
REMEDIAL INVESTIGATION REPORT

for

130 SAINT FELIX STREET SITE

Brooklyn, New York

NYSDEC BCP Site No. C224306

Prepared For:

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LIST OF ACRONYMS

| Acronym | Definition |
|----------------|---|
| DER | Division of Environmental Remediation |
| AOC | Area of Concern |
| BCP | Brownfield Cleanup Program |
| ECL | Environmental Conservation Law |
| NYSDEC | New York State Department of Environmental Conservation |
| NYSDOH | New York State Department of Health |
| RIWP | Remedial Investigation Work Plan |
| UST | Underground Storage Tank |
| NAVD88 | North American Vertical Datum of 1988 |
| NYCOASIS | New York City Open Accessible Space Information System |
| NYCT | New York City Transit |
| USGS | United States Geological Survey |
| GWQs | Groundwater Quality Standards |
| PGWSCOs | Protection of Groundwater Soil Cleanup Objectives |
| RRSCOs | Restricted Residential Soil Cleanup Objectives |
| UUSCOs | Unrestricted Use Soil Cleanup Objectives |
| VOCs | Volatile Organic Compounds |
| SVOCs | Semi-Volatile Organic Compounds |
| BCA | Brownfield Cleanup Agreement |
| ESA | Environmental Site Assessment |
| RECs | Recognized Environmental Concerns |
| LNAPL | Light Non-Aqueous Phase Liquid |
| NYCRR | 6 New York Codes, Rules, and Regulations |
| PID | Photoionization Detector |
| PCBs | Polychlorinated Biphenyls |
| BTEX | Benzene, Toluene, Ethylbenzene, and Xylenes |
| CVOCs | Chlorinated Volatile Organic Compounds |

| Acronym | Definition |
|----------------|---|
| PCE | Tetrachloroethene |
| EM | Electromagnetic |
| GPR | Ground Penetrating Radar |
| ELAP | Environmental Laboratory Approval Program |
| PFAS | Perfluoroalkyl Substances |
| PVC | Polyvinyl Chloride |
| UN/DOT | United Nations/ Department of Transportation |
| USEPA | United States Environmental Protection Agency |
| TAL | Target Analyte List |
| PFHxA | Perfluorohexanoic Acid |
| PFOA | Perfluorooctanoic Acid |
| PFOS | Perfluorooctane |
| FWRIA | Fish and Wildlife Resources Impact Analysis |
| CSM | Conceptual Site Model |
| CAMP | Community Air Monitoring Plan |
| HASP | Health and Safety Plan |
| SMMP | Soil/Materials Management Plan |
| PPE | Personal Protective Equipment |
| RUSCOs | Restricted Use Soil Cleanup Objectives |

CERTIFICATION

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

A handwritten signature in black ink, appearing to read "C. McMahon", written over a horizontal line.

Christopher McMahon, CHMM

1.0 INTRODUCTION

On behalf of 130 Saint Felix Street LLC (the Volunteer), Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. (Langan) has prepared this Remedial Investigation (RI) Report for the approximate 12,548-square-foot (0.288 acre) property located at 130 Saint Felix Street (Figure 1), in the Fort Greene neighborhood of Brooklyn, New York (hereinafter the "Site"). 130 Saint Felix Street LLC is participating in the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) as a Volunteer as defined in Environmental Conservation Law (ECL) 27-1405 (1)(b) and as identified in the executed Brownfield Cleanup Agreement Index No. C224306-05-20 dated 7 July 2020. The Site is identified in the BCP as Site No. C224306.

The RI was conducted in accordance with the 17 December 2020 Remedial Investigation Work Plan (RIWP) prepared by Langan and approved by the NYSDEC on 5 January 2021. The investigation was completed to investigate and characterize the nature and extent of the contamination at and/or emanating from the Site, supplement the data and findings of the May 2015 Subsurface Investigation report prepared by Langan, and characterize on-site historic fill and native soil, groundwater, and soil vapor conditions. Results of the 2015 investigation and areas of concern (AOCs) identified in that report and the RIWP are described in detail in Section 4.0 of this report. Specifically, investigation activities were completed in AOC-1 Historical Site Operations and Potential Historical Presence of Underground Storage Tank(s) (UST[s]), AOC-2 Historical Adjacent and Surrounding Site Operations, and AOC-3 Historic Fill. The Remedial Investigation was conducted in accordance with the process and requirements identified in the NYSDEC Division of Environmental Remediation (DER)-10 Technical Guidance for Site Investigation and Remediation (May 2010) and the New York State Department of Health (NYSDOH) "Guidance for Evaluating Soil Vapor Intrusion in the State of New York, with updates" (October 2006/ amended May 2017).

2.0 SITE DESCRIPTION

2.1 Physical Setting

The approximately 12,548-square foot (0.288 acre) Site is located at 130 Saint Felix Street in the Fort Greene neighborhood of Brooklyn, New York, and is identified as Block 2111 and Lot 40 on the New York City (NYC) Tax Map. The Site is currently an at-grade asphalt paved parking lot and has been used as a parking lot since at least 1950.

The Site is bound to the north by a four-story building occupied by the Brooklyn Music School and a seven-story building occupied by the Brooklyn Academy of Music; Saint Felix Street followed by five 2.75- to three-story residential buildings to the east; the 41-story mixed-use residential/commercial Williamsburg Savings Bank Tower (1 Hanson Place) and a three-story church building to the south; and Ashland Place followed by a 31-story mixed-use residential/commercial building to the west. The Site is located within a commercial zoning district (C6-1) and is designated for garage/gas station use (G6) by the New York City Department of Finance. According to the New York City Department of City Planning zoning map dated 10 December 2019, the Site is located within the Special Downtown Brooklyn District. The Special Downtown Brooklyn District was created to establish special height and setback regulations and urban design guidelines to promote and support the continued growth of Downtown Brooklyn as a unique mixed-use area. The Volunteer applied for a zoning map amendment to change from a C6-1 district to a C6-6 district on the western portion of the Site and from a C6-1 district to a C6-4 district on the eastern portion of the Site to allow for a mixed-use residential/institutional building. This zoning map amendment received a Negative Declaration and Statement of No Significant Effect on 3 May 2021.

2.2 Site Stratigraphy and Hydrogeology

Based on observations made during Langan's May 2015 Subsurface Investigation and this RI, subsurface conditions at the Site consists of a historic fill layer consisting of fine to coarse sand with varying proportions of silt, gravel, and clay and miscellaneous debris, including brick, wood, concrete, tile, glass, coal, and slag extending from surface grade to between 5 and 12 feet below grade surface (bgs). The contaminated historic fill layer is underlain by native sands. The average historic fill/native interface was observed at approximately el 37 North American Vertical Datum of 1988 (NAVD88) across the site footprint. Gravel layers

ranging in thickness from approximately 1 to 5 feet were also identified between approximately 26.5 and 40 feet bgs within two soil borings advanced in the eastern portion of the site. Bedrock was not encountered in any of the soil borings advanced during the 2015 Subsurface Investigation or this RI.

According to the United States Geological Survey (USGS) Bedrock and Engineering Geologic Maps of New York County and Parts of Kings and Queens Counties, New York, and parts of Bergen and Hudson Counties, New Jersey, by Charles A. Baskerville dated 1994, the underlying bedrock formation in this area is the Hartland Formation, which is typically encountered in the area of the Subject Property at depths greater than 100 feet. The Harland Formation consists of gray schist with quartz, biotite, and muscovite. Based on geotechnical investigations conducted by Langan within the area, the depth to bedrock is greater than 90 feet bgs.

Groundwater was encountered between el 2.25 to 2.85 NAVD88, corresponding to 38.79 and 41.98 feet bgs, during the RI. Based on groundwater elevation data collected as part of the RI, groundwater is inferred to flow to the south/southwest towards the Gowanus Canal. Groundwater in this part of New York City is not used as a potable (drinking) water source. The potable water supply is provided to the Site by the City of New York and is derived from surface impoundments in the Croton, Catskill, and Delaware watersheds.

2.3 Surrounding Property Land Use

According to records maintained online by New York City Open Accessible Space Information System (NYCOASIS) and aerial/street-view observations provided by Google Maps, surrounding properties include two Brooklyn Academy of Music buildings, five residential buildings, a 41-story mixed-use residential/commercial building, a three-story church building, and a 31-story mixed-use residential/commercial building. The following is a summary of surrounding property usage:

| Direction | Adjacent Properties | | | Surrounding Properties |
|-----------|---------------------|---------|--|---|
| | Block No. | Lot No. | Description | |
| North | 2111 | 11 | BAM Fisher Performing Arts Theatre (321 Ashland Place) | Brooklyn Academy of Music Performing Arts Theatre, Ashland Place followed by a residential/commercial building, and Saint Felix Street followed by a school and residential buildings |
| | | 37 | Brooklyn Music School (126 Saint Felix Street) | |
| East | 2112 | 9 | Residential Building (131 Saint Felix Street) | Residential buildings |
| | | 10 | Residential Building (129 Saint Felix Street) | |
| | | 11 | Residential Building (127 Saint Felix Street) | |
| | | 12 | Residential Building (125 Saint Felix Street) | |
| | | 13 | Residential Building (123 Saint Felix Street) | |
| South | 2111 | 7501 | Williamsburg Savings Bank Tower Mixed-Use Residential/Commercial Building (1 Hanson Place) | Hanson Place followed by Long Island Rail Road Atlantic Terminal and a commercial building, Ashland Place followed by a residential/commercial building, and Saint Felix Street followed by residential buildings |
| | | 45 | Hanson Place Central United Methodist Church (144 Saint Felix Street) | |
| West | 2110 | 3 | Mixed-use Residential/Commercial Building (286 Ashland Place) | Flatbush Avenue followed by commercial/office buildings and an industrial/manufacturing building |

Public infrastructure (storm drains, sewers, and underground utility lines) exists within the streets to the east and west of the Site. New York City Transit (NYCT) subway tunnels are located beneath Lafayette Avenue to the north, Saint Felix Street to the east, and Ashland Place, Fourth Avenue, and Flatbush Avenue to the west and south of the Site. Sensitive receptors (as defined in DER-10) located within a half mile of the Site include:

| Number | Name (Approximate distance from site) | Address |
|---------------|---|---|
| 1 | Hanson Place Elementary School (approximately 200 feet northeast of the Site) | 38 Lafayette Avenue Brooklyn, NY 11217 |
| 2 | Hanson Place Child Development Center, Inc. (approximately 500 feet east of the Site) | 55 Hanson Place Brooklyn, NY 11217 |
| 3 | Metropolitan Corp. Academy (approximately 800 feet northwest of the Site) | 362 Schermerhorn Street Brooklyn, NY 11217 |
| 4 | Pacific Library (approximately 900 feet south of the Site) | 25 Fourth Avenue Brooklyn, NY 11217 |
| 5 | Brooklyn High School For The Arts (approximately 1,000 feet southwest of the Site) | 345 Dean Street Brooklyn, NY 11217 |
| 6 | Acorn High School For Social Justice (approximately 1,100 feet southwest of the Site) | 500 Pacific Street Brooklyn, NY 11217 |
| 7 | Brooklyn Technical High School (approximately 1,200 feet north of the Site) | 29 Fort Greene Place Brooklyn, NY 11217 |
| 8 | Northside Center for Child Development, Inc. (approximately 1,200 feet northwest of the Site) | 44-60 Rockwell Place Brooklyn, NY 11217 |
| 9 | Hanover Place Child Care, LLC/Milestone School For Child Development, (approximately 1,500 feet northwest of the Site) | 15 Hanover Place Brooklyn, NY 11201 |
| 10 | P369K: The Coy L. Cox School (approximately 1,500 feet northwest of the Site) | 383 State Street Brooklyn, NY 11217 |

| Number | Name (Approximate distance from site) | Address |
|---------------|---|---|
| 11 | School for the Science Language & Art International School (approximately 1,500 feet northwest of the Site) | 9 Hanover Place Brooklyn, NY 11201 |
| 12 | Public School 038 The Pacific/Virtual Y – YMCA of Greater NY (approximately 1,500 feet southwest of the Site) | 450 Pacific Street Brooklyn, NY 11217 |
| 13 | Raices Gowanus Senior Center/Strong Place for Hope Day Care Center and Pre-K (approximately 1,600 feet west of the Site) | 460 Atlantic Avenue Brooklyn, NY 11217 |
| 14 | Kids Run Around Daycare (approximately 1,700 feet southwest of the Site) | 615 Warren Street Brooklyn, NY 11217 |
| 15 | The Brooklyn Hospital Center – Downtown Campus (approximately 1,800 feet north of the Site) | 121 Dekalb Avenue Brooklyn, NY 11217 |
| 16 | Junior High School/Old 294 Edmonds Center/Long Island University After School Program (approximately 1,900 feet northeast of the Site) | 300 Adelphi Street Brooklyn, NY 11205 |
| 17 | Wyckoff Gardens Neighborhood Senior Center/Community Center After School Program/ Wyckoff Homes Adult and Continuing Education (approximately 2,000 feet southwest of the Site) | 280 Wyckoff Street Brooklyn, NY 11217 |
| 18 | PAL/World of Little People Head Start (approximately 2,100 feet southwest of the Site) | 565 Baltic Street Brooklyn, NY 11217 |
| 19 | Park Slope Christian Academy (approximately 2,100 feet south of the Site) | 98 5th Avenue Brooklyn, NY 11217 |
| 20 | Luria Academy Day Care Center (approximately 2,100 feet southeast of the Site) | 535 Dean Street Brooklyn, NY 11217 |
| 21 | Atlantic Terminal Community Center After School Program (approximately 2,300 feet southeast of the Site) | 501 Carlton Avenue Brooklyn, NY 11238 |

| Number | Name (Approximate distance from site) | Address |
|---------------|---|---|
| 22 | Public School 133 William A. Butler/OST – University Settlement Society of NY After School Program (approximately 2,300 feet southwest of the Site) | 375 Butler Street Brooklyn, NY 11217 |
| 23 | Long Island University- Brooklyn Campus/WIA In School Youth After School Program (approximately 2,400 feet northwest of the Site) | 1 University Plaza Brooklyn, NY 11201 |
| 24 | Public School 020 Clinton Hill/YMCA of Greater NY After School Program (approximately 2,600 feet northeast of the Site) | 225 Adelphi Street Brooklyn, NY 11205 |
| 25 | Middle School 266 Park Place/21st Century – Benjamin Banneker Community Development Center After School Program (approximately 2,600 feet south of the Site) | 64 Park Place Brooklyn, NY 11217 |
| 26 | Eladia’s Day Care Center (approximately 2,600 feet south of the Site) | 266 Flatbush Avenue Brooklyn, NY 11217 |

2.4 Historical Site Usage

Previous environmental assessments and investigation reports prepared for the Site identify that the Site was an at-grade asphalt-paved parking lot since at least 1950 and may have contained USTs due to the Site’s classification as a garage/gasoline station, which could have impacted soil, groundwater and/or soil vapor. Historical operations at adjacent and surrounding properties include drug manufacturing, dry-cleaning and laundry, automobile sales, and a gasoline filling station. Dry cleaning facilities were identified located hydraulically upgradient and between 500- and 900-feet of the Site at 696 Fulton Street, 711 Fulton Street, and 85 Lafayette Avenue. A hydraulically downgradient dry cleaning facility was identified 1,200-feet from the Site at 64 Fourth Avenue. Facility locations are provided on Figure 5.

Additionally, at the adjacent property to the south located at 1 Hanson Place, a tank failure resulted in a fuel oil release that was reported to NYSDEC in 2004 and was administratively closed in 2015.

The primary contaminants of concern identified as part of the previous environmental investigations are semi-volatile organic compounds (SVOCs) and metals commonly associated with petroleum impacts and contaminated historic fill and detected in soil at concentrations exceeding the applicable NYSDEC Restricted-Residential Restricted Soil Cleanup Objectives (RRSCOs). Volatile organic compounds (VOCs) commonly associated with petroleum impacts have also been detected in soil at concentrations exceeding NYSDEC Protection of Groundwater Soil Cleanup Objectives (PGWSCOss). In groundwater, VOCs and metals have been detected at concentrations exceeding NYSDEC Groundwater Quality Standards (GWQS). Additionally, petroleum-related VOCs and low levels of chlorinated VOCs were detected in soil vapor.

3.0 PROPOSED REDEVELOPMENT PLAN

The Site is proposed to be developed with a 167,000 gross square foot, mixed-use for sale condominium with a 30% affordable housing component building on top of a 20,000 gross square foot community facility space to be purchased and occupied by the Brooklyn Music School. The Volunteer applied for a zoning map amendment to change from a C6-1 district to a C6-6 district on the western portion of the Site and from a C6-1 district to a C6-4 district on the eastern portion of the Site to allow for a mixed-use residential/institutional building and received a Negative Declaration and Statement of No Significant Effect on 3 May 2021. The proposed building will contain a partial cellar on the eastern portion of the Site. Based on the most recent proposed plans, the partial cellar and first floor will occupy approximately 9,480-square-feet and 10,770-square-feet, respectively, of the approximately 12,548-square-foot property. The planned redevelopment excavation will extend down to approximately 20 feet bgs.

4.0 PREVIOUS ENVIRONMENTAL INVESTIGATIONS

Previous environmental correspondence, environmental site assessment reports, and environmental investigation reports have been prepared and reviewed and are summarized below:

- *Phase I Environmental Site Assessment, prepared by Langan, dated May 2015*
- *Subsurface Investigation Report, prepared by Langan, dated June 2015*

- *Geophysical Engineering Survey Report, prepared by NOVA Geophysical Engineering (NOVA), dated 14 January 2020*
- *BCP Application, prepared by Knauf Shaw LLP, dated 4 February 2020*
- *Brownfield Cleanup Agreement (BCA), dated 7 July 2020*
- *RIWP, prepared by Langan, dated 17 December 2020*

4.1 Phase I Environmental Assessment – (Langan 2015)

Langan conducted a Phase I Environmental Site Assessment (ESA) dated May 2015 for the Site. At the time of the assessment, the Site was operated as a parking lot.

The ESA identified the following recognized environmental concerns (RECs):

- Historical site use due to the City's Department of Finance classification of the Site as a garage/gasoline station, and the potential for historical automobile repair or service activities. During site reconnaissance concrete patches and patched asphalt were observed, which were inferred to potentially be due to the presence of historic USTs;
- Historical use of adjacent and surrounding properties, including drug manufacturing, dry-cleaning and laundry, automobile sales, and a gasoline filling station. In addition, the property adjacent to the south at 1 Hanson Place is associated with closed Spill No. 0402131, which was reported to NYSDEC in 2004 for a release of an unknown quantity of No. 2 fuel oil as the result of a tank failure. Fuel oil impacts were observed in soil from approximately 4 to 40 feet bgs. Petroleum free phase product was observed on groundwater, which was measured at approximately 43 feet bgs. A work plan for delineation and an exposure assessment was submitted to the NYSDEC in November 2013. The spill was administratively closed by NYSDEC on 15 April 2015; however, closure documentation was not available for review to determine if impacts had migrated off-site. No records identifying completion of an off-Site investigation were identified, however an assessment of impacts associated with this spill was completed as part of the RI.

Langan recommended a subsurface investigation on the Site as a result of the above identified RECs.

4.2 Subsurface Investigation Report – Langan (2015)

Langan conducted a Subsurface Investigation for the Site in May 2015. Soil samples were collected from five soil borings from appropriate depths and locations to assess potential subsurface impacts associated with historical uses of the Site as an automotive repair or service facility, and the historical use of adjacent and surrounding properties. The investigation included installation of five soil borings, one flush-mount groundwater monitoring well, three soil vapor sampling points, and collection of soil, groundwater, and soil vapor samples. The analytical results of this investigation are summarized in Tables 3A/B through 5 and sample locations and analytical results are shown on Figures 6A/B through 8. Category B data deliverables were received and Data Usability Summary Reports (DUSRs) were prepared for data collected during the Subsurface Investigation, as discussed below.

Evidence of petroleum impacts, including the presence of sheen, light non-aqueous phase liquid (LNAPL) and elevated photoionization detector (PID) readings were not observed during the investigation, however, petroleum odors were observed from 7 to 8 feet bgs in soil boring EB12 in the eastern portion of the Site.

Analytical results of soil samples collected during the 2015 Subsurface Investigation were compared to the Title 6 of the Official Compilation of New York Codes, Rules, and Regulations (6 NYCRR) NYSDEC Part 375 Unrestricted Use SCOs (UUSCOs), PGWSCOs and RRSCOs. Analytes detected above RRSCOs are listed below. Groundwater sample results were compared to the 6 NYCRR Part 703.5 Class GA Groundwater Quality Standards and Division of Water Technical and Operational Guidance Series 1.1.1 (collectively referred to as GWQSs) for Class GA water. Analytes detected above the GWQSs are summarized below. Soil vapor sample results were evaluated using the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in New York State Soil Vapor/Indoor Air Decision Matrices dated October 2006 and updated May 2017. Laboratory analytical results are summarized below:

Soil:

- Elevated concentrations of total VOCs as measured with a PID were not detected in any soil borings. No visual or olfactory evidence of impacts were observed in any of the soil borings, with the exception of EB12, where odors were observed from 7 to 8 feet bgs.

- Herbicides, pesticides, and polychlorinated biphenyls (PCBs) were not detected in any of the soil samples.
- The VOCs naphthalene, p- & m-xylenes, and total xylenes were detected at concentrations above the PGWSCOs at only one soil boring location in the eastern portion of the Site. VOCs were not detected at concentrations above the RRSCOs in any soil borings.
- Up to fourteen SVOCs, including anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, dibenzofuran, fluoranthene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, and pyrene were detected at concentrations exceeding the RRSCOs at three of the five soil boring locations.
- Metals, including arsenic, barium, lead, and mercury, were detected in soil samples at concentrations above the RRSCOs at three of the five soil boring locations.

Groundwater:

- PID readings at the monitoring well head were measured to be 0.0 ppm, and no visual or olfactory evidence of impacts were observed in groundwater.
- Groundwater was measured in the monitoring well at approximately 42 feet bgs.
- PCBs were not detected, and no SVOCs were detected in the groundwater monitoring well at concentrations exceeding the GWQGs.
- The VOC chloroform was detected in groundwater at a concentration exceeding the GWQSSs.
- The dissolved metal sodium was detected in groundwater at concentrations exceeding the GWQSSs. Sodium is a naturally occurring element commonly found in groundwater at elevated levels in urban environments.

Soil Vapor:

Soil vapor results identified elevated concentrations of petroleum-related VOCs including benzene, toluene, ethylbenzene, and xylenes (collectively referred to as BTEX) at cumulative concentrations that ranged from 120.5 microgram per cubic

meter ($\mu\text{g}/\text{m}^3$) to $204.5 \mu\text{g}/\text{m}^3$. Benzene, toluene, ethylbenzene, and xylenes were detected in all three soil vapor samples.

The chlorinated VOCs (CVOCs) tetrachloroethene (PCE) and 1,1,1-trichloroethane were detected in soil vapor samples collected at the Site. PCE was detected in two soil vapor samples at concentrations ranging from $3.04 \mu\text{g}/\text{m}^3$ to $7.87 \mu\text{g}/\text{m}^3$ and 1,1,1-trichloroethane was detected in one soil vapor sample at a concentration of $1.3 \mu\text{g}/\text{m}^3$.

Based on the results of soil, groundwater, and soil vapor sampling completed during this Subsurface Investigation, impacts in soil, groundwater, and soil vapor are present in the subsurface.

2015 Subsurface Investigation DUSRs

DUSRs were prepared for data collected during the previous investigation and are included herein. The DUSRs were prepared in accordance with DER-10 and reviewed by Langan's in-house validator before issuance. The DUSRs presented the results of data validation, including a summary assessment of laboratory data packages, sample preservation and chain of custody procedures, and a summary assessment of deficiencies for each analytical method. DUSRs for the Subsurface Investigation are provided in Appendix H.

During the 2015 Subsurface Investigation, one soil duplicate sample was collected from the EB07 location from 10 to 12 feet bgs for VOCs, SVOCs, PCBs, pesticides, herbicides, metals, hexavalent chromium, and 1,4-dioxane analysis; the analytical results were consistent with those reported for the EB07 sample.

During the 2015 Subsurface Investigation, one groundwater duplicate sample was collected from the MW11 location for VOCs, SVOCs, PCBs, 1,4-dioxane, and total and dissolved metals analysis; the analytical results were consistent with those reported for the MW11 sample with the exception of seven metals. The field duplicate and parent sample exhibited relative percent differences (RPD) or absolute differences above the control limit of 30% for dissolved aluminum, dissolved chromium, dissolved copper, dissolved nickel, total chromium, total cobalt, and total nickel, and the associated results are qualified as J because of potential indeterminate bias.

All data are considered usable, as qualified. Some data qualifiers were appended to the reported results, which have been included in the respective data summary tables (Tables 3A/B through 5).

4.3 Geophysical Engineering Report (NOVA 2020)

On 10 January 2020, a geophysical investigation was completed by NOVA throughout the entire site to investigate the potential presence of USTs related to the potential historic use of the Site as a garage/gasoline filling station and the observed concrete patches and patched asphalt indicative of UST removal, which were identified as a REC during Langan’s 2015 Phase I ESA. NOVA conducted the geophysical investigation using a Sensors and Software Noggin 250 MHz Ground Penetrating Radar (GPR) unit equipped with a shielded antenna and a Radio Detection RD7100 Electromagnetic (EM) utility locator.

The geophysical survey identified anomalies resembling potential subsurface utilities such as drainage pipes or conduits within the western portion of the Site. Two large geophysical anomalies resembling potential buried foundations were identified within the western and eastern portions of the Site. A suspected fill port was identified within the sidewalk adjacent to the Site along Saint Felix Street. Piping connecting to the suspected fill port was traced using the utility locator and was observed to enter the Site and the potential buried foundation in the eastern portion of the Site. NOVA was unable to identify the continuation of the piping further to the west once it entered the potential buried foundation. Besides piping below the sidewalk associated with the potential fill port, subsurface metallic anomalies were not identified during the geophysical survey and the presence of a UST was not confirmed.

4.4 BCP Application and BCA (2020)

The Volunteer submitted a BCP Application to NYSDEC for the Site on 4 February 2020 and the BCA was executed on 7 July 2020.

4.5 Remedial Investigation Work Plan – Langan (2020)

A RIWP dated 12 December 2020 was prepared by Langan for 130 St. Felix Street LLC. The RIWP was prepared to investigate and characterize “the nature and extent of the contamination at and/or emanating from the brownfield site” per ECL Article 27-1415(2) (Brownfield Cleanup Program), to supplement the investigation activities and results documented in the 2015 Subsurface

Investigation Report, to evaluate potential exposure via soil vapor intrusion across the entire Site, and to determine on- and off-site receptors as part of the Qualitative Human Health Exposure Assessment as required by the 20 October 2020 NYSDOH Draft RIWP comment letter and NYSDEC comments for the Draft RIWP submitted on 7 August 2020. These requirements were subsequently addressed in the revised RIWP dated 12 December 2020 prepared by Langan and approved by the NYSDEC on 5 January 2021.

The scope of work for the RI presented in the RIWP is discussed in Section 6.0 below.

5.0 SUMMARY OF AREAS OF CONCERN

Based on the results of the previous environmental and geophysical reports, three AOCs related to historical and surrounding Site operations have been identified as requiring further investigation as part of this RI to determine the nature and extent of the impacts that have been identified. The locations of these AOCs are provided on Figures 3 and 5 through 8:

5.1 AOC-1: Historical Site Operations and Potential Historical Presence of USTs

Although review of Sanborn Fire Insurance Maps revealed that the Site has been operated as a parking lot dating back to at least 1950, the Department of Finance classification of the Site as a garage/gasoline station reveals the potential for historical automobile repair or service operations. Additionally, on-Site concrete patches and patched asphalt observed during Langan's 2015 site reconnaissance, and a UST fill port with piping leading into the Site detected during NOVA's 2020 geophysical survey, indicate the potential presence or previous removal of on-site UST(s).

5.2 AOC-2: Historical Adjacent and Surrounding Site Operations

As discussed above, historical operations at adjacent and surrounding properties including drug manufacturing, dry-cleaning and laundry, automobile sales, and a gasoline filling station have the potential to adversely impact the environmental conditions at the site. The property adjacent to the south of the Site at 1 Hanson Place is associated with the release of an unknown quantity of No. 2 fuel oil as the result of a tank failure that was reported to NYSDEC in 2004 and assigned Spill No. 0402131. Fuel oil impacts were observed in soil

from 4 to 40 feet bgs, and petroleum free phase product was observed on groundwater, which was measured at about 43 feet bgs. A work plan for delineation and an exposure assessment was submitted to the NYSDEC in November 2013. The spill was administratively closed in 2015.

Results of Langan's 2015 Subsurface Investigation did not identify concentrations of chlorinated solvents above the monitoring and/or mitigation threshold (if detected as part of a soil vapor intrusion evaluation) according to the NYSDOH Soil Vapor Intrusion Matrices, therefore impacts from surrounding dry-cleaning facilities on subsurface conditions at the Site were not identified. Impacts of petroleum-related VOCs, SVOCs, and/or metals were identified in soil, groundwater, and soil vapor samples, including some detected at concentrations exceeding the RRSCOs and/or PGWSCOs for soil and the GWQSSs for groundwater.

5.3 AOC-3: Contaminated Historic Fill

Soil borings advanced throughout the Site during Langan's 2015 Subsurface Investigation identified an approximately 9.5-foot thick layer of historic fill through the entire Site. Polycyclic aromatic hydrocarbons (PAHs) and metals commonly associated with historic fill containing ash and coal cinders were detected at concentrations exceeding the RRSCOs during the 2015 Subsurface Investigation.

6.0 REMEDIAL INVESTIGATION

The RI was completed to investigate and characterize the nature and extent of the contamination at and/or emanating from the Site, supplement the data and findings of the May 2015 Subsurface Investigation report prepared by Langan, and characterize on-Site contaminated historic fill requiring removal, and native soil, groundwater, and soil vapor conditions in accordance with the RIWP dated 12 December 2020 prepared by Langan and approved by the NYSDEC on 5 January 2021.

The objectives of the RI included:

- Supplementing the investigation activities and results provided in the 2015 Subsurface Investigation Report;
- Confirming the assumed groundwater flow direction;
- Confirming the presence of suspected USTs;

- Characterizing the nature and vertical and lateral extents of the impacts in historic fill; and,
- Characterizing on-site historic fill and native soil, groundwater, and soil vapor conditions.

The scope of work for the RI consisted of:

- As a full geophysical survey was completed at the Site in January 2020, a limited geophysical survey was completed to clear potential utilities in the vicinity of test pits and soil boring locations;
- Completion of 7 test pits at three locations suspected to be associated with former or potentially closed in-place UST locations, where asphalt patching was observed within the existing parking lot and at the location where a suspected fill line beneath the St. Felix Street sidewalk enters the Site;
- Advancement of 7 soil borings (LSB-1 through LSB-7) and collection of 23 soil samples (including two duplicate samples);
- Installation of 5 permanent monitoring wells (LMW-1 through LMW-5) and collection of 7 groundwater samples (including one duplicate sample and one groundwater sample collected from previously installed MW-11);
- Survey and gauging of monitoring wells to evaluate groundwater elevation and flow direction; and
- Installation of 15 soil vapor sampling points (LSV-1 and LSV-2A/B through LSV-8A/B) and collection of 16 soil vapor samples (including one duplicate sample) and one ambient air sample.

The results of the geophysical survey are discussed in Section 6.1. Soil, groundwater, and soil vapor sampling procedures are discussed in Sections 6.2, 6.3, and 6.4, respectively. Quality assurance procedures implemented during this investigation and data validation (Data Usability Summary Reports [DUSRs]) that were completed are discussed in Section 6.5 and results of soil, groundwater, and soil vapor sampling are discussed in Section 6.6. The locations of all soil, groundwater, and soil vapor samples collected during this investigation are shown on Figure 5. A summary of the laboratory analytical data provided for this investigation are summarized in Tables 3A through 5 and are shown on Figures 6A through 8. All samples were analyzed by a NYSDOH Environmental Laboratory Approval Program (ELAP)-certified laboratory. Daily Reports of work performed are provided in Appendix G.

6.1 Geophysical Survey Investigation

A Site-wide geophysical survey was completed on 10 January 2020 and is described in detail in Section 4.3. A limited geophysical survey was completed on 19 April 2021 by Hager-Richter Geoscience, Inc. of Fords, New Jersey using electromagnetic surveying equipment (i.e., the Radiodetection RD 8000 series precision utility location [PUL] instrument, Geonics EM61-MK2 time domain electromagnetic induction metal detector) and ground penetrating radar (i.e., the Geophysical Survey Systems, Inc. UtilityScan HS system). The purpose of the survey was to provide utility clearance for the investigation and to confirm the results of the prior geophysical investigation. A copy of the geophysical investigation report is provided in Appendix A.

The geophysical survey identified the presence of linear anomalies attributed to unidentified subsurface utilities, as well as small unidentified buried objects within the vicinity of boring and test pit locations. All anomalies and unidentified buried objects were identified as far enough from the proposed boring and test pit locations that relocation of the proposed locations was not necessary. Subsurface metallic anomalies consistent with the presence of USTs or drums were not identified.

6.2 Soil Investigation

Seven soil borings (LSB-1 through LSB-7) and seven test pits were completed between 19 and 26 April 2021 by AARCO Environmental Services Corp. of Lindenhurst, New York (AARCO).

Soil borings and test pits were completed in areas of concern and areas not previously investigated to evaluate the extents of impacts and potential remedial options based on subsurface conditions.

A sampling plan identifying the location, depth and sampling rationale for the completed borings is provided in Table 1 and boring locations are shown on Figure 5. Subsurface profiles are provided in Figures 2A and 2B.

6.2.1 Soil Boring Investigation Methodology

Soil borings were completed using a GeoProbe®6610DT track-mounted direct push drill rig to 25 feet bgs. Due to the depth of groundwater, a track-mounted GeoProbe® 8140LC Sonic drill rig was

used to subsequently re-drill and advance five of the seven borings to 50 feet bgs for the purposes of installing groundwater monitoring wells and collecting soil samples. Soil borings were completed for the purpose of Site-wide characterization and AOC investigation, as described below and in Table 1:

| Soil Boring(s) | Investigation Rationale |
|------------------------|--|
| LSB-1 and LSB-5 | Site-wide assessment of soil |
| LSB-2 | AOC-1 and AOC-2 investigation and site-wide assessment of soil |
| LSB-3, LSB-4 and LSB-6 | AOC-1 investigation and site-wide assessment of soil |
| LSB-7 | AOC-2 investigation and site-wide assessment of soil |

Discrete soil samples were collected from the surface to the final depth of each boring and were visually classified for soil type, grain size, texture, and moisture content. At the locations completed with the direct push drill rig, continuous macrocore samples were collected in 5-foot long acetate liners to the bottom of each boring. At the locations completed with the Sonic drill rig, continuous samples were collected in dedicated flexible polyethylene sleeves within the drilling casing to the bottom of each boring. Soil cuttings did not exhibit gross impacts and were placed back into boreholes after completion of the investigation.

Field screening of soil during sample collection for VOCs using a field calibrated PID equipped with a 10.6-electron volt (eV) lamp was completed during the installation of all seven test borings.

No PID readings above background were measured in any of the soil borings. Petroleum-like impacts, as evidenced by odors and/or sheen, were not encountered in any of the soil borings.

6.2.2 Soil Sampling Methodology

A total of 23 discrete soil samples (including two blind duplicate samples) were collected for laboratory analysis. At soil boring locations where groundwater monitoring wells were installed (LSB-1, LSB-2, and LSB-5 through LSB-7), discrete soil samples were collected from the two-foot interval directly below ground surface, the two-foot interval located beneath the historic fill/native material interface at 8 to 10 or 13 to 15 feet bgs, and the two-foot interval corresponding to immediately below the groundwater table. At soil boring locations where groundwater monitoring wells were not installed (LSB-3 and LSB-4), discrete soil samples were collected from the two-foot interval directly below ground surface, the two-foot interval located beneath the historic fill/native material interface at 8 to 10 or 13 to 15 feet bgs, and the two-foot interval corresponding to immediately below the anticipated maximum excavation depth for the proposed remediation (i.e., 20 to 22 feet bgs).

Soil samples were submitted for laboratory analysis of VOCs, SVOCs, PCBs, herbicides, pesticides, Target Analyte List (TAL) Metals, hexavalent chromium, per- and polyfluoroalkyl substances (PFAS), and 1,4-dioxane.

Samples submitted for VOC analysis were collected from a discrete six-inch interval directly from the acetate liner or dedicated flexible polyethylene sleeves via laboratory-supplied Terra Core soil samplers. PFAS samples were also collected directly from the acetate liner using dedicated nitrile gloves to limit the potential for cross contamination and placed in appropriate laboratory-supplied containers. The remaining two-foot sample interval volume was homogenized and placed in appropriate laboratory-supplied containers for all additional analyses. The sample containers were labeled, placed in a laboratory-supplied cooler and packed on ice (to maintain a temperature of $4\pm 2^{\circ}\text{C}$). The sample coolers were picked up and delivered via courier under standard chain-of-custody protocol to by Alpha Analytical, Inc. (Alpha), a NYSDOH ELAP-certified analytical laboratory (NYSDOH ELAP certification number 11148 [Westboro Laboratory] and 11627 [Mansfield Laboratory]). In addition, QA/QC samples including two duplicate samples, two matrix spike/matrix spike duplicate (MS/MSD) samples, two field

blanks, and four trip blanks were collected. A sample summary is provided as Table 1.

6.2.3 Test Pit Investigation

A total of seven test pits to approximately 8 feet bgs were completed using a Bobcat E35i mini excavator at the three locations at the Site where patching was observed within the existing parking lot and at the location where the suspected fill line beneath the St. Felix Street sidewalk enters the Site. This included three areas in the central-western portion of the Site where the asphalt was observed to have been cut and patched during Langan's 2015 Phase I ESA, suggesting USTs were either removed or were still present. The test pits were completed for the purposes of confirming the prior geophysical surveys and attempting to locate current or former USTs. Two test pits (TP-1/2, TP-3/4, and TP-5/6) were completed at each patched location and one test pit (TP-7) was completed where the suspected fill line entered the site.

Field screening of soil generated by test pit excavation using a field calibrated PID equipped with a 10.6-electron volt (eV) lamp was completed. No PID readings above background were measured in any of the test pits. Historic fill was identified to completion depth within each test pit. The historic fill was observed to be similar in appearance to historic fill material observed across the Site foot-print and did not resemble backfill indicating previous UST removal. Petroleum-like impacts, as evidenced by odors and/or sheen, were not encountered in any of the test pits and no evidence of the current or prior presence of USTs were observed. Test Pit Logs are included in Appendix B.

6.3 Groundwater Investigation

A Langan field engineer documented the installation of permanent groundwater monitoring wells LMW-1 through LMW-5 by AARCO on 23 and 26 April 2021. Monitoring well locations are provided on Figure 5, and construction logs are included in Appendix B.

6.3.1 Monitoring Well Installation and Development Methodology

Monitoring wells LMW-1 through LMW-5 were installed via Sonic drilling to 50 feet bgs. All wells were constructed with 10 feet of 2-inch diameter 0.020-inch slot schedule 40 polyvinyl chloride (PVC) well screen, and the remainder of the well was constructed of 2-inch diameter schedule 40 PVC riser. The well annulus around the screen of both wells was backfilled with No. 2 sand to a depth corresponding to approximately 2-feet above the screened interval. A minimum 2-foot thick hydrated bentonite seal was installed above the sand pack at all well locations. The remaining annulus was backfilled with non-impacted soil cuttings and/or clean sand. The monitoring wells were finished with flush-mount metal protective casings and concrete.

Following well construction completion, each newly installed well on Site was developed using a Whale pump and surge pumping techniques across the well screen to agitate and remove fine particles. The Whale pump was surged across the submerged well screen in 2- to 3-foot increments for approximately 2 minutes per increment. After surging, the well was purged until the water became clear. No impacts (odor, sheen, and/or product) were observed in the newly installed wells. MW-11, previously installed during the 2015 Subsurface Investigation, was also re-developed using the same techniques. Purged groundwater from development activities was containerized in 55-gallon UN/DOT approved drums.

All groundwater monitoring wells were surveyed by a licensed surveyor on 7 May 2021. Synoptic groundwater levels were measured and all groundwater monitoring wells were gauged with an oil/water interface probe prior to sample collection at each well on 4 May 2021. Groundwater was encountered between el 2.25 to 2.85 NAVD88 during the 4 May 2021 sampling event. Measured groundwater flow is inferred to be to the south/southwest towards the Gowanus Canal. A potentiometric surface map generated from measurements taken during the May 2021 sampling event is provided as Figure 3.

Groundwater monitoring well locations are shown on Figure 3. Well construction details are provided in Appendix B.

6.3.2 Groundwater Sampling Methodology

Groundwater samples were collected on 3 and 4 May 2021, greater than one week following the well development activities completed on 26 April 2021. Monitoring wells were sampled for the purpose of Site-wide characterization and AOC-investigation as described below and in Table 1:

| Groundwater Monitoring Well(s) | Investigation Rationale |
|---------------------------------------|---|
| LMW-1, LMW-3, MW-11 | Site-wide assessment of groundwater |
| LMW-2 | AOC-1 and AOC-2 investigation and site-wide assessment of groundwater |
| LMW-4 | AOC-1 investigation and site-wide assessment of groundwater |
| LMW-5 | AOC-2 investigation and site-wide assessment of groundwater |

Samples were collected in accordance with the procedures in the United States Environmental Protection Agency's (USEPA) low-flow groundwater sampling procedure ("Low Stress Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells", EQASOP-GW 001, 19 January 2010) to allow for collection of a representative sample. Monitoring wells were purged and physical/chemical parameters (e.g., temperature, dissolved oxygen, oxygen reduction potential, and turbidity) were allowed to stabilize to ranges specified in the USEPA guidance before sampling, or until one hour of parameter readings were obtained if stabilization did not occur. Monitoring wells were purged and sampled using a peristaltic pump with dedicated high density polyethylene tubing and VOC samples were collected using a dedicated Teflon bailer. PFAS samples were collected using dedicated nitrile gloves to limit cross contamination. No notable field observations of impacts were identified during groundwater sampling procedures. Purge water was placed in 55-gallon, United Nations/Department of Transportation (UN/DOT)-approved drums. Low flow groundwater sampling parameter sheets are provided in Appendix C.

Six groundwater samples were collected into laboratory-supplied glassware, packed with ice to maintain a temperature of $\pm 4^{\circ}\text{C}$, and transported via courier service to Alpha under chain-of-custody protocol.

QA/QC samples including one duplicate sample, one MS/MSD sample, one field blank, and two trip blanks were collected. Groundwater samples were analyzed for VOCs, SVOCs, PCBs, herbicides, pesticides, total and dissolved total analyte list (TAL) metals, hexavalent chromium, PFAS, and 1,4-dioxane.

6.4 Soil Vapor Investigation

Fifteen temporary soil vapor sampling points (LSV-1 through LSV-8B) were installed on 22 April 2021 by AARCO. All soil vapor sampling points were sampled on 4 May 2021 by Langan, including one duplicate soil vapor and one ambient air sample collected for QA/QC purposes. Sampling was conducted in general accordance with the NYSDOH October 2006 Final Guidance for Evaluating Soil Vapor Intrusion in New York (as amended).

6.4.1 Soil Vapor Implant Installation and Sampling Procedures

Temporary soil vapor sampling points LSV-1 and LSV-2A through LSV-8A were installed at 5 feet bgs and LSV-2B through LSV-8B were installed to the depth corresponding to the 6-inch interval below proposed redevelopment depth, 20.5 feet bgs. Each of the soil vapor points was installed via direct push drilling using Teflon-lined polyethylene tubing connected to a dedicated expendable six-inch stainless steel screen. No. 2 sand was used to backfill up to approximately one-foot above the screened interval followed by a hydrated granular bentonite clay seal to the ground surface at deep soil vapor locations LSV-3B, LSV-5B, and LSV-6B. All shallow soil vapor points (LSV-1 and LSV-2A through LSV-8A) and four deep soil vapor points (LSV-2A, LSV-4A, LSV-7A, and LSV-8A) were installed with No. 2 sand used as backfill up to approximately one-foot bgs followed by a hydrated granular bentonite clay seal to the ground surface.

| Soil Vapor Sampling Point(s) | Investigation Rationale |
|---|--|
| LSV-1, LSV-3A/B, LSV-5A/B, and LSV-6A/B | Site-wide assessment |
| LSV-2A/B | AOC-1 and AOC-2 investigation and site-wide assessment |

| Soil Vapor Sampling Point(s) | Investigation Rationale |
|-------------------------------------|--|
| LSV-4A/B and LSV-7A/B | AOC-1 investigation and site-wide assessment |
| LSV-8A/B | AOC-2 investigation and site-wide assessment |

Prior to sampling, each soil vapor sampling point was tightness tested using the helium tracer gas method and purged at a flow rate of <200-ml per minute into a 1-liter tedlar bag. No evidence of helium breakthrough (i.e., helium concentrations above 5%) was observed in any of the sample locations before sample collection. PID readings for VOCs collected from the purged soil vapor were measured at concentrations ranging from 73 parts per billion (ppb) (LSV-1) to 1,332 ppm (LSV-3B) during field screening of each location. Soil vapor sampling locations are shown on Figure 5 and soil vapor sampling field logs are provided in Appendix D.

Soil vapor samples were collected in laboratory-cleaned and certified evacuated 6-L stainless steel summa canisters with regulators supplied by Alpha and were laboratory analyzed for VOCs via USEPA TO-15 Method. The regulators were set to collect each sample over a 2-hour sampling period (a flow-rate of <200-ml per minute) as per USEPA/ITRC soil vapor sampling guidance. Each soil vapor sample was numbered and recorded in a field log book. Samples were transferred to the laboratory immediately after field sampling was completed, and stored at a maximum room temperature of 30° Celsius. Chain-of-custody forms were utilized to document custody for the acquisition, possession, and analysis.

6.4.2 Ambient Air Sampling Procedures

Concurrent with soil vapor sampling, one ambient air sample was collected to evaluate external influences on soil vapor quality for quality assurance purposes.

The ambient air sample was collected in laboratory-cleaned and certified evacuated 6-L stainless steel summa canisters with regulators supplied by Alpha and were laboratory analyzed for VOCs via USEPA TO-15 Method.

The regulator was set to collect the sample over an 8-hour sampling period (a flow-rate of <200-ml per minute). The sample was numbered and recorded in a field log book and subsequently transferred to the laboratory immediately after field sampling was completed, and stored at a maximum room temperature of 30° Celsius. Chain-of-custody forms were utilized to document custody for the acquisition, possession, and analysis.

6.5 Quality Assurance Samples and Data Validation

All soil, groundwater, and soil vapor sampling devices were properly decontaminated according to NYSDEC and ASTM (ASTM D-5088-90) guidelines prior to each sampling location. For soil sampling, this included the use of a dedicated acetate liner within a stainless steel macrocore sampling device for the locations drilled with the direct push drill rig or a dedicated flexible polyethylene sleeve within the drilling casing for the locations drilled with the Sonic rig. Soil samples were then placed in glassware supplied by the laboratory. For groundwater, dedicated high density polyethylene tubing was used. Groundwater samples were collected directly into glassware supplied by the laboratory. For soil vapor, dedicated expendable six-inch stainless steel screens and tubing were used.

Each sample was numbered and recorded in a field log book. Soil and groundwater samples were transferred to the laboratory immediately after field sampling was completed and were stored at a maximum of 4° Celsius. Soil vapor samples were transferred to the laboratory immediately after field sampling was completed, and were stored at a maximum room temperature of 30° Celsius. Chain-of-custody forms were utilized to document custody for the acquisition, possession and analysis.

Quality assurance (trip blanks) and quality control samples (field blank samples, duplicate samples, matrix spike/matrix spike duplicate [MS/MSD] samples, and ambient air samples) were incorporated into the sampling events and consisted of three field blanks (two for soil and one for groundwater), four duplicate samples (two for soil, one for groundwater, and one for soil vapor), five trip blanks (three for soil and two for groundwater), three MS/MSD samples (two for soil and one for groundwater), and one ambient air sample for soil vapor.

One soil duplicate sample was collected from the LSB-2 location from 42 to 44 feet bgs for VOCs, SVOCs, PCBs, pesticides, herbicides, TAL metals, hexavalent chromium, mercury, PFAS, and 1,4-dioxane analysis; the analytical results were consistent with those reported for the LSB2_42-44 sample with the exception of the metal nickel. The field duplicate and parent sample exhibited a RPD above the control limit of 50% for nickel, and the associated results are qualified as J because of potential indeterminate bias. One soil duplicate sample was collected from the LSB-5 location from 0 to 2 feet bgs for VOCs, SVOCs, PCBs, pesticides, herbicides, TAL metals, hexavalent chromium, mercury, PFAS, and 1,4-dioxane analysis; the analytical results were consistent with those reported for the LSB5_0-2 sample with the exception of the metal arsenic. The field duplicate and parent sample exhibited a RPD above the control limit of 50% for arsenic, and the associated results are qualified as J because of potential indeterminate bias.

