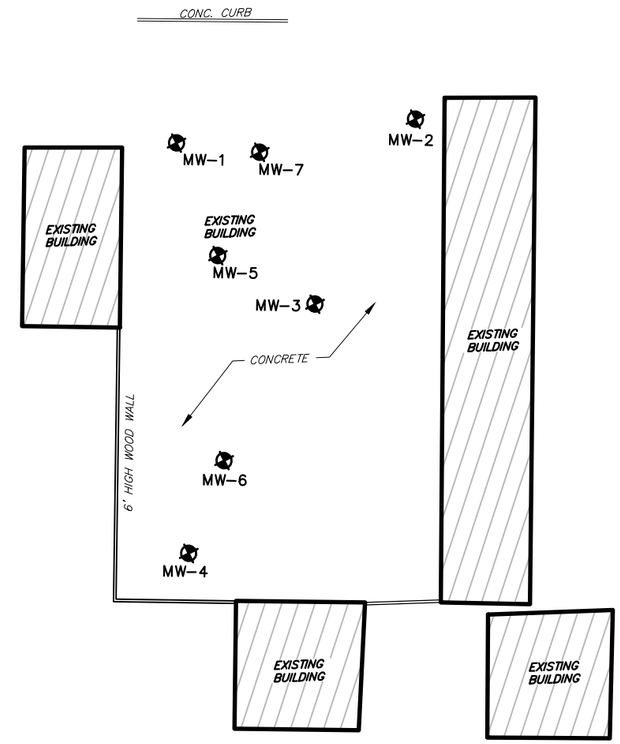
MAP OF SURVEY OF PROPERTY
IN THE BOROUGH AND COUNTY OF BROOKLYN
CITY AND STATE OF NEW YORK
TAX MAP: BLOCK 433, LOT 14

CITY MAPPING, INC.
114-34 122nd STREET
SOUTH OZONE PARK
NY 11420
TEL: 718-751-6871
email: citymapping@yahoo.com



NEVINS ST

SACKETT ST



MONITORING WELLS	GROUND	RIM	PVC	DATE OF SURVEY
MW-1	11.81 CONC	11.82	11.60	July 14, 2023
MW-2	11.88 CONC	11.89	11.67	July 14, 2023
MW-3	11.93 BRICK	11.95	11.41	July 14, 2023
MW-4	11.99 CONC	12.00	11.74	July 14, 2023
MW-5	11.96 CONC	11.96	11.69	April 25, 2024
MW-6	12.06 CONC	12.08	11.85	April 25, 2024
MW-7	11.86 CONC	11.87	11.65	April 25, 2024

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUB–DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW.

NOTES:

1. FIELD WORK PERFORMED ON JULY 14, 2023 AND APRIL 25, 2024.
2. ELEVATION DATUM NAVD 1988 DERIVED USING RTK/KEYNET. NYBR BROOKLYN PIER CORS ARP ELEV.=42.13' (NAVD 88)

GRAPHIC SCALE

30 0 15 30

(IN FEET)
1 inch = 30 ft.

REV	DATE	DESCRIPTION	BY	CHKD
1	04/29/2024	ADDED MW–5, MW–6 & MW–7	R.M.	C.S.

James J. Heiser
Professional Land Surveyor
JHEISER@DPKCONSULTING.NET

date 04/29/2024

N.J. Lic: 24GS04331100
PA. Lic: SU075616
N.Y. Lic: 050932-1
CT. Lic: 70476
DE. Lic: S6-0010858

Date: 07/17/23 | Dr.: R.M. | Chk.: C.S. | SCALE: 1" = 30' | JOB No. 23–10007 | Dwg: 23–10007 MW01

DPK LAND SURVEYING
DPK LAND SURVEYING, LLC
200 METROPLEX DRIVE - STE. 285, EDISON, NJ 08817
P:732-764-0100 F: 732-764-0990
NEW YORK CERTIFICATE OF AUTHORIZATION NO. 0012585

MONITORING WELL LOCATION MAP

FOR:
HALEY & ALDRICH OF NEW YORK
SITE:
558 SACKETT STREET
BROOKLYN
KINGS COUNTY, NEW YORK

S:_Projects\2023\23-10007\CAD\23-10007 MW01.dwg May 01, 2024-2:34pm BY:(RogerMaandal)

APPENDIX F
Synoptic Monitoring Well Gauging Log

Synoptic Monitoring Well Gauging Log

PROJECT	558 Sackett Street - Remedial Investigation
LOCATION	558 Sackett Street, Brooklyn, NY
CLIENT	Sackett Heights LLC
H&A FILE NO.	0206384
PROJECT MANAGER	M. Conlon
FIELD REP.	M. Cal
GAUGING DATE	4/26/2024
WEATHER	H: 59°F L: 41°F, Mostly Sunny, Wind: SW to NE, 3mph, Humidity: 76%

MONITORING WELL ID	TIME	DEPTH TO WATER (FT BELOW TOC)	WELL DEPTH (FT)	TOP OF CASING (FT)	GROUNDWATER ELEVATION (FT)
MW-1	7:48	9.84	15.13	11.60	1.76
MW-2	7:56	8.18	14.35	11.67	3.49
MW-3	8:52	10.27	15.17	11.41	1.14
MW-4	8:25	10.87	14.24	11.74	0.87
MW-5	8:12	10.78	16.71	11.69	0.91
MW-6	8:17	11.09	16.53	11.85	0.76
MW-7	7:51	7.97	16.53	11.65	3.68

Comments:

1. Monitoring wells MW-1 through MW-4 were surveyed on 17 July 2023 and MW-5 through MW-7 were surveyed on 26 April 2024 by DPK Consulting.
2. Wells were gauged on 26 April 2024
3. Elevation refers to the North American Vertical Datum of 1988 (NAVD88).
4. All dimensions are in US survey feet.

APPENDIX G
Soil Vapor Sampling Logs

SOIL VAPOR SAMPLING LOG

Project Name/Location: 558 Sackett Street Brooklyn NY Project Number: 0206384

Site: 558 Sackett Street Brooklyn NY
Date Collected: 6/27/2023 and 6/28/2023
Personnel: A. Vaculik
Weather: Sunny
Humidity: 74%

Sample ID	Caniser Size	Canister ID	Flow Controller ID	Sample Start Time	Canister Start Pressure ("Hg)	Sample End Time	Canister End Pressure ("Hg)	Sample Start Date	Sample Type	Analyses Method
SV-1	2.7L	262	0975	720	-29.43	910	-7.63	6/28/2023	Soil Vapor	TO-15
SV-2	2.7L	2032	01951	1220	-29.86	1400	-8.28	6/27/2023	Soil Vapor	TO-15
SV-3	2.7L	2214	0676	722	-29.30	912	-8.34	6/28/2023	Soil Vapor	TO-15
SV-4	2.7L	2789	01822	1223	-29.64	1402	-9.27	6/27/2023	Soil Vapor	TO-15
SV-5	2.7L	2204	01822	1226	-29.78	1403	-8.55	6/27/2023	Soil Vapor	TO-15
SV-6	2.7L	2081	01811	725	-29.30	915	-8.53	6/28/2023	Soil Vapor	TO-15
SV-7	2.7L	2396	01611	1225	-29.81	1405	-9.21	6/27/2023	Soil Vapor	TO-15

Notes:
Summas and flow regulators provided by Alpha Analytical Laboratory

Analyses for VOCs by Method TO-15/TO-15SIM (circle one)

APPENDIX H
Analytical Laboratory Reports

APPENDIX I
Data Usability Summary Reports

Haley & Aldrich, Inc.
600 South Meyer Ave.
Suite 100
Tucson, AZ 85701
520.289.8621

Data Usability Summary Report

Project Name: Sackett Street

Project Description: Soil Gas Samples

Sample Date(s): 26 June through 28 June 2023

Analytical Laboratory: Alpha Analytical – Westborough, MA

Validation Performed by: Kirkland Broadwell

Validation Reviewed by: Katherine Miller

Validation Date: 1 August, 2023

Haley & Aldrich, Inc. prepared this Data Usability Summary Report (DUSR) to summarize the review and validation of the analytical results for Sample Delivery Group(s) (SDG) listed. This DUSR is organized into the following sections:

1. Sample Delivery Group Numbers
2. Precision and Accuracy
3. Explanations
4. Glossary
5. Abbreviations
6. Qualifiers

References

This data validation and usability assessment was performed per the guidance and requirements established by the United States Environmental Protection Agency (USEPA) using the following reference materials:

- Analysis of Volatile Organic Compounds (VOCs) in Air Contained in Canisters by Method TO-15.
- The project-specific Quality Assurance Project Plan (QAPP), herein referred to as the specified limits (see references section).

Data reported in this sampling event were reported to the laboratory reporting limit (RL).

Sample data were qualified in accordance with the laboratory's standard operating procedures (SOPs). The results presented in each laboratory report were found to be compliant with the data quality objectives (DQOs) for the project and therefore usable; any exceptions are noted in the following pages.

1. Sample Delivery Group Numbers

1.1 SAMPLE MANAGEMENT

This DUSR summarizes the review of the following SDG numbers:

- L2336824, dated 5 July 2023; and
- L2336978, dated 5 July 2023.

Samples were collected, preserved, and shipped following standard chain of custody (COC) protocols.

Samples were also received appropriately, identified correctly, and analyzed according to the COC. Issues noted with sample management are listed below:

- SDG L2336824: The cannister ID for sample SV-7 (2392) was listed on the COC incorrectly as 2396.

Analyses were performed on the following samples:

Sample ID	Sample Type	Lab ID	Sample Date	Matrix	Methods
SV-2-20230626	N	L2336824-01	06/26/2023	GS	A
SV-4-20230626	N	L2336824-02	06/26/2023	GS	A
SV-5-20230626	N	L2336824-03	06/26/2023	GS	A
SV-7-20230626	N	L2336824-04	06/26/2023	GS	A
SV-1-20230628	N	L2336978-01	06/28/2023	GS	A
SV-3-20230628	N	L2336978-02	06/28/2023	GS	A
SV-6-20230628	N	L2336978-03	06/28/2023	GS	A

Method Holding Times			
A.	TO-15	VOCs	30 days

1.2 MULTIPLE SAMPLE RESULTS

The laboratory reported multiple results for the samples listed below. The validator chose the results that best met the DQOs of the project.

Lab ID	Method	Analyte	Qualification
L2336824-03D	TO-15	2,2,4-Trimethylpentane	The laboratory reanalyzed the sample at dilution due to a calibration exceedance. The original results are marked nonreportable, and the reanalysis results are accepted.

1.3 HOLDING TIMES/PRESERVATION

The samples arrived at the laboratory at the proper temperature and were prepared and analyzed within the holding time and preservation criteria specified per method protocol.

1.4 REPORTING LIMITS AND SAMPLE DILUTIONS

The RLs for the samples within this SDG met or were below the minimum RL requirements specified by the project-specific QAPP.

1.5 SURROGATE RECOVERY COMPLIANCE

Refer to Section E 1.2. The percent recovery (%R) for each surrogate compound added to each project sample were determined to be within the laboratory specified quality control limits.

1.6 LABORATORY CONTROL SAMPLES

Refer to Section E 1.3. Compounds associated with the laboratory control samples (LCS) analyses associated with client samples exhibited recoveries within the specified limits.

1.7 BLANK SAMPLE ANALYSIS

Refer to Section E 1.5. Method blank samples had no detections, indicating that no contamination from laboratory activities occurred.

1.8 DUPLICATE SAMPLE ANALYSIS

Refer to Section E 1.6. The laboratory did not analyze any laboratory duplicates as per the method or laboratory SOP.

1.9 CLEAN CANISTER CERTIFICATION

The canisters used for the TO-15 sample collection were certified clean by individual can analysis prior to sampling to ensure that no target analytes were present. These analysis sheets were reviewed, and no target analytes were detected in the laboratory-provided canisters.

1.10 SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

The results presented in this report were found to comply with the DQOs for the project and the guidelines specified by the analytical method. Based on the review of this report, the data are useable and acceptable as no data was rejected. No qualifiers were applied to any data in this report.

2. Precision and Accuracy

Refer to Section E 1.7. Where required by the method, some measurement of analytical accuracy and precision was reported for each method with the site samples.

3. Explanations

The following explanations include more detailed information regarding each of the sections in the DUSR above. Not all sections in the Explanations are represented:

- E 1.2 Surrogate Recovery Compliance
  - Surrogates, also known as system monitoring compounds, are compounds added to each sample prior to sample preparation to determining the efficiency of the extraction procedure by evaluating the %R of the compounds.
- E 1.3 Laboratory Control Samples
  - The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) analyses are used to assess the precision and accuracy of the analytical method independent of matrix interferences.
- E 1.5 Blank Sample Analysis
  - Method blanks are prepared by the analytical laboratory and analyzed concurrently with the project samples to assess possible laboratory contamination.
- E 1.6 Laboratory and Field Duplicate Sample Analysis
  - The laboratory duplicate sample analysis is used by the laboratory at the time of the analysis to demonstrate acceptable method precision. The relative percent difference (RPD) or absolute difference was evaluated for each duplicate sample pair to monitor the reproducibility of the data.
- E 1.7 Precision and Accuracy
  - Precision measures the reproducibility of repetitive measurements. In a laboratory environment, this will be measured by determining the RPD found between a primary and a duplicate sample. This can be an LCS/LCSD pair, a matrix spike/matrix spike duplicate (MS/MSD) pair, a laboratory duplicate performed on a site sample, or a field duplicate collected and analyzed concurrently with a site sample.
  - Accuracy is a statistical measurement of the correctness of a measured value and includes components of random error (variability caused by imprecision) and systematic error. In a laboratory environment, this will be measured by determining the %R of certain spiked compounds. This can be assessed using LCS, blank spike, MS, and/or surrogate recoveries.

4. Glossary

Not all of the following symbols, acronyms, or qualifiers occur in this document.

- Sample Types:
  - EB Equipment Blank Sample
  - FB Field Blank Sample
  - FD Field Duplicate Sample
  - N Primary Sample
  - TB Trip Blank Sample
- Units:
  - µg/kg micrograms per kilogram
  - µg/L micrograms per liter
  - µg/m^3 micrograms per cubic meter
  - mg/kg milligrams per kilogram
  - mg/L milligrams per liter
  - ppb v/v parts per billion volume/volume
  - pCi/L picocuries per liter
  - pg/g picograms per gram
- Matrices:
  - AA Ambient Air
  - GS Soil Gas
  - GW/WG Groundwater
  - QW Water Quality
  - IA Indoor Air
  - SE Sediment
  - SO Soil
  - SSV Sub-slab Vapor
  - WQ Water Quality control matrix
  - WS Surface Water
- Table Footnotes:
  - NA Not applicable
  - ND Non-detect
  - NR Not reported
- Common Symbols:
  - % percent
  - < less than
  - ≤ less than or equal to
  - > greater than
  - ≥ greater than or equal to
  - = equal
  - °C degrees Celsius
  - ± plus or minus
  - ~ approximately
  - x times (multiplier)

5. Abbreviations

%D	Percent Difference
%R	Percent Recovery
%RSD	Percent Relative Standard Deviation
%v/v	Percent volume by volume
2s	2 sigma
4,4-DDT	4 4-dichlorodiphenyltrichloroethane
Abs Diff	Absolute Difference
amu	atomic mass unit
BPJ	Best Professional Judgement
BS	Blank Spike
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CCVL	Continuing Calibration Verification Low
COC	Chain of Custody
COM	Combined Isotope Calculation
Cr (VI)	Hexavalent Chromium
CRI	Collision Reaction Interface
DoD	Department of Defense
DQO	data quality objective
DUSR	Data Usability Summary Report
EIS	Extraction Internal Standard
EMPC	Estimated Maximum Possible Concentration
FBK	Field Blank Contamination
FDP	Field Duplicate
GC	Gas Chromatograph
GC/MS	Gas Chromatography/Mass Spectrometry
GPC	Gel Permeation Chromatography
H_2	Hydrogen gas
HCl	Hydrochloric Acid
ICAL	Initial Calibration
ICB	Initial Calibration Blank
ICP/MS	Inductively Coupled Plasma/Mass Spectrometry
ICV	Initial Calibration Verification
ICVL	Initial Calibration Verification Low
IPA	Isopropyl Alcohol
LC	Laboratory Control
LCS/LCSD	Laboratory Control Sample/Laboratory Control Sample Duplicate
MBK	Method Blank Contamination
MDC	Minimum Detectable Concentration
MDL	Laboratory Method Detection Limit
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NA	not applicable
ND	Non-Detect
NFG	National Functional Guidelines
NH_3	Ammonia
NYSDEC	New York State Department of Environmental Conservation
PAH	Polycyclic Aromatic Hydrocarbon
PCB	Polychlorinated Biphenyl
PDS	Post-Digestion Spike
PEM	Performance Evaluation Mixture
PFAS	Per- and Polyfluoroalkyl Substances
PFBA	Perfluorbutanoic Acid
PFD	Perfluorodecalin
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctane sulfonate
PFPeA	Perfluoropentanoic Acid
QAPP	Quality Assurance Project Plan
QC	Quality Control
QSM	Quality Systems Manual
R^2	R-squared value
Ra-226	Radium-226
Ra-228	Radium-228
RESC	Resolution Check Measure
RL	Laboratory Reporting Limit
RPD	Relative Percent Difference
RRF	Relative Response Factor
RT	Retention Time
SAP	Sampling Analysis Plan
SDG	Sample Delivery Group
SIM	Selected ion monitoring
SOP	Standard Operating Procedure
SPE	Solid-Phase Extraction
SVOC	Semi-Volatile Organic Compound
TCLP	Toxicity Characteristic Leaching Procedure
TIC	Tentatively Identified Compound
TKN	Total Kjeldahl Nitrogen
TPH	Total Petroleum Hydrocarbon
TPU	Total Propagated Uncertainty
USEPA	U.S. Environmental Protection Agency
VOC	Volatile Organic Compound
WP	Work Plan

6. Qualifiers

The qualifiers below are from the USEPA National Functional Guidelines and the data in the DUSR may contain these qualifiers:

- Concentration (C) Qualifiers:

  U The compound was analyzed for but not detected. The associated value is either the compound quantitation limit if not detected by the analytical instrument or could be the reported or blank concentration if qualified by blank contamination. This can also be displayed as less than the associated compound quantitation limit (<RL or <MDL), or "ND".

  B The compound was found in the sample and its associated blank. Its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers:

  E The compound was quantitated above the calibration range.

  D The concentration is based on a diluted sample analysis.

- Validation Qualifiers:

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  J+ The result is an estimated quantity, but the result may be biased high.

  J- The result is an estimated quantity, but the result may be biased low.

  J/UJ as listed in exception tables J applies to detected data and UJ applies to non-detected data as reported by the laboratory.

  UJ The compound was not detected above the reported sample quantitation limit; however, the reported limit is estimated and may or may not represent the actual limit of quantitation.

  NJ The analysis indicated the presence of a compound for which there is presumptive evidence to make a tentative identification; the associated numerical value is an estimated concentration only.

  R The sample results were rejected as unusable; the compound may or may not be present in the sample.

  S Result is suspect. See DUSR for details.

References

1. Haley & Aldrich, Inc, 2023. Quality Assurance Project Plan. Remedial Investigation Work Plan. Former A&A Brake Service Site. NYSDEC BCP Site C224372. Brooklyn New York. March.

2. United States Environmental Protection Agency, 2014. Analysis of Volatile Organic Compounds in Air Contained in Canisters by Method TO-15, SOP NO. HW-31, Revision 6. June.

Haley & Aldrich, Inc.
600 South Meyer Ave.
Suite 100
Tucson, AZ 85701
520.289.8621

Data Usability Summary Report

Project Name: Sackett Street

Project Description: Soil and Groundwater Samples

Sample Date(s): 21 June through 25 June 2023

Analytical Laboratory: Alpha Analytical – Westborough, MA

Validation Performed by: Kirkland Broadwell

Validation Reviewed by: Katherine Miller

Validation Date: 3 August 2023

Haley & Aldrich, Inc. prepared this Data Usability Summary Report (DUSR) to summarize the review and validation of the analytical results for Sample Delivery Group(s) (SDG) listed. This DUSR is organized into the following sections:

1. Sample Delivery Group Numbers
2. Precision and Accuracy
3. Explanations
4. Glossary
5. Abbreviations
6. Qualifiers

References

This data validation and usability assessment was performed per the guidance and requirements established by the United States Environmental Protection Agency (USEPA) using the following reference materials:

- National Functional Guidelines (NFG) for Inorganic Data Review.
- NFG for Organic Data Review.
- Data Validation Guidelines for Perfluoroalkyl Substances (PFAS) Analyzed Using USEPA Method 537.
- Sampling, Analysis, and Assessment of Per- and PFAS Under New York State Department of Environmental Conservation's (NYSDEC) Part 375 Remedial Programs.
- The project-specific Quality Assurance Project Plan (QAPP), herein referred to as the specified limits (see references section).

Data reported in this sampling event were reported to the laboratory method detection limit (MDL). Results found between the MDL and reporting limit (RL) are flagged J as estimated.

Sample data were qualified in accordance with the laboratory's standard operating procedures (SOPs). The results presented in each laboratory report were found to be compliant with the data quality objectives (DQOs) for the project and therefore usable; any exceptions are noted in the following pages.

1. Sample Delivery Group Numbers

1.1 SAMPLE MANAGEMENT

This DUSR summarizes the review of the following SDG numbers:

- L2335535, dated 13 July 2023;
- L2335921, dated 14 July 2023;
- L2336234, dated 17 July 2023; and
- L2336505, dated 17 July 2023.

Samples were collected, preserved, and shipped following standard chain of custody (COC) protocols.

Samples were also received appropriately, identified correctly, and analyzed according to the COC. Issues noted with sample management are listed below:

- SDG L2335535: The collection date and time on the COC and container label for L2335535-15 did not match. At the client's request, the collection date and time on the sample container was switched to the date and time listed on the COC.

Analyses were performed on the following samples:

Sample ID	Sample Type	Lab ID	Sample Date	Matrix	Methods
SB-1_0-0.5	N	L2335535-01	06/21/2023	SO	A, B, C, D, E, F, G, H
SB-1_1-2	N	L2335535-02	06/21/2023	SO	A, B, C, D, E, F, G, H
SB-1_5-7	N	L2335535-03	06/21/2023	SO	A, B, C, D, E, F, G, H
SB-1_10-12	N	L2335535-04	06/21/2023	SO	A, B, C, D, E, F, G, H
SB-1_12-15	N	L2335535-05	06/21/2023	SO	A, B, C, D, E, F, G, H
SB-2_0-0.5	N	L2335535-06	06/21/2023	SO	A, B, C, D, E, F, G, H
SB-2_5-7	N	L2335535-07	06/21/2023	SO	A, B, C, D, E, F, G, H
SB-2_12-14	N	L2335535-08	06/21/2023	SO	A, B, C, D, E, F, G, H
SB-4_0-0.5	N	L2335535-09	06/21/2023	SO	A, B, C, D, E, F, G, H
SB-4_5-7	N	L2335535-10	06/21/2023	SO	A, B, C, D, E, F, G, H
SB-4_8-10	N	L2335535-11	06/21/2023	SO	A, B, C, D, E, F, G, H
SB-4_12-14	N	L2335535-12	06/21/2023	SO	A, B, C, D, E, F, G, H
SB-5_0-0.5	N	L2335535-13	06/21/2023	SO	A, B, C, D, E, F, G, H
SB-5_5-7	N	L2335535-14	06/21/2023	SO	A, B, C, D, E, F, G, H
SB-5_12-14	N	L2335535-15	06/21/2023	SO	A, B, C, D, E, F, G, H
SB-6_0-0.5	N	L2335535-16	06/21/2023	SO	A, B, C, D, E, F, G, H
SB-6_5-7	N	L2335535-17	06/21/2023	SO	A, B, C, D, E, F, G, H
SB-6_10-12	N	L2335535-18	06/21/2023	SO	A, B, C, D, E, F, G, H
SB-6_12-14	N	L2335535-19	06/21/2023	SO	A, B, C, D, E, F, G, H

Sample ID	Sample Type	Lab ID	Sample Date	Matrix	Methods
DUP01_20230621	FD	L2335535-20	06/21/2023	SO	A, B, C, D, E, F, G, H
FB01_20230621	FB	L2335535-21	06/21/2023	WQ	A, B, C, G, H, I, J, K
TB01_20230621	TB	L2335535-22	06/21/2023	WQ	A
SB-7_0-0.5	N	L2335921-01	06/22/2023	SO	A, B, C, D, E, F, G, H
SB-7_1-2	N	L2335921-02	06/22/2023	SO	A, B, C, D, E, F, G, H
SB-7_5-7	N	L2335921-03	06/22/2023	SO	A, B, C, D, E, F, G, H
SB-7_9-11	N	L2335921-04	06/22/2023	SO	A, B, C, D, E, F, G, H
SB-7_12-14	N	L2335921-05	06/22/2023	SO	A, B, C, D, E, F, G, H
FB02_20230622	FB	L2335921-06	06/22/2023	W	A, B, C, G, H, I, J, K
TB02_20230622	TB	L2335921-07	06/22/2023	W	A
SB-8_0-0.5	N	L2336234-01	06/23/2023	SO	A, B, C, D, E, F, G, H
SB-8_1-2	N	L2336234-02	06/23/2023	SO	A, B, C, D, E, F, G, H
SB-8_5-7	N	L2336234-03	06/23/2023	SO	A, B, C, D, E, F, G, H
SB-8_9-11	N	L2336234-04	06/23/2023	SO	A, B, C, D, E, F, G, H
SB-8_12-14	N	L2336234-05	06/23/2023	SO	A, B, C, D, E, F, G, H
TB03_20230623	TB	L2336234-06	06/23/2023	WQ	A
SB-3_0-0.5	N	L2336505-01	06/25/2023	SO	A, B, C, D, E, F, G, H
SB-3_1-2	N	L2336505-02	06/25/2023	SO	A, B, C, D, E, F, G, H
SB-3_5-7	N	L2336505-03	06/25/2023	SO	A, B, C, D, E, F, G, H
SB-3_9-11	N	L2336505-04	06/25/2023	SO	A, B, C, D, E, F, G, H
SB-3_12-14	N	L2336505-05	06/25/2023	SO	A, B, C, D, E, F, G, H
DUP02_20230625	FD	L2336505-06	06/25/2023	SO	A, B, C, D, E, F, G, H
TB_20230625	TB	L2336505-07	06/25/2023	WQ	A

Method Holding Times			
A.	SW8260D	Volatile Organic Compounds (VOCs)	14 days
B.	SW8270E	Semivolatile Organic Compounds (SVOCs)	14 days
C.	E1633	PFAS	14 days extraction / 40 days analysis*
D.	SW6010D	Metals (by Optical Emission Spectrometry)	180 days
E.	SW7471B	Mercury (in Solids)	28 days extraction / 48 hours analysis
F.	SM2540G	Total Solids	7 days
G.	SW8081B	Organochlorine Pesticides	14 days
H.	SW8082A	Polychlorinated Biphenyl (PCBs)	14 days
I.	SW8270ESIM	Polycyclic Aromatic Hydrocarbons (PAHs)	7 days extraction / 40 days analysis
J.	SW6020B	Metals	180 days
K.	SW7470A	Mercury (in Liquids)	28 days extraction / 48 hours analysis
**Holding time specified by NYSDEC Guidance.*			

1.2 CASE NARRATIVE

The laboratory report case narrative lists various quality control exceedances (e.g., as internal standard exceedances) not evaluated by this review thus, no qualifiers were applied to the reported results.

1.3 MULTIPLE SAMPLE RESULTS

The laboratory reported multiple results for the samples listed below. The validator chose the results that best met the DQOs of the project.

Lab ID	Method	Analyte	Qualification
L2335535-01	SW8260D	All VOCs	The laboratory reanalyzed the sample due to a low internal standard response. As the reanalysis achieved similar results, the original results are marked reportable, and the reanalysis are marked nonreportable.
L2335535-09	SW8081B	4,4'-Dichlorodiphenyl-trichloroethane (4,4'-DDT)	The laboratory reanalyzed the sample at dilution due a calibration exceedance. The original results are marked nonreportable, and the reanalysis results are accepted.
L2335535-11	SW8260D	All VOCs	The laboratory analyzed the sample as a High-Level Methanol to quantitate results within the calibration range. The original results for n-Propylbenzene, 1,2,4,5-Tetramethylbenzene, and Isopropylbenzene are marked nonreportable, and the reanalysis results for these compounds are accepted. The original results for all of VOCs are marked nonreportable and the reanalysis results are accepted.
L2335535-14	SW8270E	All SVOCs	The laboratory reanalyzed the sample due to low surrogate recoveries. As the reanalysis achieved similar results, the original results are marked reportable, and the reanalysis are marked nonreportable.
L2335535-16	SW8270E	Pyrene and Fluoranthene	The laboratory reanalyzed the sample at dilution due a calibration exceedance. The original results are marked nonreportable, and the reanalysis results are accepted.
L2335535-18	SW8260D	1,2,4-Trimethylbenzene	The laboratory reanalyzed the sample at dilution due a calibration exceedance. The original results are marked nonreportable, and the reanalysis results are accepted.
L2335921-06	SW8270ESIM	All PAHs	The laboratory reanalyzed the sample due to low LCSD recoveries. As the reanalysis were reextracted outside of hold time, the original results are marked reportable, and the reanalysis are marked nonreportable.
L2335921-02	SW8270E	All PAHs	The laboratory reanalyzed the sample due to low surrogate recoveries. As the reanalysis achieved similar results, the original results are marked reportable, and the reanalysis are marked nonreportable.

1.4 HOLDING TIMES/PRESERVATION

The samples arrived at the laboratory at the proper temperature and were prepared and analyzed within the holding time and preservation criteria specified per method protocol.

1.5 REPORTING LIMITS AND SAMPLE DILUTIONS

The MDLs for the samples within this SDG met or were below the minimum RL requirements specified by the project-specific QAPP.

1.6 REPORTING BASIS (WET/DRY)

Refer to Section E 1.1. Soil data in this SDG were reported on a dry weight basis.

Where reported, percent solid results were reviewed and found to be within limits.

1.7 SURROGATE RECOVERY COMPLIANCE

Refer to Section E 1.2. The percent recovery (%R) for each surrogate compound added to each project sample were determined to be within the laboratory specified quality control (QC) limits, with the following exceptions:

Method	Sample ID	Lab ID	Surrogate	Dilution	%R	Qualification
SW8260D	SB-1_5-7'	L2335535-03	4-bromofluorobenzene	1x	142%	J+/None target compounds*
SW8260D	SB-5_5-7'	L2335535-14	Dibromofluoromethane	1x	63%	J-/UJ target compounds**
SW8270E	SB-5_5-7'	L2335535-14	2-fluorophenol	1x	4%	J-/R target compounds***
SW8270E	SB-5_5-7'	L2335535-14	2,4,6-tribromophenol	1x	1%	J-/R target compounds****
SW8081B	SB-4_8-10'	L2335535-11	2,4,5,6-tetrachloro-m-xylene	1x	5%	J-/R target compounds*****
SW8081B	SB-4_8-10'	L2335535-11	Decachlorobiphenyl	1x	4%	J-/R target compounds*****
SW8270E	SB-7_1-2	L2335921-02	2,4,6-tribromophenol	1x	3%	J-/R target compounds****
SW8081B	SB-3_12'-14'	L2336505-05	2,4,5,6-tetrachloro-m-xylene	1x	2670%	None, target compounds are ND
SW8270E	SB-2_0-0.5	L2335535-06	2-Fluorophenol	1x	22%	J-/UJ target compounds***
SW8270E	SB-5_0-0.5’	L2335535-13	2-Fluorophenol	1x	22%	J-/UJ target compounds***
SW8081B	SB-1_5-7’	L2335535-03	Decachlorobiphenyl	1x	357%	J+/None target compounds*****

** Compounds targeted by 4-bromofluorobenzene: 1,1,2,2,-tetrachloroethane, 1,2,3-trichlorobenzene, 1,2,3-trichloropropane, 1,2,4,5-tetramethylbenzene, 1,2,4-trichlorobenzene, 1,2,4-trimethylbenzene, 1,2-dibromo-3-chloropropane, 1,2-dichlorobenzene, 1,3,5-Trichlorobenzene, 1,3,5-trimethybenzene, 1,3-dichlorobenzene, 1,4-dichloro-2-butane, 1,4-*

Method	Sample ID	Lab ID	Surrogate	Dilution	%R	Qualification
dichlorobenzene, 1,4-Dichlorobenzene-d4, 2-chlorotoluene, 4-chorotoluene, 4-ethyltoluene, Bromobenzene, Bromoform, Cyclohexanone, Hexachlorobutadiene, Isopropylbenzene, Naphthalene, n-butylbenzene, n-propylbenzene, p-diethylbenzene, Pentachloroethane, p-isopropyltoluene, sec-butylbenzene, tert-butylbenzene, and trans-1,4-dichloro-2-butene.						
*** Compounds targeted by Dibromofluoromethane: Dichlorodifluoromethane, Chloromethane, Vinyl Chloride, Bromomethane, Chloroethane, Trichlorofluoromethane, Ethyl Ether, Freon 113, Acrolein, Acetone, Ethanol, 1,1,-dichloroethene, Tert-Butyl Alcohol, Methyl Acetate, Carbon Disulfide, Methylene Chloride, Acrylonitrile, Methyl Tert Butyl Ether, Halothane, Trans-1,2-dichloroethene, Diisopropyl Ether, Vinyl Acetate, 1,1-dichloroethane, Ethyl-Tert-Butyl-Ether, 2-butanone, 2,2-dichloropropane, Cis-1,2-dichloroethene, Chloroform, Bromochloromethane, Tetrahydrofuran, 1,1,1-trichloroethane, Cyclohexane, 1,1-dichloropropene, Carbon Tetrachloride, Tertiary-Amyl Methyl Ether, 1,2-dichloroethane, Benzene, Trichloroethene, Methyl Cyclohexane, 1,2-dichloropropane, Bromodichloromethane, 1,4-Dioxane, Dibromomethane, 2-Chloroethylvinyl Ether, 4-methyl-2-pentanone, Cis-1,3-dichloropropene, Iodomethane, Methyl methacrylate, n-Butanol, Ethyl acetate, and Isopropyl Alcohol (IPA).*						
**** Compounds targeted by 2-Fluorophenol: n-Nitrosodimethylamine, 2-Picoline, Methyl methanesulfonate, Ethyl methanesulfonate, Phenol, Aniline, Bis(2-chloroethyl)ether, 2-Chlorophenol, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzyl chloride, Benzyl Alcohol, 1,2-Dichlorobenzene, 2-Methylphenol, and bis(2-Chloroisopropyl)ether.*						
***** Compounds targeted by 2,4,6-tribromophenol: Pentachlorophenol, Phenanthrene, Anthracene, Carbazole, Di-n-Butylphthalate, Isodrin, Fluoranthene, Benzidine, Pyrene, and Benzyl butyl phthalate.*						
****** Compounds targeted by 2,4,5,6-tetrachloro-m-xylene and Decachlorobiphenyl: Heptachlor epoxide Endosulfan sulfate, Aldrin, alpha-BHC, beta-BHC, delta-BHC, Endosulfan II, 4,4'-DDT, alpha-Chlordane (cis), gamma-Chlordane (trans), Endrin ketone, Chlordane, gamma-BHC (Lindane), Dieldrin, Endrin, Methoxychlor, 4,4'-DDD, 4,4'-DDE, Endrin aldehyde, Heptachlor, Toxaphene, and Endosulfan I.*						

1.8 LABORATORY CONTROL SAMPLES

Refer to Section E 1.3. Compounds associated with the laboratory control samples/laboratory control sample duplicate (LCS/LCSD) analyses associated with client samples exhibited recoveries and relative percent differences (RPDs) within the specified limits with the exceptions shown in the attached Table 1.

1.9 MATRIX SPIKE SAMPLES

Refer to Section E 1.4. The samples below were used for matrix spike/matrix spike duplicate (MS/MSD):

Lab Sample Number	Matrix Spike/Matrix Spike Duplicate Sample Client ID	Method
L2335921-01	SB-7_0-0.5'	SW6010D, SW7471B
L2336234-05	SB-8_12-14'	SW8260D, SW8270E, E1633, SW8082A, SW8081A, SW6010D, SW7471B
L2336505-01	SB-3_0-0.5'	SW6010D, SW7471B
L2335535-10	SB-4_5-7'	SW8260D, SW8270E, E1633, SW8082A, SW8081A, SW6010D, SW7471B

The MS/MSD recoveries and the RPD between the MS and MSD results were within the specified limits, with the following exceptions shown in the attached Table 2.

