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Engineering and Geology, D.P.C.

REVISED PHASE II SUBSURFACE INVESTIGATION REPORT

Surf Avenue Project Site

Two Un-numbered Lots on Surf Avenue – Block 7063, Lots 32 And 33; 2933 West 16th St – Block 7063, Lot 38; 2929 West 16th St – Block 7063, Lot 39; 2927 West 16th St – Block 7063, Lot 40 2925 West 16th St – Block 7063, Lot 41; 2910 West 15th St – Block 7063, Lot 12
Brooklyn, New York

November 15, 2019
PSG Project Number: 19314269-NY

Prepared for:
Surf Avenue L/CAL LLC c/o LCOR
One Penn Plaza, Suite 1801
New York, NY 10119

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Engineering and Geology, D.P.C.

March 9, 2020

Joseph Casillo
LCOR
One Penn Plaza, Suite 1801
New York, New York 10119

Subject: Revised Phase II Subsurface Investigation Report
Surf Avenue Project Site (Two Un-numbered Lots on Surf Avenue - Block 7063, Lots 32 and 33; 2933 West 16th St - Block 7063, Lot 38; 2929 West 16th St - Block 7063, Lot 39; 2927 West 16th St - Block 7063, Lot 40 2925 West 16th St - Block 7063, Lot 41; 2910 West 15th St - Block 7063, Lot 12)
Brooklyn, New York 11224
PSG Project Number 19314269-NY

Dear Mr. Casillo:

PSG Engineering and Geology, D.P.C. (PSG) is pleased to provide the results of the Revised Phase II Subsurface Investigation Report conducted for the site located at Two Un-numbered Lots on Surf Avenue (Block 7063, Lots 32 and 33; 2933 West 16th St - Block 7063, Lot 38; 2929 West 16th St - Block 7063, Lot 39; 2927 West 16th St - Block 7063, Lot 40 2925 West 16th St - Block 7063, Lot 41; 2910 West 15th St - Block 7063, Lot 12) in Brooklyn, Kings County, New York (the "Site"). This assessment was performed to comply with the New York State Department of Environmental Conservation (NYSDEC) DER-10/Technical Guidance for Site Investigation and Remediation (DER-10) and all applicable regulations.

If you have any questions concerning this report, please contact the undersigned at (732) 380-1700.

Sincerely,

PSG Engineering and Geology, D.P.C.

Cindy King
Project Manager – Site Mitigation

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1.0 INTRODUCTION

This Phase II Subsurface Investigation Report has been developed for the Site located at two un-numbered lots on Surf Avenue - Block 7063, Lots 32 and 33; 2933 West 16th St - Block 7063, Lot 38; 2929 West 16th St - Block 7063, Lot 39; 2927 West 16th St - Block 7063, Lot 40; 2925 West 16th St - Block 7063, Lot 41; 2910 West 15th St - Block 7063, Lot 12 in Brooklyn, New York (the Site).

PSG Engineering and Geology, DPC (PSG) is pleased to provide the results of the subsurface investigation performed at the above-referenced property. The following report describes the field activities, methods, and findings of the investigations conducted at the above-referenced property. This assessment was performed to comply with the New York State Department of Environmental Conservation (NYSDEC) DER-10/Technical Guidance for Site Investigation and Remediation (DER-10) and all applicable regulations.

This assessment was performed consistent with acceptable industry standards. The independent conclusions represent PSG's best professional judgment based upon existing conditions and the information and data available to PSG during the course of this assignment.

The subsurface investigation activities described in this document provide for the protection of public health and the environment, are consistent with the intended property use, comply with applicable environmental standards, criteria, and guidance, and conform to applicable laws and regulations.

1.1 Regulatory Agency Guidance

1.1.1 Soils

The soil sample analytical results were compared to the New York Unrestricted Use Criteria, which represents the most stringent NYSDEC criteria and includes all direct contact, ecological, and impact to groundwater pathways; the New York Restricted Use Protection of Groundwater Criteria, which is the screening level for potential soil to groundwater leaching concerns; the New York Restricted Use Residential Criteria, which is the soil to human direct contact criteria applicable to residential use; and the New York Restricted Use Commercial Criteria, which is the soil to human direct contact criteria applicable to commercial use.

1.1.2 Groundwater

The groundwater analytical results were compared to the NYSDEC Technical & Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards (AWQS) and Guidance Values.

1.1.3 Soil Vapor

The soil vapor analytical results were compared to the Environmental Protection Agency (EPA) Vapor Intrusion Screening Levels (VISL) Default Residential Target Sub-Slab and Exterior Soil Gas Concentrations (TCR = 1E-05 and TCR = 1E-06) with a Target Hazard Quotient of 1. In addition, the soil vapor analytical results were compared to the New York State Department of Health (NYSDOH) revised May 2017 Soil Vapor Intrusion Guidance Matrix levels.

2.0 SITE BACKGROUND

The Site is located at two un-numbered lots on Surf Avenue - Block 7063, Lots 32 and 33; 2933 West 16th St - Block 7063, Lot 38; 2929 West 16th St - Block 7063, Lot 39; 2927 West 16th St - Block 7063, Lot 40 2925 West 16th St - Block 7063, Lot 41; 2910 West 15th St - Block 7063, Lot 12 in Brooklyn, New York. The subject property is currently a parking lot improved with public sidewalks. The site location and a topographic map can be found on the attached Figure 1 and Figure 2, respectively.

2.1 Site History

Partner Assessment Corporation (Partner, an affiliate of PSG) completed a Phase I Environmental Site Assessment Report (Phase I), dated August 16, 2019, prepared on behalf of Surf Avenue L/CAL LLC c/o LCOR. According to available historical sources, the subject property was formerly developed with several small dwellings and stores, intersected by a railroad between 1895 and 1924. By 1930, the Site was developed with several small dwellings and stores. Between 1950 and 1961, the Site was developed with parking areas and an auto track on the southeastern portion of the property. A larger commercial structure was developed on the southeastern portion of the property between 1976 and 1982 with one commercial structure on the eastern portion and one larger commercial structure on the southeastern portion of the Site between 1983 and 1984. Tenants on the Site appear to have included various commercial retailers (1928-Present); residential (1934-Present); S & S Towel Service, Schaffer M Towel Service, Goushewitz & Nyman Tinsmiths & Roofers (1928); Molinari Frank Tailor, Fong Lee Laundry, Tufelski Hans Painter R, Govschewitz Abr Tinsmith, Botte Anthony A Clothing Cleaner, Gleisher Benj Manager Gas & Service Corp R (1934); Mermaid Tailor Shop, Utility Sheet Metal Works (1940); and The Empire Publishing & Printing Corp. (1973-1976).

A recognized environmental condition (REC) refers to the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment. The following was identified during the course of this assessment:

- According to a review of historical documentation, Fong Lee Laundry operated on the subject property (2914 West 15th Street) in 1934, possible dry cleaners (2912 and 2914 West 15th Street) operated on the subject property from at least 1934 to 1940, a tinsmith (2928 West 15th Street) operated on the subject property from at least 1928 to 1940, and The Empire Publishing and Printing Corp operated on the subject property (2914 West 15th Street) from at least 1973 to 1976. No information regarding onsite operations was

identified during the course of this assessment. These operations may have used, stored, and/or disposed of hazardous substances as part of daily operations, and they operated at a time of little to no regulatory oversight. Based on the potential nature of operations, lack of information regarding usage and disposal practices, and lack of regulatory oversight, these former operations are considered a REC.

An environmental issue refers to environmental concerns identified by Partner, which do not qualify as RECs; however, warrant further discussion. The following environmental issues were identified during the course of the Phase I assessment:

- According to Partner's Phase I research, on July 29, 2009, an "E" designation was declared for the Site. An "E" designation is a zoning map designation that provides notice of the presence of an environmental requirement pertaining to potential hazardous materials contamination. "E" designations are established by the City Planning Commission and City Council as part of a change in zoning that would allow additional development to occur on the Site or would permit uses not currently allowed. Based on our review of the New York City Department of Buildings (NYCDOB) Buildings Information System (BIS) and New York City Zoning Maps, an E-229 designation related to the Coney Island Rezoning project, of which the Site is a part of, has been placed on the Site. The specific description of this designation is "Hazardous Materials Phase I and Phase II Testing Protocol" and "Window Wall Attenuation & Alternate Ventilation" (for the Site's Block 7063, Lots 12, 32, 35, 38, 39, 40 and 41) and "Air Quality" (for Lot 12). Under these designations, certain protocols need to be followed to determine if hazardous materials are present onsite; to avoid any potential impacts associated with noise for future residential use, alternate means of ventilation including central air conditioning or air conditioning sleeves containing air conditioners or HUD-approved fans; and to ensure that any new residential and/or commercial use No. 2 fuel oil or natural gas is for the heating, ventilation, and air conditioning systems.

  In order to satisfy the requirements for the hazardous materials (E)-designation, the fee owner would be required to: (1) prepare and implement a New York City Office of Environmental Remediation (OER)-approved site investigation to determine the extent of contamination, if any, at the site; (2) submit the findings of its investigation and, if necessary, a management plan, to the OER for its review and approval; and (3) implement the OER-approved management plan. The (E) Designation requires that these measures be implemented in order to proceed with site development at any of those sites.

As stated in the Phase I assessment, an OER-approved construction-related health and safety plan (CHASP) would be required to be implemented during excavation and construction activities to protect workers and the community from potentially significant adverse impacts associated with contaminated soil and/or groundwater. This Plan would be submitted to the OER for review and approval prior to implementation. With the implementation of the (E) Designation, no significant adverse impacts related to hazardous materials would occur.

These NYC Hazardous Materials (E) Designation requirements must be followed in order to obtain permits including excavation from the New York City Department of Buildings (DOB). The results of existing studies and any additional testing required by OER would then be used to prepare a Remedial Action Plan (RAP) for implementation during construction. OER approval of the RAP will be required prior to their issuing a Notice to Proceed (NTP), allowing DOB to issue construction permits. Following construction (with implementation of the RAP), submission and approval of a Remedial Closure Report (RCR) is required for OER to issue a Notice of Satisfaction (NOS), allowing DOB to issue occupancy permits. The RCR is intended to document that activities were conducted in accordance with the RAP.

Based on the proposed redevelopment of the Site, the (E) Designation requirements must be met.

- Partner observed two 275-gallon aboveground storage tanks (ASTs) for the storage of fuel oil on the adjacent property to the northwest at 1530 Mermaid Avenue. The ASTs were not equipped with secondary containment; however, no staining, leaks or spills were noted in the vicinity of the ASTs, and no releases have been reported to the NYSDEC. Based on the overall good condition and aboveground nature of the tanks, these ASTs are not expected to represent a significant environmental concern to the Site at this time; however, historical leaks cannot be ruled out.

2.2 Geology and Hydrogeology

Review of the United States Geological Survey (USGS) Coney Island, New York-New Jersey Quadrangle topographic map shows the Site is situated at an elevation of approximately 5 feet above mean sea level and the local topography is sloping gently to the south. Refer to Figure 2 for a topographic map of the site vicinity.

The Site is located within the Coastal Plain Physiographic Province of the State of New York. Sediments of the Coastal Plain range in age from Cretaceous to Miocene and consist of layers of sand, silt, and clay. It contains a large wedge of unconsolidated sediments that have been

deposited since the Cretaceous Period. These sediments continue off-shore as far as the continental shelf edge in the Atlantic Ocean. Topography is relatively flat with a few hills of erosion resistant sediments containing gravel or iron-sedimented sands. The uppermost geologic formation underlying the Site is the Upper Cretaceous aged Monmouth Group, Matawan Group and Magothy Formation (Km). The Monmouth Group, Matawan Group and Magothy Formation consists of silty clay, glauconitic sandy clay, sand, and gravel.

Borings advanced during this investigation indicated the underlying subsurface consists predominantly of fine to medium sands from the ground surface to approximately 15.0 feet below ground surface (bgs). Fill materials were encountered in soil borings throughout the Site. Refer to Appendix A for boring logs from this investigation.

3.0 PHASE II SUBSURFACE INVESTIGATION

The scope of the Phase II subsurface investigation included a geophysical survey and the advancement of 14 soil borings (SB-1 through SB-14) for the collection of representative soil and groundwater samples. A supplemental Phase II investigation was conducted after soil and groundwater results were reviewed and included the advancement and sampling of 10 soil vapor points and the collection of 8 composite waste classification soil samples. Refer to Table 1 for a summary of the borings, sampling schedule, and laboratory analyses for these investigations.

3.1 Preparatory Activities

Prior to the initiation of fieldwork, PSG completed the following activities.

3.1.1 Utility Clearance

Coastal Environmental Solutions (Coastal) notified Dig Safely New York (Dig Safely) to clear public utility lines as required by law at least 48 hours prior to drilling activities. Dig Safely issued a ticket for the project.

3.1.2 Health and Safety Plan

PSG prepared a site-specific Health and Safety Plan (HASP), which was reviewed with on-site personnel involved in the project prior to the commencement of drilling activities.

3.2 Geophysical Survey

On September 16, 2019, Delta Geophysics (Delta) of Catasauqua, Pennsylvania conducted a geophysical survey under the supervision of PSG throughout the accessible portions of the Site. The purpose of the geophysical survey was to investigate/define environmental issues associated with the historical use of the property as well as to identify any potential utility or other subsurface conflicts/obstructions, and to additionally clear boring locations of utilities in accessible portions of the Site.

The geophysical survey was conducted with a Geophysical Survey Systems Inc. (GSSI) SIR-3000 cart-mounted Ground Penetrating Radar (GPR) unit with a 400-megahertz (Mhz) antenna, Radiodetection RD7000 precision utility locator, and Fisher M-Scope TW-6 pipe and cable locator. Delta's GPR was configured to transmit to a depth of approximately 10 feet bgs; however, actual signal penetration was limited to approximately 0-3 feet bgs. The limiting factor was due to conductive soils. The TW-6 was not able to be utilized within close proximity to building exterior walls, vehicles, and large metallic objects. Delta systematically free-traversed

the investigation area with the aforementioned equipment. The equipment data were interpreted in real time and compiled as necessary to identify subsurface anomalies consistent with disturbed soil resembling backfilled tankholds, piping trenches, utility lines, and/or other subsurface conduits/features.

Delta performed a utility survey throughout the survey area. The following utilities were identified: storm water. All utilities were marked onsite with appropriate colors; unknown features were marked in pink paint.

After GPR was conducted at the majority of the boring locations, Coastal began to hand clear each location with a hand auger to a terminal depth of 5.0 ft bgs. The hand auger was decontaminated between each boring location to eliminate cross contamination.

Refer to Appendix B for a copy of the geophysical survey report, which provides additional details regarding the geophysical survey equipment and methodology.

3.3 Drilling Equipment

On September 17 through 18, 2019, PSG subcontracted with Coastal to provide and operate drilling equipment. Coastal, under the direction of PSG, advanced borings SB-1 through SB-14 with a track-mounted GeoProbe Model 7822DT direct push rig, which advanced 2.25-inch Macro-Core rods lined with acetate liners. Sampling equipment was decontaminated between sample intervals and boring locations to prevent cross-contamination.

3.4 Boring Locations

Borings SB-1 through SB-4 were advanced in the northern portion of the Site moving from east to west; specifically, boring SB-1 was advanced in the vicinity of the former Fong Lee Laundry previously located at 2914 West 15th Street and boring SB-4 was advanced in the vicinity of the former laundry and cleaners store previously located at 2911 West 16th Street. Borings SB-5 through SB-10 were advanced in the central portion of the Site moving from west to east; specifically, boring SB-6 was advanced in the vicinity of the former Gleisher Benj Manager Gas & Service Corp gas station previously located at 2927 West 16th Street. In addition, SB-9 was advanced in the vicinity of the former Utility Sheet Metal Works facility previously located at 2928 West 15th Street. Borings SB-11 through SB-14 were advanced in the southern portion of the Site moving from east to west. Refer to Figure 3 for a map indicating boring locations.

3.5 Soil Sampling

All soil boing locations were overlain by asphalt, which was penetrated using a hammer drill with a core bit and chisel bit during the hand clearing activities. Soil samples were collected using a 5-foot long by 2.25-inch diameter Macro-Core sampler with a 5-foot long acetate liner, which

was advanced by the direct-push drill rig using 5-foot long by 1.5-inch diameter drill rods. The sampler was driven into the subsurface to allow undisturbed soil to enter the open Macro-Core barrel and retrieved in 5-foot intervals to recover the soil-filled liners.

A lengthwise section of each acetate liner was removed with a splitting tool to expose the soil. The soil column was visually inspected for discoloration, monitored for odors, and classified in accordance with the Unified Soil Classification System (USCS). Select intervals were placed in sealable plastic bags and field-screened with a photo-ionization detector (PID) calibrated to isobutylene. PID readings above the background reading of 0.0 parts per million (ppm) were only observed in the soils recovered from boring locations SB-5 and SB-11.