Two soil sampling field blanks were also collected and analyzed for VOCs, SVOCs, PCBs, pesticides, herbicides, total TAL metals, hexavalent chromium, mercury, PFAS, and 1,4-dioxane. The VOC acetone, the metals barium and manganese, and the PFAS compounds perfluorohexanoic acid (PFHxA) and perfluorooctane (PFOS) were detected. Two trip blanks were collected and analyzed for VOCs; the VOC acetone was detected in one of the two trip blank samples collected. Data usability is discussed in Section 6.6.4.

One groundwater duplicate sample was collected from the LMW-4 location for VOCs, SVOCs, PCBs, pesticides, herbicides, total and dissolved TAL metals, mercury, hexavalent chromium, PFAS, and 1,4-dioxane analysis; the analytical results were consistent with those reported for the LMW-4 sample with the exception of total iron. The field duplicate and parent sample exhibited a RPD above the control limit of 30% for total iron, and the associated results are qualified as J because of potential indeterminate bias.

One groundwater field blank was also collected and analyzed for VOCs, SVOCs, PCBs, pesticides, herbicides, total and dissolved TAL metals, mercury, hexavalent chromium, PFAS, and 1,4-dioxane analysis. The dissolved metal antimony, iron, sodium, and thallium, and the PFAS compound PFHxA were detected. Two trip blanks were collected and analyzed for VOCs; no VOCs were detected in either of the samples. Data usability is discussed in Section 6.6.4.

A soil vapor duplicate sample was collected from sampling point LSV-1 for VOC analysis; the analytical results were consistent with those reported for the LSV-1 sample. One ambient air sample was collected for VOCs. Compounds detected in the sample include acetone, chloromethane, dichlorodifluoromethane, ethanol, isopropanol, and toluene. These compounds were also detected in corresponding soil vapor samples collected. Data usability is discussed in Section 6.6.4.

Analytical data was submitted to a Langan validator for review in accordance with USEPA and NYSDEC validation protocols. A DUSR was prepared for each delivery group following data validation. The DUSR presents the results of data validation, including a summary assessment of laboratory data packages, sample preservation and chain-of-custody procedures, and a summary assessment of precision, accuracy, representativeness, comparability, and completeness for each analytical method. For each of the organic analytical methods, the following was assessed:

- Holding times
- Instrument tuning
- Instrument calibrations
- Blank results
- System monitoring compounds or surrogate recovery compounds (as applicable)
- Internal standard recovery results
- MS/MSD results
- Target compound identification
- Chromatogram quality
- Compound quantization and reported detection limits
- System performance
- Results verification

DUSRs are provided in Appendix F. Based on the results of data validation, the following qualifiers may be assigned to the data in accordance with the USEPA guidelines and best professional judgment:

- **R** – The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.

- **J** – The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
- **UJ** – The analyte was not detected at a level greater than or equal to the reporting limit (RL); however, the reported RL is approximate and may be inaccurate or imprecise.
- **U** – The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.
- **NJ** – The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

After data validation was complete, validated data was used to prepare the tables and figures included in this report.

6.6 Laboratory Analytical Results

Summaries of the laboratory analytical results for soil, groundwater, and soil vapor are provided in Tables 3A/B, 4A/B, and 5, respectively, and are shown on Figures 6A/B, 7, and 8, respectively. Analytical results are discussed in detail below. The complete laboratory analytical packages are provided in Appendix E.

6.6.1 Soil Analytical Results

All soil analytical results were compared to the NYSDEC UUSCOs, RRSCO, and PGWSCO. Soil analytical results are summarized on Table 3A (organics and inorganics) and Table 3B (Emerging Contaminants) and shown on Figure 6A (organics) and 6B (inorganics). Duplicate soil samples results are not included in the discussion as these samples are collected for quality assurance/quality control verification of the laboratory results only and are discussed in Section 6.5.

VOCs

No exceedances of the NYSDEC UUSCOs, RRSCO, or PGWSCO were identified for VOCs.

SVOCs

Analytical results revealed exceedances of the NYSDEC UUSCOs, RRSCO, and/or PGWSCO for PAHs.

Compounds detected in exceedance of the UUSCOs and/or the PGWSCOs include benzo(a)anthracene (4.5 mg/kg – 4.6 mg/kg), benzo(a)pyrene (3.6 mg/kg – 4.4 mg/kg), benzo(b)fluoranthene (1.4 mg/kg – 6 mg/kg), benzo(k)fluoranthene (1.4 mg/kg – 2.1 mg/kg), chrysene (1.1 mg/kg – 5.4 mg/kg), dibenzo(a,h)anthracene (0.5 mg/kg – 0.6 mg/kg), and indeno(1,2,3-c,d)pyrene (0.7 mg/kg – 3 mg/kg). Compounds detected at concentrations also exceeding the RRSCOs include benzo(a)anthracene (4.5 mg/kg – 4.6 mg/kg), benzo(a)pyrene (3.6 mg/kg – 4.4 mg/kg), benzo(b)fluoranthene (1.4 mg/kg – 6 mg/kg), chrysene (4.1 mg/kg – 5.4 mg/kg), dibenzo(a,h)anthracene (0.5 mg/kg – 0.6 mg/kg), indeno(1,2,3-c,d)pyrene (0.7 mg/kg – 3 mg/kg). All samples exhibiting concentrations of PAHs exceeding the NYSDEC UUSCOs, RRSCOs, and/or PGWSCOs were collected from 0 to 2 feet bgs.

PCBs

No exceedances of the NYSDEC UUSCOs, RRSCOs, or PGWSCOs were identified for PCBs.

Pesticides

Analytical results revealed an exceedance of the NYSDEC UUSCOs for the pesticide 4,4'-DDT (0.00636 mg/kg) from the sample collected from LSB-4, located in the northern portion of the Site, from 0 to 2 feet bgs. No exceedances of the NYSDEC RRSCOs or PGWSCOs were identified for pesticides.

Herbicides

Analytical results revealed no exceedances of the NYSDEC UUSCOs, RRSCOs, or PGWSCOs for herbicides.

Inorganics

Analytical results revealed exceedances of the NYSDEC UUSCOs, RRSCOs, and/or PGWSCOs for metals.

Compounds detected in exceedance of the UUSCOs and/or the PGWSCOs include lead (97.1 mg/kg – 235 mg/kg), mercury (0.186 mg/kg – 1.4 mg/kg), nickel (38.5 mg/kg – 51.1 mg/kg), and zinc (185 mg/kg - 204 mg/kg). The only compound detected at a concentration exceeding the RRSCO is mercury (1.4 mg/kg), which was identified in a sample collected from LSB-4, located

in the northern portion of the Site, from 0 to 2 feet bgs. This sample exhibited the highest concentrations of metals exceeding the NYSDEC SCOs.

Emerging Contaminants (PFAS: 21-Compound List)

Soil sample analytical results are compared to the soil UUSCOs, PGWSCO, and RRSCO identified in the NYSDEC Part 375 Remedial Programs Guidelines for Sampling and Analysis of Per- and Polyfluoroalkyl Substances (PFAS) dated January 2021. Analytical results are summarized in Table 3B and on Figure 5B.

Perfluorooctanoic Acid (PFOA) was detected above the UUSCO (0.75 parts per billion [ppb] – 1.12 ppb) from 8 to 10 feet bgs in the west and south portions of the site and 13 to 15 feet bgs in the northeast portion of the site and above the UUSCO and PGWSCO (1.12 ppb) from 8 to 10 feet bgs in the western portion of the site. No PFAS compounds were detected above the RRSCO. The sample collected from LSB-1, located in the western portion of the Site, from 8 to 10 feet bgs exhibited the highest concentration of PFOA exceeding the NYSDEC SCOs.

Conclusions

Impacts indicative of contaminated historic fill are present throughout the Site footprint. The average historic fill/native interface was observed at approximately el 37 NAVD88 across the site footprint. Exceedances of the analytes associated with contaminated historic fill, including PAHs, pesticides, and metals, were detected within the historic fill layer. The highest concentrations of PAHs were detected in the north-central and southeastern portions of the Site and the highest concentrations of metals were detected in the north-central portion of the Site. Elevated concentrations of PAHs identified in these areas may also be attributed to the potential former historical automobile repair or service operations and, in the case of LSB-6 located adjacent to the suspected fill line entering from St. Felix Street, may be attributed to the potential historical presence of USTs. Concentrations of PFOA were detected above the UUSCO in the northeastern, southwestern, and western portions of the Site. Although not above the RRSCO, these exceedances may be attributed to fill of unknown origin.

6.6.2 Groundwater Analytical Results

All groundwater analytical results were compared to the NYSDEC GWQSs and are summarized in Table 4A; 1,4-dioxane and PFAS analytical results are summarized in Table 4B. All groundwater analytical results are presented on Figure 7. Duplicate groundwater samples results are not included in the discussion as these results are discussed in detail in Section 6.5.

VOCs

Analytical results revealed exceedances of the NYSDEC GWQSs for the VOC chloroform (11 micrograms per liter [$\mu\text{g/L}$] - 27 $\mu\text{g/L}$) in all groundwater samples collected and trichloroethene (TCE) (5.8 $\mu\text{g/L}$) in MW-11 located in the central-eastern portion of the Site. No other VOCs were detected above the GWQSs.

SVOCs

Analytical results revealed exceedances of the NYSDEC GWQSs for the PAHs benzo(a)anthracene (0.07 $\mu\text{g/L}$ – 0.22 $\mu\text{g/L}$), benzo(a)pyrene (0.02 $\mu\text{g/L}$ – 0.22 $\mu\text{g/L}$), benzo(b)fluoranthene (0.02 $\mu\text{g/L}$ – 0.27 $\mu\text{g/L}$), benzo(k)fluoranthene (0.01 $\mu\text{g/L}$ – 0.11 $\mu\text{g/L}$), chrysene (0.08 $\mu\text{g/L}$ – 0.24 $\mu\text{g/L}$), and indeno(1,2,3-c,d)pyrene (0.19 $\mu\text{g/L}$) and the SVOC bis(2-ethylhexyl)phthalate (6.1 $\mu\text{g/L}$) in three of six groundwater samples collected for SVOC analysis during the investigation. The highest concentrations of SVOCs exceeding the GWQSs identified during the investigation were observed at LMW-3 located in the northeastern portion of the Site.

PCBs

Analytical results revealed exceedances of the NYSDEC SGV for total PCBs (0.142 $\mu\text{g/L}$ – 0.176 $\mu\text{g/L}$) in two of the six groundwater samples collected for PCB analysis during the investigation. The highest concentration of total PCBs exceeding the SGV identified during the investigation was observed at MW-11 located in the central-eastern portion of the Site.

Pesticides

Analytical results revealed no exceedances of the NYSDEC GWQSs.

Herbicides

Analytical results revealed no exceedances of the NYSDEC GWQSs.

Inorganics

Analytical results revealed exceedances of the NYSDEC GWQSSs for metals in all groundwater samples collected during the investigation. Exceedances include total iron (382 µg/L – 4,640 µg/L), total lead (69.42 µg/L), total manganese (502.8 µg/L – 1,065 µg/L), dissolved manganese (508.3 µg/L – 1,202 µg/L), total sodium (37,500 µg/L – 91,200 µg/L), and dissolved sodium (37,800 µg/L – 91,100 µg/L).

Emerging Contaminants (1,4-dioxane and PFAS: 21-Compound List)

All six groundwater samples were analyzed for PFAS and 1,4-dioxane. Analytical results for 1,4-dioxane were compared to NYSDEC Volume A (Title 10) Subpart 5-1.51 Public Water Systems Maximum Contaminant Levels (MCLs) dated August 2020. PFAS results were compared to screening values provided in the NYSDEC Part 375 Remedial Programs Guidelines for Sampling and Analysis of PFAS (January 2021). Analytical results are summarized in Table 4B and on Figure 7.

1,4-dioxane was not detected in any samples collected. PFAS compounds were detected in all six groundwater samples collected; however, only PFOS and PFOA were detected above the applicable MCL of 10 nanograms per liter (ng/L).

PFOS (12.7 ng/L) was detected above the MCL of 10 ng/L in one groundwater sample (LMW-1) and PFOA (19.7 ng/L – 61.8 ng/L) was detected above the MCL of 10 ng/L in all groundwater samples collected. The highest concentrations of PFOS and PFOA were detected in LMW-1 and LMW-4, respectively.

Conclusions

Analytical results revealed no exceedances of the NYSDEC GWQSSs for pesticides and herbicides. The chlorinated VOC TCE was detected in exceedance of the NYSDEC GWQSSs in one well located in the central-eastern portion of the Site. TCE in groundwater may be attributed to historical non-adjacent surrounding dry-cleaning operations or an unidentified off-Site source. The VOC chloroform was also detected in exceedance of the NYSDEC GWQSSs in all wells, however as it was not detected or was only marginally detected above the reporting limit in the

soil samples, these exceedances may be attributed to an unidentified off-Site source.

PAHs detected in exceedance of the NYSDEC GWQs at LMW-3 and LMW-4 in the eastern portion of the Site may be attributed to the historical on-Site operations, including potential historical petroleum storage, adjacent NYSDEC Spill Site at 1 Hanson Place (with confirmed groundwater impacts), and/or an unidentified off-Site source. Metals were also detected in exceedance of the NYSDEC GWQs although, with the exception of lead, these exceedances are likely attributable to naturally occurring background concentrations as groundwater was encountered within the native material beneath the site and, at least for MW-11, elevated turbidity may have occurred during sample collection. Lead was detected in exceedance of the NYSDEC GWQs at only one location (LMW-3), located in the northeastern corner of the Site. As such, this lead exceedance may be attributed to an unidentified off-Site source. Total PCBs were detected in exceedance of the NYSDEC GWQs at only two wells. It should be noted that PCBs were also detected in the method blanks associated with these samples and as such, the marginal exceedances above the GWQs at these locations may be due to laboratory contamination.

PFOA was detected above the MCL of 10 ng/L in all groundwater samples collected throughout the Site footprint and PFOS was detected above the MCL of 10 ng/L in one well. The presence of PFOS and PFOA in groundwater may be attributable to releases from the historical and active surrounding dry-cleaning/laundry facilities or an unidentified off-Site source.

6.6.3 Soil Vapor Analytical Results

Soil vapor analytical results were not compared to the NYSDOH Final Guidance for Evaluating Soil Vapor Intrusion Matrices A through C dated October 2006 and revised in May 2017 due to the lack of an existing onsite building preventing the collection of indoor air samples. For the purpose of reporting analytical results, we have identified concentrations of CVOCs that would require monitoring and/or mitigation according to the NYSDOH Soil Vapor Intrusion Matrices if detected as part of a soil vapor intrusion evaluation. Soil vapor analytical results are summarized

in Table 5 and are shown on Figure 8. Duplicate soil vapor samples results are not included in the discussion as these results are discussed in detail in Section 6.5.

The CVOCs cis-1,2-dichloroethene, 1,1-dichloroethene, carbon tetrachloride, 1,1,1-trichloroethane, methylene chloride, and vinyl chloride were not detected in any soil vapor samples collected. Elevated concentrations of the CVOC TCE that would require monitoring and/or mitigation according to the NYSDOH Soil Vapor Intrusion Matrices if detected as part of a soil vapor intrusion evaluation were identified. According to the NYSDOH Soil Vapor Intrusion Matrix A, TCE was detected above the monitoring and/or mitigation threshold of $6 \mu\text{g}/\text{m}^3$ in both the shallow and deep samples collected at LSV-7 ($6.99 \mu\text{g}/\text{m}^3$ and $18.9 \mu\text{g}/\text{m}^3$, respectively). TCE was also detected below the monitoring and/or mitigation threshold in the shallow sample collected at LSV-1 ($1.22 \mu\text{g}/\text{m}^3$). PCE was detected in all samples with the exception of shallow sample LSV-2A and deep sample LSV-4B. PCE concentrations ranged from $2.5 \mu\text{g}/\text{m}^3$ to $18.4 \mu\text{g}/\text{m}^3$ in the remaining shallow samples and from $1.63 \mu\text{g}/\text{m}^3$ to $36.3 \mu\text{g}/\text{m}^3$ in the remaining deep samples, all below the monitoring and/or mitigation threshold of $100 \mu\text{g}/\text{m}^3$ according to the NYSDOH Soil Vapor Intrusion Matrix B.

The soil vapor results also identified detections of petroleum-related VOCs including BTEX compounds in all 15 soil vapor sampling locations; cumulative BTEX concentrations detected in shallow samples ranged from $4.27 \mu\text{g}/\text{m}^3$ at LSV-2A to $196 \mu\text{g}/\text{m}^3$ at LSV-7A, while concentrations detected in deep samples ranged from $26.1 \mu\text{g}/\text{m}^3$ in LSV-8B to $518 \mu\text{g}/\text{m}^3$ in LSV-7B. Additional petroleum-related VOCs including 1,2,4-trimethylbenzene ($4.49 \mu\text{g}/\text{m}^3$ – $320 \mu\text{g}/\text{m}^3$) and 1,3,5-trimethylbenzene ($1.33 \mu\text{g}/\text{m}^3$ – $95.4 \mu\text{g}/\text{m}^3$) were also detected in all samples. The highest concentrations of petroleum-related compounds were identified in both the shallow and deep samples collected from LSV-7, located in the southeastern portion of the Site in the vicinity of the suspected fill line entering from St. Felix Street associated with AOC-1.

The soil vapor results also identified detections of the VOC methyl ethyl ketone (2-Butanone) in all 15 soil vapor sampling locations; 2-Butanone concentrations detected in shallow samples ranged from $12.7 \mu\text{g}/\text{m}^3$ at

LSV-1 to 684 $\mu\text{g}/\text{m}^3$ at LSV-6A, while concentrations detected in deep samples ranged from 36 $\mu\text{g}/\text{m}^3$ in LSV-2B to 2,000 $\mu\text{g}/\text{m}^3$ in LSV-6B. The highest concentrations of 2-Butanone were identified in both the shallow and deep samples collected from LSV-6, located in the northeastern corner of the Site.

Conclusions

The soil vapor investigation identified impacts for TCE that would require monitoring and/or mitigation per the NYSDOH guidance values in soil vapor samples LSV-7A/B located in the southeastern portion of the Site if detected as part of a soil vapor intrusion evaluation. Although TCE was not detected at concentrations exceeding NYSDEC SCOs in soil samples collected across the Site and was not detected exceeding NYSDEC GWQSs in groundwater at the monitoring well collocated with LSV-7A/B (LMW-4), TCE was detected in one nearby monitoring well (MW-11) at a concentration exceeding the SGV. The presence of TCE in groundwater and soil vapor is attributed to either historic garage/gasoline station, surrounding dry-cleaning facilities or another unknown off-Site source.

The soil vapor investigation also identified BTEX and other petroleum-related compounds in all soil vapor sampling locations. These petroleum-related VOCs were not identified above applicable SCOs or GWQSs in soil or groundwater samples collected during this investigation. The highest concentrations of petroleum-related compounds in soil vapor were identified in LSV-7A/B, located in the southeastern portion of the Site in the vicinity of the suspected fill line entering from St. Felix Street associated with AOC-1. The presence of petroleum-related VOCs in soil vapor may be attributed to historical site operations as a garage/gasoline station and the potential historical presence of USTs, historic adjacent and surrounding site operations and/or petroleum releases, or to an unknown off-Site source.

The soil vapor investigation also identified 2-Butanone in all soil vapor sampling locations. 2-Butanone was not detected in soil or groundwater samples collected during this investigation. The highest concentrations of 2-Butanone in soil vapor were identified in LSV-6A/B, located in the northeastern corner of the Site. The presence of 2-Butanone in soil vapor

may be attributed to historical site operations or to an unknown off-Site source.

6.6.4 Data Usability

The DUSRs were prepared in accordance with DER-10 and reviewed by Langan's in-house validator before issuance. The DUSRs presented the results of data validation, including a summary assessment of laboratory data packages, sample preservation and chain of custody procedures, and a summary assessment of deficiencies for each analytical method. DUSRs for the RI are provided in Appendix F.

All data are considered usable, as qualified. Some data qualifiers were appended to the reported results, which have been included in the respective data summary tables (Tables 3A through 5). Copies of the DUSRs are included in Appendix F.

6.7 Evaluation of Areas of Concern

This section discusses the results of the RI with respect to the AOCs described in detail in Section 5.0.

6.7.1 AOC-1: Historical Site Operations and Potential Historical Presence of USTs

Historical records indicate that historical Site operations may have included a gasoline station or automotive repair or service operations. Additionally, on-site concrete patches and patched asphalt observed during Langan's 2015 site reconnaissance and a UST fill port with piping leading into the Site detected during NOVA's 2020 geophysical survey indicate the potential presence or previous removal of on-site UST(s). However, as discussed above and in Section 6.2.3, neither prior geophysical investigations nor the test pit investigation completed as part of the RI did not confirm the presence of USTs at these locations.

As discussed in Section 4.2, odors were observed from 7 to 8 feet bgs in soil boring EB12 in the eastern portion of the Site during the 2015 Subsurface Investigation and the soil analytical results identified petroleum-related VOCs, PAHs, and metals in soil above NYSDEC SCOs indicative of petroleum impacts and the presence of historic fill.

Petroleum-related VOCs, PAHs, and metals detected in exceedance of NYSDEC SCOs in soil were not detected in groundwater above the NYSDEC GWQs. Elevated concentrations of petroleum-related VOCs including BTEX compounds were also identified in soil vapor samples collected across the site.

Soil

In order to investigate soil in the vicinity of the suspected UST locations and/or to further characterize the impacts associated with historical site operations identified in 2015, two soil borings (EB09 and EB12) were advanced at the Site in 2015 and four soil borings (LSB-2, LSB-3, LSB-4, and LSB-6) were advanced at the Site in 2021. EB09, LSB-2, and LSB-3 were advanced in the vicinity of patched portions of asphalt indicative of the potential historic presence of UST(s); LSB-6 was advanced in the vicinity of the suspected fill line entering from St. Felix Street; and LSB-4 was advanced at the 2015 Subsurface Investigation boring location EB12, where odors were observed and elevated concentrations of VOCs and PAHs were detected. For borings advanced during the 2015 Subsurface Investigation (EB09 and EB12), a total of two discrete samples were collected and for borings advanced during the 2021 Remedial Investigation (LSB-2, LSB-3, LSB-4, and LSB-6), a total of 13 discrete soil samples (including one duplicate sample) were collected. A summary of the soil analytical results for AOC-1 is summarized as follows:

- Odors were observed in soil between 7 and 8 feet bgs in EB12. No elevated PID readings or visual or olfactory evidence of impacts were observed in any of the remaining soil borings or test pits.
- The VOCs naphthalene and total xylenes were detected above the UUSCOs and/or PGWSCOs in one sample collected from soil boring EB12 collected from 7 to 9 feet bgs in the historic fill layer in AOC-1. No VOCs were detected above the RRSCOs in this AOC.
- A soil sample was collected from 8 to 10 feet bgs in LSB-4. This sample both assessed native soil conditions directly beneath the fill/native layer interface and also delineated the elevated concentrations of the VOCs naphthalene and total xylenes previously identified in EB12. No elevated PID readings or visual

or olfactory evidence of impacts were observed and no VOCs were detected above the UUSCOs, PGWSCO, or RRSCO in LSB-4.

- 18 SVOCs (3 & 4 methylphenol, acenaphthene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, dibenzofuran, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, phenol, and pyrene) were detected above the UUSCOs, RRSCO, and/or PGWSCO in four samples collected from EB09, EB12, LSB-4, and LSB-6 at depths ranging from 0 to 9 feet bgs in AOC-1.
- Six metals, including barium, trivalent chromium, copper, lead, mercury, and zinc, were detected above the UUSCOs and/or PGWSCO in 9 samples collected from EB09, EB12, LSB-2, LSB-3, LSB-4, and LSB-6 at depths ranging from 0 to 22 feet bgs in AOC-1. Three metals, including barium, lead and mercury, were detected above RRSCO in 3 samples collected from EB09, EB12, and LSB-4 at depths ranging from 0 to 9 feet bgs in AOC-1.
- The pesticide 4,4'-DDT was detected above the UUSCOs in 1 sample collected from LSB-4 from 0 to 2 feet bgs in AOC-1. No pesticides were detected above PGWSCO or RRSCO in this AOC.
- PCBs were not detected above UUSCOs, PGWSCO, or RRSCO in this AOC.
- Herbicides were not detected above the UUSCOs, PGWSCO, or RRSCO in this AOC.
- PFAS compounds were not detected above the UUSCOs, RRSCO, or PGWSCO in this AOC.

Groundwater

In order to further investigate potential impacts to the Site from historical Site operations and potential historical presence of USTs, two groundwater samples were collected from two monitoring wells installed during the RI (LMW-2 and LMW-4). LMW-2 was installed in the vicinity of and downgradient to the patched portions of asphalt and LMW-4 was installed in the vicinity of the suspected fill line entering from St. Felix Street. A summary of the groundwater analytical results for AOC-1 is summarized as follows:

- The VOC chloroform was detected above the GWQs in both wells sampled for this AOC. It should be noted that chloroform was also detected above the GWQs in all wells sampled across the Site.
- The SVOCs benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, and chrysene were detected above the GWQs in LMW-4 and bis(2-ethylhexyl)phthalate was detected above the GWQs in LMW-2.
- Two total and two dissolved metals, including manganese and sodium, were detected above the GWQs in LMW-2 and only total and dissolved sodium were detected above the GWQs in LMW-4.
- Pesticides, herbicides, and PCBs were not detected above the GWQs in any groundwater samples collected in AOC-1.
- PFAS compounds were detected and PFOA in particular was detected above the MCL of 10 ng/L in both groundwater samples collected within this AOC. It should be noted that PFOA was also detected above the MCL in all wells sampled across the Site and PFOS was detected in one well.

Soil Vapor

Two shallow soil vapor points (SV02 and SV03) were installed during the 2015 Subsurface Investigation and four shallow and four deep soil vapor points (LSV-2A/B, LSV-4A/B, LSV-5A/B, and LSV-7A/B) were installed during the RI within or in the vicinity of AOC-1. A summary of the soil vapor analytical results for samples collected within the vicinity of AOC-1 is summarized as follows:

- TCE was detected above the monitoring and/or mitigation threshold if detected as part of a soil vapor intrusion evaluation of $6 \mu\text{g}/\text{m}^3$ in both the shallow and deep samples collected at LSV-7.
- Petroleum-related VOCs including BTEX, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene were detected in all ten soil vapor samples collected within this AOC.
- 2-Butanone was detected in all ten soil vapor samples collected within this AOC.

AOC-1 Conclusions

The test pit investigation completed as part of the RI did not confirm the presence of USTs within AOC-1. Odors were observed in soil between 7 and 8 feet bgs in EB12 in 2015, however no additional visual or olfactory evidence of petroleum impacts were observed elsewhere within AOC-1 during the test pit investigation. Elevated concentrations of the VOCs naphthalene and total xylenes were detected in soil above the UUSCOs and/or PGWSCOs at this location, which may be associated with the historical site use. Additionally, a soil sample was collected from 8 to 10 feet bgs in LSB-4 during the 2021 RI (drilled at the same location as EB12) to both assess native soil conditions directly beneath the fill/native layer interface and also delineate the elevated concentrations of the VOCs naphthalene and total xylenes previously identified in EB12. No elevated PID readings or visual or olfactory evidence of impacts were observed and no VOCs were detected above the UUSCOs, PGWSCOs, or RRSCOs in LSB-4, therefore delineating elevated concentrations identified within EB12.

Elevated concentrations of PAHs above the UUSCOs, PGWSCOs, and/or RRSCOs in soil within AOC-1 may be attributed to historical Site operations as well as the presence of urban fill of unknown origin. Similarly, elevated concentrations metals above the UUSCOs, PGWSCOs, and/or RRSCOs are attributed to the presence of urban fill of unknown origin.

The VOC chloroform was detected in AOC-1 in groundwater above the NYSDEC GWQSs although it is likely not associated with historical Site uses or the presence of historic USTs. As chloroform was detected in all wells across the Site and as it was not detected or was only marginally detected above the reporting limit in the associated soil samples, these exceedances may be attributed to an unidentified off-Site source. The detections of PAHs above the NYSDEC GWQSs in AOC-1 may be attributed to the historical Site uses, including potential historical petroleum storage, the adjacent NYSDEC Spill Site at 1 Hanson Place, or another unidentified off-Site source. Detections of metals above the NYSDEC GWQSs in groundwater in AOC-1 are attributed to naturally occurring background concentrations. PFAS compounds detected above the MCLs in groundwater in AOC-1 may be attributed to releases

from the historical and active surrounding dry-cleaning/laundry facilities or an unidentified off-Site source and not the historical Site uses.

The detection of TCE in soil vapor in AOC-1 at LSV-7A/B at a concentration above the NYSDOH Soil Vapor Intrusion Matrix monitoring and/or mitigation threshold if detected as part of a soil vapor intrusion evaluation is likely attributable to historical surrounding dry-cleaners and not the historical Site uses. However petroleum-related VOCs including BTEX compounds, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene were detected in all 10 soil vapor samples collected in AOC-1 and may be attributable to historical site operations including the potential former presence of USTs. 2-Butanone was also detected in all 10 soil vapor samples collected in AOC-1 and may be attributable to historical site operations.

6.7.2 AOC-2: Historical Adjacent and Surrounding Site Operations

Historical operations at adjacent and surrounding properties included drug manufacturing, dry-cleaning and laundry, automobile sales, and a gasoline filling station. The property adjacent to the south of the Site at 1 Hanson Place is associated with the release of an unknown quantity of No. 2 fuel oil as the result of a tank failure that was reported to NYSDEC in 2004 and assigned Spill No. 0402131. Fuel oil impacts were observed in soil from 4 to 40 feet bgs, and petroleum free phase product was observed on groundwater. A work plan for delineation and an exposure assessment was submitted to the NYSDEC in November 2013 and the spill was administratively closed in 2015.

As discussed in Sections 4.2 and 5.0, soil vapor sampling was completed during the 2015 Subsurface Investigation and the laboratory analytical results did not identify concentrations of chlorinated solvents above the monitoring and/or mitigation threshold according to the NYSDOH Soil Vapor Intrusion Matrices if detected as part of a soil vapor intrusion evaluation. However, due to the limited nature of this investigation the potential for subsurface impacts from historical surrounding site operations including the adjacent NYSDEC Spill Site at 1 Hanson Place and surrounding dry cleaning facilities could not be determined and was further investigated during this Remedial Investigation. Impacts of petroleum-related VOCs, SVOCs, and/or metals were identified in soil,

groundwater, and soil vapor samples, including some detected at concentrations exceeding the RRSCOs and/or PGWSCOs for soil and the GWQs for groundwater. Additional investigation was completed to further evaluate potential impacts from adjacent and surrounding sites.

Soil

In order to further assess potential impacts to the Site from adjacent and surrounding sites, two soil borings (LSB-2 and LSB-7) were advanced in the vicinity of the adjacent NYSDEC Spill Site at 1 Hanson Place during the 2021 RI. A total of seven discrete soil samples including one duplicate sample were collected from these borings for laboratory analysis. A summary of the soil analytical results for AOC-2 is summarized as follows:

- No elevated PID readings or other petroleum-like impacts, including odors, LNAPL and/or sheen, were encountered in any soil borings.
- VOCs, SVOCs, pesticides, PCBs, and herbicides were not detected above the UUSCOs, PGWSCOs, or RRSCOs in this AOC.
- Two metals, including lead and mercury, were detected above the UUSCOs in two samples from borings LSB-2 and LSB-7 from 0 to 2 feet bgs.
- PFOA was detected above the UUSCO in one sample from LSB-7 from 8 to 10 feet bgs in this AOC. No PFAS compounds were detected above the RRSCOs or PGWSCOs in this AOC.

Groundwater

In order to further assess potential impacts to the Site from adjacent and surrounding sites, two groundwater samples were collected from two monitoring wells (LMW-2 and LMW-5) in the vicinity of the adjacent NYSDEC Spill Site at 1 Hanson Place. A summary of the groundwater analytical results for AOC-2 is summarized as follows:

- The VOC chloroform was detected above the GWQs in both wells sampled for this AOC. It should be noted that chloroform was also detected above the GWQs in all wells sampled across the Site.
- The SVOC bis(2-ethylhexyl)phthalate was detected above the SGV in LMW-2.

- Total PCBs were detected above the SGV in LMW-5.
- Pesticides and herbicides were not detected above the GWQSS in either groundwater sample collected in AOC-2.
- Two total and dissolved metals, including manganese and sodium, were detected above the GWQSS in both wells in AOC-2. Total iron was also detected above the SGV in LMW-5.
- PFAS compounds were detected and PFOA in particular was detected above the MCL of 10 ng/L in both groundwater samples collected within this AOC. It should be noted that PFOA was also detected above the MCL in all wells sampled across the Site and PFOS was detected above the MCL in one well.

Soil Vapor

Two shallow and two deep soil vapor points (LSV-2A/B and LSV-8A/B) were installed in the vicinity of the adjacent NYSDEC Spill Site at 1 Hanson Place. A summary of soil vapor analytical results are summarized below:

- NYSDOH Soil Vapor Intrusion Matrix compounds were not identified above the monitoring and/or mitigation thresholds if detected as part of a soil vapor intrusion evaluation in samples collected from this AOC.
- Petroleum-related VOCs including BTEX, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene were detected in all four soil vapor samples collected within this AOC.
- 2-Butanone was detected in all four soil vapor samples collected within this AOC.

AOC-2 Conclusions

Elevated concentrations of the metals lead and mercury above the UUSCOs are attributed to the presence of contaminated historic fill. Similarly, PFAS compounds detected above the SCOs in soil in AOC-2 may be attributed to the presence of historic fill of unknown origin.

The VOC chloroform was detected in AOC-2 in groundwater above the GWQSS; however, was not detected in any associated field or trip blanks collected during the remedial investigation. As chloroform was detected in all wells across the Site and as it was not detected or was only marginally detected above the reporting limit in the associated soil

samples, it is not likely that these exceedances are associated with the 1 Hanson Place site or historical site uses and instead may be attributable to an unidentified off-Site source. The SVOC bis(2-ethylhexyl)phthalate was detected above the GWQs in one sample in AOC-2. As bis(2-ethylhexyl)phthalate was not detected or was only marginally detected above the reporting limit in soil samples across the Site, this exceedance in groundwater may be attributed to the adjacent NYSDEC Spill Site at 1 Hanson Place or another unidentified off-Site source. Detections of metals above the GWQs in groundwater in AOC-2 are attributed to naturally occurring background concentrations. PFAS compounds PFOA and PFOS detected above the MCLs in groundwater for these two PFAS compounds in AOC-2 may be attributed to releases from the historical and active surrounding dry-cleaning/laundry facilities or an unidentified off-Site source.

NYSDOH Soil Vapor Intrusion Matrix compounds were not identified above the monitoring and/or mitigation thresholds (in samples collected from this AOC, however petroleum-related VOCs including BTEX compounds, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene were detected in all four soil vapor samples collected in AOC-2 and may be attributable to either historical Site operations or historic adjacent and surrounding operations including the adjacent NYSDEC Spill Site at 1 Hanson Place. Additionally, the detection of TCE in soil vapor in LSV-7A/B (included as part of the AOC-1 discussion in Section 6.7.1) above the NYSDOH Soil Vapor Intrusion Matrix monitoring and/or mitigation threshold if detected as part of a soil vapor intrusion evaluation is likely attributable to historical surrounding dry-cleaners. The VOC 2-Butanone was also detected in all four soil vapor samples collected in AOC-2 and may be attributable to an unknown offsite source.

6.7.3 AOC-3: Historic Fill

Soil borings advanced throughout the Site during Langan's 2015 Subsurface Investigation identified an approximately 9.5-foot thick layer of contaminated historic fill through the entire Site. The average historic fill/native interface was observed at approximately el 37 NAVD88 across the site footprint. PAHs and metals commonly associated with historic

fill were detected at concentrations exceeding the RRSCOs during the 2015 Subsurface Investigation.

Additional soil borings and soil vapor points were advanced throughout the entirety of the Site during this remedial investigation to assess for the potential subsurface impacts from historical filling. Soil borings advanced throughout the Site during the RI identified an approximately 5- to 12-foot thick layer of historic fill through the entire Site and the average historic fill/native interface was observed at approximately el 37 NAVD88 across the site footprint. As groundwater was generally encountered at depths ranging from approximately 39 to 42 feet bgs, at least 27 feet below the bottom of the historic fill layer, groundwater analytical results are excluded from the evaluation of AOC-3.

Soil

In order to characterize Site-wide historic fill, a total of four discrete soil samples were collected from within the historic fill layer and two discrete soil samples including one duplicate sample were collected directly beneath the historic fill/native material interface for laboratory analysis during the 2015 Subsurface Investigation. During the 2021 RI, eight discrete soil samples including one duplicate sample were collected within the historic fill layer and seven discrete soil samples were collected directly beneath the historic fill/native material interface from seven borings for laboratory analysis. Soil analytical results collected at the Site for further characterization of AOC-3 are summarized as follows:

- Odors were observed in soil between 7 and 8 feet bgs in EB12. No elevated PID readings or visual or olfactory evidence of impacts were observed in any of the remaining soil borings.
- No PCBs or herbicides were detected above the UUSCOs, RRSCOs, or PGWSCO.
- The VOCs naphthalene and total xylenes were detected above the UUSCOs and/or PGWSCO in one sample collected from soil boring EB12 collected from 7 to 9 feet bgs in the historic fill layer. No VOCs were detected above the RRSCOs.

- A soil sample was collected from 8 to 10 feet bgs in LSB-4. This sample both assessed native soil conditions directly beneath the fill/native layer interface and also delineated the elevated concentrations of the VOCs naphthalene and total xylenes previously identified in the sample collected from 7 to 9 feet bgs in EB12. No elevated PID readings or visual or olfactory evidence of impacts were observed and no VOCs were detected above the UUSCOs, PGWSCO, or RRSCO in LSB-4.
- 18 SVOCs (3 & 4 methylphenol, acenaphthene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, dibenzofuran, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, phenol, and pyrene) were detected above the UUSCOs, RRSCO, and/or PGWSCO in five samples collected from within the historical fill layer at EB09, EB12, LSB-4, LSB-5 and LSB-6 at depths ranging from 0 to 9 feet bgs. SVOCs were not detected above the UUSCOs, RRSCO, and/or PGWSCO in any samples collected from directly beneath the historic fill/native material interface or within the native material.
- The pesticide 4,4'-DDT was detected above the UUSCOs in one sample collected from within the historical fill layer at LSB-4 from 0 to 2 feet bgs. No pesticides were detected above PGWSCO or RRSCO in this AOC. Pesticides were not detected above the UUSCOs, RRSCO, and/or PGWSCO in any samples collected from directly beneath the historic fill/native material interface or within the native material.
- Seven metals, including arsenic, barium, trivalent chromium, copper, lead, mercury, and zinc, were detected above the UUSCOs, RRSCO, and/or PGWSCO in samples collected from within the historic fill layer at EB09, EB10, EB12, EB13, LSB-1, LSB-2, LSB-4, LSB-5, LSB-6, and LSB-7 at depths ranging from 0 to 9 feet bgs. Of these, two metals, mercury and nickel, were detected above the UUSCOs in the samples collected directly beneath the historic fill/native material interface at LSB-3 and LSB-4 at depths ranging from 8 to 15 feet bgs. Only nickel was detected above the UUSCOs in the samples collected in the

native material at LSB-3 and LSB-4 at depths ranging from 20 to 22 feet bgs.

- PFOA was detected above the UUSCO and PGWSCO in LSB-1 from 8 to 10 feet bgs and above the UUSCO in LSB-5 and LSB-7 from 13 to 15 ft bgs and 8 to 10 feet bgs, respectively, all of which were collected directly beneath the historic fill/native material interface. No PFAS compounds were detected above the RRSCOs in the fill or near-fill samples, and PFAS were not detected above the UUSCOs, RRSCOs, and/or PGWSCOs in any samples collected from the native material. Samples collected during the 2015 Subsurface Investigation were not analyzed for PFAS compounds.

Soil Vapor

Soil vapor points LSV-1 and LSV-2A through LSV-8A were installed within the historic fill layer during the 2021 Remedial Investigation and soil vapor points SV01 through SV03 were installed within the historic fill layer during the 2015 Subsurface Investigation. Analytical results for samples also collected to characterize AOC-1 (LSV-2A, LSV-4A, LSV-5A, LSV-7A, SV02, SV03) and AOC-2 (LSV-2A and LSV-8A) are addressed in Sections 6.7.1 and 6.7.2, respectively, and are excluded from discussion below. A summary of the remaining soil vapor analytical results (LSV-1, LSV-3A, LSV-6A, and SV01) installed within the historic fill layer are summarized as follows:

- NYSDOH Soil Vapor Intrusion Matrix compounds were not identified above the monitoring and/or mitigation thresholds if detected as part of a soil vapor intrusion evaluation in samples LSV-1, LSV-3A, LSV-6A, or SV01.
- Petroleum-related VOCs including 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and BTEX compounds, were detected in all soil vapor samples collected.

AOC-3 Conclusions

Elevated concentrations of VOCs, PAHs, metals, pesticides, and PFAS are attributable to historic fill material of unknown origin, and in the case of PAHs are also attributable to historical site operations, discussed in Section 6.7.1.

As discussed in Section 6.7.1, TCE was identified at the shallow and deep samples collected at LSV-7 above the NYSDOH Soil Vapor Intrusion Matrix monitoring and/or mitigation threshold if detected as part of a soil vapor intrusion evaluation and is likely attributable to historical surrounding dry-cleaners (AOC-2) and not historic fill. Petroleum-related VOCs including BTEX compounds, 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene were detected in all soil vapor samples collected across the Site, including those associated with AOC-3, and are attributable to historical Site operations, including the potential former presence of USTs (AOC-1) and historic adjacent and surrounding site operations including the adjacent NYSDEC Spill Site at 1 Hanson Place (AOC-2).

7.0 QUALITATIVE HUMAN AND FISH/WILDLIFE EXPOSURE ASSESSMENT

A qualitative human health exposure risk assessment was performed for both current and future Site and off-Site conditions, in accordance with the May 2010 NYSDEC Final DER-10 Technical Guidance for Site Investigation and Remediation. The assessment includes an evaluation of potential sources and migration pathways of Site contamination, potential receptors, exposure media, and receptor intake routes and exposure pathways.

In addition to the human health exposure assessment, NYSDEC DER-10 requires an on-Site and off-Site Fish and Wildlife Resources Impact Analysis (FWRIA) if certain criteria are met. No significant natural communities, rare plants or animals, or regulated wetlands are located within close proximity to the Site. Based on the requirements stipulated in Section 3.10 and Appendix 3C of DER-10, completion of an FWRIA was not required for the Site.

7.1 Current Conditions

The Site is located in the Fort Greene neighborhood of Brooklyn, New York and is identified as Tax Block 2111, Lot 40. The Site is an approximately 12,548-square foot parcel and is bound to the north by a four-story building occupied by the Brooklyn Music School and a seven-story building occupied by the Brooklyn Academy of Music; Saint Felix Street followed by five 2.75- to three-story residential buildings to the east; the 41-story mixed-use residential/commercial Williamsburg Savings Bank Tower (1 Hanson Place) and a three-story church building to the south; and Ashland Place followed by

a 31-story mixed-use residential/commercial building to the west. The Site is currently an at-grade asphalt paved parking lot and has been used as a parking lot since at least 1950. Sensitive receptors (as defined in DER-10) located within a half-mile of the Site include the schools and childcare facilities listed in Section 2.3. However, the current asphalt surface prevents any direct physical exposure and duration on the Site based on the parking lot use is temporary.

7.2 Proposed Conditions

The Site is proposed to be developed with a 167,000 gross square foot, mixed-use for sale condominium building (30% of the units qualify as affordable housing) on top of a 20,000 gross square foot community facility space to be purchased and occupied by the Brooklyn Music School. The Volunteer applied for a rezoning action to change from a C6-1 district to a C6-6 district on the western portion of the Site and from a C6-1 district to a C6-4 district on the eastern portion of the Site in order to accommodate the proposed project, and a Negative Declaration and Statement of No Significant Effect were issued on 3 May 2021. The proposed building will contain a partial cellar on the eastern portion of the Site. Based on the most recent proposed plans, the partial cellar and first floor will occupy approximately 9,480-square-feet and 10,770-square-feet, respectively, of the approximately 12,548-square-foot property. The planned redevelopment excavation will extend down to approximately 20 feet bgs.

7.3 Summary of Environmental Conditions

VOCs, SVOCs, metals, and pesticides were detected at concentrations above the NYSDEC UUSCOs, RRSCO, and/or PGWSCO in soil samples collected from across the Site. PFOA and PFOS were also detected at concentrations above the NYSDEC MCLs, but these levels, which are still very low, may be ubiquitous in an urban area such as the one the Site is located in. The compound distribution and contaminant concentrations detected are typical of fill material in New York City, however, impacts may also be attributed to historical Site operations, potential former use of historic USTs, and historic adjacent and surrounding operations.

VOCs, SVOCs, PCBs, and metals were detected in groundwater at concentrations above the NYSDEC GWQSS. Exceedances of VOCs are attributed to historical surrounding dry-cleaning operations or an unidentified off-Site source. Exceedances of SVOCs may be attributed to the historical on-Site operations, including potential historical petroleum storage, adjacent

NYSDEC Spill Site at 1 Hanson Place (with confirmed groundwater impacts), or an unidentified off-Site source. Exceedances of PCBs were detected in exceedance of the NYSDEC GWQSs at only two locations. It should be noted that PCBs were also detected in the method blanks associated with these samples and as such, the marginal exceedances above the GWQSs at these locations may be due to laboratory contamination. Detections of metals are likely attributable to naturally occurring background concentrations, with the exception of lead. Lead was detected in exceedance of the NYSDEC GWQSs at only one location (LMW-3), located in the northeastern corner of the Site; however, the corresponding dissolved lead result at this location was non-detect and the soil sample collected from immediately above the water table did not reveal the presence of lead above the PGWSCOs.

Soil vapor sample analytical results revealed the CVOC TCE in one shallow and one deep soil vapor sample collected in the southeastern portion of the Site at concentrations above the NYSDOH guidance levels which would trigger monitoring and/or mitigation if detected as part of a soil vapor intrusion evaluation; in addition, petroleum-related VOCs were detected for which there are no NYSDOH guidance values. Although TCE was not detected at concentrations exceeding NYSDEC SCOs in soil samples collected across the Site and was not detected exceeding NYSDEC GWQSs in groundwater at the monitoring well collocated with the impacted soil vapor samples, the concentration of TCE was detected in one nearby monitoring well (MW-11) at a concentration exceeding the SGV. The presence of TCE in groundwater and soil vapor is attributed to either historic surrounding dry-cleaning facilities or an unknown off-Site source. The presence of petroleum-related VOCs in soil vapor may be attributed to historical Site operations as a garage/gasoline station and the potential historical use of USTs, historic adjacent and surrounding site operations and/or petroleum releases, or an unknown off-Site source.

7.4 Conceptual Site Model

A conceptual site model (CSM) was developed based on the findings of the RI and previous investigations to produce a simplified framework for understanding the distribution of impacted materials, potential migration pathways, and potentially complete exposure pathways.

7.4.1 Potential Sources of Contamination

Potential sources of contamination have been identified and include historical site operations and potential historical use of USTs, historical adjacent and surrounding operations, and contaminated historic fill material. Historical on-Site use as a garage/gasoline station is a potential source of VOCs in soil, groundwater, and soil vapor and SVOCs in soil and groundwater. Historical adjacent and surrounding uses including drug manufacturing, dry-cleaning and laundry, automobile sales, and a gasoline filling station as well as unknown off-Site sources may also be contributing to the impacts of VOCs in groundwater and soil vapor and SVOCs, metals, and PFAs in groundwater. The Site-wide presence of historic fill has also been established as a source of SVOCs, pesticides, metals, and PFAS in soil. The detection of CVOCs, specifically TCE, in groundwater and soil vapor may be attributable to historic and current surrounding dry-cleaning facilities or an unknown off-Site source. Detections of metals in groundwater are likely attributable to naturally occurring background concentrations; with the exception of lead. However, the corresponding dissolved lead result at this location was non-detect and the soil sample collected from immediately above the water table did not reveal the presence of lead above the PGWSCOs.

7.4.2 Exposure Media

Impacted media include soil, groundwater, and soil vapor. Analytical data indicates that soil contains VOCs, SVOCs, pesticides, metals, and PFAS at concentrations greater than the UUSCOs, RRSCOs, and/or the PGWSCOs. Groundwater contains VOCs, SVOCs, PCBs, and metals above the GWQSS and PFAS above the NYSDEC Guidance Values. Soil vapor at the Site is impacted with petroleum-related VOCs (BTEX and other compounds), 2-Butanone, and the CVOC TCE which was detected at concentrations above the NYSDOH guidance levels which would trigger monitoring and/or mitigation if detected as part of a soil vapor intrusion evaluation or applicable MCLs.