1.10 BLANK SAMPLE ANALYSIS

Refer to Section E 1.5. Method blank samples had no detections, indicating that no contamination from laboratory activities occurred, with the following exceptions:

Blank Type	Batch ID	Analyte Detected in Blank	Concentration	Qualifier	Affected Samples
Method Blank	WG1797828	Sodium	1.33 J milligrams per kilogram (mg/kg)	NA	None, samples are >10x blank
Method Blank	WG1797378	Iron	0.607 J mg/kg	NA	None, samples are >10x blank
Method Blank	WG1797378	Sodium	1.39 J mg/kg	NA	None, samples are >10x blank
Method Blank	WG1795792	Pentachlorophenol	0.06 J micrograms per kilogram (µg/kg)	NA	None, sample is non-detect (ND)
Method Blank	WG1797144	Sodium	4.08 J mg/kg	NA	None, samples are >10x blank
Method Blank	WG1797250	Mercury	0.00011 J mg/kg	RL U	L2335535-21
Method Blank	WG1796156	Acenaphthene	0.03 J µg /kg	NA	None, sample is ND
Method Blank	WG1796156	Fluoranthene	0.03 J µg /kg	NA	None, sample is ND
Method Blank	WG1796156	Benzo(k)fluoranthene	0.01 J µg /kg	NA	None, sample is ND
Method Blank	WG1796156	Acenaphthylene	0.03 J µg /kg	NA	None, sample is ND
Method Blank	WG1796156	Anthracene	0.03 J µg /kg	NA	None, sample is ND
Method Blank	WG1796156	Fluorene	0.04 J µg /kg	NA	None, sample is ND
Method Blank	WG1796156	Phenanthrene	0.05 J µg /kg	NA	None, sample is ND
Method Blank	WG1796156	Pyrene	0.02 J µg /kg	NA	None, sample is ND
Method Blank	WG1796156	2-Methylnaphthalene	0.07 J µg /kg	NA	None, sample is ND
Method Blank	WG1796156	Naphthalene	0.07 J µg /kg	NA	None, sample is ND
Method Blank	WG1797367	Sodium	2.80 J mg/kg	NA	None, samples are >10x blank

Instrument blank samples had no detections, indicating that no contamination occurred during analysis.

The analysis of the blank samples for field quality control was free of target compounds, with the following exceptions:

Blank Type	Date of Blank	Analyte Detected in Blank	Concentration	Qualifier	Affected Samples
Field Blank	06/21/2023	Barium	0.00044 J milligrams per liter (mg/L)	NA	None, samples are >10x blank
Field Blank	06/21/2023	Mercury	0.00011 U mg/L*	NA	None
Field Blank	06/22/2023	Manganese	0.00964 J mg/L	NA	None, samples are >10x blank
Field Blank	06/22/2023	Barium	0.0005 mg/L	NA	None, samples are >10x blank
Field Blank	06/22/2023	Phenol	1.3 micrograms per liter (µg/L)	NA	None, samples are ND
** Qualified ND based on method blank contamination.*					

1.11 DUPLICATE SAMPLE ANALYSIS

Refer to Section E 1.6. The following samples were used for laboratory duplicate analysis and the RPDs were all below 20 percent (or the absolute difference rule was satisfied if detects were less than 5 times the RL). Any exceptions are noted below and qualified.

Lab Sample Number	Laboratory Duplicate Sample Client ID	Method(s)
L2336505-01	SB-3_0'-0.5'	SW6010D, SW7471B
L2336234-05	SB-8_12-14'	SM2540G
L2335535-10	SB-4_5-7'	SM2540G
L2335921-01	SB-7_0-0.5'	SW6010D, SW7471B

Lab Sample Number	Laboratory Duplicate Sample Client ID	Analyte	% RPD	Qualification
L2336505-01	SB-3_0'-0.5'	Calcium	43%	J/UJ, RPD > 20%
L2336505-01	SB-3_0'-0.5'	Chromium	33%	J/UJ, RPD > 20%
L2336505-01	SB-3_0'-0.5'	Cobalt	27%	J/UJ, RPD > 20%
L2336505-01	SB-3_0'-0.5'	Sodium	21%	J/UJ, RPD > 20%
L2336505-01	SB-3_0'-0.5'	Zinc	26%	J/UJ, RPD > 20%
L2336505-01	SB-3_0'-0.5'	Mercury	147%	J/UJ, RPD > 20%
L2335921-01	SB-7_0-0.5'	Arsenic	32%	J/UJ, RPD > 20%
L2335921-01	SB-7_0-0.5'	Barium	23%	J/UJ, RPD > 20%
L2335921-01	SB-7_0-0.5'	Calcium	81%	J/UJ, RPD > 20%
L2335921-01	SB-7_0-0.5'	Chromium	41%	J/UJ, RPD > 20%

Lab Sample Number	Laboratory Duplicate Sample Client ID	Analyte	% RPD	Qualification
L2335921-01	SB-7_0-0.5'	Copper	108%	J/UJ, RPD > 20%
L2335921-01	SB-7_0-0.5'	Sodium	81%	J/UJ, RPD > 20%
L2335921-01	SB-7_0-0.5'	Mercury	21%	J/UJ, RPD > 20%
L2335921-01	SB-7_0-0.5'	Nickel	41%	J/UJ, RPD > 20%

The following samples were used for field duplicate analysis. RPDs were all below 50 percent for soil/sediment (or the absolute difference rule was satisfied if detects were less than 5 times the RL). Any exceptions are noted below and qualified.

Primary Sample ID	Duplicate Sample ID	Methods
SB-3_5-7	DUP02_20230625	E1633, SM2540G, SW6010D, SW7471B, SW8081B, SW8082A, SW8260D, SW8270E
SB-5_5-7	DUP01_20230621	E1633, SM2540G, SW6010D, SW7471B, SW8081B, SW8082A, SW8260D, SW8270E

Field Duplicate RPD Calculations:

Method	Analyte	Units	Primary Sample ID	Duplicate Sample ID	% RPD	Qualification
			SB-3_5-7	DUP02_20230625		
SW8270E	Anthracene	µg/kg	460	150	NA	J/UJ, Abs. Diff. > RL
SW8270E	Benzo(a)pyrene	µg/kg	1,500	710	NA	J/UJ, Abs. Diff. > RL
SW8270E	Benzo(g,h,i)perylene	µg/kg	920	450	NA	J/UJ, Abs. Diff. > RL
SW8270E	Benzo(k)fluoranthene	µg/kg	470	250	NA	J/UJ, Abs. Diff. > RL
SW8270E	Carbazole	µg/kg	340	71	NA	J/UJ, Abs. Diff. > RL
SW8270E	Dibenzofuran	µg/kg	260	39	NA	J/UJ, Abs. Diff. > RL
SW8270E	Indeno(1,2,3-cd)pyrene	µg/kg	1,000	490	NA	J/UJ, Abs. Diff. > RL
SW8270E	Naphthalene	µg/kg	560	65	NA	J/UJ, Abs. Diff. > RL
SW6010D	Selenium	mg/kg	4.67	2.07	NA	J/UJ, Abs. Diff. > RL
SW6010D	Barium	mg/kg	481	276	54	J/UJ, RPD>50
SW8270E	Benzo(a)anthracene	µg/kg	1,400	660	72	J/UJ, RPD>50
SW8270E	Benzo(b)fluoranthene	µg/kg	1,800	850	72	J/UJ, RPD>50
SW8270E	Chrysene	µg/kg	1,600	720	76	J/UJ, RPD>50

Method	Analyte	Units	Primary Sample ID	Duplicate Sample ID	% RPD	Qualification
			SB-3_5-7	DUP02_20230625		
SW6010D	Copper	mg/kg	218	101	73	J/UJ, RPD>50
SW8270E	Fluoranthene	µg/kg	3,300	1,300	87	J/UJ, RPD>50
SW6010D	Iron	mg/kg	22,000	38,800	55	J/UJ, RPD>50
SW6010D	Manganese	mg/kg	423	216	65	J/UJ, RPD>50
SW8270E	Phenanthrene	µg/kg	3,000	820	114	J/UJ, RPD>50
SW8270E	Pyrene	µg/kg	2,900	1,200	83	J/UJ, RPD>50

1.12 CONFIRMATION COLUMN REVIEW

Refer to Section E 1.8. All RPDs were within control limits, with the following exceptions:

Method	Analyte	Sample	RPD	Action
SW8081B	gamma-Chlordane (trans)	L2335535-13	> 40%	Qualify data estimated J/UJ.
SW8081B	4,4'-DDD	L2335535-13	> 40%	Qualify data estimated J/UJ.
SW8081B	gamma-Chlordane (trans)	L2335535-14	> 40%	Qualify data estimated J/UJ.
SW8081B	4,4'-DDD	L2335535-14	> 40%	Qualify data estimated J/UJ.
SW8081B	4,4'-DDE	L2335535-01	> 40%	Qualify data estimated J/UJ.
SW8081B	gamma-Chlordane (trans)	L2335535-02	> 40%	Qualify data estimated J/UJ.
SW8081B	alpha-Chlordane (cis)	L2335535-03	> 40%	Qualify data estimated J/UJ.
SW8081B	4,4'-DDE	L2335535-03	> 40%	Qualify data estimated J/UJ.
SW8081B	gamma-Chlordane (trans)	L2335535-09	> 40%	Qualify data estimated J/UJ.
SW8081B	gamma-Chlordane (trans)	L2335921-03	> 40%	Qualify data estimated J/UJ.
SW8081B	4,4'-DDT	L2335921-03	> 40%	Qualify data estimated J/UJ.
SW8081B	alpha-Chlordane (cis)	L2335921-03	> 40%	Qualify data estimated J/UJ.

1.13 PFAS SAMPLE PREPARATION

Refer to Section E 1.14. The laboratory's SOP was reviewed, and the reviewer confirmed it is the laboratory's procedure to use solid-phase extraction (SPE) for sample preparation.

1.14 PFAS IDENTIFICATION

Refer to Section E 1.15. Ion ratios were reviewed and were within the laboratory specified limits, with the following exceptions:

Sample ID	Analyte	Qualifier	Affected Samples
SB-2_5-7	Perfluorobutanesulfonic acid (PFBS)	J	L2335535-07
SB-4_0-0.5	PFBS	J	L2335535-09
SB-4_0-0.5	Perfluorononanoic acid (PFNA)	J	L2335535-09
SB-3_1-2	PFBS	J	L2336505-02
SB-6_0-0.5	PFBS	J	L2335535-16

The laboratory's SOP was reviewed, and the reviewer confirmed that, when applicable, the laboratory's procedure is to sum the branched and linear peaks.

1.15 EXTRACTION INTERNAL STANDARDS

Refer to Section E 1.16. Recoveries were reviewed and found to be within the limits of 50 to 150 percent of the initial calibration midpoint standard/initial continuing calibration verification, with the following exceptions:

Sample ID	Lab ID or Batch ID	Standard Name	%Recovery	Qualifier	Affected Samples
SB-3_12'-14'	L2336505-05	13C2-8:2FTS	156%	J/UJ 8:2FTS	SB-3_12'-14'
SB-1_1-2'	L2335535-02	13C2-8:2FTS	176%	J/UJ 8:2FTS	SB-1_1-2'
SB-2_5-7'	L2335535-07	13C2-8:2FTS	163%	J/UJ 8:2FTS	SB-2_5-7'
SB-4_0-0.5'	L2335535-09	13C2-8:2FTS	220%	J/UJ 8:2FTS	SB-4_0-0.5'

1.16 SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

The results presented in this report were found to comply with the DQOs for the project and the guidelines specified by the analytical method. Based on the review of this report, the data are useable and acceptable as no data were rejected, except for rejected data noted below. A summary of qualifiers applied to this data set is shown in the attached Table 3.

2. Precision and Accuracy

Refer to Section E 1.7. Where required by the method, some measurement of analytical accuracy and precision was reported for each method with the site samples.

3. Explanations

The following explanations include more detailed information regarding each of the sections in the DUSR above. Not all sections in the Explanations are represented:

- E 1.1 Reporting Basis (Wet/Dry)
  - Soil samples can be reported on either a wet (as received) or dry weight basis. Dry weight data indicate calculations were made to compensate for the moisture content of the soil sample.
  - Percent (%) solids should be appropriately considered when evaluating analytical results for non-aqueous samples. Sediments with high moisture content may or may not be successfully analyzed by routine analytical methods. Samples should have greater than or equal to 30 percent solids to be appropriately quantified.
- E 1.2 Surrogate Recovery Compliance
  - Surrogates, also known as system monitoring compounds, are compounds added to each sample prior to sample preparation to determining the efficiency of the extraction procedure by evaluating the %R of the compounds.
- E 1.3 Laboratory Control Samples
  - The LCS/LCSD analyses are used to assess the precision and accuracy of the analytical method independent of matrix interferences.
- E 1.4 Matrix Spike Samples
  - MS/MSD data are used to assess the precision and accuracy of the analytical method and evaluate the effects of the sample matrix on the sample preparation procedures and measurement methodologies.
  - For inorganic methods, when a matrix spike recovery falls outside of the control limits and the sample result is less than four times the spike added, a post-digestion spike is performed.
- E 1.5 Blank Sample Analysis
  - Method blanks are prepared by the analytical laboratory and analyzed concurrently with the project samples to assess possible laboratory contamination.
  - Analysis of PFAS compliant with QSM 5.3 Table B-15 requires instrument blanks that are prepared by the analytical laboratory and analyzed concurrently with the project samples to assess contamination that could occur in the LC/MS/MS instrument.
  - Field blanks are prepared to identify contamination that may have been introduced during field activity. Equipment blanks are prepared to identify contamination that may have been introduced while decontaminating sampling equipment. Trip blanks are prepared when volatile analysis is requested to identify contamination that may have been introduced during transport.
- E 1.6 Laboratory and Field Duplicate Sample Analysis
  - The laboratory duplicate sample analysis is used by the laboratory at the time of the analysis to demonstrate acceptable method precision. The RPD or absolute difference was evaluated for each duplicate sample pair to monitor the reproducibility of the data.

- The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. The RPD or absolute difference was evaluated for each duplicate sample pair to monitor the reproducibility of the data.

- E 1.7 Precision and Accuracy
  - Precision measures the reproducibility of repetitive measurements. In a laboratory environment, this will be measured by determining the RPD found between a primary and a duplicate sample. This can be an LCS/LCSD pair, a MS/MSD pair, a laboratory duplicate performed on a site sample, or a field duplicate collected and analyzed concurrently with a site sample.
  - Accuracy is a statistical measurement of the correctness of a measured value and includes components of random error (variability caused by imprecision) and systematic error. In a laboratory environment, this will be measured by determining the %R of certain spiked compounds. This can be assessed using LCS, blank spike, MS, and/or surrogate recoveries.

- E 1.8 Confirmation Column Review
  - When analyzing for pesticides and PCBs, compound identification based on single-column analysis should be confirmed on a second column or supported by at least one other qualitative technique. When confirmed on a second column, the RPD should not exceed 40 percent.

- E 1.14 PFAS Sample Preparation
  - Analysis of PFAS requires specific sample preparation. Aqueous samples must be prepared using SPE, unless samples are known to contain high PFAS concentrations or the samples are injected directly into the LC/MS/MS instrument. Samples with greater than 1 percent solids may require centrifugation prior to SPE. The entire sample plus bottle rinsate must be extracted using SPE. If high PFAS concentrations are known, the samples may alternately be prepared using serial dilution performed in duplicate. If prepared by serial dilution, there must be documented project approval for this deviation.

- E 1.15 PFAS Identification
  - Identification of PFAS requires dual confirmation. The chemical derivation of the ion transitions must be documented. A minimum of two ion transitions per analyte are required (except for PFBA and PFPeA). Ratios of the quantitation ion to the confirmation ion should be calculated for samples and be within 50 to 150 percent of the ratios of the quantitation ion to the confirmation ion for standards.
  - Identification of PFAS also requires the proper assessment of branched and linear peaks. Standards for both isomers are not currently available for every PFAS compound, resulting in the common error of quantifying the area of only the branched or the linear isomers, which results in erroneous concentrations.

- E 1.16 Extraction Internal Standards
  - Analysis of PFAS by isotope dilution includes the use of extracted internal standards, which are stable isotope analogs of the PFAS compounds of interest added to each sample prior to extraction of the sample matrix. Matrix interferences that affect the quantification of the internal standard will affect the calculated target compound concentrations.

4. Glossary

Not all of the following symbols, acronyms, or qualifiers occur in this document.

- Sample Types:
  - EB Equipment Blank Sample
  - FB Field Blank Sample
  - FD Field Duplicate Sample
  - N Primary Sample
  - TB Trip Blank Sample
- Units:
  - µg/kg micrograms per kilogram
  - µg/L micrograms per liter
  - µg/m^3 micrograms per cubic meter
  - mg/kg milligrams per kilogram
  - mg/L milligrams per liter
  - ppb v/v parts per billion volume/volume
  - pCi/L picocuries per liter
  - pg/g picograms per gram
- Matrices:
  - AA Ambient Air
  - GS Soil Gas
  - GW/WG Groundwater
  - QW Water Quality
  - IA Indoor Air
  - SE Sediment
  - SO Soil
  - SSV Sub-slab Vapor
  - WQ Water Quality control matrix
  - WS Surface Water
- Table Footnotes:
  - NA Not applicable
  - ND Non-detect
  - NR Not reported
- Common Symbols:
  - % percent
  - < less than
  - ≤ less than or equal to
  - > greater than
  - ≥ greater than or equal to
  - = equal
  - °C degrees Celsius
  - ± plus or minus
  - ~ approximately
  - x times (multiplier)

5. Abbreviations

%D	Percent Difference
%R	Percent Recovery
%RSD	Percent Relative Standard Deviation
%v/v	Percent volume by volume
2s	2 sigma
4,4-DDT	4 4-dichlorodiphenyltrichloroethane
Abs Diff	Absolute Difference
amu	atomic mass unit
BPJ	Best Professional Judgement
BS	Blank Spike
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CCVL	Continuing Calibration Verification Low
COC	Chain of Custody
COM	Combined Isotope Calculation
Cr (VI)	Hexavalent Chromium
CRI	Collision Reaction Interface
DoD	Department of Defense
DQO	data quality objective
DUSR	Data Usability Summary Report
EIS	Extraction Internal Standard
EMPC	Estimated Maximum Possible Concentration
FBK	Field Blank Contamination
FDP	Field Duplicate
GC	Gas Chromatograph
GC/MS	Gas Chromatography/Mass Spectrometry
GPC	Gel Permeation Chromatography
H_2	Hydrogen gas
HCl	Hydrochloric Acid
ICAL	Initial Calibration
ICB	Initial Calibration Blank
ICP/MS	Inductively Coupled Plasma/Mass Spectrometry
ICV	Initial Calibration Verification
ICVL	Initial Calibration Verification Low
IPA	Isopropyl Alcohol
LC	Laboratory Control
LCS/LCSD	Laboratory Control Sample/Laboratory Control Sample Duplicate
MBK	Method Blank Contamination
MDC	Minimum Detectable Concentration
MDL	Laboratory Method Detection Limit
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NA	not applicable
ND	Non-Detect
NFG	National Functional Guidelines
NH_3	Ammonia
NYSDEC	New York State Department of Environmental Conservation
PAH	Polycyclic Aromatic Hydrocarbon
PCB	Polychlorinated Biphenyl
PDS	Post-Digestion Spike
PEM	Performance Evaluation Mixture
PFAS	Per- and Polyfluoroalkyl Substances
PFBA	Perfluorbutanoic Acid
PFD	Perfluorodecalin
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctane sulfonate
PFPeA	Perfluoropentanoic Acid
QAPP	Quality Assurance Project Plan
QC	Quality Control
QSM	Quality Systems Manual
R^2	R-squared value
Ra-226	Radium-226
Ra-228	Radium-228
RESC	Resolution Check Measure
RL	Laboratory Reporting Limit
RPD	Relative Percent Difference
RRF	Relative Response Factor
RT	Retention Time
SAP	Sampling Analysis Plan
SDG	Sample Delivery Group
SIM	Selected ion monitoring
SOP	Standard Operating Procedure
SPE	Solid-Phase Extraction
SVOC	Semi-Volatile Organic Compound
TCLP	Toxicity Characteristic Leaching Procedure
TIC	Tentatively Identified Compound
TKN	Total Kjeldahl Nitrogen
TPH	Total Petroleum Hydrocarbon
TPU	Total Propagated Uncertainty
USEPA	U.S. Environmental Protection Agency
VOC	Volatile Organic Compound
WP	Work Plan

6. Qualifiers

The qualifiers below are from the USEPA National Functional Guidelines and the data in the DUSR may contain these qualifiers:

- Concentration (C) Qualifiers:

  U The compound was analyzed for but not detected. The associated value is either the compound quantitation limit if not detected by the analytical instrument or could be the reported or blank concentration if qualified by blank contamination. This can also be displayed as less than the associated compound quantitation limit (<RL or <MDL), or "ND".

  B The compound was found in the sample and its associated blank. Its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers:

  E The compound was quantitated above the calibration range.

  D The concentration is based on a diluted sample analysis.

- Validation Qualifiers:

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  J+ The result is an estimated quantity, but the result may be biased high.

  J- The result is an estimated quantity, but the result may be biased low.

  J/UJ as listed in exception tables J applies to detected data and UJ applies to non-detected data as reported by the laboratory.

  UJ The compound was not detected above the reported sample quantitation limit; however, the reported limit is estimated and may or may not represent the actual limit of quantitation.

  NJ The analysis indicated the presence of a compound for which there is presumptive evidence to make a tentative identification; the associated numerical value is an estimated concentration only.

  R The sample results were rejected as unusable; the compound may or may not be present in the sample.

  S Result is suspect. See DUSR for details.

References

1. Haley & Aldrich, Inc, 2023. Quality Assurance Project Plan. Remedial Investigation Work Plan. Former A&A Brake Service Site. NYSDEC BCP Site C224372. Brooklyn New York. March.

2. United States Environmental Protection Agency, 2020a. National Functional Guidelines for Inorganic Superfund Methods Data Review. EPA-542-R-20-006. November.

3. United States Environmental Protection Agency, 2020b. National Functional Guidelines for Organic Superfund Methods Data Review. EPA-540-R-20-005. November.

4. United States Environmental Protection Agency, 2018. Data Review and Validation Guidelines for Perfluroalkyl Substances (PFASs) Analyzed Using EPA Method 537. EPA 910-R-18-001. November.

5. New York State Department of Environmental Conservation (NYSDEC), 2021. Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances Under NYSDEC's Part 375 Remedial Programs. January.

TABLES

TABLE 1
LABORATORY CONTROL SAMPLE SUMMARY
FORMER A&A BRAKE SERVICE SITE
BROOKLYN, NEW YORK

SDG	Sample Type	Method	Batch ID	Analyte	%R/RPD	Qualifier	Affected Samples
L2335921	LCS/LCSD	SW8260D	WG1796699	Bromomethane	RPD = 35%	J/None	None, samples are ND
L2335921	LCS/LCSD	SW8260D	WG1797432	Vinyl chloride	64%/61%	J/UJ	L2335921-01 through -04
L2335921	LCS/LCSD	SW8270E	WG1796155	Bis(2-ethylhexyl)phthalate	406%/RPD = 141	J/None	None, sample is ND
L2335921	LCSD	SW8270ESIM	WG1786156	Acenaphthene	36%	J/UJ	L2335921-06
L2335921	LCSD	SW8270ESIM	WG1786156	2-Chloronaphthalene	37%	J/UJ	L2335921-06
L2335921	LCSD	SW8270ESIM	WG1786156	Hexachlorobutadiene	36%	J/UJ	L2335921-06
L2335921	LCSD	SW8270ESIM	WG1786156	Naphthalene	33%	J/UJ	L2335921-06
L2335921	LCSD	SW8270ESIM	WG1786156	Chrysene	39%	J/UJ	L2335921-06
L2335921	LCSD	SW8270ESIM	WG1786156	Fluorene	39%	J/UJ	L2335921-06
L2335921	LCSD	SW8270ESIM	WG1786156	Phenanthrene	37%	J/UJ	L2335921-06
L2335921	LCSD	SW8270ESIM	WG1786156	2-Methylnaphthalene	36%	J/UJ	L2335921-06
L2335921	LCSD	SW8270ESIM	WG1786156	Hexachloroethane	34%	J/UJ	L2335921-06
L2335921	LCSD	SW8270ESIM	WG1797492	Pentachlorophenol	112%	J/None	L2335921-01 and -02
L2335921	LCSD	SW8270ESIM	WG1797492	Phenol	94%	J/None	L2335921-01 and -02
L2336505	LCS/LCSD	SW8260D	WG1797432	Vinyl Chloride	64%/61%	J/UJ	L2336505-01, -03 though -06
L2336505	LCS/LCSD	SW8260D	WG1798869	Trichlorofluoromethane	55%/56%	J/UJ	L2336505-02
L2336505	LCS/LCSD	SW8260D	WG1798869	Bromomethane	55%/56%	J/UJ	L2336505-02
L2336505	LCS/LCSD	SW8260D	WG1798869	Vinyl Acetate	52%/55%	J/UJ	L2336505-02
L2336505	LCS	SW8260D	WG1798869	Ethyl Ether	66%	J/UJ	L2336505-02
L2336505	LCS/LCSD	SW8270E	WG1796586	Hexachlorocyclopentadiene	31%/29%	J/UJ	L2336505-02 through -06
L2336505	LCS/LCSD	SW8270E	WG1798291	Hexachlorocyclopentadiene	20%/27%	J/UJ	L2336505-01
L2335535	LCS/LCSD	SW8260D	WG1797124 and WG1797130	Chloromethane	140%/151%	J/None	None, samples are ND
L2335535	LCS/LCSD	SW8260D	WG1797124 and WG1797130	Vinyl Chloride	145%/149%	J/None	L2335535-01, -02, -05, -07 through -10, -12 through -17, -18 through -20
L2335535	LCS/LCSD	SW8260D	WG1797124 and WG1797130	Dichlorodifluoromethane	152%/151%	J/None	L2335535-01, -02, -05, -07 through -10, -12 through -17, -18 through -20
L2335535	LCSD	SW8260D	WG1797124 and WG1797130	Acetone	143%	J/None	L2335535-01, -02, -05, -07 through -10, -12 through -17, -18 through -20
L2335535	LCS	SW8260D	WG1797128 and WG17977333	2-Hexanone	65%	J/UJ	L2335535-01, -03, -04, -06, -11 and -18
L2335535	LCS	SW8260D	WG1797128 and WG17977333	1,4-Dioxane	60%	J/UJ	L2335535-01, -03, -04, -06, -11 and -18
L2335535	LCS/LCSD	SW8270E	WG1795079	Hexachlorocyclopentadiene	39%/38%	J/UJ	L2335535-01 through -06, -08 through -20
L2335535	LCS	SW8270E	WG1795079	Phenol	92%	J/None	None, samples are ND
L2335535	LCS	SW8270E	WG1795790	4-Chloroaniline	34%/RPD = 32	J/UJ	L2335535-21

Notes:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only.

LCS/LCSD = laboratory control sample/laboratory control sample duplicate

ND = non-detect

%R = percent recovery

RPD = relative percent difference

SDG = sample delivery group

UJ = The compound was not detected above the reported sample quantitation limit; however, the reported limit is estimated and may or may not represent the actual limit of quantitation.

TABLE 2
MATRIX SPIKE/MATRIX SPIKE DUPLICATE SUMMARY
FORMER A&A BRAKE SERVICE SITE
BROOKLYN, NEW YORK

SDG	Sample Type	Method	Parent Sample	Analyte	%R/RPD	Qualifier	Affected Samples
L2335921	MS	SW6010D	SB-7_0-0.5'	Aluminum	502%	NA	None, native sample > 4x the spike added
L2335921	MS	SW6010D	SB-7_0-0.5'	Calcium	0%	NA	None, native sample > 4x the spike added
L2335921	MS	SW6010D	SB-7_0-0.5'	Chromium	35%	J/UJ	All samples in SDG
L2335921	MS	SW6010D	SB-7_0-0.5'	Copper	0%	NA	None, native sample > 4x the spike added
L2335921	MS	SW6010D	SB-7_0-0.5'	Iron	2150%	NA	None, native sample > 4x the spike added
L2335921	MS	SW6010D	SB-7_0-0.5'	Lead	217%	J/None	All samples in SDG
L2335921	MS	SW6010D	SB-7_0-0.5'	Manganese	294%	NA	None, native sample > 4x the spike added
L2335921	MS	SW6010D	SB-7_0-0.5'	Sodium	54%	J/UJ	All samples in SDG
L2335921	MS	SW6010D	SB-7_0-0.5'	Nickel	34%	J/UJ	All samples in SDG
L2335921	MS	SW7471B	SB-7_0-0.5'	Mercury	152%	J+/None	All samples in SDG
L2336234	MS/MSD	SW8260D	SB-8_12-14'	Tetrachloroethene	60%/61%	J/UJ	L2336234-05
L2336234	MS/MSD	SW8260D	SB-8_12-14'	Chlorobenzene	65%/68%	J/UJ	L2336234-05
L2336234	MS	SW8260D	SB-8_12-14'	Ethylbenzene	66%	J/UJ	L2336234-05
L2336234	MS/MSD	SW8260D	SB-8_12-14'	1,2-Dichlorobenzene	59%/60%	J/UJ	L2336234-05
L2336234	MS/MSD	SW8260D	SB-8_12-14'	1,3-Dichlorobenzene	54%/54%	J/UJ	L2336234-05
L2336234	MS/MSD	SW8260D	SB-8_12-14'	1,4-Dichlorobenzene	53%/53%	J/UJ	L2336234-05
L2336234	MS/MSD	SW8260D	SB-8_12-14'	m,p-Xylene	61%/64%	J/UJ	L2336234-05
L2336234	MS/MSD	SW8260D	SB-8_12-14'	o-Xylene	65%/69%	J/UJ	L2336234-05
L2336234	MS	SW8260D	SB-8_12-14'	Dibromomethane	69%	J/UJ	L2336234-05
L2336234	MS/MSD	SW8260D	SB-8_12-14'	Styrene	64%/68%	J/UJ	L2336234-05
L2336234	MS/MSD	SW8260D	SB-8_12-14'	Vinyl Acetate	36%/33%	J/UJ	L2336234-05
L2336234	MS/MSD	SW8260D	SB-8_12-14'	Bromobenzene	62%/64%	J/UJ	L2336234-05
L2336234	MS/MSD	SW8260D	SB-8_12-14'	n-Butylbenzene	47%/45%	J/UJ	L2336234-05
L2336234	MS/MSD	SW8260D	SB-8_12-14'	sec-Butylbenzene	57%/58%	J/UJ	L2336234-05
L2336234	MS/MSD	SW8260D	SB-8_12-14'	tert-Butylbenzene	61%/63%	J/UJ	L2336234-05
L2336234	MS/MSD	SW8260D	SB-8_12-14'	o-Chlorotoluene	61%/64%	J/UJ	L2336234-05
L2336234	MS/MSD	SW8260D	SB-8_12-14'	p-Chlorotoluene	58%/60%	J/UJ	L2336234-05
L2336234	MS	SW8260D	SB-8_12-14'	1,2-Dibromo-3-chloropropane	66%	J/UJ	L2336234-05
L2336234	MS/MSD	SW8260D	SB-8_12-14'	Hexachlorobutadiene	35%/32%	J/UJ	L2336234-05
L2336234	MS	SW8260D	SB-8_12-14'	Isopropylbenzene	64%	J/UJ	L2336234-05
L2336234	MS/MSD	SW8260D	SB-8_12-14'	p-Isopropyltoluene	52%/52%	J/UJ	L2336234-05
L2336234	MS	SW8260D	SB-8_12-14'	Naphthalene	62%	J/UJ	L2336234-05
L2336234	MS/MSD	SW8260D	SB-8_12-14'	n-Propylbenzene	59%/61%	J/UJ	L2336234-05
L2336234	MS/MSD	SW8260D	SB-8_12-14'	1,2,3-Trichlorobenzene	42%/45%	J/UJ	L2336234-05
L2336234	MS/MSD	SW8260D	SB-8_12-14'	1,2,4-Trichlorobenzene	43%/45%	J/UJ	L2336234-05
L2336234	MS/MSD	SW8260D	SB-8_12-14'	1,3,5-Trimethylbenzene	60%/62%	J/UJ	L2336234-05
L2336234	MS/MSD	SW8260D	SB-8_12-14'	1,2,4-Trimethylbenzene	59%/60%	J/UJ	L2336234-05
L2336234	MS/MSD	SW8260D	SB-8_12-14'	p-Diethylbenzene	47%/47%	J/UJ	L2336234-05

TABLE 2
MATRIX SPIKE/MATRIX SPIKE DUPLICATE SUMMARY
FORMER A&A BRAKE SERVICE SITE
BROOKLYN, NEW YORK

SDG	Sample Type	Method	Parent Sample	Analyte	%R/RPD	Qualifier	Affected Samples
L2336234	MS/MSD	SW8260D	SB-8_12-14'	p-Ethyltoluene	56%/58%	J/UJ	L2336234-05
L2336234	MS/MSD	SW8260D	SB-8_12-14'	1,2,4,5-Tetramethylbenzene	52%/54%	J/UJ	L2336234-05
L2336234	MS/MSD	SW8270E	SB-8_12-14'	Hexachlorocyclopentadiene	0%/12%	J/R	L2336234-05
L2336234	MS/MSD	SW8270E	SB-8_12-14'	2,4-Dinitrophenol	0%/0%	J/R	L2336234-05
L2336234	MS	SW8270E	SB-8_12-14'	4,6-Dinitro-o-cresol	9%	J/R	L2336234-05
L2336234	MS/MSD	SW8270E	SB-8_12-14'	Benzoic Acid	0%/0%	J/R	L2336234-05
L2336234	MS/MSD	SW6010D	SB-8_12-14'	Aluminum	477%/358%	NA	None, native sample > 4x the spike added
L2336234	MS	SW6010D	SB-8_12-14'	Antimony	73%	J/UJ	All samples in SDG
L2336234	MSD	SW6010D	SB-8_12-14'	Calcium	126%	J/None	All samples in SDG
L2336234	MS/MSD	SW6010D	SB-8_12-14'	Iron	1150%/805%	NA	None, native sample > 4x the spike added
L2336234	MS	SW6010D	SB-8_12-14'	Magnesium	126%	J/None	All samples in SDG
L2336234	MS	SW6010D	SB-8_12-14'	Manganese	203%/RPD = 24	J/None	All samples in SDG
L2336505	MS	SW6010D	SB-3_0'-0.5'	Aluminum	309%	NA	None, native sample > 4x the spike added
L2336505	MS	SW6010D	SB-3_0'-0.5'	Barium	74%	J/UJ	All samples in SDG
L2336505	MS	SW6010D	SB-3_0'-0.5'	Calcium	501%	NA	None, native sample > 4x the spike added
L2336505	MS	SW6010D	SB-3_0'-0.5'	Iron	933%	NA	None, native sample > 4x the spike added
L2336505	MS	SW6010D	SB-3_0'-0.5'	Lead	0%	NA	None, native sample > 4x the spike added
L2336505	MS	SW6010D	SB-3_0'-0.5'	Magnesium	185%	NA	None, native sample > 4x the spike added
L2336505	MS	SW6010D	SB-3_0'-0.5'	Manganese	40%	NA	None, native sample > 4x the spike added
L2336505	MS	SW6010D	SB-3_0'-0.5'	Zinc	16%	NA	None, native sample > 4x the spike added
L2336505	MS	SW7471B	SB-3_0'-0.5'	Mercury	0%	NA	None, native sample > 4x the spike added
L2335535	MS	SW8260D	SB-4_5-7'	Bromoform	66%	J/UJ	L2335535-10
L2335535	MS/MSD	SW8260D	SB-4_5-7'	1,1,2,2-Tetrachloroethane	58%/64%	J/UJ	L2335535-10
L2335535	MS/MSD	SW8260D	SB-4_5-7'	Chloromethane	148%/155%	J/None	None, samples are ND
L2335535	MS/MSD	SW8260D	SB-4_5-7'	Vinyl Chloride	149%/157%	J/None	None, samples are ND
L2335535	MS/MSD	SW8260D	SB-4_5-7'	1,2-Dichlorobenzene	48%/52%	J/UJ	L2335535-10
L2335535	MS/MSD	SW8260D	SB-4_5-7'	1,3-Dichlorobenzene	49%/54%	J/UJ	L2335535-10
L2335535	MS/MSD	SW8260D	SB-4_5-7'	1,4-Dichlorobenzene	48%/52%	J/UJ	L2335535-10
L2335535	MS/MSD	SW8260D	SB-4_5-7'	Dichlorodifluoromethane	161%/165%	J/None	None, samples are ND
L2335535	MS/MSD	SW8260D	SB-4_5-7'	Vinyl Acetate	25%/24%	J/UJ	L2335535-10
L2335535	MS/MSD	SW8260D	SB-4_5-7'	1,2,3-Trichloropropane	60%/65%	J/UJ	L2335535-10
L2335535	MS	SW8260D	SB-4_5-7'	1,2-Dibromoethane	68%	J/UJ	L2335535-10
L2335535	MS/MSD	SW8260D	SB-4_5-7'	Bromobenzene	58%/62%	J/UJ	L2335535-10
L2335535	MS/MSD	SW8260D	SB-4_5-7'	n-Butylbenzene	48%/49%	J/UJ	L2335535-10
L2335535	MS/MSD	SW8260D	SB-4_5-7'	sec-Butylbenzene	57%/58%	J/UJ	L2335535-10
L2335535	MS/MSD	SW8260D	SB-4_5-7'	tert-Butylbenzene	62%/64%	J/UJ	L2335535-10
L2335535	MS/MSD	SW8260D	SB-4_5-7'	o-Chlorotoluene	59%/62%	J/UJ	L2335535-10
L2335535	MS/MSD	SW8260D	SB-4_5-7'	p-Chlorotoluene	54%/58%	J/UJ	L2335535-10