Soil depths selected for laboratory analysis were sampled directly from the liners and retained in three unpreserved EnCores® in accordance with Environmental Protection Agency (EPA) Method 5035 sampling protocol for submittal of samples for Target Compound List (TCL) volatile organic compound (VOC) analysis in accordance with EPA Method 8260; and into one unpreserved glass jar, which was sealed with a threaded, Teflon-lined lid for submittal of samples for TCL semi-volatile organic compound (SVOC) analysis in accordance with EPA Method 8270, target analyte list (TAL) metals analysis in accordance with EPA Method 6010, polychlorinated biphenyls (PCBs) analysis in accordance with EPA Method 8082A, and for pesticides/herbicides analysis in accordance with EPA Method 8151A. The EnCores® and jars were filled with soil to capacity to minimize headspace and reduce the potential for volatilization. The EnCores®, and jars were labeled for identification, and stored in an iced-cooler.

3.6 Groundwater Sampling

After soil sampling to the terminal depth, a groundwater sample was collected from boring locations SB-4, SB-6, SB-9, and SB-11 by withdrawing the drill rods from the subsurface and installing a one-inch diameter temporary groundwater sampling point within the open borehole. The temporary groundwater sampling points consisted of a 10-foot long, 0.010-inch factory-slotted polyvinyl chloride (PVC) screen at the terminal end with blank riser to the surface.

Groundwater samples were retrieved from each temporary groundwater sampling point using a new section of 3/8-inch diameter polyethylene tubing fed through a peristaltic pump and conveyed into three hydrochloric acid-preserved VOA vials for submittal of samples for TCL VOC+15 analysis in accordance with EPA Method 8260; eight unpreserved 250-mL amber jars for submittal of samples for TCL SVOCs+20 analysis in accordance with EPA Method 8270, pesticides/herbicides analysis in accordance with EPA Method 8151A, PCBs analysis in accordance with EPA Method 8082A; and one nitric acid-preserved 250-mL plastic bottle for submittal of samples for TAL metals analysis in accordance with EPA Method 6010. The

glassware was filled with no observable headspace or air bubbles to minimize the potential for volatilization, labeled for identification, and stored in an iced cooler. New screens and tubing were used for each temporary well point.

3.7 Soil Vapor Sampling

On October 17, 2019, PSG advanced soil vapor points SG-1 through SG-10 with a track-mounted Geoprobe using 2-inch steel expendable points, 6-inch soil vapor point implants, and polyethylene tubing. A new section of ¼-inch diameter polyethylene tubing was inserted into the borehole to the desired sampling depth. Depths ranged from 4-5 feet in the soil vapor points. Sand was poured into the boring annulus to form a sand pack around the tubing. Granular bentonite was placed atop the sand pack and the remainder of the borehole was backfilled with hydrated bentonite to the ground surface to form a seal. Prior to sampling, a tracer gas was used in accordance with NYSDOH protocols to serve as a QA/QC device to verify the integrity of the soil gas probe seal. Helium was used as the tracer gas and a shroud was used to keep it in contact with the probe during testing. A portable monitoring device was used to analyze a sample of soil gas for the tracer prior to sampling. If the tracer sample results showed a significant presence of the tracer, the probe seals were adjusted to prevent infiltration. At the conclusion of the sampling round, tracer monitoring was performed a second time to confirm the integrity of the probe seals.

Soil vapor points SG-1 and SG-2 were advanced in the northern portion of the Site moving from east to west; specifically, boring SG-1 was advanced in the vicinity of the former Fong Lee Laundry previously located at 2914 West 15th Street. Soil vapor points SG-3 and SG-4 were advanced in the northwestern area of the Site; specifically, SG-4 was advanced in the vicinity of the former laundry and cleaners store previously located at 2911 West 16th Street. Soil vapor points SG-5 and SG-6 were advanced in the central portion of the Site in the vicinity of the former Gleisher Benj Manager Gas & Service Corp gas station previously located at 2927 West 16th Street. Soil vapor points SG-7 and SG-8 were advanced in the vicinity of the former Utility Sheet Metal Works facility previously located at 2928 West 15th Street. Soil vapor points SG-9 and SG-10 were advanced in the southwest and southeast corners of the property.

Refer to Figure 3 for a map indicating soil vapor locations.

3.8 Waste Classification Soil Sampling

All soil boing locations were overlain by asphalt, which was penetrated using a hammer drill with a core bit and chisel bit during the hand clearing activities. Soil samples were collected using a 5-foot long by 2.25-inch diameter MacroCore sampler with a 5-foot long acetate liner, which was advanced by the direct-push drill rig using 5-foot long by 1.5-inch diameter drill rods. The

sampler was driven into the subsurface to allow undisturbed soil to enter the open Macro-Core barrel and retrieved in 5-foot intervals to recover the soil-filled liners.

A lengthwise section of each acetate liner was removed with a splitting tool to expose the soil. The soil column was visually inspected for discoloration, monitored for odors, and classified in accordance with the Unified Soil Classification System (USCS). Select intervals were placed in sealable plastic bags and field-screened with a photo-ionization detector (PID) calibrated to isobutylene. No PID readings above the background reading of 0.0 parts per million (ppm) were only observed in the soils. Soil borings WC-1 through WC-8 were advanced to a depth of 4 feet bgs.

Composite soil samples (WC-1 through WC-8) were collected from the soil vapor sampling point locations SG-1 through SG-10 by collecting soil from 6-inches to 4 feet below grade at each location. The soil was then thoroughly mixed and transferred into laboratory supplied jars. Soils from WC-1 through WC-4 were retained in three unpreserved EnCores® in accordance with EPA Method 5035 sampling protocol for submittal of samples for TCL VOC analysis in accordance with EPA Method 8260; and into one unpreserved glass jar, which was sealed with a threaded, Teflon-lined lid for submittal of samples for TCL SVOC analysis in accordance with EPA Method 8270, TAL metals analysis in accordance with EPA Method 6010, PCBs analysis in accordance with EPA Method 8082A, waste characteristics, and for Total Petroleum Hydrocarbons (TPH) Diesel Range Organics/Gasoline Range Organics (DRO/GRO) analysis. The EnCores® and jars were filled with soil to capacity to minimize headspace and reduce the potential for volatilization. The EnCores®, and jars were labeled for identification, and stored in an iced-cooler. Soil samples WC-5 through WC-8 were only analyzed for TPH DRO/GRO.

3.9 Post-Sampling Activities

Macro-Core sampler barrels and temporary groundwater sampling points were removed from the subsurface and the boreholes were backfilled with hydrated bentonite chips following sampling activities. Boreholes advanced in improved areas were capped with asphalt patch to match existing ground cover after being backfilled.

No significant amounts of derived wastes were generated during these investigations.

3.10 Laboratory Analytical Results

3.10.1 Soils

As shown in Table 2, numerous VOCs were detected at concentrations above the laboratory method detection limits (MDLs) in numerous soil samples.

Numerous SVOCs were detected at a concentration above the laboratory MDLs in multiple soil samples.

4,4'-DDD and 4,4'-DDE were detected at a concentration above the most stringent standard (New York Unrestricted Use Criteria) in soil sample SB-1(5.5-6).

No PCBs were detected at concentrations above laboratory MDLs.

Numerous metals were reported at concentrations above the laboratory MDLs in the soil samples collected from the fourteen soil borings. Lead was detected at concentrations above the most stringent standard (New York Unrestricted Use Criteria, NY-UNRES) in soil samples SB-1(5.5-6), SB-7(6-6.5), and SB-8(6-6.5). Zinc was detected at a concentration above the NY-UNRES standard in soil sample SB-1(5.5-6).

Refer to Appendix D for the full laboratory analysis report, which includes chain-of-custody and laboratory QA/QC documentation. Laboratory QA/QC data were within acceptable limits.

3.10.2 Groundwater

As shown in Table 3, methylene chloride was the only VOC detected at a concentration above the laboratory MDLs and above the most stringent standard in the field blank (FB).

No SVOCs were reported at concentrations above the laboratory MDLs in the groundwater collected from all groundwater samples.

Aldrin and dieldrin were the only herbicides/pesticides detected at a concentration above the laboratory MDLs in the groundwater sample collected from boring SB-11GW.

PCB analytical results indicated that no targeted compounds were detected above the laboratory MDLs.

Numerous metals were detected at concentrations above the laboratory MDLs in the groundwater samples collected from borings SB-4GW, SB-6GW, SB-9GW, and SB-11GW.

Refer to Appendix D for the full laboratory analysis report, which includes chain-of-custody and laboratory QA/QC documentation. Laboratory QA/QC data were within acceptable limits.

3.10.3 Soil Vapor

As shown in Table 4, numerous VOCs were detected at concentrations above the laboratory MDLs in soil vapor samples SG-1 through SG-10.

Refer to Appendix D for the full laboratory analysis report, which includes chain-of-custody and laboratory QA/QC documentation. Laboratory QA/QC data were within acceptable limits.

3.10.4 Waste Classification

As shown in Table 5, numerous VOCs were detected at concentrations above the laboratory MDLs in soil samples WC-1 through WC-4.

Numerous SVOCs were detected at a concentration above the laboratory MDLs in multiple soil samples WC-1 through WC-4.

No PCBs were detected at concentrations above laboratory MDLs in soil samples WC-1 through WC-4.

Numerous metals were reported at concentrations above the laboratory MDLs in the soil samples WC-1 through WC-4.

GRO was not detected at concentrations above laboratory MDLs in soil samples WC-1 through WC-8. DRO was detected at concentrations above laboratory MDLs in soil samples WC-1 through WC-8.

Refer to Appendix D for the full laboratory analysis report, which includes chain-of-custody and laboratory QA/QC documentation. Laboratory QA/QC data were within acceptable limits.

3.11 Discussion

3.11.1 VOCs

Although numerous VOCs were detected at concentrations above the laboratory method detection limits (MDLs) in numerous soil samples, no VOCs were detected in any soil samples above the New York Unrestricted Use Criteria, the New York Restricted Use Residential Criteria, the New York Restricted Use Protection of Groundwater Criteria, the New York Restricted Use Residential Criteria and/or the New York Restricted Use Commercial Criteria.

In groundwater, VOC impacts above NY Guidance Values were limited to a concentration of methylene chloride detected in the field blank, which is typically associated with a laboratory artifact.

Numerous VOCs were detected in soil vapor samples above the EPA Residential Target Sub-Slab and Exterior Soil Gas Residential Vapor Intrusion Screening Levels (VISLs). 1,2-Dibromoethane was reported as non-detect in soil vapor samples SG-1 through SG-10; however, the MDLs were above the EPA Residential Target Sub-Slab and Exterior Soil Gas Residential VISLs. Numerous VOCs were reported as non-detect in soil vapor sample SG-5; however, the MDLs were above the EPA VISLs.

Of the detected VOCs, the reported concentrations of 1,3-butadiene exceeded the EPA Residential Target Sub-Slab and Exterior Soil Gas Residential 10-6 VISLs in soil vapor samples

SG-4, SG-6, SG-7, SG-8, SG-9, and SG-10. Benzene exceeded the EPA Residential Target Sub-Slab and Exterior Soil Gas Residential 10-6 VISLs in soil vapor samples SG-3 and SG-9. Chloroform exceeded the EPA Residential Target Sub-Slab and Exterior Soil Gas Residential 10-6 VISLs in soil vapor samples SG-7 and SG-10. Trichloroethene exceeded the EPA Residential Target Sub-Slab and Exterior Soil Gas Residential 10-5 and 10-6 VISLs in soil vapor sample SG-7. Vinyl Chloride exceeded the EPA Residential Target Sub-Slab and Exterior Soil Gas Residential 10-6 VISLs in soil vapor sample SG-1.

3.11.2 SVOCs

2,4-Dinitrophenol was detected in soil samples SB-1(12-12.5), and SB-14(13.5-14) above the New York Restricted Use Protection of Groundwater Criteria. 2,4-Dinitrophenol was not detected in soil sample SB-1(5.5-6) above the laboratory MDLs; however, the MDL was 0.21 milligram per kilogram (mg/kg), which is above the New York Restricted Use Protection of Groundwater Criteria of 0.2 mg/kg.

Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, and indeno(1,2,3-cd)pyrene were reported as non-detect in all groundwater samples; however, the New York Guidance Values for these compounds are 0.002 micrograms per liter (ug/L). The lab is generally unable to meet this Guidance Value of 0.002 ug/L with their equipment. Therefore, any detection (no matter how minor) may be above the very low guidance values for SVOCs. 2,4-Dinitrophenol and hexachlorobenzene were reported non-detect in all groundwater samples; however, the laboratory MDLs were higher than the New York TOGS 111 Ambient Water Quality Standards.

3.11.3 Herbicides/Pesticides

4,4'-DDE, and 4,4'-DDT were detected in soil sample SB-1(5.5-6) above the New York Unrestricted Use Criteria, but below the New York Restricted Use Residential Criteria, the New York Restricted Use Commercial Criteria and the New York Restricted Use Protection of Groundwater Criteria.

Chlordane and toxaphene were non-detect in all groundwater samples; however, the laboratory MDL was higher than the New York TOGS 111 Ambient Water Quality Standard. Aldrin was non-detect in all groundwater samples but exceeded the guidance value in groundwater sample SB-11GW. The guidance value for Aldrin is 0.01 μg/L; however, there is no standard for Aldrin associated with NY TOGS 111 Ambient Water Quality Standard. Dieldrin was also detected in groundwater sample SB-11GW above the New York TOGS 111 Ambient Water Quality Standard.

3.11.4 PCBs

Total PCB concentrations detected in all soil samples were below the New York Unrestricted Use Criteria, the New York Restricted Use Residential Criteria, the New York Restricted Use Commercial Criteria and the New York Restricted Use Protection of Groundwater Criteria.

Total PCB concentrations were non-detect in all groundwater samples; however, the laboratory MDL was higher than the NYSDEC Guidance Value of 0.1 µg/L.

3.11.5 Metals

Lead was detected in soil samples SB-1(5.5-6), SB7-(6-6.5), and SB-8(6-6.5) above the New York Unrestricted Use Criteria, but below the New York Restricted Use Residential Criteria, the New York Restricted Use Commercial Criteria and New York Protection of Groundwater Criteria. Zinc was detected in soil sample SB-1(5.5-6) above the New York Unrestricted Use Criteria, but below the New York Restricted Use Commercial Criteria and New York Restricted Use Protection of Groundwater Criteria.

Barium was detected in groundwater samples SB-9GW and SB-6GW above New York TOGS 111 Ambient Water Quality Standards. Chromium was detected in groundwater sample SB-9GW above the New York TOGS 111 Ambient Water Quality Standards. Lead was detected in groundwater samples SB-4GW, SB-6GW, and SB-9GW above the New York TOGS 111 Ambient Water Quality Standards. Iron was detected in all groundwater samples above the New York TOGS 111 Ambient Water Quality Standards.

3.11.6 Waste Classification

Although numerous VOCs were detected at concentrations above the laboratory MDLs in numerous waste classification soil samples, no VOCs were detected in any waste classification soil samples above the New York Restricted Use Residential Criteria.

Benzo[a]anthracene, benzo[b]fluoranthene, and indeno[1,2,3-cd]pyrene were detected in waste classification soil samples WC-2 and WC-3 above the New York Restricted Use Residential Criteria.

No PCBs were detected in any waste classification soil samples above the New York Restricted Use Residential Criteria.

Although numerous metals were detected at concentrations above the laboratory MDLs in numerous waste classification soil samples, no metals were detected in any waste classification soil samples above the New York Restricted Use Residential Criteria.

No Gasoline Range Organics (GROs) were detected in any waste classification soil samples above the laboratory MDLs. Diesel Range Organics (DROs) were detected in waste classification soil samples WC-1 through WC-8 above laboratory MDLs; however, New York does not have any current criteria for comparison.

Refer to Appendix C for iso-concentration maps for all sampling media (groundwater, soil, waste classification soil, and soil vapor). Sampling locations and compounds detected above regulatory standards are included on the iso-concentration maps.

4.0 CONCLUSIONS

PSG conducted a Phase II Subsurface Investigation at the Site to evaluate the potential impact of VOCs, SVOCs, PCBs, metals, and pesticides/herbicides to soil and groundwater as a consequence of a release or releases due to the former operations of the Site. The scope of the initial Phase II Subsurface Investigation included a geophysical survey and the advancement of 14 soil borings. PSG collected 28 discrete soil samples and four groundwater samples on September 17 and 18, 2019.

A supplemental Phase II investigation was conducted on October 17, 2019, after initial soil and groundwater results were reviewed, and included the advancement and sampling of 10 soil vapor points and the collection of 8 composite waste classification soil samples.

The geophysical survey identified subsurface electrical and storm sewer utilities. No anomalies were identified at the Site during the geophysical survey.