7.4.3 Receptor Populations

The Site is currently used as an asphalt-paved parking lot. The Site is enclosed in fencing and access is restricted to personnel completing Site investigations and other authorized guests. During Site development and remediation, human receptors will be limited to construction and remediation workers, authorized guests, design team members visiting the Site, and the public adjacent to the Site. Under future conditions, receptors will include the new building tenants, visitors to the building, and building management/maintenance employees.

7.5 Potential Exposure Pathways – On-Site

7.5.1 Current Conditions

Human exposure to contaminated soil is currently limited by the asphalt layer covering the Site; therefore, exposure to contaminated soil in the near surface is only possible only during a breach of the asphalt layer. Site access is restricted to individuals with access to the Site, including project team members, personnel completing site investigations, and other authorized guests. There could be a complete exposure pathway for dermal and ingestion exposure if the authorized personnel were not adhering to the Health and Safety Plan (HASP) during work that allows contact with soil beneath the asphalt.

Due to the depth of groundwater, and the fact that groundwater in New York City is not used as a potable water source, there is no complete exposure pathway to groundwater under current Site conditions. However, there is a potential exposure pathway through dermal absorption, inhalation, and ingestion during investigative groundwater sampling, but it will be controlled through the implementation of the HASP during sampling.

As there are no buildings present on Site, there are no current on-Site exposure pathways for soil vapor intrusion. Impacted soil vapor may migrate vertically through the subsurface and dissipate and dilute with ambient air; as such, there is no potential exposure pathway under current conditions. Any remaining potential exposure pathways to remedial workers during excavation through dermal absorption and

inhalation will be controlled through the implementation of a HASP and Community Air Monitoring Plan (CAMP) during ground-intrusive work.

In localized areas where human exposure to contaminated soil, groundwater, and soil vapor is possible during soil, groundwater and soil vapor sampling, the potential exposure pathways for dermal absorption, inhalation and ingestion will be controlled through implementation of a HASP and CAMP.

7.5.2 Construction/Remediation Conditions

Construction and remediation may result in potential exposures to Site contaminants in the absence of a HASP, CAMP, and a Soil/Materials Management Plan (SMMP). Construction and remedial activities will include excavation and off-Site disposal of contaminated soil, and construction of foundation components. In the absence of a HASP, CAMP, and SMMP this scenario presents the potential for exposure of soil, groundwater, and soil vapor contaminants to construction and remediation workers via dermal absorption, ingestion, and inhalation of vapors and particulate matter. However, this exposure pathway will be mitigated through the implementation of the HASP, CAMP, SMMP, and vapor and dust suppression techniques.

7.5.3 Proposed Future Conditions

Currently, the contemplated project includes a mixed-use condominium building with a 30% affordable housing component on top of a community facility space to be purchased and occupied by the Brooklyn Music School. The proposed building will contain a partial cellar on the eastern portion of the Site. Based on the most recent proposed plans, the partial cellar and first floor will occupy approximately 76% and 86% of the Site, respectively. The planned redevelopment excavation will extend down to approximately 20 feet bgs. Portions of the Site outside of the proposed building extents will be capped with concrete and/or asphalt.

Based on the soil vapor sample analytical results, the CVOC TCE has been detected at concentrations that would require monitoring and/or mitigation according to NYSDOH Soil Vapor Intrusion Matrix A if a soil vapor intrusion evaluation was completed. Petroleum compounds were

also detected in soil vapor; however, there are no NYSDOH thresholds currently in-place for petroleum-related VOCs in soil vapor. New development will incorporate a cover system across the Site and the potential pathway for soil vapor intrusion into the buildings will be minimized for occupied portions of the building by vapor mitigation measures such as a vapor barrier which may be proposed as a green remedial element.

Construction of a building slab and installation of vapor mitigation measures will prevent human exposure to impacted soil and groundwater and potential soil vapor intrusion.

There is no pathway for ingesting groundwater contaminants, as the Site and surrounding areas obtain their drinking water supply from surface water reservoirs located upstate and not from groundwater.

7.6 Potential Exposure Pathways – Off-Site

Soil vapor may migrate off-Site vertically through the subsurface and dissipate and dilute with ambient air in instances where the Site surface is compromised or during Site construction/remediation. There is potential for vapor intrusion exposures to impact off-site receptors as a result of soil vapor migration.

The potential off-Site migration of Site soil contaminants is not expected to result in a complete exposure pathway for current, construction and remediation, or future conditions for the following reasons:

- The Site is located in an urban area and predominantly covered with a continuous asphalt layer.
- During Site redevelopment, remediation and construction, the following protective measures will be implemented:
 - A Site-specific HASP, CAMP, and SMMP will be implemented to protect on-Site personnel and to monitor the perimeter of the site to mitigate off-Site migration of particulates and VOCs during construction.

- Air monitoring will be conducted for particulates (i.e., dust) and VOCs during intrusive activities as part of a CAMP. Dust and/or vapor suppression techniques will be employed to limit potential for off-Site migration of soil and vapors.
- Vehicle tires and undercarriages will be washed as necessary prior to leaving the Site to prevent tracking material off-Site.
- A soil erosion/sediment control plan will be implemented during construction to control off-Site migration of soil.

7.7 Evaluation of Human Health Exposure

Based upon the CSM and the review of environmental data, partial on-Site exposure pathways appear to be present under current conditions, and in the absence of institutional and engineering controls, complete on-Site exposure pathways could potentially exist during construction/remediation if not mitigated by the HASP, CAMP, and SMMP. Under proposed future conditions either all impacted material will be removed or if a Track 1 cleanup cannot be achieved, institutional and engineering controls will be included in the remedy to eliminate exposure.

Complete exposure pathways have the following five elements: 1) a contaminant source; 2) a contaminant release and transport mechanism; 3) a point of exposure; 4) a route of exposure; and 5) a receptor population.

7.7.1 Current Conditions

Contaminant sources include contaminated historic fill and soil with elevated levels of VOCs, SVOCs, metals, and pesticides; groundwater with elevated levels of VOCs, SVOCs, PCBs, and metals; and soil vapor with elevated levels of VOCs.

Contaminant release and transport mechanisms include contaminated soil transported as dust (dermal, ingestion, inhalation) and existing soil vapor contaminants (inhalation). Under current conditions, the likelihood of human exposure is limited, as 1) Site access is restricted to project team members and authorized personnel; 2) impermeable asphalt surfaces cover the Site; 3) the Site is an open-air vacant lot and impacted soil vapor that migrates vertically would be diluted with ambient air; and, 4) the Site is not a source of drinking water.

7.7.2 Construction/Remediation Activities

During remedial construction, points of exposure include disturbed and exposed soil during excavation and dust and organic vapors generated during Site work. Routes of exposure include ingestion and dermal absorption of contaminated soil and groundwater and inhalation of dust and organic vapors arising from contaminated soil. The receptor population includes construction and remediation workers and, to a lesser extent, the public adjacent to the Site. Potential exposures to the properties adjacent to the Site as described in Section 7.4.3 will be mitigated by the implementation of a HASP, CAMP, and SMMP as discussed below.

The potential for completed exposure pathways is present since all five elements (a contaminant source, a contaminant release and transport mechanism, a point of exposure, a route of exposure, and a receptor population) exist; however, the risk will be minimized by limiting Site access and through implementation of appropriate health and safety measures, such as work zone and perimeter air monitoring for organic vapors and dust, using vapor and dust suppression measures, maintaining Site security, and wearing the appropriate personal protective equipment (PPE), and through implementation of SMMP measures including cleaning truck undercarriages before they leave the Site to prevent off-Site soil tracking.

7.7.3 Proposed Future Conditions

Remedial construction is expected to remove on-Site contaminants located within the proposed basement footprint, as excavation for site redevelopment will be completed to a depth of approximately 20 feet bgs (corresponding to el +25 feet NAVD88) across approximately 76% of the Site. Under proposed future conditions either all impacted material will be removed or if a Track 1 cleanup cannot be achieved, institutional and engineering controls (including the building slab and asphalt-paved setback along Ashland Place) will be included in the remedy to eliminate exposure to residual contaminants. Contaminant release and transport mechanisms include penetrations through the building and asphalt-paved setback along Ashland Place. If protective measures and remediation are not implemented, points of exposure include potential cracks in the proposed building foundation and the setback and exposure during any

future soil-disturbing activities. Routes of exposure may include inhalation of vapors entering the buildings or dust during any soil-disturbing work. The receptor population includes the building tenants, visitors to the building, and building management/maintenance employees. The possible routes of exposure can be avoided or mitigated if a Track 1 cleanup cannot be achieved by proper installation of soil vapor mitigation measures, construction and maintenance of a composite cover system (i.e., concrete or at least one foot of clean soil), and implementation of a Site Management Plan.

7.7.4 Human Health Exposure Assessment Conclusions

1. Under current conditions, there is a marginal risk for exposure. The primary exposure pathways are for dermal contact, ingestion and inhalation of soil or soil vapor by authorized site personnel in instances where the integrity of the asphalt layer is compromised or during Site investigation. Exposure to groundwater is limited to those completing investigation activities. The exposure risks can be avoided or minimized by limiting Site access and implementing the appropriate health and safety and vapor and dust suppression measures outlined in a Site-specific HASP and CAMP during ground-intrusive activities.
2. In the absence of protective measures, there is a moderate risk of exposure during the construction and remediation activities. The primary exposure pathways are:
 - a. Dermal contact, ingestion and inhalation of contaminated soil, groundwater, or soil vapor by Site visitors and construction and remediation workers.
 - b. Dermal contact, ingestion and inhalation of soil (dust) and inhalation of soil vapor by the community in the vicinity of the Site.

These exposure pathways can be avoided or minimized by performing community air monitoring, by implementing soil management measures, by following the appropriate health and safety plans, implementing vapor and dust suppression techniques, and using Site security to control access.

3. A complete exposure pathway is possible for the migration of Site contaminants to off-Site human receptors during the remedial construction phase. During this phase, Site access will be limited to authorized personnel and workers and protective measures will be used during construction to prevent completion of this pathway, including following a Site-specific HASP and implementation of a CAMP and SMMP.
4. The existence of a complete exposure pathway for Site contaminants to human receptors during proposed future conditions is unlikely, as on-Site sources of contamination will be excavated and transported for off-Site disposal or, if a Track 1 cleanup cannot be achieved, engineering and institutional controls will be incorporated into the redevelopment. Regional groundwater is not used as a potable water source in this part of New York City. The potential pathway for soil vapor intrusion into the buildings, likely a result of migration of CVOCs from an off-Site source, will be minimized for occupied portions of the building basement by at a minimum the foundation walls and a vapor barrier.

8.0 NATURE AND EXTENT OF CONTAMINATION

This section evaluates the nature and extent of soil, groundwater and soil vapor contamination. The nature and extent of the contamination is derived from a combination of field observations, historical analytical data from the 2015 Subsurface Investigation discussed in Section 4.0, and analytical data from the 2021 RI that was discussed in Section 6.6.

8.1 Soil Contamination

During environmental investigations completed by Langan in 2015 and 2021, a fill layer consisting of fine to coarse sand with varying proportions of silt, gravel, and clay and miscellaneous debris, including brick, wood, concrete, tile, glass, coal, and slag extending from surface grade to between 5 and 12 feet bgs was observed corresponding to an average depth of el 37 NAVD88 across the site footprint. Twelve fill samples were collected from between ground surface and 9 feet bgs, nine samples were collected from directly beneath the historic fill/native material interface from between 8 and 15 feet bgs, and eight samples

were collected within the native material from between 20 and 44 feet bgs during the 2015 and 2021 investigations.

The VOCs naphthalene and total xylenes were detected above the UUSCOs and/or PGWSCOs in one fill sample collected. No other VOCs were detected above the UUSCOs, RRSCOs, or PGWSCOs in any fill or native soil samples collected.

SVOCs commonly associated with the presence of historic fill material including acenaphthene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, and pyrene were detected from 0 to 2, 5.4 to 5.5 and 7 to 9 feet bgs in 6 of 12 fill samples collected for SVOC analysis throughout the Site footprint at concentrations exceeding the UUSCOs, RRSCOs, and/or PGWSCOs. SVOCs 3 and 4 methylphenol, dibenzofuran, and phenol were also detected above the UUSCOs, RRSCOs and/or PGWSCOs on one fill sample collected from 7 to 9 feet bgs within the northern portion of the Site during the 2015 Subsurface Investigation. SVOCs were not detected in exceedance of the applicable SCOs or RUSCOs in samples collected from directly beneath the historic fill/native material interface or within the native material.

Metals including arsenic, barium, trivalent chromium, copper, lead, mercury, nickel, and/or zinc were detected from 0 to 2, 4.5 to 5.5, and 7 to 9 feet bgs in all 12 fill samples collected, 8 to 10 and 13 to 15 feet bgs in two of the samples collected directly beneath the historic fill/native material interface, and 20 to 22 in two of the samples collected within the native material throughout the Site footprint at concentrations exceeding UUSCOs, RRSCOs, and/or PGWSCOs.

The pesticide 4,4'-DDT was detected from 0 to 2 feet bgs at a concentration exceeding the UUSCOs in only one fill sample collected for pesticides analysis. Pesticides were not detected in exceedance of the applicable SCOs or RUSCOs in any of the samples collected from directly beneath the historic fill/native material interface or within the native material.

PFAS compounds were detected from 8 to 10 and 13 to 15 feet bgs in two of the samples collected directly beneath the historic fill/native material interface in exceedance of the UUSCOs and/or PGWSCO during the 2021 RI. PFAS was not analyzed for samples collected during the 2015 Subsurface Investigation.

Elevated concentrations of PAHs, metals, pesticides, and PFAS in fill material or near-fill material are attributed to fill material of unknown origin that exists at the site at an approximate average elevation of el 37 NAVD88 across the site footprint. The only contaminant detected within the native material above the UUSCOs was nickel, which may be attributed to naturally occurring background soil conditions. Contaminants at concentrations above UUSCOs, RRSCO, or PGWSCO were not identified in deep native soil samples collected from the two foot interval above the observed groundwater interface (i.e., either 40 to 42 feet bgs or 42 to 44 feet bgs).

8.2 Groundwater Contamination

Groundwater was encountered between 38.79 and 41.98 feet bgs at depths corresponding to el 2.25 to 2.85 NAVD88 during the RI. One monitoring well was sampled during the 2015 Subsurface Investigation and six monitoring wells were sampled during the 2021 RI.

The VOC chloroform was detected above the GWQs in all groundwater samples collected during the 2015 Subsurface Investigation and 2021 RI. However, as it was not detected or was only marginally detected above the reporting limit in soil samples collected across the Site, these exceedances may be attributed to an unidentified off-Site source. TCE was also detected above the GWQs in MW-11 located within the central-eastern portion of the site, but only during the 2021 RI. TCE is a daughter product of PCE, a chlorinated solvent used in dry cleaning processes. As such, the detection of TCE may be attributed to historical non-adjacent surrounding dry-cleaning operations or another unidentified off-Site source. No other VOCs were detected above the GWQs.

PAHs including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, and/or indeno(1,2,3-cd)pyrene were detected at concentrations exceeding the GWQs in two of the six monitoring wells

sampled for groundwater. These monitoring wells are both located in the eastern portion of the Site, adjacent to St. Felix Street. The SVOC bis(2-ethylhexyl)phthalate was also detected at a concentration exceeding the SGV in one monitoring well in the western portion of the Site. Elevated concentrations of PAHs in groundwater may be attributed to the historical on-Site operations, including potential historical petroleum storage, the adjacent NYSDEC Spill Site at 1 Hanson Place, or another unidentified off-Site source.

Total PCBs were detected in exceedance of the NYSDEC GWQSSs at only two wells. It should be noted that PCBs were also detected in the method blanks associated with these samples and as such, the marginal exceedances above the GWQSSs at these locations may be due to laboratory contamination.

Metals including total iron, total manganese, dissolved manganese, total sodium, and/or dissolved sodium were detected at concentrations exceeding the GWQSSs in all six monitoring wells sampled for groundwater throughout the Site footprint. Total lead was also detected in exceedance of the GWQSSs at LMW-3; however, dissolved lead concentrations were detected below the GWQSSs. Total chromium was also detected in exceedance of the GWQSSs at MW-11 during the 2015 Subsurface Investigation only; however, dissolved total chromium concentrations were detected below the GWQSSs. Total lead was detected in exceedance of the NYSDEC GWQSSs at only one location located in the northeastern corner of the Site. As such, this total lead exceedance may be attributed to an unidentified off-Site source. Total chromium, which was detected in exceedance of the GWQSSs at MW-11 in 2015 but not 2021, may be attributed to elevated turbidity during sample collection. Other metals detected in groundwater above the GWQSSs (total iron, total and dissolved manganese, and total and dissolved sodium) are attributed to naturally occurring background concentrations.

PFAS compounds were detected in all groundwater samples during the 2021 RI. PFOS was detected in one monitoring well and PFOA was detected in all monitoring wells above the MCL of 10 ng/L. PFAS was not analyzed for samples collected during the 2015 Subsurface Investigation. The presence of PFAS compounds in groundwater may be attributable to historical and active surrounding dry-cleaning/laundry facilities or an unidentified off-Site source.

Groundwater sample analytical results did not identify the presence of pesticides or herbicides at concentrations above the GWQSS in any samples for which they were analyzed.

8.3 Soil Vapor Contamination

Three shallow soil vapor samples were collected during the 2015 Subsurface Investigation and eight shallow and seven deep soil vapor samples were collected during the 2021 RI. Analytical results revealed the CVOC TCE at concentrations which would be above the monitoring and/or mitigation threshold according to NYSDOH Soil Vapor Intrusion Guidance Matrix A if detected as part of a soil vapor intrusion evaluation in both the shallow and deep samples collected at one location during the 2021 Remedial Investigation. Soil vapor sample analytical results also identified elevated concentrations of 2-Butanone and petroleum-related VOCs including BTEX compounds, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene at all sample locations throughout the site footprint.

Although TCE was not detected at concentrations exceeding NYSDEC SCOs in soil samples collected across the Site and was not detected exceeding NYSDEC GWQSS in groundwater at the monitoring well collocated with LSV-7A/B (LMW-4), TCE was detected in one nearby monitoring well (MW-11) at a concentration exceeding the SGV. The presence of TCE in groundwater and soil vapor is attributed to either historic surrounding dry-cleaning facilities or an unknown off-Site source. Petroleum compounds detected in soil vapor may be attributable to historical site operations as a garage/gasoline station and the potential historical use of USTs, historic adjacent or surrounding site operations and/or petroleum releases, or an unknown off-Site source. Additionally, 2-Butanone detected in soil vapor may be attributable an unknown off-Site source.

9.0 CONCLUSIONS

Stratigraphy: A historic fill layer as deep as 12 feet is generally underlain by a sand layer. The average historic fill/native interface was observed at approximately el 37 NAVD88 across the site footprint. Gravel layers with ranging in thickness from approximately 1 to 5 feet were also identified between approximately 26.5 and 40 feet bgs within two soil borings advanced in the eastern portion of the Site. Bedrock was not encountered in any of the soil borings advanced during the 2015 Subsurface Investigation or this RI.

Hydrogeology: Groundwater was encountered between el 2.25 to 2.85 NAVD88, corresponding to 38.79 and 41.98, during the RI. Based on area topography, observed water level measurements, and the proximity of the Site to the Gowanus Canal, groundwater is inferred to flow to the south/southwest towards the Gowanus Canal.

Soil Quality: Up to 12 feet of fill material was identified below surface cover which corresponds to an average approximate elevation of T el 37 NAVD88 across the site footprint. Contaminants identified within the fill material include SVOCs, metals, and pesticides, which were detected at concentrations above UUSCOs, RRSCOs, and/or PGWSCOs within this layer. Contaminants identified in soil samples collected from directly beneath the historic fill/native material interface and within the native material at the two foot interval below the proposed redevelopment depth (i.e., 20 to 22 feet bgs) include metals detected at concentrations above the UUSCOs, only. Contaminants at concentrations above UUSCOs, RRSCOs, or PGWSCOs were not identified in deep native soil samples collected from the two foot interval above the observed groundwater interface (i.e. either 40 to 42 feet bgs or 42 to 44 feet bgs). Elevated concentrations of PAHs, metals, and pesticides in fill material or near-fill material are attributable to fill material of unknown origin. Only nickel was detected above the UUSCOs in the samples collected in the native material from 20 to 22 feet bgs, which may be attributed to naturally occurring background soil conditions.

Groundwater Quality: Elevated concentrations of the VOC chloroform may be attributed to an unidentified off-Source and elevated concentrations of the CVOC TCE may be attributed to historical surrounding dry-cleaning operations or an unidentified off-Site source. Elevated concentrations of PAHs in groundwater may be attributed to the historical on-Site operations, including potential historical petroleum storage (though the presence of historical petroleum USTs was not confirmed during this remedial investigation), the adjacent NYSDEC Spill Site at 1 Hanson Place (with confirmed groundwater impacts), or an unidentified off-Site source. Total lead and total chromium in groundwater are attributable to an unidentified off-Site source or elevated turbidity during sample collection. Other metals detected in groundwater above the GWQs (total iron, total and dissolved manganese, and total and dissolved sodium) are attributed to naturally occurring background concentrations. The presence of PFAS compounds in groundwater may be attributable to historical and active surrounding dry-cleaning/laundry facilities or an unidentified off-Site source.

Soil Vapor Quality: Results of the soil vapor evaluation completed as part of the 2015 Subsurface Investigation and 2021 RI identified concentrations of TCE that would require monitoring and/or mitigation per the NYSDOH Soil Vapor Intrusion Matrix guidance values. Although TCE was not detected at concentrations exceeding NYSDEC SCOs in soil samples collected across the Site and was not detected exceeding NYSDEC GWQs in groundwater at the monitoring well collocated with the impacted samples LSV-7A/B (LMW-4), TCE was detected in one nearby monitoring well (MW-11) at a concentration exceeding the SGV. The presence of TCE in groundwater and soil vapor is attributed to either historic surrounding dry-cleaning facilities or an unknown off-Site source. Elevated concentrations of petroleum-related VOCs including BTEX compounds, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene were detected at all sample locations throughout the Site footprint and are attributable to historical site operations as a garage/gasoline station and the potential former use of USTs, historic adjacent or surrounding site operations and/or petroleum releases, or an unknown off-Site source. Elevated concentrations of the VOC 2-Butanone were also detected at all sample locations throughout the Site footprint and may be attributable to an unknown off-Site source.

Sufficient analytical data were gathered during the RI and previous studies to establish soil cleanup levels and to develop a remedy for the Site. The final remedy will be detailed in the forthcoming Remedial Action Work Plan (RAWP) to be prepared in accordance with NYS BCP guidelines. The remedy will need to address contaminated soil impacted with VOCs, SVOCs, metals, and pesticides; groundwater impacted with VOCs, SVOCs, and metals; and VOC-impacted soil vapor.

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TABLES

**Table 1
Sample Summary Rationale**

**130 Saint Felix Street
Brooklyn, New York
NYSDEC BCP Site No.: C224306
Langan Project No.: 100842301**

| Boring(s) | Sample ID | Sample Depth/ Screened Interval (feet bgs) | Sample Date | Laboratory Analyses | Rationale | |
|--|------------------|--|----------------|--|--|-------------------------------------|
| Soil | | | | | | |
| EB07 | DUP01_053015 | 10-12 | 5/30/2015 | VOCs, SVOCs, Pesticides, Herbicides, PCBs, Trivalent Chromium, Metals, Hexavalent Chromium, Mercury, Cyanide, | Site Wide Assessment of Soil | |
| EB10 | EB07_10-12 | 1-2 | | | | |
| EB13 | EB13_7-9 | 7-9 | | | | |
| EB09 | EB09_4.5-5.5 | 4.5-5.5 | | | | |
| EB12 | EB12_7-9 | 7-9 | | | | |
| LSB-1 | 015_LSB1_0-2 | 0-2 | 4/21/2021 | VOCs, SVOCs, Pesticides, Herbicides, PCBs, Trivalent Chromium, Metals, Hexavalent Chromium, Mercury, Emerging Contaminants | Site Wide Assessment of Soil | |
| | 016_LSB1_8-10 | 8-10 | 4/21/2021 | | | |
| | 023_LSB1_40-42 | 40-42 | 4/23/2021 | | | |
| LSB-5 | 001_LSB5_0-2 | 0-2 | 4/21/2021 | | | |
| | 017_DUP01_042121 | | 4/21/2021 | | | |
| | 002_LSB5_13-15 | 13-15 | 4/21/2021 | | | |
| LSB-2 | 022_LSB5_42-44 | 42-44 | 4/23/2021 | | | |
| | 009_LSB2_0-2 | 0-2 | 4/21/2021 | | | |
| | 010_LSB2_8-10 | 8-10 | 4/21/2021 | | | |
| | 025_LSB2_42-44 | 42-44 | 4/26/2021 | | | |
| LSB-3 | 026_DUP2 | | 4/26/2021 | | | |
| | 005_LSB3_0-2 | 0-2 | 4/21/2021 | | | |
| | 007_LSB3_13-15 | 13-15 | 4/21/2021 | | | |
| LSB-4 | 006_LSB3_20-22 | 20-22 | 4/21/2021 | | | |
| | 003_LSB4_0-2 | 0-2 | 4/21/2021 | | | |
| | 004_LSB4_8-10 | 8-10 | 4/21/2021 | | | |
| LSB-6 | 008_LSB4_20-22 | 20-22 | 4/21/2021 | | | |
| | 011_LSB6_0-2 | 0-2 | 4/21/2021 | | | |
| | 012_LSB6_13-15 | 13-15 | 4/21/2021 | | | |
| LSB-7 | 021_LSB6_42-44 | 42-44 | 4/23/2021 | | | |
| | 013_LSB7_0-2 | 0-2 | 4/21/2021 | | | |
| | 014_LSB7_8-10 | 8-10 | 4/21/2021 | | | |
| | 027_LSB7_42-44 | 42-44 | 4/26/2021 | | | |
| Groundwater | | | | | | |
| LMW-1 | 055_LMW-1 | 37-47 | 5/4/2021 | | VOCs, SVOCs, Pesticides, Herbicides, PCBs, Trivalent Chromium, Metals (Total & Dissolved), Hexavalent Chromium, Mercury (Total & Dissolved), Emerging Contaminants | Site Wide Assessment of Groundwater |
| LMW-3 | 053_LMW-3 | 39-49 | 5/4/2021 | | | |
| MW-11 | 056_MW11 | 39-59 | 5/4/2021 | | | |
| | GWDUP01_053015 | | 5/30/2015 | VOCs, SVOCs, PCBs, Metals (Total & Dissolved), Mercury (Total & Dissolved) | | |
| LMW-2 | 054_LMW-2 | 39-49 | 5/4/2021 | VOCs, SVOCs, Pesticides, Herbicides, PCBs, Trivalent Chromium, Metals (Total & Dissolved), Hexavalent Chromium, Mercury (Total & Dissolved), Emerging Contaminants | AOC-1, AOC-2, and Site Wide Assessment of Groundwater | |
| LMW-4 | 048_LMW-4 | 39-49 | 5/3/2021 | | AOC-1 and Site Wide Assessment of Groundwater | |
| | 049_DUP-1 | | 5/3/2021 | | AOC-2 and Site Wide Assessment of Groundwater | |
| LMW-5 | 047_LMW-5 | 39-49 | 5/3/2021 | | | |
| Soil Vapor | | | | | | |
| AMB | AMB_053015 | - | 5/30/2015 | VOCs | Site Wide Assessment of Soil Vapor | |
| SV01 | SV01_053021 | 2 | | | | |
| SV02 | SV02_053021 | 2 | | | | |
| SV03 | SV03_053021 | 2 | | | | |
| AMBIENT-1 | 030_AMBIENT-1 | - | | | | |
| LSV-1 | 045_LSV-1 | 5 | 5/4/2021 | | Site Wide Assessment of Soil Vapor | |
| | 046_DUP-1 | 5 | | | | |
| LSV-3 | 035_LSV-3A | 5 | | | | |
| | 036_LSV-3B | 20.5 | | | | |
| LSV-6 | 031_LSV-6A | 5 | | | | |
| | 032_LSV-6B | 20.5 | | | | |
| LSV-2 | 043_LSV-2A | 5 | | | | |
| | 044_LSV-2B | 20.5 | | | | |
| LSV-4 | 041_LSV-4A | 5 | | | | |
| | 042_LSV-4B | 20.5 | | | | |
| LSV-5 | 033_LSV-5A | 5 | | | | |
| | 034_LSV-5B | 20.5 | | | | |
| LSV-7 | 037_LSV-7A | 5 | | | | |
| | 038_LSV-7B | 20.5 | | | | |
| LSV-8 | 039_LSV-8A | 5 | | | | |
| | 040_LSV-8B | 20.5 | | | | |
| Quality Assurance/Quality Control | | | | | | |
| Field Blank | 018_FB01_042121 | - | 4/21/2021 | VOCs, SVOCs, Pesticides, Herbicides, PCBs, Trivalent Chromium, Metals, Hexavalent Chromium, Mercury, Emerging Contaminants | -- | |
| | 019_FB02_042121 | - | | | | |
| Trip Blank | 020_TB01_042121 | - | | VOCs | | |
| Equipment Blank | 024_EB01_042321 | - | 4/23/2021 | Emerging Contaminants | | |
| Trip Blank | 028_TB02_042621 | - | 4/26/2021 | VOCs | | |
| Equipment Blank | 029_EB02_042621 | - | | Emerging Contaminants | | |
| Field Blank | 050_FB_050321 | - | 5/3/2021 | VOCs, SVOCs, Pesticides, Herbicides, PCBs, Trivalent Chromium, Metals (Total & Dissolved), Hexavalent Chromium, Mercury (Total & Dissolved), Emerging Contaminants | | |
| Equipment Blank | 051_EB_050321 | - | | | | |
| | 052_TB_050321 | - | | | | |
| Trip Blank | 057_TB_050421 | - | 5/4/2021 | VOCs | | |
| Equipment Blank | 058_EB_050421 | - | | Emerging Contaminants | | |

Table 2
Remedial Investigation Report
Groundwater Elevation Data

130 Saint Felix Street
Brooklyn, New York
NYSDEC BCP Site No.: C224306
Langan Project No.: 100842301

| Sample Location | Casing Elevation (feet NAVD88) | Groundwater Elevation (feet NAVD88) |
|-----------------|-----------------------------------|--|
| | | 5/4/2021 |
| LMW-1 | 41.75 | 2.25 |
| LMW-2 | 42.73 | 2.63 |
| LMW-3 | 45.00 | 2.43 |
| LMW-4 | 45.64 | 2.44 |
| LMW-5 | 44.44 | 2.34 |
| MW11 | 44.50 | 2.85 |

**Table 3A
Remedial Investigation Report
Soil Sample Analytical Results**

**130 Saint Felix Street Site
Brooklyn, New York
NYSDEC BCP Site No.: C224306
Langan Project No.: 100842301**

| Location | NYSDEC Part 375 Unrestricted Use SCOs | NYSDEC Part 375 Protection of Groundwater SCOs | NYSDEC Part 375 Restricted Use Residential- Residential SCOs | EB07 EB07 10-12 L1511932-01 5/30/2015 | EB07 DUP01_053015 L1511932-06 5/30/2015 | EB09 EB09 4.5-5.5 L1511932-02 5/30/2015 | EB10 EB10 1-2 L1511932-03 5/30/2015 | EB12 EB12 7-9 L1511932-04 5/30/2015 | EB13 EB13 7-9 L1511932-05 5/30/2015 | LSB-1 015 LSB1 0-2 L2120301-15 4/21/2021 | LSB-1 016 LSB1 8-10 L2120301-16 4/21/2021 | LSB-1 023 LSB1 40-42 L2120105-03 4/23/2021 | LSB-2 009 LSB2 0-2 L2120301-09 4/21/2021 | LSB-2 010 LSB2 8-10 L2120301-10 4/21/2021 | LSB-2 025 LSB2 42-44 L2121234-01 4/26/2021 | LSB-2 026 DUP2 L2121234-02 4/26/2021 | LSB-3 005 LSB3 0-2 L2120301-05 4/21/2021 | LSB-3 007 LSB3 13-15 L2120301-07 4/21/2021 | |
|---|---|---|---|--|--|--|--|--|--|---|--|---|---|--|---|---|---|---|----|
| Sample ID | | | | 10-12 | 10-12 | 4.5-5.5 | 1-2 | 7-9 | 7-9 | 0-2 | 8-10 | 40-42 | 0-2 | 8-10 | 42-44 | 42-44 | 0-2 | 13-15 | |
| Sample Date | | | | | | | | | | | | | | | | | | | |
| Sample Depth (feet bgs) | | | | | | | | | | | | | | | | | | | |
| Volatile Organic Compounds (mg/kg) | | | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ~ | ~ | ~ | 0.00098 | UJ | 0.0012 | U | 0.0016 | UJ | 0.0011 | U | 0.24 | U | 0.0012 | U | 0.00053 | U | 0.00053 | U |
| 1,1,1-Trichloroethane | 0.68 | 0.68 | 100 | 0.00098 | UJ | 0.0012 | U | 0.0016 | UJ | 0.0011 | U | 0.24 | U | 0.0012 | U | 0.00053 | U | 0.00053 | U |
| 1,1,2,2-Tetrachloroethane | ~ | ~ | ~ | 0.00098 | UJ | 0.0012 | U | 0.0016 | UJ | 0.0011 | U | 0.24 | U | 0.0012 | U | 0.00053 | U | 0.00053 | U |
| 1,1,2-Trichloroethane | ~ | ~ | ~ | 0.0015 | UJ | 0.0018 | U | 0.0024 | UJ | 0.0017 | U | 0.36 | U | 0.0018 | U | 0.0011 | U | 0.0011 | U |
| 1,1-Dichloroethane | 0.27 | 0.27 | 26 | 0.0015 | UJ | 0.0018 | U | 0.0024 | UJ | 0.0017 | U | 0.36 | U | 0.0018 | U | 0.0011 | U | 0.0011 | U |
| 1,1-Dichloroethene | 0.33 | 0.33 | 100 | 0.00098 | UJ | 0.0012 | U | 0.0016 | UJ | 0.0011 | U | 0.24 | U | 0.0012 | U | 0.0011 | U | 0.0011 | U |
| 1,1-Dichloropropene | ~ | ~ | ~ | 0.0049 | UJ | 0.0061 | U | 0.0081 | UJ | 0.0057 | U | 1.2 | U | 0.0061 | U | 0.00053 | U | 0.00053 | U |
| 1,2,3-Trichlorobenzene | ~ | ~ | ~ | 0.0049 | UJ | 0.0061 | U | 0.0081 | UJ | 0.0057 | U | 1.2 | U | 0.0061 | U | 0.0022 | U | 0.0024 | U |
| 1,2,3-Trichloropropane | ~ | ~ | ~ | 0.0098 | UJ | 0.012 | U | 0.016 | UJ | 0.011 | U | 2.4 | U | 0.012 | U | 0.0021 | U | 0.0024 | U |
| 1,2,4,5-Tetramethylbenzene | ~ | ~ | ~ | 0.0039 | UJ | 0.0048 | U | 0.0064 | UJ | 0.0045 | U | 0.081 | J | 0.0048 | U | 0.0021 | U | 0.0024 | U |
| 1,2,4-Trichlorobenzene | ~ | ~ | ~ | 0.0049 | UJ | 0.0061 | U | 0.0081 | UJ | 0.0057 | U | 1.2 | U | 0.0061 | U | 0.0021 | U | 0.0024 | U |
| 1,2,4-Trimethylbenzene | 3.6 | 3.6 | 52 | 0.0049 | UJ | 0.0061 | U | 0.0081 | UJ | 0.0057 | U | 0.54 | J | 0.0061 | U | 0.0021 | U | 0.0024 | U |
| 1,2-Dibromo-3-Chloropropane | ~ | ~ | ~ | 0.0049 | UJ | 0.0061 | UJ | 0.0081 | UJ | 0.0057 | UJ | 1.2 | UJ | 0.0061 | UJ | 0.0032 | U | 0.0036 | U |
| 1,2-Dibromoethane (Ethylene Dibromide) | ~ | ~ | ~ | 0.0039 | UJ | 0.0048 | U | 0.0064 | UJ | 0.0045 | U | 0.95 | U | 0.0048 | U | 0.0011 | U | 0.0012 | U |
| 1,2-Dichlorobenzene | 1.1 | 1.1 | 100 | 0.0049 | UJ | 0.0061 | U | 0.0081 | UJ | 0.0057 | U | 1.2 | U | 0.0061 | U | 0.0021 | U | 0.0024 | U |
| 1,2-Dichloroethane | 0.02 | 0.02 | 3.1 | 0.00098 | UJ | 0.0012 | U | 0.0016 | UJ | 0.0011 | UJ | 0.24 | U | 0.0012 | U | 0.0011 | U | 0.0012 | U |
| 1,2-Dichloropropane | ~ | ~ | ~ | 0.0034 | UJ | 0.0042 | U | 0.0056 | UJ | 0.004 | U | 0.83 | U | 0.0042 | U | 0.0011 | U | 0.0012 | U |
| 1,3,5-Trimethylbenzene (Mesitylene) | 8.4 | 8.4 | 52 | 0.0049 | UJ | 0.0061 | U | 0.0081 | UJ | 0.0057 | U | 0.29 | J | 0.0061 | U | 0.0021 | U | 0.0024 | U |
| 1,3-Dichlorobenzene | 2.4 | 2.4 | 49 | 0.0049 | UJ | 0.0061 | U | 0.0081 | UJ | 0.0057 | U | 1.2 | U | 0.0061 | U | 0.0021 | U | 0.0024 | U |
| 1,3-Dichloropropane | ~ | ~ | ~ | 0.0049 | UJ | 0.0061 | U | 0.0081 | UJ | 0.0057 | U | 1.2 | U | 0.0061 | U | 0.0021 | U | 0.0024 | U |
| 1,4-Dichlorobenzene | 1.8 | 1.8 | 13 | 0.0049 | UJ | 0.0061 | U | 0.0081 | UJ | 0.0057 | U | 1.2 | U | 0.0061 | U | 0.0021 | U | 0.0024 | U |
| 1,4-Diethyl Benzene | ~ | ~ | ~ | 0.0039 | UJ | 0.0048 | U | 0.0064 | UJ | 0.0045 | U | 0.2 | J | 0.0048 | U | 0.0021 | U | 0.0024 | U |
| 1,4-Dioxane (P-Dioxane) | 0.1 | 0.1 | 13 | 0.098 | UJ | 0.12 | UJ | 0.16 | UJ | 0.11 | UJ | 24 | UJ | 0.098 | UJ | 0.085 | UJ | 0.085 | UJ |
| 2,2-Dichloropropane | ~ | ~ | ~ | 0.0049 | UJ | 0.0061 | U | 0.0081 | UJ | 0.0057 | U | 1.2 | U | 0.0061 | U | 0.0021 | U | 0.0024 | U |
| 2-Chlorotoluene | ~ | ~ | ~ | 0.0049 | UJ | 0.0061 | U | 0.0081 | UJ | 0.0057 | U | 1.2 | U | 0.0061 | U | 0.0021 | U | 0.0024 | U |
| 2-Hexanone (MBK) | ~ | ~ | ~ | 0.0098 | UJ | 0.012 | UJ | 0.016 | UJ | 0.011 | UJ | 2.4 | UJ | 0.012 | UJ | 0.011 | U | 0.012 | UJ |
| 4-Chlorotoluene | ~ | ~ | ~ | 0.0049 | UJ | 0.0061 | U | 0.0081 | UJ | 0.0057 | U | 1.2 | U | 0.0061 | U | 0.0021 | U | 0.0024 | U |
| 4-Ethyltoluene | ~ | ~ | ~ | 0.0039 | UJ | 0.0048 | U | 0.0064 | UJ | 0.0045 | U | 0.95 | U | 0.0048 | U | 0.0021 | U | 0.0024 | U |
| Acetone | 0.05 | 0.05 | 100 | 0.0056 | J | 0.012 | UJ | 0.016 | UJ | 0.011 | UJ | 2.4 | U | 0.012 | UJ | 0.011 | U | 0.012 | UJ |
| Acrylonitrile | ~ | ~ | ~ | 0.0098 | UJ | 0.012 | UJ | 0.016 | UJ | 0.011 | UJ | 2.4 | U | 0.012 | UJ | 0.0043 | U | 0.0044 | U |
| Benzene | 0.06 | 0.06 | 4.8 | 0.00098 | UJ | 0.0012 | U | 0.0016 | UJ | 0.0011 | U | 0.24 | U | 0.0012 | U | 0.00053 | U | 0.00053 | U |
| Bromobenzene | ~ | ~ | ~ | 0.0049 | UJ | 0.0061 | U | 0.0081 | UJ | 0.0057 | U | 1.2 | U | 0.0061 | U | 0.0021 | U | 0.0024 | U |
| Bromochloromethane | ~ | ~ | ~ | 0.0049 | UJ | 0.0061 | U | 0.0081 | UJ | 0.0057 | U | 1.2 | U | 0.0061 | U | 0.0021 | U | 0.0024 | U |
| Bromodichloromethane | ~ | ~ | ~ | 0.00098 | UJ | 0.0012 | U | 0.0016 | UJ | 0.0011 | U | 0.24 | U | 0.0012 | U | 0.00053 | U | 0.00053 | U |
| Bromoform | ~ | ~ | ~ | 0.0039 | UJ | 0.0048 | U | 0.0064 | UJ | 0.0045 | U | 0.95 | U | 0.0048 | UJ | 0.0043 | UJ | 0.0044 | UJ |
| Bromomethane | ~ | ~ | ~ | 0.002 | UJ | 0.0024 | UJ | 0.0032 | UJ | 0.0023 | U | 0.48 | UJ | 0.0024 | UJ | 0.0021 | U | 0.0024 | U |
| Carbon Disulfide | ~ | ~ | ~ | 0.0098 | UJ | 0.012 | U | 0.016 | UJ | 0.011 | U | 2.4 | U | 0.012 | U | 0.011 | U | 0.012 | U |
| Carbon Tetrachloride | 0.76 | 0.76 | 2.4 | 0.00098 | UJ | 0.0012 | U | 0.0016 | UJ | 0.0011 | U | 0.24 | U | 0.0012 | U | 0.0011 | UJ | 0.0012 | UJ |
| Chlorobenzene | 1.1 | 1.1 | 100 | 0.00098 | UJ | 0.0012 | U | 0.0016 | UJ | 0.0011 | U | 0.24 | U | 0.0012 | U | 0.00053 | U | 0.00053 | U |
| Chloroethane | ~ | ~ | ~ | 0.002 | UJ | 0.0024 | UJ | 0.0032 | UJ | 0.0023 | U | 0.48 | UJ | 0.0024 | UJ | 0.0021 | U | 0.0024 | U |
| Chloroform | 0.37 | 0.37 | 49 | 0.0015 | UJ | 0.0018 | U | 0.0024 | UJ | 0.0017 | U | 0.36 | U | 0.0018 | U | 0.0016 | U | 0.0018 | U |
| Chloromethane | ~ | ~ | ~ | 0.0049 | UJ | 0.0061 | U | 0.0081 | UJ | 0.0057 | U | 1.2 | U | 0.0061 | U | 0.0043 | U | 0.0044 | U |
| Cis-1,2-Dichloroethene | 0.25 | 0.25 | 100 | 0.00098 | UJ | 0.0012 | U | 0.0016 | UJ | 0.0011 | U | 0.24 | U | 0.0012 | U | 0.0011 | U | 0.0012 | U |
| Cis-1,3-Dichloropropene | ~ | ~ | ~ | 0.00098 | UJ | 0.0012 | U | 0.0016 | UJ | 0.0011 | U | 0.24 | U | 0.0012 | U | 0.00053 | U | 0.00053 | U |
| Cymene | ~ | ~ | ~ | 0.00098 | UJ | 0.0012 | U | 0.0016 | UJ | 0.0011 | U | 0.24 | U | 0.0012 | U | 0.0011 | U | 0.0012 | U |
| Dibromochloromethane | ~ | ~ | ~ | 0.00098 | UJ | 0.0012 | U | 0.0016 | UJ | 0.0011 | U | 0.24 | U | 0.0012 | U | 0.0011 | U | 0.0012 | U |
| Dibromomethane | ~ | ~ | ~ | 0.0098 | UJ | 0.012 | U | 0.016 | UJ | 0.011 | U | 2.4 | U | 0.012 | U | 0.0021 | U | 0.0024 | U |
| Dichlorodifluoromethane | ~ | ~ | ~ | 0.0098 | UJ | 0.012 | U | 0.016 | UJ | 0.011 | UJ | 2.4 | UJ | 0.012 | UJ | 0.011 | UJ | 0.012 | UJ |
| Diethyl Ether (Ethyl Ether) | ~ | ~ | ~ | 0.0049 | UJ | 0.0061 | U | 0.0081 | UJ | 0.0057 | U | 1.2 | U | 0.0061 | U | 0.0021 | U | 0.0024 | U |
| Ethylbenzene | 1 | 1 | 41 | 0.00098 | UJ | 0.0012 | U | 0.0016 | UJ | 0.0011 | U | 0.24 | U | 0.0012 | U | 0.0011 | U | 0.0012 | U |
| Hexachlorobutadiene | ~ | ~ | ~ | 0.0049 | UJ | 0.0061 | U | 0.0081 | UJ | 0.0057 | U | 1.2 | U | 0.0061 | U | 0.0043 | U | 0.0044 | U |
| Isopropylbenzene (Cumene) | ~ | ~ | ~ | 0.00098 | UJ | 0.0012 | U | 0.0016 | UJ | 0.0011 | U | 0.24 | U | 0.0012 | U | 0.0011 | U | 0.0012 | U |
| M,P-Xylene | ~ | ~ | ~ | 0.00024 | J | 0.0024 | U | 0.0032 | UJ | 0.0023 | U | 0.3 | J | 0.0024 | U | 0.0021 | U | 0.0024 | U |
| Methyl Ethyl Ketone (2-Butanone) | 0.12 | 0.12 | 100 | 0.0098 | UJ | 0.012 | UJ | 0.016 | UJ | 0.011 | UJ | 2.4 | U | 0.012 | UJ | 0.011 | UJ | 0.012 | UJ |
| Methyl Isobutyl Ketone (4-Methyl-2-Pentanone) | ~ | ~ | ~ | 0.0098 | UJ | 0.012 | U | 0.016 | UJ | 0.011 | UJ | 2.4 | U | 0.012 | U | 0.011 | UJ | 0.012 | UJ |
| Methylene Chloride | 0.05 | 0.05 | 100 | 0.0098 | UJ | 0.012 | U | 0.016 | UJ | 0.011 | UJ | 2.4 | U | 0.012 | U | 0.0053 | U | 0.0055 | U |
| Naphthalene | 12 | 12 | 100 | 0.0049 | UJ | 0.0061 | U | 0.0081 | J | 0.0057 | U | 53 | U | 0.0061 | U | 0.0043 | U | 0.0044 | U |
| n-Butylbenzene | 12 | 12 | 100 | 0.00098 | UJ | 0.0012 | U | 0.0016 | UJ | 0.0011 | U | 0.24 | U | 0.0012 | U | 0.0011 | U | 0.0012 | U |
| n-Propylbenzene | 3.9 | 3.9 | 100 | 0.00098 | UJ | 0.0012 | U | 0.0016 | UJ | 0.0011 | U | 0.24 | U | 0.0012 | U | 0.0011 | U | 0.0012 | U |
| o-Xylene (1,2-Dimethylbenzene) | ~ | ~ | ~ | 0.002 | UJ | 0.0024 | U | 0.0032 | UJ | 0.0023 | U | 0.24 | J | 0.0024 | U | 0.0011 | U | 0.0012 | U |
| Sec-Butylbenzene | 11 | 11 | 100 | 0.00098 | UJ | 0.0012 | U | 0.0016 | UJ | 0.0011 | U | 0.24 | U | 0.0012 | U | 0.0011 | U | 0.0012 | U |
| Styrene | ~ | ~ | ~ | 0.002 | UJ | 0.0024 | U | 0.0032 | UJ | 0.0023 | U | 0.48 | U | 0.0024 | U | 0.0011 | U | 0.0012 | U |
| T-Butylbenzene | 5.9 | 5.9 | 100 | 0.0049 | UJ | 0.0061 | U | 0.0081 | UJ | 0.0057 | U | 1.2 | U | 0.0061 | U | 0.0021 | U | 0.0024 | U |
| Tert-Butyl Methyl Ether | 0.93 | 0.93 | 100 | 0.002 | UJ | 0 | | | | | | | | | | | | | |