TABLE 2
MATRIX SPIKE/MATRIX SPIKE DUPLICATE SUMMARY
FORMER A&A BRAKE SERVICE SITE
BROOKLYN, NEW YORK

SDG	Sample Type	Method	Parent Sample	Analyte	%R/RPD	Qualifier	Affected Samples
L2335535	MS/MSD	SW8260D	SB-4_5-7'	1,2-Dibromo-3-chloropropane	59%/65%	J/UJ	L2335535-10
L2335535	MS/MSD	SW8260D	SB-4_5-7'	Hexachlorobutadiene	38%/39%	J/UJ	L2335535-10
L2335535	MS/MSD	SW8260D	SB-4_5-7'	Isopropylbenzene	65%/68%	J/UJ	L2335535-10
L2335535	MS/MSD	SW8260D	SB-4_5-7'	p-Isopropyltoluene	55%/56%	J/UJ	L2335535-10
L2335535	MS/MSD	SW8260D	SB-4_5-7'	Naphthalene	32%/36%	J/UJ	L2335535-10
L2335535	MS/MSD	SW8260D	SB-4_5-7'	n-Propylbenzene	61%/62%	J/UJ	L2335535-10
L2335535	MS/MSD	SW8260D	SB-4_5-7'	1,2,3-Trichlorobenzene	27%/32%	J/UJ	L2335535-10
L2335535	MS/MSD	SW8260D	SB-4_5-7'	1,2,4-Trichlorobenzene	30%/35%	J/UJ	L2335535-10
L2335535	MS/MSD	SW8260D	SB-4_5-7'	1,3,5-Trimethylbenzene	63%/66%	J/UJ	L2335535-10
L2335535	MS/MSD	SW8260D	SB-4_5-7'	1,2,4-Trimethylbenzene	59%/62%	J/UJ	L2335535-10
L2335535	MS/MSD	SW8260D	SB-4_5-7'	p-Diethylbenzene	51%/53%	J/UJ	L2335535-10
L2335535	MS/MSD	SW8260D	SB-4_5-7'	p-Ethyltoluene	60%/62%	J/UJ	L2335535-10
L2335535	MS/MSD	SW8260D	SB-4_5-7'	1,2,4,5-Tetramethylbenzene	44%/49%	J/UJ	L2335535-10
L2335535	MS/MSD	SW8260D	SB-4_5-7'	trans-1,4-Dichloro-2-butene	63%/69%	J/UJ	L2335535-10
L2335535	MS/MSD	SW8270E	SB-4_5-7'	Hexachlorocyclopentadiene	0%/12%	J/R	L2335535-10
L2335535	MS/MSD	SW8270E	SB-4_5-7'	2,4-Dinitrophenol	0%/0%	J/R	L2335535-10
L2335535	MS/MSD	SW8270E	SB-4_5-7'	4,6-Dinitro-o-cresol	0%/9%	J/R	L2335535-10
L2335535	MS/MSD	SW8270E	SB-4_5-7'	Benzoic Acid	0%/0%	J/R	L2335535-10
L2335535	MS/MSD	SW6010D	SB-4_5-7'	Aluminum	690%/911%	NA	None, native sample > 4x the spike added
L2335535	MS/MSD	SW6010D	SB-4_5-7'	Antimony	61%/57%	J/UJ	All samples in SDG
L2335535	MS/MSD	SW6010D	SB-4_5-7'	Calcium	0%/33%	J/UJ	All samples in SDG
L2335535	MS/MSD	SW6010D	SB-4_5-7'	Iron	0%/1050%	NA	None, native sample > 4x the spike added
L2335535	MSD	SW6010D	SB-4_5-7'	Lead	71%	J/UJ	All samples in SDG
L2335535	MS	SW6010D	SB-4_5-7'	Magnesium	136%	J/None	All samples in SDG
L2335535	MS/MSD	SW6010D	SB-4_5-7'	Zinc	58%/55%	J/UJ	All samples in SDG

Notes:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only.

J+ = The result is an estimated quantity, but the result may be biased high.

MS/MSD = matrix spike/matrix spike duplicate

NA = not analyzed

ND = non-detect

%R = percent recovery

R = The sample results were rejected as unusable; the compound may or may not be present in the sample.

RPD = relative percent difference

SDG = sample delivery group

UJ = The compound was not detected above the reported sample quantitation limit; however, the reported limit is estimated and may or may not represent the actual limit of quantitation.

TABLE 3
SYSTEM PERFORMANCE SUMMARY
FORMER A&A BRAKE SERVICE SITE
BROOKLYN, NEW YORK

SDG	Method	Basis	Sample ID	Lab ID	Analyte	Fraction	Reportable Result	Reported Result	Validated Result	Reason for Qualifier
L2336505	SW6010D	NA	SB-3_0-0.5	L2336505-01	Calcium	N	Yes	26,600	26,600 J	DUP
L2336505	SW6010D	NA	SB-3_0-0.5	L2336505-01	Chromium	N	Yes	17.3	17.3 J	DUP
L2336505	SW6010D	NA	SB-3_0-0.5	L2336505-01	Cobalt	N	Yes	6.1	6.1 J	DUP
L2336505	SW6010D	NA	SB-3_0-0.5	L2336505-01	Sodium	N	Yes	363	363 J	DUP
L2336505	SW6010D	NA	SB-3_0-0.5	L2336505-01	Zinc	N	Yes	305	305 J	DUP
L2336505	SW7471B	NA	SB-3_0-0.5	L2336505-01	Mercury	N	Yes	7.94	7.94 J	DUP
L2335921	SW6010D	NA	SB-7_0-0.5	L2335921-01	Arsenic	N	Yes	6.43	6.43 J	DUP
L2335921	SW6010D	NA	SB-7_0-0.5	L2335921-01	Barium	N	Yes	108	108 J	DUP
L2335921	SW6010D	NA	SB-7_0-0.5	L2335921-01	Calcium	N	Yes	30,400	30,400 J	DUP
L2335921	SW6010D	NA	SB-7_0-0.5	L2335921-01	Copper	N	Yes	242	242 J	DUP
L2335921	SW6010D	NA	SB-7_0-0.5	L2335921-01	Chromium	N	Yes	38	38 J	DUP, MSD
L2335921	SW6010D	NA	SB-7_0-0.5	L2335921-01	Nickel	N	Yes	62.5	62.5 J	DUP, MSD
L2335921	SW6010D	NA	SB-7_0-0.5	L2335921-01	Sodium	N	Yes	680	680 J	DUP, MSD
L2335921	SW7471B	NA	SB-7_0-0.5	L2335921-01	Mercury	N	Yes	0.645	0.645 J+	DUP, MSD
L2336505	SW6010D	NA	DUP02_20230625	L2336505-06	Copper	N	Yes	101	101 J	FDP
L2336505	SW6010D	NA	DUP02_20230625	L2336505-06	Iron	N	Yes	38,800	38,800 J	FDP
L2336505	SW6010D	NA	DUP02_20230625	L2336505-06	Manganese	N	Yes	216	216 J	FDP
L2336505	SW6010D	NA	DUP02_20230625	L2336505-06	Selenium	N	Yes	2.07	2.07 J	FDP
L2336505	SW8270E	NA	DUP02_20230625	L2336505-06	Anthracene	N	Yes	150	150 J	FDP
L2336505	SW8270E	NA	DUP02_20230625	L2336505-06	Benzo(a)anthracene	N	Yes	660	660 J	FDP
L2336505	SW8270E	NA	DUP02_20230625	L2336505-06	Benzo(a)pyrene	N	Yes	710	710 J	FDP
L2336505	SW8270E	NA	DUP02_20230625	L2336505-06	Benzo(b)fluoranthene	N	Yes	850	850 J	FDP
L2336505	SW8270E	NA	DUP02_20230625	L2336505-06	Benzo(g,h,i)perylene	N	Yes	450	450 J	FDP
L2336505	SW8270E	NA	DUP02_20230625	L2336505-06	Benzo(k)fluoranthene	N	Yes	250	250 J	FDP
L2336505	SW8270E	NA	DUP02_20230625	L2336505-06	Carbazole	N	Yes	71 J	71 J	FDP
L2336505	SW8270E	NA	DUP02_20230625	L2336505-06	Chrysene	N	Yes	720	720 J	FDP
L2336505	SW8270E	NA	DUP02_20230625	L2336505-06	Dibenzofuran	N	Yes	39 J	39 J	FDP
L2336505	SW8270E	NA	DUP02_20230625	L2336505-06	Fluoranthene	N	Yes	1,300	1,300 J	FDP
L2336505	SW8270E	NA	DUP02_20230625	L2336505-06	Indeno(1,2,3-cd)pyrene	N	Yes	490	490 J	FDP
L2336505	SW8270E	NA	DUP02_20230625	L2336505-06	Naphthalene	N	Yes	65 J	65 J	FDP
L2336505	SW8270E	NA	DUP02_20230625	L2336505-06	Phenanthrene	N	Yes	820	820 J	FDP
L2336505	SW8270E	NA	DUP02_20230625	L2336505-06	Pyrene	N	Yes	1,200	1,200 J	FDP
L2336505	SW6010D	NA	SB-3_5-7	L2336505-03	Copper	N	Yes	218	218 J	FDP
L2336505	SW6010D	NA	SB-3_5-7	L2336505-03	Iron	N	Yes	22,000	22,000 J	FDP
L2336505	SW6010D	NA	SB-3_5-7	L2336505-03	Manganese	N	Yes	423	423 J	FDP
L2336505	SW6010D	NA	SB-3_5-7	L2336505-03	Selenium	N	Yes	4.67	4.67 J	FDP
L2336505	SW8270E	NA	SB-3_5-7	L2336505-03	Anthracene	N	Yes	460	460 J	FDP
L2336505	SW8270E	NA	SB-3_5-7	L2336505-03	Benzo(a)anthracene	N	Yes	1,400	1,400 J	FDP
L2336505	SW8270E	NA	SB-3_5-7	L2336505-03	Benzo(a)pyrene	N	Yes	1,500	1,500 J	FDP
L2336505	SW8270E	NA	SB-3_5-7	L2336505-03	Benzo(b)fluoranthene	N	Yes	1,800	1,800 J	FDP
L2336505	SW8270E	NA	SB-3_5-7	L2336505-03	Benzo(g,h,i)perylene	N	Yes	920	920 J	FDP

TABLE 3
SYSTEM PERFORMANCE SUMMARY
FORMER A&A BRAKE SERVICE SITE
BROOKLYN, NEW YORK

SDG	Method	Basis	Sample ID	Lab ID	Analyte	Fraction	Reportable Result	Reported Result	Validated Result	Reason for Qualifier
L2336505	SW8270E	NA	SB-3_5-7	L2336505-03	Benzo(k)fluoranthene	N	Yes	470	470 J	FDP
L2336505	SW8270E	NA	SB-3_5-7	L2336505-03	Carbazole	N	Yes	340	340 J	FDP
L2336505	SW8270E	NA	SB-3_5-7	L2336505-03	Chrysene	N	Yes	1,600	1,600 J	FDP
L2336505	SW8270E	NA	SB-3_5-7	L2336505-03	Dibenzofuran	N	Yes	260	260 J	FDP
L2336505	SW8270E	NA	SB-3_5-7	L2336505-03	Fluoranthene	N	Yes	3,300	3,300 J	FDP
L2336505	SW8270E	NA	SB-3_5-7	L2336505-03	Indeno(1,2,3-cd)pyrene	N	Yes	1,000	1,000 J	FDP
L2336505	SW8270E	NA	SB-3_5-7	L2336505-03	Naphthalene	N	Yes	560	560 J	FDP
L2336505	SW8270E	NA	SB-3_5-7	L2336505-03	Phenanthrene	N	Yes	3,000	3,000 J	FDP
L2336505	SW8270E	NA	SB-3_5-7	L2336505-03	Pyrene	N	Yes	2,900	2,900 J	FDP
L2336505	SW6010D	NA	DUP02_20230625	L2336505-06	Barium	N	Yes	276	276 J	FDP, MSD
L2336505	SW6010D	NA	SB-3_5-7	L2336505-03	Barium	N	Yes	481	481 J	FDP, MSD
L2335535	E1633	NA	SB-1_1-2	L2335535-02	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	N	Yes	U	UJ	IDL
L2335535	E1633	NA	SB-2_5-7	L2335535-07	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	N	Yes	U	UJ	IDL
L2336505	E1633	NA	SB-3_12-14	L2336505-05	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	N	Yes	U	UJ	IDL
L2335535	E1633	NA	SB-4_0-0.5	L2335535-09	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	N	Yes	U	UJ	IDL
L2335535	E1633	NA	SB-2_5-7	L2335535-07	Perfluorobutanesulfonic acid (PFBS)	N	Yes	0.085 J	0.085 J	ION
L2336505	E1633	NA	SB-3_1-2	L2336505-02	Perfluorobutanesulfonic acid (PFBS)	N	Yes	0.128 J	0.128 J	ION
L2335535	E1633	NA	SB-4_0-0.5	L2335535-09	Perfluorobutanesulfonic acid (PFBS)	N	Yes	0.087 J	0.087 J	ION
L2335535	E1633	NA	SB-4_0-0.5	L2335535-09	Perfluorononanoic acid (PFNA)	N	Yes	0.102 J	0.102 J	ION
L2335535	E1633	NA	SB-6_0-0.5	L2335535-16	Perfluorobutanesulfonic acid (PFBS)	N	Yes	0.054 J	0.054 J	ION
L2335535	SW8260D	NA	DUP01_20230621	L2335535-20	Acetone	N	Yes	39	39 J	LCS
L2335535	SW8270E	NA	DUP01_20230621	L2335535-20	Hexachlorocyclopentadiene	N	Yes	U	UJ	LCS
L2336505	SW8260D	NA	DUP02_20230625	L2336505-06	Vinyl chloride	N	Yes	U	UJ	LCS
L2336505	SW8270E	NA	DUP02_20230625	L2336505-06	Hexachlorocyclopentadiene	N	Yes	U	UJ	LCS
L2335535	SW8270E	NA	FB01_20230621	L2335535-21	4-Chloroaniline	N	Yes	U	UJ	LCS
L2335921	SW8270ESIM	NA	FB02_20230622	L2335921-06	2-Chloronaphthalene	N	Yes	U	UJ	LCS
L2335921	SW8270ESIM	NA	FB02_20230622	L2335921-06	2-Methylnaphthalene	N	Yes	U	UJ	LCS
L2335921	SW8270ESIM	NA	FB02_20230622	L2335921-06	Acenaphthene	N	Yes	U	UJ	LCS
L2335921	SW8270ESIM	NA	FB02_20230622	L2335921-06	Chrysene	N	Yes	U	UJ	LCS
L2335921	SW8270ESIM	NA	FB02_20230622	L2335921-06	Fluorene	N	Yes	U	UJ	LCS
L2335921	SW8270ESIM	NA	FB02_20230622	L2335921-06	Hexachlorobutadiene	N	Yes	U	UJ	LCS
L2335921	SW8270ESIM	NA	FB02_20230622	L2335921-06	Naphthalene	N	Yes	U	UJ	LCS
L2335921	SW8270ESIM	NA	FB02_20230622	L2335921-06	Phenanthrene	N	Yes	U	UJ	LCS
L2335535	SW8260D	NA	SB-1_0-0.5	L2335535-01	1,4-Dioxane	N	Yes	U	UJ	LCS
L2335535	SW8260D	NA	SB-1_0-0.5	L2335535-01	2-Hexanone (Methyl Butyl Ketone)	N	Yes	U	UJ	LCS
L2335535	SW8260D	NA	SB-1_0-0.5	L2335535-01	Acetone	N	Yes	84	84 J	LCS
L2335535	SW8270E	NA	SB-1_0-0.5	L2335535-01	Hexachlorocyclopentadiene	N	Yes	U	UJ	LCS
L2335535	SW8260D	NA	SB-1_1-2	L2335535-02	Acetone	N	Yes	7.8 J	7.8 J	LCS
L2335535	SW8270E	NA	SB-1_1-2	L2335535-02	Hexachlorocyclopentadiene	N	Yes	U	UJ	LCS
L2335535	SW8260D	NA	SB-1_10-12	L2335535-04	1,4-Dioxane	N	Yes	U	UJ	LCS
L2335535	SW8260D	NA	SB-1_10-12	L2335535-04	2-Hexanone (Methyl Butyl Ketone)	N	Yes	U	UJ	LCS

TABLE 3
SYSTEM PERFORMANCE SUMMARY
FORMER A&A BRAKE SERVICE SITE
BROOKLYN, NEW YORK

SDG	Method	Basis	Sample ID	Lab ID	Analyte	Fraction	Reportable Result	Reported Result	Validated Result	Reason for Qualifier
L2335535	SW8270E	NA	SB-1_10-12	L2335535-04	Hexachlorocyclopentadiene	N	Yes	U	UJ	LCS
L2335535	SW8260D	NA	SB-1_12-15	L2335535-05	Acetone	N	Yes	40	40 J	LCS
L2335535	SW8270E	NA	SB-1_12-15	L2335535-05	Hexachlorocyclopentadiene	N	Yes	U	UJ	LCS
L2335535	SW8260D	NA	SB-1_5-7	L2335535-03	1,4-Dioxane	N	Yes	U	UJ	LCS
L2335535	SW8260D	NA	SB-1_5-7	L2335535-03	2-Hexanone (Methyl Butyl Ketone)	N	Yes	U	UJ	LCS
L2335535	SW8270E	NA	SB-1_5-7	L2335535-03	Hexachlorocyclopentadiene	N	Yes	U	UJ	LCS
L2335535	SW8260D	NA	SB-2_0-0.5	L2335535-06	1,4-Dioxane	N	Yes	U	UJ	LCS
L2335535	SW8260D	NA	SB-2_0-0.5	L2335535-06	2-Hexanone (Methyl Butyl Ketone)	N	Yes	U	UJ	LCS
L2335535	SW8270E	NA	SB-2_0-0.5	L2335535-06	Hexachlorocyclopentadiene	N	Yes	U	UJ	LCS
L2335535	SW8260D	NA	SB-2_12-14	L2335535-08	Acetone	N	Yes	23	23 J	LCS
L2335535	SW8270E	NA	SB-2_12-14	L2335535-08	Hexachlorocyclopentadiene	N	Yes	U	UJ	LCS
L2335535	SW8260D	NA	SB-2_5-7	L2335535-07	Acetone	N	Yes	120	120 J	LCS
L2336505	SW8260D	NA	SB-3_0-0.5	L2336505-01	Vinyl Chloride	N	Yes	U	UJ	LCS
L2336505	SW8270E	NA	SB-3_0-0.5	L2336505-01	Hexachlorocyclopentadiene	N	Yes	U	UJ	LCS
L2336505	SW8260D	NA	SB-3_1-2	L2336505-02	Bromomethane (Methyl Bromide)	N	Yes	U	UJ	LCS
L2336505	SW8260D	NA	SB-3_1-2	L2336505-02	Ethyl Ether	N	Yes	U	UJ	LCS
L2336505	SW8260D	NA	SB-3_1-2	L2336505-02	Trichlorofluoromethane (CFC-11)	N	Yes	U	UJ	LCS
L2336505	SW8260D	NA	SB-3_1-2	L2336505-02	Vinyl Acetate	N	Yes	U	UJ	LCS
L2336505	SW8270E	NA	SB-3_1-2	L2336505-02	Hexachlorocyclopentadiene	N	Yes	U	UJ	LCS
L2336505	SW8260D	NA	SB-3_12-14	L2336505-05	Vinyl Chloride	N	Yes	U	UJ	LCS
L2336505	SW8270E	NA	SB-3_12-14	L2336505-05	Hexachlorocyclopentadiene	N	Yes	U	UJ	LCS
L2336505	SW8260D	NA	SB-3_5-7	L2336505-03	Vinyl Chloride	N	Yes	U	UJ	LCS
L2336505	SW8270E	NA	SB-3_5-7	L2336505-03	Hexachlorocyclopentadiene	N	Yes	U	UJ	LCS
L2336505	SW8260D	NA	SB-3_9-11	L2336505-04	Vinyl Chloride	N	Yes	U	UJ	LCS
L2336505	SW8270E	NA	SB-3_9-11	L2336505-04	Hexachlorocyclopentadiene	N	Yes	U	UJ	LCS
L2335535	SW8260D	NA	SB-4_0-0.5	L2335535-09	Acetone	N	Yes	56	56 J	LCS
L2335535	SW8270E	NA	SB-4_0-0.5	L2335535-09	Hexachlorocyclopentadiene	N	Yes	U	UJ	LCS
L2335535	SW8270E	NA	SB-4_12-14	L2335535-12	Hexachlorocyclopentadiene	N	Yes	U	UJ	LCS
L2335535	SW8260D	NA	SB-4_5-7	L2335535-10	Acetone	N	Yes	8.1 J	8.1 J	LCS
L2335535	SW8260D	NA	SB-4_8-10	L2335535-11	1,4-Dioxane	N	Yes	U	UJ	LCS
L2335535	SW8260D	NA	SB-4_8-10	L2335535-11	2-Hexanone (Methyl Butyl Ketone)	N	Yes	U	UJ	LCS
L2335535	SW8270E	NA	SB-4_8-10	L2335535-11	Hexachlorocyclopentadiene	N	Yes	U	UJ	LCS
L2335535	SW8260D	NA	SB-5_0-0.5	L2335535-13	Acetone	N	Yes	33	33 J	LCS
L2335535	SW8270E	NA	SB-5_0-0.5	L2335535-13	Hexachlorocyclopentadiene	N	Yes	U	UJ	LCS
L2335535	SW8260D	NA	SB-5_12-14	L2335535-15	Acetone	N	Yes	42	42 J	LCS
L2335535	SW8270E	NA	SB-5_12-14	L2335535-15	Hexachlorocyclopentadiene	N	Yes	U	UJ	LCS
L2335535	SW8260D	NA	SB-5_5-7	L2335535-14	Acetone	N	Yes	88	88 J	LCS
L2335535	SW8270E	NA	SB-5_5-7	L2335535-14	Hexachlorocyclopentadiene	N	Yes	U	UJ	LCS
L2335535	SW8270E	NA	SB-6_0-0.5	L2335535-16	Hexachlorocyclopentadiene	N	Yes	U	UJ	LCS
L2335535	SW8260D	NA	SB-6_10-12	L2335535-18	1,4-Dioxane	N	Yes	U	UJ	LCS
L2335535	SW8260D	NA	SB-6_10-12	L2335535-18	2-Hexanone (Methyl Butyl Ketone)	N	Yes	U	UJ	LCS

TABLE 3
SYSTEM PERFORMANCE SUMMARY
FORMER A&A BRAKE SERVICE SITE
BROOKLYN, NEW YORK

SDG	Method	Basis	Sample ID	Lab ID	Analyte	Fraction	Reportable Result	Reported Result	Validated Result	Reason for Qualifier
L2335535	SW8270E	NA	SB-6_10-12	L2335535-18	Hexachlorocyclopentadiene	N	Yes	U	UJ	LCS
L2335535	SW8260D	NA	SB-6_12-14	L2335535-19	Acetone	N	Yes	26	26 J	LCS
L2335535	SW8270E	NA	SB-6_12-14	L2335535-19	Hexachlorocyclopentadiene	N	Yes	U	UJ	LCS
L2335535	SW8260D	NA	SB-6_5-7	L2335535-17	Acetone	N	Yes	12	12 J	LCS
L2335535	SW8270E	NA	SB-6_5-7	L2335535-17	Hexachlorocyclopentadiene	N	Yes	U	UJ	LCS
L2335921	SW8260D	NA	SB-7_0-0.5	L2335921-01	Vinyl Chloride	N	Yes	U	UJ	LCS
L2335921	SW8270E	NA	SB-7_0-0.5	L2335921-01	Pentachlorophenol	N	Yes	U	UJ	LCS
L2335921	SW8270E	NA	SB-7_0-0.5	L2335921-01	Phenol	N	Yes	U	UJ	LCS
L2335921	SW8260D	NA	SB-7_1-2	L2335921-02	Vinyl Chloride	N	Yes	U	UJ	LCS
L2335921	SW8270E	NA	SB-7_1-2	L2335921-02	Phenol	N	Yes	U	UJ	LCS
L2335921	SW8260D	NA	SB-7_5-7	L2335921-03	Vinyl Chloride	N	Yes	U	UJ	LCS
L2335921	SW8260D	NA	SB-7_9-11	L2335921-04	Vinyl Chloride	N	Yes	U	UJ	LCS
L2335921	SW8270E	NA	SB-7_1-2	L2335921-02	Pentachlorophenol	N	Yes	U	R	LCS, SUR
L2335535	SW7470A	NA	FB01_20230621	L2335535-21	Mercury	T	Yes	0.00011 J	0.0002 U	MBK
L2335535	SW6010D	NA	DUP01_20230621	L2335535-20	Antimony	N	Yes	0.698 J	0.698 J	MSD
L2335535	SW6010D	NA	DUP01_20230621	L2335535-20	Calcium	N	Yes	720	720 J	MSD
L2335535	SW6010D	NA	DUP01_20230621	L2335535-20	Lead	N	Yes	6.54	6.54 J	MSD
L2335535	SW6010D	NA	DUP01_20230621	L2335535-20	Magnesium	N	Yes	1,830	1,830 J	MSD
L2335535	SW6010D	NA	DUP01_20230621	L2335535-20	Zinc	N	Yes	23.4	23.4 J	MSD
L2335535	SW6010D	NA	SB-1_0-0.5	L2335535-01	Antimony	N	Yes	13.1	13.1 J	MSD
L2335535	SW6010D	NA	SB-1_0-0.5	L2335535-01	Calcium	N	Yes	48,800	48,800 J	MSD
L2335535	SW6010D	NA	SB-1_0-0.5	L2335535-01	Lead	N	Yes	1,370	1,370 J	MSD
L2335535	SW6010D	NA	SB-1_0-0.5	L2335535-01	Magnesium	N	Yes	5,230	5,230 J	MSD
L2335535	SW6010D	NA	SB-1_0-0.5	L2335535-01	Zinc	N	Yes	2,610	2,610 J	MSD
L2335535	SW6010D	NA	SB-1_1-2	L2335535-02	Antimony	N	Yes	5.8	5.8 J	MSD
L2335535	SW6010D	NA	SB-1_1-2	L2335535-02	Calcium	N	Yes	45,100	45,100 J	MSD
L2335535	SW6010D	NA	SB-1_1-2	L2335535-02	Lead	N	Yes	1,570	1,570 J	MSD
L2335535	SW6010D	NA	SB-1_1-2	L2335535-02	Magnesium	N	Yes	4,700	4,700 J	MSD
L2335535	SW6010D	NA	SB-1_1-2	L2335535-02	Zinc	N	Yes	3,880	3,880 J	MSD
L2335535	SW6010D	NA	SB-1_10-12	L2335535-04	Antimony	N	Yes	0.594 J	0.594 J	MSD
L2335535	SW6010D	NA	SB-1_10-12	L2335535-04	Calcium	N	Yes	692	692 J	MSD
L2335535	SW6010D	NA	SB-1_10-12	L2335535-04	Lead	N	Yes	6.03	6.03 J	MSD
L2335535	SW6010D	NA	SB-1_10-12	L2335535-04	Magnesium	N	Yes	1,820	1,820 J	MSD
L2335535	SW6010D	NA	SB-1_10-12	L2335535-04	Zinc	N	Yes	21.5	21.5 J	MSD
L2335535	SW6010D	NA	SB-1_12-15	L2335535-05	Antimony	N	Yes	0.609 J	0.609 J	MSD
L2335535	SW6010D	NA	SB-1_12-15	L2335535-05	Calcium	N	Yes	809	809 J	MSD
L2335535	SW6010D	NA	SB-1_12-15	L2335535-05	Lead	N	Yes	6.79	6.79 J	MSD
L2335535	SW6010D	NA	SB-1_12-15	L2335535-05	Magnesium	N	Yes	1,710	1,710 J	MSD
L2335535	SW6010D	NA	SB-1_12-15	L2335535-05	Zinc	N	Yes	22.9	22.9 J	MSD
L2335535	SW6010D	NA	SB-1_5-7	L2335535-03	Antimony	N	Yes	0.759 J	0.759 J	MSD
L2335535	SW6010D	NA	SB-1_5-7	L2335535-03	Calcium	N	Yes	5,770	5,770 J	MSD

TABLE 3
SYSTEM PERFORMANCE SUMMARY
FORMER A&A BRAKE SERVICE SITE
BROOKLYN, NEW YORK

SDG	Method	Basis	Sample ID	Lab ID	Analyte	Fraction	Reportable Result	Reported Result	Validated Result	Reason for Qualifier
L2335535	SW6010D	NA	SB-1_5-7	L2335535-03	Lead	N	Yes	331	331 J	MSD
L2335535	SW6010D	NA	SB-1_5-7	L2335535-03	Magnesium	N	Yes	3,050	3,050 J	MSD
L2335535	SW6010D	NA	SB-1_5-7	L2335535-03	Zinc	N	Yes	230	230 J	MSD
L2335535	SW6010D	NA	SB-2_0-0.5	L2335535-06	Antimony	N	Yes	3.54 J	3.54 J	MSD
L2335535	SW6010D	NA	SB-2_0-0.5	L2335535-06	Calcium	N	Yes	54,700	54,700 J	MSD
L2335535	SW6010D	NA	SB-2_0-0.5	L2335535-06	Lead	N	Yes	692	692 J	MSD
L2335535	SW6010D	NA	SB-2_0-0.5	L2335535-06	Magnesium	N	Yes	8,230	8,230 J	MSD
L2335535	SW6010D	NA	SB-2_0-0.5	L2335535-06	Zinc	N	Yes	741	741 J	MSD
L2335535	SW6010D	NA	SB-2_12-14	L2335535-08	Antimony	N	Yes	U	UJ	MSD
L2335535	SW6010D	NA	SB-2_12-14	L2335535-08	Calcium	N	Yes	202	202 J	MSD
L2335535	SW6010D	NA	SB-2_12-14	L2335535-08	Lead	N	Yes	3.48 J	3.48 J	MSD
L2335535	SW6010D	NA	SB-2_12-14	L2335535-08	Magnesium	N	Yes	1,620	1,620 J	MSD
L2335535	SW6010D	NA	SB-2_12-14	L2335535-08	Zinc	N	Yes	15.9	15.9 J	MSD
L2335535	SW6010D	NA	SB-2_5-7	L2335535-07	Antimony	N	Yes	2.02 J	2.02 J	MSD
L2335535	SW6010D	NA	SB-2_5-7	L2335535-07	Calcium	N	Yes	54,300	54,300 J	MSD
L2335535	SW6010D	NA	SB-2_5-7	L2335535-07	Lead	N	Yes	1,330	1,330 J	MSD
L2335535	SW6010D	NA	SB-2_5-7	L2335535-07	Magnesium	N	Yes	8,280	8,280 J	MSD
L2335535	SW6010D	NA	SB-2_5-7	L2335535-07	Zinc	N	Yes	750	750 J	MSD
L2336505	SW6010D	NA	SB-3_0-0.5	L2336505-01	Barium	N	Yes	106	106 J	MSD
L2336505	SW6010D	NA	SB-3_1-2	L2336505-02	Barium	N	Yes	231	231 J	MSD
L2336505	SW6010D	NA	SB-3_12-14	L2336505-05	Barium	N	Yes	23.1	23.1 J	MSD
L2336505	SW6010D	NA	SB-3_9-11	L2336505-04	Barium	N	Yes	28	28 J	MSD
L2335535	SW6010D	NA	SB-4_0-0.5	L2335535-09	Antimony	N	Yes	9.79	9.79 J	MSD
L2335535	SW6010D	NA	SB-4_0-0.5	L2335535-09	Calcium	N	Yes	34,200	34,200 J	MSD
L2335535	SW6010D	NA	SB-4_0-0.5	L2335535-09	Lead	N	Yes	1,870	1,870 J	MSD
L2335535	SW6010D	NA	SB-4_0-0.5	L2335535-09	Magnesium	N	Yes	3,930	3,930 J	MSD
L2335535	SW6010D	NA	SB-4_0-0.5	L2335535-09	Zinc	N	Yes	6,200	6,200 J	MSD
L2335535	SW6010D	NA	SB-4_12-14	L2335535-12	Antimony	N	Yes	0.671 J	0.671 J	MSD
L2335535	SW6010D	NA	SB-4_12-14	L2335535-12	Calcium	N	Yes	701	701 J	MSD
L2335535	SW6010D	NA	SB-4_12-14	L2335535-12	Lead	N	Yes	3.66 J	3.66 J	MSD
L2335535	SW6010D	NA	SB-4_12-14	L2335535-12	Magnesium	N	Yes	2,610	2,610 J	MSD
L2335535	SW6010D	NA	SB-4_12-14	L2335535-12	Zinc	N	Yes	20.6	20.6 J	MSD
L2335535	SW6010D	NA	SB-4_5-7	L2335535-10	Antimony	N	Yes	0.397 J	0.397 J	MSD
L2335535	SW6010D	NA	SB-4_5-7	L2335535-10	Calcium	N	Yes	2,010	2,010 J	MSD
L2335535	SW6010D	NA	SB-4_5-7	L2335535-10	Lead	N	Yes	40.3	40.3 J	MSD
L2335535	SW6010D	NA	SB-4_5-7	L2335535-10	Magnesium	N	Yes	1,670	1,670 J	MSD
L2335535	SW6010D	NA	SB-4_5-7	L2335535-10	Zinc	N	Yes	51.4	51.4 J	MSD
L2335535	SW8260D	NA	SB-4_5-7	L2335535-10	1,1,2,2-Tetrachloroethane	N	Yes	U	UJ	MSD
L2335535	SW8260D	NA	SB-4_5-7	L2335535-10	1,2,3-Trichlorobenzene	N	Yes	U	UJ	MSD
L2335535	SW8260D	NA	SB-4_5-7	L2335535-10	1,2,3-Trichloropropane	N	Yes	U	UJ	MSD
L2335535	SW8260D	NA	SB-4_5-7	L2335535-10	1,2,4,5-Tetramethylbenzene	N	Yes	U	UJ	MSD