Soil

Based on the Phase II Subsurface Investigation, no VOCs were detected above any NYSDEC criteria. SVOC impacts were limited to 2,4-Dinitrophenol in soil, which exceeded the New York Restricted Use Protection of Groundwater Criteria in soil. There was no evidence of soil contamination associated with PCBs and herbicides. However; the pesticides 4,4'-DDD and 4,4'DDE were detected above the New York Unrestricted Use Criteria in soil in the northeast portion of the site at a depth of 5.5 to 6 feet below grade at soil boring SB-1. Vertical delineation of pesticides in soil was achieved at 12.0 feet bgs. Lead and zinc concentrations exceeded the New York Unrestricted Use Criteria in soil in the northeast portion of the site at soil borings SB-1, SB-7 and SB-8 to a depth of 5.5 to 6 feet below grade. Vertical delineation of these metals in soil was achieved at 12.0 feet bgs.

Groundwater

Groundwater VOC impacts are confined to methylene chloride, which is a common lab artifact.

The method detection limit for a few reported non-detect SVOCs were above the NYSDEC Guidance Values including: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, and indeno(1,2,3-cd) pyrene. Additionally, the method detection limit for 2,4-Dinitrophenol and hexachlorobenzene was above the New York TOGS 111 Ambient Water Quality Standards for all groundwater samples.

The pesticides, aldrin and dieldrin, were detected in groundwater sample SB-11GW, but were not detected in the soil samples collected from the soil column directly above the groundwater

interface at this same boring location. Herbicide compounds were all reported as non-detect, below the laboratory MDLs. Chlordane and toxaphene were reported as non-detect; however, the method detection limit exceeded the New York TOGS 111 Ambient Water Quality Standards for all groundwater samples.

The metals barium, chromium, iron, and lead were detected in groundwater samples at concentrations above the New York TOGS 111 Ambient Water Quality Standards.

Soil Vapor

Numerous VOCs were detected in soil vapor samples above the EPA Residential Target Sub-Slab and Exterior Soil Gas Residential Vapor Intrusion Screening Levels (VISLs). The highest soil vapor exceedance was detected at soil vapor sample SG-7 which was collected in the area of the former Utility Sheet Metal Works operations onsite. Specifically, trichloroethene (TCE) was detected at a concentration of 434 micrograms per cubic meter ($\mu g/m^3$), which is above the EPA Residential Target Sub-Slab and Exterior Soil Gas Residential 10^{-5} and 10^{-6} VISLs.

Benzene exceeded the EPA Residential Target Sub-Slab and Exterior Soil Gas Residential 10^{-6} VISLs in soil vapor samples SG-3 and SG-9 located in the central and southeastern portions of the site. 1,3-butadiene exceeded the EPA Residential Target Sub-Slab and Exterior Soil Gas Residential 10^{-6} VISLs across the site in soil vapor samples SG-4, SG-6, SG-7, SG-8, SG-9, and SG-10. Chloroform exceeded the EPA Residential Target Sub-Slab and Exterior Soil Gas Residential 10^{-6} VISLs in soil vapor samples SG-7 and SG-10 located in the eastern and southwestern portions of the site. Cis-1,2-Dichloroethene was detected as a concentration that exceeded the NYSDOH revised May 2017 Soil Vapor Intrusion Guidance Matrix level of 6.0 micrograms per cubic meter ($\mu g/m^3$) in soil vapor sample SG-1. Trichloroethene (TCE) was detected at a concentration that exceeded the EPA Residential Target Sub-Slab and Exterior Soil Gas Residential 10^{-5} and 10^{-6} VISLs, and NYSDOH revised May 2017 Soil Vapor Intrusion Guidance Matrix level of 6.0 $\mu g/m^3$ in soil vapor sample SG-7. Vinyl Chloride exceeded the EPA Residential Target Sub-Slab and Exterior Soil Gas Residential 10^{-6} VISLs in soil vapor sample SG-1 located in the northeastern portion of the site near the former FongLee Laundry operations onsite.

Waste Classification

Although numerous VOCs and metals were detected at concentrations above the laboratory MDLs in waste classification soil samples, no VOCs or metals were detected in any waste classification soil samples above the New York Restricted Use Residential Criteria.

SVOCs benzo[a]anthracene, benzo[b]fluoranthene, and indeno[1,2,3-cd] pyrene were detected in waste classification soil samples WC-2 and WC-3 above the New York Restricted Use Residential Criteria.

No PCBs were detected in any waste classification soil samples above the New York Restricted Use Residential Criteria.

In addition, no Gasoline Range Organics (GROs) were detected in any waste classification soil samples above the laboratory MDLs. Diesel Range Organics (DROs) were detected in waste classification soil samples WC-1 through WC-8 above laboratory MDLs; however, New York does not have any current criteria for comparison.

Based on the VOC exceedances in soil vapor at the Site, PSG recommends the installation of a vapor barrier in concert with any future construction. PSG collected waste classification samples in anticipation of future off-site soil disposal for redevelopment purposes and identified various base neutral compounds above New York Restricted Use Residential Criteria. Based on these results, any soil planned for disposal during re-construction activities should be managed and disposed of appropriately.

The purpose of this Phase II investigation was to complete the necessary Phase II site characterization sampling in accordance with due diligence and considering e-Designation practices. Based on conversations with the client and attorney and these Phase II results, PSG recommends providing the Phase I and Phase II results to the New York State Department of Environmental Conservation (NYSDEC) Brownfields Cleanup Program (BCP) and requesting a pre-application meeting with the NYSDEC Region 2 contact. Independent of the type of program entered [NYSDEC BCP or New York City Office of Environmental Remediation (NYC OER)], additional remedial investigation activities may be necessary.

FIGURES

Site Location Map

Brooklyn, New York

SURF AVENUE PROJECT

2910 WEST 15TH STREET, AND
2925 THROUGH 2933 WEST 16TH STREET
BLOCK 7063, LOTS 12, 32, 33 & 38-41
BROOKLYN, NEW YORK

FIGURE 1
SITE LOCATION MAP

Legend

Site Boundary

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet
Projection: Lambert Conformal Conic
False Easting: 984,250.0000
False Northing: 0.0000
Central Meridian: -74.0000
Standard Parallel 1: 40.6667
Standard Parallel 2: 41.0333
Latitude Of Origin: 40.1667
Units: Foot US

0 40 80 160
Feet

PSG Engineering, DPC

611 Industrial Way West
Eatontown, NJ 07724
Certificate of Authorization No. 24GA27989800

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Fax.:732.380.1701
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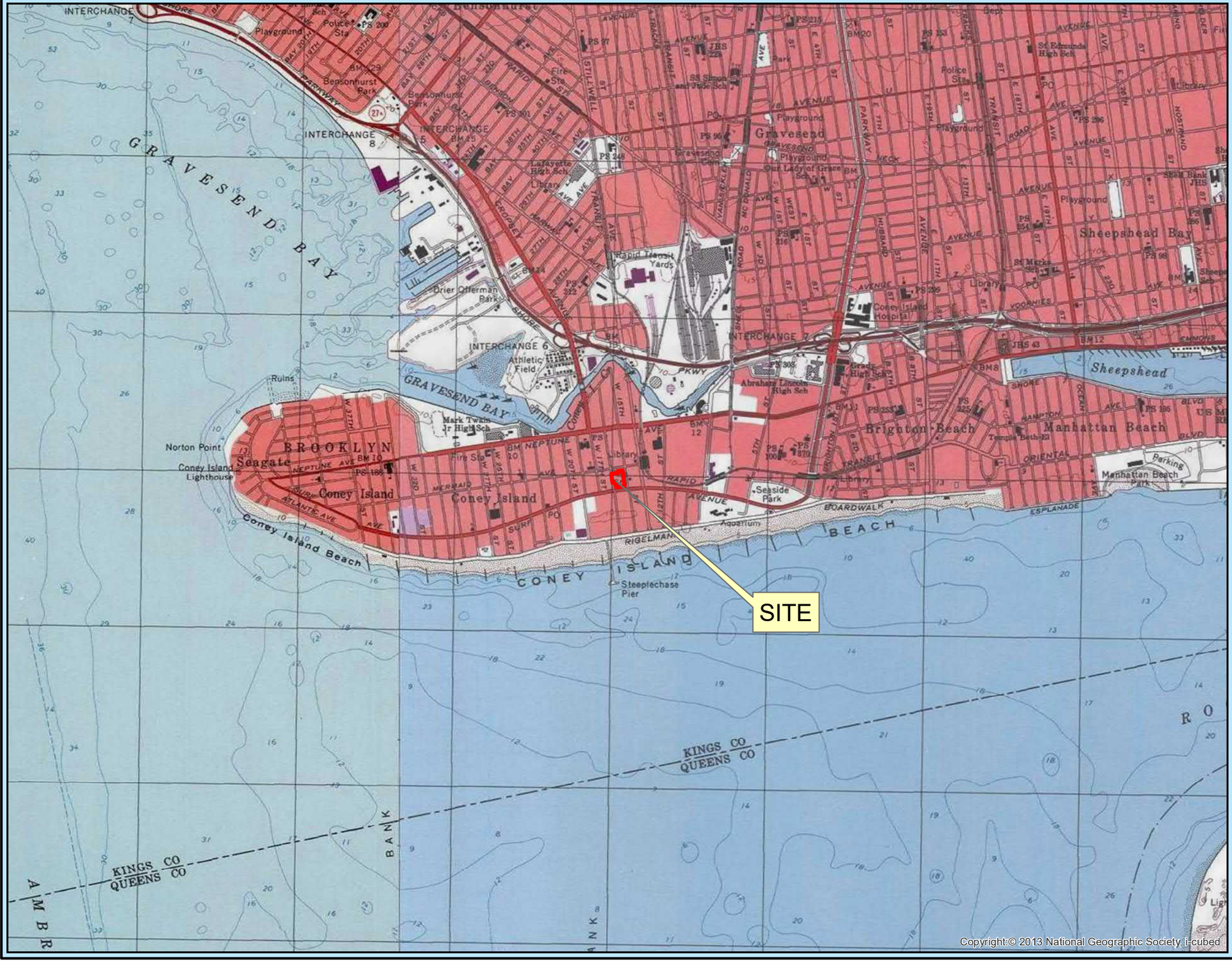
Sources: NJDEP and NJGIN GIS Data	DRAWN BY BPT	SCALE 1 in = 80 ft
Job No: 19314269 File Name: Fig1-Site Location Map		DATE 02/20/2020

File: \\pac.localroot\Solutions\Jobs\LCOR\19314269-NY-ENPlan\GIS\Fig 1 Site Location Map.mxd
User: ahassler
Date: 2/21/2020

Topographic Map — Brooklyn, New York



SURF AVENUE PROJECT

2910 WEST 15TH STREET, AND
2925 THROUGH 2933 WEST 16TH STREET
BLOCK 7063, LOTS 12, 32, 33 & 38-41
BROOKLYN, NEW YORK

FIGURE 2
TOPOGRAPHIC MAP

Legend

Site Boundary

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet
Projection: Lambert Conformal Conic
False Easting: 984,250.0000
False Northing: 0.0000
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Standard Parallel 1: 40.6667
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Latitude Of Origin: 40.1667
Units: Foot US

0 1,000 2,000 4,000
Feet

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Sources: NJDEP and NJGIN GIS Data	DRAWN BY BPT	SCALE 1 in = 2,000 ft
Job No: 19314269 File Name: Fig 2-Topographic Map		DATE 02/20/2020

File: R:\Solutions\Jobs\COR\19314269-NY-ENPlan\GIS\Fig 2 Topo Map.mxd
User: bkooney
Date: 2/20/2020

Sample Location Map

Brooklyn, New York

SURF AVENUE PROJECT

2910 WEST 15TH STREET, AND
2925 THROUGH 2933 WEST 16TH STREET
BLOCK 7063, LOTS 12, 32, 33 & 38-41
BROOKLYN, NEW YORK

FIGURE 3
SAMPLE LOCATION MAP

Legend

- Site Boundary
- 2019-09-18 GW Sample Location (4)
- 2019-09-17 Soil Sample Location (14)
- 2019-10-17 Soil Vapor Sample Location (10)

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet
Projection: Lambert Conformal Conic
False Easting: 984,250.0000
False Northing: 0.0000
Central Meridian: -74.0000
Standard Parallel 1: 40.6667
Standard Parallel 2: 41.0333
Latitude Of Origin: 40.1667
Units: Foot US

0 22.5 45 90
Feet

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Sources: NYS GIS Clearing House	DRAWN BY BPT	SCALE 1 in = 40 ft
Job No: 19314269 File Name: Fig3-Sample Location Map		DATE 02/20/2020

File: R:\Solutions\Jobs\LCOR\19314269-NY-ENPlan\GIS\Fig 3 Sample Location Map.mxd
User: btoohey
Date: 2/20/2020

TABLES

Table 1
Summary of Investigation Scope
Surf Avenue Project
2910 West 15th Street, and 2925 through 2933 West 16th Street
Brooklyn, NY
PSG Project Number 19314269

Boring Identification	Terminal Depth (feet bgs)	Matrix Sampled	Lab Identification	Sampling Depths (feet bgs)	Target Analytes
SB-1	15.0	Soil	SB-1(5.5-6)	5.5-6.0	TCL VOCs, TCL SVOCs, PCBs, TAL Metals, Pesticides/Herbicides
		Soil	SB-1(12-12.5	12.0-12.5	
SB-2	15.0	Soil	SB-2(6-6.5)	6.0-6.5	TCL VOCs, TCL SVOCs, PCBs, TAL Metals, Pesticides/Herbicides
		Soil	SB-2(12-12.5)	12.0-12.5	
SB-3	15.0	Soil	SB-3(6.5-7)	6.5-7.0	TCL VOCs, TCL SVOCs, PCBs, TAL Metals, Pesticides/Herbicides
		Soil	SB-3(12-12.5)	12.0-12.5	
SB-4	15.0	Soil	SB-4(6-6.5)	6.0-6.5	TCL VOCs, TCL SVOCs, PCBs, TAL Metals, Pesticides/Herbicides
		Soil	SB-4(11.5-12)	11.5-12.0	
	14.0	Groundwater	SB-4GW	4.0-14.0	
SB-5	15.0	Soil	SB-5(5.5-6)	5.5-6.0	TCL VOCs, TCL SVOCs, PCBs, TAL Metals, Pesticides/Herbicides
		Soil	SB-5(12-12.5)	12.0-12.5	
SB-6	15.0	Soil	SB-6(6-6.5)	6.0-6.5	TCL VOCs, TCL SVOCs, PCBs, TAL Metals, Pesticides/Herbicides
		Soil	SB-6(12-12.5)	12.0-12.5	
	11.0	Groundwater	SB-6GW	1.0-11.0	
SB-7	15.0	Soil	SB-7(6-6.5)	6.0-6.5	TCL VOCs, TCL SVOCs, PCBs, TAL Metals, Pesticides/Herbicides
		Soil	SB-7(12-12.5)	12.0-12.5	
SB-8	25.0	Soil	SB-8(6-6.5)	6.0-6.5	TCL VOCs, TCL SVOCs, PCBs, TAL Metals, Pesticides/Herbicides
		Soil	SB-8(12-12.5)	12.0-12.5	
SB-9	15.0	Soil	SB-9(5.5-6)	5.5-6.0	TCL VOCs, TCL SVOCs, PCBs, TAL Metals, Pesticides/Herbicides
		Soil	SB-9(12-12.5)	12.0-12.5	
	13.0	Groundwater	SB-9GW	3.0-13.0	
SB-10	25.0	Soil	SB-10(5.5-6)	5.5-6.0	TCL VOCs, TCL SVOCs, PCBs, TAL Metals, Pesticides/Herbicides
		Soil	SB-10(12-12.5	12.0-12.5	
SB-11	25.0	Soil	SB-11(5-5.5)	5.0-5.5	TCL VOCs, TCL SVOCs, PCBs, TAL Metals, Pesticides/Herbicides
		Soil	SB-11(12-12.5)	12.0-12.5	
	12.0	Groundwater	SB-11GW	2.0-12.0	
SB-12	25.0	Soil	SB-12(6-6.5)	6.0-6.5	TCL VOCs, TCL SVOCs, PCBs, TAL Metals, Pesticides/Herbicides
		Soil	SB-12(12-12.5)	12.0-12.5	
SB-13	25.0	Soil	SB-13(6-6.5)	6.0-6.5	TCL VOCs, TCL SVOCs, PCBs, TAL Metals, Pesticides/Herbicides
		Soil	SB-13(13.5-14)	13.5-14.0	
SB-14	8.0	Soil	SB-14(5.5-6)	5.5-6.0	TCL VOCs, TCL SVOCs, PCBs, TAL Metals, Pesticides/Herbicides
		Soil	SB-14(13.5-14)	13.5-14.0	
SG-1	5.0	Soil Vapor	SG-1	5.0	VOCs via TO-15
SG-2	5.0	Soil Vapor	SG-2	5.0	VOCs via TO-15
SG-3	5.0	Soil Vapor	SG-3	5.0	VOCs via TO-15
SG-4	4.0	Soil Vapor	SG-4	4.0	VOCs via TO-15
SG-5	4.0	Soil Vapor	SG-5	4.0	VOCs via TO-15
SG-6	5.0	Soil Vapor	SG-6	5.0	VOCs via TO-15
SG-7	5.0	Soil Vapor	SG-7	5.0	VOCs via TO-15
SG-8	5.0	Soil Vapor	SG-8	5.0	VOCs via TO-15
SG-9	4.0	Soil Vapor	SG-9	4.0	VOCs via TO-15
SG-10	4.0	Soil Vapor	SG-10	4.0	VOCs via TO-15
WC-1	4.0	Soil	WC-1	4.0	TCL VOCs, TCL SVOCs, PCBs, TAL Metals, GRO/DRO, Waste Class
WC-2	4.0	Soil	WC-2	4.0	TCL VOCs, TCL SVOCs, PCBs, TAL Metals, GRO/DRO, Waste Class
WC-3	4.0	Soil	WC-3	4.0	TCL VOCs, TCL SVOCs, PCBs, TAL Metals, GRO/DRO, Waste Class
WC-4	4.0	Soil	WC-4	4.0	TCL VOCs, TCL SVOCs, PCBs, TAL Metals, GRO/DRO, Waste Class
WC-5	4.0	Soil	WC-4	4.0	GRO/DRO
WC-6	4.0	Soil	WC-6	4.0	GRO/DRO
WC-7	4.0	Soil	WC-7	4.0	GRO/DRO
WC-8	4.0	Soil	WC-8	4.0	GRO/DRO