**Table 3A
Remedial Investigation Report
Soil Sample Analytical Results**

**130 Saint Felix Street Site
Brooklyn, New York
NYSDEC BCP Site No.: C224306
Langan Project No.: 100842301**

| Location | NYSDEC Part 375 Unrestricted Use SCOs | NYSDEC Part 375 Protection of Groundwater SCOs | NYSDEC Part 375 Restricted Use Residential- Residential SCOs | EB07 EB07 10-12 L1511932-01 5/30/2015 10-12 | EB07 DUP01_053015 L1511932-06 5/30/2015 10-12 | EB09 EB09 4.5-5.5 L1511932-02 5/30/2015 4.5-5.5 | EB10 EB10 1-2 L1511932-03 5/30/2015 1-2 | EB12 EB12 7-9 L1511932-04 5/30/2015 7-9 | EB13 EB13 7-9 L1511932-05 5/30/2015 7-9 | LSB-1 015 LSB1 0-2 L2120301-15 4/21/2021 0-2 | LSB-1 016 LSB1 8-10 L2120301-16 4/21/2021 8-10 | LSB-1 023 LSB1 40-42 L2121015-03 4/23/2021 40-42 | LSB-2 009 LSB2 0-2 L2120301-09 4/21/2021 0-2 | LSB-2 010 LSB2 8-10 L2120301-10 4/21/2021 8-10 | LSB-2 025 LSB2 42-44 L2121234-01 4/26/2021 42-44 | LSB-2 026 DUP2 L2120301-02 4/26/2021 42-44 | LSB-3 005 LSB3 0-2 L2120301-05 4/21/2021 0-2 | LSB-3 007 LSB3 13-15 L2120301-07 4/21/2021 13-15 | |
|--|---|---|---|---|---|---|---|---|---|--|--|--|--|--|--|--|--|--|---------|
| Semivolatile Organic Compounds (mg/kg) | | | | | | | | | | | | | | | | | | | |
| 1,2,4,5-Tetrachlorobenzene | ~ | ~ | ~ | 0.21 U | 0.22 U | 0.93 U | 0.37 U | 10 U | 0.18 U | 0.89 U | 0.19 U | 0.19 U | 0.18 U | 0.2 U | 0.18 U | 0.18 U | 0.19 U | 0.17 U | 0.17 U |
| 1,2,4-Trichlorobenzene | ~ | ~ | ~ | 0.21 U | 0.22 U | 0.93 U | 0.37 U | 10 U | 0.18 U | 0.89 U | 0.19 U | 0.19 U | 0.18 U | 0.2 U | 0.18 U | 0.18 U | 0.19 U | 0.17 U | 0.17 U |
| 1,2-Dichlorobenzene | 1.1 | 1.1 | 100 | 0.21 U | 0.22 U | 0.93 U | 0.37 U | 10 U | 0.18 U | 0.89 U | 0.19 U | 0.19 U | 0.18 U | 0.2 U | 0.18 U | 0.18 U | 0.19 U | 0.17 U | 0.17 U |
| 1,3-Dichlorobenzene | 2.4 | 2.4 | 49 | 0.21 U | 0.22 U | 0.93 U | 0.37 U | 10 U | 0.18 U | 0.89 U | 0.19 U | 0.19 U | 0.18 U | 0.2 U | 0.18 U | 0.18 U | 0.19 U | 0.17 U | 0.17 U |
| 1,4-Dichlorobenzene | 1.8 | 1.8 | 13 | 0.21 U | 0.22 U | 0.93 U | 0.37 U | 10 U | 0.18 U | 0.89 U | 0.19 U | 0.19 U | 0.18 U | 0.2 U | 0.18 U | 0.18 U | 0.19 U | 0.17 U | 0.17 U |
| 1,4-Dioxane (P-Dioxane) | 0.1 | 0.1 | 13 | NA | NA | NA | NA | NA | NA | 0.13 U | 0.029 U | 0.029 U | 0.028 U | 0.03 U | 0.027 U | 0.027 U | 0.029 U | 0.026 U | 0.026 U |
| 2,4,5-Trichlorophenol | ~ | ~ | ~ | 0.21 U | 0.22 U | 0.93 U | 0.37 U | 10 U | 0.18 U | 0.89 U | 0.19 U | 0.19 U | 0.18 U | 0.2 U | 0.18 U | 0.18 U | 0.19 U | 0.17 U | 0.17 U |
| 2,4,6-Trichlorophenol | ~ | ~ | ~ | 0.13 U | 0.13 U | 0.56 U | 0.22 U | 6.1 U | 0.11 U | 0.53 U | 0.12 U | 0.11 U | 0.11 U | 0.12 U | 0.11 U | 0.11 U | 0.11 U | 0.1 U | 0.1 U |
| 2,4-Dichlorophenol | ~ | ~ | ~ | 0.19 U | 0.2 U | 0.84 U | 0.33 U | 9.2 U | 0.17 U | 0.8 U | 0.18 U | 0.17 U | 0.16 U | 0.18 U | 0.16 U | 0.16 U | 0.17 U | 0.16 U | 0.16 U |
| 2,4-Dimethylphenol | ~ | ~ | ~ | 0.21 U | 0.22 U | 0.93 U | 0.37 U | 3.8 U | 0.18 U | 0.89 U | 0.19 U | 0.19 U | 0.18 U | 0.2 U | 0.18 U | 0.18 U | 0.19 U | 0.17 U | 0.17 U |
| 2,4-Dinitrophenol | ~ | ~ | ~ | 1 U | 1 U | 4.5 U | 1.8 U | 49 U | 0.89 U | 4.3 U | 0.94 U | 0.92 U | 0.88 U | 0.96 U | 0.86 U | 0.87 U | 0.92 U | 0.83 U | 0.83 U |
| 2,4-Dinitrotoluene | ~ | ~ | ~ | 0.21 U | 0.22 U | 0.93 U | 0.37 U | 10 U | 0.18 U | 0.89 U | 0.19 U | 0.19 U | 0.18 U | 0.2 U | 0.18 U | 0.18 U | 0.19 U | 0.17 U | 0.17 U |
| 2,6-Dinitrotoluene | ~ | ~ | ~ | 0.21 U | 0.22 U | 0.93 U | 0.37 U | 10 U | 0.18 U | 0.89 U | 0.19 U | 0.19 U | 0.18 U | 0.2 U | 0.18 U | 0.18 U | 0.19 U | 0.17 U | 0.17 U |
| 2-Chloronaphthalene | ~ | ~ | ~ | 0.21 U | 0.22 U | 0.93 U | 0.37 U | 10 U | 0.18 U | 0.89 U | 0.19 U | 0.19 U | 0.18 U | 0.2 U | 0.18 U | 0.18 U | 0.19 U | 0.17 U | 0.17 U |
| 2-Chlorophenol | ~ | ~ | ~ | 0.21 U | 0.22 U | 0.93 U | 0.37 U | 10 U | 0.18 U | 0.89 U | 0.19 U | 0.19 U | 0.18 U | 0.2 U | 0.18 U | 0.18 U | 0.19 U | 0.17 U | 0.17 U |
| 2-Methylnaphthalene | ~ | ~ | ~ | 0.26 U | 0.26 U | 1.2 U | 0.44 U | 50 U | 0.093 U | 1.1 U | 0.23 U | 0.23 U | 0.22 U | 0.24 U | 0.22 U | 0.22 U | 0.23 U | 0.21 U | 0.21 U |
| 2-Methylphenol (o-Cresol) | 0.33 | 0.33 | 100 | 0.21 U | 0.22 U | 0.93 U | 0.37 U | 10 U | 0.18 U | 0.89 U | 0.19 U | 0.19 U | 0.18 U | 0.2 U | 0.18 U | 0.18 U | 0.19 U | 0.17 U | 0.17 U |
| 2-Nitroaniline | ~ | ~ | ~ | 0.21 U | 0.22 U | 0.93 U | 0.37 U | 10 U | 0.18 U | 0.89 U | 0.19 U | 0.19 U | 0.18 U | 0.2 U | 0.18 U | 0.18 U | 0.19 U | 0.17 U | 0.17 U |
| 2-Nitrophenol | ~ | ~ | ~ | 0.46 U | 0.48 U | 2 U | 0.8 U | 22 U | 0.4 U | 1.9 U | 0.42 U | 0.41 U | 0.4 U | 0.43 U | 0.39 U | 0.39 U | 0.41 U | 0.38 U | 0.38 U |
| 3 & 4 Methylphenol (m&p Cresol) | 0.33 | 0.33 | 100 | 0.31 U | 0.32 U | 1.3 U | 0.53 U | 8.1 U | 0.27 U | 1.3 U | 0.28 U | 0.28 U | 0.26 U | 0.29 U | 0.26 U | 0.26 U | 0.27 U | 0.25 U | 0.25 U |
| 3,3'-Dichlorobenzidine | ~ | ~ | ~ | 0.21 U | 0.22 U | 0.93 U | 0.37 U | 10 U | 0.18 U | 0.89 U | 0.19 U | 0.19 U | 0.18 U | 0.2 U | 0.18 U | 0.18 U | 0.19 U | 0.17 U | 0.17 U |
| 3-Nitroaniline | ~ | ~ | ~ | 0.21 U | 0.22 U | 0.93 U | 0.37 U | 10 U | 0.18 U | 0.89 U | 0.19 U | 0.19 U | 0.18 U | 0.2 U | 0.18 U | 0.18 U | 0.19 U | 0.17 U | 0.17 U |
| 4,6-Dinitro-2-Methylphenol | ~ | ~ | ~ | 0.56 U | 0.57 U | 2.4 U | 0.96 U | 27 U | 0.48 U | 2.3 U | 0.51 U | 0.5 U | 0.48 U | 0.52 U | 0.47 U | 0.47 U | 0.5 U | 0.45 U | 0.45 U |
| 4-Bromophenyl Phenyl Ether | ~ | ~ | ~ | 0.21 U | 0.22 U | 0.93 U | 0.37 U | 10 U | 0.18 U | 0.89 U | 0.19 U | 0.19 U | 0.18 U | 0.2 U | 0.18 U | 0.18 U | 0.19 U | 0.17 U | 0.17 U |
| 4-Chloro-3-Methylphenol | ~ | ~ | ~ | 0.21 U | 0.22 U | 0.93 U | 0.37 U | 10 U | 0.18 U | 0.89 U | 0.19 U | 0.19 U | 0.18 U | 0.2 U | 0.18 U | 0.18 U | 0.19 U | 0.17 U | 0.17 U |
| 4-Chloroaniline | ~ | ~ | ~ | 0.21 U | 0.22 U | 0.93 U | 0.37 U | 10 U | 0.18 U | 0.89 U | 0.19 U | 0.19 U | 0.18 U | 0.2 U | 0.18 U | 0.18 U | 0.19 U | 0.17 U | 0.17 U |
| 4-Chlorophenyl Phenyl Ether | ~ | ~ | ~ | 0.21 U | 0.22 U | 0.93 U | 0.37 U | 10 U | 0.18 U | 0.89 U | 0.19 U | 0.19 U | 0.18 U | 0.2 U | 0.18 U | 0.18 U | 0.19 U | 0.17 U | 0.17 U |
| 4-Nitroaniline | ~ | ~ | ~ | 0.21 U | 0.22 U | 0.93 U | 0.37 U | 10 U | 0.18 U | 0.89 U | 0.19 U | 0.19 U | 0.18 U | 0.2 U | 0.18 U | 0.18 U | 0.19 U | 0.17 U | 0.17 U |
| 4-Nitrophenol | ~ | ~ | ~ | 0.3 U | 0.31 U | 1.3 U | 0.52 U | 14 U | 0.26 U | 1.2 U | 0.27 U | 0.27 U | 0.26 U | 0.28 U | 0.25 U | 0.25 U | 0.27 U | 0.24 U | 0.24 U |
| Acenaphthene | 20 | 98 | 100 | 0.17 U | 0.18 U | 1.9 U | 0.3 U | 58 U | 0.18 U | 1.11 U | 0.16 U | 0.15 U | 0.15 U | 0.16 U | 0.14 U | 0.14 U | 0.15 U | 0.14 U | 0.14 U |
| Acenaphthylene | 100 | 107 | 100 | 0.17 U | 0.18 U | 2.2 U | 0.3 U | 42 U | 0.15 U | 0.71 U | 0.16 U | 0.15 U | 0.15 U | 0.16 U | 0.14 U | 0.14 U | 0.15 U | 0.14 U | 0.14 U |
| Acetophenone | ~ | ~ | ~ | 0.21 U | 0.22 U | 0.93 U | 0.37 U | 10 U | 0.18 U | 0.89 U | 0.19 U | 0.19 U | 0.18 U | 0.2 U | 0.18 U | 0.18 U | 0.19 U | 0.17 U | 0.17 U |
| Anthracene | 100 | 1,000 | 100 | 0.13 U | 0.13 U | 5 U | 0.22 U | 140 U | 0.46 U | 0.53 U | 0.12 U | 0.11 U | 0.11 U | 0.12 U | 0.11 U | 0.11 U | 0.11 U | 0.1 U | 0.1 U |
| Benzo(a)anthracene | 1 | 1 | 1 | 0.13 U | 0.13 U | 17 | 0.22 U | 270 | 0.9 U | 0.34 U | 0.12 U | 0.11 U | 0.098 U | 0.12 U | 0.11 U | 0.11 U | 0.11 U | 0.1 U | 0.1 U |
| Benzo(a)pyrene | 1 | 22 | 1 | 0.17 U | 0.18 U | 17 | 0.3 U | 260 | 0.84 U | 0.26 U | 0.16 U | 0.15 U | 0.098 U | 0.16 U | 0.14 U | 0.14 U | 0.15 U | 0.14 U | 0.14 U |
| Benzo(b)fluoranthene | 1 | 1.7 | 1 | 0.13 U | 0.13 U | 21 | 0.22 U | 270 | 1 U | 0.4 U | 0.12 U | 0.11 U | 0.13 U | 0.12 U | 0.11 U | 0.11 U | 0.11 U | 0.1 U | 0.1 U |
| Benzo(g,h,i)perylene | 100 | 1,000 | 100 | 0.17 U | 0.18 U | 12 | 0.3 U | 180 | 0.57 U | 0.2 U | 0.16 U | 0.15 U | 0.08 U | 0.16 U | 0.14 U | 0.14 U | 0.15 U | 0.14 U | 0.14 U |
| Benzo(k)fluoranthene | 0.8 | 1.7 | 3.9 | 0.13 U | 0.13 U | 7.9 | 0.22 U | 190 | 0.37 U | 0.14 U | 0.12 U | 0.11 U | 0.043 U | 0.12 U | 0.11 U | 0.11 U | 0.11 U | 0.1 U | 0.1 U |
| Benzoic Acid | ~ | ~ | ~ | 0.69 U | 0.71 U | 3 U | 1.2 U | 33 U | 0.6 U | 2.9 U | 0.63 U | 0.62 U | 0.6 U | 0.65 U | 0.58 U | 0.59 U | 0.62 U | 0.56 U | 0.56 U |
| Benzyl Alcohol | ~ | ~ | ~ | 0.21 U | 0.22 U | 0.93 U | 0.37 U | 10 U | 0.18 U | 0.89 U | 0.19 U | 0.19 U | 0.18 U | 0.2 U | 0.18 U | 0.18 U | 0.19 U | 0.17 U | 0.17 U |
| Benzyl Butyl Phthalate | ~ | ~ | ~ | 0.21 U | 0.22 U | 0.93 U | 0.37 U | 10 U | 0.18 U | 0.89 U | 0.19 U | 0.19 U | 0.18 U | 0.2 U | 0.18 U | 0.18 U | 0.19 U | 0.17 U | 0.17 U |
| Biphenyl (Diphenyl) | ~ | ~ | ~ | 0.49 U | 0.5 U | 0.41 U | 0.84 U | 14 U | 0.42 U | 2 U | 0.44 U | 0.44 U | 0.42 U | 0.46 U | 0.41 U | 0.42 U | 0.43 U | 0.4 U | 0.4 U |
| Bis(2-chloroethoxy) methane | ~ | ~ | ~ | 0.23 U | 0.24 U | 1 U | 0.4 U | 11 U | 0.2 U | 0.96 U | 0.21 U | 0.21 U | 0.2 U | 0.22 U | 0.19 U | 0.2 U | 0.2 U | 0.19 U | 0.19 U |
| Bis(2-chloroethyl) ether (2-chloroethyl ether) | ~ | ~ | ~ | 0.19 U | 0.2 U | 0.84 U | 0.33 U | 9.2 U | 0.17 U | 0.8 U | 0.18 U | 0.17 U | 0.16 U | 0.18 U | 0.16 U | 0.16 U | 0.17 U | 0.16 U | 0.16 U |
| Bis(2-chloroisopropyl) ether | ~ | ~ | ~ | 0.26 U | 0.26 U | 1.1 U | 0.44 U | 12 U | 0.22 U | 1.1 U | 0.23 U | 0.23 U | 0.22 U | 0.24 U | 0.22 U | 0.22 U | 0.23 U | 0.21 U | 0.21 U |
| Bis(2-ethylhexyl) phthalate | ~ | ~ | ~ | 0.21 U | 0.22 U | 0.93 U | 0.37 U | 10 U | 0.18 U | 0.89 U | 0.19 U | 0.12 U | 0.18 U | 0.2 U | 0.18 U | 0.18 U | 0.19 U | 0.17 U | 0.17 U |
| Carbazole | ~ | ~ | ~ | 0.21 U | 0.22 U | 1.9 U | 0.37 U | 100 U | 0.24 U | 0.89 U | 0.19 U | 0.19 U | 0.019 U | 0.2 U | 0.18 U | 0.18 U | 0.19 U | 0.17 U | 0.17 U |
| Chrysene | 1 | 1 | 3.9 | 0.13 U | 0.13 U | 18 | 0.22 U | 270 | 0.91 U | 0.41 U | 0.12 U | 0.11 U | 0.13 U | 0.12 U | 0.11 U | 0.11 U | 0.11 U | 0.1 U | 0.1 U |
| Dibenz(a,h)anthracene | 0.33 | 1,000 | 0.33 | 0.13 U | 0.13 U | 3.6 | 0.22 U | 60 | 0.15 U | 0.53 U | 0.12 U | 0.11 U | 0.11 U | 0.12 U | 0.11 U | 0.11 U | 0.11 U | 0.1 U | 0.1 U |
| Dibenzofuran | 7 | 210 | 59 | 0.21 U | 0.22 U | 1.5 U | 0.37 U | 71 U | 0.17 U | 0.89 U | 0.19 U | 0.19 U | 0.18 U | 0.2 U | 0.18 U | 0.18 U | 0.19 U | 0.17 U | 0.17 U |
| Dibutyl phthalate | ~ | ~ | ~ | 0.21 U | 0.22 U | 0.93 U | 0.37 U | 10 U | 0.18 U | 0.89 U | 0.19 U | 0.19 U | 0.18 U | 0.2 U | 0.18 U | 0.18 U | 0.19 U | 0.17 U | 0.17 U |
| Diethyl phthalate | ~ | ~ | ~ | 0.21 U | 0.22 U | 0.93 U | 0.37 U | 10 U | 0.18 U | 0.89 U | 0.19 U | 0.19 U | 0.18 U | 0.2 U | 0.18 U | 0.18 U | 0.19 U | 0.17 U | 0.17 U |
| Dimethyl phthalate | ~ | ~ | ~ | 0.21 U | 0.22 U | 0.93 | | | | | | | | | | | | | |

**Table 3A
Remedial Investigation Report
Soil Sample Analytical Results**

**130 Saint Felix Street Site
Brooklyn, New York
NYSDEC BCP Site No.: C224306
Langan Project No.: 100842301**

| Location | NYSDEC Part 375 Unrestricted Use SCOs | NYSDEC Part 375 Protection of Groundwater SCOs | NYSDEC Part 375 Restricted Use Residential SCOs | EB07 EB07 10-12 L1511932-01 5/30/2015 | EB07 DUP01_053015 L1511932-06 5/30/2015 | EB09 EB09 4.5-5.5 L1511932-02 5/30/2015 | EB10 EB10 1-2 L1511932-03 5/30/2015 | EB12 EB12 7-9 L1511932-04 5/30/2015 | EB13 EB13 7-9 L1511932-05 5/30/2015 | LSB-1 015 LSB1 0-2 L2120301-15 4/21/2021 | LSB-1 016 LSB1 8-10 L2120301-16 4/21/2021 | LSB-1 023 LSB1 40-42 L2120105-03 4/23/2021 | LSB-2 009 LSB2 0-2 L2120301-09 4/21/2021 | LSB-2 010 LSB2 8-10 L2120301-10 4/21/2021 | LSB-2 025 LSB2 42-44 L2121234-01 4/26/2021 | LSB-2 026 DUP2 L2121234-02 4/26/2021 | LSB-3 005 LSB3 0-2 L2120301-05 4/21/2021 | LSB-3 007 LSB3 13-15 L2120301-07 4/21/2021 | |
|---|---|---|---|--|--|--|--|--|--|---|--|---|---|--|---|---|---|---|--|
| Sample ID | Sample Date | Sample Depth (feet bgs) | Pesticides (mg/kg) | Herbicides (mg/kg) | Polychlorinated Biphenyls (mg/kg) | Inorganics (mg/kg) | General Chemistry (%) | | | | | | | | | | | | |
| 4,4'-DDD | 0.0033 | 14 | 13 | 0.00206 U | 0.00212 U | 0.00225 U | 0.00175 U | 0.00188 U | 0.00177 U | 0.00844 U | 0.00185 U | 0.00184 U | 0.00177 U | 0.00188 U | 0.00175 U | 0.00168 U | 0.0018 U | 0.00167 U | |
| 4,4'-DDE | 0.0033 | 17 | 8.9 | 0.00206 U | 0.00212 U | 0.00225 U | 0.00175 U | 0.00188 U | 0.00177 U | 0.00844 U | 0.00185 U | 0.00184 U | 0.00177 U | 0.00188 U | 0.00175 U | 0.00168 U | 0.0018 U | 0.00167 U | |
| 4,4'-DDT | 0.0033 | 136 | 7.9 | 0.00386 UJ | 0.00397 UJ | 0.00422 UJ | 0.00328 UJ | 0.00352 UJ | 0.00332 UJ | 0.0158 UJ | 0.00347 UJ | 0.00344 UJ | 0.00331 UJ | 0.00353 UJ | 0.00328 UJ | 0.00316 UJ | 0.00337 UJ | 0.00313 UJ | |
| Aldrin | 0.005 | 0.19 | 0.097 | 0.00206 U | 0.00212 U | 0.00225 U | 0.00175 U | 0.00188 U | 0.00177 U | 0.00844 U | 0.00185 U | 0.00184 U | 0.00177 U | 0.00188 U | 0.00175 U | 0.00168 U | 0.0018 U | 0.00167 U | |
| Alpha BHC (Alpha Hexachlorocyclohexane) | 0.02 | 0.02 | 0.48 | 0.000858 U | 0.000882 U | 0.000937 U | 0.00073 U | 0.000782 U | 0.000739 U | 0.00352 U | 0.000772 U | 0.000765 U | 0.000737 U | 0.000785 U | 0.000729 U | 0.000702 U | 0.000748 U | 0.000696 U | |
| Alpha Chlordane | 0.094 | 2.9 | 4.2 | 0.00258 U | 0.00264 U | 0.00281 U | 0.00219 U | 0.00234 U | 0.00222 U | 0.0105 U | 0.00231 U | 0.00229 U | 0.00221 U | 0.00235 U | 0.00219 U | 0.00211 U | 0.00224 U | 0.00209 U | |
| Alpha Endosulfan | 2.4 | 102 | 24 | 0.00206 U | 0.00212 U | 0.00225 U | 0.00175 U | 0.00188 U | 0.00177 U | 0.00844 U | 0.00185 U | 0.00184 U | 0.00177 U | 0.00188 U | 0.00175 U | 0.00168 U | 0.0018 U | 0.00167 U | |
| Beta Bhc (Beta Hexachlorocyclohexane) | 0.036 | 0.09 | 0.36 | 0.00206 U | 0.00212 U | 0.00225 U | 0.00175 U | 0.00188 U | 0.00177 U | 0.00844 U | 0.00185 U | 0.00184 U | 0.00177 U | 0.00188 U | 0.00175 U | 0.00168 U | 0.0018 U | 0.00167 U | |
| Beta Endosulfan | 2.4 | 102 | 24 | 0.00206 U | 0.00212 U | 0.00225 U | 0.00175 U | 0.00188 U | 0.00177 U | 0.00844 U | 0.00185 U | 0.00184 U | 0.00177 U | 0.00188 U | 0.00175 U | 0.00168 U | 0.0018 U | 0.00167 U | |
| Chlordane (alpha and gamma) | ~ | ~ | ~ | 0.0167 U | 0.0172 U | 0.0183 U | 0.0142 U | 0.0152 U | 0.0144 U | 0.0703 U | 0.0154 U | 0.0153 U | 0.0147 U | 0.0157 U | 0.0146 U | 0.014 U | 0.015 U | 0.0139 U | |
| Delta Bhc (Delta Hexachlorocyclohexane) | 0.04 | 0.25 | 100 | 0.00206 UJ | 0.00212 UJ | 0.00225 UJ | 0.00175 UJ | 0.00188 UJ | 0.00177 UJ | 0.00844 U | 0.00185 U | 0.00184 U | 0.00177 U | 0.00188 U | 0.00175 U | 0.00168 U | 0.0018 U | 0.00167 U | |
| Dieldrin | 0.005 | 0.1 | 0.2 | 0.00129 U | 0.00132 U | 0.0014 U | 0.00109 U | 0.00117 U | 0.00111 U | 0.00527 U | 0.00116 U | 0.00115 U | 0.0011 U | 0.00118 U | 0.00109 U | 0.00105 U | 0.00112 U | 0.00104 U | |
| Endosulfan Sulfate | 2.4 | 1,000 | 24 | 0.000858 UJ | 0.000882 UJ | 0.000937 UJ | 0.00073 UJ | 0.000782 UJ | 0.000739 UJ | 0.00352 UJ | 0.000772 UJ | 0.000765 UJ | 0.000737 UJ | 0.000785 UJ | 0.000729 UJ | 0.000702 UJ | 0.000748 UJ | 0.000696 UJ | |
| Endrin | 0.014 | 0.06 | 11 | 0.000858 UJ | 0.000882 UJ | 0.000937 UJ | 0.00073 UJ | 0.000782 UJ | 0.000739 UJ | 0.00352 UJ | 0.000772 UJ | 0.000765 UJ | 0.000737 UJ | 0.000785 UJ | 0.000729 UJ | 0.000702 UJ | 0.000748 UJ | 0.000696 UJ | |
| Endrin Aldehyde | ~ | ~ | ~ | NA | NA | NA | NA | NA | NA | 0.0105 U | 0.00231 U | 0.00229 U | 0.00221 U | 0.00235 U | 0.00219 U | 0.00211 U | 0.00224 U | 0.00209 U | |
| Endrin Ketone | ~ | ~ | ~ | 0.00206 U | 0.00212 U | 0.00225 U | 0.00175 U | 0.00188 U | 0.00177 U | 0.00844 U | 0.00185 U | 0.00184 U | 0.00177 U | 0.00188 U | 0.00175 U | 0.00168 U | 0.0018 U | 0.00167 U | |
| Gamma Bhc (Lindane) | 0.1 | 0.1 | 1.3 | 0.000858 U | 0.000882 U | 0.000937 U | 0.00073 U | 0.000782 U | 0.000739 U | 0.00352 U | 0.000772 U | 0.000765 U | 0.000737 U | 0.000785 U | 0.000729 U | 0.000702 U | 0.000748 U | 0.000696 U | |
| Gamma Chlordane | ~ | ~ | ~ | 0.00258 U | 0.00264 U | 0.00281 U | 0.00219 U | 0.00234 U | 0.00222 U | 0.0105 U | 0.00231 U | 0.00229 U | 0.00221 U | 0.00235 U | 0.00219 U | 0.00211 U | 0.00224 U | 0.00209 U | |
| Heptachlor | 0.042 | 0.38 | 2.1 | 0.00103 U | 0.00106 U | 0.00112 U | 0.000876 U | 0.000938 U | 0.000887 U | 0.00422 U | 0.000926 U | 0.000918 U | 0.000884 U | 0.000942 U | 0.000875 U | 0.000842 U | 0.000898 U | 0.000835 U | |
| Heptachlor Epoxide | ~ | ~ | ~ | 0.00386 U | 0.00397 U | 0.00422 U | 0.00328 U | 0.00352 U | 0.00332 U | 0.0158 U | 0.00347 U | 0.00344 U | 0.00331 U | 0.00353 U | 0.00328 U | 0.00316 U | 0.00337 U | 0.00313 U | |
| Methoxychlor | ~ | ~ | ~ | 0.00386 U | 0.00397 U | 0.00422 U | 0.00328 U | 0.00352 U | 0.00332 U | 0.0158 U | 0.00347 U | 0.00344 U | 0.00331 U | 0.00353 U | 0.00328 U | 0.00316 U | 0.00337 U | 0.00313 U | |
| Toxaphene | ~ | ~ | ~ | 0.0386 U | 0.0397 U | 0.0422 U | 0.0328 U | 0.0352 U | 0.0332 U | 0.158 UJ | 0.0347 UJ | 0.0344 UJ | 0.0331 UJ | 0.0353 UJ | 0.0328 UJ | 0.0316 UJ | 0.0337 UJ | 0.0313 UJ | |
| 2,4,5-T (Trichlorophenoxyacetic Acid) | ~ | ~ | ~ | 0.214 UJ | 0.221 UJ | 0.233 UJ | 0.184 UJ | 0.196 UJ | 0.184 UJ | 0.179 UJ | 0.192 UJ | 0.192 UJ | 0.183 UJ | 0.202 UJ | 0.182 UJ | 0.183 UJ | 0.19 UJ | 0.174 UJ | |
| 2,4-D (Dichlorophenoxyacetic Acid) | ~ | ~ | ~ | 0.214 UJ | 0.221 UJ | 0.233 UJ | 0.184 UJ | 0.196 UJ | 0.184 UJ | 0.179 UJ | 0.192 UJ | 0.192 UJ | 0.183 UJ | 0.202 UJ | 0.182 UJ | 0.183 UJ | 0.19 UJ | 0.174 UJ | |
| Silvex (2,4,5-Tp) | 3.8 | 3.8 | 100 | 0.214 UJ | 0.221 UJ | 0.233 UJ | 0.184 UJ | 0.196 UJ | 0.184 UJ | 0.179 UJ | 0.192 UJ | 0.192 UJ | 0.183 UJ | 0.202 UJ | 0.182 UJ | 0.183 UJ | 0.19 UJ | 0.174 UJ | |
| PCB-1016 (Aroclor 1016) | ~ | ~ | ~ | 0.0421 U | 0.044 U | 0.0471 U | 0.0362 U | 0.0388 U | 0.0364 U | 0.035 U | 0.0375 U | 0.0375 U | 0.0351 U | 0.0388 U | 0.0349 U | 0.0368 U | 0.038 U | 0.0343 U | |
| PCB-1221 (Aroclor 1221) | ~ | ~ | ~ | 0.0421 U | 0.044 U | 0.0471 U | 0.0362 U | 0.0388 U | 0.0364 U | 0.035 U | 0.0375 U | 0.0375 U | 0.0351 U | 0.0388 U | 0.0349 U | 0.0368 U | 0.038 U | 0.0343 U | |
| PCB-1232 (Aroclor 1232) | ~ | ~ | ~ | 0.0421 U | 0.044 U | 0.0471 U | 0.0362 U | 0.0388 U | 0.0364 U | 0.035 U | 0.0375 U | 0.0375 U | 0.0351 U | 0.0388 U | 0.0349 U | 0.0368 U | 0.038 U | 0.0343 U | |
| PCB-1242 (Aroclor 1242) | ~ | ~ | ~ | 0.0421 U | 0.044 U | 0.0471 U | 0.0362 U | 0.0388 U | 0.0364 U | 0.035 U | 0.0375 U | 0.0375 U | 0.0351 U | 0.0388 U | 0.0349 U | 0.0368 U | 0.038 U | 0.0343 U | |
| PCB-1248 (Aroclor 1248) | ~ | ~ | ~ | 0.0421 U | 0.044 U | 0.0471 U | 0.0362 U | 0.0388 U | 0.0364 U | 0.035 U | 0.0375 U | 0.0375 U | 0.0351 U | 0.0388 U | 0.0349 U | 0.0368 U | 0.038 U | 0.0343 U | |
| PCB-1254 (Aroclor 1254) | ~ | ~ | ~ | 0.0421 U | 0.044 U | 0.0471 U | 0.0362 U | 0.0388 U | 0.0364 U | 0.035 U | 0.0375 U | 0.0375 U | 0.0351 U | 0.0388 U | 0.0349 U | 0.0368 U | 0.038 U | 0.0343 U | |
| PCB-1260 (Aroclor 1260) | ~ | ~ | ~ | 0.0421 U | 0.044 U | 0.0471 U | 0.0362 U | 0.0388 U | 0.0364 U | 0.035 U | 0.0375 U | 0.0375 U | 0.0351 U | 0.0388 U | 0.0349 U | 0.0368 U | 0.038 U | 0.0343 U | |
| PCB-1262 (Aroclor 1262) | ~ | ~ | ~ | 0.0421 U | 0.044 U | 0.0471 U | 0.0362 U | 0.0388 U | 0.0364 U | 0.035 U | 0.0375 U | 0.0375 U | 0.0351 U | 0.0388 U | 0.0349 U | 0.0368 U | 0.038 U | 0.0343 U | |
| PCB-1268 (Aroclor 1268) | ~ | ~ | ~ | 0.0421 U | 0.044 U | 0.0471 U | 0.0362 U | 0.0388 U | 0.0364 U | 0.035 U | 0.0375 U | 0.0375 U | 0.0351 U | 0.0388 U | 0.0349 U | 0.0368 U | 0.038 U | 0.0343 U | |
| Total PCBs | 0.1 | 3.2 | 1 | 0.0421 U | 0.044 U | 0.0471 U | 0.0362 U | 0.0388 U | 0.0364 U | 0.035 U | 0.0375 U | 0.0375 U | 0.0351 U | 0.0388 U | 0.0349 U | 0.0368 U | 0.038 U | 0.0343 U | |
| Aluminum | ~ | ~ | ~ | 7,100 | 9,800 | 6,200 | 6,100 | 5,800 | 7,800 | 4,580 | 7,080 | 1,780 | 7,070 | 6,580 | 1,740 | 1,760 | 7,170 | 3,920 | |
| Antimony | ~ | ~ | ~ | 5.1 U | 5.1 U | 2.3 J | 1.6 J | 1.1 J | 4.2 U | 4.3 U | 4.57 U | 4.45 U | 4.38 U | 4.77 U | 4.39 U | 4.41 U | 4.49 U | 4.1 U | |
| Arsenic | 13 | 16 | 16 | 1.1 | 1.2 | 12 | 16 | 8.6 | 4.4 | 4.26 | 0.914 U | 0.578 J | 3.31 | 0.955 U | 1.17 | 1.15 | 0.98 | 1.24 | |
| Barium | 350 | 820 | 400 | 53 | 73 | 860 | 370 | 720 | 140 | 109 | 57.8 | 18.1 | 63.6 | 55.6 | 20.4 | 21.2 | 35.1 | 31.8 | |
| Beryllium | 7.2 | 47 | 72 | 0.31 J | 0.42 J | 0.26 J | 0.28 J | 0.24 J | 0.3 J | 0.258 J | 0.338 J | 0.445 U | 0.324 J | 0.334 J | 0.097 J | 0.088 J | 0.36 J | 0.172 J | |
| Cadmium | 2.5 | 7.5 | 4.3 | 1 U | 1 U | 0.95 J | 0.1 J | 0.93 | 0.85 U | 0.378 J | 0.476 J | 0.151 J | 0.35 J | 0.525 J | 0.123 J | 0.132 J | 0.521 J | 0.279 J | |
| Calcium | ~ | ~ | ~ | 1,300 J | 1,700 | 45,000 | 26,000 | 22,000 | 14,000 | 29,400 | 1,810 | 4,390 | 30,400 | 1,510 | 4,370 | 4,980 | 5,550 | 6,680 | |
| Chromium, Hexavalent | 1 | 19 | 110 | 0.58 J | 0.53 J | 0.96 J | 0.31 J | 0.33 J | 0.3 J | 0.876 U | 0.944 U | 0.927 U | 0.89 U | 0.984 U | 0.888 U | 0.892 U | 0.936 U | 0.852 U | |
| Chromium, Total | ~ | ~ | ~ | 18 J | 25 J | 24 | 16 | 32 | 17 | 10.6 | 20.8 | 5.2 | 11.8 | 20.3 | 3.83 | 5.52 | 20.2 | 11.1 | |
| Chromium, Trivalent | 30 | ~ | 180 | 17 J | 24 J | 23 J | 16 J | 32 J | 17 J | 11 | 21 | 5.2 | 12 | 20 | 3.8 | 5.5 | 20 | 11 | |
| Cobalt | ~ | ~ | ~ | 6.6 | 8.6 | 4.7 | 5.5 | 4.7 | 5.6 | 4.56 | 8.32 | 2.23 | 4.96 | 8.32 | 2.23 | 2.77 | 7.36 | 6.24 | |
| Copper | 50 | 1720 | 270 | 16 | 21 | 42 | 28 | 64 | 20 | 12.9 | 14.5 | 5.74 | 15.4 | 15.4 | 6.05 | 6.56 | 15 | 13.4 | |
| Cyanide | 27 | 40 | 27 | 1.2 U | 1.3 U | 0.62 J | 1.1 U | 0.75 J | 1 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Iron | ~ | ~ | ~ | 15,000 | 20,000 | 1 | | | | | | | | | | | | | |

**Table 3A
Remedial Investigation Report
Soil Sample Analytical Results**

**130 Saint Felix Street Site
Brooklyn, New York
NYSDEC BCP Site No.: C224306
Langan Project No.: 100842301**

| Location | NYSDEC Part 375 Unrestricted Use SCOs | NYSDEC Part 375 Protection of Groundwater SCOs | NYSDEC Part 375 Restricted Use Residential- Residential SCOs | LSB-3 006 LSB3 20-22 L2120301-06 4/21/2021 20-22 | LSB-4 003 LSB4 0-2 L2120301-03 4/21/2021 0-2 | LSB-4 004 LSB4 8-10 L2120301-04 4/21/2021 8-10 | LSB-4 008 LSB4 20-22 L2120301-08 4/21/2021 20-22 | LSB-5 001 LSB5 0-2 L2120301-01 4/21/2021 0-2 | LSB-5 017 DUP01 042121 L2120301-17 4/21/2021 0-2 | LSB-5 002 LSB5 13-15 L2120301-02 4/21/2021 13-15 | LSB-5 022 LSB5 42-44 L2120105-02 4/23/2021 42-44 | LSB-6 011 LSB6 0-2 L2120301-11 4/21/2021 0-2 | LSB-6 012 LSB6 13-15 L2120301-12 4/21/2021 13-15 | LSB-6 021 LSB6 42-44 L2120105-01 4/23/2021 42-44 | LSB-7 013 LSB7 0-2 L2120301-13 4/21/2021 0-2 | LSB-7 014 LSB7 8-10 L2120301-14 4/21/2021 8-10 | LSB-7 027 LSB7 42-44 L2121234-03 4/26/2021 42-44 | |
|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-----------|
| Volatile Organic Compounds (mg/kg) | | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ~ | ~ | ~ | 0.00047 U | 0.00077 U | 0.00052 U | 0.00047 U | 0.00073 U | 0.0011 U | 0.00053 U | 0.00058 U | 0.00067 U | 0.00048 U | 0.00057 U | 0.00051 U | 0.00053 U | 0.00053 U | 0.00053 U |
| 1,1,1-Trichloroethane | 0.68 | 0.68 | 100 | 0.00047 U | 0.00077 U | 0.00052 U | 0.00047 U | 0.00073 U | 0.0011 U | 0.00053 U | 0.00058 U | 0.00067 U | 0.00048 U | 0.00057 U | 0.00051 U | 0.00053 U | 0.00053 U | 0.00053 U |
| 1,1,2,2-Tetrachloroethane | ~ | ~ | ~ | 0.00047 U | 0.00077 U | 0.00052 U | 0.00047 U | 0.00073 U | 0.0011 U | 0.00053 U | 0.00058 U | 0.00067 U | 0.00048 U | 0.00057 U | 0.00051 U | 0.00053 U | 0.00053 U | 0.00053 U |
| 1,1,2-Trichloroethane | ~ | ~ | ~ | 0.00093 U | 0.0015 U | 0.001 U | 0.00094 U | 0.0014 U | 0.0023 U | 0.0011 U | 0.0012 U | 0.0013 U | 0.00097 U | 0.0011 U | 0.001 U | 0.001 U | 0.001 U | 0.001 U |
| 1,1-Dichloroethane | 0.27 | 0.27 | 26 | 0.00093 U | 0.0015 U | 0.001 U | 0.00094 U | 0.0014 U | 0.0023 U | 0.0011 U | 0.0012 U | 0.0013 U | 0.00097 U | 0.0011 U | 0.001 U | 0.001 U | 0.001 U | 0.001 U |
| 1,1-Dichloroethene | 0.33 | 0.33 | 100 | 0.00093 U | 0.0015 U | 0.001 U | 0.00094 U | 0.0014 U | 0.0023 U | 0.0011 U | 0.0012 U | 0.0013 U | 0.00097 U | 0.0011 U | 0.001 U | 0.001 U | 0.001 U | 0.001 U |
| 1,1-Dichloropropene | ~ | ~ | ~ | 0.00047 U | 0.00077 U | 0.00052 U | 0.00047 U | 0.00073 U | 0.0011 U | 0.00053 U | 0.00058 U | 0.00067 U | 0.00048 U | 0.00057 U | 0.00051 U | 0.00053 U | 0.00053 U | 0.00053 U |
| 1,2,3-Trichlorobenzene | ~ | ~ | ~ | 0.0019 U | 0.0031 U | 0.0021 U | 0.0019 U | 0.0029 U | 0.0046 U | 0.0021 U | 0.0023 U | 0.0027 U | 0.0019 U | 0.0023 U | 0.002 U | 0.002 U | 0.002 U | 0.002 U |
| 1,2,3-Trichloropropane | ~ | ~ | ~ | 0.0019 U | 0.0031 U | 0.0021 U | 0.0019 U | 0.0029 U | 0.0046 U | 0.0021 U | 0.0023 U | 0.0027 U | 0.0019 U | 0.0023 U | 0.002 U | 0.002 U | 0.002 U | 0.002 U |
| 1,2,4,5-Tetramethylbenzene | ~ | ~ | ~ | 0.0019 U | 0.0031 U | 0.0021 U | 0.0019 U | 0.0029 U | 0.0046 U | 0.0021 U | 0.0023 U | 0.0027 U | 0.0019 U | 0.0023 U | 0.002 U | 0.002 U | 0.002 U | 0.002 U |
| 1,2,4-Trichlorobenzene | ~ | ~ | ~ | 0.0019 U | 0.0031 U | 0.0021 U | 0.0019 U | 0.0029 U | 0.0046 U | 0.0021 U | 0.0023 U | 0.0027 U | 0.0019 U | 0.0023 U | 0.002 U | 0.002 U | 0.002 U | 0.002 U |
| 1,2,4-Trimethylbenzene | 3.6 | 3.6 | 52 | 0.0019 U | 0.0031 U | 0.0021 U | 0.0019 U | 0.0029 U | 0.0046 U | 0.0021 U | 0.0023 U | 0.0027 U | 0.0019 U | 0.0023 U | 0.002 U | 0.002 U | 0.002 U | 0.002 U |
| 1,2-Dibromo-3-Chloropropane | ~ | ~ | ~ | 0.0028 U | 0.0046 U | 0.0031 U | 0.0028 U | 0.0044 U | 0.0069 U | 0.0032 U | 0.0035 U | 0.004 U | 0.0029 U | 0.0034 U | 0.0031 U | 0.0032 U | 0.0032 U | 0.0032 U |
| 1,2-Dibromoethane (Ethylene Dibromide) | ~ | ~ | ~ | 0.00093 U | 0.0015 U | 0.001 U | 0.00094 U | 0.0014 U | 0.0023 U | 0.0011 U | 0.0012 U | 0.0013 U | 0.00097 U | 0.0011 U | 0.001 U | 0.001 U | 0.001 U | 0.001 U |
| 1,2-Dichlorobenzene | 1.1 | 1.1 | 100 | 0.0019 U | 0.0031 U | 0.0021 U | 0.0019 U | 0.0029 U | 0.0046 U | 0.0021 U | 0.0023 U | 0.0027 U | 0.0019 U | 0.0023 U | 0.002 U | 0.002 U | 0.002 U | 0.002 U |
| 1,2-Dichloroethane | 0.02 | 0.02 | 3.1 | 0.00093 U | 0.0015 U | 0.001 U | 0.00094 U | 0.0014 U | 0.0023 U | 0.0011 U | 0.0012 U | 0.0013 U | 0.00097 U | 0.0011 U | 0.001 U | 0.001 U | 0.001 U | 0.001 U |
| 1,2-Dichloropropane | ~ | ~ | ~ | 0.00093 U | 0.0015 U | 0.001 U | 0.00094 U | 0.0014 U | 0.0023 U | 0.0011 U | 0.0012 U | 0.0013 U | 0.00097 U | 0.0011 U | 0.001 U | 0.001 U | 0.001 U | 0.001 U |
| 1,3,5-Trimethylbenzene (Mesitylene) | 8.4 | 8.4 | 52 | 0.0019 U | 0.0031 U | 0.0021 U | 0.0019 U | 0.0029 U | 0.0046 U | 0.0021 U | 0.0023 U | 0.0027 U | 0.0019 U | 0.0023 U | 0.002 U | 0.002 U | 0.002 U | 0.002 U |
| 1,3-Dichlorobenzene | 2.4 | 2.4 | 49 | 0.0019 U | 0.0031 U | 0.0021 U | 0.0019 U | 0.0029 U | 0.0046 U | 0.0021 U | 0.0023 U | 0.0027 U | 0.0019 U | 0.0023 U | 0.002 U | 0.002 U | 0.002 U | 0.002 U |
| 1,3-Dichloropropane | ~ | ~ | ~ | 0.0019 U | 0.0031 U | 0.0021 U | 0.0019 U | 0.0029 U | 0.0046 U | 0.0021 U | 0.0023 U | 0.0027 U | 0.0019 U | 0.0023 U | 0.002 U | 0.002 U | 0.002 U | 0.002 U |
| 1,4-Dichlorobenzene | 1.8 | 1.8 | 13 | 0.0019 U | 0.0031 U | 0.0021 U | 0.0019 U | 0.0029 U | 0.0046 U | 0.0021 U | 0.0023 U | 0.0027 U | 0.0019 U | 0.0023 U | 0.002 U | 0.002 U | 0.002 U | 0.002 U |
| 1,4-Diethyl Benzene | ~ | ~ | ~ | 0.0019 U | 0.0031 U | 0.0021 U | 0.0019 U | 0.0029 U | 0.0046 U | 0.0021 U | 0.0023 U | 0.0027 U | 0.0019 U | 0.0023 U | 0.002 U | 0.002 U | 0.002 U | 0.002 U |
| 1,4-Dioxane (P-Dioxane) | 0.1 | 0.1 | 13 | 0.075 UJ | 0.12 UJ | 0.084 UJ | 0.075 UJ | 0.12 UJ | 0.18 UJ | 0.086 UJ | 0.092 UJ | 0.11 UJ | 0.077 UJ | 0.091 UJ | 0.082 UJ | 0.084 UJ | 0.085 UJ | 0.085 UJ |
| 2,2-Dichloropropane | ~ | ~ | ~ | 0.0019 U | 0.0031 U | 0.0021 U | 0.0019 U | 0.0029 U | 0.0046 U | 0.0021 U | 0.0023 U | 0.0027 U | 0.0019 U | 0.0023 U | 0.002 U | 0.002 U | 0.002 U | 0.002 U |
| 2-Chlorotoluene | ~ | ~ | ~ | 0.0019 U | 0.0031 U | 0.0021 U | 0.0019 U | 0.0029 U | 0.0046 U | 0.0021 U | 0.0023 U | 0.0027 U | 0.0019 U | 0.0023 U | 0.002 U | 0.002 U | 0.002 U | 0.002 U |
| 2-Hexanone (MBK) | ~ | ~ | ~ | 0.0093 U | 0.015 U | 0.01 U | 0.0094 U | 0.014 U | 0.023 U | 0.011 U | 0.012 UJ | 0.013 U | 0.0097 U | 0.011 UJ | 0.01 U | 0.01 U | 0.01 U | 0.01 UJ |
| 4-Chlorotoluene | ~ | ~ | ~ | 0.0019 U | 0.0031 U | 0.0021 U | 0.0019 U | 0.0029 U | 0.0046 U | 0.0021 U | 0.0023 U | 0.0027 U | 0.0019 U | 0.0023 U | 0.002 U | 0.002 U | 0.002 U | 0.002 U |
| 4-Ethyltoluene | ~ | ~ | ~ | 0.0019 U | 0.0031 U | 0.0021 U | 0.0019 U | 0.0029 U | 0.0046 U | 0.0021 U | 0.0023 U | 0.0027 U | 0.0019 U | 0.0023 U | 0.002 U | 0.002 U | 0.002 U | 0.002 U |
| Acetone | 0.05 | 0.05 | 100 | 0.011 U | 0.015 U | 0.01 U | 0.0094 U | 0.014 U | 0.023 U | 0.011 U | 0.012 UJ | 0.013 U | 0.0097 U | 0.011 UJ | 0.01 U | 0.01 U | 0.01 U | 0.01 UJ |
| Acrylonitrile | ~ | ~ | ~ | 0.0037 U | 0.0062 U | 0.0042 U | 0.0038 U | 0.0058 U | 0.0092 U | 0.0043 U | 0.0046 U | 0.0053 U | 0.0039 U | 0.0045 U | 0.0041 U | 0.0042 U | 0.0042 U | 0.0042 UJ |
| Benzene | 0.06 | 0.06 | 4.8 | 0.00047 U | 0.00077 U | 0.00052 U | 0.00047 U | 0.00073 U | 0.0011 U | 0.00053 U | 0.00058 U | 0.00067 U | 0.00048 U | 0.00057 U | 0.00051 U | 0.00053 U | 0.00053 U | 0.00053 U |
| Bromobenzene | ~ | ~ | ~ | 0.0019 U | 0.0031 U | 0.0021 U | 0.0019 U | 0.0029 U | 0.0046 U | 0.0021 U | 0.0023 U | 0.0027 U | 0.0019 U | 0.0023 U | 0.002 U | 0.002 U | 0.002 U | 0.002 U |
| Bromochloromethane | ~ | ~ | ~ | 0.0019 U | 0.0031 U | 0.0021 U | 0.0019 U | 0.0029 U | 0.0046 U | 0.0021 U | 0.0023 U | 0.0027 U | 0.0019 U | 0.0023 U | 0.002 U | 0.002 U | 0.002 U | 0.002 U |
| Bromodichloromethane | ~ | ~ | ~ | 0.00047 U | 0.00077 U | 0.00052 U | 0.00047 U | 0.00073 U | 0.0011 U | 0.00053 U | 0.00058 U | 0.00067 U | 0.00048 U | 0.00057 U | 0.00051 U | 0.00053 U | 0.00053 U | 0.00053 U |
| Bromofrom | ~ | ~ | ~ | 0.0037 UJ | 0.0062 UJ | 0.0042 UJ | 0.0038 UJ | 0.0058 UJ | 0.0092 UJ | 0.0043 UJ | 0.0046 UJ | 0.0053 UJ | 0.0039 UJ | 0.0045 UJ | 0.0041 UJ | 0.0042 UJ | 0.0042 UJ | 0.0042 U |
| Bromomethane | ~ | ~ | ~ | 0.0019 U | 0.0031 U | 0.0021 U | 0.0019 U | 0.0029 U | 0.0046 U | 0.0021 U | 0.0023 U | 0.0027 U | 0.0019 U | 0.0023 U | 0.002 U | 0.002 U | 0.002 U | 0.002 U |
| Carbon Disulfide | ~ | ~ | ~ | 0.0093 U | 0.015 U | 0.01 U | 0.0094 U | 0.014 U | 0.023 U | 0.011 U | 0.012 U | 0.013 U | 0.0097 U | 0.011 U | 0.01 U | 0.01 U | 0.01 U | 0.01 U |
| Carbon Tetrachloride | 0.76 | 0.76 | 2.4 | 0.00093 UJ | 0.0015 UJ | 0.001 UJ | 0.00094 UJ | 0.0014 UJ | 0.0023 UJ | 0.0011 UJ | 0.0012 UJ | 0.0013 UJ | 0.00097 UJ | 0.0011 UJ | 0.001 UJ | 0.001 UJ | 0.001 UJ | 0.001 UJ |
| Chlorobenzene | 1.1 | 1.1 | 100 | 0.00047 U | 0.00077 U | 0.00052 U | 0.00047 U | 0.00073 U | 0.0011 U | 0.00053 U | 0.00058 U | 0.00067 U | 0.00048 U | 0.00057 U | 0.00051 U | 0.00053 U | 0.00053 U | 0.00053 U |
| Chloroethane | ~ | ~ | ~ | 0.0019 U | 0.0031 U | 0.0021 U | 0.0019 U | 0.0029 U | 0.0046 U | 0.0021 U | 0.0023 U | 0.0027 U | 0.0019 U | 0.0023 U | 0.002 U | 0.002 U | 0.002 U | 0.002 U |
| Chloroform | 0.37 | 0.37 | 49 | 0.0014 U | 0.0023 U | 0.0016 U | 0.0014 U | 0.0022 U | 0.0034 U | 0.0016 U | 0.0017 U | 0.002 U | 0.0014 U | 0.0022 U | 0.0015 U | 0.0016 U | 0.0016 U | 0.0034 U |
| Chloromethane | ~ | ~ | ~ | 0.0037 U | 0.0062 U | 0.0042 U | 0.0038 U | 0.0058 U | 0.0092 U | 0.0043 U | 0.0046 U | 0.0053 U | 0.0039 U | 0.0045 U | 0.0041 U | 0.0042 U | 0.0042 U | 0.0042 U |
| Cis-1,2-Dichloroethene | 0.25 | 0.25 | 100 | 0.00093 U | 0.0015 U | 0.001 U | 0.00094 U | 0.0014 U | 0.0023 U | 0.0011 U | 0.0012 U | 0.0013 U | 0.00097 U | 0.0011 U | 0.001 U | 0.001 U | 0.001 U | 0.001 U |
| Cis-1,3-Dichloropropene | ~ | ~ | ~ | 0.00047 U | 0.00077 U | 0.00052 U | 0.00047 U | 0.00073 U | 0.0011 U | 0.00053 U | 0.00058 U | 0.00067 U | 0.00048 U | 0.00057 U | 0.00051 U | 0.00053 U | 0.00053 U | 0.00053 U |
| Cymene | ~ | ~ | ~ | 0.00093 U | 0.0015 U | 0.001 U | 0.00094 U | 0.0014 U | 0.0023 U | 0.0011 U | 0.0012 U | 0.0013 U | 0.00097 U | 0.0011 U | 0.001 U | 0.001 U | 0.001 U | 0.001 U |
| Dibromochloromethane | ~ | ~ | ~ | 0.00093 U | 0.0015 U | 0.001 U | 0.00094 U | 0.0014 U | 0.0023 U | 0.0011 U | 0.0012 U | 0.0013 U | 0.00097 U | 0.0011 U | 0.001 U | 0.001 U | 0.001 U | 0.001 U |
| Dibromomethane | ~ | ~ | ~ | 0.0019 U | 0.0031 U | 0.0021 U | 0.0019 U | 0.0029 U | 0.0046 U | 0.0021 U | 0.0023 U | 0.0027 U | 0.0019 U | 0.0023 U | 0.002 U | 0.002 U | 0.002 U | 0.002 U |
| Dichlorodifluoromethane | ~ | ~ | ~ | 0.0093 UJ | 0.015 UJ | 0.01 UJ | 0.0094 UJ | | | | | | | | | | | |