SDG	Method	Basis	Sample ID	Lab ID	Analyte	Fraction	Reportable Result	Reported Result	Validated Result	Reason for Qualifier
L2335535	SW8260D	NA	SB-4_5-7	L2335535-10	1,2,4-Trichlorobenzene	N	Yes	U	UJ	MSD
L2335535	SW8260D	NA	SB-4_5-7	L2335535-10	1,2,4-Trimethylbenzene	N	Yes	U	UJ	MSD
L2335535	SW8260D	NA	SB-4_5-7	L2335535-10	1,2-Dibromo-3-chloropropane (DBCP)	N	Yes	U	UJ	MSD
L2335535	SW8260D	NA	SB-4_5-7	L2335535-10	1,2-Dibromoethane (Ethylene Dibromide)	N	Yes	U	UJ	MSD
L2335535	SW8260D	NA	SB-4_5-7	L2335535-10	1,2-Dichlorobenzene	N	Yes	U	UJ	MSD
L2335535	SW8260D	NA	SB-4_5-7	L2335535-10	1,3-Dichlorobenzene	N	Yes	U	UJ	MSD
L2335535	SW8260D	NA	SB-4_5-7	L2335535-10	1,4-Dichlorobenzene	N	Yes	U	UJ	MSD
L2335535	SW8260D	NA	SB-4_5-7	L2335535-10	1,4-Diethylbenzene	N	Yes	U	UJ	MSD
L2335535	SW8260D	NA	SB-4_5-7	L2335535-10	2-Chlorotoluene	N	Yes	U	UJ	MSD
L2335535	SW8260D	NA	SB-4_5-7	L2335535-10	2-Phenylbutane (sec-Butylbenzene)	N	Yes	U	UJ	MSD
L2335535	SW8260D	NA	SB-4_5-7	L2335535-10	4-Chlorotoluene	N	Yes	U	UJ	MSD
L2335535	SW8260D	NA	SB-4_5-7	L2335535-10	4-Ethyltoluene (1-Ethyl-4-Methylbenzene)	N	Yes	U	UJ	MSD
L2335535	SW8260D	NA	SB-4_5-7	L2335535-10	Bromobenzene	N	Yes	U	UJ	MSD
L2335535	SW8260D	NA	SB-4_5-7	L2335535-10	Cymene (p-Isopropyltoluene)	N	Yes	U	UJ	MSD
L2335535	SW8260D	NA	SB-4_5-7	L2335535-10	Hexachlorobutadiene	N	Yes	U	UJ	MSD
L2335535	SW8260D	NA	SB-4_5-7	L2335535-10	Isopropylbenzene (Cumene)	N	Yes	0.13 J	0.13 J	MSD
L2335535	SW8260D	NA	SB-4_5-7	L2335535-10	Naphthalene	N	Yes	U	UJ	MSD
L2335535	SW8260D	NA	SB-4_5-7	L2335535-10	Vinyl Acetate	N	Yes	U	UJ	MSD
L2335535	SW8260D	NA	SB-4_5-7	L2335535-10	n-Butylbenzene	N	Yes	U	UJ	MSD
L2335535	SW8260D	NA	SB-4_5-7	L2335535-10	n-Propylbenzene	N	Yes	0.37 J	0.37 J	MSD
L2335535	SW8260D	NA	SB-4_5-7	L2335535-10	tert-Butylbenzene	N	Yes	U	UJ	MSD
L2335535	SW8260D	NA	SB-4_5-7	L2335535-10	trans-1,4-Dichloro-2-butene	N	Yes	U	UJ	MSD
L2335535	SW8270E	NA	SB-4_5-7	L2335535-10	2,4-Dinitrophenol	N	Yes	U	R	MSD
L2335535	SW8270E	NA	SB-4_5-7	L2335535-10	4,6-Dinitro-2-methylphenol	N	Yes	U	R	MSD
L2335535	SW8270E	NA	SB-4_5-7	L2335535-10	Benzoic Acid	N	Yes	U	R	MSD
L2335535	SW8270E	NA	SB-4_5-7	L2335535-10	Hexachlorocyclopentadiene	N	Yes	U	R	MSD
L2335535	SW6010D	NA	SB-4_8-10	L2335535-11	Antimony	N	Yes	U	UJ	MSD
L2335535	SW6010D	NA	SB-4_8-10	L2335535-11	Calcium	N	Yes	2,550	2,550 J	MSD
L2335535	SW6010D	NA	SB-4_8-10	L2335535-11	Lead	N	Yes	19.2	19.2 J	MSD
L2335535	SW6010D	NA	SB-4_8-10	L2335535-11	Magnesium	N	Yes	1,650	1,650 J	MSD
L2335535	SW6010D	NA	SB-4_8-10	L2335535-11	Zinc	N	Yes	24.9	24.9 J	MSD
L2335535	SW6010D	NA	SB-5_0-0.5	L2335535-13	Antimony	N	Yes	16	16 J	MSD
L2335535	SW6010D	NA	SB-5_0-0.5	L2335535-13	Calcium	N	Yes	18,300	18,300 J	MSD
L2335535	SW6010D	NA	SB-5_0-0.5	L2335535-13	Lead	N	Yes	64	64 J	MSD
L2335535	SW6010D	NA	SB-5_0-0.5	L2335535-13	Magnesium	N	Yes	2,670	2,670 J	MSD
L2335535	SW6010D	NA	SB-5_0-0.5	L2335535-13	Zinc	N	Yes	37.8	37.8 J	MSD
L2335535	SW6010D	NA	SB-5_12-14	L2335535-15	Antimony	N	Yes	0.577 J	0.577 J	MSD
L2335535	SW6010D	NA	SB-5_12-14	L2335535-15	Calcium	N	Yes	724	724 J	MSD
L2335535	SW6010D	NA	SB-5_12-14	L2335535-15	Lead	N	Yes	7.54	7.54 J	MSD
L2335535	SW6010D	NA	SB-5_12-14	L2335535-15	Magnesium	N	Yes	2,630	2,630 J	MSD
L2335535	SW6010D	NA	SB-5_12-14	L2335535-15	Zinc	N	Yes	22	22 J	MSD

TABLE 3
SYSTEM PERFORMANCE SUMMARY
FORMER A&A BRAKE SERVICE SITE
BROOKLYN, NEW YORK

SDG	Method	Basis	Sample ID	Lab ID	Analyte	Fraction	Reportable Result	Reported Result	Validated Result	Reason for Qualifier
L2335535	SW6010D	NA	SB-5_5-7	L2335535-14	Antimony	N	Yes	2.72 J	2.72 J	MSD
L2335535	SW6010D	NA	SB-5_5-7	L2335535-14	Calcium	N	Yes	32,200	32,200 J	MSD
L2335535	SW6010D	NA	SB-5_5-7	L2335535-14	Lead	N	Yes	145	145 J	MSD
L2335535	SW6010D	NA	SB-5_5-7	L2335535-14	Magnesium	N	Yes	5,060	5,060 J	MSD
L2335535	SW6010D	NA	SB-5_5-7	L2335535-14	Zinc	N	Yes	110	110 J	MSD
L2335535	SW6010D	NA	SB-6_0-0.5	L2335535-16	Antimony	N	Yes	1.39 J	1.39 J	MSD
L2335535	SW6010D	NA	SB-6_0-0.5	L2335535-16	Calcium	N	Yes	17,600	17,600 J	MSD
L2335535	SW6010D	NA	SB-6_0-0.5	L2335535-16	Lead	N	Yes	727	727 J	MSD
L2335535	SW6010D	NA	SB-6_0-0.5	L2335535-16	Magnesium	N	Yes	7,670	7,670 J	MSD
L2335535	SW6010D	NA	SB-6_0-0.5	L2335535-16	Zinc	N	Yes	588	588 J	MSD
L2335535	SW6010D	NA	SB-6_10-12	L2335535-18	Antimony	N	Yes	U	UJ	MSD
L2335535	SW6010D	NA	SB-6_10-12	L2335535-18	Calcium	N	Yes	490	490 J	MSD
L2335535	SW6010D	NA	SB-6_10-12	L2335535-18	Lead	N	Yes	5.27	5.27 J	MSD
L2335535	SW6010D	NA	SB-6_10-12	L2335535-18	Magnesium	N	Yes	1,380	1,380 J	MSD
L2335535	SW6010D	NA	SB-6_10-12	L2335535-18	Zinc	N	Yes	18	18 J	MSD
L2335535	SW6010D	NA	SB-6_12-14	L2335535-19	Antimony	N	Yes	0.423 J	0.423 J	MSD
L2335535	SW6010D	NA	SB-6_12-14	L2335535-19	Calcium	N	Yes	690	690 J	MSD
L2335535	SW6010D	NA	SB-6_12-14	L2335535-19	Lead	N	Yes	2.77 J	2.77 J	MSD
L2335535	SW6010D	NA	SB-6_12-14	L2335535-19	Magnesium	N	Yes	1,240	1,240 J	MSD
L2335535	SW6010D	NA	SB-6_12-14	L2335535-19	Zinc	N	Yes	17.4	17.4 J	MSD
L2335535	SW6010D	NA	SB-6_5-7	L2335535-17	Antimony	N	Yes	3.61 J	3.61 J	MSD
L2335535	SW6010D	NA	SB-6_5-7	L2335535-17	Calcium	N	Yes	13,600	13,600 J	MSD
L2335535	SW6010D	NA	SB-6_5-7	L2335535-17	Lead	N	Yes	814	814 J	MSD
L2335535	SW6010D	NA	SB-6_5-7	L2335535-17	Magnesium	N	Yes	5,240	5,240 J	MSD
L2335535	SW6010D	NA	SB-6_5-7	L2335535-17	Zinc	N	Yes	314	314 J	MSD
L2335921	SW6010D	NA	SB-7_0-0.5	L2335921-01	Lead	N	Yes	132	132 J	MSD
L2335921	SW6010D	NA	SB-7_1-2	L2335921-02	Chromium	N	Yes	25	25 J	MSD
L2335921	SW6010D	NA	SB-7_1-2	L2335921-02	Lead	N	Yes	169	169 J	MSD
L2335921	SW6010D	NA	SB-7_1-2	L2335921-02	Nickel	N	Yes	37.7	37.7 J	MSD
L2335921	SW6010D	NA	SB-7_1-2	L2335921-02	Sodium	N	Yes	240	240 J	MSD
L2335921	SW7471B	NA	SB-7_1-2	L2335921-02	Mercury	N	Yes	0.934	0.934 J+	MSD
L2335921	SW6010D	NA	SB-7_12-14	L2335921-05	Chromium	N	Yes	18	18 J	MSD
L2335921	SW6010D	NA	SB-7_12-14	L2335921-05	Lead	N	Yes	21	21 J	MSD
L2335921	SW6010D	NA	SB-7_12-14	L2335921-05	Nickel	N	Yes	40.8	40.8 J	MSD
L2335921	SW6010D	NA	SB-7_12-14	L2335921-05	Sodium	N	Yes	186	186 J	MSD
L2335921	SW7471B	NA	SB-7_12-14	L2335921-05	Mercury	N	Yes	0.146	0.146 J+	MSD
L2335921	SW6010D	NA	SB-7_5-7	L2335921-03	Chromium	N	Yes	30.9	30.9 J	MSD
L2335921	SW6010D	NA	SB-7_5-7	L2335921-03	Lead	N	Yes	628	628 J	MSD
L2335921	SW6010D	NA	SB-7_5-7	L2335921-03	Nickel	N	Yes	28.7	28.7 J	MSD
L2335921	SW6010D	NA	SB-7_5-7	L2335921-03	Sodium	N	Yes	206	206 J	MSD
L2335921	SW7471B	NA	SB-7_5-7	L2335921-03	Mercury	N	Yes	1.43	1.43 J+	MSD

TABLE 3
SYSTEM PERFORMANCE SUMMARY
FORMER A&A BRAKE SERVICE SITE
BROOKLYN, NEW YORK

SDG	Method	Basis	Sample ID	Lab ID	Analyte	Fraction	Reportable Result	Reported Result	Validated Result	Reason for Qualifier
L2335921	SW6010D	NA	SB-7_9-11	L2335921-04	Chromium	N	Yes	54.4	54.4 J	MSD
L2335921	SW6010D	NA	SB-7_9-11	L2335921-04	Lead	N	Yes	31.2	31.2 J	MSD
L2335921	SW6010D	NA	SB-7_9-11	L2335921-04	Nickel	N	Yes	41.6	41.6 J	MSD
L2335921	SW6010D	NA	SB-7_9-11	L2335921-04	Sodium	N	Yes	428	428 J	MSD
L2336234	SW6010D	NA	SB-8_0-0.5	L2336234-01	Antimony	N	Yes	U	UJ	MSD
L2336234	SW6010D	NA	SB-8_0-0.5	L2336234-01	Calcium	N	Yes	12,500	12,500 J	MSD
L2336234	SW6010D	NA	SB-8_0-0.5	L2336234-01	Magnesium	N	Yes	2,760	2,760 J	MSD
L2336234	SW6010D	NA	SB-8_0-0.5	L2336234-01	Manganese	N	Yes	202	202 J	MSD
L2336234	SW6010D	NA	SB-8_1-2	L2336234-02	Antimony	N	Yes	U	UJ	MSD
L2336234	SW6010D	NA	SB-8_1-2	L2336234-02	Calcium	N	Yes	24,200	24,200 J	MSD
L2336234	SW6010D	NA	SB-8_1-2	L2336234-02	Magnesium	N	Yes	2,930	2,930 J	MSD
L2336234	SW6010D	NA	SB-8_1-2	L2336234-02	Manganese	N	Yes	215	215 J	MSD
L2336234	SW6010D	NA	SB-8_12-14	L2336234-05	Antimony	N	Yes	U	UJ	MSD
L2336234	SW6010D	NA	SB-8_12-14	L2336234-05	Calcium	N	Yes	436	436 J	MSD
L2336234	SW6010D	NA	SB-8_12-14	L2336234-05	Magnesium	N	Yes	1,170	1,170 J	MSD
L2336234	SW6010D	NA	SB-8_12-14	L2336234-05	Manganese	N	Yes	92.6	92.6 J	MSD
L2336234	SW8260D	NA	SB-8_12-14	L2336234-05	1,2,3-Trichlorobenzene	N	Yes	U	UJ	MSD
L2336234	SW8260D	NA	SB-8_12-14	L2336234-05	1,2,4,5-Tetramethylbenzene	N	Yes	U	UJ	MSD
L2336234	SW8260D	NA	SB-8_12-14	L2336234-05	1,2,4-Trichlorobenzene	N	Yes	U	UJ	MSD
L2336234	SW8260D	NA	SB-8_12-14	L2336234-05	1,2,4-Trimethylbenzene	N	Yes	U	UJ	MSD
L2336234	SW8260D	NA	SB-8_12-14	L2336234-05	1,2-Dibromo-3-chloropropane (DBCP)	N	Yes	U	UJ	MSD
L2336234	SW8260D	NA	SB-8_12-14	L2336234-05	1,2-Dichlorobenzene	N	Yes	U	UJ	MSD
L2336234	SW8260D	NA	SB-8_12-14	L2336234-05	1,3,5-Trimethylbenzene	N	Yes	U	UJ	MSD
L2336234	SW8260D	NA	SB-8_12-14	L2336234-05	1,3-Dichlorobenzene	N	Yes	U	UJ	MSD
L2336234	SW8260D	NA	SB-8_12-14	L2336234-05	1,4-Dichlorobenzene	N	Yes	U	UJ	MSD
L2336234	SW8260D	NA	SB-8_12-14	L2336234-05	1,4-Diethylbenzene	N	Yes	U	UJ	MSD
L2336234	SW8260D	NA	SB-8_12-14	L2336234-05	2-Chlorotoluene	N	Yes	U	UJ	MSD
L2336234	SW8260D	NA	SB-8_12-14	L2336234-05	2-Phenylbutane (sec-Butylbenzene)	N	Yes	U	UJ	MSD
L2336234	SW8260D	NA	SB-8_12-14	L2336234-05	4-Chlorotoluene	N	Yes	U	UJ	MSD
L2336234	SW8260D	NA	SB-8_12-14	L2336234-05	4-Ethyltoluene (1-Ethyl-4-Methylbenzene)	N	Yes	U	UJ	MSD
L2336234	SW8260D	NA	SB-8_12-14	L2336234-05	Bromobenzene	N	Yes	U	UJ	MSD
L2336234	SW8260D	NA	SB-8_12-14	L2336234-05	Chlorobenzene	N	Yes	U	UJ	MSD
L2336234	SW8260D	NA	SB-8_12-14	L2336234-05	Cymene (p-Isopropyltoluene)	N	Yes	U	UJ	MSD
L2336234	SW8260D	NA	SB-8_12-14	L2336234-05	Dibromomethane	N	Yes	U	UJ	MSD
L2336234	SW8260D	NA	SB-8_12-14	L2336234-05	Ethylbenzene	N	Yes	U	UJ	MSD
L2336234	SW8260D	NA	SB-8_12-14	L2336234-05	Hexachlorobutadiene	N	Yes	U	UJ	MSD
L2336234	SW8260D	NA	SB-8_12-14	L2336234-05	Isopropylbenzene (Cumene)	N	Yes	U	UJ	MSD
L2336234	SW8260D	NA	SB-8_12-14	L2336234-05	Naphthalene	N	Yes	U	UJ	MSD
L2336234	SW8260D	NA	SB-8_12-14	L2336234-05	Styrene	N	Yes	U	UJ	MSD
L2336234	SW8260D	NA	SB-8_12-14	L2336234-05	Tetrachloroethene	N	Yes	3	3 J	MSD
L2336234	SW8260D	NA	SB-8_12-14	L2336234-05	Vinyl acetate	N	Yes	U	UJ	MSD

TABLE 3
SYSTEM PERFORMANCE SUMMARY
FORMER A&A BRAKE SERVICE SITE
BROOKLYN, NEW YORK

SDG	Method	Basis	Sample ID	Lab ID	Analyte	Fraction	Reportable Result	Reported Result	Validated Result	Reason for Qualifier
L2336234	SW8260D	NA	SB-8_12-14	L2336234-05	m,p-Xylenes	N	Yes	U	UJ	MSD
L2336234	SW8260D	NA	SB-8_12-14	L2336234-05	n-Butylbenzene	N	Yes	U	UJ	MSD
L2336234	SW8260D	NA	SB-8_12-14	L2336234-05	n-Propylbenzene	N	Yes	U	UJ	MSD
L2336234	SW8260D	NA	SB-8_12-14	L2336234-05	o-Xylene	N	Yes	U	UJ	MSD
L2336234	SW8260D	NA	SB-8_12-14	L2336234-05	tert-Butylbenzene	N	Yes	U	UJ	MSD
L2336234	SW8270E	NA	SB-8_12-14	L2336234-05	2,4-Dinitrophenol	N	Yes	U	R	MSD
L2336234	SW8270E	NA	SB-8_12-14	L2336234-05	4,6-Dinitro-2-methylphenol	N	Yes	U	R	MSD
L2336234	SW8270E	NA	SB-8_12-14	L2336234-05	Benzoic acid	N	Yes	U	R	MSD
L2336234	SW8270E	NA	SB-8_12-14	L2336234-05	Hexachlorocyclopentadiene	N	Yes	U	R	MSD
L2336234	SW6010D	NA	SB-8_5-7	L2336234-03	Antimony	N	Yes	U	UJ	MSD
L2336234	SW6010D	NA	SB-8_5-7	L2336234-03	Calcium	N	Yes	2,400	2,400 J	MSD
L2336234	SW6010D	NA	SB-8_5-7	L2336234-03	Magnesium	N	Yes	1,780	1,780 J	MSD
L2336234	SW6010D	NA	SB-8_5-7	L2336234-03	Manganese	N	Yes	159	159 J	MSD
L2336234	SW6010D	NA	SB-8_9-11	L2336234-04	Antimony	N	Yes	U	UJ	MSD
L2336234	SW6010D	NA	SB-8_9-11	L2336234-04	Calcium	N	Yes	1,540	1,540 J	MSD
L2336234	SW6010D	NA	SB-8_9-11	L2336234-04	Magnesium	N	Yes	2,270	2,270 J	MSD
L2336234	SW6010D	NA	SB-8_9-11	L2336234-04	Manganese	N	Yes	268	268 J	MSD
L2335535	SW8081B	NA	SB-1_0-0.5	L2335535-01	4,4'-DDE	N	Yes	6.47	6.47 J	RPD
L2335535	SW8081B	NA	SB-1_1-2	L2335535-02	gamma-Chlordane (trans)	N	Yes	6.24	6.24 J	RPD
L2335535	SW8081B	NA	SB-4_0-0.5	L2335535-09	gamma-Chlordane (trans)	N	Yes	11.8	11.8 J	RPD
L2335535	SW8081B	NA	SB-5_0-0.5	L2335535-13	4,4'-DDD	N	Yes	0.686 J	0.686 J	RPD
L2335535	SW8081B	NA	SB-5_0-0.5	L2335535-13	gamma-Chlordane (trans)	N	Yes	1.78 J	1.78 J	RPD
L2335535	SW8081B	NA	SB-5_5-7	L2335535-14	4,4'-DDD	N	Yes	U	UJ	RPD
L2335535	SW8081B	NA	SB-5_5-7	L2335535-14	gamma-Chlordane (trans)	N	Yes	0.846 J	0.846 J	RPD
L2335921	SW8081B	NA	SB-7_5-7	L2335921-03	4,4'-DDT	N	Yes	3.57	3.57 J	RPD
L2335921	SW8081B	NA	SB-7_5-7	L2335921-03	alpha-Chlordane (cis)	N	Yes	0.89 J	0.89 J	RPD
L2335921	SW8081B	NA	SB-7_5-7	L2335921-03	gamma-Chlordane (trans)	N	Yes	U	UJ	RPD
L2335535	SW8081B	NA	SB-1_5-7	L2335535-03	4,4'-DDE	N	Yes	6.18	6.18 J+	RPD, SUR
L2335535	SW8081B	NA	SB-1_5-7	L2335535-03	alpha-Chlordane (cis)	N	Yes	5.65	5.65 J+	RPD, SUR
L2335535	SW8081B	NA	SB-1_5-7	L2335535-03	4,4'-DDT	N	Yes	74.3	74.3 J+	SUR
L2335535	SW8081B	NA	SB-1_5-7	L2335535-03	Chlordane	N	Yes	155	155 J+	SUR
L2335535	SW8081B	NA	SB-1_5-7	L2335535-03	gamma-Chlordane (trans)	N	Yes	8.22	8.22 J+	SUR
L2335535	SW8260D	NA	SB-1_5-7	L2335535-03	1,2,4,5-Tetramethylbenzene	N	Yes	100	100 J+	SUR
L2335535	SW8260D	NA	SB-1_5-7	L2335535-03	1,2,4-Trimethylbenzene	N	Yes	1.1 J	1.1 J+	SUR
L2335535	SW8260D	NA	SB-1_5-7	L2335535-03	1,3,5-Trimethylbenzene	N	Yes	0.27 J	0.27 J+	SUR
L2335535	SW8260D	NA	SB-1_5-7	L2335535-03	Isopropylbenzene (Cumene)	N	Yes	6.2	6.2 J+	SUR
L2335535	SW8260D	NA	SB-1_5-7	L2335535-03	Naphthalene	N	Yes	2.3 J	2.3 J+	SUR
L2335535	SW8260D	NA	SB-1_5-7	L2335535-03	n-Butylbenzene	N	Yes	32	32 J+	SUR
L2335535	SW8260D	NA	SB-1_5-7	L2335535-03	n-Propylbenzene	N	Yes	18	18 J+	SUR
L2335535	SW8260D	NA	SB-1_5-7	L2335535-03	tert-Butylbenzene	N	Yes	0.57 J	0.57 J+	SUR
L2335535	SW8270E	NA	SB-2_0-0.5	L2335535-06	1,2-Dichlorobenzene	N	Yes	U	UJ	SUR

TABLE 3
SYSTEM PERFORMANCE SUMMARY
FORMER A&A BRAKE SERVICE SITE
BROOKLYN, NEW YORK

SDG	Method	Basis	Sample ID	Lab ID	Analyte	Fraction	Reportable Result	Reported Result	Validated Result	Reason for Qualifier
L2335535	SW8270E	NA	SB-2_0-0.5	L2335535-06	1,3-Dichlorobenzene	N	Yes	U	UJ	SUR
L2335535	SW8270E	NA	SB-2_0-0.5	L2335535-06	1,4-Dichlorobenzene	N	Yes	U	UJ	SUR
L2335535	SW8270E	NA	SB-2_0-0.5	L2335535-06	2-Chlorophenol	N	Yes	U	UJ	SUR
L2335535	SW8270E	NA	SB-2_0-0.5	L2335535-06	2-Methylphenol (o-Cresol)	N	Yes	U	UJ	SUR
L2335535	SW8270E	NA	SB-2_0-0.5	L2335535-06	Benzyl Alcohol	N	Yes	U	UJ	SUR
L2335535	SW8270E	NA	SB-2_0-0.5	L2335535-06	Phenol	N	Yes	U	UJ	SUR
L2335535	SW8270E	NA	SB-2_0-0.5	L2335535-06	bis(2-Chloroethyl)ether	N	Yes	U	UJ	SUR
L2335535	SW8081B	NA	SB-4_8-10	L2335535-11	4,4'-DDD	N	Yes	U	R	SUR
L2335535	SW8081B	NA	SB-4_8-10	L2335535-11	4,4'-DDE	N	Yes	U	R	SUR
L2335535	SW8081B	NA	SB-4_8-10	L2335535-11	4,4'-DDT	N	Yes	U	R	SUR
L2335535	SW8081B	NA	SB-4_8-10	L2335535-11	Aldrin	N	Yes	U	R	SUR
L2335535	SW8081B	NA	SB-4_8-10	L2335535-11	Chlordane	N	Yes	U	R	SUR
L2335535	SW8081B	NA	SB-4_8-10	L2335535-11	Dieldrin	N	Yes	U	R	SUR
L2335535	SW8081B	NA	SB-4_8-10	L2335535-11	Endosulfan I	N	Yes	U	R	SUR
L2335535	SW8081B	NA	SB-4_8-10	L2335535-11	Endosulfan II	N	Yes	U	R	SUR
L2335535	SW8081B	NA	SB-4_8-10	L2335535-11	Endosulfan Sulfate	N	Yes	U	R	SUR
L2335535	SW8081B	NA	SB-4_8-10	L2335535-11	Endrin	N	Yes	U	R	SUR
L2335535	SW8081B	NA	SB-4_8-10	L2335535-11	Endrin Aldehyde	N	Yes	U	R	SUR
L2335535	SW8081B	NA	SB-4_8-10	L2335535-11	Endrin Ketone	N	Yes	U	R	SUR
L2335535	SW8081B	NA	SB-4_8-10	L2335535-11	Heptachlor	N	Yes	U	R	SUR
L2335535	SW8081B	NA	SB-4_8-10	L2335535-11	Heptachlor Epoxide	N	Yes	U	R	SUR
L2335535	SW8081B	NA	SB-4_8-10	L2335535-11	Methoxychlor	N	Yes	U	R	SUR
L2335535	SW8081B	NA	SB-4_8-10	L2335535-11	Toxaphene	N	Yes	U	R	SUR
L2335535	SW8081B	NA	SB-4_8-10	L2335535-11	alpha-BHC	N	Yes	U	R	SUR
L2335535	SW8081B	NA	SB-4_8-10	L2335535-11	alpha-Chlordane (cis)	N	Yes	U	R	SUR
L2335535	SW8081B	NA	SB-4_8-10	L2335535-11	beta-BHC	N	Yes	U	R	SUR
L2335535	SW8081B	NA	SB-4_8-10	L2335535-11	delta-BHC	N	Yes	U	R	SUR
L2335535	SW8081B	NA	SB-4_8-10	L2335535-11	gamma-BHC (Lindane)	N	Yes	U	R	SUR
L2335535	SW8081B	NA	SB-4_8-10	L2335535-11	gamma-Chlordane (trans)	N	Yes	U	R	SUR
L2335535	SW8270E	NA	SB-5_0-0.5	L2335535-13	1,2-Dichlorobenzene	N	Yes	U	UJ	SUR
L2335535	SW8270E	NA	SB-5_0-0.5	L2335535-13	1,3-Dichlorobenzene	N	Yes	U	UJ	SUR
L2335535	SW8270E	NA	SB-5_0-0.5	L2335535-13	1,4-Dichlorobenzene	N	Yes	U	UJ	SUR
L2335535	SW8270E	NA	SB-5_0-0.5	L2335535-13	2-Chlorophenol	N	Yes	U	UJ	SUR
L2335535	SW8270E	NA	SB-5_0-0.5	L2335535-13	2-Methylphenol (o-Cresol)	N	Yes	U	UJ	SUR
L2335535	SW8270E	NA	SB-5_0-0.5	L2335535-13	Benzyl Alcohol	N	Yes	U	UJ	SUR
L2335535	SW8270E	NA	SB-5_0-0.5	L2335535-13	Phenol	N	Yes	U	UJ	SUR
L2335535	SW8270E	NA	SB-5_0-0.5	L2335535-13	bis(2-Chloroethyl)ether	N	Yes	U	UJ	SUR
L2335535	SW8260D	NA	SB-5_5-7	L2335535-14	1,1,1-Trichloroethane	N	Yes	U	UJ	SUR
L2335535	SW8260D	NA	SB-5_5-7	L2335535-14	1,1-Dichloroethane	N	Yes	U	UJ	SUR
L2335535	SW8260D	NA	SB-5_5-7	L2335535-14	1,1-Dichloroethene	N	Yes	U	UJ	SUR
L2335535	SW8260D	NA	SB-5_5-7	L2335535-14	1,1-Dichloropropene	N	Yes	U	UJ	SUR

TABLE 3
SYSTEM PERFORMANCE SUMMARY
FORMER A&A BRAKE SERVICE SITE
BROOKLYN, NEW YORK

SDG	Method	Basis	Sample ID	Lab ID	Analyte	Fraction	Reportable Result	Reported Result	Validated Result	Reason for Qualifier
L2335535	SW8260D	NA	SB-5_5-7	L2335535-14	1,2-Dichloroethane	N	Yes	U	UJ	SUR
L2335535	SW8260D	NA	SB-5_5-7	L2335535-14	1,2-Dichloropropane	N	Yes	U	UJ	SUR
L2335535	SW8260D	NA	SB-5_5-7	L2335535-14	1,4-Dioxane	N	Yes	U	UJ	SUR
L2335535	SW8260D	NA	SB-5_5-7	L2335535-14	2,2-Dichloropropane	N	Yes	U	UJ	SUR
L2335535	SW8260D	NA	SB-5_5-7	L2335535-14	2-Butanone (Methyl Ethyl Ketone)	N	Yes	8.9 J	8.9 J-	SUR
L2335535	SW8260D	NA	SB-5_5-7	L2335535-14	4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	N	Yes	U	UJ	SUR
L2335535	SW8260D	NA	SB-5_5-7	L2335535-14	Acrylonitrile	N	Yes	U	UJ	SUR
L2335535	SW8260D	NA	SB-5_5-7	L2335535-14	Benzene	N	Yes	0.29 J	0.29 J-	SUR
L2335535	SW8260D	NA	SB-5_5-7	L2335535-14	Bromodichloromethane	N	Yes	U	UJ	SUR
L2335535	SW8260D	NA	SB-5_5-7	L2335535-14	Bromomethane (Methyl Bromide)	N	Yes	U	UJ	SUR
L2335535	SW8260D	NA	SB-5_5-7	L2335535-14	Carbon Disulfide	N	Yes	U	UJ	SUR
L2335535	SW8260D	NA	SB-5_5-7	L2335535-14	Carbon Tetrachloride	N	Yes	U	UJ	SUR
L2335535	SW8260D	NA	SB-5_5-7	L2335535-14	Chloroethane	N	Yes	U	UJ	SUR
L2335535	SW8260D	NA	SB-5_5-7	L2335535-14	Chloroform (Trichloromethane)	N	Yes	U	UJ	SUR
L2335535	SW8260D	NA	SB-5_5-7	L2335535-14	Chloromethane (Methyl Chloride)	N	Yes	U	UJ	SUR
L2335535	SW8260D	NA	SB-5_5-7	L2335535-14	Dibromomethane	N	Yes	U	UJ	SUR
L2335535	SW8260D	NA	SB-5_5-7	L2335535-14	Dichlorodifluoromethane (CFC-12)	N	Yes	U	UJ	SUR
L2335535	SW8260D	NA	SB-5_5-7	L2335535-14	Ethyl Ether	N	Yes	U	UJ	SUR
L2335535	SW8260D	NA	SB-5_5-7	L2335535-14	Methyl Tert Butyl Ether (MTBE)	N	Yes	U	UJ	SUR
L2335535	SW8260D	NA	SB-5_5-7	L2335535-14	Methylene chloride (Dichloromethane)	N	Yes	U	UJ	SUR
L2335535	SW8260D	NA	SB-5_5-7	L2335535-14	Trichloroethene	N	Yes	1.4	1.4 J-	SUR
L2335535	SW8260D	NA	SB-5_5-7	L2335535-14	Trichlorofluoromethane (CFC-11)	N	Yes	U	UJ	SUR
L2335535	SW8260D	NA	SB-5_5-7	L2335535-14	Vinyl Acetate	N	Yes	U	UJ	SUR
L2335535	SW8260D	NA	SB-5_5-7	L2335535-14	Vinyl Chloride	N	Yes	U	UJ	SUR
L2335535	SW8260D	NA	SB-5_5-7	L2335535-14	cis-1,2-Dichloroethene	N	Yes	U	UJ	SUR
L2335535	SW8260D	NA	SB-5_5-7	L2335535-14	cis-1,3-Dichloropropene	N	Yes	U	UJ	SUR
L2335535	SW8260D	NA	SB-5_5-7	L2335535-14	trans-1,2-Dichloroethene	N	Yes	U	UJ	SUR
L2335535	SW8270E	NA	SB-5_5-7	L2335535-14	1,2-Dichlorobenzene	N	Yes	U	R	SUR
L2335535	SW8270E	NA	SB-5_5-7	L2335535-14	1,3-Dichlorobenzene	N	Yes	U	R	SUR
L2335535	SW8270E	NA	SB-5_5-7	L2335535-14	1,4-Dichlorobenzene	N	Yes	U	R	SUR
L2335535	SW8270E	NA	SB-5_5-7	L2335535-14	2-Chlorophenol	N	Yes	U	R	SUR
L2335535	SW8270E	NA	SB-5_5-7	L2335535-14	2-Methylphenol (o-Cresol)	N	Yes	U	R	SUR
L2335535	SW8270E	NA	SB-5_5-7	L2335535-14	Anthracene	N	Yes	1,200	1,200 J-	SUR
L2335535	SW8270E	NA	SB-5_5-7	L2335535-14	Benzyl Alcohol	N	Yes	U	R	SUR
L2335535	SW8270E	NA	SB-5_5-7	L2335535-14	Butyl benzylphthalate (BBP)	N	Yes	U	R	SUR
L2335535	SW8270E	NA	SB-5_5-7	L2335535-14	Carbazole	N	Yes	240	240 J-	SUR
L2335535	SW8270E	NA	SB-5_5-7	L2335535-14	Di-n-butylphthalate (DBP)	N	Yes	U	R	SUR
L2335535	SW8270E	NA	SB-5_5-7	L2335535-14	Fluoranthene	N	Yes	5,400	5,400 J-	SUR
L2335535	SW8270E	NA	SB-5_5-7	L2335535-14	Pentachlorophenol	N	Yes	U	R	SUR
L2335535	SW8270E	NA	SB-5_5-7	L2335535-14	Phenanthrene	N	Yes	4,500	4,500 J-	SUR
L2335535	SW8270E	NA	SB-5_5-7	L2335535-14	Phenol	N	Yes	U	R	SUR

TABLE 3
SYSTEM PERFORMANCE SUMMARY
FORMER A&A BRAKE SERVICE SITE
BROOKLYN, NEW YORK

SDG	Method	Basis	Sample ID	Lab ID	Analyte	Fraction	Reportable Result	Reported Result	Validated Result	Reason for Qualifier
L2335535	SW8270E	NA	SB-5_5-7	L2335535-14	Pyrene	N	Yes	5,300	5,300 J-	SUR
L2335535	SW8270E	NA	SB-5_5-7	L2335535-14	bis(2-Chloroethyl)ether	N	Yes	U	R	SUR
L2335921	SW8270E	NA	SB-7_1-2	L2335921-02	Anthracene	N	Yes	230	230 J-	SUR
L2335921	SW8270E	NA	SB-7_1-2	L2335921-02	Butyl benzylphthalate (BBP)	N	Yes	U	R	SUR
L2335921	SW8270E	NA	SB-7_1-2	L2335921-02	Carbazole	N	Yes	140 J	140 J-	SUR
L2335921	SW8270E	NA	SB-7_1-2	L2335921-02	Di-n-butylphthalate (DBP)	N	Yes	U	R	SUR
L2335921	SW8270E	NA	SB-7_1-2	L2335921-02	Fluoranthene	N	Yes	1,400	1,400 J-	SUR
L2335921	SW8270E	NA	SB-7_1-2	L2335921-02	Phenanthrene	N	Yes	1,100	1,100 J-	SUR
L2335921	SW8270E	NA	SB-7_1-2	L2335921-02	Pyrene	N	Yes	1,200	1,200 J-	SUR

Notes:

%R = percent recovery

DUP = duplicate

FDP = field duplicate

IDL = Isotope dilution outside recovery limits.