Notes:
bgs = below ground surface
TCL VOCs = Target Compound List (TCL) Volatile Organic Compounds via EPA Method 8260
TCL SVOCs = Semi-Volatile Organic Compounds via EPA Method 8270
PAHs = Polycyclic Aromatic Hydrocarbons via EPA Method 8270
PCBs = Polychlorinated biphenyls via EPA Method 8082A
TAL Metals = Target Analyte List Metals via EPA Method 6010
Pesticides/Herbicides = Pesticides/Herbicides via EPA Method 8081B/8151A
GRO/DRO = Gasoline Range Organics/Diesel Range Organics
Waste Class = Burn rate, reactivity, corrosivity, pH, mercury

Table 2
Soil Analytical Results - VOCs
Surf Avenue Project
2910 West 15th Street, and 2925 through 2933 West 16th Street
Brooklyn, NY
PSG Project Number 19314269

Client ID	Lab Sample ID	Sampling Date	1,4-Dichlorobenzene	1,4-Dioxane	2-Butanone (MEK)	Acetone	Benzene	Carbon disulfide	cis-1,2-Dichloroethene	Ethylbenzene	Isopropyl benzene	Methyl tert-butyl ether	Methylene Chloride	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl chloride	Xylenes, Total	Total Conc	Total Estimated Conc. (TICs)
NY-UNRES (mg/kg)			1.8	0.1	0.12	0.05	0.06	--	0.25	1	--	0.93	0.05	1.3	0.7	0.19	0.47	0.02	0.26	--	--
NY-RESR (mg/kg)			13	13	--	100	4.8	--	100	41	--	100	100	19	100	100	21	0.9	100	--	--
NY-RESC (mg/kg)			130	130	--	500	44	--	500	390	--	500	500	150	500	500	200	13	500	--	--
NY-RESGW (mg/kg)			1.8	0.1	0.3	0.05	0.06	2.7	0.25	1	2.3	0.93	0.05	1.3	0.7	0.19	0.47	0.02	1.6	--	--
SB-1(5.5-6)	460-191586-1	9/17/2019	ND (0.00026)	ND (0.011)	0.0038 J	0.013	ND (0.00030)	ND (0.00031)	ND (0.00018)	ND (0.00023)	ND (0.00015)	ND (0.00015)	ND (0.00054)	ND (0.00017)	ND (0.00027)	ND (0.00029)	ND (0.00017)	ND (0.00063)*	ND (0.00020)	0.0168	0.0*T
SB-1(12-12.5)	460-191586-2	9/17/2019	ND (0.00025)	ND (0.010)	ND (0.0031)	0.012	ND (0.00029)	0.0012	ND (0.00017)	ND (0.00022)	ND (0.00014)	ND (0.00014)	0.00074 J	ND (0.00016)	ND (0.00026)	ND (0.00028)	ND (0.00016)	ND (0.00062)*	ND (0.00020)	0.01394	0.0*T
SB-2(6-6.5)	460-191586-3	9/17/2019	ND (0.00024)	ND (0.0099)	ND (0.0029)	ND (0.0061)	ND (0.00028)	ND (0.00029)	ND (0.00016)	ND (0.00021)	ND (0.00014)	ND (0.00013)	ND (0.00050)	ND (0.00015)	ND (0.00025)	ND (0.00026)	ND (0.00015)	ND (0.00059)*	ND (0.00019)	0.0	0.0*T
SB-2(12-12.5)	460-191586-4	9/17/2019	ND (0.00020)	ND (0.0081)	ND (0.0024)	0.0085	ND (0.00023)	0.0015	ND (0.00013)	ND (0.00017)	ND (0.00011)	ND (0.00011)	0.00062 J	ND (0.00013)	ND (0.00021)	ND (0.00022)	ND (0.00013)	ND (0.00048)*	ND (0.00015)	0.01062	0.0*T
SB-3(6.5-7)	460-191586-5	9/17/2019	ND (0.00023)	ND (0.0094)	ND (0.0028)	ND (0.0059)	ND (0.00027)	ND (0.00027)	ND (0.00016)	ND (0.00020)	ND (0.00013)	ND (0.00013)	0.00063 J	ND (0.00015)	ND (0.00024)	ND (0.00025)	ND (0.00015)	ND (0.00056)*	ND (0.00018)	0.00063	0.0*T
SB-3(12-12.5)	460-191586-6	9/17/2019	ND (0.00023)	ND (0.0095)	0.0031 J	0.012	ND (0.00027)	0.00082 J	ND (0.00016)	ND (0.00021)	ND (0.00013)	ND (0.00013)	0.00052 J	ND (0.00015)	ND (0.00024)	ND (0.00025)	ND (0.00015)	ND (0.00056)*	ND (0.00018)	0.01644	0.0*T
SB-4(6-6.5)	460-191586-7	9/17/2019	ND (0.00027)	ND (0.011)	ND (0.0032)	ND (0.0068)	ND (0.00030)	ND (0.00031)	ND (0.00018)	ND (0.00023)	ND (0.00015)	ND (0.00015)	ND (0.00055)	ND (0.00017)	ND (0.00028)	ND (0.00029)	ND (0.00017)	ND (0.00064)*	ND (0.00021)	0.0	0.0*T
SB-4(11.5-12)	460-191586-8	9/17/2019	ND (0.00027)	ND (0.011)	ND (0.0033)	ND (0.0070)	ND (0.00031)	0.0041	ND (0.00019)	ND (0.00024)	ND (0.00015)	ND (0.00015)	0.00064 J	ND (0.00017)	ND (0.00029)	ND (0.00030)	ND (0.00018)	ND (0.00067)*	ND (0.00021)	0.00474	0.0*T
SB-5(5.5-6)	460-191586-9	9/17/2019	ND (0.00025)	ND (0.010)	ND (0.0030)	ND (0.0063)	ND (0.00028)	ND (0.00029)	ND (0.00017)	ND (0.00022)	ND (0.00014)	ND (0.00014)	ND (0.00051)	ND (0.00016)	ND (0.00026)	ND (0.00027)	ND (0.00016)	ND (0.00060)*	ND (0.00019)	0.0	0.0*T
SB-5(12-12.5)	460-191586-10	9/17/2019	ND (0.00024)	ND (0.0097)	0.0031 J	0.011	ND (0.00027)	0.0014	ND (0.00016)	ND (0.00021)	ND (0.00013)	ND (0.00013)	ND (0.00049)	ND (0.00015)	ND (0.00025)	ND (0.00026)	ND (0.00015)	ND (0.00058)*	ND (0.00018)	0.0155	0.0*T
SB-6(6-6.5)	460-191586-11	9/17/2019	ND (0.00026)	ND (0.010)	0.0034 J	0.019	ND (0.00030)	0.00075 J	ND (0.00017)	ND (0.00023)	ND (0.00014)	ND (0.00014)	0.00097 J	ND (0.00016)	ND (0.00027)	ND (0.00028)	ND (0.00016)	ND (0.00062)*	ND (0.00020)	0.02412	0.0909
SB-6(12-12.5)	460-191586-12	9/17/2019	ND (0.00023)	ND (0.0096)	ND (0.0028)	0.0081	ND (0.00027)	ND (0.00028)	ND (0.00016)	ND (0.00021)	ND (0.00013)	ND (0.00013)	0.00067 J	ND (0.00015)	ND (0.00024)	ND (0.00026)	ND (0.00015)	ND (0.00057)	ND (0.00018)	0.00877	0.0*T
SB-7(6-6.5)	460-191586-13	9/17/2019	ND (0.00022)	ND (0.0091)	ND (0.0027)	ND (0.0057)	ND(0.00026)	ND (0.00026)	ND (0.00015)	ND (0.00020)	ND (0.00012)	ND (0.00012)	0.00072 J	ND (0.00014)	ND (0.00023)	ND (0.00024)	ND (0.00014)	ND (0.00054)*	ND (0.00017)	0.00072	0.0*T
SB-7(12-12.5)	460-191586-14	9/17/2019	ND (0.00020)	ND (0.0083)	0.0028 J	0.0086	ND (0.00023)	0.00057 J	ND (0.00014)	ND (0.00018)	ND (0.00011)	ND (0.00011)	ND (0.00042)	ND (0.00013)	ND (0.00021)	ND (.00022)	ND (0.00013)	ND (0.00050)*	ND (0.00016)	0.01197	0.0158
SB-8(6-6.5)	460-191586-15	9/17/2019	ND (0.00025)	ND (0.010)	ND (0.0030)	ND (0.0063)	ND (0.00028)	ND (0.00029)	ND (0.00017)	ND (0.00022)	ND (0.00014)	ND (0.00014)	ND (0.00051)	ND (0.00016)	ND (0.00026)	ND (0.00027)	ND (0.00016)	ND (0.00060)*	ND (0.00019)	0.0	0.0*T
SB-8(12-12.5)	460-191586-16	9/17/2019	ND (0.00025)	ND (0.010)	ND (0.0030)	0.0068	ND (0.00028)	ND (0.00029)	ND (0.00017)	ND (0.00022)	ND (0.00014)	ND (0.00014)	ND (0.00051)	ND (0.00016)	ND (0.00026)	ND (0.00027)	ND (0.00016)	ND (0.00060)*	ND (0.00019)	0.0068	0.0*T
SB-9(5.5-6.0)	460-191586-17	9/17/2019	ND (0.00025)	ND (0.010)	ND (0.0030)	ND (0.0063)	ND (0.00028)	ND (0.00029)	ND (0.00017)	ND (0.00022)	ND (0.00014)	ND (0.00014)	ND (0.00051)	ND (0.00016)	ND (0.00026)	ND (0.00027)	ND (0.00016)	ND (0.00060)*	ND (0.00019)	0.0	0.0*T
SB-9(12-12.5)	460-191586-18	9/17/2019	ND (0.00025)	ND (0.010)	ND (0.0031)	0.0097	ND (0.00029)	ND (0.00030)	ND (0.00017)	ND (0.00022)	ND (0.00014)	ND (0.00014)	0.00072 J	ND (0.00016)	ND (0.00026)	ND (0.00028)	ND (0.00016)	ND (0.00062)*	ND (0.00020)	0.01042	0.0*T
SB-10(5.5-6)	460-191586-19	9/17/2019	ND (0.00025)	ND (0.010)	ND (0.0030)	0.010	ND (0.00028)	ND (0.00029)	ND (0.00017)	ND (0.00022)	ND (0.00014)	ND (0.00014)	0.00066 J	ND (0.00016)	ND (0.00026)	ND (0.00027)	ND (0.00016)	ND (0.00060)*	ND (0.00019)	0.01066	0.0*T
SB-10(12-12.5)	460-191586-20	9/17/2019	ND (0.00026)	ND (0.011)	ND (0.0032)	ND (0.0067)	ND (0.00030)	ND (0.00031)	ND (0.00018)	ND (0.00023)	ND (0.00015)	ND (0.00015)	ND (0.00055)	ND (0.00017)	ND (0.00028)	ND (0.00029)	ND (0.00017)	ND (0.00064)*	ND (0.00020)	0.0	0.0*T
SB-11(5-5.5)	460-191586-21	9/17/2019	ND (0.00033)	ND (0.0094)	ND (0.0028)	0.0097	ND (0.00026)	0.00061 J	ND (0.00016)	ND (0.00020)	0.00023 J	ND (0.00013)	ND (0.00048)	ND (0.00015)	ND (0.00024)	ND (0.00025)	ND (0.00015)	ND (0.00056)	ND (0.00018)	0.01087	1.334
SB-11(12-12.5)	460-191586-22	9/17/2019	0.00025 J	ND (0.010)	0.0052 J	0.019	ND (0.00028)	0.0063	ND (0.00017)	ND (0.00022)	ND (0.00014)	ND (0.00014)	ND (0.00051)	ND (0.00016)	ND (0.00026)	ND (0.00027)	ND (0.00016)	ND (0.00060)*	ND (0.00019)	0.0305	0.0*T
SB-12(6-6.5)	460-191693-1	9/18/2019	ND (0.00025)	ND (0.010)	ND (0.0031)	ND (0.0065)	ND (0.00029)	0.00030	ND (0.00017)	ND (0.00022)	ND (0.00014)	ND (0.00014)	ND (0.00052)	ND (0.00016)	ND (0.00026)	ND (0.00028)	ND (0.00016)	ND (0.00062)	ND (0.00020)	0.0	0.0*T
SB-12(12-12.5)	460-191693-2	9/18/2019	ND (0.00025)	ND (0.010)	ND (0.0030)	ND (0.0084)	ND (0.00029)	0.00045 J	ND (0.00017)	ND (0.00022)	ND (0.00014)	ND (0.00014)	ND (0.00051)	ND (0.00016)	ND (0.00026)	ND (0.00027)	ND (0.00016)	ND (0.00060)	ND (0.00019)	0.00885	0.0*T
SB-13(6-6.5)	460-191693-3	9/18/2019	ND (0.00026)	ND (0.011)	ND (0.0031)	ND (0.0066)	ND (0.00030)	ND (0.00031)	ND (0.00018)	ND (0.00023)	ND (0.00015)	ND (0.00014)	ND (0.00054)	ND (0.00017)	ND (0.00027)	ND (0.00029)	ND (0.00017)	ND (0.00063)	ND (0.00020)	0.0	0.0*T
SB-13(13.5-14)	460-191693-4	9/18/2019	ND (0.00024)	ND (0.010)	ND (0.0029)	ND(0.0094)	ND (0.00028)	0.0017	ND (0.00016)	ND (0.00022)	ND (0.00014)	ND (0.00014)	ND (0.00050)	ND (0.00016)	ND (0.00025)	ND (0.00027)	ND (0.00016)	ND (0.00059)	ND (0.00019)	0.0111	0.0*T
SB-14(5.5-6)	460-191693-5	9/18/2019	ND (0.00022)	ND (0.0091)	ND (0.0027)	ND (0.0057)	ND (0.00026)	ND (0.00026)	ND (0.00015)	ND (0.00020)	ND (0.00012)	ND (0.00012)	ND (0.00046)	ND (0.00014)	ND (0.00023)	ND (0.00024)	ND (0.00014)	ND (0.00054)	ND (0.00017)	0.0	0.0*T
SB-14(13.5-14)	460-191693-6	9/18/2019	ND (0.00033)	ND (0.013)	ND (0.0040)	ND (0.020)	ND (0.00038)	0.0023	0.00022	ND (0.00029)	ND (0.00018)	ND (0.00018)	0.00092 J	ND (0.00021)	ND (0.00034)	ND (0.00036)	ND (0.00021)	ND (0.00080)	ND (0.00026)	0.02322	0.0*T

Legend:

*T:	There are no TICs reported for the sample
* :	LCS or LCSD is outside acceptance limits.
J :	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U :	Indicates the analyte was analyzed for but not detected.
mg/kg:	milligrams per kilogram, ppm
--:	Not Established
NY-UNRES:	New York Unrestricted Use Criteria
NY-RESR:	New York Restricted Use Residential Criteria
NY-RESC:	New York Restricted Use Commercial Criteria
NY-RESGW:	New York Restricted Use Protection of Groundwater Criteria
VO TICs:	Volatile Organic Tentatively Identified Compounds
NA:	Not Analyzed
ND (0.00019):	Not Detected followed by method detection limit (MDL)
2.2:	Concentration in excess of NY SCO criteria
ND (0.026):	MDL exceeds the most stringent criteria

Table 2
Soil Analytical Results - SVOCs
Surf Avenue Project
2910 West 15th Street, and 2925 through 2933 West 16th Street
Brooklyn, NY
PSG Project Number 19314269