**Table 3A
Remedial Investigation Report
Soil Sample Analytical Results**

**130 Saint Felix Street Site
Brooklyn, New York
NYSDEC BCP Site No.: C224306
Langan Project No.: 100842301**

| Location | NYSDEC Part 375 Unrestricted Use SCOs | NYSDEC Part 375 Protection of Groundwater SCOs | NYSDEC Part 375 Restricted Use Residential- Residential SCOs | LSB-3 006 LSB3 20-22 L2120301-06 4/21/2021 20-22 | LSB-4 003 LSB4 0-2 L2120301-03 4/21/2021 0-2 | LSB-4 004 LSB4 8-10 L2120301-04 4/21/2021 8-10 | LSB-4 008 LSB4 20-22 L2120301-08 4/21/2021 20-22 | LSB-5 001 LSB5 0-2 L2120301-01 4/21/2021 0-2 | LSB-5 017 DUP01 042121 L2120301-17 4/21/2021 0-2 | LSB-5 002 LSB5 13-15 L2120301-02 4/21/2021 13-15 | LSB-5 022 LSB5 42-44 L2121015-02 4/23/2021 42-44 | LSB-6 011 LSB6 0-2 L2120301-11 4/21/2021 0-2 | LSB-6 012 LSB6 13-15 L2120301-12 4/21/2021 13-15 | LSB-6 021 LSB6 42-44 L2121015-01 4/23/2021 42-44 | LSB-7 013 LSB7 0-2 L2120301-13 4/21/2021 0-2 | LSB-7 014 LSB7 8-10 L2120301-14 4/21/2021 8-10 | LSB-7 027 LSB7 42-44 L2121234-03 4/26/2021 42-44 | |
|--|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---------|
| Semivolatile Organic Compounds (mg/kg) | | | | | | | | | | | | | | | | | | |
| 1,2,4,5-Tetrachlorobenzene | ~ | ~ | ~ | 0.18 U | 0.23 U | 0.21 U | 0.17 U | 0.9 U | 0.94 U | 0.21 U | 0.19 U | 0.92 U | 0.21 U | 0.19 U | 0.18 U | 0.21 U | 0.19 U | 0.19 U |
| 1,2,4-Trichlorobenzene | ~ | ~ | ~ | 0.18 U | 0.23 U | 0.21 U | 0.17 U | 0.9 U | 0.94 U | 0.21 U | 0.19 U | 0.92 U | 0.21 U | 0.19 U | 0.18 U | 0.21 U | 0.19 U | 0.19 U |
| 1,2-Dichlorobenzene | 1.1 | 1.1 | 100 | 0.18 U | 0.23 U | 0.21 U | 0.17 U | 0.9 U | 0.94 U | 0.21 U | 0.19 U | 0.92 U | 0.21 U | 0.19 U | 0.18 U | 0.21 U | 0.19 U | 0.19 U |
| 1,3-Dichlorobenzene | 2.4 | 2.4 | 49 | 0.18 U | 0.23 U | 0.21 U | 0.17 U | 0.9 U | 0.94 U | 0.21 U | 0.19 U | 0.92 U | 0.21 U | 0.19 U | 0.18 U | 0.21 U | 0.19 U | 0.19 U |
| 1,4-Dichlorobenzene | 1.8 | 1.8 | 13 | 0.18 U | 0.23 U | 0.21 U | 0.17 U | 0.9 U | 0.94 U | 0.21 U | 0.19 U | 0.92 U | 0.21 U | 0.19 U | 0.18 U | 0.21 U | 0.19 U | 0.19 U |
| 1,4-Dioxane (P-Dioxane) | 0.1 | 0.1 | 13 | 0.026 U | 0.035 U | 0.032 U | 0.026 U | 0.14 U | 0.14 U | 0.032 U | 0.029 U | 0.14 U | 0.032 U | 0.028 U | 0.027 U | 0.031 U | 0.028 U | 0.028 U |
| 2,4,5-Trichlorophenol | ~ | ~ | ~ | 0.18 U | 0.23 U | 0.21 U | 0.17 U | 0.9 U | 0.94 U | 0.21 U | 0.19 U | 0.92 U | 0.21 U | 0.19 U | 0.18 U | 0.21 U | 0.19 U | 0.19 U |
| 2,4,6-Trichlorophenol | ~ | ~ | ~ | 0.11 U | 0.14 U | 0.13 U | 0.1 U | 0.54 U | 0.57 U | 0.13 U | 0.12 U | 0.55 U | 0.13 U | 0.11 U | 0.11 U | 0.12 U | 0.11 U | 0.11 U |
| 2,4-Dichlorophenol | ~ | ~ | ~ | 0.16 U | 0.21 U | 0.19 U | 0.15 U | 0.81 U | 0.85 U | 0.19 U | 0.17 U | 0.83 U | 0.19 U | 0.17 U | 0.16 U | 0.19 U | 0.17 U | 0.17 U |
| 2,4-Dimethylphenol | ~ | ~ | ~ | 0.18 U | 0.23 U | 0.21 U | 0.17 U | 0.9 U | 0.94 U | 0.21 U | 0.19 U | 0.92 U | 0.21 U | 0.19 U | 0.18 U | 0.21 U | 0.19 U | 0.19 U |
| 2,4-Dinitrophenol | ~ | ~ | ~ | 0.85 U | 1.1 U | 1 U | 0.82 U | 4.3 U | 4.5 U | 1 U | 0.92 U | 4.4 U | 1 U | 0.9 U | 0.88 U | 0.99 U | 0.89 U | 0.89 U |
| 2,4-Dinitrotoluene | ~ | ~ | ~ | 0.18 U | 0.23 U | 0.21 U | 0.17 U | 0.9 U | 0.94 U | 0.21 U | 0.19 U | 0.92 U | 0.21 U | 0.19 U | 0.18 U | 0.21 U | 0.19 U | 0.19 U |
| 2,6-Dinitrotoluene | ~ | ~ | ~ | 0.18 U | 0.23 U | 0.21 U | 0.17 U | 0.9 U | 0.94 U | 0.21 U | 0.19 U | 0.92 U | 0.21 U | 0.19 U | 0.18 U | 0.21 U | 0.19 U | 0.19 U |
| 2-Chloronaphthalene | ~ | ~ | ~ | 0.18 U | 0.23 U | 0.21 U | 0.17 U | 0.9 U | 0.94 U | 0.21 U | 0.19 U | 0.92 U | 0.21 U | 0.19 U | 0.18 U | 0.21 U | 0.19 U | 0.19 U |
| 2-Chlorophenol | ~ | ~ | ~ | 0.18 U | 0.23 U | 0.21 U | 0.17 U | 0.9 U | 0.94 U | 0.21 U | 0.19 U | 0.92 U | 0.21 U | 0.19 U | 0.18 U | 0.21 U | 0.19 U | 0.19 U |
| 2-Methylnaphthalene | ~ | ~ | ~ | 0.21 U | 0.45 U | 0.25 U | 0.2 U | 0.59 U | 0.42 U | 0.26 U | 0.23 U | 0.15 U | 0.26 U | 0.22 U | 0.22 U | 0.25 U | 0.22 U | 0.22 U |
| 2-Methylphenol (o-Cresol) | 0.33 | 0.33 | 100 | 0.18 U | 0.23 U | 0.21 U | 0.17 U | 0.9 U | 0.94 U | 0.21 U | 0.19 U | 0.92 U | 0.21 U | 0.19 U | 0.18 U | 0.21 U | 0.19 U | 0.19 U |
| 2-Nitroaniline | ~ | ~ | ~ | 0.18 U | 0.23 U | 0.21 U | 0.17 U | 0.9 U | 0.94 U | 0.21 U | 0.19 U | 0.92 U | 0.21 U | 0.19 U | 0.18 U | 0.21 U | 0.19 U | 0.19 U |
| 2-Nitrophenol | ~ | ~ | ~ | 0.38 U | 0.51 U | 0.45 U | 0.37 U | 2 U | 2 U | 0.46 U | 0.41 U | 2 U | 0.46 U | 0.4 U | 0.39 U | 0.45 U | 0.4 U | 0.4 U |
| 3 & 4 Methylphenol (m&p Cresol) | 0.33 | 0.33 | 100 | 0.25 U | 0.34 U | 0.3 U | 0.24 U | 1.3 U | 1.4 U | 0.31 U | 0.28 U | 1.3 U | 0.31 U | 0.27 U | 0.26 U | 0.3 U | 0.27 U | 0.27 U |
| 3,3'-Dichlorobenzidine | ~ | ~ | ~ | 0.18 U | 0.23 U | 0.21 U | 0.17 U | 0.9 U | 0.94 U | 0.21 U | 0.19 U | 0.92 U | 0.21 U | 0.19 U | 0.18 U | 0.21 U | 0.19 U | 0.19 U |
| 3-Nitroaniline | ~ | ~ | ~ | 0.18 U | 0.23 U | 0.21 U | 0.17 U | 0.9 U | 0.94 U | 0.21 U | 0.19 U | 0.92 U | 0.21 U | 0.19 U | 0.18 U | 0.21 U | 0.19 U | 0.19 U |
| 4,6-Dinitro-2-Methylphenol | ~ | ~ | ~ | 0.46 U | 0.61 U | 0.55 U | 0.44 U | 2.3 U | 2.4 U | 0.56 U | 0.5 U | 2.4 U | 0.56 U | 0.48 U | 0.47 U | 0.54 U | 0.48 U | 0.48 U |
| 4-Bromophenyl Phenyl Ether | ~ | ~ | ~ | 0.18 U | 0.23 U | 0.21 U | 0.17 U | 0.9 U | 0.94 U | 0.21 U | 0.19 U | 0.92 U | 0.21 U | 0.19 U | 0.18 U | 0.21 U | 0.19 U | 0.19 U |
| 4-Chloro-3-Methylphenol | ~ | ~ | ~ | 0.18 U | 0.23 U | 0.21 U | 0.17 U | 0.9 U | 0.94 U | 0.21 U | 0.19 U | 0.92 U | 0.21 U | 0.19 U | 0.18 U | 0.21 U | 0.19 U | 0.19 U |
| 4-Chloroaniline | ~ | ~ | ~ | 0.18 U | 0.23 U | 0.21 U | 0.17 U | 0.9 U | 0.94 U | 0.21 U | 0.19 U | 0.92 U | 0.21 U | 0.19 U | 0.18 U | 0.21 U | 0.19 U | 0.19 U |
| 4-Chlorophenyl Phenyl Ether | ~ | ~ | ~ | 0.18 U | 0.23 U | 0.21 U | 0.17 U | 0.9 U | 0.94 U | 0.21 U | 0.19 U | 0.92 U | 0.21 U | 0.19 U | 0.18 U | 0.21 U | 0.19 U | 0.19 U |
| 4-Nitroaniline | ~ | ~ | ~ | 0.18 U | 0.23 U | 0.21 U | 0.17 U | 0.9 U | 0.94 U | 0.21 U | 0.19 U | 0.92 U | 0.21 U | 0.19 U | 0.18 U | 0.21 U | 0.19 U | 0.19 U |
| 4-Nitrophenol | ~ | ~ | ~ | 0.25 U | 0.33 U | 0.29 U | 0.24 U | 1.3 U | 1.3 U | 0.3 U | 0.27 U | 1.3 U | 0.3 U | 0.26 U | 0.29 U | 0.29 U | 0.26 U | 0.26 U |
| Acenaphthene | 20 | 98 | 100 | 0.14 U | 1.1 U | 0.17 U | 0.14 U | 0.72 U | 0.76 U | 0.17 U | 0.15 U | 0.54 U | 0.17 U | 0.15 U | 0.15 U | 0.16 U | 0.15 U | 0.15 U |
| Acenaphthylene | 100 | 107 | 100 | 0.14 U | 0.25 U | 0.17 U | 0.14 U | 0.72 U | 0.76 U | 0.17 U | 0.15 U | 0.32 U | 0.17 U | 0.15 U | 0.15 U | 0.16 U | 0.15 U | 0.15 U |
| Acetophenone | ~ | ~ | ~ | 0.18 U | 0.23 U | 0.21 U | 0.17 U | 0.9 U | 0.94 U | 0.21 U | 0.19 U | 0.92 U | 0.21 U | 0.19 U | 0.18 U | 0.21 U | 0.19 U | 0.19 U |
| Anthracene | 100 | 1,000 | 100 | 0.11 U | 1.9 U | 0.13 U | 0.1 U | 0.54 U | 0.57 U | 0.13 U | 0.12 U | 1.5 U | 0.13 U | 0.11 U | 0.11 U | 0.12 U | 0.11 U | 0.11 U |
| Benzo(a)anthracene | 1 | ~ | 1 | 0.036 J | 4.5 | 0.13 U | 0.1 U | 0.96 U | 1.1 | 0.13 U | 0.12 U | 4.6 | 0.13 U | 0.11 U | 0.12 U | 0.12 U | 0.11 U | 0.11 U |
| Benzo(a)pyrene | 1 | 22 | 1 | 0.14 U | 3.6 | 0.17 U | 0.14 U | 0.96 U | 1.1 | 0.17 U | 0.15 U | 4.4 | 0.17 U | 0.15 U | 0.091 J | 0.16 U | 0.15 U | 0.15 U |
| Benzo(b)fluoranthene | 1 | 1.7 | 1 | 0.037 J | 5.2 | 0.13 U | 0.1 U | 1.4 | 1.6 | 0.13 U | 0.12 U | 6 | 0.13 U | 0.11 U | 0.15 U | 0.12 U | 0.11 U | 0.11 U |
| Benzo(g,h,i)Perylene | 100 | 1,000 | 100 | 0.14 U | 2 | 0.17 U | 0.14 U | 0.67 J | 0.82 | 0.17 U | 0.15 U | 3 | 0.17 U | 0.15 U | 0.058 J | 0.16 U | 0.15 U | 0.15 U |
| Benzo(k)fluoranthene | 0.8 | 1.7 | 3.9 | 0.11 U | 1.4 | 0.13 U | 0.1 U | 0.43 J | 0.48 J | 0.13 U | 0.12 U | 2.1 | 0.13 U | 0.11 U | 0.041 J | 0.12 U | 0.11 U | 0.11 U |
| Benzoic Acid | ~ | ~ | ~ | 0.57 U | 0.76 U | 0.68 U | 0.55 U | 2.9 U | 3.1 U | 0.69 U | 0.62 U | 3 U | 0.7 U | 0.6 U | 0.59 U | 0.67 U | 0.6 U | 0.6 U |
| Benzyl Alcohol | ~ | ~ | ~ | 0.18 U | 0.23 U | 0.21 U | 0.17 U | 0.9 U | 0.94 U | 0.21 U | 0.19 U | 0.92 U | 0.21 U | 0.19 U | 0.18 U | 0.21 U | 0.19 U | 0.19 U |
| Benzyl Butyl Phthalate | ~ | ~ | ~ | 0.18 U | 0.23 U | 0.21 U | 0.17 U | 0.9 U | 0.94 U | 0.21 U | 0.19 U | 0.92 U | 0.21 U | 0.19 U | 0.18 U | 0.21 U | 0.19 U | 0.19 U |
| Biphenyl (Diphenyl) | ~ | ~ | ~ | 0.4 U | 0.1 J | 0.48 U | 0.39 U | 2.1 U | 2.2 U | 0.49 U | 0.44 U | 2.1 U | 0.49 U | 0.42 U | 0.42 U | 0.47 U | 0.42 U | 0.42 U |
| Bis(2-chloroethoxy) methane | ~ | ~ | ~ | 0.19 U | 0.25 U | 0.23 U | 0.18 U | 0.98 U | 1 U | 0.23 U | 0.21 U | 1 U | 0.23 U | 0.2 U | 0.2 U | 0.22 U | 0.2 U | 0.2 U |
| Bis(2-chloroethyl) ether (2-chloroethyl ether) | ~ | ~ | ~ | 0.16 U | 0.21 U | 0.19 U | 0.15 U | 0.81 U | 0.85 U | 0.19 U | 0.17 U | 0.83 U | 0.19 U | 0.17 U | 0.16 U | 0.19 U | 0.17 U | 0.17 U |
| Bis(2-chloroisopropyl) ether | ~ | ~ | ~ | 0.21 U | 0.28 U | 0.25 U | 0.2 U | 1.1 U | 1.1 U | 0.26 U | 0.23 U | 1.1 U | 0.26 U | 0.22 U | 0.22 U | 0.25 U | 0.22 U | 0.22 U |
| Bis(2-ethylhexyl) phthalate | ~ | ~ | ~ | 0.18 U | 0.095 J | 0.21 U | 0.17 U | 0.9 U | 0.94 U | 0.21 U | 0.19 U | 0.92 U | 0.21 U | 0.19 U | 0.18 U | 0.21 U | 0.19 U | 0.19 U |
| Carbazole | ~ | ~ | ~ | 0.18 U | 1 U | 0.21 U | 0.17 U | 0.9 U | 0.94 U | 0.21 U | 0.19 U | 0.71 J | 0.21 U | 0.19 U | 0.02 J | 0.21 U | 0.19 U | 0.19 U |
| Chrysene | 1 | 1 | 3.9 | 0.03 J | 4.1 | 0.13 U | 0.1 U | 1.1 | 1.1 | 0.13 U | 0.12 U | 5.4 | 0.13 U | 0.11 U | 0.14 U | 0.12 U | 0.11 U | 0.11 U |
| Dibenz(a,h)anthracene | 0.33 | 1,000 | 0.33 | 0.11 U | 0.5 | 0.13 U | 0.1 U | 0.15 J | 0.17 J | 0.13 U | 0.12 U | 0.6 | 0.13 U | 0.11 U | 0.11 U | 0.12 U | 0.11 U | 0.11 U |
| Dibenzofuran | 7 | 210 | 59 | 0.18 U | 0.6 U | 0.21 U | 0.17 U | 0.17 J | 0.12 J | 0.21 U | 0.19 U | 0.22 J | 0.21 U | 0.19 U | 0.18 U | 0.21 U | 0.19 U | 0.19 U |
| Dibutyl phthalate | ~ | ~ | ~ | 0.18 U | 0.23 U | 0.21 U | 0.17 U | 0.9 U | 0.94 U | 0.21 U | 0.19 U | 0.92 U | 0.21 U | 0.19 U | 0.18 U | 0.21 U | 0.19 U | 0.19 U |
| Diethyl phthalate | ~ | ~ | ~ | 0.18 U | 0.23 U | 0.21 U | 0.17 U | 0.9 U | 0.94 U | 0.21 U | 0.19 U | 0.92 U | 0.21 U | 0.19 U | 0.18 U | 0.21 U | 0.19 U | 0.19 U |
| Dimethyl phthalate | ~ | ~ | ~ | 0.18 U | 0.23 U | 0.21 U | 0.17 U | 0.9 U | 0.94 U | 0.21 U | 0.19 U | 0.92 U | 0.21 U | 0.19 U | 0.18 U | 0.21 U | 0.19 U | 0.19 U |
| Dioctyl phthalate | ~ | ~ | ~ | 0.18 U | 0.23 U | 0.21 U | 0.17 U | 0.9 U | 0.94 U | 0.21 U | 0.19 U | 0.92 U | 0.21 U | 0.19 U | 0.18 U | 0.21 U | 0.19 U | 0.19 U |
| Fluoranthene | 100 | 1,000 | 100 | 0.06 J | 8.2 U | 0.13 U | 0.1 U | 1.8 U | 2 U | 0.13 U | 0.12 U | 10 U</ | | | | | | |

**Table 3A
Remedial Investigation Report
Soil Sample Analytical Results**

**130 Saint Felix Street Site
Brooklyn, New York
NYSDEC BCP Site No.: C224306
Langan Project No.: 100842301**

| Location | NYSDEC Part 375 Unrestricted Use SCOs | NYSDEC Part 375 Protection of Groundwater SCOs | NYSDEC Part 375 Restricted Use Residential- Residential SCOs | LSB-3 006 LSB3 20-22 L2120301-06 4/21/2021 20-22 | LSB-4 003 LSB4 0-2 L2120301-03 4/21/2021 0-2 | LSB-4 004 LSB4 8-10 L2120301-04 4/21/2021 8-10 | LSB-4 008 LSB4 20-22 L2120301-08 4/21/2021 20-22 | LSB-5 001 LSB5 0-2 L2120301-01 4/21/2021 0-2 | LSB-5 017 DUP01 042121 L2120301-17 4/21/2021 0-2 | LSB-5 002 LSB5 13-15 L2120301-02 4/21/2021 13-15 | LSB-5 022 LSB5 42-44 L2120105-02 4/23/2021 42-44 | LSB-6 011 LSB6 0-2 L2120301-11 4/21/2021 0-2 | LSB-6 012 LSB6 13-15 L2120301-12 4/21/2021 13-15 | LSB-6 021 LSB6 42-44 L2120105-01 4/23/2021 42-44 | LSB-7 013 LSB7 0-2 L2120301-13 4/21/2021 0-2 | LSB-7 014 LSB7 8-10 L2120301-14 4/21/2021 8-10 | LSB-7 027 LSB7 42-44 L2121234-03 4/26/2021 42-44 | |
|--|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|------------|
| Pesticides (mg/kg) | | | | | | | | | | | | | | | | | | |
| 4,4'-DDD | 0.0033 | 14 | 13 | 0.00165 U | 0.00219 U | 0.002 U | 0.00159 U | 0.00861 U | 0.0174 U | 0.00199 U | 0.0018 U | 0.00174 U | 0.00195 U | 0.0018 U | 0.00171 U | 0.00198 U | 0.00176 U | 0.00176 U |
| 4,4'-DDE | 0.0033 | 17 | 8.9 | 0.00165 U | 0.00219 U | 0.002 U | 0.00159 U | 0.00861 U | 0.0174 U | 0.00199 U | 0.0018 U | 0.00174 U | 0.00195 U | 0.0018 U | 0.00171 U | 0.00198 U | 0.00176 U | 0.00176 U |
| 4,4'-DDT | 0.0033 | 136 | 7.9 | 0.00309 U | 0.00636 | 0.00374 U | 0.00298 U | 0.0161 U | 0.0327 U | 0.00374 U | 0.00337 U | 0.00327 U | 0.00366 U | 0.00338 U | 0.0032 U | 0.00372 U | 0.00329 U | 0.00329 U |
| Aldrin | 0.005 | 0.19 | 0.097 | 0.00165 U | 0.00219 U | 0.002 U | 0.00159 U | 0.00861 U | 0.0174 U | 0.00199 U | 0.0018 U | 0.00174 U | 0.00195 U | 0.0018 U | 0.00171 U | 0.00198 U | 0.00176 U | 0.00176 U |
| Alpha BHC (Alpha Hexachlorocyclohexane) | 0.02 | 0.02 | 0.48 | 0.000687 U | 0.000914 U | 0.000832 U | 0.000662 U | 0.00359 U | 0.00727 U | 0.00083 U | 0.000749 U | 0.000726 U | 0.000813 U | 0.00075 U | 0.000711 U | 0.000826 U | 0.000732 U | 0.000732 U |
| Alpha Chlordane | 0.094 | 2.9 | 4.2 | 0.00206 U | 0.00274 U | 0.0025 U | 0.00199 U | 0.0108 U | 0.0218 U | 0.00249 U | 0.00225 U | 0.00218 U | 0.00244 U | 0.00225 U | 0.00213 U | 0.00248 U | 0.0022 U | 0.0022 U |
| Alpha Endosulfan | 2.4 | 102 | 24 | 0.00165 U | 0.00219 U | 0.002 U | 0.00159 U | 0.00861 U | 0.0174 U | 0.00199 U | 0.0018 U | 0.00174 U | 0.00195 U | 0.0018 U | 0.00171 U | 0.00198 U | 0.00176 U | 0.00176 U |
| Beta Bhc (Beta Hexachlorocyclohexane) | 0.036 | 0.09 | 0.36 | 0.00165 U | 0.00219 U | 0.002 U | 0.00159 U | 0.00861 U | 0.0174 U | 0.00199 U | 0.0018 U | 0.00174 U | 0.00195 U | 0.0018 U | 0.00171 U | 0.00198 U | 0.00176 U | 0.00176 U |
| Beta Endosulfan | 2.4 | 102 | 24 | 0.00165 U | 0.00219 U | 0.002 U | 0.00159 U | 0.00861 U | 0.0174 U | 0.00199 U | 0.0018 U | 0.00174 U | 0.00195 U | 0.0018 U | 0.00171 U | 0.00198 U | 0.00176 U | 0.00176 U |
| Chlordane (alpha and gamma) | ~ | ~ | ~ | 0.0137 U | 0.0183 U | 0.0166 U | 0.0132 U | 0.0171 U | 0.145 U | 0.0166 U | 0.015 U | 0.0145 U | 0.0163 U | 0.015 U | 0.0142 U | 0.0165 U | 0.0146 U | 0.0146 U |
| Delta Bhc (Delta Hexachlorocyclohexane) | 0.04 | 0.25 | 100 | 0.00165 U | 0.00219 U | 0.002 U | 0.00159 U | 0.00861 U | 0.0174 U | 0.00199 U | 0.0018 U | 0.00174 U | 0.00195 U | 0.0018 U | 0.00171 U | 0.00198 U | 0.00176 U | 0.00176 U |
| Dieldrin | 0.005 | 0.001 | 0.2 | 0.00103 U | 0.00137 U | 0.00125 U | 0.000994 U | 0.00538 U | 0.0109 U | 0.00124 U | 0.00112 U | 0.00109 U | 0.00122 U | 0.00112 U | 0.00107 U | 0.00124 U | 0.0011 U | 0.0011 U |
| Endosulfan Sulfate | 2.4 | 1,000 | 24 | 0.000687 U | 0.000914 U | 0.000832 U | 0.000662 U | 0.00359 U | 0.00727 U | 0.00083 U | 0.000749 U | 0.000726 U | 0.000813 U | 0.00075 U | 0.000711 U | 0.000826 U | 0.000732 U | 0.000732 U |
| Endrin | 0.014 | 0.06 | 11 | 0.000687 U | 0.000914 U | 0.000832 U | 0.000662 U | 0.00359 U | 0.00727 U | 0.00083 U | 0.000749 U | 0.000726 U | 0.000813 U | 0.00075 U | 0.000711 U | 0.000826 U | 0.000732 U | 0.000732 U |
| Endrin Aldehyde | ~ | ~ | ~ | 0.00206 U | 0.00274 U | 0.0025 U | 0.00199 U | 0.0108 U | 0.0218 U | 0.00249 U | 0.00225 U | 0.00218 U | 0.00244 U | 0.00225 U | 0.00213 U | 0.00248 U | 0.0022 U | 0.0022 U |
| Endrin Ketone | ~ | ~ | ~ | 0.00165 U | 0.00219 U | 0.002 U | 0.00159 U | 0.00861 U | 0.0174 U | 0.00199 U | 0.0018 U | 0.00174 U | 0.00195 U | 0.0018 U | 0.00171 U | 0.00198 U | 0.00176 U | 0.00176 U |
| Gamma Bhc (Lindane) | 0.1 | 0.1 | 1.3 | 0.000687 U | 0.000914 U | 0.000832 U | 0.000662 U | 0.00359 U | 0.00727 U | 0.00083 U | 0.000749 U | 0.000726 U | 0.000813 U | 0.00075 U | 0.000711 U | 0.000826 U | 0.000732 U | 0.000732 U |
| Gamma Chlordane | ~ | ~ | ~ | 0.00206 U | 0.00274 U | 0.0025 U | 0.00199 U | 0.0108 U | 0.0218 U | 0.00249 U | 0.00225 U | 0.00218 U | 0.00244 U | 0.00225 U | 0.00213 U | 0.00248 U | 0.0022 U | 0.0022 U |
| Heptachlor | 0.042 | 0.38 | 2.1 | 0.000824 U | 0.0011 U | 0.000998 U | 0.000795 U | 0.0043 U | 0.00873 U | 0.000996 U | 0.000899 U | 0.000871 U | 0.000976 U | 0.0009 U | 0.000853 U | 0.000992 U | 0.000878 U | 0.000878 U |
| Heptachlor Epoxide | ~ | ~ | ~ | 0.00309 U | 0.00411 U | 0.00374 U | 0.00298 U | 0.0161 U | 0.0327 U | 0.00374 U | 0.00337 U | 0.00327 U | 0.00366 U | 0.00338 U | 0.0032 U | 0.00372 U | 0.00329 U | 0.00329 U |
| Methoxychlor | ~ | ~ | ~ | 0.00309 U | 0.00411 U | 0.00374 U | 0.00298 U | 0.0161 U | 0.0327 U | 0.00374 U | 0.00337 U | 0.00327 U | 0.00366 U | 0.00338 U | 0.0032 U | 0.00372 U | 0.00329 U | 0.00329 U |
| Toxaphene | ~ | ~ | ~ | 0.0309 U | 0.0411 U | 0.0374 U | 0.0298 U | 0.161 U | 0.327 U | 0.0374 U | 0.0337 U | 0.0327 U | 0.0366 U | 0.0338 U | 0.032 U | 0.0372 U | 0.0329 U | 0.0329 U |
| Herbicides (mg/kg) | | | | | | | | | | | | | | | | | | |
| 2,4,5-T (Trichlorophenoxyacetic Acid) | ~ | ~ | ~ | 0.172 U | 0.23 U | 0.21 U | 0.17 U | 0.358 U | 0.189 U | 0.211 U | 0.188 U | 0.182 U | 0.211 U | 0.188 U | 0.185 U | 0.207 U | 0.186 U | 0.186 U |
| 2,4-D (Dichlorophenoxyacetic Acid) | ~ | ~ | ~ | 0.172 U | 0.23 U | 0.21 U | 0.17 U | 0.358 U | 0.189 U | 0.211 U | 0.188 U | 0.182 U | 0.211 U | 0.188 U | 0.185 U | 0.207 U | 0.186 U | 0.186 U |
| Silvex (2,4,5-Tr) | 3.8 | 3.8 | 100 | 0.172 U | 0.23 U | 0.21 U | 0.17 U | 0.358 U | 0.189 U | 0.211 U | 0.188 U | 0.182 U | 0.211 U | 0.188 U | 0.185 U | 0.207 U | 0.186 U | 0.186 U |
| Polychlorinated Biphenyls (mg/kg) | | | | | | | | | | | | | | | | | | |
| PCB-1016 (Aroclor 1016) | ~ | ~ | ~ | 0.0344 U | 0.0463 U | 0.0407 U | 0.0338 U | 0.0349 U | 0.0384 U | 0.0415 U | 0.038 U | 0.0366 U | 0.0409 U | 0.0358 U | 0.0359 U | 0.0412 U | 0.0353 U | 0.0353 U |
| PCB-1221 (Aroclor 1221) | ~ | ~ | ~ | 0.0344 U | 0.0463 U | 0.0407 U | 0.0338 U | 0.0349 U | 0.0384 U | 0.0415 U | 0.038 U | 0.0366 U | 0.0409 U | 0.0358 U | 0.0359 U | 0.0412 U | 0.0353 U | 0.0353 U |
| PCB-1232 (Aroclor 1232) | ~ | ~ | ~ | 0.0344 U | 0.0463 U | 0.0407 U | 0.0338 U | 0.0349 U | 0.0384 U | 0.0415 U | 0.038 U | 0.0366 U | 0.0409 U | 0.0358 U | 0.0359 U | 0.0412 U | 0.0353 U | 0.0353 U |
| PCB-1242 (Aroclor 1242) | ~ | ~ | ~ | 0.0344 U | 0.0463 U | 0.0407 U | 0.0338 U | 0.0349 U | 0.0384 U | 0.0415 U | 0.038 U | 0.0366 U | 0.0409 U | 0.0358 U | 0.0359 U | 0.0412 U | 0.0353 U | 0.0353 U |
| PCB-1248 (Aroclor 1248) | ~ | ~ | ~ | 0.0344 U | 0.0463 U | 0.0407 U | 0.0338 U | 0.0349 U | 0.0384 U | 0.0415 U | 0.038 U | 0.0366 U | 0.0409 U | 0.0358 U | 0.0359 U | 0.0412 U | 0.0353 U | 0.0353 U |
| PCB-1254 (Aroclor 1254) | ~ | ~ | ~ | 0.0344 U | 0.0463 U | 0.0407 U | 0.0338 U | 0.0349 U | 0.0384 U | 0.0415 U | 0.038 U | 0.0366 U | 0.0409 U | 0.0358 U | 0.0359 U | 0.0412 U | 0.0353 U | 0.0353 U |
| PCB-1260 (Aroclor 1260) | ~ | ~ | ~ | 0.0344 U | 0.0463 U | 0.0407 U | 0.0338 U | 0.0349 U | 0.0384 U | 0.0415 U | 0.038 U | 0.0366 U | 0.0409 U | 0.0358 U | 0.0359 U | 0.0412 U | 0.0353 U | 0.0353 U |
| PCB-1262 (Aroclor 1262) | ~ | ~ | ~ | 0.0344 U | 0.0463 U | 0.0407 U | 0.0338 U | 0.0349 U | 0.0384 U | 0.0415 U | 0.038 U | 0.0366 U | 0.0409 U | 0.0358 U | 0.0359 U | 0.0412 U | 0.0353 U | 0.0353 U |
| PCB-1268 (Aroclor 1268) | ~ | ~ | ~ | 0.0344 U | 0.0463 U | 0.0407 U | 0.0338 U | 0.0349 U | 0.0384 U | 0.0415 U | 0.038 U | 0.0366 U | 0.0409 U | 0.0358 U | 0.0359 U | 0.0412 U | 0.0353 U | 0.0353 U |
| Total PCBs | 0.1 | 3.2 | 1 | 0.0344 U | 0.0463 U | 0.0407 U | 0.0338 U | 0.0349 U | 0.0384 U | 0.0415 U | 0.038 U | 0.0366 U | 0.0409 U | 0.0358 U | 0.0359 U | 0.0412 U | 0.0353 U | 0.0353 U |
| Inorganics (mg/kg) | | | | | | | | | | | | | | | | | | |
| Aluminum | ~ | ~ | ~ | 4,190 | 10,300 | 7,490 | 3,170 | 2,520 | 3,320 | 6,660 | 2,010 | 4,650 | 7,320 | 1,610 | 6,860 | 7,820 | 1,940 | 1,940 |
| Antimony | ~ | ~ | ~ | 4.15 U | 5.37 U | 4.98 U | 4.02 U | 4.25 U | 4.56 U | 5.02 U | 4.47 U | 0.444 J | 4.9 U | 4.37 U | 4.4 U | 4.98 U | 4.42 U | 4.42 U |
| Arsenic | 13 | 16 | 16 | 1.21 | 3.05 | 0.996 | 0.57 | 4.92 | 10.9 | 1 | 0.733 | 7.38 | 0.98 | 0.454 | 2.33 | 0.997 | 1.01 | 1.01 |
| Barium | 350 | 820 | 400 | 37.4 | 224 | 61.5 | 23.8 | 89.5 | 107 | 48.9 | 14.3 | 150 | 56.7 | 13.1 | 77.7 | 49.1 | 15.6 | 15.6 |
| Beryllium | 7.2 | 47 | 72 | 0.191 J | 0.408 J | 0.388 J | 0.161 J | 0.17 J | 0.228 J | 0.331 J | 0.447 U | 0.214 J | 0.412 J | 0.437 U | 0.343 J | 0.399 J | 0.088 J | 0.088 J |
| Cadmium | 2.5 | 7.5 | 4.3 | 0.299 J | 0.623 J | 0.518 J | 0.249 J | 0.348 J | 0.484 J | 0.431 J | 0.188 J | 0.53 J | 0.5 J | 0.14 J | 0.554 J | 0.518 J | 0.132 J | 0.132 J |
| Calcium | ~ | ~ | ~ | 10,100 | 59,500 | 1,440 | 2,680 | 33,900 | 44,500 | 1,580 | 5,000 | 20,900 | 1,710 | 3,820 | 16,500 | 1,920 | 3,360 | 3,360 |
| Chromium, Hexavalent | 1 | 19 | 110 | 0.851 U | 1.13 U | 1.03 U | 0.832 U | 0.873 U | 0.923 U | 1.03 U | 0.924 U | 0.889 U | 1.03 U | 0.228 J | 0.9 U | 1.01 U | 0.903 U | 0.903 U |
| Chromium, Total | ~ | ~ | ~ | 19.1 | 20.1 | 22.2 | 9.21 | 6.8 | 7.98 | 17.1 | 5.05 | 10.5 | 20.2 | 4.78 | 17.5 | 21.4 | 6.04 | 6.04 |
| Chromium, Trivalent | 30 | ~ | 180 | 19 | 20 | 22 | 9.2 | 6.8 | 8 | 17 | 5 | 10 | 20 | 4.6 | 18 | 21 | 6 | 6 |
| Cobalt | ~ | ~ | ~ | 5.89 | 6.6 | 9 | 5.7 | 2.98 | 3.84 | 7.99 | 2.67 | 4.02 | 8.82 | 1.88 | 6.72 | 8.39 | 2.78 | 2.78 |
| Copper | 50 | 1720 | 270 | 16.1 | 21.7 | 17.2 | 11.6 | 38.8 | 31.2 | 14.3 | 5.22 | 19 | 17.7 | 4.97 | 21.5 | 17.2 | 7.88 | 7.88 |
| Cyanide | 27 | 40 | 27 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Iron | ~ | ~ | ~ | 9,730 | 14,100 | 17 | | | | | | | | | | | | |

Table 3A
Remedial Investigation Report
Soil Sample Analytical Results

130 Saint Felix Street Site
Brooklyn, New York
NYSDEC BCP Site No.: C224306
Langan Project No.: 100842301

Notes:

1. 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, Protection of Groundwater and Restricted Use Restricted-Residential Soil Cleanup Objectives (SCO).
2. Criterion comparisons for 3- & 4-methylphenol (m&p cresol) are provided for reference. Promulgated SCOs are for 3-methylphenol (m-cresol) and 4-methylphenol (p-cresol).
3. Detected analytical results above Unrestricted Use SCOs are bolded.
4. Detected analytical results above Protection of Groundwater SCOs are underlined.
5. Detected analytical results above Restricted Use Restricted-Residential SCOs are shaded.
6. Analytical results with reporting limits (RL) above the lowest applicable criteria are italicized.
7. Sample DUP01_053015 is a duplicate sample of EB07_10-12; sample 026_DUP2 is a duplicate sample of 025_LSB2_42-44; and sample 017_DUP01_042121 is a duplicate sample of 001_LSB5_0-2.
7. ~ = Regulatory limit for this analyte does not exist
8. bgs = below grade surface
9. mg/kg = milligrams per kilogram
10. % = percent
11. NA = Not analyzed
12. ND = Not detected

Qualifiers:

- J = The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
UJ = The analyte was not detected at a level greater than or equal to the RL; however, the reported RL is approximate and may be inaccurate or imprecise.
U = The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.