ION = Ion ratios were reviewed and were outside the limits of 50-150% or the signal to noise ratios (S/N) were not ≥ 10 for all ions used for quantitation/ ≥ 3 for all ions used for confirmation.

J- = The result is an estimated quantity, but the result may be biased low.

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only.

LCS/LCSD = laboratory control sample/laboratory control sample duplicate

MBK = Method blank contamination.

MSD = matrix spike duplicate

NA = not applicable

ND = non-detect

R = The sample results were rejected as unusable; the compound may or may not be present in the sample.

RPD = relative percent difference

SDG = sample delivery group

SUR = Surrogate percent recovery outside acceptance limits.

U = The compound was analyzed for but not detected. The associated value is either the compound quantitation limit if not detected by the analytical instrument or could be the reported or blank concentration if qualified by blank contamination. This can also be displayed as less than the associated compound quantitation limit (<RL or <MDL), or "ND".

UJ = The compound was not detected above the reported sample quantitation limit; however, the reported limit is estimated and may or may not represent the actual limit of quantitation.

Haley & Aldrich, Inc.
600 South Meyer Ave.
Suite 100
Tucson, AZ 85701
520.289.8621

Data Usability Summary Report

Project Name: Sackett Street

Project Description: Groundwater Samples

Sample Date(s): 6 July through 17 July 2023

Analytical Laboratory: Alpha Analytical – Westborough, MA

Validation Performed by: Kirkland Broadwell & Kristina Ilina

Validation Reviewed by: Katherine Miller

Validation Date: 28 July 2023

Haley & Aldrich, Inc. prepared this Data Usability Summary Report (DUSR) to summarize the review and validation of the analytical results for Sample Delivery Groups (SDG) listed. This DUSR is organized into the following sections:

1. Sample Delivery Group Numbers
2. Precision and Accuracy
3. Explanations
4. Glossary
5. Abbreviations
6. Qualifiers

References

This data validation and usability assessment was performed per the guidance and requirements established by the United States Environmental Protection Agency (USEPA) using the following reference materials:

- National Functional Guidelines (NFG) for Inorganic Data Review.
- NFG for Organic Data Review.
- Data Validation Guidelines for Perfluoroalkyl Substances (PFAS) Analyzed Using USEPA Method 537.
- Sampling, Analysis, and Assessment of PFAS Under New York State Department of Environmental Conservation's (NYSDEC) Part 375 Remedial Programs.
- The project-specific Quality Assurance Project Plan (QAPP), herein referred to as the specified limits (see references section).

Data reported in this sampling event were reported to the laboratory method detection limit (MDL). Results found between the MDL and RL are flagged J as estimated.

Sample data were qualified in accordance with the laboratory's standard operating procedures (SOPs). The results presented in each laboratory report were found to be compliant with the data quality objectives (DQOs) for the project and therefore usable; any exceptions are noted in the following pages.

1. Sample Delivery Group Numbers

1.1 SAMPLE MANAGEMENT

This DUSR summarizes the review of the following SDG numbers:

- L2338623, dated 25 July 2023; and
- L2340792, dated 26 July 2023.

Samples were collected, preserved, and shipped following standard chain of custody (COC) protocols.

Samples were also received appropriately, identified correctly, and analyzed according to the COC.

Analyses were performed on the following samples:

Sample ID	Sample Type	Lab ID	Sample Date	Matrix	Methods
MW-2-20230706	N	L2338623-01	07/06/2023	WG	A, B, C, D, E, F, G, H
DUP01-20230706	FD	L2338623-02	07/06/2023	WG	A, B, C, D, E, F, G, H
TB01-20230706	TB	L2338623-03	07/06/2023	WQ	C
MW-1-20230717	N	L2340792-01	07/17/2023	WG	A, B, C, D, E, F, G, H
MW-3-20230717	N	L2340792-02	07/17/2023	WG	A, B, C, D, E, F, G, H
MW-4-20230717	N	L2340792-03	07/17/2023	WG	A, B, C, D, E, F, G, H
FB-20230717	FB	L2340792-04	07/17/2023	WQ	A, B, C, D, E, F, G, H
TB-20230717	TB	L2340792-05	07/17/2023	WQ	C

Method Holding Times			
A.	E1633	PFAS	14 days extraction / 28 days analysis
B.	SW8082A	PCBs	7 days extraction / 40 days analysis
C.	SW8260D	Volatile Organic Compounds (VOCs)	14 days for liquid, preserved 7 days
D.	SW8270E	Semivolatile Organic Compounds (SVOCs)	7 days extraction / 40 days analysis
E.	SW8270ESIM	SVOCs	7 days extraction / 40 days analysis
F.	SW6020B	Metals	180 days
G.	SW7470A	Mercury (in Liquids)	28 days extraction / 48 hours analysis
H.	SW8081B	Pesticides	7 days extraction / 40 days analysis
**Holding time specified by NYSDEC Guidance.*			

1.2 MULTIPLE SAMPLE RESULTS

The laboratory reported multiple results for the samples listed below. The validator chose the results that best met the DQOs of the project.

Lab ID	Method	Analyte	Qualification
L2340792-01 and L2340792-02	SW8270ESIM	All SVOCs	The laboratory reanalyzed the samples due to a method blank detection for naphthalene. As the re-extracted results were similar to the original results, the original results are marked accepted, and the reanalyzed results are marked nonreportable.

1.3 HOLDING TIMES/PRESERVATION

The samples arrived at the laboratory at the proper temperature and were prepared and analyzed within the holding time and preservation criteria specified per method protocol.

1.4 REPORTING LIMITS AND SAMPLE DILUTIONS

The RLs for the samples within this SDG met or were below the minimum RL requirements specified by the project-specific QAPP.

1.5 SURROGATE RECOVERY COMPLIANCE

Refer to Section E 1.2. The percent recovery (%R) for each surrogate compound added to each project sample were determined to be within the laboratory specified quality control limits, with the following exceptions:

Method	Sample ID	Lab ID	Surrogate	Dilution	%R	Qualification
8270ESIM	MW-1-20230717	L2340792-01	Nitrobenzene-d5	1x	121%	J+/None target compounds*
8270ESIM	MW-1-20230717	L2340792-01	2,4,6-Tribromophenol	1x	187%	J+/None target compounds**
8270ESIM	MW-3-20230717	L2340792-02	2,4,6-Tribromophenol	1x	173%	J+/None target compounds**
8270ESIM	MW-4-20230717	L2340792-03	2,4,6-Tribromophenol	1x	158%	J+/None target compounds**
8270ESIM	FB-20230717	L2340792-04	2,4,6-Tribromophenol	1x	178%	J+/None target compounds**
8270ESIM	MW-1-20230717	L2340792-01	Nitrobenzene-d5	1x	131%	J+/None target compounds*
8270ESIM	MW-1-20230717	L2340792-01	2,4,6-Tribromophenol	1x	196%	J+/None target compounds**
8270ESIM	MW-3-20230717	L2340792-02	Nitrobenzene-d5	1x	150%	J+/None target compounds*

Method	Sample ID	Lab ID	Surrogate	Dilution	%R	Qualification
8270ESIM	MW-3-20230717	L2340792-02	2,4,6-Tribromophenol	1x	227%	J+/None target compounds**

**Compounds targeted by Nitrobenzene-d5: 1,4-Dioxane, Anthracene, Benzo(g,h,i)perylene, Indeno(1,2,3-cd)pyrene, Benzo(k)fluoranthene, Acenaphthylene, Chrysene, Benzo(a)pyrene, Dibenz(a,h)anthracene, Benzo(a)anthracene, Hexachloroethane, Hexachlorobutadiene, Naphthalene, 2-Methylnaphthalene, 2-Chloronaphthalene, Hexachlorobenzene, Pyrene, Benzo(b)fluoranthene, Fluoranthene, Acenaphthene, Phenanthrene, and Fluorene.*

***Compounds targeted by 2,4,6-Tribromophenol: Pentachlorophenol*

1.6 LABORATORY CONTROL SAMPLES

Refer to Section E 1.3. Compounds associated with the laboratory control samples/laboratory control sample duplicate (LCS/LCSD) analyses associated with client samples exhibited recoveries and relative percent differences (RPDs) within the specified limits with the following exceptions:

SDG #	Sample Type	Method	Batch ID	Analyte	%R/RPD	Qualifier	Affected Samples
L2338623	LCS/LCSD	8270E	WG1800839	4-Chloroaniline	38%/36%	J-/R	L2338623-01 and -02
L2338623	LCS	8270E	WG1800839	4-Nitrophenol	82%	J+/None	None, samples are non-detect (ND)
L2340792	LCS/LCSD	8270E	WG1805644	4-Nitrophenol	93%/90%	J+/None	None, samples are ND
L2340792	LCSD	8270E	WG1805644	Benzoic Acid	0%	J-/R	L2338623-01 through -04
L2340792	LCS	SW6020B	WG1804510	Copper	156%	J+/None	L2338623-01 through -03
L2338623	LCS	E1633	WG1806226	Perfluorononanoic acid	140%/145%	J/UJ	L2338623-01, L2338623-02

1.7 MATRIX SPIKE SAMPLES

Refer to Section E 1.4. The sample(s) below were used for matrix spike/matrix spike duplicate (MS/MSD):

Lab Sample Number	Matrix Spike/Matrix Spike Duplicate Sample Client ID	Methods
L2338623-01	MW-2-20230717	A, B, C, D, E, F, G, H

The MS/MSD recoveries and the RPD between the MS and MSD results were within the specified limits, with the following exceptions:

Sample Type	Method	Parent Sample	Analyte	%R/RPD	Qualifier	Affected Samples
MSD	SW8260D	MW-2-20230717	Chloromethane	132%	J/None	L2338623-01
MS/MSD	SW8270E	MW-2-20230717	3,3'-Dichlorobenzidine	0%/0%	J/R	L2338623-01
MS/MSD	SW8270E	MW-2-20230717	2,4-Dinitrotoluene	RPD = 34	J/None	None, sample is ND
MS/MSD	SW8270E	MW-2-20230717	2,6-Dinitrotoluene	RPD = 31	J/None	None, sample is ND
MS/MSD	SW8270E	MW-2-20230717	NDPA/DPA	RPD = 32	J/None	None, sample is ND
MS/MSD	SW8270E	MW-2-20230717	n-Nitrosodi-n-propylamine	RPD = 33	J/None	None, sample is ND
MS/MSD	SW8270E	MW-2-20230717	Butyl benzyl phthalate	RPD = 40	J/None	None, sample is ND
MS/MSD	SW8270E	MW-2-20230717	Dimethyl phthalate	RPD = 35	J/None	None, sample is ND
MS/MSD	SW8270E	MW-2-20230717	Biphenyl	RPD = 31	J/None	None, sample is ND
MS/MSD	SW8270E	MW-2-20230717	4-Chloroaniline	27%/21%	J/R	L2338623-01
MS/MSD	SW8270E	MW-2-20230717	2-Nitroaniline	RPD = 37	J/None	None, sample is ND
MS/MSD	SW8270E	MW-2-20230717	3-Nitroaniline	RPD =32	J/None	None, sample is ND
MS/MSD	SW8270E	MW-2-20230717	4-Nitroaniline	43%/31%/ RPD = 33	J/R	L2338623-01
MS/MSD	SW8270E	MW-2-20230717	Acetophenone	RPD = 34	J/None	None, sample is ND
MS/MSD	SW8270E	MW-2-20230717	2,4,6-Trichlorophenol	RPD = 34	J/None	None, sample is ND
MS/MSD	SW8270E	MW-2-20230717	p-Chloro-m-cresol	RPD = 33	J/None	None, sample is ND
MS/MSD	SW8270E	MW-2-20230717	2,4-Dichlorophenol	RPD = 31	J/None	None, sample is ND
MS/MSD	SW8270E	MW-2-20230717	2,4-Dimethylphenol	RPD = 34	J/None	None, sample is ND
MS	SW8270E	MW-2-20230717	4-Nitrophenol	100%	J/None	None, sample is ND

Sample Type	Method	Parent Sample	Analyte	%R/RPD	Qualifier	Affected Samples
MS/MSD	SW8270E	MW-2-20230717	2,4-Dinitrophenol	RPD = 34	J/None	None, sample is ND
MS/MSD	SW8270E	MW-2-20230717	4,6-Dinitro-o-cresol	RPD = 45	J/None	None, sample is ND
MS/MSD	SW8270E	MW-2-20230717	2,4,5-Trichlorophenol	RPD = 36	J/None	None, sample is ND
MS/MSD	SW8270E	MW-2-20230717	Benzyl Alcohol	RPD = 33	J/None	None, sample is ND
MS/MSD	SW8270E	MW-2-20230717	Carbazole	RPD = 31	J/None	None, sample is ND
MSD	SW8270ESIM	MW-2-20230717	Acenaphthene	0%, RPD = 92	J/R	L2338623-01
MSD	SW8270ESIM	MW-2-20230717	1,4-Dioxane	141%	J/None	L2338623-01
MS/MSD	SW6020B	MW-2-20230717	Calcium	50%/10%	NA	None, native sample > 4x the spike added
MS/MSD	SW6020B	MW-2-20230717	Iron	60%/0%	NA	None, native sample > 4x the spike added
MSD	SW6020B	MW-2-20230717	Magnesium	72%	J/UJ	L2338623-01 and L2338623-02
MS/MSD	SW6020B	MW-2-20230717	Sodium	0%/0%	NA	None, native sample > 4x the spike added
MS	E1633	MW-2-20230717	PFPeA	134%	J/UJ	L2338623-01
MS	E1633	MW-2-20230717	PFOA	134%	J/UJ	L2338623-01
MS/MSD	E1633	MW-2-20230717	PFDS	56%/58%	J/UJ	L2338623-01
MSD	E1633	MW-2-20230717	NMeFOSAA	137%	J/UJ	L2338623-01

1.8 BLANK SAMPLE ANALYSIS

Refer to Section E 1.5. Method blank samples had no detections, indicating that no contamination from laboratory activities occurred, with the following exceptions:

Blank Type	Batch ID	Analyte Detected in Blank	Concentration (µg/L)	Qualifier	Affected Samples
Method Blank	WG1801016	2-Methylnaphthalene	0.04 J	RL U	L2338623-01 and L2338623-02
Method Blank	WG1805644	Naphthalene	1.2 J	NA	No target analytes reported
Method Blank	WG1806000	Acenaphthene	0.02 J	RL U	L2340792-01 and L2340792-02
Method Blank	WG1806000	Naphthalene	0.89	J+	L2340792-01 and L2340792-02
Method Blank	WG1806000	2-Methylnaphthalene	0.06 J	RL U	L2340792-01
				J+	L2340792-02

Instrument blank samples had no detections, indicating that no contamination occurred during analysis.

The analysis of the blank samples for field quality control was free of target compounds, with the following exceptions:

Blank Type	Date of Blank	Analyte Detected in Blank	Concentration (µg/L)	Qualifier	Affected Samples
Field Blank	7/17/2023	Benzo(b)fluoranthene	0.01 J	NA	None, samples are ND
Field Blank	7/17/2023	Sodium	0.0901 J	NA	None, samples are >10x blank
Field Blank	7/17/2023	Barium	0.00090	NA	None, samples are >10x blank

1.9 DUPLICATE SAMPLE ANALYSIS

Refer to Section E 1.6. The following sample was used for laboratory duplicate analysis and the RPDs were all below 20 percent (or the absolute difference rule was satisfied if detects were less than 5 times the RL):

Lab Sample Number	Laboratory Duplicate Sample Client ID	Methods
L2340792-01	MW-1-20230717	SW7470A, SW6020B

The following sample was used for field duplicate analysis. RPDs were all below 35 percent (or the absolute difference rule was satisfied if detects were less than 5 times the RL). Any exceptions are noted below and qualified.

Primary Sample ID	Duplicate Sample ID	Methods
MW-2-20230706	DUP01-20230706	A, B, C, D, E, F, G, H

Field Duplicate RPD Calculations:

Method	Analyte (µg/L)	Primary Sample ID	Duplicate Sample ID	% RPD	Qualification
		MW-2-20230706	DUP01-20230706		
SW8270ESIM	Naphthalene	0.52	0.22	NA	J/UJ, Abs. Diff. > RL
SW8270ESIM	Phenanthrene	0.38	0.03	NA	J/UJ, Abs. Diff. > RL
SW8270ESIM	Acenaphthene	17	9.8	54	J/UJ, RPD>35
SW8270ESIM	Fluorene	2.9	0.74	119	J/UJ, RPD>35
E1633	Perfluorooctanoic acid (PFOA)	105	69.7	40	J/UJ, RPD>35
E1633	Perfluoropentanoic acid (PFPeA)	60	22.1	92	J/UJ, RPD>35
E1633	US EPA PFAS (PFOS + PFOA)	105	69.7	40	J/UJ, RPD>35
E1633	Perfluorobutanoic acid (PFBA)	33.6	22.7	NA	J/UJ, Abs. Diff. > RL
E1633	Perfluorohexanesulfonic acid (PFHxS)	5.27	0.502	NA	J/UJ, Abs. Diff. > RL

1.10 PFAS SAMPLE PREPARATION

Refer to Section E 1.14. The entire sample plus sample bottle rinsate was extracted. No data qualification required.

1.11 PFAS IDENTIFICATION

Refer to Section E 1.15. Ion ratios were reviewed and were within the limits of 50 to 150 percent.

The laboratory's SOP was reviewed and the reviewer confirmed that, when applicable, the laboratory's procedure is to sum the branched and linear peaks.

1.12 EXTRACTION INTERNAL STANDARDS

Refer to Section E 1.16. Recoveries were reviewed and found to be within the limits of 50 to 150 percent of the initial calibration midpoint standard/ initial continuing calibration verification, with the following exceptions:

Sample ID	Standard Name	%Recovery	Qualifier	Affected Samples
MW-2-20230706	1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (13C2-6:2 FTS)	238%	J/UJ	L2338623-01
MW-2-20230706	1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (13C2-8:2 FTS)	186%	J/UJ	L2338623-01
DUP01-20230706	1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (13C2-8:2 FTS)	162%	J/UJ	L2338623-02
DUP01-20230706	1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (13C2-6:2 FTS)	177%	J/UJ	L2338623-02
MW-3-20230717	1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (13C2-6:2 FTS)	180%	J/UJ	L2340792-02
MW-3-20230717	1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (13C2-8:2 FTS)	185%	J/UJ	L2340792-02

1.13 SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

The results presented in this report were found to comply with the DQOs for the project and the guidelines specified by the analytical method. Based on the review of this report, the data are useable and acceptable except for rejected data noted below. A summary of qualifiers applied to this data set is shown in the attached Table 1.

2. Precision and Accuracy

Refer to Section E 1.7. Where required by the method, some measurement of analytical accuracy and precision was reported for each method with the site samples.

3. Explanations

The following explanations include more detailed information regarding each of the sections in the DUSR above. Not all sections in the Explanations are represented:

- E 1.2 Surrogate Recovery Compliance
  - Surrogates, also known as system monitoring compounds, are compounds added to each sample prior to sample preparation to determining the efficiency of the extraction procedure by evaluating the %R of the compounds.
- E 1.3 Laboratory Control Samples
  - The LCS/LCSD analyses are used to assess the precision and accuracy of the analytical method independent of matrix interferences.
- E 1.4 Matrix Spike Samples
  - MS/MSD data are used to assess the precision and accuracy of the analytical method and evaluate the effects of the sample matrix on the sample preparation procedures and measurement methodologies.
  - For inorganic methods, when a matrix spike recovery falls outside of the control limits and the sample result is less than four times the spike added, a post-digestion spike is performed.
- E 1.5 Blank Sample Analysis
  - Method blanks are prepared by the analytical laboratory and analyzed concurrently with the project samples to assess possible laboratory contamination.
  - Analysis of PFAS compliant with QSM 5.3 Table B-15 requires instrument blanks that are prepared by the analytical laboratory and analyzed concurrently with the project samples to assess contamination that could occur in the LC/MS/MS instrument.
  - Field blanks are prepared to identify contamination that may have been introduced during field activity. Equipment blanks are prepared to identify contamination that may have been introduced while decontaminating sampling equipment. Trip blanks are prepared when volatile analysis is requested to identify contamination that may have been introduced during transport.
- E 1.6 Laboratory and Field Duplicate Sample Analysis
  - The laboratory duplicate sample analysis is used by the laboratory at the time of the analysis to demonstrate acceptable method precision. The RPD or absolute difference was evaluated for each duplicate sample pair to monitor the reproducibility of the data.
  - The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. The RPD or absolute difference was evaluated for each duplicate sample pair to monitor the reproducibility of the data.
- E 1.7 Precision and Accuracy
  - Precision measures the reproducibility of repetitive measurements. In a laboratory environment, this will be measured by determining the RPD found between a primary and a duplicate sample. This can be an LCS/LCSD pair, a MS/MSD pair, a laboratory

duplicate performed on a site sample, or a field duplicate collected and analyzed concurrently with a site sample.

  - Accuracy is a statistical measurement of the correctness of a measured value and includes components of random error (variability caused by imprecision) and systematic error. In a laboratory environment, this will be measured by determining the %R of certain spiked compounds. This can be assessed using LCS, blank spike (BS), MS, and/or surrogate recoveries.

- E 1.13 QLC/MS/MS Tune Check
  - Analysis of PFAS requires a tune check for the mass calibration. Mass calibration range must bracket the ion masses of interest.
- E 1.14 PFAS Sample Preparation
  - Analysis of PFAS requires specific sample preparation. Aqueous samples must be prepared using Solid Phase Extraction (SPE), unless samples are known to contain high PFAS concentrations or the samples are injected directly into the LC/MS/MS instrument. Samples with greater than 1 percent solids may require centrifugation prior to SPE. The entire sample plus bottle rinsate must be extracted using SPE. If high PFAS concentrations are known, the samples may alternately be prepared using serial dilution performed in duplicate. If prepared by serial dilution, there must be documented project approval for this deviation.
- E 1.15 PFAS Identification
  - Identification of PFAS requires dual confirmation. The chemical derivation of the ion transitions must be documented. A minimum of two ion transitions per analyte are required (except for PFBA and PFPeA). Ratios of the quantitation ion to the confirmation ion should be calculated for samples and be within 50 to 150 percent of the ratios of the quantitation ion to the confirmation ion for standards.
  - Identification of PFAS also requires the proper assessment of branched and linear peaks. Standards for both isomers are not currently available for every PFAS compound, resulting in the common error of quantifying the area of only the branched or the linear isomers, which results in erroneous concentrations.
- E 1.16 Extraction Internal Standards
  - Analysis of PFAS by isotope dilution includes the use of extracted internal standards, which are stable isotope analogs of the PFAS compounds of interest added to each sample prior to extraction of the sample matrix. Matrix interferences that affect the quantification of the internal standard will affect the calculated target compound concentrations.

4. Glossary

Not all of the following symbols, acronyms, or qualifiers occur in this document.

- Sample Types:
  - EB Equipment Blank Sample
  - FB Field Blank Sample
  - FD Field Duplicate Sample
  - N Primary Sample
  - TB Trip Blank Sample
- Units:
  - µg/kg micrograms per kilogram
  - µg/L micrograms per liter
  - µg/m^3 micrograms per cubic meter
  - mg/kg milligrams per kilogram
  - mg/L milligrams per liter
  - ppb v/v parts per billion volume/volume
  - pCi/L picocuries per liter
  - pg/g picograms per gram
- Matrices:
  - AA Ambient Air
  - GS Soil Gas
  - GW/WG Groundwater
  - QW Water Quality
  - IA Indoor Air
  - SE Sediment
  - SO Soil
  - SSV Sub-slab Vapor
  - WQ Water Quality control matrix
  - WS Surface Water
- Table Footnotes:
  - NA Not applicable
  - ND Non-detect
  - NR Not reported
- Common Symbols:
  - % percent
  - < less than
  - ≤ less than or equal to
  - > greater than
  - ≥ greater than or equal to
  - = equal
  - °C degrees Celsius
  - ± plus or minus
  - ~ approximately
  - x times (multiplier)

5. Abbreviations

%D	Percent Difference
%R	Percent Recovery
%RSD	Percent Relative Standard Deviation
%v/v	Percent volume by volume
2s	2 sigma
4,4-DDT	4 4-dichlorodiphenyltrichloroethane
Abs Diff	Absolute Difference
amu	atomic mass unit
BPJ	Best Professional Judgement
BS	Blank Spike
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CCVL	Continuing Calibration Verification Low
COC	Chain of Custody
COM	Combined Isotope Calculation
Cr (VI)	Hexavalent Chromium
CRI	Collision Reaction Interface
DoD	Department of Defense
DQO	data quality objective
DUSR	Data Usability Summary Report
EIS	Extraction Internal Standard
EMPC	Estimated Maximum Possible Concentration
FBK	Field Blank Contamination
FDP	Field Duplicate
GC	Gas Chromatograph
GC/MS	Gas Chromatography/Mass Spectrometry
GPC	Gel Permeation Chromatography
H_2	Hydrogen gas
HCl	Hydrochloric Acid
ICAL	Initial Calibration
ICB	Initial Calibration Blank
ICP/MS	Inductively Coupled Plasma/Mass Spectrometry
ICV	Initial Calibration Verification
ICVL	Initial Calibration Verification Low
IPA	Isopropyl Alcohol
LC	Laboratory Control
LCS/LCSD	Laboratory Control Sample/Laboratory Control Sample Duplicate
MBK	Method Blank Contamination
MDC	Minimum Detectable Concentration
MDL	Laboratory Method Detection Limit
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NA	not applicable
ND	Non-Detect
NFG	National Functional Guidelines
NH_3	Ammonia
NYSDEC	New York State Department of Environmental Conservation
PAH	Polycyclic Aromatic Hydrocarbon
PCB	Polychlorinated Biphenyl
PDS	Post-Digestion Spike
PEM	Performance Evaluation Mixture
PFAS	Per- and Polyfluoroalkyl Substances
PFBA	Perfluorbutanoic Acid
PFD	Perfluorodecalin
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctane sulfonate
PFPeA	Perfluoropentanoic Acid
QAPP	Quality Assurance Project Plan
QC	Quality Control
QSM	Quality Systems Manual
R^2	R-squared value
Ra-226	Radium-226
Ra-228	Radium-228
RESC	Resolution Check Measure
RL	Laboratory Reporting Limit
RPD	Relative Percent Difference
RRF	Relative Response Factor
RT	Retention Time
SAP	Sampling Analysis Plan
SDG	Sample Delivery Group
SIM	Selected ion monitoring
SOP	Standard Operating Procedure
SPE	Solid-Phase Extraction
SVOC	Semi-Volatile Organic Compound
TCLP	Toxicity Characteristic Leaching Procedure
TIC	Tentatively Identified Compound
TKN	Total Kjeldahl Nitrogen
TPH	Total Petroleum Hydrocarbon
TPU	Total Propagated Uncertainty
USEPA	U.S. Environmental Protection Agency
VOC	Volatile Organic Compound
WP	Work Plan

6. Qualifiers

The qualifiers below are from the USEPA National Functional Guidelines and the data in the DUSR may contain these qualifiers:

- Concentration (C) Qualifiers:

  U The compound was analyzed for but not detected. The associated value is either the compound quantitation limit if not detected by the analytical instrument or could be the reported or blank concentration if qualified by blank contamination. This can also be displayed as less than the associated compound quantitation limit (<RL or <MDL), or "ND".

  B The compound was found in the sample and its associated blank. Its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers:

  E The compound was quantitated above the calibration range.

  D The concentration is based on a diluted sample analysis.

- Validation Qualifiers:

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  J+ The result is an estimated quantity, but the result may be biased high.

  J- The result is an estimated quantity, but the result may be biased low.

  J/UJ as listed in exception tables J applies to detected data and UJ applies to non-detected data as reported by the laboratory.

  UJ The compound was not detected above the reported sample quantitation limit; however, the reported limit is estimated and may or may not represent the actual limit of quantitation.

  NJ The analysis indicated the presence of a compound for which there is presumptive evidence to make a tentative identification; the associated numerical value is an estimated concentration only.

  R The sample results were rejected as unusable; the compound may or may not be present in the sample.

  S Result is suspect. See DUSR for details.

References

1. Haley & Aldrich, Inc, 2023. Quality Assurance Project Plan. Remedial Investigation Work Plan. Former A&A Brake Service Site. NYSDEC BCP Site C224372. Brooklyn New York. March.

2. United States Environmental Protection Agency, 2020a. National Functional Guidelines for Inorganic Superfund Methods Data Review. EPA-542-R-20-006. November.

3. United States Environmental Protection Agency, 2020b. National Functional Guidelines for Organic Superfund Methods Data Review. EPA-540-R-20-005. November.

4. United States Environmental Protection Agency, 2018. Data Review and Validation Guidelines for Perfluroalkyl Substances (PFASs) Analyzed Using EPA Method 537. EPA 910-R-18-001. November.

5. New York State Department of Environmental Conservation (NYSDEC), 2021. Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances Under NYSDEC's Part 375 Remedial Programs. January.

TABLES

TABLE 1
SYSTEM PERFORMANCE SUMMARY
FORMER A&A BRAKE SERVICE SITE
BROOKLYN, NEW YORK

SDG	Method	Basis	Sample ID	Lab ID	Analyte	Fraction	Reportable Result	Reported Result	Validated Result	Reason for Qualifier
L2338623	E1633	NA	DUP01-20230706	L2338623-02	Perfluorobutanoic acid (PFBA)	N	Yes	22.7	22.7 J	FDP
L2338623	E1633	NA	DUP01-20230706	L2338623-02	Perfluorohexanesulfonic acid (PFHxS)	N	Yes	0.502 J	0.502 J	FDP
L2338623	E1633	NA	DUP01-20230706	L2338623-02	Perfluorooctanoic acid (PFOA)	N	Yes	69.7	69.7 J	FDP
L2338623	E1633	NA	DUP01-20230706	L2338623-02	Perfluoropentanoic acid (PFPeA)	N	Yes	22.1	22.1 J	FDP
L2338623	E1633	NA	DUP01-20230706	L2338623-02	US EPA PFAS (PFOS + PFOA)	N	Yes	69.7	69.7 J	FDP
L2338623	SW8270ESIM	NA	DUP01-20230706	L2338623-02	Acenaphthene	N	Yes	9.8	9.8 J	FDP
L2338623	SW8270ESIM	NA	DUP01-20230706	L2338623-02	Fluorene	N	Yes	0.74	0.74 J	FDP
L2338623	SW8270ESIM	NA	DUP01-20230706	L2338623-02	Naphthalene	N	Yes	0.22	0.22 J	FDP
L2338623	SW8270ESIM	NA	DUP01-20230706	L2338623-02	Phenanthrene	N	Yes	0.03 J	0.03 J	FDP
L2338623	E1633	NA	MW-2-20230706	L2338623-01	Perfluorobutanoic acid (PFBA)	N	Yes	33.6	33.6 J	FDP
L2338623	E1633	NA	MW-2-20230706	L2338623-01	Perfluorohexanesulfonic acid (PFHxS)	N	Yes	5.27	5.27 J	FDP
L2338623	E1633	NA	MW-2-20230706	L2338623-01	US EPA PFAS (PFOS + PFOA)	N	Yes	105	105 J	FDP
L2338623	SW8270ESIM	NA	MW-2-20230706	L2338623-01	Fluorene	N	Yes	2.9	2.9 J	FDP
L2338623	SW8270ESIM	NA	MW-2-20230706	L2338623-01	Naphthalene	N	Yes	0.52	0.52 J	FDP
L2338623	SW8270ESIM	NA	MW-2-20230706	L2338623-01	Phenanthrene	N	Yes	0.38	0.38 J	FDP
L2338623	SW8270ESIM	NA	MW-2-20230706	L2338623-01	Acenaphthene	N	Yes	17	17 J	FDP, MSD
L2338623	E1633	NA	DUP01-20230706	L2338623-02	6:2 Fluorotelomer sulfonic acid (6:2 FTS)	N	Yes	U	UJ	IDL
L2338623	E1633	NA	DUP01-20230706	L2338623-02	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	N	Yes	U	UJ	IDL
L2338623	E1633	NA	MW-2-20230706	L2338623-01	6:2 Fluorotelomer sulfonic acid (6:2 FTS)	N	Yes	U	UJ	IDL
L2338623	E1633	NA	MW-2-20230706	L2338623-01	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	N	Yes	U	UJ	IDL
L2340792	E1633	NA	MW-3-20230717	L2340792-02	6:2 Fluorotelomer sulfonic acid (6:2 FTS)	N	Yes	U	UJ	IDL
L2340792	E1633	NA	MW-3-20230717	L2340792-02	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	N	Yes	U	UJ	IDL
L2338623	E1633	NA	DUP01-20230706	L2338623-02	Perfluorononanoic acid (PFNA)	N	Yes	1.59 J	1.59 J	LCS
L2338623	SW8270E	NA	DUP01-20230706	L2338623-02	4-Chloroaniline	N	Yes	U	R	LCS
L2340792	SW8270E	NA	FB-20230717	L2340792-04	Benzoic acid	N	Yes	U	R	LCS
L2340792	SW6020B	NA	MW-1-20230717	L2340792-01	Copper	T	Yes	0.00468	0.00468 J+	LCS
L2340792	SW8270E	NA	MW-1-20230717	L2340792-01	Benzoic acid	N	Yes	U	R	LCS
L2338623	E1633	NA	MW-2-20230706	L2338623-01	Perfluorononanoic acid (PFNA)	N	Yes	1.6	1.6 J	LCS
L2340792	SW6020B	NA	MW-3-20230717	L2340792-02	Copper	T	Yes	0.02251	0.02251 J+	LCS
L2340792	SW8270E	NA	MW-3-20230717	L2340792-02	Benzoic acid	N	Yes	U	R	LCS
L2340792	SW6020B	NA	MW-4-20230717	L2340792-03	Copper	T	Yes	0.00267	0.00267 J+	LCS
L2340792	SW8270E	NA	MW-4-20230717	L2340792-03	Benzoic acid	N	Yes	U	R	LCS
L2338623	SW8270E	NA	MW-2-20230706	L2338623-01	4-Chloroaniline	N	Yes	U	R	LCS, MSD