Client ID	Lab Sample ID	Sampling Date	2,4-Dinitrophenol	2-Methylnaphthalene	4,6-Dinitro-2-methylphenol	Acenaphthylene	Anthracene	B(a)A	B(a)P	B(b)F	B(g,h,i)P	B(k)F	Bis(2-ethylhexyl) phthalate	Carbazole	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	Naphthalene	Phenanthrene	Pyrene	Total Conc	Total Estimated Conc. (TICs)
NY-UNRES (mg/kg)			--	--	--	100	100	1	1	1	100	0.8	--	--	1	0.33	7	100	30	0.5	12	100	100	--	--
NY-RESR (mg/kg)			--	--	--	100	100	1	1	1	100	3.9	--	--	3.9	0.33	59	100	100	0.5	100	100	100	--	--
NY-RESC (mg/kg)			--	--	--	500	500	5.6	1	5.6	500	56	--	--	56	0.56	350	500	500	5.6	500	500	500	--	--
NY-RESGW (mg/kg)			0.2	36.4	--	--	1000	1	22	1.7	1000	1.7	435	--	1	1000	6.2	1000	386	8.2	12	1000	1000	--	--
SB-1(5.5-6)	460-191586-1	9/17/2019	ND (0.21)	ND (0.0052)	ND (0.068)	ND (0.0043)	ND (0.0047)	0.053	0.036 J	0.044	0.021 J	0.020 J	ND (0.022)	ND (0.0049)	0.057 J	ND (0.018)	ND (0.0059)	0.085 J	ND (0.0057)	0.024 J	0.032 J	0.033 J	0.096 J	0.521	17.95
SB-1(12-12.5)	460-191586-2	9/17/2019	0.37	ND (0.0052)	0.82	ND (0.0043)	ND (0.0047)	ND (0.015)	ND (0.011)	ND (0.011)	ND (0.012)	ND (0.0082)	ND (0.022)	ND (0.0049)	ND (0.0070)	ND (0.018)	ND (0.0058)	ND (0.0054)	ND (0.0056)	ND (0.016)	ND (0.0072)	ND (0.0073)	ND (0.010)	1.19	1.7
SB-2(6-6.5)	460-191586-3	9/17/2019	ND (0.19)	ND (0.0049)	ND (0.064)	ND (0.0041)	ND (0.0044)	ND (0.014)	ND (0.010)	ND (0.010)	ND (0.012)	ND (0.0077)	ND (0.021)	ND (0.0046)	ND (0.0066)	ND (0.017)	ND (0.0055)	ND (0.0051)	ND (0.0053)	ND (0.015)	ND (0.0068)	ND (0.0069)	ND (0.0097)	0.0	1.7
SB-2(12-12.5)	460-191586-4	9/17/2019	ND (0.17)	ND (0.0042)	0.16 J	ND (0.0035)	ND (0.0038)	ND (0.012)	ND (0.0090)	ND (0.0087)	ND (0.0099)	ND (0.0066)	ND (0.018)	ND (0.0039)	ND (0.0057)	ND (0.015)	ND (0.0047)	ND (0.0044)	ND (0.0046)	ND (0.013)	ND (0.0058)	ND (0.0059)	ND (0.0084)	0.16	1.2
SB-3(6.5-7)	460-191586-5	9/17/2019	ND (0.18)	ND (0.0045)	ND (0.059)	ND (0.0037)	ND (0.0040)	ND (0.013)	ND (0.0096)	ND (0.0094)	ND (0.011)	ND (0.0071)	ND (0.019)	ND (0.0042)	ND (0.0061)	ND (0.016)	ND (0.0051)	ND (0.0047)	ND (0.0049)	ND (0.014)	ND (0.0063)	ND (0.0064)	ND (0.0090)	0.0	1.39
SB-3(12-12.5)	460-191586-6	9/17/2019	ND (0.20)	ND (0.0050)	ND (0.065)	ND (0.0041)	ND (0.0045)	ND (0.014)	ND (0.011)	ND (0.010)	ND (0.012)	ND (0.0079)	ND (0.021)	ND (0.0047)	ND (0.0068)	ND (0.017)	ND (0.0056)	ND (0.0052)	ND (0.0054)	ND (0.016)	ND (0.0069)	ND (0.0070)	ND (0.010)	0.0	1.3
SB-4(6-6.5)	460-191586-7	9/17/2019	ND (0.19)	0.021 J	ND (0.064)	0.031 J	0.034 J	0.19	0.19	0.32	0.16 J	0.14	0.25 J	0.042 J	0.35 J	0.031 J	0.020 J	0.63	0.015 J	0.17	0.030 J	0.56	0.58	3.764	2.5
SB-4(11.5-12)	460-191586-8	9/17/2019	ND (0.20)	ND (0.0051)	ND (0.066)	ND (0.0042)	ND (0.0046)	ND (0.014)	ND (0.011)	ND (0.011)	ND (0.012)	ND (0.0080)	ND (0.022)	ND (0.0048)	ND (0.0069)	ND (0.018)	ND (0.0058)	ND (0.0053)	ND (0.0056)	ND (0.016)	ND (0.0071)	ND (0.0072)	ND (0.010)	0.0	1.8
SB-5(5.5-6)	460-191586-9	9/17/2019	ND (0.18)	ND (0.0045)	ND (0.058)	ND (0.0037)	ND (0.0040)	0.021 J	ND (0.0096)	0.012 J	ND (0.011)	ND (0.0071)	ND (0.019)	ND (0.0042)	0.016 J	ND (0.016)	ND (0.0051)	0.032 J	ND (0.0049)	ND (0.014)	ND (0.0062)	0.042 J	0.030 J	0.153	1.1
SB-5(12-12.5)	460-191586-10	9/17/2019	ND (0.20)	ND (0.0051)	ND (0.066)	ND (0.0042)	ND (0.0046)	ND (0.014)	ND (0.011)	ND (0.011)	ND (0.012)	ND (0.0080)	ND (0.022)	ND (0.0048)	ND (0.0069)	ND (0.018)	ND (0.0057)	ND (0.0053)	ND (0.0055)	ND (0.016)	ND (0.0071)	ND (0.0072)	ND (0.010)	0.0	1.5
SB-6(6-6.5)	460-191586-11	9/17/2019	ND (0.19)	0.038 J	ND (0.063)	ND (0.0040)	0.044 J	0.071	0.037 J	0.053	0.021 J	0.023 J	ND (0.020)	0.017 J	0.058 J	ND (0.017)	0.047 J	0.18 J	0.018 J	0.026 J	0.11 J	0.27 J	0.16 J	1.204	14
SB-6(12-12.5)	460-191586-12	9/17/2019	ND (0.19)	0.017 J	ND (0.062)	ND (0.0040)	0.055 J	0.081	0.047	0.064	0.034 J	0.026 J	ND (0.020)	0.026 J	0.071 J	ND (0.017)	0.035 J	0.19 J	0.024 J	0.036 J	0.065 J	0.27 J	0.16 J	1.201	1.3
SB-7(6-6.5)	460-191586-13	9/17/2019	ND (0.17)	ND (0.0044)	ND (0.057)	ND (0.0036)	ND (0.0039)	0.013 J	ND (0.0093)	ND (0.0090)	ND (0.010)	ND (0.0068)	ND (0.018)	ND (0.0041)	0.0097 J	ND (0.015)	ND (0.0049)	ND (0.0045)	ND (0.0047)	ND (0.014)	ND (0.0060)	0.011 J	ND (0.0087)	0.0337	1.3
SB-7(12-12.5)	460-191586-14	9/17/2019	ND (0.17)	ND (0.0042)	ND (0.055)	ND (0.0035)	ND (0.0038)	ND (0.012)	ND (0.0090)	ND (0.0087)	ND (0.0099)	ND (0.0066)	ND (0.018)	ND (0.0039)	ND (0.0057)	ND (0.015)	ND (0.0047)	ND (0.0044)	ND (0.0046)	ND (0.013)	ND (0.0058)	ND (0.0059)	ND (0.0084)	0.0	1.2
SB-8(6-6.5)	460-191586-15	9/17/2019	ND (0.18)	ND (0.0046)	ND (0.060)	ND (0.0038)	ND (0.0041)	ND (0.013)	ND (0.0099)	ND (0.0096)	ND (0.011)	ND (0.0073)	ND (0.020)	ND (0.0043)	ND (0.0063)	ND (0.016)	ND (0.0052)	ND (0.0048)	ND (0.0050)	ND (0.014)	ND (0.0064)	ND (0.0065)	ND (0.0092)	0.0	1.1
SB-8(12-12.5)	460-191586-16	9/17/2019	ND (0.20)	ND (0.0050)	ND (0.065)	ND (0.0041)	ND (0.0045)	ND (0.014)	ND (0.011)	ND (0.010)	ND (0.012)	ND (0.0079)	ND (0.021)	ND (0.0047)	ND (0.0068)	ND (0.017)	ND (0.0056)	ND (0.0052)	ND (0.0054)	ND (0.016)	ND (0.0069)	ND (0.0071)	ND (0.010)	0.0	1.4
SB-9(5.5-6.0)	460-191586-17	9/17/2019	ND (0.17)	ND (0.0042)	ND (0.055)	ND (0.0035)	ND (0.0038)	ND (0.012)	ND (0.0090)	ND (0.0087)	ND (0.010)	ND (0.0066)	ND (0.018)	ND (0.0040)	ND (0.0057)	ND (0.015)	ND (0.0047)	ND (0.0044)	ND (0.0046)	ND (0.013)	ND (0.0058)	ND (0.0059)	ND (0.0084)	0.0	6.6
SB-9(12-12.5)	460-191586-18	9/17/2019	ND (0.20)	ND (0.0050)	ND (0.065)	ND (0.0041)	ND (0.0045)	ND (0.014)	ND (0.011)	ND (0.010)	ND (0.012)	ND (0.0078)	ND (0.021)	ND (0.0047)	ND (0.0067)	ND (0.017)	ND (0.0056)	ND (0.0052)	ND (0.0054)	ND (0.016)	ND (0.0069)	ND (0.0070)	ND (0.0099)	0.0	1.9
SB-10(5.5-6)	460-191586-19	9/17/2019	ND (0.20)	ND (0.0051)	ND (0.066)	ND (0.0042)	ND (0.0046)	ND (0.014)	ND (0.011)	ND (0.011)	ND (0.012)	ND (0.0080)	ND (0.022)	ND (0.0048)	ND (0.0069)	ND (0.018)	ND (0.0057)	ND (0.0053)	ND (0.0055)	ND (0.016)	ND (0.0071)	ND (0.0072)	ND (0.010)	0.0	1.4
SB-10(12-12.5)	460-191586-20	9/17/2019	ND (0.17)	ND (0.0043)	ND (0.055)	ND (0.0035)	ND (0.0038)	ND (0.012)	ND (0.0091)	ND (0.0088)	ND (0.010)	ND (0.0067)	ND (0.018)	ND (0.0040)	ND (0.0058)	ND (0.015)	ND (0.0048)	ND (0.0044)	ND (0.0046)	ND (0.013)	ND (0.0059)	ND (0.0060)	ND (0.0085)	0.0	1.4
SB-11(5-5.5)	460-191586-21	9/17/2019	ND (0.19)	ND (0.0049)	ND (0.063)	ND (0.0040)	ND (0.0043)	ND (0.014)	ND (0.010)	ND (0.010)	ND (0.011)	ND (0.0076)	ND (0.021)	ND (0.0046)	ND (0.0066)	ND (0.017)	ND (0.0055)	ND (0.0051)	ND (0.0053)	ND (0.015)	ND (0.0067)	ND (0.0068)	ND (0.00970	0.0	152.5
SB-11(12-12.5)	460-191586-22	9/17/2019	ND (0.20)	ND (0.0050)	ND (0.065)	ND (0.0041)	ND (0.0044)	ND (0.014)	ND (0.011)	ND (0.010)	ND (0.012)	ND (0.0078)	ND (0.021)	ND (0.0046)	ND (0.0067)	ND (0.017)	ND (0.0056)	ND (0.0052)	ND (0.0054)	ND (0.016)	ND (0.0069)	ND (0.0070)	ND (0.0099)	0.0	1.56
SB-12(6-6.5)	460-191693-1	9/18/2019	ND (0.20)	ND (0.0050)	ND (0.065)	ND (0.0041)	ND (0.0045)	ND (0.014)	ND (0.011)	ND (0.010)	ND (0.012)	ND (0.0078)	ND (0.021)	ND (0.0047)	ND (0.0067)	ND (0.017)	ND (0.0056)	ND (0.0052)	ND (0.0054)	ND (0.016)	ND (0.0069)	ND (0.0070)	ND (0.0099)	0.0	1.1
SB-12(12-12.5)	460-191693-2	9/18/2019	ND (0.20)	ND (0.0051)	ND (0.066)	ND (0.0042)	ND (0.0045)	ND (0.014)	ND (0.011)	ND (0.011)	ND (0.012)	ND (0.0080)	ND (0.021)	ND (0.0047)	ND (0.0069)	ND (0.018)	ND (0.0057)	ND (0.0053)	ND (0.0055)	ND (0.016)	ND (0.0070)	ND (0.0071)	ND (0.010)	0.0	2
SB-13(6-6.5)	460-191693-3	9/18/2019	ND (0.19)	ND (0.0049)	ND (0.064)	ND (0.0041)	ND (0.0044)	ND (0.014)	ND (0.011)	ND (0.010)	ND (0.012)	ND (0.0078)	ND (0.021)	ND (0.0046)	ND (0.0067)	ND (0.017)	ND (0.0056)	ND (0.0051)	ND (0.0054)	ND (0.015)	ND (0.0068)	ND (0.0070)	ND (0.0098)	0.0	1.6
SB-13(13.5-14)	460-191693-4	9/18/2019	ND (0.20)	ND (0.0050)	ND (0.066)	ND (0.0042)	ND (0.0045)	ND (0.014)	ND (0.011)	ND (0.010)	ND (0.012)	ND (0.0079)	ND (0.021)	ND (0.0047)	ND (0.0068)	ND (0.017)	ND (0.0057)	ND (0.0052)	ND (0.0055)	ND (0.016)	ND (0.0070)	ND (0.0071)	ND (0.010)	0.0	0*T
SB-14(5.5-6)	460-191693-5	9/18/2019	ND (0.17)	ND (0.0043)	ND (0.055)	ND (0.0035)	ND (0.0038)	ND (0.012)	ND (0.0091)	ND (0.0088)	ND (0.010)	ND (0.0067)	ND (0.018)	ND (0.0040)	ND (0.014)	ND (0.015)	ND (0.0048)	ND (0.0044)	ND (0.0046)	ND (0.013)	ND (0.0059)	ND (0.0060)	ND (0.0085)	0.014	1
SB-14(13.5-14)	460-191693-6	9/18/2019	0.23	ND (0.0058)	ND (0.076)	ND (0.0048)	ND (0.0052)	ND (0.016)	ND (0.012)	ND (0.012)	ND (0.014)	ND (0.0091)	ND (0.025)	nd (0.0054)	ND (0.0079)	ND (0.020)	ND(0.0065)	ND (0.0060)	ND (0.0063)	ND (0.018)	ND (0.0080)	ND (0.0082)	ND (0.012)	0.0	0.64

Legend:

*T There are no TICs reported for the sample
* : LCS or LCSD is outside acceptance limits.
J : Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U : Indicates the analyte was analyzed for but not detected.
mg/kg: milligrams per kilogram, ppm
--: Not Established
NY-UNRES: New York Unrestricted Use Criteria
NY-RESR: New York Restricted Use Residential Criteria
NY-RESC: New York Restricted Use Commercial Criteria
NY-RESGW: New York Restricted Use Protection of Groundwater Criteria
VO TICs: Volatile Organic Tentatively Identified Compounds
NA: Not Analyzed
ND (0.00019): Not Detected followed by method detection limit (MDL)
2.2: Concentration in excess of NY SCO criteria
ND (0.026): MDL exceeds the most stringent criteria
B(a)A: Benzo(a)anthracene
B(a)P: Benzo(a)pyrene
B(b)F: Benzo(b)fluoranthene
B(g,h,i)P: Benzo(g,h,i)perylene
B(k)F: Benzo(k)fluoranthene

Table 2
Soil Analytical Results - Pesticides, Herbicides and PCBs
Surf Avenue Project
2910 West 15th Street, and 2925 through 2933 West 16th Street
Brooklyn, NY
PSG Project Number 19314269