**Table 3B
Remedial Investigation Report
Soil Sample Analytical Results - PFAS**

**130 Saint Felix Street Site
Brooklyn, New York
NYSDEC BCP Site No.: C224306
Langan Project No.: 100842301**

| Location Sample ID Laboratory ID Sample Date Sample Depth (feet bgs) | NYSDEC Part 375 Unrestricted Use Guidance Values | NYSDEC Part 375 Protection of Groundwater Guidance Values | NYSDEC Part 375 Restricted Use Restricted- Residential Guidance Values | LSB-1 015_LSB1_0-2 L2120301-15 4/21/2021 0-2 | LSB-1 016_LSB1_8-10 L2120301-16 4/21/2021 8-10 | LSB-1 023_LSB1_40-42 L2121015-03 4/23/2021 40-42 | LSB-2 009_LSB2_0-2 L2120301-09 4/21/2021 0-2 | LSB-2 010_LSB2_8-10 L2120301-10 4/21/2021 8-10 | LSB-2 025_LSB2_42-44 L2121234-01 4/26/2021 42-44 | LSB-2 026_DUP2 L2121234-02 4/26/2021 42-44 | LSB-3 005_LSB3_0-2 L2120301-05 4/21/2021 0-2 | LSB-3 007_LSB3_13-15 L2120301-07 4/21/2021 13-15 | LSB-3 006_LSB3_20-22 L2120301-06 4/21/2021 20-22 | LSB-4 003_LSB4_0-2 L2120301-03 4/21/2021 0-2 | LSB-4 004_LSB4_8-10 L2120301-04 4/21/2021 8-10 | LSB-4 008_LSB4_20-22 L2120301-08 4/21/2021 20-22 | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Per and Polyfluoroalkyl Substances (ppb) | | | | | | | | | | | | | | | | | |
| N-ethyl perfluorooctane- sulfonamidoacetic Acid (NEtFOSAA) | ~ | ~ | ~ | 0.532 U | 0.572 U | 0.509 U | 0.511 U | 0.587 U | 0.502 U | 0.5 U | 0.544 U | 0.488 U | 0.477 U | 0.655 U | 0.596 U | 0.466 U | |
| N-methyl perfluorooctane- sulfonamidoacetic Acid (NMeFOSAA) | ~ | ~ | ~ | 0.532 U | 0.572 U | 0.509 U | 0.511 U | 0.587 U | 0.502 U | 0.5 U | 0.544 U | 0.488 U | 0.477 U | 0.655 U | 0.596 U | 0.466 U | |
| Perfluorobutanesulfonic Acid (PFBS) | ~ | ~ | ~ | 0.266 U | 0.286 U | 0.255 U | 0.256 U | 0.294 U | 0.251 U | 0.25 U | 0.272 U | 0.244 U | 0.238 U | 0.328 U | 0.298 U | 0.233 U | |
| Perfluorobutanoic acid (PFBA) | ~ | ~ | ~ | 0.532 U | 0.572 U | 0.509 U | 0.511 U | 0.587 U | 0.502 U | 0.5 U | 0.544 U | 0.488 U | 0.477 U | 0.655 U | 0.596 U | 0.466 U | |
| Perfluorodecanesulfonic Acid (PFDS) | ~ | ~ | ~ | 0.532 U | 0.572 U | 0.509 U | 0.511 U | 0.587 U | 0.502 U | 0.5 U | 0.544 U | 0.488 U | 0.477 U | 0.655 U | 0.596 U | 0.466 U | |
| Perfluorodecanoic Acid (PFDA) | ~ | ~ | ~ | 0.266 U | 0.286 U | 0.255 U | 0.256 U | 0.294 U | 0.251 U | 0.25 U | 0.104 J | 0.244 U | 0.238 U | 0.09 J | 0.298 U | 0.233 U | |
| Perfluorododecanoic Acid (PFDoA) | ~ | ~ | ~ | 0.532 U | 0.572 U | 0.509 U | 0.511 U | 0.587 U | 0.502 U | 0.5 U | 0.544 U | 0.488 U | 0.477 U | 0.655 U | 0.596 U | 0.466 U | |
| Perfluoroheptanesulfonic Acid (PFHpS) | ~ | ~ | ~ | 0.532 U | 0.572 U | 0.509 U | 0.511 U | 0.587 U | 0.502 U | 0.5 U | 0.544 U | 0.488 U | 0.477 U | 0.655 U | 0.596 U | 0.466 U | |
| Perfluoroheptanoic acid (PFHpA) | ~ | ~ | ~ | 0.266 U | 0.286 U | 0.255 U | 0.256 U | 0.294 U | 0.251 U | 0.25 U | 0.272 U | 0.244 U | 0.238 U | 0.328 U | 0.298 U | 0.233 U | |
| Perfluorohexanesulfonic Acid (PFHxS) | ~ | ~ | ~ | 0.266 U | 0.286 U | 0.255 U | 0.256 U | 0.294 U | 0.251 U | 0.25 U | 0.272 U | 0.244 U | 0.238 U | 0.328 U | 0.298 U | 0.233 U | |
| Perfluorohexanoic Acid (PFHxA) | ~ | ~ | ~ | 0.532 U | 0.572 U | 0.509 U | 0.511 U | 0.587 U | 0.502 U | 0.5 U | 0.544 U | 0.488 U | 0.477 U | 0.655 U | 0.596 U | 0.466 U | |
| Perfluorononanoic Acid (PFNA) | ~ | ~ | ~ | 0.266 U | 0.286 U | 0.255 U | 0.256 U | 0.294 U | 0.251 U | 0.25 U | 0.097 J | 0.244 U | 0.238 U | 0.328 U | 0.298 U | 0.233 U | |
| Perfluorooctanesulfonamide (FOSA) | ~ | ~ | ~ | 0.532 U | 0.572 U | 0.509 U | 0.511 U | 0.587 U | 0.502 U | 0.5 U | 0.544 U | 0.488 U | 0.477 U | 0.655 U | 0.596 U | 0.466 U | |
| Perfluorooctanesulfonic Acid (PFOS) | 0.88 | 3.7 | 44 | 0.266 U | 0.286 U | 0.255 U | 0.256 U | 0.294 U | 0.251 U | 0.25 U | 0.414 J | 0.244 U | 0.238 U | 0.328 U | 0.298 U | 0.233 U | |
| Perfluorooctanoic Acid (PFOA) | 0.66 | 1.1 | 33 | 0.125 J | 1.12 | 0.255 U | 0.111 J | 0.568 | 0.251 U | 0.25 U | 0.126 J | 0.244 U | 0.238 U | 0.158 J | 0.165 J | 0.233 U | |
| Perfluoropentanoic Acid (PFPeA) | ~ | ~ | ~ | 0.532 U | 0.572 U | 0.509 U | 0.511 U | 0.587 U | 0.502 U | 0.5 U | 0.544 U | 0.488 U | 0.477 U | 0.655 U | 0.596 U | 0.466 U | |
| Perfluorotetradecanoic Acid (PFTA) | ~ | ~ | ~ | 0.532 U | 0.572 U | 0.509 U | 0.511 U | 0.587 U | 0.502 U | 0.5 U | 0.544 U | 0.488 U | 0.477 U | 0.655 U | 0.596 U | 0.466 U | |
| Perfluorotridecanoic Acid (PFTriDA) | ~ | ~ | ~ | 0.532 U | 0.572 U | 0.509 U | 0.511 U | 0.587 U | 0.502 U | 0.5 U | 0.544 U | 0.488 U | 0.477 U | 0.655 U | 0.596 U | 0.466 U | |
| Perfluoroundecanoic Acid (PFUnA) | ~ | ~ | ~ | 0.532 U | 0.572 U | 0.509 U | 0.511 U | 0.587 U | 0.502 U | 0.5 U | 0.544 U | 0.488 U | 0.477 U | 0.655 U | 0.596 U | 0.466 U | |
| Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) (8:2FTS) | ~ | ~ | ~ | 0.532 U | 0.572 U | 0.509 U | 0.511 U | 0.587 U | 0.502 U | 0.5 U | 0.544 U | 0.488 U | 0.477 U | 0.655 U | 0.596 U | 0.466 U | |
| Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) (6:2FTS) | ~ | ~ | ~ | 0.532 U | 0.572 U | 0.509 U | 0.511 U | 0.587 U | 0.502 U | 0.5 U | 0.544 U | 0.488 U | 0.477 U | 0.655 U | 0.596 U | 0.466 U | |
| Total PFOA and PFOS | ~ | ~ | ~ | 0.266 U | 0.286 U | 0.255 U | 0.256 U | 0.568 | 0.251 U | 0.25 U | 0.272 U | 0.244 U | 0.238 U | 0.328 U | 0.298 U | 0.233 U | |

Notes provided on Page 3.

Concentrations above Unrestricted Use Guidance Values are bolded.

Concentrations above Restricted Use Restricted-Residential Guidance Values are shaded.

Concentrations above PGW Guidance Values are underlined.

**Table 3B
Remedial Investigation Report
Soil Sample Analytical Results - PFAS**

**130 Saint Felix Street Site
Brooklyn, New York
NYSDEC BCP Site No.: C224306
Langan Project No.: 100842301**

| Location | NYSDEC Part 375 Unrestricted Use Guidance Values | NYSDEC Part 375 Protection of Groundwater Guidance Values | NYSDEC Part 375 Restricted Use Restricted- Residential Guidance Values | LSB-5 001_LSB5_0-2 L2120301-01 4/21/2021 | LSB-5 017_DUP01_042121 L2120301-17 4/21/2021 | LSB-5 002_LSB5_13-15 L2120301-02 4/21/2021 | LSB-5 022_LSB5_42-44 L2121015-02 4/23/2021 | LSB-6 011_LSB6_0-2 L2120301-11 4/21/2021 | LSB-6 012_LSB6_13-15 L2120301-12 4/21/2021 | LSB-6 021_LSB6_42-44 L2121015-01 4/23/2021 | LSB-7 013_LSB7_0-2 L2120301-13 4/21/2021 | LSB-7 014_LSB7_8-10 L2120301-14 4/21/2021 | LSB-7 027_LSB7_42-44 L2121234-03 4/26/2021 |
|---|--|--|--|---|---|---|---|---|---|---|---|--|---|
| Sample ID | | | | 0-2 | 0-2 | 13-15 | 42-44 | 0-2 | 13-15 | 42-44 | 0-2 | 8-10 | 42-44 |
| Laboratory ID | | | | | | | | | | | | | |
| Sample Date | | | | | | | | | | | | | |
| Sample Depth (feet bgs) | | | | | | | | | | | | | |
| Per and Polyfluoroalkyl Substances (ppb) | | | | | | | | | | | | | |
| N-ethyl perfluorooctane- sulfonamidoacetic Acid (NEtFOSAA) | ~ | ~ | ~ | 0.497 U | 0.095 J | 0.634 U | 0.512 U | 0.53 U | 0.625 U | 0.525 U | 0.508 U | 0.595 U | 0.529 U |
| N-methyl perfluorooctane- sulfonamidoacetic Acid (NMeFOSAA) | ~ | ~ | ~ | 0.497 U | 0.532 U | 0.634 U | 0.512 U | 0.53 U | 0.625 U | 0.525 U | 0.508 U | 0.595 U | 0.529 U |
| Perfluorobutanesulfonic Acid (PFBS) | ~ | ~ | ~ | 0.249 U | 0.266 U | 0.317 U | 0.256 UJ | 0.265 U | 0.312 U | 0.263 U | 0.254 U | 0.297 U | 0.264 U |
| Perfluorobutanoic acid (PFBA) | ~ | ~ | ~ | 0.497 U | 0.532 U | 0.634 U | 0.512 U | 0.53 U | 0.625 U | 0.525 U | 0.508 U | 0.595 U | 0.529 U |
| Perfluorodecanesulfonic Acid (PFDS) | ~ | ~ | ~ | 0.497 U | 0.532 U | 0.634 U | 0.512 U | 0.53 U | 0.625 U | 0.525 U | 0.508 U | 0.595 U | 0.529 U |
| Perfluorodecanoic Acid (PFDA) | ~ | ~ | ~ | 0.249 U | 0.266 U | 0.317 U | 0.256 U | 0.265 U | 0.312 U | 0.263 UJ | 0.254 U | 0.297 U | 0.264 U |
| Perfluorododecanoic Acid (PFDoA) | ~ | ~ | ~ | 0.497 U | 0.532 U | 0.634 U | 0.512 U | 0.53 U | 0.625 U | 0.525 U | 0.508 U | 0.595 U | 0.529 U |
| Perfluoroheptanesulfonic Acid (PFHpS) | ~ | ~ | ~ | 0.497 U | 0.532 U | 0.634 U | 0.512 U | 0.53 U | 0.625 U | 0.525 U | 0.508 U | 0.595 U | 0.529 U |
| Perfluoroheptanoic acid (PFHpA) | ~ | ~ | ~ | 0.249 U | 0.266 U | 0.317 U | 0.256 U | 0.265 U | 0.312 U | 0.263 U | 0.254 U | 0.297 U | 0.264 U |
| Perfluorohexanesulfonic Acid (PFHxS) | ~ | ~ | ~ | 0.249 U | 0.266 U | 0.317 U | 0.256 U | 0.265 U | 0.312 U | 0.263 U | 0.254 U | 0.297 U | 0.264 U |
| Perfluorohexanoic Acid (PFHxA) | ~ | ~ | ~ | 0.497 U | 0.532 U | 0.634 U | 0.512 U | 0.53 U | 0.625 U | 0.525 U | 0.508 U | 0.595 U | 0.529 U |
| Perfluorononanoic Acid (PFNA) | ~ | ~ | ~ | 0.249 U | 0.266 U | 0.317 U | 0.256 U | 0.265 U | 0.312 U | 0.263 UJ | 0.254 U | 0.297 U | 0.264 U |
| Perfluorooctanesulfonamide (FOSA) | ~ | ~ | ~ | 0.497 U | 0.532 U | 0.634 U | 0.512 U | 0.53 U | 0.625 U | 0.525 U | 0.508 U | 0.595 U | 0.529 U |
| Perfluorooctanesulfonic Acid (PFOS) | 0.88 | 3.7 | 44 | 0.249 U | 0.266 U | 0.317 U | 0.256 U | 0.265 U | 0.312 U | 0.263 U | 0.254 U | 0.297 U | 0.264 U |
| Perfluorooctanoic Acid (PFOA) | 0.66 | 1.1 | 33 | 0.102 J | 0.154 J | 0.75 | 0.256 U | 0.139 J | 0.532 J | 0.263 U | 0.488 | 0.907 | 0.264 U |
| Perfluoropentanoic Acid (PFPeA) | ~ | ~ | ~ | 0.497 U | 0.532 U | 0.634 U | 0.512 UJ | 0.53 U | 0.625 U | 0.525 U | 0.508 U | 0.595 U | 0.529 U |
| Perfluorotetradecanoic Acid (PFTA) | ~ | ~ | ~ | 0.497 U | 0.532 U | 0.634 U | 0.512 U | 0.53 U | 0.625 U | 0.525 U | 0.508 U | 0.595 U | 0.529 U |
| Perfluorotridecanoic Acid (PFTDA) | ~ | ~ | ~ | 0.497 UJ | 0.532 UJ | 0.634 UJ | 0.512 U | 0.53 UJ | 0.625 UJ | 0.525 U | 0.508 UJ | 0.595 UJ | 0.529 U |
| Perfluoroundecanoic Acid (PFUnA) | ~ | ~ | ~ | 0.497 U | 0.532 U | 0.634 U | 0.512 U | 0.53 U | 0.625 U | 0.525 U | 0.508 U | 0.595 U | 0.529 U |
| Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) (8:2FTS) | ~ | ~ | ~ | 0.497 U | 0.532 U | 0.634 U | 0.512 U | 0.53 U | 0.625 U | 0.525 U | 0.508 U | 0.595 U | 0.529 U |
| Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) (6:2FTS) | ~ | ~ | ~ | 0.497 U | 0.532 U | 0.634 U | 0.512 U | 0.53 U | 0.625 U | 0.525 U | 0.508 U | 0.595 U | 0.529 U |
| Total PFOA and PFOS | ~ | ~ | ~ | 0.249 U | 0.266 U | 0.75 | 0.256 U | 0.265 U | 0.532 | 0.263 U | 0.488 | 0.907 | 0.264 U |

Notes provided on Page 3.

Concentrations above Unrestricted Use Guidance Values are bolded.

Concentrations above Restricted Use Restricted-Residential Guidance Values are shaded.

Concentrations above PGW Guidance Values are underlined.

Table 3B
Remedial Investigation Report
Soil Sample Analytical Results - PFAS

130 Saint Felix Street Site
Brooklyn, New York
NYSDEC BCP Site No.: C224306
Langan Project No.: 100842301

Notes:

1. Soil sample analytical results are compared to the New York State Department of Environmental Conservation (NYSDEC) Part 375 Remedial Programs Guidelines for Sampling and Analysis of Per- and Polyfluoroalkyl Substances (PFAS) Unrestricted Use, Protection of Groundwater and Restricted Use Restricted-Residential Guidance Values (January 2021).
2. Detected analytical results above Unrestricted Use Guidance Values are bolded.
3. Detected analytical results above Protection of Groundwater Guidance Values are underlined.
4. Detected analytical results above Restricted Use Restricted-Residential Guidance Values are shaded.
5. Analytical results with reporting limits (RL) above the lowest applicable criteria are italicized.
6. Sample 026_DUP2 is a duplicate sample of 025_LSB2_42-44 and sample 017_DUP01_042121 is a duplicate sample of 001_LSB5_0-2.
7. ~ = Regulatory limit for this analyte does not exist
8. bgs = below grade surface
9. ppb = parts per billion

Qualifiers:

J = The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.

UJ = The analyte was not detected at a level greater than or equal to the RL; however, the reported RL is approximate and may be inaccurate or imprecise.

U = The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.

Notes provided on Page 3.

Concentrations above Unrestricted Use Guidance Values are bolded.

Concentrations above Restricted Use Restricted-Residential Guidance Values are shaded.

Concentrations above PGW Guidance Values are underlined.

Table 4A
Remedial Investigation Report
Groundwater Sample Analytical Results

130 Saint Felix Street Site
Brooklyn, New York
NYSDEC BCP Site No.: C224306
Langan Project No.: 100842301

| Location | NYSDEC | LMW-1 | LMW-2 | LMW-3 | LMW-4 | LMW-4 | LMW-5 | MW11 | MW11 | MW-11 | |
|---|--------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------|-------------|----|
| Sample ID | SGVs | 055_LMW-1 | 054_LMW-2 | 053_LMW-3 | 048_LMW-4 | 049_DUP-1 | 047_LMW-5 | MW11_053015 | GWDP01_053015 | 056_MW11 | |
| Laboratory ID | | L2123074-03 | L2123074-02 | L2123074-01 | L2122822-02 | L2122822-03 | L2122822-01 | L1511932-07 | L1511932-08 | L2123074-04 | |
| Sample Date | | 5/4/2021 | 5/4/2021 | 5/4/2021 | 5/3/2021 | 5/3/2021 | 5/3/2021 | 5/30/2015 | 5/30/2015 | 5/4/2021 | |
| Volatile Organic Compounds (µg/L) | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| 1,1,1-Trichloroethane | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| 1,1,2,2-Tetrachloroethane | 5 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U |
| 1,1,2-Trichloroethane | 1 | 1.5 | U | 1.5 | U | 1.5 | U | 1.5 | U | 1.5 | U |
| 1,1-Dichloroethane | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| 1,1-Dichloroethene | 5 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U |
| 1,1-Dichloropropene | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| 1,2,3-Trichlorobenzene | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| 1,2,3-Trichloropropane | 0.04 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| 1,2,4,5-Tetramethylbenzene | 5 | 2 | U | 2 | U | 2 | U | 2 | U | 2 | U |
| 1,2,4-Trichlorobenzene | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| 1,2,4-Trimethylbenzene | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| 1,2-Dibromo-3-Chloropropane | 0.04 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| 1,2-Dibromoethane (Ethylene Dibromide) | 0.0006 | 2 | U | 2 | U | 2 | U | 2 | U | 2 | U |
| 1,2-Dichlorobenzene | 3 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| 1,2-Dichloroethane | 0.6 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U |
| 1,2-Dichloropropane | 1 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| 1,3,5-Trimethylbenzene (Mesitylene) | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| 1,3-Dichlorobenzene | 3 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| 1,3-Dichloropropane | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| 1,4-Dichlorobenzene | 3 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| 1,4-Diethyl Benzene | ~ | 2 | U | 2 | U | 2 | U | 2 | U | 2 | U |
| 1,4-Dioxane (P-Dioxane) | ~ | 250 | UJ | 250 | UJ | 250 | UJ | 250 | UJ | 250 | UJ |
| 2,2-Dichloropropane | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| 2-Chlorotoluene | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| 2-Hexanone (MBK) | 50 | 5 | UJ | 5 | UJ | 5 | UJ | 5 | UJ | 5 | UJ |
| 4-Chlorotoluene | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| 4-Ethyltoluene | ~ | 2 | U | 2 | U | 2 | U | 2 | U | 2 | U |
| Acetone | 50 | 5 | UJ | 5 | UJ | 5 | UJ | 5 | UJ | 5 | UJ |
| Acrylonitrile | 5 | 5 | UJ | 5 | UJ | 5 | UJ | 5 | UJ | 5 | UJ |
| Benzene | 1 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U |
| Bromobenzene | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| Bromochloromethane | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| Bromodichloromethane | 50 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U |
| Bromoform | 50 | 2 | U | 2 | U | 2 | U | 2 | U | 2 | U |
| Bromomethane | 5 | 2.5 | UJ | 2.5 | UJ | 2.5 | UJ | 2.5 | UJ | 2.5 | UJ |
| Carbon Disulfide | 60 | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| Carbon Tetrachloride | 5 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U |
| Chlorobenzene | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| Chloroethane | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| Chloroform | 7 | 14 | | 24 | | 19 | | 14 | | 11 | |
| Chloromethane | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| Cis-1,2-Dichloroethene | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| Cis-1,3-Dichloropropene | 0.4 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U |
| Cymene | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| Dibromochloromethane | 50 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U |
| Dibromomethane | 5 | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| Dichlorodifluoromethane | 5 | 5 | UJ | 5 | UJ | 5 | UJ | 5 | UJ | 5 | UJ |
| Diethyl Ether (Ethyl Ether) | ~ | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| Ethylbenzene | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| Hexachlorobutadiene | 0.5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| Isopropylbenzene (Cumene) | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| M,P-Xylene | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| Methyl Ethyl Ketone (2-Butanone) | 50 | 5 | UJ | 5 | UJ | 5 | UJ | 5 | UJ | 5 | UJ |
| Methyl Isobutyl Ketone (4-Methyl-2-Pentanone) | ~ | 5 | UJ | 5 | UJ | 5 | UJ | 5 | UJ | 5 | UJ |
| Methylene Chloride | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| Naphthalene | 10 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| n-Butylbenzene | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| n-Propylbenzene | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| o-Xylene (1,2-Dimethylbenzene) | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| Sec-Butylbenzene | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| Styrene | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| T-Butylbenzene | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| Tert-Butyl Methyl Ether | 10 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| Tetrachloroethene (PCE) | 5 | 3.2 | | 1.2 | | 1.4 | | 3.2 | | 1.2 | |
| Toluene | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| Total 1,2-Dichloroethene (Cis and Trans) | ~ | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| Total Xylenes | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| Total, 1,3-Dichloropropene (Cis And Trans) | 0.4 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U |
| Trans-1,2-Dichloroethene | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| Trans-1,3-Dichloropropene | 0.4 | 0.5 | UJ | 0.5 | UJ | 0.5 | UJ | 0.5 | UJ | 0.5 | UJ |
| Trans-1,4-Dichloro-2-Butene | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| Trichloroethene (TCE) | 5 | 2.1 | | 4.7 | | 3.5 | | 2.8 | | 2.9 | |
| Trichlorofluoromethane | 5 | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U |
| Vinyl Acetate | ~ | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| Vinyl Chloride | 2 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U |
| Total BTEX | ~ | ND | | ND | | ND | | ND | | ND | |
| Total CVOCs | ~ | 5.3 | | 5.9 | | 4.9 | | 6 | | 4.7 | |
| Total VOCs | ~ | 19.3 | | 29.9 | | 23.9 | | 20 | | 20 | |

Table 4A
Remedial Investigation Report
Groundwater Sample Analytical Results

130 Saint Felix Street Site
Brooklyn, New York
NYSDEC BCP Site No.: C224306
Langan Project No.: 100842301

| Location | NYSDEC | LMW-1 | LMW-2 | LMW-3 | LMW-4 | LMW-4 | LMW-5 | MW11 | MW11 | MW-11 | |
|--|--------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------|-------------|----|
| Sample ID | SGVs | 055_LMW-1 | 054_LMW-2 | 053_LMW-3 | 048_LMW-4 | 049_DUP-1 | 047_LMW-5 | MW11_053015 | GWDUP01_053015 | 056_MW11 | |
| Laboratory ID | | L2123074-03 | L2123074-02 | L2123074-01 | L2122822-02 | L2122822-03 | L2122822-01 | L1511932-07 | L1511932-08 | L2123074-04 | |
| Sample Date | | 5/4/2021 | 5/4/2021 | 5/4/2021 | 5/3/2021 | 5/3/2021 | 5/3/2021 | 5/30/2015 | 5/30/2015 | 5/4/2021 | |
| Semivolatile Organic Compounds (µg/L) | | | | | | | | | | | |
| 1,2,4,5-Tetrachlorobenzene | 5 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U |
| 1,2,4-Trichlorobenzene | 5 | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| 1,2-Dichlorobenzene | 3 | 2 | U | 2 | U | 2 | U | 2 | U | 2 | U |
| 1,3-Dichlorobenzene | 3 | 2 | U | 2 | U | 2 | U | 2 | U | 2 | U |
| 1,4-Dichlorobenzene | 3 | 2 | U | 2 | U | 2 | U | 2 | U | 2 | U |
| 2,4,5-Trichlorophenol | ~ | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| 2,4,6-Trichlorophenol | ~ | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| 2,4-Dichlorophenol | 1 | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| 2,4-Dimethylphenol | 1 | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| 2,4-Dinitrophenol | 1 | 20 | UJ | 20 | UJ | 20 | UJ | 20 | UJ | 20 | UJ |
| 2,4-Dinitrotoluene | 5 | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| 2,6-Dinitrotoluene | 5 | 5 | UJ | 4.5 | J | 5 | UJ | 5 | UJ | 5 | UJ |
| 2-Chloronaphthalene | 10 | 0.2 | U | 0.2 | U | 0.2 | U | 0.2 | U | 0.2 | U |
| 2-Chlorophenol | ~ | 2 | U | 2 | U | 2 | U | 2 | U | 2 | U |
| 2-Methylnaphthalene | ~ | 0.05 | J | 0.06 | J | 0.05 | J | 0.28 | 0.21 | 0.1 | U |
| 2-Methylphenol (o-Cresol) | ~ | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| 2-Nitroaniline | 5 | 5 | U | 5 | U | 5 | UJ | 5 | UJ | 5 | U |
| 2-Nitrophenol | ~ | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ |
| 3 & 4 Methylphenol (m&p Cresol) | ~ | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| 3,3'-Dichlorobenzidine | 5 | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| 3-Nitroaniline | 5 | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| 4,6-Dinitro-2-Methylphenol | ~ | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ |
| 4-Bromophenyl Phenyl Ether | ~ | 2 | U | 2 | U | 2 | U | 2 | U | 2 | U |
| 4-Chloro-3-Methylphenol | ~ | 2 | U | 2 | U | 2 | U | 2 | U | 2 | U |
| 4-Chloroaniline | 5 | 5 | U | 5 | U | 5 | UJ | 5 | UJ | 5 | U |
| 4-Chlorophenyl Phenyl Ether | ~ | 2 | U | 2 | U | 2 | U | 2 | U | 2 | U |
| 4-Nitroaniline | 5 | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| 4-Nitrophenol | ~ | 10 | U | 10 | U | 10 | UJ | 10 | UJ | 10 | U |
| Acenaphthene | 20 | 0.1 | U | 0.04 | J | 0.07 | J | 0.38 | 0.3 | 0.1 | U |
| Acenaphthylene | ~ | 0.1 | U | 0.1 | U | 0.1 | U | 0.38 | 0.3 | 0.1 | U |
| Acetophenone | ~ | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| Anthracene | 50 | 0.1 | U | 0.1 | U | 0.08 | J | 0.27 | 0.22 | 0.1 | U |
| Benzo(a)anthracene | 0.002 | 0.1 | U | 0.1 | U | 0.22 | J | 0.07 | 0.07 | 0.1 | U |
| Benzo(a)pyrene | 0 | 0.1 | U | 0.1 | U | 0.22 | J | 0.02 | 0.02 | 0.1 | U |
| Benzo(b)fluoranthene | 0.002 | 0.1 | U | 0.1 | U | 0.27 | J | 0.02 | 0.03 | 0.1 | U |
| Benzo(g,h,i)Perylene | ~ | 0.1 | U | 0.1 | U | 0.19 | J | 0.1 | 0.1 | 0.1 | U |
| Benzo(k)fluoranthene | 0.002 | 0.1 | U | 0.1 | U | 0.11 | J | 0.01 | 0.02 | 0.1 | U |
| Benzoic Acid | ~ | 50 | UJ | 9.8 | J | 50 | UJ | 50 | UJ | 50 | UJ |
| Benzyl Alcohol | ~ | 2 | U | 1.8 | J | 2 | U | 0.66 | 0.83 | 2 | U |
| Benzyl Butyl Phthalate | 50 | 5 | UJ | 5 | UJ | 5 | UJ | 5 | UJ | 5 | UJ |
| Biphenyl (Diphenyl) | 5 | 2 | U | 2 | U | 2 | U | 2 | U | 2 | U |
| Bis(2-chloroethoxy) methane | 5 | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| Bis(2-chloroethyl) ether (2-chloroethyl ether) | 1 | 2 | U | 2 | U | 2 | U | 2 | U | 2 | U |
| Bis(2-chloroisopropyl) ether | 5 | 2 | UJ | 2 | UJ | 2 | U | 2 | U | 2 | UJ |
| Bis(2-ethylhexyl) phthalate | 5 | 3 | U | 6.1 | J | 1.7 | J | 3 | 3 | 3 | U |
| Carbazole | ~ | 2 | U | 2 | U | 2 | U | 2 | U | 2 | U |
| Chrysene | 0.002 | 0.1 | U | 0.1 | U | 0.24 | J | 0.08 | 0.08 | 0.1 | U |
| Dibenz(a,h)anthracene | ~ | 0.1 | U | 0.1 | U | 0.03 | J | 0.1 | 0.1 | 0.1 | U |
| Dibenzofuran | ~ | 2 | U | 2 | U | 2 | U | 2 | U | 2 | U |
| Dibutyl phthalate | 50 | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| Diethyl phthalate | 50 | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| Dimethyl phthalate | 50 | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| Diethyl phthalate | 50 | 5 | UJ | 5 | UJ | 5 | UJ | 5 | UJ | 5 | UJ |
| Fluoranthene | 50 | 0.1 | U | 0.1 | U | 0.59 | J | 0.42 | 0.38 | 0.1 | U |
| Fluorene | 50 | 0.02 | J | 0.02 | J | 0.05 | J | 0.74 | 0.58 | 0.1 | U |
| Hexachlorobenzene | 0.04 | 0.8 | U | 0.8 | U | 0.8 | U | 0.8 | U | 0.8 | U |
| Hexachlorobutadiene | 0.5 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U |
| Hexachlorocyclopentadiene | 5 | 20 | U | 20 | U | 20 | U | 20 | UJ | 20 | UJ |
| Hexachloroethane | 5 | 0.8 | U | 0.8 | U | 0.8 | U | 0.8 | U | 0.8 | U |
| Indeno(1,2,3-cd)pyrene | 0.002 | 0.1 | U | 0.1 | U | 0.19 | J | 0.1 | 0.1 | 0.2 | U |
| Isophorone | 50 | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| Naphthalene | 10 | 0.06 | J | 0.11 | J | 0.08 | J | 0.12 | 0.1 | 0.1 | U |
| Nitrobenzene | 0.4 | 2 | U | 2 | U | 2 | U | 2 | U | 2 | U |
| n-Nitrosodi-N-Propylamine | ~ | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| n-Nitrosodiphenylamine | 50 | 2 | U | 2 | U | 2 | U | 2 | U | 2 | U |
| Pentachlorophenol | 1 | 0.8 | U | 0.8 | U | 0.8 | U | 0.12 | 0.8 | 0.8 | U |
| Phenanthrene | 50 | 0.07 | J | 0.08 | J | 0.55 | J | 2.1 | 1.7 | 0.05 | J |
| Phenol | 1 | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U |
| Pyrene | 50 | 0.1 | U | 0.1 | U | 0.51 | J | 0.4 | 0.35 | 0.02 | J |

Table 4A
Remedial Investigation Report
Groundwater Sample Analytical Results

130 Saint Felix Street Site
Brooklyn, New York
NYSDEC BCP Site No.: C224306
Langan Project No.: 100842301

| Location | NYSDEC | LMW-1 | LMW-2 | LMW-3 | LMW-4 | LMW-4 | LMW-5 | MW11 | MW11 | MW-11 |
|---|-------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Sample ID | SGVs | 055_LMW-1 | 054_LMW-2 | 053_LMW-3 | 048_LMW-4 | 049_DUP-1 | 047_LMW-5 | MW11_053015 | GWDUP01_053015 | 056_MW11 |
| Laboratory ID | | L2123074-03 | L2123074-02 | L2123074-01 | L2122822-02 | L2122822-03 | L2122822-01 | L1511932-07 | L1511932-08 | L2123074-04 |
| Sample Date | | 5/4/2021 | 5/4/2021 | 5/4/2021 | 5/3/2021 | 5/3/2021 | 5/3/2021 | 5/30/2015 | 5/30/2015 | 5/4/2021 |
| Pesticides (µg/L) | | | | | | | | | | |
| 4,4'-DDD | 0.3 | 0.029 UJ | NA | NA | 0.029 UJ |
| 4,4'-DDE | 0.2 | 0.029 UJ | NA | NA | 0.029 UJ |
| 4,4'-DDT | 0.2 | 0.029 UJ | NA | NA | 0.029 UJ |
| Aldrin | 0 | 0.014 U | NA | NA | 0.014 U |
| Alpha BHC (Alpha Hexachlorocyclohexane) | 0.01 | 0.014 U | NA | NA | 0.014 U |
| Alpha Chlordane | ~ | 0.014 UJ | NA | NA | 0.014 UJ |
| Alpha Endosulfan | ~ | 0.014 UJ | NA | NA | 0.014 UJ |
| Beta Bhc (Beta Hexachlorocyclohexane) | 0.04 | 0.014 U | NA | NA | 0.014 U |
| Beta Endosulfan | ~ | 0.029 UJ | NA | NA | 0.029 UJ |
| Chlordane (alpha and gamma) | 0.05 | 0.143 U | NA | NA | 0.143 U |
| Delta Bhc (Delta Hexachlorocyclohexane) | 0.04 | 0.014 U | NA | NA | 0.014 U |
| Dieldrin | 0.004 | 0.029 UJ | NA | NA | 0.029 UJ |
| Endosulfan Sulfate | ~ | 0.029 UJ | NA | NA | 0.029 UJ |
| Endrin | 0 | 0.029 UJ | NA | NA | 0.029 UJ |
| Endrin Aldehyde | 5 | 0.029 UJ | NA | NA | 0.029 UJ |
| Endrin Ketone | 5 | 0.029 UJ | NA | NA | 0.029 UJ |
| Gamma Bhc (Lindane) | 0.05 | 0.014 U | NA | NA | 0.014 U |
| Gamma Chlordane | ~ | 0.014 UJ | NA | NA | 0.014 UJ |
| Heptachlor | 0.04 | 0.014 U | NA | NA | 0.014 U |
| Heptachlor Epoxide | 0.03 | 0.014 UJ | NA | NA | 0.014 UJ |
| Methoxychlor | 35 | 0.143 UJ | NA | NA | 0.143 UJ |
| Toxaphene | 0.06 | 0.143 U | NA | NA | 0.143 U |
| Herbicides (µg/L) | | | | | | | | | | |
| 2,4,5-T (Trichlorophenoxyacetic Acid) | 35 | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | NA | NA | 2 U |
| 2,4-D (Dichlorophenoxyacetic Acid) | 50 | 10 U | NA | NA | 10 U |
| Silvex (2,4,5-Tp) | 0.26 | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | NA | NA | 2 U |
| Polychlorinated Biphenyls (µg/L) | | | | | | | | | | |
| PCB-1016 (Aroclor 1016) | ~ | 0.071 U | 0.083 U | 0.083 U | 0.071 U |
| PCB-1221 (Aroclor 1221) | ~ | 0.071 U | 0.083 U | 0.083 U | 0.071 U |
| PCB-1232 (Aroclor 1232) | ~ | 0.071 U | 0.083 U | 0.083 U | 0.071 U |
| PCB-1242 (Aroclor 1242) | ~ | 0.071 U | 0.083 U | 0.083 U | 0.071 U |
| PCB-1248 (Aroclor 1248) | ~ | 0.071 U | 0.083 U | 0.083 U | 0.071 U |
| PCB-1254 (Aroclor 1254) | ~ | 0.071 U | 0.142 J | 0.083 U | 0.083 U | 0.176 J |
| PCB-1260 (Aroclor 1260) | ~ | 0.071 U | 0.083 U | 0.083 U | 0.071 U |
| PCB-1262 (Aroclor 1262) | ~ | 0.071 U | 0.083 U | 0.083 U | 0.071 U |
| PCB-1268 (Aroclor 1268) | ~ | 0.071 U | 0.083 U | 0.083 U | 0.071 U |
| Total PCBs | 0.09 | 0.071 U | 0.142 B | 0.083 U | 0.083 U | 0.176 B |

Table 4A
Remedial Investigation Report
Groundwater Sample Analytical Results

130 Saint Felix Street Site
Brooklyn, New York
NYSDEC BCP Site No.: C224306
Langan Project No.: 100842301

| Location | NYSDEC | LMW-1 | LMW-2 | LMW-3 | LMW-4 | LMW-4 | LMW-5 | MW11 | MW11 | MW-11 | | | | | | | | | |
|-----------------------------|--------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------|-------------|---|--------|---|--------|---|--------|---|--------|---|
| Sample ID | SGVs | 055_LMW-1 | 054_LMW-2 | 053_LMW-3 | 048_LMW-4 | 049_DUP-1 | 047_LMW-5 | MW11_053015 | GWDP01_053015 | 056_MW11 | | | | | | | | | |
| Laboratory ID | | L2123074-03 | L2123074-02 | L2123074-01 | L2122822-02 | L2122822-03 | L2122822-01 | L1511932-07 | L1511932-08 | L2123074-04 | | | | | | | | | |
| Sample Date | | 5/4/2021 | 5/4/2021 | 5/4/2021 | 5/3/2021 | 5/3/2021 | 5/3/2021 | 5/30/2015 | 5/30/2015 | 5/4/2021 | | | | | | | | | |
| Inorganics (µg/L) | | | | | | | | | | | | | | | | | | | |
| Aluminum | ~ | 39.5 | J | 39.8 | J | 2,580 | J | 45.1 | J | 33.5 | J | 178 | J | 1,020 | J | 952 | J | 627 | J |
| Aluminum (Dissolved) | ~ | 9.69 | J | 13.9 | J | 9.47 | J | 8.58 | J | 8.71 | J | 7.34 | J | 42 | J | 22 | J | 6.37 | J |
| Antimony | 3 | 4 | U | 0.6 | J | 4 | U | 4 | U | 0.75 | J | 4 | U | 2 | U | 2 | U | 4 | U |
| Antimony (Dissolved) | 3 | 4 | U | 4 | U | 4 | U | 4 | U | 4 | U | 4 | U | 1.6 | J | 0.9 | J | 4 | U |
| Arsenic | 25 | 0.86 | J | 1.02 | J | 2.45 | J | 1.14 | J | 1.08 | J | 0.7 | J | 1 | J | 1 | J | 0.95 | J |
| Arsenic (Dissolved) | 25 | 0.8 | J | 0.96 | J | 0.64 | J | 0.94 | J | 0.92 | J | 0.65 | J | 0.5 | U | 0.5 | U | 0.71 | J |
| Barium | 1,000 | 171 | J | 60.44 | J | 202.9 | J | 87.92 | J | 88.21 | J | 67.91 | J | 125.8 | J | 114.3 | J | 90.98 | J |
| Barium (Dissolved) | 1,000 | 168.8 | J | 60.32 | J | 85.56 | J | 90.66 | J | 88.67 | J | 72.95 | J | 104.2 | J | 101.9 | J | 83.28 | J |
| Beryllium | 3 | 0.5 | U | 0.5 | U | 0.15 | J | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U |
| Beryllium (Dissolved) | 3 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U |
| Cadmium | 5 | 0.2 | U | 0.2 | U | 0.22 | U | 0.2 | U | 0.2 | U | 0.2 | U | 0.1 | J | 0.2 | U | 0.2 | U |
| Cadmium (Dissolved) | 5 | 0.2 | U | 0.2 | U | 0.08 | J | 0.2 | U | 0.2 | U | 0.2 | U | 0.2 | U | 0.2 | U | 0.2 | U |
| Calcium | ~ | 94,100 | J | 58,900 | J | 80,900 | J | 84,200 | J | 83,800 | J | 75,400 | J | 67,000 | J | 53,100 | J | 66,400 | J |
| Calcium (Dissolved) | ~ | 95,300 | J | 57,100 | J | 74,800 | J | 94,400 | J | 93,100 | J | 82,000 | J | 69,300 | J | 65,900 | J | 65,800 | J |
| Chromium, Hexavalent | 50 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | NA | U | NA | U | 10 | U |
| Chromium, Total | 50 | 0.28 | J | 0.61 | J | 10.3 | J | 0.68 | J | 0.5 | J | 0.92 | J | 62.7 | J | 41.1 | J | 3.43 | J |
| Chromium, Total (Dissolved) | 50 | 1 | U | 0.52 | J | 0.66 | J | 1 | U | 0.21 | J | 1 | U | 4.1 | J | 1.7 | J | 1.97 | J |
| Chromium, Trivalent | ~ | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | NA | U | NA | U | 10 | U |
| Cobalt | ~ | 0.85 | J | 0.67 | J | 3.27 | J | 0.66 | J | 0.61 | J | 1.03 | J | 2.1 | J | 1.4 | J | 0.98 | J |
| Cobalt (Dissolved) | ~ | 0.84 | J | 0.63 | J | 0.71 | J | 0.56 | J | 0.48 | J | 0.84 | J | 0.4 | J | 0.3 | J | 0.5 | U |
| Copper | 200 | 1 | U | 1 | U | 10.11 | J | 1.43 | J | 1.5 | J | 1.57 | J | 7.3 | J | 6.1 | J | 1.95 | J |
| Copper (Dissolved) | 200 | 1 | U | 1 | U | 1 | U | 0.72 | J | 0.73 | J | 0.81 | J | 1.7 | J | 5.9 | J | 1 | U |
| Iron | 300 | 146 | J | 88.3 | J | 4,640 | J | 148 | J | 97.1 | J | 382 | J | 3,090 | J | 2,420 | J | 1,200 | J |
| Iron (Dissolved) | 300 | 74.6 | J | 24.2 | J | 50 | U | 50 | U | 50 | U | 50 | U | 58 | J | 37 | J | 50 | U |
| Lead | 25 | 0.51 | J | 1 | U | 69.42 | J | 8.61 | J | 6.93 | J | 1 | U | 2.2 | J | 1.7 | J | 1.14 | J |
| Lead (Dissolved) | 25 | 1 | U | 1 | U | 1 | U | 3.01 | J | 3 | J | 1 | U | 1 | U | 0.1 | J | 1 | U |
| Magnesium | 35,000 | 31,600 | J | 13,300 | J | 25,000 | J | 27,600 | J | 26,600 | J | 23,300 | J | 29,300 | J | 24,300 | J | 25,500 | J |
| Magnesium (Dissolved) | 35,000 | 31,600 | J | 14,600 | J | 23,200 | J | 29,000 | J | 28,100 | J | 25,500 | J | 26,200 | J | 23,800 | J | 25,000 | J |
| Manganese | 300 | 1,065 | J | 502.8 | J | 706.6 | J | 199 | J | 185.1 | J | 520.1 | J | 160.6 | J | 130 | J | 85.06 | J |
| Manganese (Dissolved) | 300 | 1,202 | J | 512.6 | J | 559.4 | J | 199.9 | J | 185.6 | J | 508.3 | J | 66.9 | J | 60.4 | J | 1.24 | J |
| Mercury | 0.7 | 0.2 | U | 0.2 | U | 0.11 | J | 0.2 | U | 0.2 | U | 0.2 | U | 0.2 | U | 0.2 | U | 0.2 | U |
| Mercury (Dissolved) | 0.7 | 0.2 | U | 0.2 | U | 0.2 | U | 0.2 | U | 0.2 | U | 0.2 | U | 0.2 | U | 0.2 | U | 0.2 | U |
| Nickel | 100 | 2.86 | J | 3.4 | J | 16.05 | J | 2.28 | J | 2.02 | J | 5.13 | J | 39.2 | J | 23.6 | J | 1.71 | J |
| Nickel (Dissolved) | 100 | 3.09 | J | 2.94 | J | 2.68 | J | 2.11 | J | 1.85 | J | 3.38 | J | 7.5 | J | 4.2 | J | 2 | U |
| Potassium | ~ | 6,150 | J | 6,020 | J | 4,800 | J | 4,130 | J | 3,880 | J | 6,210 | J | 5,040 | J | 4,500 | J | 3,120 | J |
| Potassium (Dissolved) | ~ | 6,770 | J | 5,920 | J | 4,250 | J | 4,390 | J | 4,300 | J | 5,980 | J | 4,490 | J | 4,240 | J | 2,980 | J |
| Selenium | 10 | 1.78 | J | 5 | U | 5 | U | 2.39 | J | 2.24 | J | 5 | U | 1 | J | 1 | J | 5 | U |
| Selenium (Dissolved) | 10 | 5 | U | 5 | U | 5 | U | 2.36 | J | 2.38 | J | 1.88 | J | 5 | U | 5 | U | 5 | U |
| Silver | 50 | 0.4 | U | 0.4 | U | 0.4 | U | 0.4 | U | 0.4 | U | 0.4 | U | 0.1 | J | 0.2 | J | 0.4 | U |
| Silver (Dissolved) | 50 | 0.4 | U | 0.4 | U | 0.4 | U | 0.4 | U | 0.4 | U | 0.4 | U | 0.4 | U | 0.4 | U | 0.4 | U |
| Sodium | 20,000 | 91,200 | J | 40,200 | J | 56,000 | J | 59,700 | J | 56,900 | J | 59,900 | J | 51,600 | J | 46,600 | J | 37,500 | J |
| Sodium (Dissolved) | 20,000 | 91,100 | J | 41,000 | J | 57,300 | J | 63,000 | J | 61,200 | J | 64,700 | J | 62,800 | J | 54,200 | J | 37,800 | J |
| Thallium | 0.5 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | 0.5 | U | 0.5 | U | 1 | U |
| Thallium (Dissolved) | 0.5 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | 0.5 | U | 0.5 | U | 1 | U |
| Vanadium | ~ | 5 | U | 5 | U | 7.78 | J | 5 | U | 5 | U | 5 | U | 3.3 | J | 2.3 | J | 3.22 | J |
| Vanadium (Dissolved) | ~ | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 1.83 | J |
| Zinc | 2,000 | 10 | U | 10 | U | 79.41 | J | 10 | U | 10 | U | 10 | U | 123.8 | J | 143.6 | J | 5.34 | J |
| Zinc (Dissolved) | 2,000 | 10 | U | 10 | U | 10.52 | J | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U |

Table 3A
Remedial Investigation Report
Groundwater Sample Analytical Results

130 Saint Felix Street Site
Brooklyn, New York
NYSDEC BCP Site No.: C224306
Langan Project No.: 100842301

Notes:

1. Groundwater 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 703.5 and the NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guidance Values for Class GA Water (herein collectively referenced as "NYSDEC SGVs").
2. Criterion comparisons for total xylenes and m,p-xylene are provided for reference. Promulgated NYSDEC SGVs are for o-xylene, m-xylene, and p-xylene.
3. Detected analytical results above NYSDEC SGVs are bolded and shaded.
4. Analytical results with reporting limits (RL) above NYSDEC SGVs are italicized.
5. Sample 049_DUP-1 is a duplicate sample of 048_LMW-4 and sample GWDUP01_053015 is a duplicate sample of MW11_053015.
6. ~ = Regulatory limit for this analyte does not exist
7. µg/l = micrograms per liter
8. NA = Not analyzed
9. ND = Not detected

Qualifiers:

- B = The analyte was found in the associated analysis batch blank.
J = The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
UJ = The analyte was not detected at a level greater than or equal to the RL; however, the reported RL is approximate and may be inaccurate or imprecise.
U = The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.

Table 4B
Remedial Investigation Report
Groundwater Sample Analytical Results - Emerging Contaminants

130 Saint Felix Street Site
 Brooklyn, New York
 NYSDEC BCP Site No.: C224306
 Langan Project No.: 100842301

| Location | NYSDEC January 2021 Guidance Values | LMW-1 055_LMW-1 L2123074-03 5/4/2021 | LMW-2 054_LMW-2 L2123074-02 5/4/2021 | LMW-3 053_LMW-3 L2123074-01 5/4/2021 | LMW-4 048_LMW-4 L2122822-02 5/3/2021 | LMW-4 049_DUP-1 L2122822-03 5/3/2021 | LMW-5 047_LMW-5 L2122822-01 5/3/2021 | MW-11 056_MW11 L2123074-04 5/4/2021 |
|---|-------------------------------------|---|---|---|---|---|---|--|
| Semivolatile Organic Compounds (ng/L) | | | | | | | | |
| 1,4-Dioxane (P-Dioxane) | 1,000 | 139 U | 139 U | 139 U | 150 U | 139 U | 139 U | 139 U |
| Per and Polyfluoroalkyl Substances (ng/L) | | | | | | | | |
| N-ethyl perfluorooctane- sulfonamidoacetic Acid (NEtFOSAA) | 100 | 1.81 U | 1.79 U | 1.83 U | 1.78 U | 1.89 U | 1.8 U | 1.77 U |
| N-methyl perfluorooctane- sulfonamidoacetic Acid (NMeFOSAA) | 100 | 1.81 U | 1.79 U | 1.83 U | 1.78 U | 1.89 U | 1.8 U | 1.77 U |
| Perfluorobutanesulfonic Acid (PFBS) | 100 | 4.85 | 1.46 J | 1.84 | 4.59 | 4.49 | 3.86 | 1.42 J |
| Perfluorobutanoic acid (PFBA) | 100 | 10.4 | 1.9 | 3.49 | 8.43 J | 8.04 J | 7.22 | 2.31 |
| Perfluorodecanesulfonic Acid (PFDS) | 100 | 1.81 U | 1.79 U | 1.83 U | 1.78 U | 1.89 U | 1.8 U | 1.77 U |
| Perfluorodecanoic Acid (PFDA) | 100 | 1.81 U | 1.79 U | 1.83 U | 1.78 UJ | 1.89 UJ | 1.8 U | 1.77 U |
| Perfluorododecanoic Acid (PFDoA) | 100 | 1.81 U | 1.79 U | 1.83 U | 1.78 U | 1.89 U | 1.8 U | 1.77 U |
| Perfluoroheptanesulfonic Acid (PFHpS) | 100 | 1.81 U | 1.79 U | 1.83 U | 1.78 U | 1.89 U | 1.8 U | 1.77 U |
| Perfluoroheptanoic acid (PFHpA) | 100 | 14.2 | 2.92 | 4.35 | 9.87 J | 9.67 J | 8.73 | 3.83 |
| Perfluorohexanesulfonic Acid (PFHxS) | 100 | 4.29 | 1.46 J | 2.67 | 4.24 | 4.05 | 3.5 | 1.84 |
| Perfluorohexanoic Acid (PFHxA) | 100 | 16.4 | 3.71 J | 5.5 | 11.2 J | 11 J | 12.1 | 4.24 J |
| Perfluorononanoic Acid (PFNA) | 100 | 0.409 J | 0.312 J | 0.487 J | 1.78 UJ | 1.89 UJ | 0.462 J | 1.77 U |
| Perfluorooctanesulfonamide (FOSA) | 100 | 1.81 U | 1.79 U | 1.83 U | 1.78 U | 1.89 U | 1.8 U | 1.77 U |
| Perfluorooctanesulfonic Acid (PFOS) | 10 | 12.7 | 4.25 | 8.66 | 5.11 | 4.96 | 7.7 | 3.61 |
| Perfluorooctanoic Acid (PFOA) | 10 | 59.3 | 19.7 | 29 | 61.8 J | 60 J | 45.5 | 27.1 |
| Perfluoropentanoic Acid (PFPeA) | 100 | 23.6 | 4.08 | 6.42 | 14.9 J | 14.3 | 16.3 | 4.5 |
| Perfluorotetradecanoic Acid (PFTA) | 100 | 1.81 U | 1.79 U | 1.83 U | 1.78 U | 1.89 U | 1.8 U | 1.77 U |
| Perfluorotridecanoic Acid (PFTrDA) | 100 | 1.81 U | 1.79 U | 1.83 U | 1.78 U | 1.89 U | 1.8 U | 1.77 U |
| Perfluoroundecanoic Acid (PFUnA) | 100 | 1.81 U | 1.79 U | 1.83 U | 1.78 UJ | 1.89 U | 1.8 U | 1.77 U |
| Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) (8:2FTS) | 100 | 1.81 U | 1.79 U | 1.83 U | 1.78 U | 1.89 U | 1.8 U | 1.77 U |
| Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) (6:2FTS) | 100 | 1.81 U | 1.79 U | 1.48 J | 4.68 | 4.03 | 12.3 | 1.77 U |
| Total PFOA and PFOS | ~ | 72 | 24 | 37.7 | 66.9 | 65 | 53.2 | 30.7 |
| Total PFAS | 500 | 146 | 39.8 | 63.9 | 125 | 121 | 118 | 48.9 |

Notes:

- Groundwater sample analytical results are compared to the New York State Department of Environmental Conservation (NYSDEC) Part 375 Remedial Programs Guidelines for Sampling and Analysis of Per- and Polyfluoroalkyl Substances (PFAS) (January 2021) and the 1,4-Dioxane value reflects the drinking water maximum contaminant level (MCL) adopted by New York State for public water systems (July 2020). Pursuant to Part 375-1.7(f)(2), the NYSDEC will treat the MCL as relevant and appropriate and will consider this value in remedy selection.
- Detected analytical results above NYSDEC January 2021 Guidance Values are bolded and shaded.
- Analytical results with reporting limits (RL) above NYSDEC January 2021 Guidance Values are italicized.
- Sample 049_DUP-1 is a duplicate sample of 048_LMW-4.
- ~ = Regulatory limit for this analyte does not exist
- ng/l = nanograms per liter

Qualifiers:

- J = The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ = The analyte was not detected at a level greater than or equal to the RL; however, the reported RL is approximate and may be inaccurate or imprecise.
- U = The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.