TABLE 1
SYSTEM PERFORMANCE SUMMARY
FORMER A&A BRAKE SERVICE SITE
BROOKLYN, NEW YORK

SDG	Method	Basis	Sample ID	Lab ID	Analyte	Fraction	Reportable Result	Reported Result	Validated Result	Reason for Qualifier
L2338623	SW8270ESIM	NA	DUP01-20230706	L2338623-02	2-Methylnaphthalene	N	Yes	0.03 J	0.1 U	MBK
L2340792	SW8270ESIM	NA	MW-1-20230717	L2340792-01	2-Methylnaphthalene	N	Yes	0.02 J	0.1 U	MBK
L2340792	SW8270ESIM	NA	MW-1-20230717	L2340792-01	Acenaphthene	N	Yes	0.09 J	0.1 U	MBK
L2338623	SW8270ESIM	NA	MW-2-20230706	L2338623-01	2-Methylnaphthalene	N	Yes	0.09 J	0.1 U	MBK
L2340792	SW8270ESIM	NA	MW-3-20230717	L2340792-02	2-Methylnaphthalene	N	Yes	0.13	0.13 J+	MBK
L2340792	SW8270ESIM	NA	MW-3-20230717	L2340792-02	Acenaphthene	N	Yes	0.05 J	0.1 U	MBK
L2340792	SW8270ESIM	NA	MW-3-20230717	L2340792-02	Naphthalene	N	Yes	0.41	0.41 J+	MBK
L2340792	SW8270ESIM	NA	MW-1-20230717	L2340792-01	Naphthalene	N	Yes	0.33	0.33 J+	MBK, SUR
L2338623	SW6020B	NA	DUP01-20230706	L2338623-02	Magnesium	T	Yes	24.1	24.1 J	MSD
L2338623	E1633	NA	MW-2-20230706	L2338623-01	N-Methyl Perfluorooctanesulfonamidoacetic Acid (MeFOSAA)	N	Yes	U	UJ	MSD
L2338623	E1633	NA	MW-2-20230706	L2338623-01	Perfluorodecanesulfonic acid (PFDS)	N	Yes	U	UJ	MSD
L2338623	SW6020B	NA	MW-2-20230706	L2338623-01	Magnesium	T	Yes	26.4	26.4 J	MSD
L2338623	SW8270E	NA	MW-2-20230706	L2338623-01	3,3'-Dichlorobenzidine	N	Yes	U	R	MSD
L2338623	SW8270E	NA	MW-2-20230706	L2338623-01	4-Nitroaniline	N	Yes	U	R	MSD
L2338623	SW8270ESIM	NA	MW-2-20230706	L2338623-01	1,4-Dioxane	N	Yes	119 J	119 J	MSD
L2338623	E1633	NA	MW-2-20230706	L2338623-01	Perfluorooctanoic acid (PFOA)	N	Yes	105	105 J	MSD, FDP
L2338623	E1633	NA	MW-2-20230706	L2338623-01	Perfluoropentanoic acid (PFPeA)	N	Yes	60	60 J	MSD, FDP
L2340792	SW8270ESIM	NA	MW-1-20230717	L2340792-01	2-Methylnaphthalene	N	No	0.06 J	0.06 J+	SUR
L2340792	SW8270ESIM	NA	MW-1-20230717	L2340792-01	Acenaphthene	N	No	0.25	0.25 J+	SUR
L2340792	SW8270ESIM	NA	MW-1-20230717	L2340792-01	Acenaphthylene	N	Yes	0.05 J	0.05 J+	SUR
L2340792	SW8270ESIM	NA	MW-1-20230717	L2340792-01	Acenaphthylene	N	No	0.09 J	0.09 J+	SUR
L2340792	SW8270ESIM	NA	MW-1-20230717	L2340792-01	Anthracene	N	Yes	0.02 J	0.02 J+	SUR
L2340792	SW8270ESIM	NA	MW-1-20230717	L2340792-01	Anthracene	N	No	0.04 J	0.04 J+	SUR
L2340792	SW8270ESIM	NA	MW-1-20230717	L2340792-01	Benzo(a)anthracene	N	Yes	0.02 J	0.02 J+	SUR
L2340792	SW8270ESIM	NA	MW-1-20230717	L2340792-01	Benzo(a)pyrene	N	No	0.02 J	0.02 J+	SUR
L2340792	SW8270ESIM	NA	MW-1-20230717	L2340792-01	Benzo(b)fluoranthene	N	No	0.02 J	0.02 J+	SUR
L2340792	SW8270ESIM	NA	MW-1-20230717	L2340792-01	Benzo(g,h,i)perylene	N	No	0.02 J	0.02 J+	SUR
L2340792	SW8270ESIM	NA	MW-1-20230717	L2340792-01	Benzo(k)fluoranthene	N	No	0.02 J	0.02 J+	SUR
L2340792	SW8270ESIM	NA	MW-1-20230717	L2340792-01	Dibenz(a,h)anthracene	N	No	0.01 J	0.01 J+	SUR
L2340792	SW8270ESIM	NA	MW-1-20230717	L2340792-01	Fluoranthene	N	No	0.03 J	0.03 J+	SUR

TABLE 1
SYSTEM PERFORMANCE SUMMARY
FORMER A&A BRAKE SERVICE SITE
BROOKLYN, NEW YORK

SDG	Method	Basis	Sample ID	Lab ID	Analyte	Fraction	Reportable Result	Reported Result	Validated Result	Reason for Qualifier
L2340792	SW8270ESIM	NA	MW-1-20230717	L2340792-01	Fluorene	N	Yes	0.01 J	0.01 J+	SUR
L2340792	SW8270ESIM	NA	MW-1-20230717	L2340792-01	Fluorene	N	No	0.03 J	0.03 J+	SUR
L2340792	SW8270ESIM	NA	MW-1-20230717	L2340792-01	Indeno(1,2,3-cd)pyrene	N	No	0.01 J	0.01 J+	SUR
L2340792	SW8270ESIM	NA	MW-1-20230717	L2340792-01	Naphthalene	N	No	1.2	1.2 J+	SUR
L2340792	SW8270ESIM	NA	MW-1-20230717	L2340792-01	Phenanthrene	N	No	0.05 J	0.05 J+	SUR
L2340792	SW8270ESIM	NA	MW-3-20230717	L2340792-02	2-Methylnaphthalene	N	No	0.1 J	0.1 J+	SUR
L2340792	SW8270ESIM	NA	MW-3-20230717	L2340792-02	Acenaphthene	N	No	0.03 J	0.03 J+	SUR
L2340792	SW8270ESIM	NA	MW-3-20230717	L2340792-02	Acenaphthylene	N	No	0.04 J	0.04 J+	SUR
L2340792	SW8270ESIM	NA	MW-3-20230717	L2340792-02	Anthracene	N	No	0.06 J	0.06 J+	SUR
L2340792	SW8270ESIM	NA	MW-3-20230717	L2340792-02	Benzo(a)anthracene	N	No	0.04 J	0.04 J+	SUR
L2340792	SW8270ESIM	NA	MW-3-20230717	L2340792-02	Benzo(a)pyrene	N	No	0.04 J	0.04 J+	SUR
L2340792	SW8270ESIM	NA	MW-3-20230717	L2340792-02	Benzo(b)fluoranthene	N	No	0.04 J	0.04 J+	SUR
L2340792	SW8270ESIM	NA	MW-3-20230717	L2340792-02	Benzo(g,h,i)perylene	N	No	0.02 J	0.02 J+	SUR
L2340792	SW8270ESIM	NA	MW-3-20230717	L2340792-02	Benzo(k)fluoranthene	N	No	0.02 J	0.02 J+	SUR
L2340792	SW8270ESIM	NA	MW-3-20230717	L2340792-02	Chrysene	N	No	0.04 J	0.04 J+	SUR
L2340792	SW8270ESIM	NA	MW-3-20230717	L2340792-02	Fluoranthene	N	No	0.05 J	0.05 J+	SUR
L2340792	SW8270ESIM	NA	MW-3-20230717	L2340792-02	Indeno(1,2,3-cd)pyrene	N	No	0.03 J	0.03 J+	SUR
L2340792	SW8270ESIM	NA	MW-3-20230717	L2340792-02	Naphthalene	N	No	0.66	0.66 J+	SUR
L2340792	SW8270ESIM	NA	MW-3-20230717	L2340792-02	Phenanthrene	N	No	0.04 J	0.04 J+	SUR

Notes

FDP = Field duplicate qualifier due to an exceedance of the specified limits.

IDL = Isotope dilution outside the specified limits.

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only.

J+ = The result is an estimated quantity, but the result may be biased high.

LCS = Laboratory control/laboratory control spike duplicate percent recoveries or relative percent difference were outside the specified limits.

MBK = Method blank contamination.

MSD = Matrix spike/matrix spike duplicate percent recoveries or relative percent difference were outside the specified limits.

R = The sample results were rejected as unusable; the compound may or may not be present in the sample.

SDG = sample delivery group

SUR = Surrogate percent recovery outside the specified limits.

U = The compound was analyzed for but not detected.

UJ = The compound was not detected above the reported sample quantitation limit; however, the reported limit is estimated and may or may not represent the actual limit of quantitation.

Haley & Aldrich, Inc.
600 South Meyer Ave.
Suite 100
Tucson, AZ 85701
520.289.8621

Data Usability Summary Report

Project Name: Sackett Street

Project Description: Groundwater Samples

Sample Date(s): 6 July through 17 July 2023

Analytical Laboratory: Alpha Analytical – Westborough, MA

Validation Performed by: Kirkland Broadwell

Validation Reviewed by: Katherine Miller

Validation Date: 8 August 2023

Haley & Aldrich, Inc. prepared this Data Usability Summary Report (DUSR) to summarize the review and validation of the analytical results for Sample Delivery Group(s) (SDG) listed. This DUSR is organized into the following sections:

1. Sample Delivery Group Number L2343860
2. Explanations
3. Glossary
4. Abbreviations
5. Qualifiers

References.

This data validation and usability assessment was performed per the guidance and requirements established by the United States Environmental Protection Agency (USEPA) using the following reference materials:

- National Functional Guidelines for Inorganic Data Review; and
- The project-specific Quality Assurance Project Plan (QAPP), herein referred to as the specified limits (see references section).

Data reported in this sampling event were reported to the laboratory method detection limit (MDL). Results found between the MDL and reporting limit (RL) are flagged J as estimated.

Sample data were qualified in accordance with the laboratory's standard operating procedures (SOPs). The results presented in each laboratory report were found to be compliant with the data quality objectives (DQOs) for the project and therefore usable; any exceptions are noted in the following pages.

1. Sample Delivery Group Number L2343860

1.1 SAMPLE MANAGEMENT

This DUSR summarizes the review of SDG numbers:

- L2343860, dated 4 August 2023.

Samples were collected, preserved, and shipped following standard chain of custody (COC) protocols.

Samples were also received appropriately, identified correctly, and analyzed according to the COC. Issues noted with sample management are listed below:

- Custody seals were not used on the sample coolers.

Analyses were performed on the following samples:

Sample ID	Sample Type	Lab ID	Sample Date	Matrix	Methods
MW-2-20230706	N	L2343860-01	07/06/2023	WG	A, B
DUP01-20230706	FD	L2343860-02	07/06/2023	WG	A, B
MW-1-20230717	N	L2343860-03	07/17/2023	WG	A, B
MW-3-20230717	N	L2343860-04	07/17/2023	WG	A, B
MW-4-20230717	N	L2343860-05	07/17/2023	WG	A, B
FB-20230717	N	L2343860-06	07/17/2023	WQ	A, B

Method Holding Times			
A.	SW6020B	Metals	180 days for liquid, preserved
B.	SW7470A	Mercury (in Liquids)	28 days extraction / 48 hours analysis for liquid, preserved

1.2 HOLDING TIMES/PRESERVATION

The samples arrived at the laboratory at the proper temperature and were prepared and analyzed within the holding time and preservation criteria specified per method protocol.

1.3 REPORTING LIMITS AND SAMPLE DILUTIONS

The RLs for the samples within this SDG met or were below the minimum RL requirements specified by the project-specific QAPP.

1.4 LABORATORY CONTROL SAMPLES

Refer to Section E 1.3. Compounds associated with the laboratory control samples (LCS) analyses associated with client samples exhibited recoveries within the specified limits.

1.5 MATRIX SPIKE SAMPLES

Refer to Section E 1.4. The sample(s) below were used for matrix spike/matrix spike duplicate (MS/MSD):

Lab Sample Number	Matrix Spike/Matrix Spike Duplicate Sample Client ID	Method(s)
L2343860-01	MW-2-20230706	SW6020B, SW7470A

The MS/MSD recoveries and the relative percent difference (RPD) between the MS and MSD results were within the specified limits, with the following exceptions:

Sample Type	Method	Parent Sample	Analyte	%R/RPD	Qualifier	Affected Samples
MS/MSD	SW6020B	MW-2-20230706	Calcium	60%/0%	NA	None, native sample > 4x the spike added
MSD	SW6020B	MW-2-20230706	Magnesium	74%	J/UJ	All samples in SDG
MSD	SW6020B	MW-2-20230706	Sodium	0%	NA	None, native sample > 4x the spike added

1.6 BLANK SAMPLE ANALYSIS

Refer to Section E 1.5. Method blank samples had no detections, indicating that no contamination from laboratory activities occurred, with the following exceptions:

Blank Type	Batch ID	Analyte Detected in Blank	Concentration (mg/L)	Qualifier	Affected Samples
Method Blank	WG1809983	Aluminum	0.0129 J	RL U	L2343860-01 through -04, -06
	WG1809983	Chromium	0.00150 J	RL U	L2343860-01 through -05
	WG1809983	Manganese	0.00047 J	NA	None, samples are >10x blank

The analysis of the blank samples for field quality control was free of target compounds, with the following exceptions:

Blank Type	Date of Blank	Analyte Detected in Blank	Concentration (mg/L)	Qualifier	Affected Samples
Field Blank	7/17/2023	Aluminum	0.00994 J	RL U	L2343860-01 through -04, -06
		Barium	0.00063	NA	None, samples are >10x blank
		Calcium	0.0454 J	NA	None, samples are >10x blank

Blank Type	Date of Blank	Analyte Detected in Blank	Concentration (mg/L)	Qualifier	Affected Samples
		Sodium	0.472	NA	None, samples are >10x blank

1.7 DUPLICATE SAMPLE ANALYSIS

Refer to Section E 1.6. The laboratory did not analyze any laboratory duplicates as per the method or laboratory SOP.

The following sample was used for field duplicate analysis. RPDs were all below 35 percent (or the absolute difference rule was satisfied if detects were less than five times the RL). Any exceptions are noted below and qualified.

Primary Sample ID	Duplicate Sample ID	Methods
MW-2-20230706	DUP01-20230706	SW6020B, SW7470A

Field Duplicate RPD Calculations:

Methods: SW6020B, SW7470A				
Analyte (mg/L)	Primary Sample ID	Duplicate Sample ID	% RPD	Qualification
	MW-2-20230706	DUP01-20230706		
Barium	0.1049	0.06914	41	J/UJ, RPD>35

1.8 PRECISION AND ACCURACY

Refer to Section E 1.7. Where required by the method, some measurement of analytical accuracy and precision was reported for each method with the site samples.

1.9 SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

The results presented in this report were found to comply with the DQOs for the project and the guidelines specified by the analytical method. Based on the review of this report, the data are useable and acceptable as no data was rejected. The qualifiers applied to this dataset are summarized in the table below.

Sample ID	Analyte	Reported Result	Validated Result	Reason for Qualifier
MW-2-20230706	Sodium	158	158 J	MSD % recovery low
DUP01-20230706	Sodium	148	148 J	MSD % recovery low
FB-20230717	Sodium	0.472	0.472 J	MSD % recovery low
MW-1-20230717	Sodium	227	227 J	MSD % recovery low
MW-3-20230717	Sodium	122	122 J	MSD % recovery low
MW-4-20230717	Sodium	105	105 J	MSD % recovery low
DUP01-20230706	Chromium	0.00025	RL U	Method blank detection
MW-2-20230706	Chromium	0.00024	RL U	Method blank detection
MW-1-20230717	Chromium	0.00044	RL U	Method blank detection
MW-3-20230717	Chromium	0.00103	RL U	Method blank detection

Sample ID	Analyte	Reported Result	Validated Result	Reason for Qualifier
MW-4-20230717	Chromium	0.00159	RL U	Method blank detection
MW-2-20230706	Aluminum	0.0107	RL U	Method blank and field blank detection
DUP01-20230706	Aluminum	0.00424	RL U	Method blank and field blank detection
FB-20230717	Aluminum	0.00994	RL U	Method blank and field blank detection
MW-1-20230717	Aluminum	0.0104	RL U	Method blank and field blank detection
MW-3-20230717	Aluminum	0.00328	RL U	Method blank and field blank detection
MW-2-20230706	Barium	0.1049	0.1049	Field duplicate calculations
DUP01-20230706	Barium	0.06914	0.06914	Field duplicate calculations

2. Explanations

The following explanations include more detailed information regarding each of the sections in the DUSR above. Not all sections in the Explanations are represented:

- E 1.3 Laboratory Control Samples
  - The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) analyses are used to assess the precision and accuracy of the analytical method independent of matrix interferences.
- E 1.4 Matrix Spike Samples
  - MS/MSD data are used to assess the precision and accuracy of the analytical method and evaluate the effects of the sample matrix on the sample preparation procedures and measurement methodologies.
  - For inorganic methods, when a matrix spike recovery falls outside of the control limits and the sample result is less than four times the spike added, a PDS is performed.
- E 1.5 Blank Sample Analysis
  - Method blanks are prepared by the analytical laboratory and analyzed concurrently with the project samples to assess possible laboratory contamination.
  - Field blanks are prepared to identify contamination that may have been introduced during field activity. Equipment blanks are prepared to identify contamination that may have been introduced while decontaminating sampling equipment. Trip blanks are prepared when volatile analysis is requested to identify contamination that may have been introduced during transport.
- E 1.6 Laboratory and Field Duplicate Sample Analysis
  - The laboratory duplicate sample analysis is used by the laboratory at the time of the analysis to demonstrate acceptable method precision. The RPD or absolute difference was evaluated for each duplicate sample pair to monitor the reproducibility of the data.
  - The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. The RPD or absolute difference was evaluated for each duplicate sample pair to monitor the reproducibility of the data.
- E 1.7 Precision and Accuracy
  - Precision measures the reproducibility of repetitive measurements. In a laboratory environment, this will be measured by determining the RPD found between a primary and a duplicate sample. This can be an LCS/LCSD pair, an MS/MSD pair, a laboratory duplicate performed on a site sample, or a field duplicate collected and analyzed concurrently with a site sample.
  - Accuracy is a statistical measurement of the correctness of a measured value and includes components of random error (variability caused by imprecision) and systematic error. In a laboratory environment, this will be measured by determining the percent recovery (%R) of certain spiked compounds. This can be assessed using LCS, blank spike, MS, and/or surrogate recoveries.

3. Glossary

Not all of the following symbols, acronyms, or qualifiers occur in this document.

- Sample Types:
  - EB Equipment Blank Sample
  - FB Field Blank Sample
  - FD Field Duplicate Sample
  - N Primary Sample
  - TB Trip Blank Sample
- Units:
  - µg/kg micrograms per kilogram
  - µg/L micrograms per liter
  - µg/m^3 micrograms per cubic meter
  - mg/kg milligrams per kilogram
  - mg/L milligrams per liter
  - ppb v/v parts per billion volume/volume
  - pCi/L picocuries per liter
  - pg/g picograms per gram
- Matrices:
  - AA Ambient Air
  - GS Soil Gas
  - GW/WG Groundwater
  - QW Water Quality
  - IA Indoor Air
  - SE Sediment
  - SO Soil
  - SSV Sub-slab Vapor
  - WQ Water Quality control matrix
  - WS Surface Water
- Table Footnotes:
  - NA Not applicable
  - ND Non-detect
  - NR Not reported
- Common Symbols:
  - % percent
  - < less than
  - ≤ less than or equal to
  - > greater than
  - ≥ greater than or equal to
  - = equal
  - °C degrees Celsius
  - ± plus or minus
  - ~ approximately
  - x times (multiplier)
- Fractions:
  - N Normal (method cannot be filtered)
  - D Dissolved (filtered)
  - T Total (unfiltered)

4. Abbreviations

%D	Percent Difference
%R	Percent Recovery
%RSD	Percent Relative Standard Deviation
%v/v	Percent volume by volume
2s	2 sigma
4,4-DDT	4 4-dichlorodiphenyltrichloroethane
Abs Diff	Absolute Difference
amu	atomic mass unit
BPJ	Best Professional Judgement
BS	Blank Spike
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CCVL	Continuing Calibration Verification Low
COC	Chain of Custody
COM	Combined Isotope Calculation
Cr (VI)	Hexavalent Chromium
CRI	Collision Reaction Interface
DoD	Department of Defense
DQO	data quality objective
DUSR	Data Usability Summary Report
EIS	Extraction Internal Standard
EMPC	Estimated Maximum Possible Concentration
FBK	Field Blank Contamination
FDP	Field Duplicate
GC	Gas Chromatograph
GC/MS	Gas Chromatography/Mass Spectrometry
GPC	Gel Permeation Chromatography
H_2	Hydrogen gas
HCl	Hydrochloric Acid
ICAL	Initial Calibration
ICB	Initial Calibration Blank
ICP/MS	Inductively Coupled Plasma/Mass Spectrometry
ICV	Initial Calibration Verification
ICVL	Initial Calibration Verification Low
IPA	Isopropyl Alcohol
LC	Laboratory Control
LCS/LCSD	Laboratory Control Sample/Laboratory Control Sample Duplicate
MBK	Method Blank Contamination
MDC	Minimum Detectable Concentration
MDL	Laboratory Method Detection Limit
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NA	not applicable
ND	Non-Detect
NFG	National Functional Guidelines
NH_3	Ammonia
NYSDEC	New York State Department of Environmental Conservation
PAH	Polycyclic Aromatic Hydrocarbon
PCB	Polychlorinated Biphenyl
PDS	Post-Digestion Spike
PEM	Performance Evaluation Mixture
PFAS	Per- and Polyfluoroalkyl Substances
PFBA	Perfluorbutanoic Acid
PFD	Perfluorodecalin
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctane sulfonate
PFPeA	Perfluoropentanoic Acid
QAPP	Quality Assurance Project Plan
QC	Quality Control
QSM	Quality Systems Manual
R^2	R-squared value
Ra-226	Radium-226
Ra-228	Radium-228
RESC	Resolution Check Measure
RL	Laboratory Reporting Limit
RPD	Relative Percent Difference
RRF	Relative Response Factor
RT	Retention Time
SAP	Sampling Analysis Plan
SDG	Sample Delivery Group
SIM	Selected ion monitoring
SOP	Standard Operating Procedure
SPE	Solid-Phase Extraction
SVOC	Semi-Volatile Organic Compound
TCLP	Toxicity Characteristic Leaching Procedure
TIC	Tentatively Identified Compound
TKN	Total Kjeldahl Nitrogen
TPH	Total Petroleum Hydrocarbon
TPU	Total Propagated Uncertainty
USEPA	U.S. Environmental Protection Agency
VOC	Volatile Organic Compound
WP	Work Plan

5. Qualifiers

The qualifiers below are from the USEPA National Functional Guidelines and the data in the DUSR may contain these qualifiers:

- Concentration (C) Qualifiers:

  U The compound was analyzed for but not detected. The associated value is either the compound quantitation limit if not detected by the analytical instrument or could be the reported or blank concentration if qualified by blank contamination. This can also be displayed as less than the associated compound quantitation limit (<RL or <MDL), or "ND".

  B The compound was found in the sample and its associated blank. Its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers:

  E The compound was quantitated above the calibration range.

  D The concentration is based on a diluted sample analysis.

- Validation Qualifiers:

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  J+ The result is an estimated quantity, but the result may be biased high.

  J- The result is an estimated quantity, but the result may be biased low.

  J/UJ as listed in exception tables J applies to detected data and UJ applies to non-detected data as reported by the laboratory.

  UJ The compound was not detected above the reported sample quantitation limit; however, the reported limit is estimated and may or may not represent the actual limit of quantitation.

  NJ The analysis indicated the presence of a compound for which there is presumptive evidence to make a tentative identification; the associated numerical value is an estimated concentration only.

  R The sample results were rejected as unusable; the compound may or may not be present in the sample.

  S Result is suspect. See DUSR for details.

References

1. Haley & Aldrich, Inc, 2023. Quality Assurance Project Plan. Remedial Investigation Work Plan. Former A&A Brake Service Site. NYSDEC BCP Site C224372. Brooklyn New York. March.

2. United States Environmental Protection Agency, 2020. National Functional Guidelines for Inorganic Superfund Methods Data Review. EPA-542-R-20-006. November.

Data Usability Summary Report

Project Name: Sackett Street

Project Description: Soil Samples

Sample Date(s): 26 March 2024 through 5 April 2024

Analytical Laboratory: Alpha Analytical Laboratories, INC. – Westborough, MA

Validation Performed by: Santa McKenna

Validation Reviewed by: Katherine Miller

Validation Date: 29 April 2024

Haley & Aldrich, Inc. prepared this Data Usability Summary Report (DUSR) to summarize the review and validation of the analytical results for Sample Delivery Group(s) (SDG) listed. This DUSR is organized into the following sections:

1. **Sample Delivery Group Numbers**
2. **Precision and Accuracy [for SDG(s) above]**
3. **Explanations**
4. **Glossary**
5. **Abbreviations**
6. **Qualifiers**

References

This data validation and usability assessment was performed per the guidance and requirements established by the United States Environmental Protection Agency (USEPA) using the following reference materials:

- National Functional Guidelines (NFG) for Inorganic Data Review.
- National Functional Guidelines (NFG) for Organic Data Review.
- Data Validation Guidelines for Perfluoroalkyl Substances (PFASs) Analyzed Using USEPA Method 537.
- Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under New York State Department of Environmental Conservation's (NYSDEC's) Part 375 Remedial Programs.
- The project-specific Assurance Project Plan (QAPP), herein referred to as the specified limits (see references section).

Data reported in this sampling event were reported to the laboratory reporting limit (RL) Results found between the MDL and RL are flagged J as estimated.

Sample data were qualified in accordance with the laboratory's standard operating procedures (SOPs). The results presented in each laboratory report were found to be compliant with the data quality objectives (DQOs) for the project and are therefore usable; any exceptions are noted in the following pages.

1. Sample Delivery Group Numbers

1.1 SAMPLE MANAGEMENT

This DUSR summarizes the review of SDG number(s) L2416482, dated 9 April 2024.

- L2418246, dated 15 April 2024;
- L2418559, dated 18 April 2024; and
- L2418782, dated 4/17/2024.

Samples were collected, preserved, and shipped following standard chain of custody (COC) protocols.

- L2416482 presents 77 samples, but only 16 samples were analyzed. The remaining samples were placed on hold by the client.

Analyses were performed on the following samples:

Sample ID	Sample Type	Lab ID	Sample Date	Matrix	Methods
SB-2A_0-0.5	N	L2416482-01	03/26/2024	SO	A, B, C, D, E
SB-2A_1-3	N	L2416482-02	03/26/2024	SO	A, B, C, D, E
SB-2A_3-5	N	L2416482-03	03/26/2024	SO	A, B, C, D, E
SB-2A_5-7	N	L2416482-04	03/26/2024	SO	A, B, C, D, E
SB-2A_7-9	N	L2416482-05	03/26/2024	SO	A, B, C, D, E
SB-2A_9-11	N	L2416482-06	03/26/2024	SO	A, B, C, D, E
SB-2A_12-14	N	L2416482-07	03/26/2024	SO	A, B, C, D, E
SB-3A_0-0.5	N	L2416482-50	03/26/2024	SO	A, B, C, D, E
SB-3A_1-3	N	L2416482-51	03/26/2024	SO	A, B, C, D, E
SB-3A_3-5	N	L2416482-52	03/26/2024	SO	A, B, C, D, E
SB-3A_5-7	N	L2416482-53	03/26/2024	SO	A, B, C, D, E
SB-3A_7-9	N	L2416482-54	03/26/2024	SO	A, B, C, D, E
SB-3A_9-11	N	L2416482-55	03/26/2024	SO	A, B, C, D, E
DUP03_20240326	FD	L2416482-74	03/26/2024	SO	A, B, C, D, E
SB-2A-S1_11-11.5	N	L2416482-76	03/26/2024	SO	A, F, G
TB-01_20240326	TB	L2416482-77	03/26/2024	WQ	F
MW-7-20240403	N	L2418246-01	04/03/2024	WG	F, G, H, I, J, K, L, M
MW-5-20240403	N	L2418246-02	04/03/2024	WG	F, G, H, I, J, K, L, M
MW-3-20240403	N	L2418246-03	04/03/2024	WG	F, G, H, I, J, K, L, M
DUP1_20240403	FD	L2418246-04	04/03/2024	WG	F, G, H, I, J, K, L, M
TRIP BLANK-20240403	TB	L2418246-05	04/03/2024	WQ	F
MW-4_20240404	N	L2418559-01	04/04/2024	WG	F, G, H, I, J, K, L, M
MW-1_20240404	N	L2418559-02	04/04/2024	WG	F, G, H, I, J, K, L, M
FIELD BLANK-20240404	FB	L2418559-03	04/04/2024	WQ	F, G, H, I, J, K, L, M

Sample ID	Sample Type	Lab ID	Sample Date	Matrix	Methods
TRIP BLANK-20240402	TB	L2418559-04	04/02/2024	WQ	F
MW-6_20240405	N	L2418782-01	04/05/2024	WG	F, G, H, I, J, K, L, M
MW-2_20240405	N	L2418782-02	04/05/2024	WG	F, G, H, I, J, K, L, M
TRIP BLANK-20240405	TB	L2418782-03	04/05/2024	WQ	F

Method Holding Times			
A.	SM2540G	Total Solids	7 days for solid unpreserved
B.	SW6010D	Metals	180 days for solid unpreserved
C.	SW6010DR	TCLP Metals	180 days
D.	SW7470AR	TCLP Mercury	28 days
E.	SW7471B	Mercury (in Solids)	28 days extraction / 48 hours analysis for solid, unpreserved
F.	SW8260D	Volatile Organic Compounds (VOCs)	14 days for solid, preserved 14 days for solid unpreserved, 14 days for liquid, preserved 7 days for liquid unpreserved
G.	SW8270E	Semivolatile Organic Compounds (SVOCs)	14 days extraction / 40 days analysis for solid, unpreserved, 7 days extraction / 40 days analysis for liquid, unpreserved
H.	E1633	PFAS	14 days extraction / 40 days analysis*
I.	SW8270ESIM	Polycyclic Aromatic Hydrocarbons (PAHs)	7 days extraction / 40 days analysis for liquid, unpreserved
J.	SW6020B	Metals	180 days for liquid, preserved
K.	SW7470A	Mercury (in Liquids)	28 days extraction / 48 hours analysis for liquid, preserved
L.	SW8081B	Organochlorine Pesticides	14 days
M.	SW8082A	PCBS	14 days

 # days/# days notation indicates the holding time is # days for extraction and then an additional # days for analysis.

1.2 MULTIPLE SAMPLE RESULTS

The laboratory reported multiple results for the samples listed below. The validator chose the results that best met the DQOs of the project.

Lab ID	Analysis Date/Time	Method	Analyte	Qualification
L2416482-76	3/29/2024 12:39:00 PM	8260D	Naphthalene	The sample required the dilution due to results exceedance. The laboratory marked the original results nonreportable, and the reanalysis results were accepted.
L2416482-76	3/26/2024 2:50:00 PM	8270E	2-Methylnaphthalene Naphthalene	

1.3 HOLDING TIMES/PRESERVATION

The samples arrived at the laboratory at the proper temperature and were prepared and analyzed within the holding time and preservation criteria specified per method protocol.

1.4 REPORTING LIMITS AND SAMPLE DILUTIONS

All sample dilutions were reviewed and found to be justified. Any non-detects with elevated reported limits are noted and explained below.

Sample ID	Lab ID	Analyte/ Method	Dilution Factor	Issue/Explanation
Various	Various	Various	X5, x10, x25, x100, x500	Dilution required to bring the concentration of target analytes within the calibration range.
L2418226 L2418559 L2418782	All samples	PFAS	x1	Select analyte's reporting limits above the 1633 required 2 ng/L for multiple analytes.

1.5 REPORTING BASIS (WET/DRY)

Refer to Section E 1.1. Where reported, percent solid results were reviewed and found to be within limits.

1.6 SURROGATE RECOVERY COMPLIANCE

Refer to Section E 1.2. The percent recovery (%R) for each surrogate compound added to each project sample were determined to be within the laboratory-specified quality control (QC) limits.

1.7 LABORATORY CONTROL SAMPLES

Refer to Section E 1.3. Compounds associated with the laboratory control samples/laboratory control sample duplicate (LCS/LCSD) analyses associated with client samples exhibited recoveries and relative percent differences (RPDs) within the specified limits with the following exceptions:

SDG #	Sample Type	Method	Batch ID	Analyte	%R/RPD	Qualifier	Affected Samples
L2416482	LCSD	8260D	WG1903826-4	2-Butanone	67%	J/UJ	L2416482-76
L2416482	LSC/LCSD	8260D	WG1903826-3, -4	2-Hexanone	68%/63%	J/UJ	L2416482-76
L2416482	LSC	8270E	WG1902900-2	Carbazole	48%	J/UJ	L2416482-76
L2416482	LSC/LCSD	8270E	WG1902900-2, -3	1,4-Dioxane	35%/44%	J/UJ	L2416482-76
L2418246	LSC/LCSD	8260D	WG1906529-3, -4	p/m-Xylene	21 RPD	J/None	L2418246-01 through -05

SDG #	Sample Type	Method	Batch ID	Analyte	%R/RPD	Qualifier	Affected Samples
L2418559	LCSD	8270E	WG1905320-3	4-Nitrophenol	82%	J/None	None, samples are ND
L2418559	LCS	8270E	WG1905779-2	Hexachlorobutadiene	38%	J/UJ	L2418559-01
L2418559	LCS	8270E	WG1905779-2	Acenaphthylene	43%	J/UJ	L2418559-01
L2418559	LCS	8270E	WG1905779-2	2-Nitroaniline	49%	J/UJ	L2418559-01
L2418559	LCS	8270E	WG1905779-2	Carbazole	51%	J/UJ	L2418559-01
L2418782	LCS/LCSD	8260D	WG1907435-3,-4	Vinyl acetate	140%/140%	J/None	None, samples are ND
L2418782	LCSD	8260D	WG1907435-4	trans-1,4-Dichloro-2-butene	69%	J/UJ	L2418782-01 through -03
L2418782	LCSD	8270E	WG1906595-3	4-Nitrophenol	81%	J/None	None, samples are ND
L2418782	LCS	6010	WG1905987-2	Dissolved Mercury	203%	J/None	None, samples are ND
L2418559	LCS	1633	WG1908440-2	3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	43%	J/UJ	L2418559-01 through -03

1.8 MATRIX SPIKE SAMPLES

Refer to Section E 1.4. The sample(s) below were used for matrix spike/matrix spike duplicate (MS/MSD):

Lab Sample Number	Matrix Spike/Matrix Spike Duplicate Sample Client ID	Method(s)
L2418559-01	MW-4_20240404	SW8060D, SW8270E, SW8082A, SW8081B, SW6010D, E1633

The MS/MSD recoveries and the relative percent difference (RPD) between the MS and MSD results were within the specified limits, with the following exceptions:

Sample Type	Method	Parent Sample	Analyte	%R/RPD	Qualifier	Affected Samples
MS	SW6010D	MW4_20240404	Total Calcium	127%	NA	None, native sample > 4x the spike added

Sample Type	Method	Parent Sample	Analyte	%R/RPD	Qualifier	Affected Samples
MS	SW6010D	MW4_20240404	Dissolved Calcium	156%	NA	None, native sample > 4x the spike added
MSD	SW6010D	MW4_20240404	Dissolved Sodium	173%	NA	None, native sample > 4x the spike added
MS/MSD	SW6010D	MW4_20240404	Dissolved Magnesium	161%/135%	J/None	L2418559-01 through -03
MS/MSD	SW8270E	MW4_20240404	Bis(2-chloroethyl)ether	32 RPD	J/None	None, sample is ND
MS/MSD	SW8270E	MW4_20240404	1,3-Dichlorobenzene	32 RPD	J/None	None, sample is ND
MS/MSD	SW8270E	MW4_20240404	1,4-Dichlorobenzene	32 RPD	J/None	None, sample is ND
MS/MSD	SW8270E	MW4_20240404	4-Chlorophenyl phenyl ether	33 RPD	J/None	None, sample is ND
MS/MSD	SW8270E	MW4_20240404	Bis(2-chloroisopropyl)ether	31 RPD	J/None	None, sample is ND
MS/MSD	SW8270E	MW4_20240404	Nitrobenzene	32 RPD	J/None	None, sample is ND
MS/MSD	SW8270E	MW4_20240404	n-Nitrosodi-n-propylamine	32 RPD	J/None	None, sample is ND
MS/MSD	SW8270E	MW4_20240404	Di-n-butylphthalate	31 RPD	J/None	None, sample is ND
MS/MSD	SW8270E	MW4_20240404	Diethyl phthalate	33 RPD	J/None	None, sample is ND
MS	SW8270E	MW4_20240404	2-Nitroaniline	51%	J/UJ	None, sample is ND
MS/MSD	SW8270E	MW4_20240404	Acetophenone	33 RPD	J/None	None, sample is ND
MS/MSD	SW8270E	MW4_20240404	2,4-Dichlorophenol	31 RPD	J/None	None, sample is ND
MS/MSD	SW8270E	MW4_20240404	2,4-Dimethylphenol	35 RPD	J/None	None, sample is ND
MS/MSD	SW8270E	MW4_20240404	2-Nitrophenol	31 RPD	J/None	None, sample is ND
MS/MSD	SW8270E	MW4_20240404	3-Methylphenol/4-Methylphenol	31 RPD	J/None	None, sample is ND
MS/MSD	SW8270E	MW4_20240404	2,4,5-Trichlorophenol	31 RPD	J/None	None, sample is ND
MS	SW8270E	MW4_20240404	Carbazole	53%	J/UJ	L2418559-001

1.9 BLANK SAMPLE ANALYSIS

Refer to Section E 1.5. Method blank samples had no detections, indicating that no contamination from laboratory activities occurred, with the following exceptions:

Blank Type	Batch ID	Analyte Detected in Blank	Concentration (µg/L)	Qualifier	Affected Samples
Method Blank	WG1905316-1	Naphthalene	0.06 J	J+	L2418246-03
				Result U	L2418559-02
	WG1906599-1		0.08 J	RL U	L2418782-02
	WG1905316-1	Benzo(b)fluoranthene	0.1 J	J+	L2418246-01
				RL U	L2418246-03 L2418559-02
	WG1905316-1	Benzo(ghi)perylene	0.05 J	J+	L2418246-01
	WG1905316-1	Dibenzo(a,h)anthracene	0.02 J	RL U	L2418246-01
	WG1905316-1	Indeno(1,2,3-cd)pyrene	0.04 J	J+	L2418246-01
				RL U	L2418559-02
	WG1904914-1	Arsenic	0.00019 J mg/L	J+	L2418246-03
	WG1904914-1	Manganese	0.00148 J	J+	L2418246-03
	WG1906599-1	Fluorene	0.02 J	RL U	L2418782-02
	WG1906599-1	Phenanthrene	0.02 J	RL U	L2418782-02
				Result U	L2418782-01
	WG1906599-1	2-Methylnaphthalene	0.03 J	J+	L2418782-01
	WG1905591-1	Total Arsenic	0.00023 J	NA	None, samples are >10x blank

The analysis of the blank samples for field quality control was free of target compounds.