Client ID	Lab Sample ID	Sampling Date	4,4'-DDD	4,4'-DDE	Total PCBs	2,4,5-T	2,4-D	Silvex (2,4,5-TP)
NY-UNRES (mg/kg)			0.0033	0.0033	0.1	--	--	3.8
NY-RESR (mg/kg)			13	8.9	1	--	--	100
NY-RESC (mg/kg)			92	62	1	--	--	500
NY-RESGW (mg/kg)			14	17	3.2	1.9	0.5	3.8
SB-1(5.5-6)	460-191586-1	9/17/2019	0.055	0.013	ND (0.012)	ND (0.0089)	ND (0.015)	ND (0.0044)
SB-1(12-12.5)	460-191586-2	9/17/2019	ND (0.0014)	ND (0.00099)	ND (0.012)	ND (0.0089)	ND (0.015)	ND (0.0044)
SB-2(6-6.5)	460-191586-3	9/17/2019	ND (0.0014)	ND (0.00094)	ND (0.011)	ND (0.0084)	ND (0.014)	ND (0.0041)
SB-2(12-12.5)	460-191586-4	9/17/2019	ND (0.0012)	ND (0.00080)	ND (0.0093)	ND (0.0072)	ND (0.012)	ND (0.0035)
SB-3(6.5-7)	460-191586-5	9/17/2019	ND (0.0012)	ND (0.00086)	ND (0.010)	ND (0.0077)	ND (0.013)	ND (0.0038)
SB-3(12-12.5)	460-191586-6	9/17/2019	ND (0.0014)	ND (0.00096)	ND (0.011)	ND (0.0086)	ND (0.015)	ND (0.0042)
SB-4(6-6.5)	460-191586-7	9/17/2019	ND (0.0014)	ND (0.00094)	ND (0.011)	ND (0.0085)	ND (0.014)	ND (0.0041)
SB-4(11.5-12)	460-191586-8	9/17/2019	ND (0.0014)	ND (0.00098)	ND (0.011)	ND (0.0088)	ND (0.015)	ND (0.0043)
SB-5(5.5-6)	460-191586-9	9/17/2019	ND (0.0012)	ND (0.00086)	ND (0.010)	ND (0.0077)	ND (0.013)	ND (0.0038)
SB-5(12-12.5)	460-191586-10	9/17/2019	ND (0.0014)	ND (0.00097)	ND (0.011)	ND (0.0087)	ND (0.015)	ND (0.0043)
SB-6(6-6.5)	460-191586-11	9/17/2019	ND (0.0013)	ND (0.00092)	ND (0.011)	ND (0.0082)	ND (0.014)	ND (0.004)
SB-6(12-12.5)	460-191586-12	9/17/2019	ND (0.0013)	ND (0.00092)	ND (0.011)	ND (0.0082)	ND (0.014)	ND (0.004)
SB-7(6-6.5)	460-191586-13	9/17/2019	ND (0.0012)	ND (0.00083)	ND (0.0097)	ND (0.0075)	ND (0.013)	ND (0.0037)
SB-7(12-12.5)	460-191586-14	9/17/2019	ND (0.0012)	ND (0.00081)	ND (0.0094)	ND (0.0072)	ND (0.012)	ND (0.0035)
SB-8(6-6.5)	460-191586-15	9/17/2019	ND (0.0013)	ND (0.00088)	ND (0.010)	ND (0.0079)	ND (0.014)	ND (0.0039)
SB-8(12-12.5)	460-191586-16	9/17/2019	ND (0.0014)	ND (0.00096)	ND (0.011)	ND (0.0086)	ND (0.015)	ND (0.0042)
SB-9(5.5-6.0)	460-191586-17	9/17/2019	ND (0.0012)	ND (0.00081)'	ND (0.0094)	ND (0.0072)	ND (0.012)	ND (0.0035)
SB-9(12-12.5)	460-191586-18	9/17/2019	ND (0.0014)	ND (0.00095)	ND (0.011)	ND (0.0085)	ND (0.015)	ND (0.0042)
SB-10(5.5-6)	460-191586-19	9/17/2019	ND (0.0014)	ND (0.00098)	ND (0.011)	ND (0.0087)	ND (0.015)	ND (0.0043)
SB-10(12-12.5)	460-191586-20	9/17/2019	ND (0.0012)	ND (0.00082)	ND (0.0095)	ND (0.0073)	ND (0.012)	ND (0.0036)
SB-11(5-5.5)	460-191586-21	9/17/2019	ND (0.0013)	ND (0.00093)	ND (0.011)	ND (0.0083)	ND (0.014)	ND (0.0041)
SB-11(12-12.5)	460-191586-22	9/17/2019	ND (0.0014)	ND (0.00095)	ND (0.011)	ND (0.0085)	ND (0.015)	ND (0.0042)
SB-12(6-6.5)	460-191693-1	9/18/2019	ND (0.0014)	ND (0.00095)	ND (0.011)	ND (0.0085)	ND (0.015)	ND (0.0042)
SB-12(12-12.5)	460-191693-2	9/18/2019	ND (0.0014)	ND (0.00097)	ND (0.011)	ND (0.0087)	ND (0.015)	ND (0.0043)
SB-13(6-6.5)	460-191693-3	9/18/2019	ND (0.0014)	ND (0.00095)	ND (0.011)	ND (0.0085)	ND (0.014)	ND (0.0041)
SB-13(13.5-14)	460-191693-4	9/18/2019	ND (0.0014)	ND (0.00096)	ND (0.011)	ND (0.0086)	ND (0.015)	ND (0.0042)
SB-14(5.5-6)	460-191693-5	9/18/2019	ND (0.0012)	ND (0.00081)	ND (0.0095)	ND (0.0073)	ND (0.012)	ND (0.0036)
SB-14(13.5-14)	460-191693-6	9/18/2019	ND (0.0016)	ND (0.0011)	ND (0.013)	ND (.010)	ND (0.017)	ND (0.0049)

Legend:

mg/kg: milligrams per kilogram, ppm
--: Not Established
NY-UNRES: New York Unrestricted Use Criteria
NY-RESR: New York Restricted Use Residential Criteria
NY-RESC: New York Restricted Use Commercial Criteria
NY-RESGW: New York Restricted Use Protection of Groundwater Criteria
VO TICs: Volatile Organic Tentatively Identified Compounds
ND Indicates the analyte was analyzed for but not detected.
NA: Not Analyzed
ND (0.00019): Not Detected followed by method detection limit (MDL)
2.2: Concentration in excess of NY SCO criteria
ND (0.026): MDL exceeds the most stringent criteria
B(a)A: Benzo(a)anthracene
B(a)P: Benzo(a)pyrene
B(b)F: Benzo(b)fluoranthene
B(g,h,i)P: Benzo(g,h,i)perylene
B(k)F: Benzo(k)fluoranthene

Table 2
Soil Analytical Results - Metals
Surf Avenue Project
2910 West 15th Street, and 2925 through 2933 West 16th Street
Brooklyn, NY
PSG Project Number 19314269

Client ID	Lab Sample ID	Sampling Date	Aluminum	Antimony	Arsenic	Barium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Sodium	Vanadium	Zinc	Mercury
NY-UNRES (mg/kg)			--	--	13	350	--	--	--	50	--	63	--	1,600	30	--	--	--	109	0.18
NY-RESR (mg/kg)			--	--	16	400	--	--	--	270	--	400	--	2,000	310	--	--	--	10,000	0.81
NY-RESC (mg/kg)			--	--	16	400	--	--	--	270	--	1,000	--	10,000	310	--	--	--	10,000	2.8
NY-RESGW (mg/kg)			--	--	16	820	--	--	--	1,720	--	450	--	2,000	130	--	--	--	2,480	0.73
SB-1(5.5-6)	460-191586-1	9/17/2019	970	0.43 J	5.3	41.2	720	10.5	1.5 J	11.4	4610	121	447	23.6	5.5	190	42.3 J	11.9	175	0.025
SB-1(12-12.5)	460-191586-2	9/17/2019	1110	ND 0.37	1.1 J	9.8	428	4.1	1.3 J	1.2 J	2210	24.5	534	21.7	7.1	233	44.1 J	4.4	27.9	ND (0.011)
SB-2(6-6.5)	460-191586-3	9/17/2019	681	ND (0.33)	0.58 J	5.9	357	4.3	ND (0.67)	1.5 J	1550	2.8	301	18.2	1.5	134	40.9 J	3.6	48.4	ND (0.011)
SB-2(12-12.5)	460-191586-4	9/17/2019	844	ND (0.28)	0.92 J	2.6	220	3.5	1.0 J	0.90 J	1650	1.3	399	15.2	5.0	190	41.3 J	3.1	9.1	ND (0.010)
SB-3(6.5-7)	460-191586-5	9/17/2019	779	ND (0.31)	0.44 J	2.9	335	3.4	ND (0.65)	ND (0.61)	1340	1.5	322	14.6	1.6	183	33.6 J	3.2	11.6	ND (0.0099)
SB-3(12-12.5)	460-191586-6	9/17/2019	1040	ND (0.32)	1.0 J	2.9	228	4.8	1.3 J	1.4 J	2060	1.1	463	16.8	5.4	232	49.9 J	3.6	7.2 J	0.012 J
SB-4(6-6.5)	460-191586-7	9/17/2019	1080	ND (0.35)	1.3	14.8	761	4.7	0.97 J	6.5	2400	31.4	500	37.6	4.6	195	43.5 J	5.0	101	0.057
SB-4(11.5-12)	460-191586-8	9/17/2019	895	ND (0.35)	1.4	3.1	357	6.2	0.94 J	1.2 J	1930	7.4	435	17.7	4.0	186	89.5 J	3.8	6.4 J	0.016 J
SB-5(5.5-6)	460-191586-9	9/17/2019	1520	ND (0.29)	0.82 J	19.1	9000	6.2	0.89 J	8.9	20400	21.9	752	91.4	3.3	255	110	5.5	15.6	0.016 J
SB-5(12-12.5)	460-191586-10	9/17/2019	875	ND (0.35)	0.89 J	3.5	329	4.1	0.92 J	1.2 J	1790	1.4	392	16.7	4.2	189	48.5 J	3.7	6.8 J	0.014 J
SB-6(6-6.5)	460-191586-11	9/17/2019	1910	ND (0.30)	0.82 J	198	20200	5.9	1.3 J	9.9	3200	62.7	4480	60.3	4.5	204	102 J	5.5	98.4	0.031
SB-6(12-12.5)	460-191586-12	9/17/2019	940	ND (0.31)	0.65	14.6	450	5.6	0.84 J	1.8 J	1910	4.1	419	18.7	3.8	191	49.9 J	3.6	11.0	0.014 J
SB-7(6-6.5)	460-191586-13	9/17/2019	1070	ND (0.30)	1.4	41.4	8880	6.2	1.0 J	10.7	2320	98.1	525	53.4	3.6	186	53.3 J	6.6	64.3	0.17
SB-7(12-12.5)	460-191586-14	9/17/2019	1040	ND (0.28)	1.1	3.3	291	4.5	1.2 J	1.7 J	1880	1.3	500	15.8	4.7	255	49.4 J	4.2	16.2	0.015 J
SB-8(6-6.5)	460-191586-15	9/17/2019	635	ND (0.31)	0.56 J	40.2	1780	7.1	ND (0.64)	12.1	2640	67.9	657	31.7	1.7	151	46.5 J	3.3	46.0	0.053
SB-8(12-12.5)	460-191586-16	9/17/2019	1110	ND (0.34)	0.72 J	6.3	311	5.1	ND (0.70)	2.0 J	2090	2.2	498	15.8	4.4	238	47.9 J	3.8	33.7	0.017 J
SB-9(5.5-6.0)	460-191586-17	9/17/2019	643	ND (0.29)	1.4	9.1	838	6.8	ND (0.60)	0.58 J	2140	4.8	289	40.0	1.2	127	40.3 J	7.0	61.1	0.020
SB-9(12-12.5)	460-191586-18	9/17/2019	547	ND (0.33)	0.41 J	9.1	967	4.8	ND (0.68)	1.9 J	1330	20.8	499	16.1	1.8	148	96.8 J	3.3	37.6	0.033
SB-10(5.5-6)	460-191586-19	9/17/2019	757	ND (0.35)	0.66 J	3.0	684	5.5	ND (0.72)	ND (0.68)	1630	3.5	338	25.9	1.5	180	47.3 J	4.6	12.4	ND (0.011)
SB-10(12-12.5)	460-191586-20	9/17/2019	555	ND (0.28)	0.41 J	2.2	301	4.3	ND (0.57)	0.87 J	1290	1.2	254	11.9	1.8	144	33.7 J	2.4	22.1	ND (0.010)
SB-11(5-5.5)	460-191586-21	9/17/2019	545	ND (0.34)	ND (0.38)	2.7	1360	2.4	ND (0.71)	0.67ND ()	1050	0.86	297	13.1	1.1	155	45.3 J	1.9 J	ND (4.6)	ND (0.011)
SB-11(12-12.5)	460-191586-22	9/17/2019	1420	ND (0.35)	2.6	4.0	363	6.0	1.4 J	1.8 J	3530	1.5	689	28.2	7.0	294	63.9 J	6.6	7.3 J	ND (0.012)
SB-12(6-6.5)	460-191693-1	9/18/2019	632	ND (0.34)	0.65 J	1.9 J	330	3.5	ND (0.70)	0.86 J	1200	1.6	330	12.4	1.4	192	62.8 J	2.6	20.1	ND (0.011)
SB-12(12-12.5)	460-191693-2	9/18/2019	709	ND (0.35)	0.88 J	2.0 J	253	3.4	ND (0.71)	1.2 J	1760	0.88	343	13.6	2.8	145	58.7 J	3.6	ND (4.6)	ND (0.011)
SB-13(6-6.5)	460-191693-3	9/18/2019	498	ND (0.35)	0.52 J	2.3 J	256	2.4	ND (0.71)	0.78 J	954	0.85	248	9.2	1.2	133	44.6 J	1.9 J	11.8	ND (0.011)
SB-13(13.5-14)	460-191693-4	9/18/2019	992	ND (0.35)	0.94 J	3.2	279	3.1	0.89 J	1.4 J	2040	1.0	462	19.6	3.7	239	119 J	3.3	6.8 J	ND (0.011)
SB-14(5.5-6)	460-191693-5	9/18/2019	568	ND (0.29)	0.64 J	6.5	552	4.6	ND (0.59)	2.0	1280	3.8	271	20.6	1.2	142	61.6 J	3.6	30.1	ND (0.046)
SB-14(13.5-14)	460-191693-6	9/18/2019	2700	ND (0.41)	2.3	7.1	652	8.1	2.1 J	3.3	6400	2.5	1290	76.6	8.8	607	234	8.4	20.0	ND (0.013)

Legend:

J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
ND Indicates the analyte was analyzed for but not detected.
mg/kg: milligrams per kilogram, ppm
--: Not Established
NY-UNRES: New York Unrestricted Use Criteria
NY-RESR: New York Restricted Use Residential Criteria
NY-RESC: New York Restricted Use Commercial Criteria
NY-RESGW: New York Restricted Use Protection of Groundwater Criteria
NA: Not Analyzed
ND (0.00019): Not Detected followed by method detection limit (MDL)
2.2: Concentration in excess of NY SCO criteria
ND (0.026): MDL exceeds the most stringent criteria

Table 3
Groundwater Analytical Results - VOCs
Surf Avenue Project
2910 West 15th Street, and 2925 through 2933 West 16th Street
Brooklyn, NY
PSG Project Number 19314269

Client ID	Lab Sample ID	Sampling Date	1,4-Dioxane	Benzene	Carbon disulfide	cis-1,2-Dichloroethene	Cyclohexane	Ethylbenzene	Methyl tert-butyl ether	Methylene Chloride	Tetrachloroethene	Toluene	Trichloroethene	Vinyl chloride	Xylenes, Total	Total Conc	Total Estimated Conc. (TICs)
NY TOGS Class GA GW Standards (NYSDES 6/2004) (ug/L)			--	1	--	--	--	5	--	--	--	--	--	--	--	--	--
NY Guidance Value (ug/L)			--	0.7	50	--	--	5	10	5	5	5	5	2	5	--	--
SB-9GW	460-191941-1	9/18/2019	ND (28)	ND (0.20)	ND (0.82)	ND (0.22)	ND (0.32)	ND (0.30)	ND (0.47)	ND (0.32)	ND (0.25)	ND (0.38)	ND (0.31)	ND (0.17)	ND (0.65)	0.0	0.0*T
SB-4GW	460-191941-2	9/18/2019	ND (28)	ND (0.20)	ND (0.82)	ND (0.22)	ND (0.32)	ND (0.30)	ND (0.47)	ND (0.32)	ND (0.25)	ND (0.38)	ND (0.31)	ND (0.17)	ND (0.65)	0.0	0.0*T
SB-6GW	460-191941-3	9/18/2019	ND (28)	ND (0.20)	ND (0.82)	ND (0.22)	ND (0.32)	ND (0.30)	ND (0.47)	ND (0.32)	ND (0.25)	ND (0.38)	ND (0.31)	ND (0.17)	ND (0.65)	0.0	0.0*T
SB-11GW	460-191941-4	9/18/2019	ND (28)	ND (0.20)	ND (0.82)	ND (0.22)	ND (0.32)	ND (0.30)	ND (0.47)	ND (0.32)	ND (0.25)	ND (0.38)	ND (0.31)	ND (0.17)	ND (0.65)	0.0	0.0*T
FB	460-191941-5	9/18/2019	ND (28)	ND (0.20)	ND (0.82)	ND (0.22)	ND (0.32)	ND (0.30)	ND (0.47)	5.3	ND (0.25)	ND (0.38)	ND (0.31)	ND (0.17)	ND (0.65)	5.3	0.0*T
TB	460-191941-6	9/16/2019	ND (28)	ND (0.20)	ND (0.82)	ND (0.22)	ND (0.32)	ND (0.30)	ND (0.47)	ND (0.32)	ND (0.25)	ND (0.38)	ND (0.31)	ND (0.17)	ND (0.65)	0.0	0.0*T