Table 4B
Remedial Investigation Report
Groundwater Sample Analytical Results - Emerging Contaminants

130 Saint Felix Street Site
Brooklyn, New York
NYSDEC BCP Site No.: C224306
Langan Project No.: 100842301

Notes:

1. Groundwater sample analytical results are compared to the New York State Department of Environmental Conservation (NYSDEC) Part 375 Remedial Programs Guidelines for Sampling and Analysis of Per- and Polyfluoroalkyl Substances (PFAS) (January 2021) and the 1,4-Dioxane value reflects the drinking water maximum contaminant level (MCL) adopted by New York State for public water systems (July 2020). Pursuant to Part 375-1.7(f)(2), the NYSDEC will treat the MCL as relevant and appropriate and will consider this value in remedy selection.
2. Detected analytical results above NYSDEC January 2021 Guidance Values are bolded and shaded.
3. Analytical results with reporting limits (RL) above NYSDEC January 2021 Guidance Values are italicized.
4. Sample 049_DUP-1 is a duplicate sample of 048_LMW-4.
5. ~ = Regulatory limit for this analyte does not exist
6. ng/l = nanograms per liter

Qualifiers:

J = The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
UJ = The analyte was not detected at a level greater than or equal to the RL; however, the reported RL is approximate and may be inaccurate or imprecise.
U = The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.

Table 5
Remedial Investigation Report
Soil Vapor Sample Analytical Results

130 Saint Felix Street Site
Brooklyn, New York
NYSDEC BCP Site No.: C224306
Langan Project No.: 100842301

| Location | NYSDOH Decision | Unit | AMB 053015 | SV01 053021 | SV02 053021 | SV03 053021 | AMBIENT-1 030 AMBIENT-1 | LSV-1 045 LSV-1 | LSV-1 046 DUP-1 | LSV-2 043 LSV-2A | LSV-2 044 LSV-2B | LSV-3 035 LSV-3A | LSV-3 036 LSV-3B | LSV-4 041 LSV-4A | LSV-4 042 LSV-4B | LSV-5 033 LSV-5A | LSV-5 034 LSV-5B | LSV-6 031 LSV-6A | LSV-6 032 LSV-6B | LSV-7 037 LSV-7A | LSV-7 038 LSV-7B | LSV-8 039 LSV-8A | LSV-8 040 LSV-8B | | | |
|---|------------------|-------|-------------|-------------|-------------|-------------|-------------------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------|---|--|
| Sample ID | Matrices Minimum | | L1511934-04 | L1511934-01 | L1511934-02 | L1511934-03 | L2123062-01 | L2123062-16 | L2123062-17 | L2123062-14 | L2123062-15 | L2123062-06 | L2123062-07 | L2123062-12 | L2123062-13 | L2123062-04 | L2123062-05 | L2123062-02 | L2123062-03 | L2123062-08 | L2123062-09 | L2123062-10 | L2123062-11 | | | |
| Sample Date | Concentrations | | 5/30/2015 | 5/30/2015 | 5/30/2015 | 5/30/2015 | 5/4/2021 | 5/4/2021 | 5/4/2021 | 5/4/2021 | 5/4/2021 | 5/4/2021 | 5/4/2021 | 5/4/2021 | 5/4/2021 | 5/4/2021 | 5/4/2021 | 5/4/2021 | 5/4/2021 | 5/4/2021 | 5/4/2021 | 5/4/2021 | 5/4/2021 | | | |
| Sample Type | | | AA | SV | SV | SV | AA | SV | SV | SV | SV | SV | SV | SV | SV | SV | SV | SV | SV | SV | SV | SV | SV | | | |
| Volatile Organic Compounds (µg/m³) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | 100 | ug/m3 | 1.09 | U | 2.73 | U | 3.64 | U | 1.3 | 1.09 | U | 1.09 | U | |
| 1,1,2,2-Tetrachloroethane | ~ | ug/m3 | 1.37 | U | 3.43 | U | 4.58 | U | 1.37 | 1.37 | U | 1.37 | U | |
| 1,1,2-Trichloro-1,2,2-Trifluoroethane | ~ | ug/m3 | 1.53 | U | 3.83 | U | 5.11 | U | 1.53 | 1.53 | U | 1.53 | U | |
| 1,1,2-Trichloroethane | ~ | ug/m3 | 1.09 | U | 2.73 | U | 3.64 | U | 1.09 | 1.09 | U | 1.09 | U | |
| 1,1-Dichloroethane | ~ | ug/m3 | 0.809 | U | 2.02 | U | 2.7 | U | 0.809 | 0.809 | U | 0.809 | U | |
| 1,1-Dichloroethene | 6 | ug/m3 | 0.793 | U | 1.98 | U | 2.64 | U | 0.793 | 0.793 | U | 0.793 | U | |
| 1,2,4-Trichlorobenzene | ~ | ug/m3 | 1.48 | U | 3.71 | U | 4.95 | U | 1.48 | 1.48 | U | 1.48 | U | |
| 1,2,4-Trimethylbenzene | ~ | ug/m3 | 1.36 | U | 86.5 | U | 80.1 | U | 0.983 | 0.983 | U | 0.983 | U | |
| 1,2-Dibromoethane (Ethylene Dibromide) | ~ | ug/m3 | 1.54 | U | 3.84 | U | 5.13 | U | 1.54 | 1.54 | U | 1.54 | U | |
| 1,2-Dichlorobenzene | ~ | ug/m3 | 1.2 | U | 3.01 | U | 4.01 | U | 1.2 | 1.2 | U | 1.2 | U | |
| 1,2-Dichloroethane | ~ | ug/m3 | 0.809 | U | 2.02 | U | 2.7 | U | 0.809 | 0.809 | U | 0.809 | U | |
| 1,2-Dichloropropane | ~ | ug/m3 | 0.924 | U | 2.31 | U | 3.08 | U | 0.924 | 0.924 | U | 0.924 | U | |
| 1,2-Dichlorotetrafluoroethane | ~ | ug/m3 | 1.4 | U | 3.49 | U | 4.66 | U | 1.4 | 1.4 | U | 1.4 | U | |
| 1,3,5-Trimethylbenzene (Mesitylene) | ~ | ug/m3 | 0.983 | U | 24 | U | 23.6 | U | 0.983 | 0.983 | U | 0.983 | U | |
| 1,3-Butadiene | ~ | ug/m3 | 0.442 | U | 1.57 | U | 2.39 | U | 0.442 | 0.442 | U | 0.442 | U | |
| 1,3-Dichlorobenzene | ~ | ug/m3 | 1.2 | U | 3.01 | U | 4.01 | U | 1.2 | 1.2 | U | 1.2 | U | |
| 1,4-Dichlorobenzene | ~ | ug/m3 | 1.2 | U | 3.01 | U | 4.01 | U | 1.2 | 1.2 | U | 1.2 | U | |
| 1,4-Dioxane (P-Dioxane) | ~ | ug/m3 | 0.721 | U | 1.8 | U | 2.4 | U | 0.721 | 0.721 | U | 0.721 | U | |
| 2,2,4-Trimethylpentane | ~ | ug/m3 | 5.56 | U | 2.34 | U | 9.81 | U | 0.934 | 0.934 | U | 0.934 | U | |
| 2-Hexanone (MBK) | ~ | ug/m3 | 0.82 | U | 2.05 | U | 2.73 | U | 0.82 | 0.82 | U | 0.82 | U | |
| 4-Ethyltoluene | ~ | ug/m3 | 0.983 | U | 16 | U | 15.8 | U | 0.983 | 0.983 | U | 0.983 | U | |
| Acetone | ~ | ug/m3 | 13.5 | U | 82 | U | 152 | U | 137 | 137 | U | 137 | U | |
| Allyl Chloride (3-Chloropropene) | ~ | ug/m3 | 0.626 | U | 1.57 | U | 2.09 | U | 0.626 | 0.626 | U | 0.626 | U | |
| Benzene | ~ | ug/m3 | 0.639 | U | 4.34 | U | 4.7 | U | 0.639 | 0.639 | U | 0.639 | U | |
| Benzyl Chloride | ~ | ug/m3 | 1.04 | U | 2.59 | U | 3.45 | U | 1.04 | 1.04 | U | 1.04 | U | |
| Bromodichloromethane | ~ | ug/m3 | 1.34 | U | 3.35 | U | 4.47 | U | 1.34 | 1.34 | U | 1.34 | U | |
| Bromoethane | ~ | ug/m3 | 0.874 | U | 2.19 | U | 2.92 | U | 0.874 | 0.874 | U | 0.874 | U | |
| Bromoform | ~ | ug/m3 | 2.07 | U | 5.17 | U | 6.9 | U | 2.07 | 2.07 | U | 2.07 | U | |
| Bromomethane | ~ | ug/m3 | 0.777 | U | 1.94 | U | 2.59 | U | 0.777 | 0.777 | U | 0.777 | U | |
| Carbon Disulfide | ~ | ug/m3 | 0.623 | U | 442 | U | 679 | U | 0.623 | 0.623 | U | 0.623 | U | |
| Carbon Tetrachloride | 6 | ug/m3 | 1.26 | U | 3.15 | U | 4.2 | U | 1.26 | 1.26 | U | 1.26 | U | |
| Chlorobenzene | ~ | ug/m3 | 0.921 | U | 2.3 | U | 3.07 | U | 0.921 | 0.921 | U | 0.921 | U | |
| Chloroethane | ~ | ug/m3 | 0.528 | U | 1.32 | U | 1.76 | U | 0.528 | 0.528 | U | 0.528 | U | |
| Chloroform | ~ | ug/m3 | 0.977 | U | 2.44 | U | 3.26 | U | 1.02 | 0.977 | U | 4.93 | U | 5.27 | U | 0.977 | U | 2.72 | U | 1.74 | U | 1.63 | U | 2.82 | U | |
| Chloromethane | ~ | ug/m3 | 1.31 | U | 1.03 | U | 1.38 | U | 1.18 | 1.14 | U | 0.413 | U | 0.413 | U | 0.52 | U | 1.15 | U | 1.03 | U | 0.717 | U | 0.688 | U | |
| Cis-1,2-Dichloroethane | 6 | ug/m3 | 0.793 | U | 1.98 | U | 2.64 | U | 0.793 | 0.793 | U | 0.793 | U | |
| Cis-1,3-Dichloropropene | ~ | ug/m3 | 0.908 | U | 2.27 | U | 3.03 | U | 0.908 | 0.908 | U | 0.908 | U | |
| Cyclohexane | ~ | ug/m3 | 0.688 | U | 13.8 | U | 7.74 | U | 2.03 | 0.688 | U | 0.688 | U | |
| Dibromochloromethane | ~ | ug/m3 | 1.7 | U | 4.26 | U | 5.68 | U | 1.7 | 1.7 | U | 1.7 | U | |
| Dichlorodifluoromethane | ~ | ug/m3 | 1.05 | J | 2.47 | U | 3.3 | U | 1.68 | 2.29 | U | 2.31 | U | 2.26 | U | 2.25 | U | 2.25 | U | 2.25 | U | 2.25 | U | 2.25 | U | |
| Ethanol | ~ | ug/m3 | 12.9 | U | 27.5 | U | 69.5 | U | 164 | 17 | U | 9.42 | U | 9.42 | U | 26.2 | U | 23.6 | U | 9.42 | U | 18.1 | U | 15.7 | U | |
| Ethyl Acetate | ~ | ug/m3 | 1.8 | U | 4.5 | U | 6.02 | U | 1.8 | 1.8 | U | 1.8 | U | 1.8 | U | 5.01 | U | 4.5 | U | 1.8 | U | 2.65 | U | 3.01 | U | |
| Ethylbenzene | ~ | ug/m3 | 0.869 | U | 17.2 | U | 21.1 | U | 11.9 | 0.869 | U | 0.869 | U | |
| Hexachlorobutadiene | ~ | ug/m3 | 2.13 | U | 5.33 | U | 7.11 | U | 2.13 | 2.13 | U | 2.13 | U | |
| Isopropanol | ~ | ug/m3 | 1.98 | U | 8.41 | U | 14.1 | U | 28.3 | 3.37 | U | 1.91 | U | 1.76 | U | 1.23 | U | 1.23 | U | 1.23 | U | 1.23 | U | 1.23 | U | |
| M,P-Xylene | ~ | ug/m3 | 2.81 | U | 81.7 | U | 93 | U | 53 | 1.47 | U | 12.7 | U | 12.8 | U | 36 | U | 602 | U | 560 | U | 165 | U | | | |

Table 5
Remedial Investigation Report
Soil Vapor Sample Analytical Results

130 Saint Felix Street Site
Brooklyn, New York
NYSDEC BCP Site No.: C224306
Langan Project No.: 100842301

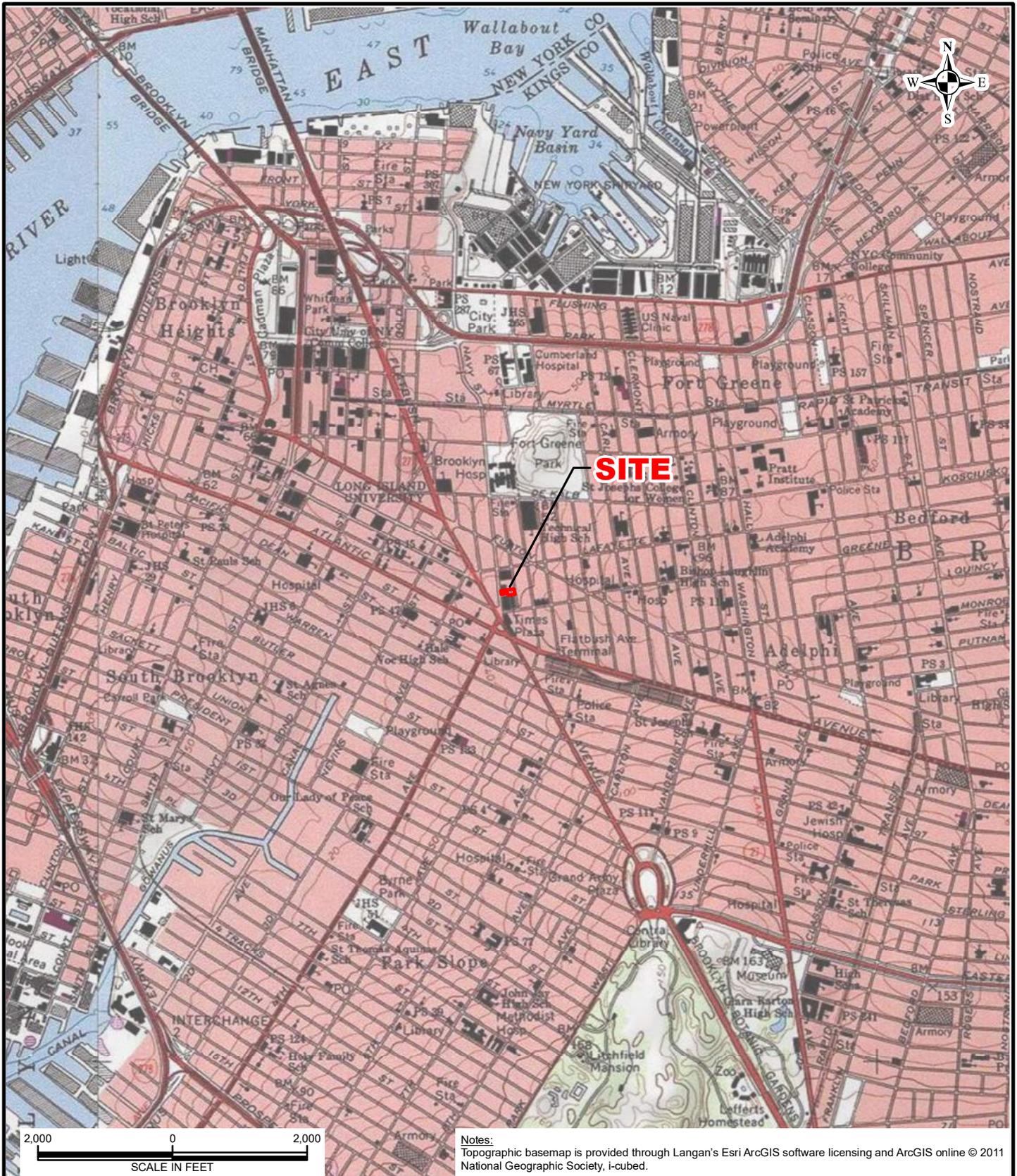
Notes:

1. Soil vapor sample analytical results are compared to the minimum soil vapor concentrations at which mitigation is recommended as set forth in the New York State Department of Health (NYSDOH) October 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York Decision Matrices for Sub-Slab Vapor and Indoor Air and subsequent updates (2017).
2. Ambient air sample analytical results are shown for reference only.
3. Detected analytical results above the minimum soil vapor concentrations recommending mitigation are bolded and shaded.
4. Analytical results with reporting limits (RL) above the minimum soil vapor concentrations recommending mitigation are italicized.
5. Sample 046_DUP-1 is a duplicate of parent sample 045_LSV-1.
6. ~ = Regulatory limit for this analyte does not exist
7. $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter
8. AA = Ambient Air
9. SV = Soil Vapor

Qualifiers:

- J = The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
UJ = The analyte was not detected at a level greater than or equal to the RL; however, the reported RL is approximate and may be inaccurate or imprecise.
U = The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.

FIGURES



Notes:
 Topographic basemap is provided through Langan's Esri ArcGIS software licensing and ArcGIS online © 2011 National Geographic Society, i-cubed.

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Langan Engineering & Environmental Services, Inc.
 Langan Engineering, Environmental, Surveying,
 Landscape Architecture and Geology, D.P.C.
 Langan International LLC
 Collectively known as Langan

NJ CERTIFICATE OF AUTHORIZATION No. 24GA27996400

Project
130 SAINT FELIX STREET
 BLOCK No. 2111, LOT No. 40

BROOKLYN NEW YORK

Drawing Title
SITE LOCATION MAP

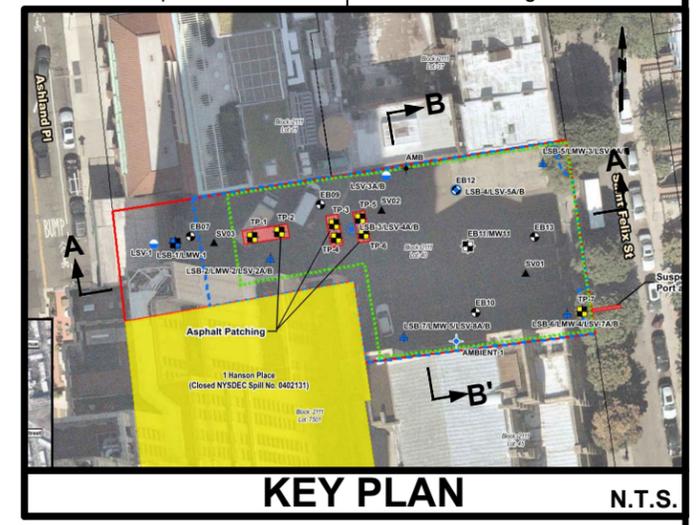
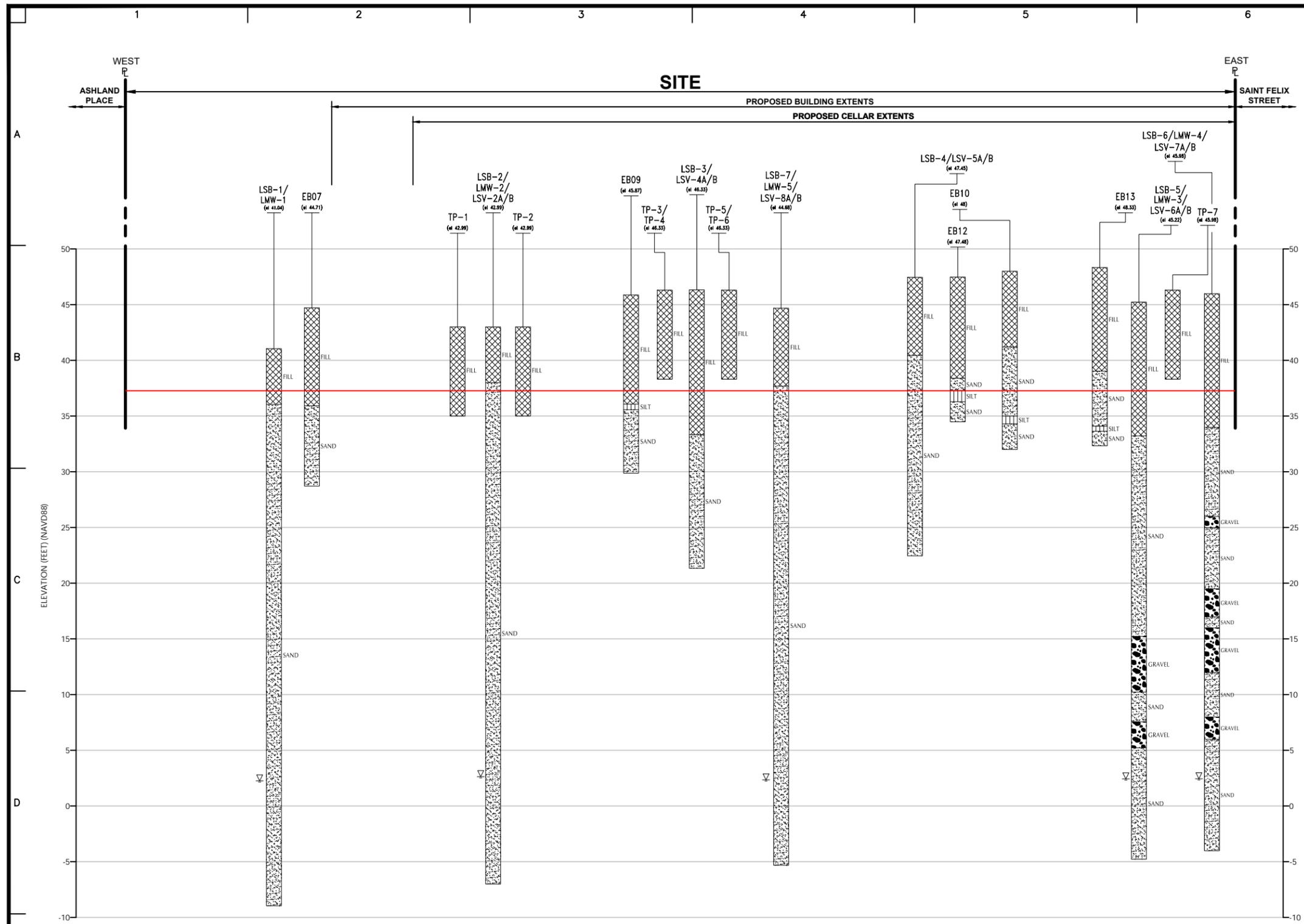
Project No.
 100842301

Date
 6/30/2021

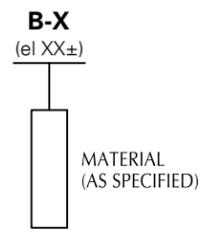
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Drawn By
 JF

Figure
1



BORING KEY:



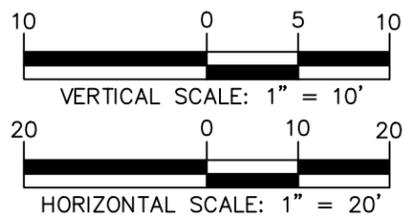
LEGEND:

- B-X DRILLED BORING IDENTIFICATION
- el XX± APPROXIMATE SURFACE ELEVATION AT THE TIME OF BORING (NAVD88)
- ▽ GROUNDWATER IN MONITORING WELL
- AVERAGE ELEVATION OF FILL/NATIVE INTERFACE

NOTES:

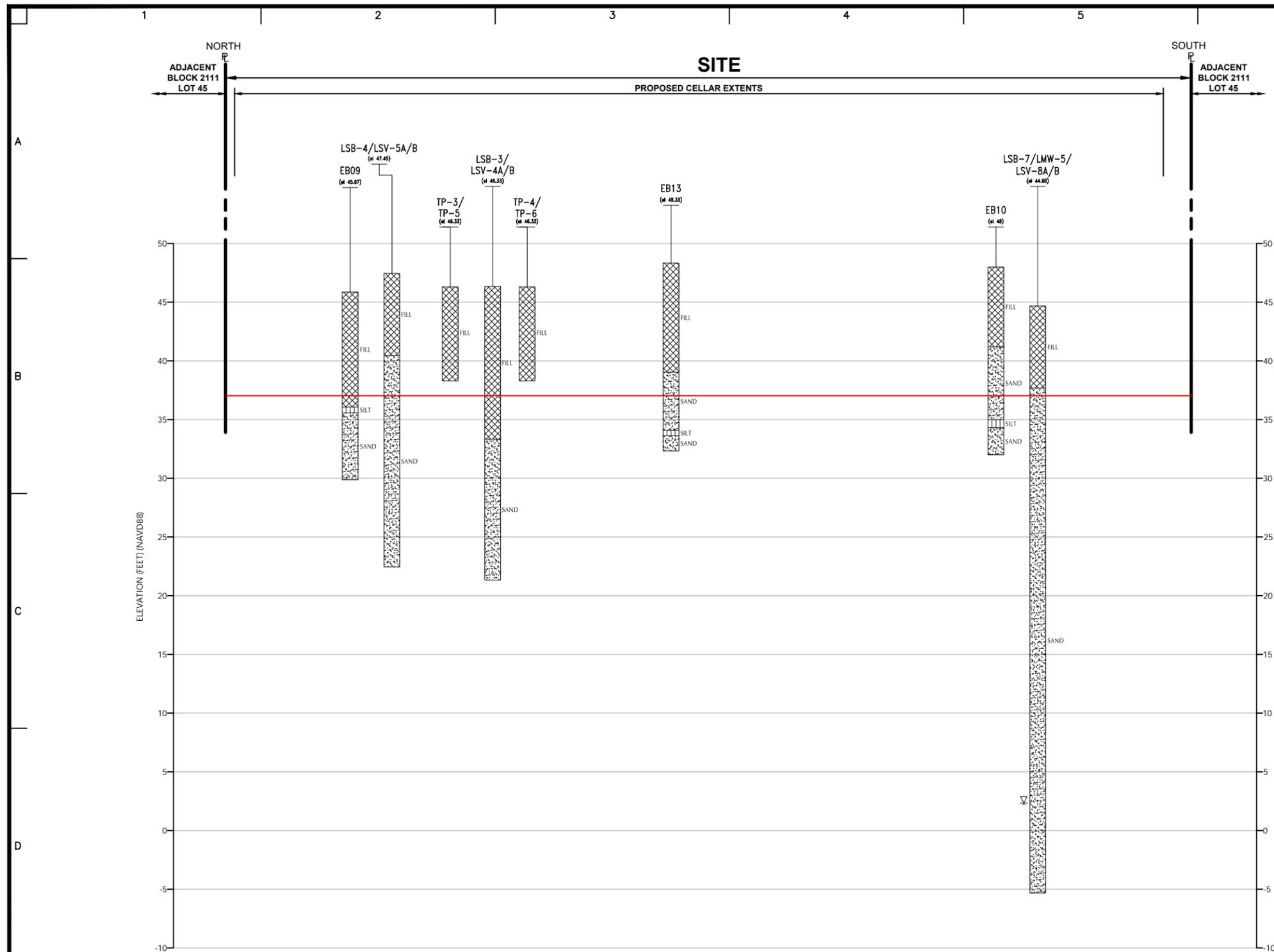
1. THIS PROFILE SHOWS GENERALIZED SUBSURFACE CONDITIONS AT THE RESPECTIVE BORING LOCATIONS. VARIATIONS IN SUBSURFACE CONDITIONS SHOULD BE EXPECTED BETWEEN BORINGS. FOR A DETAILED DESCRIPTION OF CONDITIONS ENCOUNTERED, SEE BORING LOGS INCLUDED IN APPENDIX B AND APPENDIX H.
2. SOIL BORING LOCATIONS ARE APPROXIMATE. GROUND SURFACE ELEVATIONS OF SOIL BORINGS COLLOCATED WITH MONITORING WELLS (LSB-1, LSB-2, AND LSB-5 THROUGH LSB-7) WERE SURVEYED USING GPS LOCATING TECHNIQUES. GROUND SURFACE ELEVATIONS OF EB07 THROUGH EB12, LSB-3, AND LSB-4 WERE INFERRED USING LIDAR FILES.
3. SOIL BORINGS EB07 THROUGH EB13 WERE COMPLETED DURING THE 2015 SUBSURFACE INVESTIGATION AND SOIL BORINGS LSB-1 THROUGH LSB-7 WERE COMPLETED DURING THE 2021 REMEDIAL INVESTIGATION.
4. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, NAVD88.

SUBSURFACE PROFILE A-A'
 VERTICAL SCALE: 1" = 10'
 HORIZONTAL SCALE: 1" = 20'

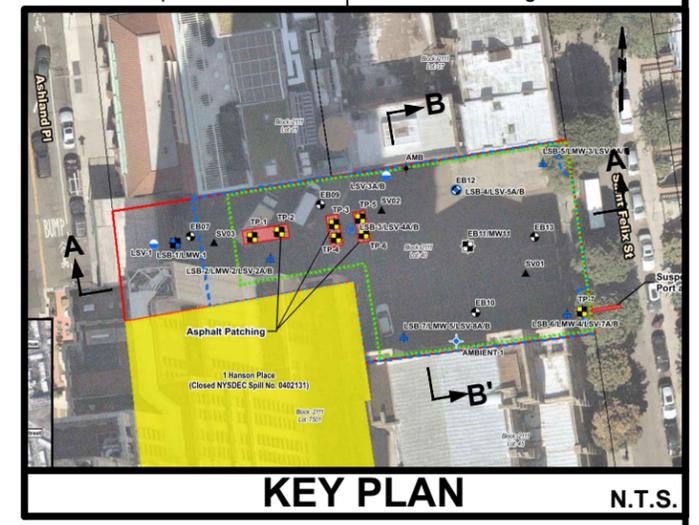
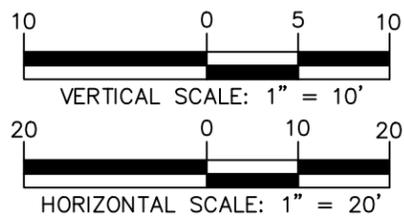


WARNING: IT IS A VIOLATION OF THE NYS EDUCATION LAW ARTICLE 145 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, LAND SURVEYOR OR GEOLOGIST, TO ALTER THIS ITEM IN ANY WAY.

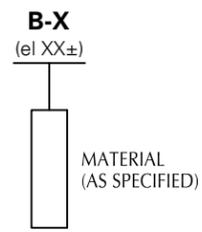
| | | | | |
|--|-----------------------------------|--------------------------------|-------------|-------------|
| LANGAN Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. 300 Kimball Drive Parsippany, NJ 07054 T: 973.560.4900 F: 973.560.4901 www.langan.com NJ Certificate of Authorization No.24GA27996400 | Project | Drawing Title | Project No. | Drawing No. |
| | 130 SAINT FELIX STREET | SUBSURFACE PROFILE A-A' | 100842301 | 2A |
| | BLOCK No. 2111, LOT No. 40 | | Date | |
| | BROOKLYN KINGS COUNTY NEW YORK | | 07/01/2021 | |
| | | | Drawn By | |
| | | | AC | |
| | | | Checked By | |
| | | | BR | |



SUBSURFACE PROFILE B-B'
 VERTICAL SCALE: 1" = 10'
 HORIZONTAL SCALE: 1" = 20'



BORING KEY:



LEGEND:

- B-X DRILLED BORING IDENTIFICATION
- el XX± APPROXIMATE SURFACE ELEVATION AT THE TIME OF BORING (NAVD88)
- ▽ GROUNDWATER IN MONITORING WELL
- AVERAGE ELEVATION OF FILL/NATIVE INTERFACE

NOTES:

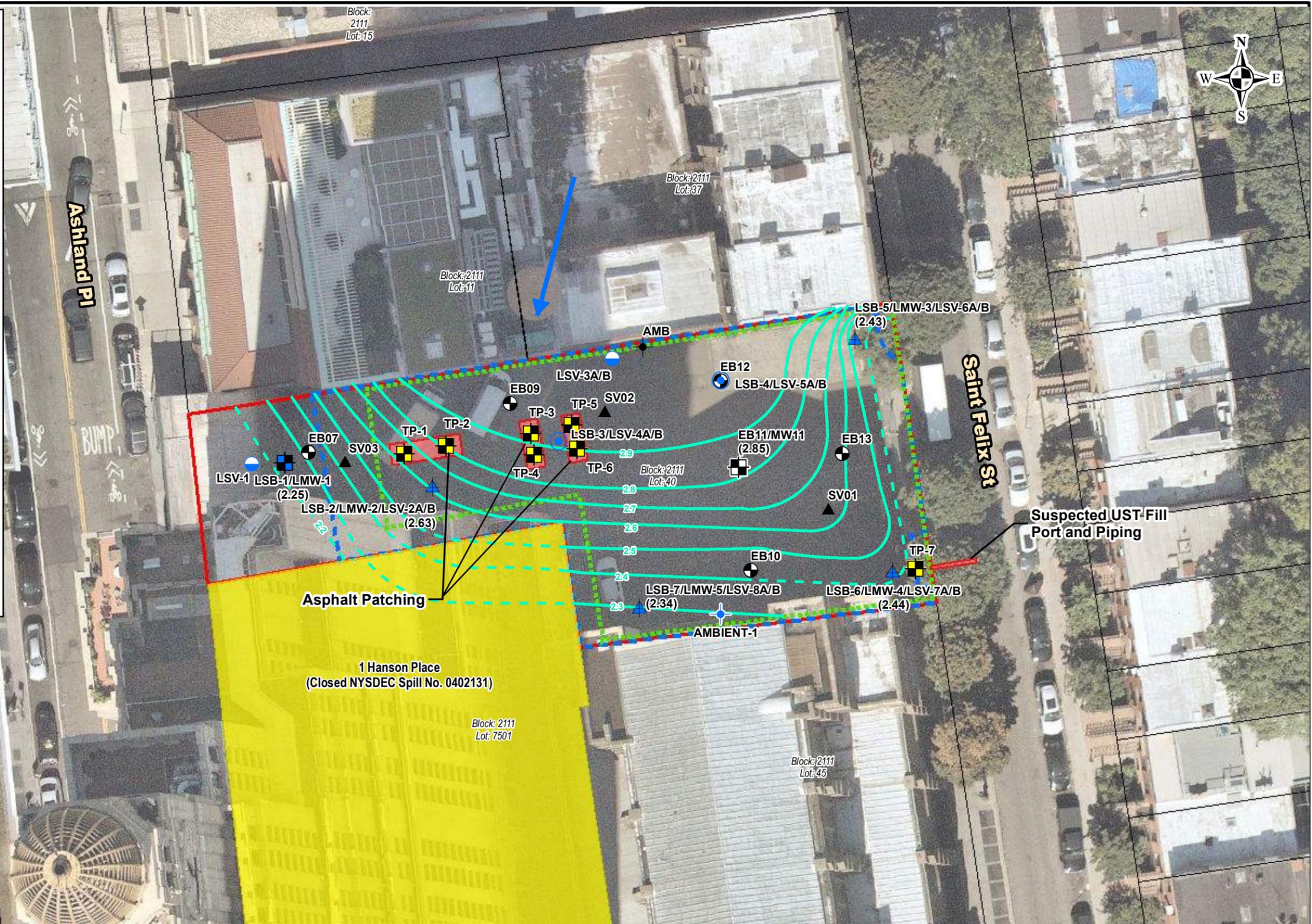
1. THIS PROFILE SHOWS GENERALIZED SUBSURFACE CONDITIONS AT THE RESPECTIVE BORING LOCATIONS. VARIATIONS IN SUBSURFACE CONDITIONS SHOULD BE EXPECTED BETWEEN BORINGS. FOR A DETAILED DESCRIPTION OF CONDITIONS ENCOUNTERED, SEE BORING LOGS INCLUDED IN APPENDIX B AND APPENDIX H.
2. SOIL BORING LOCATIONS ARE APPROXIMATE. GROUND SURFACE ELEVATIONS OF SOIL BORINGS COLLOCATED WITH MONITORING WELLS (LSB-1, LSB-2, AND LSB-5 THROUGH LSB-7) WERE SURVEYED USING GPS LOCATING TECHNIQUES. GROUND SURFACE ELEVATIONS OF EB07 THROUGH EB12, LSB-3, AND LSB-4 WERE INFERRED USING LIDAR FILES.
3. SOIL BORINGS EB07 THROUGH EB13 WERE COMPLETED DURING THE 2015 SUBSURFACE INVESTIGATION AND SOIL BORINGS LSB-1 THROUGH LSB-7 WERE COMPLETED DURING THE 2021 REMEDIAL INVESTIGATION.
4. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, NAVD88.

WARNING: IT IS A VIOLATION OF THE NYS EDUCATION LAW ARTICLE 145 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, LAND SURVEYOR OR GEOLOGIST, TO ALTER THIS ITEM IN ANY WAY.

| | | | | |
|--|-------------------------------|--------------------------------|-------------|-------------|
| <p>LANGAN Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. 300 Kimball Drive Parsippany, NJ 07054 T: 973.560.4900 F: 973.560.4901 www.langan.com NJ Certificate of Authorization No.24GA27996400</p> | Project | Drawing Title | Project No. | Drawing No. |
| | 130 SAINT FELIX STREET | SUBSURFACE PROFILE B-B' | 100842301 | 2B |
| | BLOCK No. 2111, LOT No. 40 | | Date | |
| | BROOKLYN NEW YORK | | 07/01/2021 | |
| | | | Drawn By | |
| | | | AC | |
| | | | Checked By | |
| | | | BR | |

Legend

- Approximate Site Boundary
- Tax Lot
- AOC-1 - Historical Site Operations and Potential Historical Presence of USTs
- AOC-2 - Historical Adjacent and Surrounding Site Operations
- Proposed Building Extents
- Proposed Cellar Extents
- Inferred Anticipated Groundwater Flow Direction
- Groundwater Elevation Contour
- - - Inferred Groundwater Elevation Contour
- + Ambient Air Sample (Langan 2015)
- Soil Boring (Langan 2015)
- ▲ Soil Vapor Sample (Langan 2015)
- ⊠ Soil Boring/Monitoring Well (Langan 2015)
- ⊞ Test Pit (Langan 2021)
- + Ambient Air Sample (Langan 2021)
- ⊠ Soil Boring/Monitoring Well (Langan 2021)
- Soil Boring/Soil Vapor Sample (Langan 2021)
- ▲ Soil Boring/Monitoring Well/Soil Vapor Sample (Langan 2021)
- Soil Vapor Sample (Langan 2021)



Notes:

1. Aerial imagery provided by Nearmap Ltd., collected September 20, 2019.
2. Parcel information from MapPLUTO 18v2 copyrighted by the New York City Department of Planning.
3. Historic sample locations from June 2015 Subsurface Investigation Report, prepared by Langan.
4. All historic sample locations are approximate.
5. UST fill port and piping were detected during NOVA's 2020 Geophysical Survey. Approximate locations of asphalt patches are based on field observations made by Langan in 2020.
6. LSV-1 and LSV-2A through LSV-8A will be installed to 5 ft bgs and LSV-2B through LSV-8B will be installed to 20.5 ft bgs.
7. All sample locations are approximate and based on field measurements.
8. All monitoring well elevations were collected using classic survey techniques.
9. Groundwater elevations are referenced to North American Vertical Datum of 1988.



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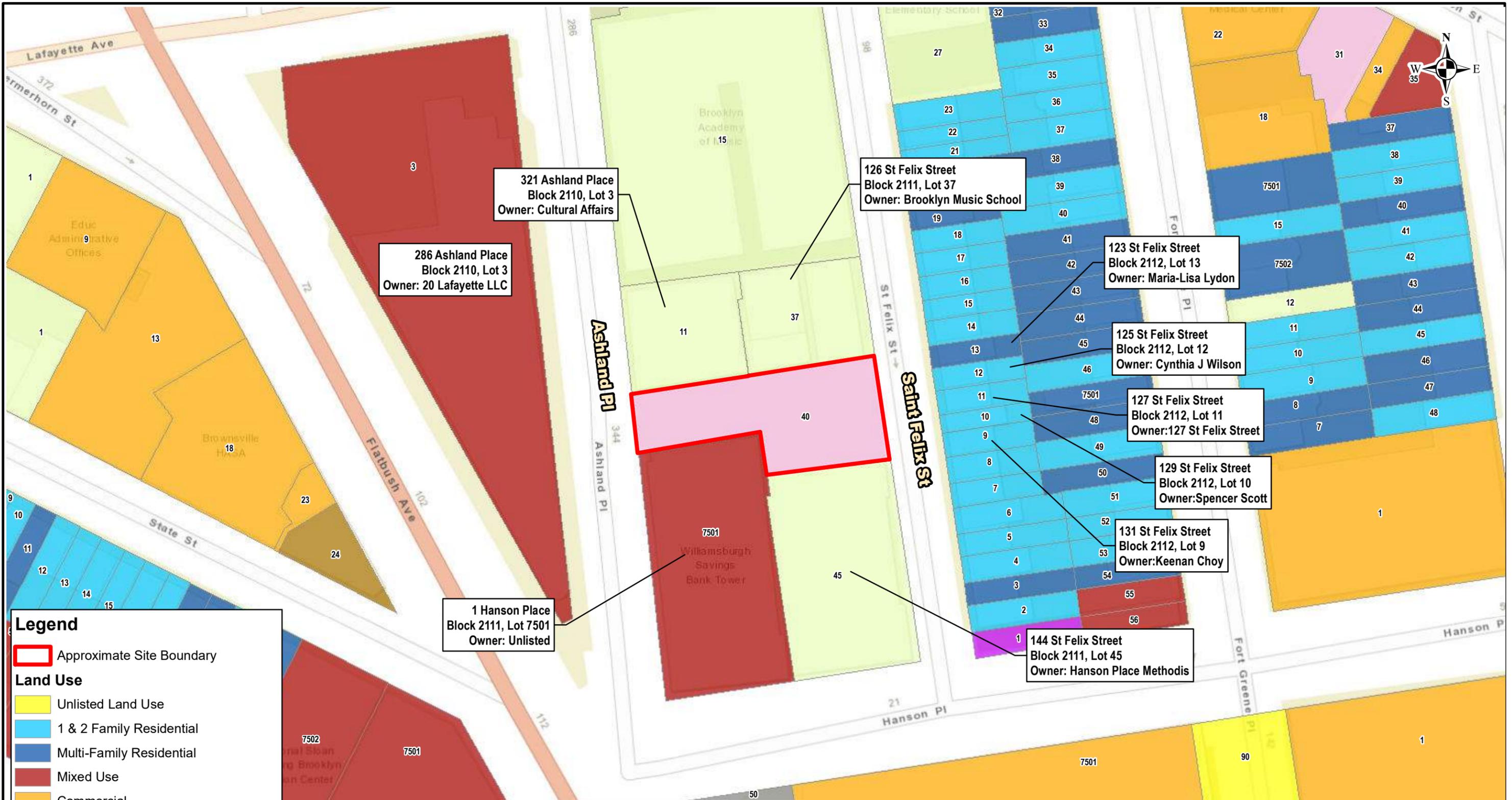
Langan Engineering & Environmental Services, Inc.
Langan Engineering, Environmental, Surveying,
Landscape Architecture and Geology, D.P.C.
Langan International LLC
Collectively known as Langan

NJ CERTIFICATE OF AUTHORIZATION No. 24GA27996400

Project
130 SAINT FELIX STREET
BLOCK No. 2111, LOT No. 40
BROOKLYN NEW YORK

Drawing Title
POTENTIOMETRIC SURFACE MAP

| | | |
|-------------|-----------|----------|
| Project No. | 100842301 | 3 |
| Date | 8/12/2021 | |
| Scale | 1" = 30' | |
| Drawn By | JF | |



Legend

Approximate Site Boundary

Land Use

- Unlisted Land Use
- 1 & 2 Family Residential
- Multi-Family Residential
- Mixed Use
- Commercial
- Industrial
- Transportation & Utility
- Public Facilities & Outdoor Recreation
- Parking Facilities
- Vacant Land



Notes:
 1. World street basemap is provided through Langan's Esri ArcGIS software licensing and ArcGIS online.
 2. Parcel information from MapPLUTO 20v5 copyrighted by the New York City Department of Planning.

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NJ CERTIFICATE OF AUTHORIZATION No. 24GA27996400

Project
130 SAINT FELIX STREET
 BLOCK No. 2111, LOT No. 40
 BROOKLYN NEW YORK

Drawing Title
ADJACENT PROPERTIES AND SURROUNDING SITES

| | |
|--------------------------|--------------------|
| Project No. 100842301 | Figure 4 |
| Date 7/28/2021 | |
| Scale 1" = 75' | |
| Drawn By JF | |

Legend

- Approximate Site Boundary
- Tax Lot
- AOC-1 - Historical Site Operations and Potential Historical Presence of USTs
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- Soil Boring (Langan 2015)
- Soil Vapor Sample (Langan 2015)
- Soil Boring/Monitoring Well (Langan 2015)
- Test Pit (Langan 2021)
- Ambient Air Sample 2021, Langan 2015
- Soil Boring/Monitoring Well (Langan 2021)
- Soil Boring/Soil Vapor Sample (Langan 2021)
- Soil Boring/Monitoring Well/Soil Vapor Sample (Langan 2021)
- Soil Vapor Sample (Langan 2021)



Notes:

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6. LSV-1 and LSV-2A through LSV-8A were installed to 5 ft bgs and LSV-2B through LSV-8B were installed to 20.5 bgs.