1.10 DUPLICATE SAMPLE ANALYSIS

Refer to Section E 1.6. The following sample(s) were used for laboratory duplicate analysis and the RPDs were all below 20 percent (or the absolute difference rule was satisfied if detects were less than 5 times the RL):

Lab Sample Number	Laboratory Duplicate Sample Client ID	Method(s)
L2416482-01	SB-2A_0-0.5	SM2540G

The following sample(s) were used for field duplicate analysis. RPDs were all below 50 percent for soil/sediment (or the absolute difference rule was satisfied if detects were less than 5 times the RL). Any exceptions are noted below and qualified.

Primary Sample ID	Duplicate Sample ID	Method(s)
SB-2A_12-14	DUP03_20240326	SM2540G SW6010D SW7470A SW7471B

Field Duplicate RPD Calculations:

Method	Analyte (mg/kg)	Primary Sample ID	Duplicate Sample ID	% RPD	Qualification
		SB-2A_12-14	DUP03_20240326		
SW8260	1,1,1-Trichloroethane	302	109	94%	J/UJ, RPD>50
Method	**Analyte (mg/L) for SW6020 (µg/L) for SW8270**	**Primary Sample ID**	**Duplicate Sample ID**	**% RPD**	**Qualification**
		MW-7-20240403	**DUP1_20240403**		
SW6020	Total Arsenic	0.00209	0.00294	NA	J/UJ, Abs. Diff. > RL
SW6020	Total Cobalt	0.00067	0.00161	NA	J/UJ, Abs. Diff. > RL
SW6020	Total Aluminum	0.523	1.63	103	J/UJ, RPD>35
SW6020	Total Barium	0.08077	0.1177	37	J/UJ, RPD>35
SW6020	Total Copper	0.01637	0.03729	78	J/UJ, RPD>35
SW6020	Total Iron	0.914	2.89	104	J/UJ, RPD>35
SW6020	Total Lead	0.01766	0.04667	90	J/UJ, RPD>35
SW6020	Total Manganese	0.03045	0.05372	55	J/UJ, RPD>35
SW8270	Benzo(b)fluoranthene	0.41	1.6	NA	J/UJ, Abs. Diff. > RL
SW8270	Benzo(g,h,i)perylene	0.26	1	NA	J/UJ, Abs. Diff. > RL
SW8270	Benzo(k)fluoranthene	0.15	0.51	NA	J/UJ, Abs. Diff. > RL
SW8270	Dibenz(a,h)anthracene	0.06	0.2	NA	J/UJ, Abs. Diff. > RL
SW8270	Indeno(1,2,3-cd)pyrene	0.22	0.88	NA	J/UJ, Abs. Diff. > RL
SW8270	2-Methylnaphthalene	16	3.1	135	J/UJ, RPD>35
SW8270	Acenaphthylene	1.2	2.5	70	J/UJ, RPD>35
SW8270	Benzo(a)anthracene	0.67	2.2	107	J/UJ, RPD>35
SW8270	Benzo(a)pyrene	0.54	2.2	121	J/UJ, RPD>35
SW8270	Chrysene	0.62	2	105	J/UJ, RPD>35
SW8270	Fluoranthene	3.1	6.2	67	J/UJ, RPD>35
SW8270	Naphthalene	9.1	720	195	J/UJ, RPD>35
SW8270	Phenanthrene	0.55	2.2	120	J/UJ, RPD>35
SW8270	Pyrene	4.4	9.2	71	J/UJ, RPD>35

1.11 PFAS SAMPLE PREPARATION

Refer to Section E 1.14. The laboratory's SOP was reviewed, and the reviewer confirmed it is the laboratory's procedure to use solid-phase extraction (SPE) for sample preparation.

1.12 PFAS IDENTIFICATION

Refer to Section E 1.15. Ion ratios could not be reviewed because the laboratory did not provide an ion ratio summary.

Peaks were reviewed and the reviewer confirmed that, when applicable, the laboratory summed the branched and linear peaks.

1.13 EXTRACTION INTERNAL STANDARDS

Refer to Section E 1.16. Recoveries were reviewed and found to be within the limits of 50 to 150 percent of the initial calibration (ICAL) midpoint standard/ initial continuing calibration verification (CCV), with the following exceptions:

Sample ID	Lab ID	Standard Name	%Recovery	Qualifier	Target analytes
MW-7-20240403	L2418246-01	1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	178%	J-/None	4:2FTS
MW-5-20240403	L2418246-01	1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	196%	J-/None	4:2FTS
MW-5-20240403	L2418246-01	1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	211%	J-/None	6:2FTS
MW-5-20240403	L2418246-01	1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	161%	J-/None	8:2FTS
MW-3-20240403	L2418246-03	1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	169%	J-/None	4:2FTS
DUP1_20240403	L2418246-04	Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	47%	J+/UJ	PFHpS PFOS PFNS PFDS PFDoS
DUP1_20240403	L2418246-04	Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	39%	J+/UJ	PFOSA
DUP1_20240403	L2418246-04	Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	48%	J+/UJ	PFTeDA
DUP1_20240403	L2418246-04	N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	40%	J+/UJ	None, target analytes not reported

DUP1_20240403	L2418246-04	N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	39%	J+/UJ	None, target analytes not reported
DUP1_20240403	L2418246-04	N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	48%	J+/UJ	None, target analytes not reported
MW-4_20240404	L2418559-01	1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	158%	J-/None	4:2FTS
MW-1_20240404	L2418559-02	1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	161%	J-/None	4:2FTS
MW-1_20240404	L2418559-02	1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	162%	J-/None	8:2FTS
MW-6_20240405	L2418782-01	1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	156%	J-/None	4:2FTS
MW-2_20240405	L2418782-02	1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	164%	J-/None	4:2FTS
MW-2_20240405	L2418782-02	1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	199%	J-/None	6:2FTS
MW-2_20240405	L2418782-02	1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	171%	J-/None	8:2FTS
Method Blank	L2418782	N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	48%	NA	Extraction Internal Standards were out of limits but does not affect the data.
Method Blank	L2418782	N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	48%	NA	Extraction Internal Standards were out of limits but does not affect the data.

1.14 SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

The results presented in this report were found to comply with the DQOs for the project and the guidelines specified by the analytical method. Based on the review of this report, the data are useable and acceptable, except for rejected data noted below. A summary of qualifiers applied to this data set is shown in Table 1.

2. Precision and Accuracy [for SDG(s) above]

Refer to Section E 1.7. Some measurement of analytical accuracy and precision was reported for each method with the site samples.

3. Explanations

The following explanations include more detailed information regarding each of the sections in the DUSR above. Not all sections in the Explanations are represented:

- E 1.1 Reporting Basis (Wet/Dry)
  - Soil samples can be reported on either a wet (as received) or dry weight basis. Dry weight data indicate calculations were made to compensate for the moisture content of the soil sample.
  - Percent (%) solids should be appropriately considered when evaluating analytical results for non-aqueous samples. Sediments with high moisture content may or may not be successfully analyzed by routine analytical methods. Samples should have greater than or equal to 30 percent solids to be appropriately quantified.
- E 1.2 Surrogate Recovery Compliance
  - Surrogates, also known as system monitoring compounds, are compounds added to each sample prior to sample preparation to determining the efficiency of the extraction procedure by evaluating the percent recovery (%R) of the compounds.
- E 1.3 Laboratory Control Samples
  - The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) analyses are used to assess the precision and accuracy of the analytical method independent of matrix interferences.
- E 1.4 Matrix Spike Samples
  - Matrix spike/matrix spike duplicate (MS/MSD) data are used to assess the precision and accuracy of the analytical method and evaluate the effects of the sample matrix on the sample preparation procedures and measurement methodologies.
  - For inorganic methods, when a matrix spike recovery falls outside of the control limits and the sample result is less than four times the spike added, a post-digestion spike (PDS) is performed.
- E 1.5 Blank Sample Analysis
  - Method blanks are prepared by the analytical laboratory and analyzed concurrently with the project samples to assess possible laboratory contamination.
  - Analysis of PFAS compliant with QSM 5.3 Table B-15 requires instrument blanks that are prepared by the analytical laboratory and analyzed concurrently with the project samples to assess contamination that could occur in the LC/MS/MS instrument.
  - Field blanks are prepared to identify contamination that may have been introduced during field activity. Equipment blanks are prepared to identify contamination that may have been introduced while decontaminating sampling equipment. Trip blanks are prepared when volatile analysis is requested to identify contamination that may have been introduced during transport.
- E 1.6 Laboratory and Field Duplicate Sample Analysis

- The laboratory duplicate sample analysis is used by the laboratory at the time of the analysis to demonstrate acceptable method precision. The RPD or absolute difference was evaluated for each duplicate sample pair to monitor the reproducibility of the data.
- The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. The relative percent difference (RPD) or absolute difference was evaluated for each duplicate sample pair to monitor the reproducibility of the data.

- E 1.7 Precision and Accuracy
  - Precision measures the reproducibility of repetitive measurements. In a laboratory environment, this will be measured by determining the relative percent difference (RPD) found between a primary and a duplicate sample. This can be an LCS/LCSD pair, a MS/MSD pair, a laboratory duplicate performed on a site sample, or a field duplicate collected and analyzed concurrently with a site sample.
  - Accuracy is a statistical measurement of the correctness of a measured value and includes components of random error (variability caused by imprecision) and systematic error. In a laboratory environment, this will be measured by determining the percent recovery (%R) of certain spiked compounds. This can be assessed using LCS, blank spike (BS), MS, and/or surrogate recoveries.
- E 1.14 PFAS Sample Preparation
  - Analysis of PFAS requires specific sample preparation. Aqueous samples must be prepared using Solid Phase Extraction (SPE), unless samples are known to contain high PFAS concentrations or the samples are injected directly into the LC/MS/MS instrument. Samples with greater than 1 percent solids may require centrifugation prior to SPE. The entire sample plus bottle rinsate must be extracted using SPE. If high PFAS concentrations are known, the samples may alternately be prepared using serial dilution performed in duplicate. If prepared by serial dilution, there must be documented project approval for this deviation.
- E 1.15 PFAS Identification
  - Identification of PFAS requires dual confirmation. The chemical derivation of the ion transitions must be documented. A minimum of two ion transitions per analyte are required (except for PFBA and PFPeA). Ratios of the quantitation ion to the confirmation ion should be calculated for samples and be within 50 to 150 percent of the ratios of the quantitation ion to the confirmation ion for standards.
  - Identification of PFAS also requires the proper assessment of branched and linear peaks. Standards for both isomers are not currently available for every PFAS compound, resulting in the common error of quantifying the area of only the branched or the linear isomers, which results in erroneous concentrations.
- E 1.16 Extraction Internal Standards
  - Analysis of PFAS by isotope dilution includes the use of extracted internal standards, which are stable isotope analogs of the PFAS compounds of interest added to each sample prior to extraction of the sample matrix. Matrix interferences that affect the quantification of the internal standard will affect the calculated target compound concentrations.

4. Glossary

Not all of the following symbols, acronyms, or qualifiers occur in this document.

- Sample Types:
  - EB Equipment Blank Sample
  - FB Field Blank Sample
  - FD Field Duplicate Sample
  - N Primary Sample
  - TB Trip Blank Sample
- Units:
  - µg/kg micrograms per kilogram
  - µg/L micrograms per liter
  - µg/m^3 micrograms per cubic meter
  - mg/kg milligrams per kilogram
  - mg/L milligrams per liter
  - ppb v/v parts per billion volume/volume
  - pCi/L picocuries per liter
  - pg/g picograms per gram
  - pg/L picograms per liter
- Matrices:
  - AA Ambient Air
  - GS Soil Gas
  - GW/WG Groundwater
  - QW Water Quality
  - IA Indoor Air
  - SE Sediment
  - SO Soil
  - SSV Sub-slab Vapor
  - WQ Water Quality control matrix
  - WS Surface Water
- Table Footnotes:
  - NA Not applicable
  - ND Non-detect
  - NR Not reported
- Common Symbols:
  - % percent
  - < less than
  - ≤ less than or equal to
  - > greater than
  - ≥ greater than or equal to
  - = equal
  - °C degrees Celsius
  - ± plus or minus
  - ~ approximately
  - x times (multiplier)

- Fractions:
  - N Normal (method cannot be filtered)
  - D Dissolved (filtered)
  - T Total (unfiltered)

5. Abbreviations

%D	Percent Difference
%R	Percent Recovery
%RSD	Percent Relative Standard Deviation
%v/v	Percent volume by volume
2s	2 sigma
4,4-DDT	4 4-dichlorodiphenyltrichloroethane
Abs Diff	Absolute Difference
amu	atomic mass unit
BPJ	Best Professional Judgement
BS	Blank Spike
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CCVL	Continuing Calibration Verification Low
COC	Chain of Custody
COM	Combined Isotope Calculation
Cr (VI)	Hexavalent Chromium
CRI	Collision Reaction Interface
DoD	Department of Defense
DQO	data quality objective
DUSR	Data Usability Summary Report
EIS	Extraction Internal Standard
EMPC	Estimated Maximum Possible Concentration
FBK	Field Blank Contamination
FDP	Field Duplicate
GC	Gas Chromatograph
GC/MS	Gas Chromatography/Mass Spectrometry
GPC	Gel Permeation Chromatography
H_2	Hydrogen gas
HCl	Hydrochloric Acid
ICAL	Initial Calibration
ICB	Initial Calibration Blank
ICP/MS	Inductively Coupled Plasma/Mass Spectrometry
ICV	Initial Calibration Verification
ICVL	Initial Calibration Verification Low
IPA	Isopropyl Alcohol
LC	Laboratory Control
LCS/LCSD	Laboratory Control Sample/Laboratory Control Sample Duplicate
MBK	Method Blank Contamination
MDC	Minimum Detectable Concentration
MDL	Laboratory Method Detection Limit
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NA	not applicable
ND	Non-Detect
NFG	National Functional Guidelines
NH_3	Ammonia
NYSDEC	New York State Department of Environmental Conservation
PAH	Polycyclic Aromatic Hydrocarbon
PCB	Polychlorinated Biphenyl
PDS	Post-Digestion Spike
PEM	Performance Evaluation Mixture
PFAS	Per- and Polyfluoroalkyl Substances
PFBA	Perfluorbutanoic Acid
PFD	Perfluorodecalin
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctane sulfonate
PFPeA	Perfluoropentanoic Acid
QAPP	Quality Assurance Project Plan
QC	Quality Control
QSM	Quality Systems Manual
R^2	R-squared value
Ra-226	Radium-226
Ra-228	Radium-228
RESC	Resolution Check Measure
RL	Laboratory Reporting Limit
RPD	Relative Percent Difference
RRF	Relative Response Factor
RT	Retention Time
SAP	Sampling Analysis Plan
SDG	Sample Delivery Group
SIM	Selected ion monitoring
SOP	Standard Operating Procedure
SPE	Solid-Phase Extraction
SVOC	Semi-Volatile Organic Compound
TCLP	Toxicity Characteristic Leaching Procedure
TIC	Tentatively Identified Compound
TKN	Total Kjeldahl Nitrogen
TPH	Total Petroleum Hydrocarbon
TPU	Total Propagated Uncertainty
USEPA	U.S. Environmental Protection Agency
VOC	Volatile Organic Compound
WP	Work Plan

6. Qualifiers

The qualifiers below are from the USEPA National Functional Guidelines and the data in the DUSR may contain these qualifiers:

- Concentration (C) Qualifiers:

  U The compound was analyzed for but not detected. The associated value is either the compound quantitation limit if not detected by the analytical instrument or could be the reported or blank concentration if qualified by blank contamination. This can also be displayed as less than the associated compound quantitation limit (<RL or <MDL), or "ND".

  B The compound was found in the sample and its associated blank. Its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers:

  E The compound was quantitated above the calibration range.

  D The concentration is based on a diluted sample analysis.

- Validation Qualifiers:

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  J+ The result is an estimated quantity, but the result may be biased high.

  J- The result is an estimated quantity, but the result may be biased low.

  J/UJ as listed in exception tables J applies to detected data and UJ applies to non-detected data as reported by the laboratory.

  UJ The compound was not detected above the reported sample quantitation limit; however, the reported limit is estimated and may or may not represent the actual limit of quantitation.

  NJ The analysis indicated the presence of a compound for which there is presumptive evidence to make a tentative identification; the associated numerical value is an estimated concentration only.

  R The sample results were rejected as unusable; the compound may or may not be present in the sample.

  S Result is suspect. See DUSR for details.

References

1. Haley & Aldrich, Inc, 2023. Quality Assurance Project Plan. Remedial Investigation Work Plan. Former A&A Brake Service Site. NYSDEC BCP Site C224372. Brooklyn New York. March.

2. United States Environmental Protection Agency, 2020a. National Functional Guidelines for Inorganic Superfund Methods Data Review. EPA-542-R-20-006. November.

3. United States Environmental Protection Agency, 2020b. National Functional Guidelines for Organic Superfund Methods Data Review. EPA-540-R-20-005. November.

4. United States Environmental Protection Agency, 2018. Data Review and Validation Guidelines for Perfluroalkyl Substances (PFASs) Analyzed Using EPA Method 537. EPA 910-R-18-001. November.

5. New York State Department of Environmental Conservation (NYSDEC), 2023. Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances Under NYSDEC's Part 375 Remedial Programs. April.

TABLES

TABLE 1
SYSTEM PERFORMANCE SUMMARY
FORMER A&A BRAKE SERVICE SITE
BROOKLYN, NEW YORK

SDG	Method	Basis	Sample ID	Lab ID	Analyte	Fraction	Reportable Result	Reported Result	Validated Result	Reason for Qualifier
L2416482	SW8260D	NA	SB-2A-S1_11-11.5	L2416482-76	Naphthalene	N	No	3700000	3700000 R	ARA
L2416482	SW8270E	NA	SB-2A-S1_11-11.5	L2416482-76	2-Methylnaphthalene	N	No	11000	11000 R	ARA
L2416482	SW8270E	NA	SB-2A-S1_11-11.5	L2416482-76	Naphthalene	N	No	18000	18000 R	ARA
L2416482	SW6010D	NA	DUP03_20240326	L2416482-74	Lead	N	Yes	109	109 J	FDP
L2418246	SW6020B	NA	DUP1_20240403	L2418246-04	Aluminum	T	Yes	1.63	1.63 J	FDP
L2418246	SW6020B	NA	DUP1_20240403	L2418246-04	Arsenic	T	Yes	0.00294	0.00294 J	FDP
L2418246	SW6020B	NA	DUP1_20240403	L2418246-04	Barium	T	Yes	0.1177	0.1177 J	FDP
L2418246	SW6020B	NA	DUP1_20240403	L2418246-04	Cobalt	T	Yes	0.00161	0.00161 J	FDP
L2418246	SW6020B	NA	DUP1_20240403	L2418246-04	Copper	T	Yes	0.03729	0.03729 J	FDP
L2418246	SW6020B	NA	DUP1_20240403	L2418246-04	Iron	T	Yes	2.89	2.89 J	FDP
L2418246	SW6020B	NA	DUP1_20240403	L2418246-04	Lead	T	Yes	0.04667	0.04667 J	FDP
L2418246	SW6020B	NA	DUP1_20240403	L2418246-04	Manganese	T	Yes	0.05372	0.05372 J	FDP
L2418246	SW6020B	NA	MW-7-20240403	L2418246-01	Aluminum	T	Yes	0.523	0.523 J	FDP
L2418246	SW6020B	NA	MW-7-20240403	L2418246-01	Arsenic	T	Yes	0.00209	0.00209 J	FDP
L2418246	SW6020B	NA	MW-7-20240403	L2418246-01	Barium	T	Yes	0.08077	0.08077 J	FDP
L2418246	SW6020B	NA	MW-7-20240403	L2418246-01	Cobalt	T	Yes	0.00067	0.00067 J	FDP
L2418246	SW6020B	NA	MW-7-20240403	L2418246-01	Copper	T	Yes	0.01637	0.01637 J	FDP
L2418246	SW6020B	NA	MW-7-20240403	L2418246-01	Iron	T	Yes	0.914	0.914 J	FDP
L2418246	SW6020B	NA	MW-7-20240403	L2418246-01	Lead	T	Yes	0.01766	0.01766 J	FDP
L2418246	SW6020B	NA	MW-7-20240403	L2418246-01	Manganese	T	Yes	0.03045	0.03045 J	FDP
L2418246	SW8270ESIM	NA	MW-7-20240403	L2418246-01	Acenaphthene	N	Yes	32	32 J	FDP
L2418246	SW8270ESIM	NA	MW-7-20240403	L2418246-01	Benzo(a)anthracene	N	Yes	0.67	0.67 J	FDP
L2418246	SW8270ESIM	NA	MW-7-20240403	L2418246-01	Benzo(a)pyrene	N	Yes	0.54	0.54 J	FDP
L2418246	SW8270ESIM	NA	MW-7-20240403	L2418246-01	Chrysene	N	Yes	0.62	0.62 J	FDP
L2418246	SW8270ESIM	NA	MW-7-20240403	L2418246-01	Fluoranthene	N	Yes	3.1	3.1 J	FDP
L2418246	SW8270ESIM	NA	MW-7-20240403	L2418246-01	Naphthalene	N	Yes	9.1	9.1 J	FDP
L2418246	SW8270ESIM	NA	MW-7-20240403	L2418246-01	Phenanthrene	N	Yes	0.55	0.55 J	FDP
L2418246	SW8270ESIM	NA	MW-7-20240403	L2418246-01	Pyrene	N	Yes	4.4	4.4 J	FDP
L2416482	SW6010D	NA	SB-2A_12-14	L2416482-07	Lead	N	Yes	302	302 J	FDP
L2418246	E1633	NA	DUP1_20240403	L2418246-04	Perfluorodecanesulfonic acid (PFDS)	N	Yes	U	UJ	IDL
L2418246	E1633	NA	DUP1_20240403	L2418246-04	Perfluorododecane sulfonic acid (PFDoDS)	N	Yes	U	UJ	IDL
L2418246	E1633	NA	DUP1_20240403	L2418246-04	Perfluoroheptanesulfonic acid (PFHpS)	N	Yes	0.446 J	0.446 J	IDL
L2418246	E1633	NA	DUP1_20240403	L2418246-04	Perfluorononane sulfonic acid (PFNS)	N	Yes	U	UJ	IDL
L2418246	E1633	NA	DUP1_20240403	L2418246-04	Perfluorooctane sulfonamide (PFOSA)	N	Yes	U	UJ	IDL
L2418246	E1633	NA	DUP1_20240403	L2418246-04	Perfluorooctanesulfonic acid (PFOS)	N	Yes	26.8	26.8 J	IDL
L2418246	E1633	NA	DUP1_20240403	L2418246-04	Perfluorotetradecanoic acid (PFTeDA)	N	Yes	U	UJ	IDL
L2418246	SW8260D	NA	DUP1_20240403	L2418246-04	m,p-Xylenes	N	Yes	39	39 J	LCS
L2418559	E1633	NA	FIELD BLANK-20240404	L2418559-03	3-(Perfluoroheptyl)propanoic acid (7:3 FTCA)	N	Yes	U	R	LCS
L2418559	E1633	NA	MW-1_20240404	L2418559-02	3-(Perfluoroheptyl)propanoic acid (7:3 FTCA)	N	Yes	U	R	LCS
L2418782	SW8260D	NA	MW-2_20240405	L2418782-02	trans-1,4-Dichloro-2-butene	N	Yes	U	UJ	LCS
L2418559	E1633	NA	MW-4_20240404	L2418559-01	3-(Perfluoroheptyl)propanoic acid (7:3 FTCA)	N	Yes	U	R	LCS
L2418559	SW8270ESIM	NA	MW-4_20240404	L2418559-01	Acenaphthylene	N	Yes	U	UJ	LCS
L2418559	SW8270ESIM	NA	MW-4_20240404	L2418559-01	Hexachlorobutadiene	N	Yes	U	UJ	LCS
L2418246	SW8260D	NA	MW-5-20240403	L2418246-02	m,p-Xylenes	N	Yes	0.75 J	0.75 J	LCS
L2418782	SW8260D	NA	MW-6_20240405	L2418782-01	trans-1,4-Dichloro-2-butene	N	Yes	U	UJ	LCS
L2418246	SW8260D	NA	MW-7-20240403	L2418246-01	m,p-Xylenes	N	Yes	42	42 J	LCS
L2416482	SW8260D	NA	SB-2A-S1_11-11.5	L2416482-76	1,4-Dioxane	N	Yes	U	UJ	LCS
L2416482	SW8260D	NA	SB-2A-S1_11-11.5	L2416482-76	2-Butanone (Methyl Ethyl Ketone)	N	Yes	U	UJ	LCS
L2416482	SW8260D	NA	SB-2A-S1_11-11.5	L2416482-76	2-Hexanone (Methyl Butyl Ketone)	N	Yes	U	UJ	LCS
L2416482	SW8270E	NA	SB-2A-S1_11-11.5	L2416482-76	1,4-Dioxane	N	Yes	U	UJ	LCS
L2416482	SW8270E	NA	SB-2A-S1_11-11.5	L2416482-76	Carbazole	N	Yes	66 J	66 J	LCS
L2418782	SW8260D	NA	TRIP BLANK-20240405	L2418782-03	trans-1,4-Dichloro-2-butene	N	Yes	U	UJ	LCS
L2418559	SW8270E	NA	MW-4_20240404	L2418559-01	2-Nitroaniline	N	Yes	U	UJ	LCS MSD
L2418559	SW8270E	NA	MW-4_20240404	L2418559-01	Carbazole	N	Yes	U	UJ	LCS MSD
L2418559	SW8270ESIM	NA	MW-1_20240404	L2418559-02	Benzo(b)fluoranthene	N	Yes	0.02 J	0.1 U	MBK
L2418559	SW8270ESIM	NA	MW-1_20240404	L2418559-02	Indeno(1,2,3-cd)pyrene	N	Yes	0.02 J	0.1 U	MBK
L2418559	SW8270ESIM	NA	MW-1_20240404	L2418559-02	Naphthalene	N	Yes	0.12	0.12 U	MBK
L2418782	SW8270ESIM	NA	MW-2_20240405	L2418782-02	Fluorene	N	Yes	0.04 J	0.1 U	MBK
L2418782	SW8270ESIM	NA	MW-2_20240405	L2418782-02	Naphthalene	N	Yes	0.09 J	0.1 U	MBK
L2418782	SW8270ESIM	NA	MW-2_20240405	L2418782-02	Phenanthrene	N	Yes	0.03 J	0.1 U	MBK
L2418246	SW6020B	NA	MW-3-20240403	L2418246-03	Arsenic	T	Yes	0.00112	0.00112 J+	MBK
L2418246	SW6020B	NA	MW-3-20240403	L2418246-03	Manganese	T	Yes	0.00349	0.00349 J+	MBK
L2418246	SW8270ESIM	NA	MW-3-20240403	L2418246-03	Benzo(b)fluoranthene	N	Yes	0.01 J	0.1 U	MBK
L2418246	SW8270ESIM	NA	MW-3-20240403	L2418246-03	Naphthalene	N	Yes	0.4	0.4 J+	MBK
L2418782	SW8270ESIM	NA	MW-6_20240405	L2418782-01	2-Methylnaphthalene	N	Yes	0.25	0.25 J+	MBK
L2418782	SW8270ESIM	NA	MW-6_20240405	L2418782-01	Phenanthrene	N	Yes	0.11	0.11 U	MBK
L2418246	SW8270ESIM	NA	MW-7-20240403	L2418246-01	Benzo(b)fluoranthene	N	Yes	0.41	0.41 J+	MBK
L2418246	SW8270ESIM	NA	MW-7-20240403	L2418246-01	Benzo(g,h,i)perylene	N	Yes	0.26	0.26 J+	MBK
L2418246	SW8270ESIM	NA	MW-7-20240403	L2418246-01	Dibenz(a,h)anthracene	N	Yes	0.06 J	0.1 U	MBK
L2418246	SW8270ESIM	NA	MW-7-20240403	L2418246-01	Indeno(1,2,3-cd)pyrene	N	Yes	0.22	0.22 J+	MBK
L2418559	SW6020B	NA	MW-1_20240404	L2418559-02	Magnesium	D	Yes	53.1	53.1 J	MSD
L2418559	SW6020B	NA	MW-4_20240404	L2418559-01	Magnesium	D	Yes	37.4	37.4 J	MSD

Notes
MSD = Matrix spike/matrix spike duplicate percent recoveries or relative percent difference were outside the specified limits.
FDP = Field duplicate qualifier due to an exceedance of the specified limits.
LCS = Laboratory control/laboratory control spike duplicate percent recoveries or relative percent difference were outside the specified limits.
MBK = Method blank contamination.
ARA = Another more viable result is available, whether due to dilution, resampling, etc.
IDL = Isotope dilution outside the specified limits.
J = The compound was positively identified; however, the associated numerical value is an estimated concentration only.
U = The compound was analyzed for but not detected.
UJ = The compound was not detected above the reported sample quantitation limit; however, the reported limit is estimated and may or may not represent the actual limit of quantitation.
R = The sample results were rejected as unusable; the compound may or may not be present in the sample.
J+ = The result is an estimated quantity, but the result may be biased high.

APPENDIX J
Daily Reports

DAILY FIELD REPORT

Project	Former A&A Brake Service Site	**Report No.**	16
BCP Site	NYSDEC BCP SITE C224372	**Date**	6/21/2023
Location	558 Sackett Street	**File No.**	0206384
Client	Sackett Heights LLC	**Temperature**	H:74 L: 60
Contractor	Coastal Environmental Solutions, Inc. (Coastal)	**Wind Direction**	NE to SW, 11 mph
Weather	Sunny	**Personnel on Site**	Anna Vaculik, Zach Simmel
Humidity	76%	**Time on Site**	6:45-15:15

Haley & Aldrich of New York (Haley & Aldrich) was present to document implementation of the NYSDEC-Approved Remedial Investigation Work Plan (RIWP) dated March 2023. Site observations are summarized below.

Daily Observations:

- Coastal mobilized a Eijkelkamp CRS XL140 Duo sonic drilling rig to the site.
- NYSDEC representative Brian Jessourian met with Haley & Aldrich personnel at the site.
- Coastal completed a site-wide Ground Penetrating Radar survey and cleared sampling locations.
- Coastal completed installation of five soil borings (SB-1, SB-2, SB-4, SB-5, and SB-6) to 20 feet below grade surface (ft bgs) and soil samples were collected in accordance with the RIWP.
- Coastal completed installation of permanent groundwater monitoring well MW-3 to 15 ft bgs.

Samples Collected:

- Soil samples were collected from SB-1, SB-2, SB-4, SB-5, and SB-6 in accordance with the RIWP.
- One duplicate, one MS/MSD sample, one field blank, and one trip blank were collected.
- All samples were submitted on ice in a cooler via courier to Alpha Analytical Laboratories, Inc. in Westborough, MA for analyses in accordance with the RIWP.

CAMP Activities:

- Air monitoring was performed at one upwind and one downwind location during ground intrusive activities. A background reading was collected directly in front of the entrance to the residence located to the west of the Site in proximity to the observed air conditioning window units. The upwind air monitoring location was placed adjacent to the air conditioning unit as well. No concentrations of volatiles organic compounds (VOCs) or particulate 15-minute average concentration of matter smaller than 10 microns in diameter (PM10) exceeded the action levels of 0.1 ppm and 150 mcg/m^3, respectively, as specified in the "Special Requirements for Work Within 20 Feet of Potentially Exposed Individuals or Structures." No visible dust was observed leaving the site perimeter.

Activities Planned for Coming Week:

- Haley & Aldrich will continue implementing the Remedial Investigation including soil borings, monitoring well installation and soil vapor point installation.

Site Photographs:

Photo 1: View of drilling SB-5, facing south.

Photo 2: View of upwind CAMP station, facing north.

DAILY FIELD REPORT

Site Plan:

LEGEND:

- CAMP Station
- In Progress
- Complete

558 Sackett Street, Brooklyn, NY
BCP Site C224372
Air Monitoring Log

Date: 6/21/2023
Personnel: A. Vaculik, Z.Simmel
Weather: Sunny
Humidity: 76%
Wind Direction: NE to SW, 11 mph

Particulate Background (mg/m3): 0.008
PID Background (ppm): 0

N

Site Map:

	Particulate		VOCs		Notes	
	Upwind	Downwind	Upwind	Downwind		
Time	(mg/m3)	(mg/m3)	(ppm)	(ppm)	Odors (y/n)	Activities/Additional Monitoring
630						
645						
700						
715						
730						
745						
800						
815						
830	0.011	0.033	0	0	n	Begin intrusive work
845	0.01	0.011	0	0	n	
900	0.014	0.008	0	0	n	
915	0.01	0.007	0	0	n	
930	0.009	0.004	0	0	n	
945	0.013	0.006	0	0	n	
1000	0.012	0.01	0	0	n	
1015	0.02	0.007	0	0	n	
1030	0.009	0.009	0	0	n	
1045	0.008	0.01	0	0	n	

558 Sackett Street, Brooklyn, NY
BCP Site C224372
Air Monitoring Log

	Particulate		VOCs		Notes	
	Upwind	Downwind	Upwind	Downwind		
Time	(mg/m3)	(mg/m3)	(ppm)	(ppm)	Odors (y/n)	Activities/Additional Monitoring
1100	0.011	0.008	0	0	n	
1115	0.018	0.02	0	0	n	
1130	0.017	0.013	0	0	n	
1145	0.01	0.012	0	0	n	
1200	0.012	0.008	0	0	n	
1215	0.008	0.008	0	0	n	
1230	0.011	0.007	0	0	n	
1245	0.01	0.012	0	0	n	
1300	0.01	0.015	0	0	n	
1315	0.011	0.009	0	0	n	
1330	0.01	0.009	0	0	n	
1345	0.008	0.011	0	0	n	
1400	0.012	0.009	0	0	n	
1430						
1445						
1500						
1515						
1530						
1545						
1600						
1615						
1630						
1645						
1700						
1715						
1730						
1745						
1800						
1815						
1830						
1845						

DAILY FIELD REPORT

Project	Former A&A Brake Service Site	**Report No.**	17
BCP Site	NYSDEC BCP SITE C224372	**Date**	6/22/2023
Location	558 Sackett Street	**File No.**	0206384
Client	Sackett Heights LLC	**Temperature**	H:68 L: 60
Contractor	Coastal Environmental Solutions, Inc. (Coastal)	**Wind Direction**	NW to SE, 12 mph
Weather	Sunny	**Personnel on Site**	Anna Vaculik, Zach Simmel
Humidity	80%	**Time on Site**	6:30-15:00

Haley & Aldrich of New York (Haley & Aldrich) was present to document implementation of the NYSDEC-Approved Remedial Investigation Work Plan (RIWP) dated March 2023. Site observations are summarized below.