Legend:

*T There are no TICs reported for the sample
* : LCS or LCSD is outside acceptance limits.
ug/L: micrograms per liter
--: Not Established
ND (0.00019): Not Detected followed by method detection limit (MDL)
2.2: Concentration in excess of NY SCO criteria
ND (0.026): MDL exceeds the most stringent criteria

Table 3
Groundwater Analytical Results - SVOCs
Surf Avenue Project
2910 West 15th Street, and 2925 through 2933 West 16th Street
Brooklyn, NY
PSG Project Number 19314269

Client ID	Lab Sample ID	Sampling Date	2,4-Dinitrophenol	2-Methylnaphthalene	Benzo[a] anthracene	Benzo[a]pyrene	Benzo[b] fluoranthene	Benzo[g,h,i] perylene	Benzo[k] fluoranthene	Chrysene	Hexachlorobenzene	Indeno[1,2,3-cd]pyrene	Naphthalene	Pyrene	Total Conc	Total Estimated Conc. (TICs)
NY TOGS Class GA GW Standards (NYSDES 6/2004) (ug/L)			1	--	--	--	--	--	--	--	0.04	--	--	--	--	--
NY Guidance Value (ug/L)			5	--	0.002	0.002	0.002	--	0.002	0.002	--	0.002	10	50	NA	NA
SB-9GW	460-191941-1	9/18/2019	ND (14)	ND (1.1)	ND (0.59)	ND (0.41)	ND (1.1)	ND (1.4)*	ND (0.67)	ND (0.91)	ND (0.40)	ND (1.3)	ND (1.1)	ND (1.6)	0.0	0.0*T
SB-4GW	460-191941-2	9/18/2019	ND (14)	ND (1.1)	ND (0.59)	ND (0.41)	ND (1.1)	ND (1.4)*	ND (0.67)	ND (0.91)	ND (0.40)	ND (1.3)	ND (1.1)	ND (1.6)	0.0	0.0*T
SB-6GW	460-191941-3	9/18/2019	ND (14)	ND (1.1)	ND (0.59)	ND (0.41)	ND (1.1)	ND (1.4)*	ND (0.67)	ND (0.91)	ND (0.40)	ND (1.3)	ND (1.1)	ND (1.6)	0.0	21.0
SB-11GW	460-191941-4	9/18/2019	ND (14)	ND (1.1)	ND (0.59)	ND (0.41)	ND (1.1)	ND (1.4)*	ND (0.67)	ND (0.91)	ND (0.40)	ND (1.3)	ND (1.1)	ND (1.6)	0.0	0.0*T
FB	460-191941-5	9/18/2019	ND (14)	ND (1.1)	ND (0.59)	ND (0.41)	ND (1.1)	ND (1.4)*	ND (0.67)	ND (0.91)	ND (0.40)	ND (1.3)	ND (1.1)	ND (1.6)	0.0	0.0*T

Legend:

*T There are no TICs reported for the sample
* : LCS or LCSD is outside acceptance limits.
ug/L: micrograms per liter
--: Not Established
ND (0.00019): Not Detected followed by method detection limit (MDL)
2.2: Concentration in excess of NY SCO criteria
ND (0.026): MDL exceeds the most stringent criteria

Table 3
Groundwater Analytical Results - Pesticides, Herbicides and PCBs
Surf Avenue Project
2910 West 15th Street, and 2925 through 2933 West 16th Street
Brooklyn, NY
PSG Project Number 19314269

Client ID	Lab Sample ID	Sampling Date	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	alpha-BHC	beta-BHC	Chlordane (technical)	delta-BHC	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	Endrin ketone	gamma-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor	Toxaphene	Total PCBs	2,4,5-T	2,4-D	Silvex (2,4,5-TP)
NY TOGS Class GA GW Standards (NYSDES 6/2004) (ug/L)			0.3	0.2	0.2	--	0.01	0.04	0.05	--	0.004	--	--	--	--	--	--	0.05	0.04	0.03	35	0.06	--	35	50	0.26
NY Guidance Value (ug/L)			--	--	--	0.01	--	--	--	0.05	0.01	--	--	--	--	5	5	--	--	--	--	--	0.1	--	--	--
SB-9GW	460-191941-1	9/18/2019	ND (0.0060)	ND (0.0020)	ND (0.0040)	ND (0.0030)	ND (0.0070)	0.0040	ND (0.055)	ND (0.0050)	ND (0.0030)	ND (0.0020)	ND (0.0040)	ND (0.0060)	ND (0.0040)	ND (0.0080)	ND (0.0080)	ND (0.012)	ND (0.0030)	ND (0.0050)	ND (0.0040)	ND (0.11)	ND (0.12)	ND (0.12)*	ND (0.13)*	ND (0.11)*
SB-4GW	460-191941-2	9/18/2019	ND (0.0060)	ND (0.0020)	ND (0.0040)	ND (0.0030)	ND (0.0070)	0.0040	ND (0.055)	ND (0.0050)	ND (0.0030)	ND (0.0020)	ND (0.0040)	ND (0.0060)	ND (0.0040)	ND (0.0080)	ND (0.0080)	ND (0.012)	ND (0.0030)	ND (0.0050)	ND (0.0040)	ND (0.11)	ND (0.12)	ND (0.12)*	ND (0.13)*	ND (0.11)*
SB-6GW	460-191941-3	9/18/2019	ND (0.0060)	ND (0.0020)	ND (0.0040)	ND (0.0030)	ND (0.0070)	0.0040	ND (0.055)	ND (0.0050)	ND (0.0030)	ND (0.0020)	ND (0.0040)	ND (0.0060)	ND (0.0040)	ND (0.0080)	ND (0.0080)	ND (0.012)	ND (0.0030)	ND (0.0050)	ND (0.0040)	ND (0.11)	ND (0.12)	ND (0.12)*	ND (0.13)*	ND (0.11)*
SB-11GW	460-191941-4	9/18/2019	ND (0.0060)	ND (0.0020)	ND (0.0040)	0.034	ND (0.0070)	0.0040	ND (0.055)	ND (0.0050)	0.17	ND (0.0020)	ND (0.0040)	ND (0.0060)	ND (0.0040)	ND (0.0080)	ND (0.0080)	ND (0.012)	ND (0.0030)	ND (0.0050)	ND (0.0040)	ND (0.11)	ND (0.12)	ND (0.12)*	ND (0.13)*	ND (0.11)*
FB	460-191941-5	9/18/2019	ND (0.0060)	ND (0.0020)	ND (0.0040)	ND (0.0030)	ND (0.0070)	0.0040	ND (0.055)	ND (0.0050)	ND (0.0030)	ND (0.0020)	ND (0.0040)	ND (0.0060)	ND (0.0040)	ND (0.0080)	ND (0.0080)	ND (0.012)	ND (0.0030)	ND (0.0050)	ND (0.0040)	ND (0.11)	ND (0.12)	ND (0.12)*	ND (0.13)*	ND (0.11)*

Legend:

*T: There are no TICs reported for the sample
* : LCS or LCSD is outside acceptance limits.
ug/L: micrograms per liter
--: Not Established
ND (0.00019): Not Detected followed by method detection limit (MDL)
2.2: Concentration in excess of NY SCO criteria
ND (0.026): MDL exceeds the most stringent criteria

Table 3
Groundwater Analytical Results - Metals
Surf Avenue Project
2910 West 15th Street, and 2925 through 2933 West 16th Street
Brooklyn, NY
PSG Project Number 19314269

Client ID	Lab Sample ID	Sampling Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Mercury
NY TOGS Class GA GW Standards (NYSDES 6/2004) (ug/L)			--	3	25	100	--	5	--	50	--	200	300	25	--	300	100	--	10	50	20000	--	--	--	0.7
NY Guidance Value (ug/L)			--	--	36	--	3	--	--	--	--	--	--	--	35000	--	--	--	--	--	--	--	--	--	--
SB-9GW	460-191941-1	9/18/2019	10500	1.9 J	15.8	113	0.94	ND (0.81)	19700	54.7	6.5	32.4	23300	101	26200	174	35.3	21300	ND (5.4)	ND (0.59)	164000	0.25 J	38.1	717	0.25
SB-4GW	460-191941-2	9/18/2019	5350	2.3	14.5	72.6	0.51 J	ND (0.81)	76400	29.3	7.4	29.0	16500	58.8	25900	239	38.9	12500	ND (5.4)	ND (0.59)	168000	0.18 J	25.2	192	ND (0.12)
SB-6GW	460-191941-3	9/18/2019	214	1.5 J	0.81 J	730	ND (0.25)	ND (0.81)	469000	4.4	ND (1.6)	8.1	9960	131	16700	231	ND (2.4)	11300	ND (5.4)	ND (0.59)	20200	ND (0.16)	2.0 J	108	ND (0.12)
SB-11GW	460-191941-4	9/18/2019	282	2.0	2.1	5.4	ND (0.25)	ND (0.81)	72100	ND (2.3)	ND (1.6)	ND (2.0)	731	1.3	7060	30.2	ND (2.4)	10300	ND (5.4)	ND (0.59)	30800	ND (0.16)	7.7	ND (11.1)	ND (0.12)
FB	460-191941-5	9/18/2019	18.8	0.92 J	ND (0.73)	ND (1.2)	ND (0.25)	ND (0.81)	234	ND (2.3)	ND (1.6)	ND (2.0)	ND (51.1)	ND (0.55)	ND (73.7)	ND (2.9)	ND (2.4)	ND (86.7)	ND (5.4)	ND (0.59)	ND (128)	ND (0.16)	ND (1.1)	ND (11.1)	ND (0.12)

Legend:

*T: There are no TICs reported for the sample
* : LCS or LCSD is outside acceptance limits.
ug/L: micrograms per liter
--: Not Established
ND (0.00019): Not Detected followed by method detection limit (MDL)
2.2: Concentration in excess of NY SCO criteria
ND (0.026): MDL exceeds the most stringent criteria

Table 4
Soil Vapor Analytical Results - TO-15
Surf Avenue Project
2910 West 15th Street, and 2925 through 2933 West 16th Street
Brooklyn, NY
PSG Project Number 19314269