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NJ CERTIFICATE OF AUTHORIZATION No. 24GA27996400

Project
130 SAINT FELIX STREET
BLOCK No. 2111, LOT No. 40
BROOKLYN NEW YORK

Drawing Title
SITE PLAN

| | | |
|-------------|-----------|----------|
| Project No. | 100842301 | 5 |
| Date | 8/9/2021 | |
| Scale | 1" = 30' | |
| Drawn By | JF | |

Legend

- Approximate Site Boundary
- Tax Lot
- AOC-1 - Historical Site Operations and Potential Historical Presence of USTs
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- Soil Boring/Monitoring Well (Langan 2015)
- Test Pit (Langan 2021)
- Ambient Air Sample 2021, Langan 2015
- Soil Boring/Monitoring Well (Langan 2021)
- Soil Boring/Soil Vapor Sample (Langan 2021)
- Soil Boring/Monitoring Well/Soil Vapor Sample (Langan 2021)
- Soil Vapor Sample (Langan 2021)

| Sample ID | 015_L5B1 0-2 | 016_L5B1 8-10 | 023_L5B1 40-42 |
|---------------------------------|--------------|---------------|----------------|
| Sample Date | 4/21/2021 | 4/21/2021 | 4/23/2021 |
| Sample Depth (feet bgs) | 0-2 | 8-10 | 40-42 |
| VOCs (mg/kg) | | | |
| Naphthalene | ND | ND | ND |
| Total Xylenes | ND | ND | ND |
| SVOCs (mg/kg) | | | |
| 3 & 4 Methylphenol (m&p Cresol) | ND | ND | ND |
| Acenaphthene | 0.11 | J | ND |
| Anthracene | 0.34 | J | ND |
| Benzolanthracene | 0.26 | J | ND |
| Benzolopyrene | 0.4 | J | ND |
| Benzofluoranthene | 0.2 | J | ND |
| Benzol(h,i)Perylene | 0.14 | J | ND |
| Chrysene | 0.41 | J | ND |
| Dibenz(a,h)anthracene | ND | ND | ND |
| Dibenzofuran | ND | ND | ND |
| Fluoranthene | 0.68 | J | ND |
| Fluorene | 0.93 | J | ND |
| Indeno(1,2,3-cd)pyrene | 0.2 | J | ND |
| Naphthalene | ND | ND | ND |
| Phenanthrene | 0.67 | J | ND |
| Phenol | ND | ND | ND |
| Pyrene | 0.59 | J | ND |
| Pesticides (mg/kg) | | | |
| 4,4'-DDT | ND | ND | ND |
| PFAS (ppb) | | | |
| Perfluorooctanoic Acid (PFOA) | 0.126 | J | 1.12 |

| Sample ID | 009_L5B3 0-2 | 007_L5B3 13-15 | 006_L5B3 20-22 |
|---------------------------------|--------------|----------------|----------------|
| Sample Date | 4/21/2021 | 4/21/2021 | 4/21/2021 |
| Sample Depth (feet bgs) | 0-2 | 13-15 | 20-22 |
| VOCs (mg/kg) | | | |
| Naphthalene | ND | ND | ND |
| Total Xylenes | ND | ND | ND |
| SVOCs (mg/kg) | | | |
| 3 & 4 Methylphenol (m&p Cresol) | ND | ND | ND |
| Acenaphthene | ND | ND | ND |
| Anthracene | ND | ND | 0.036 |
| Benzolanthracene | ND | ND | ND |
| Benzolopyrene | ND | ND | ND |
| Benzofluoranthene | ND | ND | 0.037 |
| Benzol(h,i)Perylene | ND | ND | ND |
| Benzol(k)fluoranthene | ND | ND | ND |
| Chrysene | ND | ND | 0.03 |
| Dibenz(a,h)anthracene | ND | ND | ND |
| Dibenzofuran | ND | ND | ND |
| Fluoranthene | ND | ND | 0.06 |
| Fluorene | ND | ND | ND |
| Indeno(1,2,3-cd)pyrene | ND | ND | ND |
| Naphthalene | ND | ND | ND |
| Phenanthrene | ND | ND | 0.042 |
| Phenol | ND | ND | 0.055 |
| Pyrene | 0.02 | J | ND |
| Pesticides (mg/kg) | | | |
| 4,4'-DDT | ND | ND | ND |
| PFAS (ppb) | | | |
| Perfluorooctanoic Acid (PFOA) | 0.126 | J | ND |

| Sample ID | EB12 7-9 |
|---------------------------------|-----------|
| Sample Date | 5/30/2015 |
| Sample Depth (feet bgs) | 7-9 |
| VOCs (mg/kg) | |
| Naphthalene | 53 |
| Total Xylenes | 0.54 |
| SVOCs (mg/kg) | |
| 3 & 4 Methylphenol (m&p Cresol) | 8.1 |
| Acenaphthene | 58 |
| Anthracene | 140 |
| Benzolanthracene | 270 |
| Benzolopyrene | 260 |
| Benzofluoranthene | 270 |
| Benzol(h,i)Perylene | 180 |
| Benzol(k)fluoranthene | 190 |
| Chrysene | 270 |
| Dibenz(a,h)anthracene | 60 |
| Dibenzofuran | 71 |
| Fluoranthene | 600 |
| Fluorene | 76 |
| Indeno(1,2,3-cd)pyrene | 110 |
| Naphthalene | 120 |
| Phenanthrene | 110 |
| Phenol | 620 |
| Pyrene | 3.9 |
| Pesticides (mg/kg) | |
| 4,4'-DDT | ND |

| Sample ID | 001_L5B5 0-2 | 017_DUP01 04212 | 002_L5B5 13-15 | 002_L5B5 42-44 |
|---------------------------------|--------------|-----------------|----------------|----------------|
| Sample Date | 4/21/2021 | 4/21/2021 | 4/21/2021 | 4/23/2021 |
| Sample Depth (feet bgs) | 0-2 | 0-2 | 13-15 | 42-44 |
| VOCs (mg/kg) | | | | |
| Naphthalene | ND | ND | ND | ND |
| Total Xylenes | ND | ND | ND | ND |
| SVOCs (mg/kg) | | | | |
| 3 & 4 Methylphenol (m&p Cresol) | ND | ND | ND | ND |
| Acenaphthene | ND | ND | ND | ND |
| Anthracene | ND | ND | ND | ND |
| Benzolanthracene | 0.96 | 1.1 | ND | ND |
| Benzolopyrene | 1.1 | 1.1 | ND | ND |
| Benzofluoranthene | 0.67 | J | 0.82 | ND |
| Benzol(h,i)Perylene | 0.43 | J | 0.48 | J |
| Benzol(k)fluoranthene | 1.1 | J | 1.1 | ND |
| Chrysene | 0.15 | J | 0.17 | J |
| Dibenz(a,h)anthracene | 0.17 | J | 0.12 | J |
| Dibenzofuran | 1.8 | J | 2 | ND |
| Fluoranthene | ND | ND | ND | ND |
| Fluorene | 0.7 | J | 0.2 | ND |
| Indeno(1,2,3-cd)pyrene | 0.45 | J | 0.34 | J |
| Naphthalene | 0.99 | J | 0.92 | J |
| Phenanthrene | ND | ND | ND | ND |
| Phenol | ND | ND | ND | ND |
| Pyrene | 1.6 | J | 1.7 | ND |
| Pesticides (mg/kg) | | | | |
| 4,4'-DDT | ND | ND | ND | ND |
| PFAS (ppb) | | | | |
| Perfluorooctanoic Acid (PFOA) | 0.102 | J | 0.155 | J |

| Sample ID | 003_L5B4 0-2 | 004_L5B4 8-10 | 008_L5B4 20-22 |
|---------------------------------|--------------|---------------|----------------|
| Sample Date | 4/21/2021 | 4/21/2021 | 4/21/2021 |
| Sample Depth (feet bgs) | 0-2 | 8-10 | 20-22 |
| VOCs (mg/kg) | | | |
| Naphthalene | ND | 0.012 | ND |
| Total Xylenes | ND | ND | ND |
| SVOCs (mg/kg) | | | |
| 3 & 4 Methylphenol (m&p Cresol) | ND | ND | ND |
| Acenaphthene | 1.9 | ND | ND |
| Anthracene | ND | ND | ND |
| Benzolanthracene | 4.5 | ND | ND |
| Benzolopyrene | 3.6 | ND | ND |
| Benzofluoranthene | 5.2 | ND | ND |
| Benzol(h,i)Perylene | 2 | ND | ND |
| Benzol(k)fluoranthene | 1.4 | ND | ND |
| Chrysene | 4.1 | ND | ND |
| Dibenz(a,h)anthracene | 0.6 | ND | ND |
| Dibenzofuran | 0.6 | ND | ND |
| Fluoranthene | 0.91 | ND | ND |
| Fluorene | 2.2 | ND | ND |
| Indeno(1,2,3-cd)pyrene | 0.67 | 0.04 | J |
| Naphthalene | 8.4 | 1.0 | ND |
| Phenanthrene | 6.9 | ND | ND |
| Phenol | ND | ND | ND |
| Pyrene | 6.9 | ND | ND |
| Pesticides (mg/kg) | | | |
| 4,4'-DDT | 0.00636 | ND | ND |
| PFAS (ppb) | | | |
| Perfluorooctanoic Acid (PFOA) | 0.158 | J | 0.165 |

| Sample ID | EB13 7-9 |
|---------------------------------|-----------|
| Sample Date | 5/30/2015 |
| Sample Depth (feet bgs) | 7-9 |
| VOCs (mg/kg) | |
| Naphthalene | ND |
| Total Xylenes | ND |
| SVOCs (mg/kg) | |
| 3 & 4 Methylphenol (m&p Cresol) | ND |
| Acenaphthene | 0.18 |
| Anthracene | 0.46 |
| Benzolanthracene | 0.84 |
| Benzolopyrene | 1 |
| Benzofluoranthene | 0.57 |
| Benzol(h,i)Perylene | 0.37 |
| Benzol(k)fluoranthene | 0.31 |
| Chrysene | 0.15 |
| Dibenz(a,h)anthracene | 0.17 |
| Dibenzofuran | 2.4 |
| Fluoranthene | 0.2 |
| Fluorene | 0.48 |
| Indeno(1,2,3-cd)pyrene | 0.2 |
| Naphthalene | 2 |
| Phenanthrene | 2 |
| Phenol | 2 |
| Pyrene | 2 |
| Pesticides (mg/kg) | |
| 4,4'-DDT | ND |

| Sample ID | EB07 10-12 | DUP01 053015 |
|---------------------------------|------------|--------------|
| Sample Date | 5/30/2015 | 5/30/2015 |
| Sample Depth (feet bgs) | 10-12 | 10-12 |
| VOCs (mg/kg) | | |
| Naphthalene | ND | ND |
| Total Xylenes | 0.00024 | J |
| SVOCs (mg/kg) | | |
| 3 & 4 Methylphenol (m&p Cresol) | ND | ND |
| Acenaphthene | ND | ND |
| Anthracene | ND | ND |
| Benzolanthracene | ND | ND |
| Benzolopyrene | ND | ND |
| Benzofluoranthene | ND | ND |
| Benzol(h,i)Perylene | ND | ND |
| Benzol(k)fluoranthene | ND | ND |
| Chrysene | ND | ND |
| Dibenz(a,h)anthracene | ND | ND |
| Dibenzofuran | ND | ND |
| Fluoranthene | ND | ND |
| Fluorene | ND | ND |
| Indeno(1,2,3-cd)pyrene | ND | ND |
| Naphthalene | ND | ND |
| Phenanthrene | ND | ND |
| Phenol | ND | ND |
| Pyrene | ND | ND |
| Pesticides (mg/kg) | | |
| 4,4'-DDT | ND | ND |

| Sample ID | 009_L5B2 0-2 | 010_L5B2 8-10 | 025_L5B2 42-44 | 026_DUP2 |
|---------------------------------|--------------|---------------|----------------|-----------|
| Sample Date | 4/21/2021 | 4/21/2021 | 4/28/2021 | 4/28/2021 |
| Sample Depth (feet bgs) | 0-2 | 8-10 | 42-44 | 42-44 |
| VOCs (mg/kg) | | | | |
| Naphthalene | ND | ND | ND | ND |
| Total Xylenes | ND | ND | ND | ND |
| SVOCs (mg/kg) | | | | |
| 3 & 4 Methylphenol (m&p Cresol) | ND | ND | ND | ND |
| Acenaphthene | ND | ND | ND | ND |
| Anthracene | ND | ND | ND | ND |
| Benzolanthracene | 0.098 | J | ND | ND |
| Benzolopyrene | 0.098 | J | ND | ND |
| Benzofluoranthene | 0.13 | ND | ND | ND |
| Benzol(h,i)Perylene | 0.08 | J | ND | ND |
| Benzol(k)fluoranthene | 0.043 | J | ND | ND |
| Chrysene | 0.13 | ND | ND | ND |
| Dibenz(a,h)anthracene | ND | ND | ND | ND |
| Dibenzofuran | ND | ND | ND | ND |
| Fluoranthene | 0.22 | ND | ND | ND |
| Fluorene | ND | ND | ND | ND |
| Indeno(1,2,3-cd)pyrene | 0.073 | J | ND | ND |
| Naphthalene | ND | ND | ND | ND |
| Phenanthrene | 0.16 | ND | ND | ND |
| Phenol | ND | ND | ND | ND |
| Pyrene | 0.2 | ND | ND | ND |
| Pesticides (mg/kg) | | | | |
| 4,4'-DDT | ND | ND | ND | ND |
| PFAS (ppb) | | | | |
| Perfluorooctanoic Acid (PFOA) | 0.111 | J | 0.568 | ND |

| Sample ID | 013_L5B7 0-2 | 014_L5B7 8-10 | 027_L5B7 42-44 |
|---------------------------------|--------------|---------------|----------------|
| Sample Date | 4/21/2021 | 4/21/2021 | 4/28/2021 |
| Sample Depth (feet bgs) | 0-2 | 8-10 | 42-44 |
| VOCs (mg/kg) | | | |
| Naphthalene | ND | ND | ND |
| Total Xylenes | ND | ND | ND |
| SVOCs (mg/kg) | | | |
| 3 & 4 Methylphenol (m&p Cresol) | ND | ND | ND |
| Acenaphthene | ND | ND | ND |
| Anthracene | ND | ND | ND |
| Benzolanthracene | 0.12 | ND | ND |
| Benzolopyrene | 0.091 | J | ND |
| Benzofluoranthene | 0.15 | ND | ND |
| Benzol(h,i)Perylene | 0.058 | J | ND |
| Benzol(k)fluoranthene | 0.041 | J | ND |
| Chrysene | 0.14 | J | ND |
| Dibenz(a,h)anthracene | ND | ND | ND |
| Dibenzofuran | ND | ND | ND |
| Fluoranthene | 0.26 | ND | ND |
| Fluorene | ND | ND | ND |
| Indeno(1,2,3-cd)pyrene | 0.061 | J | ND |
| Naphthalene | ND | ND | ND |
| Phenanthrene | 0.17 | ND | ND |
| Phenol | ND | ND | ND |
| Pyrene | 0.24 | ND | ND |
| Pesticides (mg/kg) | | | |
| 4,4'-DDT | ND | ND | ND |
| PFAS (ppb) | | | |
| Perfluorooctanoic Acid (PFOA) | 0.498 | J | 0.907 |

| Sample ID | EB10 1-2 |
|---------------------------------|-----------|
| Sample Date | 5/30/2015 |
| Sample Depth (feet bgs) | 1-2 |
| VOCs (mg/kg) | |
| Naphthalene | ND |
| Total Xylenes | ND |
| SVOCs (mg/kg) | |
| 3 & 4 Methylphenol (m&p Cresol) | ND |
| Acenaphthene | 1.5 |
| Anthracene | ND |
| Benzolanthracene | 4.4 |
| Benzolopyrene | 6 |
| Benzofluoranthene | 3 |
| Benzol(h,i)Perylene | 2.1 |
| Benzol(k)fluoranthene | 5.4 |
| Chrysene | 0.6 |
| Dibenz(a,h)anthracene | 0.22 |
| Dibenzofuran | 10 |
| Fluoranthene | 0.5 |
| Fluorene | 0.11 |
| Indeno(1,2,3-cd)pyrene | 3 |
| Naphthalene | 1.4 |
| Phenanthrene | 6.5 |
| Phenol | ND |
| Pyrene | 9.3 |
| Pesticides (mg/kg) | |
| 4,4'-DDT | 0.098 |

| Sample ID | 011_L5B6 0-2 | 012_L5B6 13-15 | 021 |
|-----------|--------------|----------------|-----|
|-----------|--------------|----------------|-----|

Legend

- Approximate Site Boundary
- Tax Lot
- AOC-1 - Historical Site Operations and Potential Historical Presence of USTs
- AOC-2 - Historical Adjacent and Surrounding Site Operations
- Proposed Building Extents
- Proposed Cellar Extents
- Inferred Anticipated Groundwater Flow Direction
- Groundwater Elevation Contour
- - - Inferred Groundwater Elevation Contour
- + Ambient Air Sample (Langan 2015)
- ⊕ Soil Boring (Langan 2015)
- ▲ Soil Vapor Sample (Langan 2015)
- ⊕ Soil Boring/Monitoring Well (Langan 2015)
- ⊠ Test Pit (Langan 2021)
- + Ambient Air Sample (Langan 2021)
- ⊕ Soil Boring/Monitoring Well (Langan 2021)
- ⊕ Soil Boring/Soil Vapor Sample (Langan 2021)
- ▲ Soil Boring/Monitoring Well/Soil Vapor Sample (Langan 2021)
- ⊕ Soil Vapor Sample (Langan 2021)

| Analyte | NYSDEC SGVs |
|-------------------------------------|-------------|
| VOCs (µg/L) | |
| Chloroform | 7 |
| Trichloroethene (TCE) | 5 |
| SVOCs (µg/L) | |
| Benzo(a)anthracene | 0.002 |
| Benzo(a)pyrene | 0 |
| Benzo(b)fluoranthene | 0.002 |
| Benzo(k)fluoranthene | 0.002 |
| Bis(2-ethylhexyl) phthalate | 5 |
| Chrysene | 0.002 |
| Indeno(1,2,3-cd)pyrene | 0.002 |
| PCBs (µg/L) | |
| Total PCBs | 0.09 |
| Inorganics (µg/L) | |
| Chromium, Total | 50 |
| Chromium, Total (Dissolved) | 50 |
| Iron | 300 |
| Iron (Dissolved) | 300 |
| Lead | 25 |
| Lead (Dissolved) | 25 |
| Manganese | 300 |
| Manganese (Dissolved) | 300 |
| Sodium | 20,000 |
| Sodium (Dissolved) | 20,000 |
| PFAS (ng/L) | |
| Perfluorooctanesulfonic Acid (PFOS) | 10 |
| Perfluorooctanoic Acid (PFOA) | 10 |

Notes:
 1. Groundwater 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 703.5, the NYSDC Technical and Operational Guidance Series (TOGS) 1.1.1, Ambient Water Quality Standards and Guidance Values for Class GA Water (herein collectively referenced as "NYSDEC SGVs"), and the NYSDC Part 375 Remedial Programs Guidelines for Sampling and Analysis of Per- and Polyfluoroalkyl Substances (PFAS) (January 2021). The 1,4-Dioxane value reflects the drinking water maximum contaminant level (MCL) adopted by New York State for public water systems (July 2020). Pursuant to Part 375-1.7(f)(2), the NYSDC will treat the MCL as relevant and appropriate and will consider this value in remedy selection.
 2. Detected analytical results above NYSDC SGVs are bolded and shaded.
 3. Sample 049_DUP-1 is a duplicate sample of 048_LMW-4 and sample GWDUP01_053015 is a duplicate sample of MW11_053015.
 4. µg/L = micrograms per liter
 5. ng/L = nanograms per liter
 6. NA = Not analyzed
 7. ND = Not detected
Qualifiers:
 B = The analyte was found in the associated analysis batch blank.
 J = The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.

- Notes:**
 1. Aerial imagery provided by Nearmap Ltd., collected September 20, 2019.
 2. Parcel information from MapPLUTO 18v2 copyrighted by the New York City Department of Planning.
 3. Historic sample locations from June 2015 Subsurface Investigation Report, prepared by Langan.
 4. All sample locations are approximate and based on field measurements.
 5. All monitoring well elevations were collected using classic survey techniques.
 6. UST fill port and piping were detected during NOVA's 2020 Geophysical Survey. Approximate locations of asphalt patches are based on field observations made by Langan in 2020.
 7. LSV-1 and LSV-2A through LSV-8A were installed to 5 ft bgs and LSV-2B through LSV-8B were installed to 20.5 bgs.
 8. Chemboxes for samples collected during the 2021 RI are shown with a bold outline.
 9. Groundwater elevations are referenced to the North American Vertical Datum of 1988.

| Sample ID | 055_LMW-1 | 054_LMW-2 |
|-------------------------------------|-----------|-----------|
| Sample Date | 5/4/2021 | 5/4/2021 |
| VOCs (µg/L) | | |
| Chloroform | 14 | 24 |
| Trichloroethene (TCE) | 2.1 | 4.7 |
| SVOCs (µg/L) | | |
| Benzo(a)anthracene | ND | ND |
| Benzo(a)pyrene | ND | ND |
| Benzo(b)fluoranthene | ND | ND |
| Benzo(k)fluoranthene | ND | ND |
| Bis(2-ethylhexyl) phthalate | ND | 6.1 |
| Chrysene | ND | ND |
| Indeno(1,2,3-cd)pyrene | ND | ND |
| Pesticides (µg/L) | ND | ND |
| Herbicides (µg/L) | ND | ND |
| PCBs (µg/L) | ND | ND |
| Total PCBs | ND | ND |
| Inorganics (µg/L) | | |
| Chromium, Total | 0.28 J | 0.61 J |
| Chromium, Total (Dissolved) | ND | 0.52 J |
| Iron | 146 | 88.3 |
| Iron (Dissolved) | 74.6 | 24.2 J |
| Lead | 0.51 J | ND |
| Lead (Dissolved) | ND | ND |
| Manganese | 1,065 | 502.8 |
| Manganese (Dissolved) | 1,202 | 512.6 |
| Sodium | 91,200 | 40,200 |
| Sodium (Dissolved) | 91,100 | 41,000 |
| PFAS (ng/L) | | |
| Perfluorooctanesulfonic Acid (PFOS) | 12.7 | 4.25 |
| Perfluorooctanoic Acid (PFOA) | 59.3 | 19.7 |

| Sample ID | 056_MW11 |
|-------------------------------------|----------|
| Sample Date | 5/4/2021 |
| VOCs (µg/L) | |
| Chloroform | 27 |
| Trichloroethene (TCE) | 5.8 |
| SVOCs (µg/L) | |
| Benzo(a)anthracene | ND |
| Benzo(a)pyrene | ND |
| Benzo(b)fluoranthene | ND |
| Benzo(k)fluoranthene | ND |
| Bis(2-ethylhexyl) phthalate | ND |
| Chrysene | ND |
| Indeno(1,2,3-cd)pyrene | ND |
| Pesticides (µg/L) | ND |
| Herbicides (µg/L) | ND |
| PCBs (µg/L) | 0.176 B |
| Total PCBs | 0.176 B |
| Inorganics (µg/L) | |
| Chromium, Total | 3.43 |
| Chromium, Total (Dissolved) | 1.97 |
| Iron | 1,200 |
| Iron (Dissolved) | ND |
| Lead | 1.14 |
| Lead (Dissolved) | ND |
| Manganese | 85.06 |
| Manganese (Dissolved) | 1.24 |
| Sodium | 37,500 |
| Sodium (Dissolved) | 37,800 |
| PFAS (ng/L) | |
| Perfluorooctanesulfonic Acid (PFOS) | 3.61 |
| Perfluorooctanoic Acid (PFOA) | 27.1 |

| Sample ID | 053_LMW-3 |
|-------------------------------------|-----------|
| Sample Date | 5/4/2021 |
| VOCs (µg/L) | |
| Chloroform | 19 |
| Trichloroethene (TCE) | 3.5 |
| SVOCs (µg/L) | |
| Benzo(a)anthracene | 0.22 |
| Benzo(a)pyrene | 0.22 |
| Benzo(b)fluoranthene | 0.27 |
| Benzo(k)fluoranthene | 0.11 J |
| Bis(2-ethylhexyl) phthalate | 1.7 |
| Chrysene | 0.24 |
| Indeno(1,2,3-cd)pyrene | 0.19 |
| Pesticides (µg/L) | ND |
| Herbicides (µg/L) | ND |
| PCBs (µg/L) | ND |
| Total PCBs | ND |
| Inorganics (µg/L) | |
| Chromium, Total | 10.3 |
| Chromium, Total (Dissolved) | 0.66 J |
| Iron | 4,640 |
| Iron (Dissolved) | 68.42 |
| Lead | ND |
| Lead (Dissolved) | 706.6 |
| Manganese | 559.4 |
| Manganese (Dissolved) | 56,000 |
| Sodium | 57,300 |
| Sodium (Dissolved) | 57,300 |
| PFAS (ng/L) | |
| Perfluorooctanesulfonic Acid (PFOS) | 8.66 |
| Perfluorooctanoic Acid (PFOA) | 29 |

| Sample ID | MW11_053015 | GWDUP01_053015 |
|-----------------------------|-------------|----------------|
| Sample Date | 5/30/2015 | 5/30/2015 |
| VOCs (µg/L) | | |
| Chloroform | 15 | 15 |
| Trichloroethene (TCE) | 3.4 | 3.4 |
| SVOCs (µg/L) | | |
| Benzo(a)anthracene | ND | ND |
| Benzo(a)pyrene | ND | ND |
| Benzo(b)fluoranthene | ND | ND |
| Benzo(k)fluoranthene | ND | ND |
| Bis(2-ethylhexyl) phthalate | ND | ND |
| Chrysene | ND | ND |
| Indeno(1,2,3-cd)pyrene | ND | ND |
| Pesticides (µg/L) | NA | NA |
| Herbicides (µg/L) | NA | NA |
| PCBs (µg/L) | ND | ND |
| Total PCBs | ND | ND |
| Inorganics (µg/L) | | |
| Chromium, Total | 62.7 J | 41.1 J |
| Chromium, Total (Dissolved) | 4.1 J | 37 J |
| Iron | 3,090 J | 2,420 J |
| Iron (Dissolved) | 58 | 37 J |
| Lead | 2.2 J | 1.7 J |
| Lead (Dissolved) | ND | 0.1 J |
| Manganese | 160.6 | 130 |
| Manganese (Dissolved) | 66.9 | 60.4 |
| Sodium | 51,600 | 46,600 |
| Sodium (Dissolved) | 62,800 | 54,200 |
| PFAS (ng/L) | NA | NA |

| Sample ID | 047_LMW-5 |
|-------------------------------------|-----------|
| Sample Date | 5/3/2021 |
| VOCs (µg/L) | |
| Chloroform | 11 |
| Trichloroethene (TCE) | 1.5 |
| SVOCs (µg/L) | |
| Benzo(a)anthracene | ND |
| Benzo(a)pyrene | ND |
| Benzo(b)fluoranthene | ND |
| Benzo(k)fluoranthene | ND |
| Bis(2-ethylhexyl) phthalate | ND |
| Chrysene | ND |
| Indeno(1,2,3-cd)pyrene | ND |
| Pesticides (µg/L) | ND |
| Herbicides (µg/L) | ND |
| PCBs (µg/L) | 0.142 B |
| Total PCBs | 0.142 B |
| Inorganics (µg/L) | |
| Chromium, Total | 0.92 J |
| Chromium, Total (Dissolved) | 0.21 J |
| Iron | 382 J |
| Iron (Dissolved) | ND |
| Lead | ND |
| Lead (Dissolved) | ND |
| Manganese | 500.1 |
| Manganese (Dissolved) | 508.3 |
| Sodium | 59,900 |
| Sodium (Dissolved) | 64,700 |
| PFAS (ng/L) | |
| Perfluorooctanesulfonic Acid (PFOS) | 7.7 |
| Perfluorooctanoic Acid (PFOA) | 45.5 |

| Sample ID | 048_LMW-4 | 049_DUP-1 |
|-------------------------------------|-----------|-----------|
| Sample Date | 5/3/2021 | 5/3/2021 |
| VOCs (µg/L) | | |
| Chloroform | 14 | 14 |
| Trichloroethene (TCE) | 2.8 | 2.9 |
| SVOCs (µg/L) | | |
| Benzo(a)anthracene | 0.07 J | 0.07 J |
| Benzo(a)pyrene | 0.02 J | 0.02 J |
| Benzo(b)fluoranthene | 0.02 J | 0.03 J |
| Benzo(k)fluoranthene | 0.01 J | 0.02 J |
| Bis(2-ethylhexyl) phthalate | ND | ND |
| Chrysene | 0.08 J | 0.08 J |
| Indeno(1,2,3-cd)pyrene | ND | ND |
| Pesticides (µg/L) | ND | ND |
| Herbicides (µg/L) | ND | ND |
| PCBs (µg/L) | ND | ND |
| Total PCBs | ND | ND |
| Inorganics (µg/L) | | |
| Chromium, Total | 0.68 J | 0.5 J |
| Chromium, Total (Dissolved) | ND | 0.21 J |
| Iron | 148 | 97.1 |
| Iron (Dissolved) | ND | ND |
| Lead | 8.61 | 6.93 J |
| Lead (Dissolved) | 3.01 | 3 |
| Manganese | 199 | 185.1 |
| Manganese (Dissolved) | 199.9 | 185.6 |
| Sodium | 59,700 | 56,900 |
| Sodium (Dissolved) | 63,000 | 61,200 |
| PFAS (ng/L) | | |
| Perfluorooctanesulfonic Acid (PFOS) | 5.11 | 4.96 |
| Perfluorooctanoic Acid (PFOA) | 61.8 J | 60 J |

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Langan Engineering & Environmental Services, Inc.
 Langan Engineering, Environmental, Surveying,
 Landscape Architecture and Geology, D.P.C.
 Langan International LLC
 Collectively known as Langan

NJ CERTIFICATE OF AUTHORIZATION No. 24GA27996400

Project
130 SAINT FELIX STREET
 BLOCK No. 2111, LOT No. 40
 BROOKLYN NEW YORK

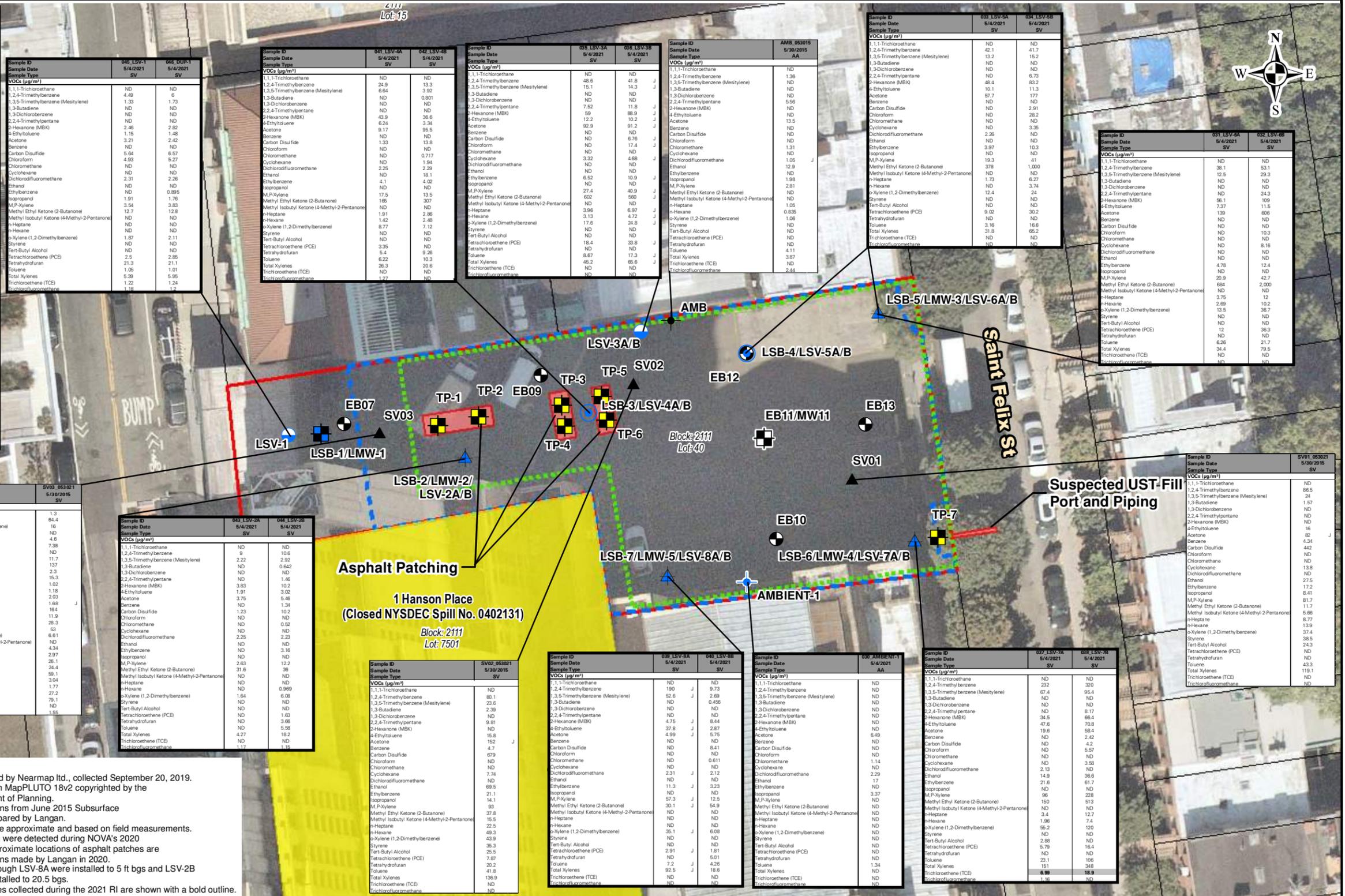
Drawing Title
SUBSURFACE INVESTIGATION AND REMEDIAL INVESTIGATION GROUNDWATER ANALYTICAL RESULTS

Project No. 100842301
 Date 8/12/2021
 Scale 1" = 30'
 Drawn By JF
 Figure **7**



Legend

- Approximate Site Boundary
- Tax Lot
- AOC-1 - Historical Site Operations and Potential Historical Presence of USTs
- AOC-2 - Historical Adjacent and Surrounding Site Operations
- Proposed Building Extents
- Proposed Cellar Extents
- Ambient Air Sample (Langan 2015)
- Soil Boring (Langan 2015)
- Soil Vapor Sample (Langan 2015)
- Soil Boring/Monitoring Well (Langan 2015)
- Test Pit (Langan 2021)
- Ambient Air Sample 2021, Langan 2015
- Soil Boring/Monitoring Well (Langan 2021)
- Soil Boring/Soil Vapor Sample (Langan 2021)
- Soil Boring/Monitoring Well/Soil Vapor Sample (Langan 2021)
- Soil Vapor Sample (Langan 2021)



| Sample ID | Sample Date | Sample Type | 041 LSV-1A 5/4/2021 SV | 041 DUP-1 5/4/2021 SV |
|---|-------------|-------------|------------------------------|-----------------------------|
| VOCS (µg/m³) | | | | |
| 1,1,1-Trichloroethane | ND | ND | ND | ND |
| 1,2,4-Trimethylbenzene | 4.98 | 6 | ND | ND |
| 1,3,5-Trimethylbenzene (Mesitylene) | 1.33 | 1.73 | ND | ND |
| 1,3-Butadiene | ND | ND | ND | ND |
| 1,3-Dichlorobenzene | ND | ND | ND | ND |
| 2,2,4-Trimethylpentane | ND | ND | ND | ND |
| 2-Hexanone (MBK) | 2.46 | 2.82 | ND | ND |
| 4-Ethyltoluene | 1.15 | 1.48 | ND | ND |
| Acetone | 3.21 | 2.42 | ND | ND |
| Benzene | ND | ND | ND | ND |
| Carbon Disulfide | 5.64 | 6.57 | ND | ND |
| Chloroform | 4.93 | 5.27 | ND | ND |
| Chloromethane | ND | ND | ND | ND |
| Cyclohexane | ND | ND | ND | ND |
| Dichlorodifluoromethane | ND | ND | ND | ND |
| Ethanol | ND | ND | ND | ND |
| Ethylbenzene | ND | ND | ND | ND |
| Isopropanol | ND | ND | ND | ND |
| M,P-Xylene | ND | ND | ND | ND |
| Methyl Ethyl Ketone (2-Butanone) | 17.5 | 13.5 | ND | ND |
| Methyl Isobutyl Ketone (4-Methyl-2-Pentanone) | 186 | 307 | ND | ND |
| n-Heptane | 1.91 | 2.98 | ND | ND |
| n-Hexane | 1.42 | 2.48 | ND | ND |
| o-Xylene (1,2-Dimethylbenzene) | 8.77 | 7.12 | ND | ND |
| Syrene | ND | ND | ND | ND |
| Tert-Butyl Alcohol | ND | ND | ND | ND |
| Tetrachloroethene (PCE) | 3.35 | ND | ND | ND |
| Tetrahydrofuran | 5.4 | 9.28 | ND | ND |
| Toluene | 6.22 | 10.3 | ND | ND |
| Total Xylenes | 26.3 | 20.6 | ND | ND |
| Trichloroethene (TCE) | 1.05 | 1.01 | ND | ND |
| Trichlorofluoromethane | 1.22 | 1.24 | ND | ND |

| Sample ID | Sample Date | Sample Type | 041 LSV-4A 5/4/2021 SV | 042 LSV-4B 5/4/2021 SV |
|---|-------------|-------------|------------------------------|------------------------------|
| VOCS (µg/m³) | | | | |
| 1,1,1-Trichloroethane | ND | ND | ND | ND |
| 1,2,4-Trimethylbenzene | 24.9 | 13.3 | ND | ND |
| 1,3,5-Trimethylbenzene (Mesitylene) | 6.64 | 3.92 | ND | ND |
| 1,3-Butadiene | ND | 0.801 | ND | ND |
| 1,3-Dichlorobenzene | ND | ND | ND | ND |
| 2,2,4-Trimethylpentane | ND | ND | ND | ND |
| 2-Hexanone (MBK) | 43.9 | 36.6 | ND | ND |
| 4-Ethyltoluene | 6.24 | 3.34 | ND | ND |
| Acetone | 9.17 | 95.5 | ND | ND |
| Benzene | ND | ND | ND | ND |
| Carbon Disulfide | 1.33 | 13.8 | ND | ND |
| Chloroform | ND | ND | ND | ND |
| Chloromethane | ND | 0.717 | ND | ND |
| Cyclohexane | 1.94 | ND | ND | ND |
| Dichlorodifluoromethane | 2.29 | 2.29 | ND | ND |
| Ethanol | ND | 18.1 | ND | ND |
| Ethylbenzene | 4.1 | 4.02 | ND | ND |
| Isopropanol | ND | ND | ND | ND |
| M,P-Xylene | 17.5 | 13.5 | ND | ND |
| Methyl Ethyl Ketone (2-Butanone) | 186 | 307 | ND | ND |
| Methyl Isobutyl Ketone (4-Methyl-2-Pentanone) | 1.91 | 2.98 | ND | ND |
| n-Heptane | 1.42 | 2.48 | ND | ND |
| n-Hexane | 8.77 | 7.12 | ND | ND |
| o-Xylene (1,2-Dimethylbenzene) | ND | ND | ND | ND |
| Syrene | ND | ND | ND | ND |
| Tert-Butyl Alcohol | ND | ND | ND | ND |
| Tetrachloroethene (PCE) | 3.35 | ND | ND | ND |
| Tetrahydrofuran | 5.4 | 9.28 | ND | ND |
| Toluene | 6.22 | 10.3 | ND | ND |
| Total Xylenes | 26.3 | 20.6 | ND | ND |
| Trichloroethene (TCE) | 1.05 | 1.01 | ND | ND |
| Trichlorofluoromethane | 1.22 | 1.24 | ND | ND |

| Sample ID | Sample Date | Sample Type | 055 LSV-3A 5/4/2021 SV | 056 LSV-3B 5/4/2021 SV |
|---|-------------|-------------|------------------------------|------------------------------|
| VOCS (µg/m³) | | | | |
| 1,1,1-Trichloroethane | ND | ND | ND | ND |
| 1,2,4-Trimethylbenzene | 48.6 | 41.8 | ND | ND |
| 1,3,5-Trimethylbenzene (Mesitylene) | 15.1 | 14.3 | ND | ND |
| 1,3-Butadiene | ND | ND | ND | ND |
| 1,3-Dichlorobenzene | ND | ND | ND | ND |
| 2,2,4-Trimethylpentane | 7.52 | 11.8 | ND | ND |
| 2-Hexanone (MBK) | 69 | 69.9 | ND | ND |
| 4-Ethyltoluene | 12.2 | 10.2 | ND | ND |
| Acetone | 92.9 | 91.2 | ND | ND |
| Benzene | ND | ND | ND | ND |
| Carbon Disulfide | ND | 6.76 | ND | ND |
| Chloroform | ND | 17.4 | ND | ND |
| Chloromethane | ND | 1.31 | ND | ND |
| Cyclohexane | 3.32 | 4.68 | ND | ND |
| Dichlorodifluoromethane | ND | 1.05 | ND | ND |
| Ethanol | ND | 12.9 | ND | ND |
| Ethylbenzene | ND | ND | ND | ND |
| Isopropanol | 622 | 560 | ND | ND |
| M,P-Xylene | 27.4 | 40.9 | ND | ND |
| Methyl Ethyl Ketone (2-Butanone) | 186 | 307 | ND | ND |
| Methyl Isobutyl Ketone (4-Methyl-2-Pentanone) | 1.91 | 2.98 | ND | ND |
| n-Heptane | 3.96 | 6.97 | ND | ND |
| n-Hexane | 31.3 | 4.72 | ND | ND |
| o-Xylene (1,2-Dimethylbenzene) | 17.6 | 24.8 | ND | ND |
| Syrene | ND | ND | ND | ND |
| Tert-Butyl Alcohol | ND | ND | ND | ND |
| Tetrachloroethene (PCE) | 18.4 | 33.8 | ND | ND |
| Tetrahydrofuran | ND | ND | ND | ND |
| Toluene | 8.67 | 17.3 | ND | ND |
| Total Xylenes | 45.3 | 69.6 | ND | ND |
| Trichloroethene (TCE) | ND | ND | ND | ND |
| Trichlorofluoromethane | ND | ND | ND | ND |

| Sample ID | Sample Date | Sample Type | 065 LSV-5A 5/4/2021 SV | 066 LSV-5B 5/4/2021 SV |
|---|-------------|-------------|------------------------------|------------------------------|
| VOCS (µg/m³) | | | | |
| 1,1,1-Trichloroethane | ND | ND | ND | ND |
| 1,2,4-Trimethylbenzene | 48.6 | 41.8 | ND | ND |
| 1,3,5-Trimethylbenzene (Mesitylene) | 15.1 | 14.3 | ND | ND |
| 1,3-Butadiene | ND | ND | ND | ND |
| 1,3-Dichlorobenzene | ND | ND | ND | ND |
| 2,2,4-Trimethylpentane | 7.52 | 11.8 | ND | ND |
| 2-Hexanone (MBK) | 69 | 69.9 | ND | ND |
| 4-Ethyltoluene | 12.2 | 10.2 | ND | ND |
| Acetone | 92.9 | 91.2 | ND | ND |
| Benzene | ND | ND | ND | ND |
| Carbon Disulfide | ND | 6.76 | ND | ND |
| Chloroform | ND | 17.4 | ND | ND |
| Chloromethane | ND | 1.31 | ND | ND |
| Cyclohexane | 3.32 | 4.68 | ND | ND |
| Dichlorodifluoromethane | ND | 1.05 | ND | ND |
| Ethanol | ND | 12.9 | ND | ND |
| Ethylbenzene | ND | ND | ND | ND |
| Isopropanol | 622 | 560 | ND | ND |
| M,P-Xylene | 27.4 | 40.9 | ND | ND |
| Methyl Ethyl Ketone (2-Butanone) | 186 | 307 | ND | ND |
| Methyl Isobutyl Ketone (4-Methyl-2-Pentanone) | 1.91 | 2.98 | ND | ND |
| n-Heptane | 3.96 | 6.97 | ND | ND |
| n-Hexane | 31.3 | 4.72 | ND | ND |
| o-Xylene (1,2-Dimethylbenzene) | 17.6 | 24.8 | ND | ND |
| Syrene | ND | ND | ND | ND |
| Tert-Butyl Alcohol | ND | ND | ND | ND |
| Tetrachloroethene (PCE) | 18.4 | 33.8 | ND | ND |
| Tetrahydrofuran | ND | ND | ND | ND |
| Toluene | 8.67 | 17.3 | ND | ND |
| Total Xylenes | 45.3 | 69.6 | ND | ND |
| Trichloroethene (TCE) | ND | ND | ND | ND |
| Trichlorofluoromethane | ND | ND | ND | ND |

| Sample ID | Sample Date | Sample Type | 081 LSV-6A 5/4/2021 SV | 081 LSV-6B 5/4/2021 SV |
|---|-------------|-------------|------------------------------|------------------------------|
| VOCS (µg/m³) | | | | |
| 1,1,1-Trichloroethane | ND | ND | ND | ND |
| 1,2,4-Trimethylbenzene | 42.1 | 41.7 | ND | ND |
| 1,3,5-Trimethylbenzene (Mesitylene) | 13.2 | 15.2 | ND | ND |
| 1,3-Butadiene | ND | ND | ND | ND |
| 1,3-Dichlorobenzene | ND | ND | ND | ND |
| 2,2,4-Trimethylpentane | 48.4 | 83.2 | ND | ND |
| 2-Hexanone (MBK) | 10.1 | 11.3 | ND | ND |
| 4-Ethyltoluene | 57.7 | 177 | ND | ND |
| Benzene | ND | ND | ND | ND |
| Carbon Disulfide | ND | 2.91 | ND | ND |
| Chloroform | ND | 28.2 | ND | ND |
| Chloromethane | ND | ND | ND | ND |
| Cyclohexane | ND | 3.35 | ND | ND |
| Dichlorodifluoromethane | 2.26 | ND | ND | ND |
| Ethanol | ND | 19.3 | ND | ND |
| Ethylbenzene | 3.97 | 10.3 | ND | ND |
| Isopropanol | ND | ND | ND | ND |
| M,P-Xylene | 19.3 | 41 | ND | ND |
| Methyl Ethyl Ketone (2-Butanone) | 378 | 1,000 | ND | ND |
| Methyl Isobutyl Ketone (4-Methyl-2-Pentanone) | ND | ND | ND | ND |
| n-Heptane | 1.73 | 6.27 | ND | ND |
| n-Hexane | ND | 3.74 | ND | ND |
| o-Xylene (1,2-Dimethylbenzene) | 12.4 | 24 | ND | ND |
| Syrene | ND | ND | ND | ND |
| Tert-Butyl Alcohol | ND | ND | ND | ND |
| Tetrachloroethene (PCE) | 12.4 | 24 | ND | ND |
| Tetrahydrofuran | ND | ND | ND | ND |
| Toluene | 11.6 | 11.5 | ND | ND |
| Total Xylenes | 9.02 | 30.2 | ND | ND |
| Trichloroethene (TCE) | ND | ND | ND | ND |
| Trichlorofluoromethane | ND | ND | ND | ND |
| Ethanol | ND | 139 | ND | ND |
| Ethylbenzene | ND | 606 | ND | ND |
| Isopropanol | ND | 442 | ND | ND |
| M,P-Xylene | 20.9 | 42.7 | ND | ND |
| Methyl Ethyl Ketone (2-Butanone) | 684 | 2,000 | ND | ND |
| Methyl Isobutyl Ketone (4-Methyl-2-Pentanone) | ND | ND | ND | ND |
| n-Heptane | 3.75 | 12 | ND | ND |
| n-Hexane | 2.69 | 10.2 | ND | ND |
| o-Xylene (1,2-Dimethylbenzene) | 13.5 | 36.7 | ND | ND |
| Syrene | ND | ND | ND | ND |
| Tert-Butyl Alcohol | ND | ND | ND | ND |
| Tetrachloroethene (PCE) | 12 | 38.3 | ND | ND |
| Tetrahydrofuran | ND | ND | ND | ND |
| Toluene | 6.26 | 21.7 | ND | ND |
| Total Xylenes | 34.4 | 79.5 | ND | ND |
| Trichloroethene (TCE) | ND | ND | ND | ND |
| Trichlorofluoromethane | ND | ND | ND | ND |

| Sample ID | Sample Date | Sample Type | 081 LSV-6A 5/4/2021 SV | 082 LSV-6B 5/4/2021 SV |
|---|-------------|-------------|------------------------------|------------------------------|
| VOCS (µg/m³) | | | | |
| 1,1,1-Trichloroethane | ND | ND | ND | ND |
| 1,2,4-Trimethylbenzene | 38.1 | 33.1 | ND | ND |
| 1,3,5-Trimethylbenzene (Mesitylene) | 12.5 | 29.3 | ND | ND |
| 1,3-Butadiene | ND | ND | ND | ND |
| 1,3-Dichlorobenzene | ND | ND | ND | ND |
| 2,2,4-Trimethylpentane | ND | 24.3 | ND | ND |
| 2-Hexanone (MBK) | 96.1 | 109 | ND | ND |
| 4-Ethyltoluene | 11.5 | 11.5 | ND | ND |
| Acetone | 139 | 606 | ND | ND |
| Benzene | ND | ND | ND | ND |
| Carbon Disulfide | ND | 2.91 | ND | ND |
| Chloroform | ND | 17.4 | ND | ND |
| Chloromethane | ND | 1.31 | ND | ND |
| Cyclohexane | ND | 3.35 | ND | ND |
| Dichlorodifluoromethane | ND | 1.05 | ND | ND |
| Ethanol | ND | 12.9 | ND | ND |
| Ethylbenzene | ND | ND | ND | ND |
| Isopropanol | ND | ND | ND | ND |
| M,P-Xylene | 20.9 | 42.7 | ND | ND |
| Methyl Ethyl Ketone (2-Butanone) | 684 | 2,000 | ND | ND |
| Methyl Isobutyl Ketone (4-Methyl-2-Pentanone) | ND | ND | ND | ND |
| n-Heptane | 3.75 | 12 | ND | ND |
| n-Hexane | 2.69 | 10.2 | ND | ND |
| o-Xylene (1,2-Dimethylbenzene) | 13.5 | 36.7 | ND | ND |
| Syrene | ND</ | | | |