Daily Observations:

- NYSDEC representative Brian Jessourian met with Haley & Aldrich personnel at the site.
- Coastal completed installation of one soil boring (SB-7) to 20 feet below grade surface (ft bgs) and soil samples were collected in accordance with the RIWP.
- Coastal completed installation of one soil boring (SB-1) to 100 feet ft bgs, evidence of grossly contaminated material or non-aqueous phase liquid not observed, no additional samples were collected.
- Coastal completed installation of permanent groundwater monitoring well MW-1 to 15 ft bgs.
- Development of monitoring wells.

Samples Collected:

- Soil samples were collected from SB-7 in accordance with the RIWP.
- One field blank and one trip blank were collected.
- All samples were submitted on ice in a cooler via courier to Alpha Analytical Laboratories, Inc. in Westborough, MA for analyses in accordance with the RIWP.

CAMP Activities:

- Due to inclement weather, visual and olfactory monitoring was implemented from 7:00 AM to 11:45 AM. No odor or visible dust was observed leaving the site perimeter.
- Air monitoring was performed at one upwind and one downwind location during ground intrusive activities. A background reading was collected directly in front of the entrance to the residence located to the west of the Site in proximity to the observed air conditioning window units. The upwind air monitoring location was placed adjacent to the air conditioning unit as well. No concentrations of volatiles organic compounds (VOCs) or particulate 15-minute average concentration of matter smaller than 10 microns in diameter (PM10) exceeded the action levels of 0.1 ppm and 150 mcg/m^3, respectively, as specified in the “Special Requirements for Work Within 20 Feet of Potentially Exposed Individuals or Structures.” No visible dust was observed leaving the site perimeter.

Activities Planned for Coming Week:

- Haley & Aldrich will continue implementing the Remedial Investigation including soil borings, monitoring well installation and soil vapor point installation.

Site Photographs:

Photo 1: Soil from SB-1 from 90-100 ft bgs, facing east.

Photo 2: View of upwind CAMP station, facing northwest.

DAILY FIELD REPORT

Site Plan:

LEGEND:

- CAMP Station
- In Progress
- Complete

558 Sackett Street, Brooklyn, NY
BCP Site C224372
Air Monitoring Log

Date: 6/22/2023
Personnel: A. Vaculik, Z.Simmel
Weather: Rain, chance sun afternoon
Humidity: 80%
Wind Direction: NW to SE, 12 mph

Particulate Background (mg/m3): 0.018
PID Background (ppm): 0.0

N

Site Map:

	Particulate		VOCs		Notes	
	Upwind	Downwind	Upwind	Downwind		
Time	(mg/m3)	(mg/m3)	(ppm)	(ppm)	Odors (y/n)	Activities/Additional Monitoring
630	Visual and olfactory monitoring conducted due to inclement weather					
645						
700						
715						
730						
745						
800						
815						
830						
845						
900						
915						
930						
945						
1000						
1015						
1030						
1045						

558 Sackett Street, Brooklyn, NY
BCP Site C224372
Air Monitoring Log

	Particulate		VOCs		Notes	
	Upwind	Downwind	Upwind	Downwind		
Time	(mg/m3)	(mg/m3)	(ppm)	(ppm)	Odors (y/n)	Activities/Additional Monitoring
1100	Visual and olfactory monitoring conducted due to inclement weather					
1115						
1130						
1145	0.019	0.021	0.0	0.0	N	
1200	0.018	0.012	0.0	0.0	N	
1215	0.013	0.010	0.0	0.0	N	
1230	0.012	0.012	0.0	0.0	N	
1245	0.016	0.080	0.0	0.0	N	
1300	0.012	0.009	0.0	0.0	N	
1315	0.013	0.009	0.0	0.0	N	
1330	0.013	0.037	0.0	0.0	N	
1345	0.006	0.025	0.0	0.0	N	
1400						
1430						
1445						
1500						
1515						
1530						
1545						
1600						
1615						
1630						
1645						
1700						
1715						
1730						
1745						
1800						
1815						
1830						
1845						

DAILY FIELD REPORT

Project	Former A&A Brake Service Site	**Report No.**	18
BCP Site	NYSDEC BCP SITE C224372	**Date**	6/23/2023
Location	558 Sackett Street	**File No.**	0206384
Client	Sackett Heights LLC	**Temperature**	H:74 L: 65
Contractor	Coastal Environmental Solutions, Inc. (Coastal)	**Wind Direction**	E to W, 7 mph
Weather	Sunny	**Personnel on Site**	A. Vaculik, A. Chandra
Humidity	89%	**Time on Site**	6:30-14:30

Haley & Aldrich of New York (Haley & Aldrich) was present to document implementation of the NYSDEC-Approved Remedial Investigation Work Plan (RIWP) dated March 2023. Site observations are summarized below.

Daily Observations:

- NYSDEC representative Harry August met with Haley & Aldrich personnel at the site.
- Coastal completed installation of one soil boring (SB-8) to 30 feet below grade surface (ft bgs) and soil samples were collected in accordance with the RIWP.
- Coastal completed installation of one soil boring (SB-7) to 100 feet ft bgs, evidence of grossly contaminated material or non-aqueous phase liquid not observed, no additional samples were collected.
- Coastal completed installation of permanent groundwater monitoring well MW-4 to 15 ft bgs.
- Development of monitoring wells.

Samples Collected:

- Soil samples were collected from SB-8 in accordance with the RIWP.
- One Matrix Spike (MS), Matrix Spike Duplicate (MSD), and one trip blank were collected.
- All samples were submitted on ice in a cooler via courier to Alpha Analytical Laboratories, Inc. in Westborough, MA for analyses in accordance with the RIWP.

CAMP Activities:

- Due to inclement weather, visual and olfactory monitoring was implemented from 10:00 AM to 1:30PM. No odor or visible dust was observed leaving the site perimeter.
- Air monitoring was performed at one upwind and one downwind location during ground intrusive activities. A background reading was collected directly in front of the entrance to the residence located to the west of the Site in proximity to the observed air conditioning window units. The upwind air monitoring location was placed adjacent to the air conditioning unit as well. No concentrations of volatiles organic compounds (VOCs) or particulate 15-minute average concentration of matter smaller than 10 microns in diameter (PM10) exceeded the action levels of 0.1 ppm and 150 mcg/m^3, respectively, as specified in the “Special Requirements for Work Within 20 Feet of Potentially Exposed Individuals or Structures.” No visible dust was observed leaving the site perimeter.

Activities Planned for Coming Week:

- Haley & Aldrich will continue implementing the Remedial Investigation including soil borings, monitoring well installation and soil vapor point installation.

DAILY FIELD REPORT

Site Photographs:

Photo 1: Soil from SB-7 from 40-50 ft bgs, facing east.

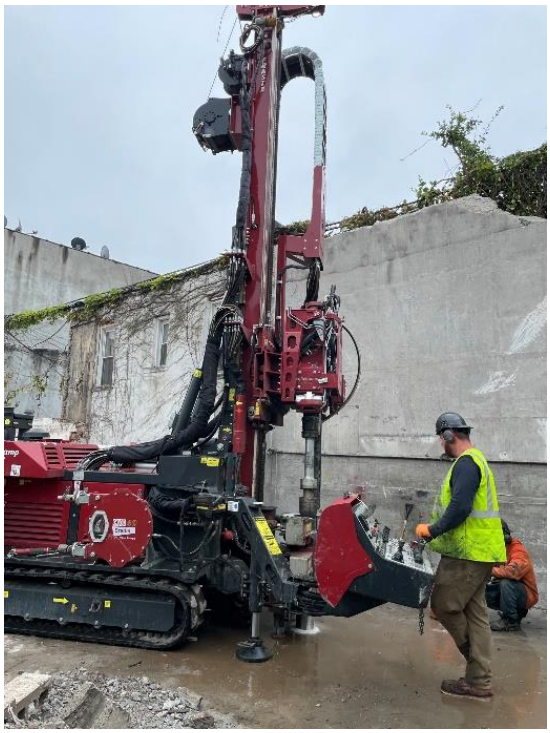


Photo 2: Installation of MW-4, facing southwest.

DAILY FIELD REPORT

Site Plan:

LEGEND:

- CAMP Station
- In Progress
- Complete

558 Sackett Street, Brooklyn, NY
BCP Site C224372
Air Monitoring Log

Date: 6/23/2023
Personnel: A. Vaculik, A. Chandra
Weather: Cloudy, Rainy
Humidity: 89%
Wind Direction: E to W, 7 mph

Particulate Background (mg/m3): 0.022
PID Background (ppm): 0.0

N

Site Map:

	Particulate		VOCs		Notes	
	Upwind	Downwind	Upwind	Downwind		
Time	(mg/m3)	(mg/m3)	(ppm)	(ppm)	Odors (y/n)	Activities/Additional Monitoring
630						
645						
700						
715	0.031	0.027	0.0	0.0	N	
730	0.021	0.018	0.0	0.0	N	
745	0.008	0.012	0.0	0.0	N	
800	0.006	0.014	0.0	0.0	N	
815	DustTrak malfunction possibly due to high humidity	0.011	0.0	0.0	N	
830		0.010	0.0	0.0	N	
845		0.009	0.0	0.0	N	
900		0.011	0.0	0.0	N	
915		0.009	0.0	0.0	N	
930		0.006	0.0	0.0	N	
945		0.005	0.0	0.0	N	
1000	Due to inclement weather, visual and olfatory monitoring conducted					
1015						
1030						
1045						

558 Sackett Street, Brooklyn, NY
BCP Site C224372
Air Monitoring Log

	Particulate		VOCs		Notes	
	Upwind	Downwind	Upwind	Downwind		
Time	(mg/m3)	(mg/m3)	(ppm)	(ppm)	Odors (y/n)	Activities/Additional Monitoring
1100	Due to inclement weather, visual and olfatory monitoring conducted					
1115						
1130						
1145						
1200						
1215						
1230						
1245						
1300						
1315						
1330						
1345						
1400						
1430						
1445						
1500						
1515						
1530						
1545						
1600						
1615						
1630						
1645						
1700						
1715						
1730						
1745						
1800						
1815						
1830						
1845						

DAILY FIELD REPORT

Project	Former A&A Brake Service Site	**Report No.**	19
BCP Site	NYSDEC BCP SITE C224372	**Date**	6/26/2023
Location	558 Sackett Street	**File No.**	0206384
Client	Sackett Heights LLC	**Temperature**	H:80 L: 69
Contractor	Coastal Environmental Solutions, Inc. (Coastal)	**Wind Direction**	SE to NW, 4 mph
Weather	Sunny with intermittent rain	**Personnel on Site**	A. Vaculik
Humidity	88%	**Time on Site**	6:30-15:15

Haley & Aldrich of New York (Haley & Aldrich) was present to document implementation of the NYSDEC-Approved Remedial Investigation Work Plan (RIWP) dated March 2023. Site observations are summarized below.

Daily Observations:

- NYSDEC representative Harry August met with Haley & Aldrich personnel at the site.
- Coastal completed installation of one soil boring (SB-3) to 50 feet below grade surface (ft bgs) and soil samples were collected in accordance with the RIWP.
- Coastal completed installation of one soil boring (SB-8) to 100 feet ft bgs, evidence of grossly contaminated material or non-aqueous phase liquid not observed, no additional samples were collected.

Samples Collected:

- Soil samples were collected from SB-3 in accordance with the RIWP.
- One duplicate and one trip blank were collected.
- All samples were submitted on ice in a cooler via courier to Alpha Analytical Laboratories, Inc. in Westborough, MA for analyses in accordance with the RIWP.

CAMP Activities:

- Due to inclement weather, visual and olfactory monitoring was implemented from 10:00 AM to 12:00 PM, and again from 12:30 PM to 2:00 PM. No odor or visible dust was observed leaving the site perimeter.
- Air monitoring was performed at one upwind and one downwind location during ground intrusive activities. A background reading was collected directly in front of the entrance to the residence located to the west of the Site in proximity to the observed air conditioning window units. The upwind air monitoring location was placed adjacent to the air conditioning unit as well. No concentrations of volatiles organic compounds (VOCs) or particulate 15-minute average concentration of matter smaller than 10 microns in diameter (PM10) exceeded the action levels of 0.1 ppm and 150 mcg/m^3, respectively, as specified in the "Special Requirements for Work Within 20 Feet of Potentially Exposed Individuals or Structures." No visible dust was observed leaving the site perimeter.

Activities Planned for Coming Week:

- Haley & Aldrich will continue implementing the Remedial Investigation including soil borings, monitoring well installation and soil vapor point installation.

Site Photographs:

Photo 1: View of drilling at SB-3, facing northeast.

Photo 2: Soil from SB-8 from 50 to 60 ft bgs, facing east.

DAILY FIELD REPORT

Site Plan:

LEGEND:

- CAMP Station
- In Progress
- Complete

558 Sackett Street, Brooklyn, NY
BCP Site C224372
Air Monitoring Log

Date:	6/26/2023
Personnel:	A. Vaculik
Weather:	Cloudy, Rainy
Humidity:	89%
Wind Direction:	SE to NW, 4 mph

Particulate Background (mg/m3): 0.036

PID Background (ppm): 0.0

N

Site Map:

	Particulate		VOCs		Notes	
	Upwind	Downwind	Upwind	Downwind		
Time	(mg/m3)	(mg/m3)	(ppm)	(ppm)	Odors (y/n)	Activities/Additional Monitoring
630						
645						
700						
715	0.033	0.039	0.0	0.0	N	
730	0.041	0.021	0.0	0.0	N	
745	0.042	0.033	0.0	0.0	N	
800	0.027	0.034	0.0	0.0	N	
815	0.033	0.021	0.0	0.0	N	
830	0.022	0.033	0.0	0.0	N	
845	0.031	0.034	0.0	0.0	N	
900	Drill rig shut off for break and to refill water tank; no readings collected					
915						
930	0.027	0.017	0.0	0.0	N	
945	0.018	0.008	0.0	0.0	N	
1000	Due to inclement weather, visual and olfatory monitoring conducted					
1015						
1030						
1045						

558 Sackett Street, Brooklyn, NY
BCP Site C224372
Air Monitoring Log

	Particulate		VOCs		Notes		
	Upwind	Downwind	Upwind	Downwind			
Time	(mg/m3)	(mg/m3)	(ppm)	(ppm)	Odors (y/n)	Activities/Additional Monitoring	
1100	Due to inclement weather, visual and olfatory monitoring conducted						
1115							
1130							
1145							
1200	0.008	0.010	0.0	0.0	N		
1215	0.030	0.019	0.0	0.0	N		
1230	0.011	0.008	0.0	0.0	N		
1245	Due to inclement weather, visual and olfatory monitoring conducted						
1300							
1315							
1330							
1345							
1400							
1430							
1445							
1500							
1515							
1530							
1545							
1600							
1615							
1630							
1645							
1700							
1715							
1730							
1745							
1800							
1815							
1830							
1845							

DAILY FIELD REPORT

Project	Former A&A Brake Service Site	**Report No.**	20
BCP Site	NYSDEC BCP SITE C224372	**Date**	6/27/2023
Location	558 Sackett Street	**File No.**	0206384
Client	Sackett Heights LLC	**Temperature**	H:80 L: 66
Contractor	Coastal Environmental Solutions, Inc. (Coastal)	**Wind Direction**	S to N, 7 mph
Weather	Cloudy, Rainy	**Personnel on Site**	A. Vaculik
Humidity	97%	**Time on Site**	6:30-15:45

Haley & Aldrich of New York (Haley & Aldrich) was present to document implementation of the NYSDEC-Approved Remedial Investigation Work Plan (RIWP) dated March 2023. Site observations are summarized below.

Daily Observations:

- NYSDEC representative Harry August met with Haley & Aldrich personnel at the site.
- Coastal completed installation of one soil boring (SB-3) to 100 feet ft bgs, evidence of grossly contaminated material or non-aqueous phase liquid not observed, no additional samples were collected.
- Coastal completed installation of one groundwater monitoring well (MW-2) to a depth of 15 ft bgs.
- Coastal completed installation of seven soil vapor points across the site to a depth of 7 ft bgs.
- Developed monitoring wells.

Samples Collected:

- Four soil vapor samples were collected from SV-2, SV-4, SV-5, and SV-7 in accordance with the RIWP.
- All samples were submitted via courier to Alpha Analytical Laboratories, Inc. in Westborough, MA for analyses in accordance with the RIWP.

CAMP Activities:

- Due to inclement weather, visual and olfactory monitoring was implemented from 8:45 AM to 12:30 PM. No odor or visible dust was observed leaving the site perimeter.
- Air monitoring was performed at one upwind and one downwind location during ground intrusive activities. A background reading was collected directly in front of the entrance to the residence located to the west of the Site in proximity to the observed air conditioning window units. The upwind air monitoring location was placed adjacent to the air conditioning unit as well. No concentrations of volatiles organic compounds (VOCs) or particulate 15-minute average concentration of matter smaller than 10 microns in diameter (PM10) exceeded the action levels of 0.1 ppm and 150 mcg/m^3, respectively, as specified in the "Special Requirements for Work Within 20 Feet of Potentially Exposed Individuals or Structures." No visible dust was observed leaving the site perimeter.

Activities Planned for Coming Week:

- Haley & Aldrich will continue implementing the Remedial Investigation including soil vapor and groundwater sampling.

DAILY FIELD REPORT

Site Photographs:

Photo 1: Soil from SB-3 from 60-70 ft bgs, facing east.

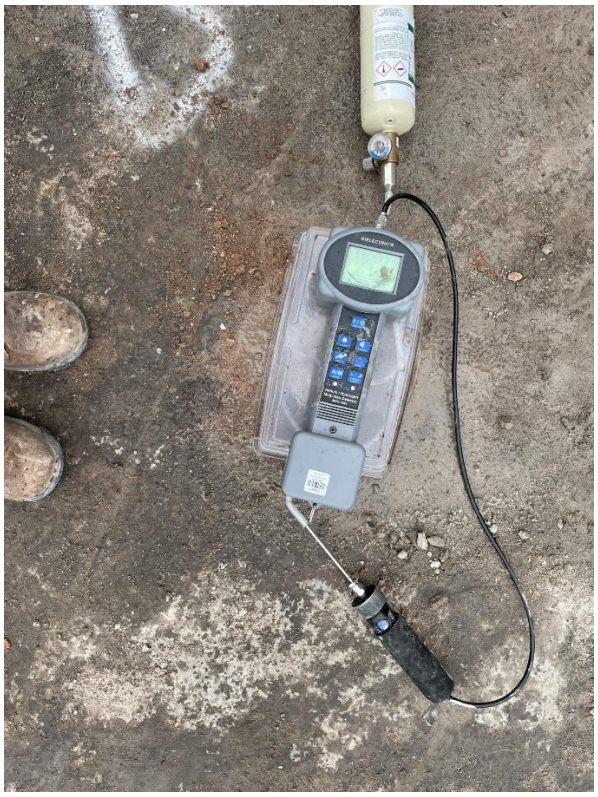


Photo 2: Helium Shroud fit test on SV-7, facing south.

DAILY FIELD REPORT

Site Plan:

LEGEND:

- CAMP Station
- In Progress
- Complete

558 Sackett Street, Brooklyn, NY
BCP Site C224372
Air Monitoring Log

Date:	6/27/2023
Personnel:	A. Vaculik
Weather:	Cloudy, Rainy
Humidity:	97%
Wind Direction:	S to N, 7 mph

Particulate Background (mg/m3):	0.035
PID Background (ppm):	0.0

N

Site Map:

	Particulate		VOCs		Notes	
	Upwind	Downwind	Upwind	Downwind		
Time	(mg/m3)	(mg/m3)	(ppm)	(ppm)	Odors (y/n)	Activities/Additional Monitoring
630						
645						
700	0.040	0.029	0.0	0.0	N	
715	0.021	0.021	0.0	0.0	N	
730	0.033	0.015	0.0	0.0	N	
745	0.029	0.016	0.0	0.0	N	
800	0.032	0.02	0.0	0.0	N	
815	0.032	0.019	0.0	0.0	N	
830	0.037	0.028	0.0	0.0	N	
845	Due to inclement weather, visual and olfatory monitoring conducted					
900						
915						
930						
945						
1000						
1015						
1030						
1045						

558 Sackett Street, Brooklyn, NY
BCP Site C224372
Air Monitoring Log

	Particulate		VOCs		Notes	
	Upwind	Downwind	Upwind	Downwind		
Time	(mg/m3)	(mg/m3)	(ppm)	(ppm)	Odors (y/n)	Activities/Additional Monitoring
1100	Due to inclement weather, visual and olfatory monitoring conducted					
1115						
1130						
1145						
1200						
1215						
1230						
1245						
1300						
1315						
1330						
1345						
1400						
1430						
1445						
1500						
1515						
1530						
1545						
1600						
1615						
1630						
1645						
1700						
1715						
1730						
1745						
1800						
1815						
1830						
1845						

DAILY FIELD REPORT

Project	Former A&A Brake Service Site	**Report No.**	21
BCP Site	NYSDEC BCP SITE C224372	**Date**	6/28/2023
Location	558 Sackett Street	**File No.**	0206384
Client	Sackett Heights LLC	**Temperature**	H:83 L: 66
Contractor	N/A	**Wind Direction**	SW to NE, 6 mph
Weather	Cloudy, Rainy	**Personnel on Site**	A. Vaculik
Humidity	61%	**Time on Site**	6:30-9:45

Haley & Aldrich of New York (Haley & Aldrich) was present to document implementation of the NYSDEC-Approved Remedial Investigation Work Plan (RIWP) dated March 2023. Site observations are summarized below.

Daily Observations:

- NYSDEC representative Harry August met with Haley & Aldrich personnel at the site.
- A total of seven DOT-approved drums of investigation derived waste were generated to date and remain secured and labeled on-site pending future off-site disposal including three containing purge water from well development and five containing soil cuttings.

Samples Collected:

- Three (3) soil vapor samples were collected from SV-1, SV-3, and SV-6 in accordance with the RIWP.
- All samples were submitted via courier to Alpha Analytical Laboratories, Inc. in Westborough, MA for analyses in accordance with the RIWP.

CAMP Activities:

- None

Activities Planned for Coming Week:

- Haley & Aldrich will continue implementing the Remedial Investigation including groundwater sampling.

Site Photographs:

Photo 1: Soil vapor collection at SV-3, facing south.

Photo 2: View of site conditions, facing south.

DAILY FIELD REPORT

Site Plan:

LEGEND:

- CAMP Station
- In Progress
- Complete

DAILY FIELD REPORT

Project	Former A&A Brake Service Site	**Report No.**	1
BCP Site	NYSDEC BCP SITE C224372	**Date**	3/26/2023
Location	558 Sackett Street	**File No.**	0206384
Client	Sackett Heights LLC	**Temperature**	H:49 L: 37
Contractor	Lakewood Environmental Services Corp.	**Wind Direction**	NE to SW, 8 mph
Weather	Partly Cloudy	**Personnel on Site**	N. Mooney, A. Stewart, Z. Simmel
Humidity	69%	**Time on Site**	7:00 - 17:30

Haley & Aldrich of New York (Haley & Aldrich) was present to document implementation of the NYSDEC-Approved Supplemental Remedial Investigation Work Plan (SRIWP) dated March 2024. Site observations are summarized below.

Daily Observations:

- NYSDEC case manager Marnie Chancey and Chris Disclafani of WSP (contracted by NYSDEC) met with Haley & Aldrich personnel at the site.
- Lakewood completed installation of one soil boring (SB-3A) to 11 ft bgs and one soil boring (SB-2A) to 14 ft bgs and associated 5-foot step outs and contingency borings for delineation of Total/TCLP Lead and Mercury.
- The contingency boring proposed approximately 5 ft west of step out SB-3A-W1 was unable to be installed due to utility presence.
- Lakewood completed installation/development of three groundwater monitoring wells (MW-5, MW-6, MW-7) to a depth of 17 ft bgs (groundwater encountered at 9-10 ft bgs).
- A total of two DOT-approved drums of investigation derived waste were generated and are secured and labeled on-site pending future off-site disposal, including one containing purge water from well development and one containing soil cuttings.

Samples Collected:

- Soil samples were collected from SB-2A and SB-3A in accordance with the SRIWP.
- An additional soil sample was collected for VOCs and SVOCs from the step out located 5 ft south of SB-2 (SB-2A-S1) due to impacts observed from 11 to 11.5 ft bgs. MW-7 was installed at this boring location. Deviation from the SRIWP was communicated with NYSDEC by email and phone conversation with the NYSDEC case manager.
- Soil samples collected from step outs and contingency borings were placed on hold in accordance with the SRIWP.
- All samples were submitted on ice in a cooler via courier to Alpha Analytical Laboratories, Inc. in Westborough, MA for analyses in accordance with the SRIWP.

DAILY FIELD REPORT

CAMP Activities:

- Air monitoring was performed at one upwind and one downwind location during ground intrusive activities. A background reading was collected directly in front of the entrance to the residence located to the west of the Site in proximity to the observed air conditioning window units. The upwind air monitoring location was placed adjacent to the air conditioning unit as well. No concentrations of volatiles organic compounds (VOCs) or particulate 15-minute average concentration of matter smaller than 10 microns in diameter (PM10) exceeded the action levels of 0.1 ppm and 150 mcg/m^3, respectively, as specified in the "Special Requirements for Work Within 20 Feet of Potentially Exposed Individuals or Structures." No visible dust was observed leaving the site perimeter.

Activities Planned for Coming Week:

- Haley & Aldrich will continue implementing the Supplemental Remedial Investigation including groundwater sampling.

Site Photographs:

Photo 1: View of MW-5 and drilling at SB-2A, facing north.

Photo 2: View of MW-5 and Site conditions, facing south.

DAILY FIELD REPORT

Site Plan:

LEGEND:

- CAMP Station
- Not Completed Due to Site Conditions
- Complete

Air Monitoring Log

Date: 3/26/2024
Personnel: A. Stewart, N. Mooney
Weather: 37-49 °F, Partly Cloudy
Humidity: 69%
Wind Direction: NE to SW

Particulate Background (mcg/m3): 0.025
PID Background (ppm): 0.0

Upwind
Dustrak #: 8530143210
Downwind
Dustrak #: 8530133102

Site Map:

Wind Direction

	Particulate		VOCs			Notes
	Upwind	Downwind	Upwind	Downwind		
Time	Dust (mcg/m3)	Dust (mcg/m3)	PID (ppm)	PID (ppm)	Odors (y/n)	Activities/Additional Monitoring
630						
645						
700						
715						
730						
745	0.025	0.014	0.0	0.0	N	
800	0.016	0.013	0.0	0.1	N	
815	0.016	0.015	0.0	0.1	N	
830	0.018	0.025	0.0	0.1	N	
845	0.021	0.023	0.0	0.1	N	
900	0.018	0.016	0.0	0.1	N	
915	0.016	0.016	0.0	0.1	N	
930	0.014	0.014	0.0	0.1	N	
945	0.020	0.021	0.0	0.2	N	Windy conditions kicking up dust
1000	0.015	0.020	0.0	0.1	N	
1015	0.013	0.017	0.0	0.1	N	
1030	0.014	0.017	0.0	0.1	N	
1045	0.020	0.015	0.0	0.0	N	

Air Monitoring Log

Time	Upwind	Downwind	Upwind	Downwind		Notes
	Dust (mcg/m3)	Dust (mcg/m3)	PID (ppm)	PID (ppm)	Odors (y/n)	Activities/Additional Monitoring
1100	0.024	0.014	0.0	0.2	N	
1115	0.020	0.013	0.0	0.2	N	
1130	0.009	0.011	0.0	0.1	N	
1145	0.015	0.014	0.0	0.1	N	
1200	0.020	0.020	0.0	0.1	N	
1215	0.013	0.016	0.0	0.1	N	
1230	0.014	0.019	0.0	0.1	N	
1245	0.017	0.013	0.0	0.1	N	
1300	0.015	0.014	0.0	0.1	N	
1315	0.021	0.018	0.0	0.1	N	
1330	0.020	0.018	0.0	0.1	N	
1345	0.020	0.018	0.0	0.1	N	
1400	0.018	0.017	0.0	0.1	N	
1430	0.016	0.015	0.0	0.1	N	
1445	0.014	0.016	0.0	0.1	N	
1500	0.020	0.017	0.0	0.1	N	
1515	0.021	0.019	0.0	0.1	N	
1530	0.018	0.020	0.0	0.1	N	
1545	0.013	0.017	0.0	0.1	N	
1600	0.015	0.016	0.0	0.1	N	Instrusive activities complete
1615						
1630						
1645						
1700						
1715						
1730						
1745						
1800						
1815						
1830						
1845						
1900						

DAILY FIELD REPORT

Project	Former A&A Brake Service Site	**Report No.**	2
BCP Site	NYSDEC BCP SITE C224372	**Date**	4/3/2024
Location	558 Sackett Street	**File No.**	0206384
Client	Sackett Heights LLC	**Temperature**	H:46 L: 42
Contractor	Haley & Aldrich	**Wind Direction**	E to W, 19 mph
Weather	Rain	**Personnel on Site**	N. Manzione
Humidity	84%	**Time on Site**	7:00 - 17:30

Haley & Aldrich of New York (Haley & Aldrich) was present to document implementation of the NYSDEC-Approved Supplemental Remedial Investigation Work Plan (SRIWP) dated March 2024. Site observations are summarized below.

Daily Observations:

- NYSDEC representative Chris Disclafani of WSP (contracted by NYSDEC) met with Haley & Aldrich personnel at the site.
- Haley & Aldrich conducted a synoptic groundwater gauging event of all seven monitoring wells.
- Haley & Aldrich completed groundwater sampling at MW-3, MW-5, and MW-7.

Samples Collected:

- Groundwater samples MW-3, MW-5, and MW-7 were collected in accordance with the SRIWP.
- QA/QC samples including one duplicate (parent sample MW-7) and one trip blank were collected in accordance with the SRIWP.
- Purge water was contained in 55-gallon DOT-approved labeled drums.
- All samples were submitted on ice in a cooler via courier to Alpha Analytical Laboratories, Inc. in Westborough, MA for analyses in accordance with the RIWP.

CAMP Activities:

- No intrusive drilling activities were conducted; therefore, CAMP was not performed.

Activities Planned for Coming Week:

- Haley & Aldrich will continue implementing the Supplemental Remedial Investigation including groundwater sampling of monitoring wells MW-1, MW-2, MW-4, and MW-6.
- Of note, Haley & Aldrich was on Site on April 2, 2024, however no activities were conducted as laboratory provided sample materials were delayed in arriving to the Site.

Site Photographs:

Photo 1: Site conditions facing southwest.

HALEY ALDRICH

DAILY FIELD REPORT

Site Plan:

LEGEND:

- CAMP Station
- Groundwater Sample Collected
- In Progress

DAILY FIELD REPORT

Project	Former A&A Brake Service Site	**Report No.**	3
BCP Site	NYSDEC BCP SITE C224372	**Date**	4/4/2024
Location	558 Sackett Street	**File No.**	0206384
Client	Sackett Heights LLC	**Temperature**	H:51 L: 36
Contractor	Haley & Aldrich	**Wind Direction**	NW to SE, 5 mph
Weather	Clear	**Personnel on Site**	N. Manzione
Humidity	55%	**Time on Site**	7:45 – 18:15

Haley & Aldrich of New York (Haley & Aldrich) was present to document implementation of the NYSDEC-Approved Supplemental Remedial Investigation Work Plan (SRIWP) dated March 2024. Site observations are summarized below.

Daily Observations:

- NYSDEC representative Chris Disclafani of WSP (contracted by NYSDEC) met with Haley & Aldrich personnel at the site.
- Haley & Aldrich completed groundwater sampling at MW-1 and MW-4.

Samples Collected:

- Groundwater samples MW-1 and MW-4 were collected in accordance with the SRIWP.
- QA/QC samples including one MS/MSD sample (parent sample MW-4) and one trip blank were collected in accordance with the SRIWP.
- Purge water was contained in 55-gallon DOT-approved labeled drums.
- All samples were submitted on ice in a cooler via courier to Alpha Analytical Laboratories, Inc. in Westborough, MA for analyses in accordance with the RIWP.

CAMP Activities:

- No intrusive drilling activities were conducted; therefore, CAMP was not performed.

Activities Planned for Coming Week:

- Haley & Aldrich will continue implementing the Supplemental Remedial Investigation including groundwater sampling of monitoring wells MW-2 and MW-6.

Site Photographs:

Photo 1: Site conditions facing north.

Photo 2: View of low-flow sampling, facing south.

DAILY FIELD REPORT

Site Plan:

LEGEND:

- CAMP Station
- Groundwater Sample Collected
- In Progress

DAILY FIELD REPORT

Project	Former A&A Brake Service Site	**Report No.**	4
BCP Site	NYSDEC BCP SITE C224372	**Date**	4/5/2024
Location	558 Sackett Street	**File No.**	0206384
Client	Sackett Heights LLC	**Temperature**	H:48 L: 39
Contractor	Haley & Aldrich	**Wind Direction**	W to E, 11 mph
Weather	Clear	**Personnel on Site**	N. Manzione
Humidity	38%	**Time on Site**	7:30 – 15:30

Haley & Aldrich of New York (Haley & Aldrich) was present to document implementation of the NYSDEC-Approved Supplemental Remedial Investigation Work Plan (SRIWP) dated March 2024. Site observations are summarized below.

Daily Observations:

- NYSDEC representative Chris Disclafani of WSP (contracted by NYSDEC) met with Haley & Aldrich personnel at the site.
- Haley & Aldrich completed groundwater sampling at MW-2 and MW-6.

Samples Collected:

- Groundwater samples MW-2 and MW-6 were collected in accordance with the SRIWP.
- A trip blank was collected in accordance with the SRIWP.
- Purge water was contained in 55-gallon DOT-approved labeled drums.
- All samples were submitted on ice in a cooler via courier to Alpha Analytical Laboratories, Inc. in Westborough, MA for analyses in accordance with the RIWP.

CAMP Activities:

- No intrusive drilling activities were conducted; therefore, CAMP was not performed.

Activities Planned for Coming Week:

- None.

Site Photographs:

Photo 1: Site conditions facing south.

Photo 2: View of low-flow sampling, facing north.

DAILY FIELD REPORT

Site Plan:

LEGEND:

- CAMP Station
- Groundwater Sample Collected
- In Progress

APPENDIX K
Investigation Derived Waste Disposal Manifests

MANIFEST

MANIFEST DOC NO: 324628WA

AB Environmental

Generator	Transporter	Facility
Generator Name: SACKETT HEIGHTS LLC **Generator ID:** 34495 **Address:** 558 SACKETT ST. BROOKLYN 11217	**Transporter Name:** ABLE ENVIRONMENTAL SERVICES. **Address:** 1599 Ocean Avenue Bldg. 2 Bohemia **Zip:** 11716 **EPA ID:** NYR000003582	**Facility Name:** AB OIL SERVICE LTD **Address:** 1599 Ocean Ave Bohemia 11716 **Zip:** 11716 **EPA ID:** NYD987023371

SHIPPING NAME AND DESCRIPTION	NUMCONT		CONTTYPE	QUANTITY	UNIT	PROFILE ID
CONTAMINATED DIRTS, SOILS, AND SANDS	0	3	DM	- 200	P	N816
WATER CONTAMINATED W/ PETROLEUM	0	4	DM	- 220	G	N018

ADDITIONAL DESCRIPTION FOR MATERIAL LISTED ABOVE

GENERATOR ADDRESS: 1365 ST NICHOLAS AVE. NY,,NY 10003

SPECIAL HANDLING INSTRUCTION AND ADDITIONAL INFORMATION

-

DISCREPANCY INDICATION SPACE

-

Generator's Certification:

I certify that the materials described above are not subjected to federal regulations for reporting proper hazardous waste

X Zevier PRINTED/TYPED NAME _____ SIGNATURE 10/11/23 DATE

TRANSPORTER 1 ACKNOWLEDGEMENT OF RECEIPT OF MATERIALS

_____ PRINTED/TYPED NAME _____ SIGNATURE 10/11 DATE

TRANSPORTER 2 ACKNOWLEDGEMENT OF RECEIPT OF MATERIALS

_____ PRINTED/TYPED NAME _____ SIGNATURE _____ DATE

FACILITY OWNER OR OPERATOR: CERTIFICATION OF RECEIPT OF WASTE MATERIAL COVERED BY THIS MANIFEST EXCEPT AS NOTED ABOVE.

Faith Bernard PRINTED/TYPED NAME _____ SIGNATURE 10/12/23 DATE