SAMPLE ID:				SG-1	SG-2	SG-3	SG-4	SG-5	SG-6	SG-7	SG-8	SG-9	SG-10
LAB ID:				L1948934-01	L1948934-02	L1948934-03	L1948934-04	L1948934-05	L1948934-06	L1948934-07	L1948934-08	L1948934-09	L1948934-10
COLLECTION DATE:				10/17/2019	10/17/2019	10/17/2019	10/17/2019	10/17/2019	10/17/2019	10/17/2019	10/17/2019	10/17/2019	10/17/2019
SAMPLE DEPTH:				5.0' bgs	5.0' bgs	5.0' bgs	4.0' bgs	4.0' bgs	5.0' bgs	5.0' bgs	5.0' bgs	4.0' bgs	4.0' bgs
SAMPLE MATRIX:				Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor
	EPA-VISL-RTSSGC-5	EPA-VISL-RTSSGC-6	NYSDOH rev. May 2017 SVI Guidance Matrix Level	Concentration	Concentration	Concentration	Concentration	Concentration	Concentration	Concentration	Concentration	Concentration	Concentration
ANALYTE	(ug/m3)	(ug/m3)	(ug/m3)										
VOCs via EPA Method TO-15													
1,1,1-Trichloroethane	174,000	174,000	100	ND (1.09)	ND (1.09)	ND (1.09)	ND (1.09)	ND (85.1)	ND (1.09)	ND (1.09)	4.1	ND (1.09)	ND (1.09)
1,1,2,2-Tetrachloroethane	16.1	1.61	--	ND (1.37)	ND (1.37)	ND (1.37)	ND (1.37)	**ND (107)**	ND (1.37)	ND (1.37)	ND (1.37)	ND (1.37)	ND (1.37)
1,1,2-Trichloro-1,2,2-Trifluoroethane	174,000	174,000	--	ND (1.53)	ND (1.53)	ND (1.53)	ND (1.53)	<120	ND (1.53)	ND (1.53)	ND (1.53)	ND (1.53)	ND (1.53)
1,1,2-Trichloroethane	6.95	5.85	--	ND (1.09)	ND (1.09)	ND (1.09)	ND (1.09)	**ND (85.1)**	ND (1.09)	ND (1.09)	ND (1.09)	ND (1.09)	ND (1.09)
1,1-Dichloroethane	585	58.5	--	ND (0.809)	ND (0.809)	ND (0.809)	ND (0.809)	**ND (63.1)**	ND (0.809)	ND (0.809)	ND (0.809)	ND (0.809)	ND (0.809)
1,1-Dichloroethene	6,950	6,950	6	ND (0.793)	ND (0.793)	ND (0.793)	ND (0.793)	**ND (61.9)**	ND (0.793)	ND (0.793)	ND (0.793)	ND (0.793)	ND (0.793)
1,2,4-Trichlorobenzene	69.5	69.5	--	ND (1.48)	ND (1.48)	ND (1.48)	ND (1.48)	**ND (116)**	ND (1.48)	ND (1.48)	ND (1.48)	ND (1.48)	ND (1.48)
1,2,4-Trimethylbenzene	2,090	2,090	--	2.49	3.24	2.51	3.18	ND (76.7)	2.8	1.8	1.56	ND (0.983)	1.05
1,2-Dibromoethane	1.56	0.156	--	**ND (1.54)**	**ND (1.54)**	**ND (1.54)**	**ND (1.54)**	**ND (120)**	**ND (1.54)**	**ND (1.54)**	**ND (1.54)**	**ND (1.54)**	**ND (1.54)**
1,2-Dichloro-1,1,2,2-tetrafluoroethane	--	--	--	ND (1.4)	ND (1.4)	ND (1.4)	ND (1.4)	ND (109)	ND (1.4)	ND (1.4)	ND (1.4)	344	ND (1.4)
1,2-Dichlorobenzene	6,950	6,950	--	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (93.8)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)
1,2-Dichloroethane	36	3.6	--	ND (0.809)	ND (0.809)	ND (0.809)	ND (0.809)	**ND (63.1)**	ND (0.809)	ND (0.809)	ND (0.809)	ND (0.809)	ND (0.809)
1,2-Dichloroethene (total)	--	--	--	9.99	ND (0.793)	ND (0.793)	ND (0.793)	ND (61.9)	ND (0.793)	ND (0.793)	ND (0.793)	ND (0.793)	ND (0.793)
1,2-Dichloropropane	139	25.3	--	ND (0.924)	ND (0.924)	ND (0.924)	ND (0.924)	**ND (72.1)**	ND (0.924)	ND (0.924)	ND (0.924)	ND (0.924)	ND (0.924)
1,3,5-Trimethylbenzene	2,090	2,090	--	ND (0.983)	1.11	ND (0.983)	ND (0.983)	ND (76.7)	ND (0.983)	ND (0.983)	ND (0.983)	9.34	ND (0.983)
1,3-Butadiene	31.2	3.12	--	0.746	0.471	2.7	8.07	**ND (34.5)**	14.7	19.1	8.1	24.3	4.91
1,3-Dichlorobenzene	--	--	--	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (93.8)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)
1,3-Dichloropropene, Total	234	23.4	--	ND (0.908)	ND (0.908)	ND (0.908)	ND (0.908)	**ND (70.8)**	ND (0.908)	ND (0.908)	ND (0.908)	ND (0.908)	ND (0.908)
1,4-Dichlorobenzene	85.1	8.51	--	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	**ND (93.8)**	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)
1,4-Dioxane	187	18.7	--	ND (0.721)	ND (0.721)	ND (0.721)	ND (0.721)	**ND (56.2)**	ND (0.721)	ND (0.721)	ND (0.721)	ND (0.721)	ND (0.721)
2,2,4-Trimethylpentane	--	--	--	ND (0.934)	ND (0.934)	ND (0.934)	ND (0.934)	ND (72.9)	ND (0.934)	ND (0.934)	ND (0.934)	383	ND (0.934)
2-Butanone	174,000	174,000	--	27.8	25.1	24.7	16.5	ND (115)	33.6	26.7	16.1	28.7	8.08
2-Hexanone	1,040	1,040	--	ND (0.82)	8.93	4.55	3.55	ND (63.9)	5.12	4.92	3.66	ND (0.82)	2.09
3-Chloropropene	34.8	15.6	--	ND (0.626)	ND (0.626)	ND (0.626)	ND (0.626)	**ND (48.8)**	ND (0.626)	ND (0.626)	ND (0.626)	ND (0.626)	ND (0.626)
4-Ethyltoluene	--	--	--	ND (0.983)	ND (0.983)	ND (0.983)	ND (0.983)	ND (76.7)	ND (0.983)	ND (0.983)	ND (0.983)	ND (0.983)	ND (0.983)
4-Methyl-2-pentanone	104,000	104,000	--	4.26	12.5	4.26	3.34	ND (159)	3.16	2.34	2.18	5.49	<2.05
Acetone	1,070,000	1,070,000	--	57.7	42	59.9	35.6	ND (185)	123	97.4	75.1	87.9	45.1
Benzene	120	12	--	2.72	ND (0.639)	19.3	5.49	**ND (49.8)**	5.85	5.37	3.32	31.9	1.96
Benzyl chloride	19.1	1.91	--	ND (1.04)	ND (1.04)	ND (1.04)	ND (1.04)	**ND (80.8)**	ND (1.04)	ND (1.04)	ND (1.04)	ND (1.04)	ND (1.04)
Bromodichloromethane	25.3	2.53	--	ND (1.34)	ND (1.34)	ND (1.34)	ND (1.34)	**ND (105)**	ND (1.34)	ND (1.34)	ND (1.34)	ND (1.34)	ND (1.34)
Bromoform	851	85.1	--	ND (2.07)	ND (2.07)	ND (2.07)	ND (2.07)	**ND (161)**	ND (2.07)	ND (2.07)	ND (2.07)	ND (2.07)	ND (2.07)
Bromomethane	174	174	--	ND (0.777)	ND (0.777)	ND (0.777)	ND (0.777)	ND (0.6)	ND (0.777)	ND (0.777)	ND (0.777)	ND (0.777)	ND (0.777)
Carbon disulfide	24,300	24,300	--	68.8	1.85	7.54	2.47	ND (8.6)	8.03	5.14	5.26	168	3.83
Carbon tetrachloride	156	15.6	6	ND (1.26)	ND (1.26)	ND (1.26)	ND (1.26)	**ND (98.1)**	ND (1.26)	ND (1.26)	ND (1.26)	ND (1.26)	ND (1.26)
Chlorobenzene	1,740	1,740	--	ND (0.921)	ND (0.921)	ND (0.921)	ND (0.921)	ND (71.8)	ND (0.921)	ND (0.921)	ND (0.921)	ND (0.921)	ND (0.921)
Chloroethane	348,000	348,000	--	ND (0.528)	ND (0.528)	ND (0.528)	ND (0.528)	ND (41.2)	ND (0.528)	ND (0.528)	ND (0.528)	0.749	ND (0.528)
Chloroform	40.7	4.07	--	ND (0.977)	2.51	ND (0.977)	ND (0.977)	**ND (6.2)**	ND (0.977)	4.93	ND (0.977)	ND (0.977)	49
Chloromethane	3130	3130	--	ND (0.413)	ND (0.413)	ND (0.413)	ND (0.413)	ND (32.2)	ND (0.413)	ND (0.413)	ND (0.413)	1.35	ND (0.413)
cis-1,2-Dichloroethene	--	--	6	9.99	ND (0.793)	ND (0.793)	ND (0.793)	**ND (61.9)**	ND (0.793)	ND (0.793)	ND (0.793)	ND (0.793)	ND (0.793)
cis-1,3-Dichloropropene	--	--	--	ND (0.908)	ND (0.908)	ND (0.908)	ND (0.908)	ND (70.8)	ND (0.908)	ND (0.908)	ND (0.908)	ND (0.908)	ND (0.908)
Cyclohexane	209,000	209,000	--	8.19	ND (0.688)	2.45	ND (0.688)	ND (53.7)	ND (0.688)	ND (0.688)	1.11	12.5	ND (0.688)
Dibromochloromethane	--	--	--	ND (1.7)	ND (1.7)	ND (1.7)	ND (1.7)	ND (133)	ND (1.7)	ND (1.7)	ND (1.7)	ND (1.7)	ND (1.7)
Dichlorodifluoromethane	3,480	3,480	--	1.04	2.17	1.91	2.42	121	2.12	2.26	2.11	5.44	2.15
Ethyl Acetate	2,430	2,430	--	ND (1.8)	ND (1.8)	ND (1.8)	ND (1.8)	ND (140)	ND (1.8)	ND (1.8)	ND (1.8)	ND (1.8)	ND (1.8)
Ethyl Alcohol	--	--	--	10.4	15	10.3	11.6	ND (733)	18.4	13.5	15.5	14	<9.42
Ethylbenzene	374	37.4	--	3.45	1.02	2.17	1.98	**ND (67.8)**	1.97	1.8	1.07	2.1	<0.869
Heptane	--	--	--	25.1	2.18	1.05	1.76	8730	5.49	2.81	1.6	18.4	1.42
Hexachlorobutadiene	42.5	4.25	--	ND (2.13)	ND (2.13)	ND (2.13)	ND (2.13)	**ND (166)**	ND (2.13)	ND (2.13)	ND (2.13)	ND (2.13)	ND (2.13)
iso-Propyl Alcohol	6,950	6,950	--	4.23	9.59	4.72	4.97	ND (95.6)	3.93	2.48	3.42	2.85	ND (1.23)
Methyl tert butyl ether	3,600	360	--	ND (0.721)	ND (0.721)	ND (0.721)	ND (0.721)	ND (56.2)	ND (0.721)	ND (0.721)	ND (0.721)	ND (0.721)	ND (0.721)
Methylene chloride	20,900	3,380	100	ND (1.74)	ND (1.74)	ND (1.74)	ND (1.74)	ND (35)	ND (1.74)	ND (1.74)	ND (1.74)	ND (1.74)	ND (1.74)
n-Hexane	24,300	24,300	--	64.8	1.4	1.32	2.82	12400	12.8	3.63	2.08	48.3	1.55
o-Xylene	3,480	3,480	--	1.99	1.7	3.41	2.35	ND (67.8)	1.95	2.12	1.16	4.28	1.02
p/m-Xylene	3,480	3,480	--	3.34	3.65	13.7	8.21	ND (136)	5.43	4.23	2.93	7.38	2.72
Styrene	34,800	34,800	--	1.11	ND (0.852)	0.903	ND (0.852)	ND (66.4)	ND (0.852)	0.975	ND (0.852)	ND (0.852)	ND (0.852)
tert-Butyl Alcohol	--	--	--	27.9	45.5	34.6	36.7	ND (118)	19.9	14.4	16.6	13.5	8.34
Tetrachloroethene	1,390	360	100	11.3	15.4	14.6	15.5	**ND (106)**	18.2	15.9	11.5	10.9	15.1
Tetrahydrofuran	69,500	69,500	--	2.43	3.07	4.28	ND (1.47)	ND (115)	1.86	ND (1.47)	ND (1.47)	1.7	ND (1.47)
Toluene	174,000	174,000	--	4.26	1.79	35	12.6	ND (58.8)	6.07	6.03	3.99	13	4.03
trans-1,2-Dichloroethene	--	--	--	ND (0.793)	ND (0.793)	ND (0.793)	ND (0.793)	ND (61.9)	ND (0.793)	ND (0.793)	ND (0.793)	ND (0.793)	ND (0.793)
trans-1,3-Dichloropropene	--	--	--	ND (0.908)	ND (0.908)	ND (0.908)	ND (0.908)	ND (70.8)	ND (0.908)	ND (0.908)	ND (0.908)	ND (0.908)	ND (0.908)
Trichloroethene	69.5	15.9	6	ND (1.07)	ND (1.07)	ND (1.07)	ND (1.07)	**ND (83.8)**	ND (1.07)	434	ND (1.07)	ND (1.07)	ND (1.07)
Trichlorofluoromethane	--	--	--	ND (1.12)	1.24	1.71	3.48	ND (87.7)	1.43	1.98	12.5	13.8	1.24
Vinyl bromide	29.2	2.92	--	ND (0.874)	ND (0.874)	ND (0.874)	ND (0.874)	**ND (68.2)**	ND (0.874)	ND (0.874)	ND (0.874)	ND (0.874)	ND (0.874)
Vinyl chloride	55.9	5.59	6	5.22	ND (0.511)	ND (0.511)	ND (0.511)	**ND (39.9)**	ND (0.511)	ND (0.511)	ND (0.511)	ND (0.511)	ND (0.511)
Xylene (Total)	3,480	3,480	--	5.3	5.34	17.1	10.6	ND (67.8)	7.38	6.34	4.09	11.6	3.74

Legend:

VOCs = Volatile Organic Compounds
bgs = Below Ground Surface
ND = Not Detected above laboratory RLs
(ug/m3) = micrograms per cubic meter
RL = Laboratory reporting limits
-- = Not Established
ND (1.54) = Laboratory RL exceeds one EPA VISL Criteria/NYSDOH Matrix Level
434 = Result concentration exceeds one EPA VISL Criteria/NYSDOH Matrix Level
EPA = Environmental Protection Agency
VISL = Vapor Intrusion Screen Levels
EPA-VISL-RTSSGC-5 = EPA VISL Default Residential Target Sub-Slab & Exterior Soil Gas Concentrations (TCR = 1E-05; THQ = 1)
EPA-VISL-RTSSGC-6 = EPA VISL Default Residential Target Sub-Slab & Exterior Soil Gas Concentrations (TCR = 1E-06; THQ = 1)
NYSDOH rev. 2017 SVI Guidance Matrix Level = New York State Department of Health revised May 2017 Soil Vapor Intrusion Guidance Matrices Levels

Table 5
Soil Waste Classification Results
Surf Avenue Project
2910 West 15th Street, and 2925 through 2933 West 16th Street
Brooklyn, New York
PSG Project Number 19314269

Analyte	CAS Number	Units	Restricted Use Soil Cleanup Objectives-Restricted-Residential Use	WC-1 10/17/19 SOIL	WC-2 10/17/19 SOIL	WC-3 10/17/19 SOIL	WC-4 10/17/19 SOIL	WC-5 10/17/19 SOIL	WC-6 10/17/19 SOIL	WC-7 10/17/19 SOIL	WC-8 10/17/19 SOIL
Volatile Organic Compounds by GC/MS											
1,2-Dibromo-3-Chloropropane	96-12-8	mg/Kg	NE	ND (0.00047)	ND (0.00048)	ND (0.00047)	ND (0.00048)	NA	NA	NA	NA
1,2-Dichlorobenzene	95-50-1	mg/Kg	100	ND (0.00015)	ND (0.00015)	ND (0.00015)	ND (0.00015)	NA	NA	NA	NA
1,2-Dichloroethane	107-06-2	mg/Kg	3.1	ND (0.00030)	ND (0.00031)	ND (0.00030)	ND (0.00031)	NA	NA	NA	NA
Vinyl chloride	75-01-4	mg/Kg	0.9	ND (0.00056)	ND (0.00057)	ND (0.00056)	ND (0.00057)	NA	NA	NA	NA
Trichlorofluoromethane	75-69-4	mg/Kg	NE	ND (0.00041)	ND (0.00042)	ND (0.00041)	ND (0.00042)	NA	NA	NA	NA
Trichloroethene	79-01-6	mg/Kg	21	ND (0.00015)	ND (0.00015)	0.00023 J	0.00018 J	NA	NA	NA	NA
trans-1,3-Dichloropropene	10061-02-6	mg/Kg	NE	ND (0.00027)	ND (0.00028)	ND (0.00027)	ND (0.00028)	NA	NA	NA	NA
trans-1,2-Dichloroethene	156-60-5	mg/Kg	100	ND (0.00025)	ND (0.00026)	ND (0.00025)	ND (0.00025)	NA	NA	NA	NA
Toluene	108-88-3	mg/Kg	100	ND (0.00024)	ND (0.00024)	ND (0.00024)	ND (0.00024)	NA	NA	NA	NA
Tetrachloroethene	127-18-4	mg/Kg	19	ND (0.00015)	ND (0.00015)	ND (0.00015)	ND (0.00015)	NA	NA	NA	NA
Styrene	100-42-5	mg/Kg	NE	ND (0.00028)	ND (0.00029)	ND (0.00028)	ND (0.00029)	NA	NA	NA	NA
Xylenes, Total	1330-20-7	mg/Kg	100	ND (0.00018)	ND (0.00018)	ND (0.00018)	ND (0.00018)	NA	NA	NA	NA
Methylene Chloride	75-09-2	mg/Kg	100	ND (0.00047)	0.0013	ND (0.00047)	ND (0.00048)	NA	NA	NA	NA
Methylcyclohexane	108-87-2	mg/Kg	NE	ND (0.00051)	ND (0.00052)	ND (0.00051)	ND (0.00052)	NA	NA	NA	NA
Methyl tert-butyl ether	1634-04-4	mg/Kg	100	ND (0.00013)	ND (0.00013)	ND (0.00013)	ND (0.00013)	NA	NA	NA	NA
Methyl acetate	79-20-9	mg/Kg	NE	ND (0.0044)	ND (0.0045)	ND (0.0044)	ND (0.0044)	NA	NA	NA	NA
Isopropylbenzene	98-82-8	mg/Kg	NE	ND (0.00013)	ND (0.00013)	ND (0.00013)	ND (0.00013)	NA	NA	NA	NA
Ethylene Dibromide	106-93-4	mg/Kg	NE	ND (0.00018)	ND (0.00019)	ND (0.00018)	ND (0.00019)	NA	NA	NA	NA
Ethylbenzene	100-41-4	mg/Kg	41	ND (0.00020)	ND (0.00021)	ND (0.00020)	ND (0.00021)	NA	NA	NA	NA
Dichlorodifluoromethane	75-71-8	mg/Kg	NE	ND (0.00034)	ND (0.00035)	ND (0.00034)	ND (0.00035)	NA	NA	NA	NA
Dichlorobromomethane	75-27-4	mg/Kg	NE	ND (0.00026)	ND (0.00027)	ND (0.00026)	ND (0.00027)	NA	NA	NA	NA
Cyclohexane	110-82-7	mg/Kg	NE	ND (0.00023)	ND (0.00023)	ND (0.00023)	ND (0.00023)	NA	NA	NA	NA
cis-1,3-Dichloropropene	10061-01-5	mg/Kg	NE	ND (0.00028)	ND (0.00028)	ND (0.00028)	ND (0.00028)	NA	NA	NA	NA
cis-1,2-Dichloroethene	156-59-2	mg/Kg	100	ND (0.00015)	ND (0.00016)	ND (0.00015)	ND (0.00016)	NA	NA	NA	NA
Chloromethane	74-87-3	mg/Kg	NE	ND (0.00044)	ND (0.00045)	ND (0.00044)	ND (0.00045)	NA	NA	NA	NA
Chloroform	67-66-3	mg/Kg	49	ND (0.00033)	ND (0.00033)	ND (0.00032)	ND (0.00033)	NA	NA	NA	NA
Chloroethane	75-00-3	mg/Kg	NE	ND (0.00053)	ND (0.00054)	ND (0.00053)	ND (0.00054)	NA	NA	NA	NA
Chlorodibromomethane	124-48-1	mg/Kg	NE	ND (0.00020)	ND (0.00020)	ND (0.00020)	ND (0.00020)	NA	NA	NA	NA
Chlorobromomethane	74-97-5	mg/Kg	NE	ND (0.00029)	ND (0.00029)	ND (0.00029)	ND (0.00029)	NA	NA	NA	NA
Chlorobenzene	108-90-7	mg/Kg	100	ND (0.00018)	ND (0.00018)	ND (0.00018)	ND (0.00018)	NA	NA	NA	NA
Carbon tetrachloride	56-23-5	mg/Kg	2.4	ND (0.00039)	ND (0.00040)	ND (0.00039)	ND (0.00040)	NA	NA	NA	NA
Carbon disulfide	75-15-0	mg/Kg	NE	0.00032 J	ND (0.00028)	0.00061 J	0.00033 J	NA	NA	NA	NA
Bromomethane	74-83-9	mg/Kg	NE	ND (0.00048)	ND (0.00049)	ND (0.00048)	ND (0.00049)	NA	NA	NA	NA
Bromoform	75-25-2	mg/Kg	NE	ND (0.00043)	ND (0.00044)	ND (0.00043)	ND (0.00044)	NA	NA	NA	NA
Benzene	71-43-2	mg/Kg	4.8	ND (0.00026)	ND (0.00027)	ND (0.00026)	ND (0.00027)	NA	NA	NA	NA
Acetone	67-64-1	mg/Kg	100	ND (0.0058)	0.0066	0.0078	0.0061 J	NA	NA	NA	NA
4-Methyl-2-pentanone (MIBK)	108-10-1	mg/Kg	NE	ND (0.0016)	ND (0.0016)	ND (0.0016)	ND (0.0016)	NA	NA	NA	NA
2-Hexanone	591-78-6	mg/Kg	NE	ND (0.0017)	ND (0.0018)	ND (0.0017)	ND (0.0018)	NA	NA	NA	NA
2-Butanone (MEK)	78-93-3	mg/Kg	100	ND (0.0028)	ND (0.0028)	ND (0.0028)	ND (0.0028)	NA	NA	NA	NA
1,4-Dioxane	123-91-1	mg/Kg	13	ND (0.0094)	ND (0.0095)	ND (0.0093)	ND (0.0095)	NA	NA	NA	NA
1,4-Dichlorobenzene	106-46-7	mg/Kg	13	ND (0.00023)	ND (0.00023)	ND (0.00023)	ND (0.00023)	NA	NA	NA	NA
1,3-Dichlorobenzene	541-73-1	mg/Kg	49	ND (0.00016)	ND (0.00017)	ND (0.00016)	ND (0.00016)	NA	NA	NA	NA
1,2-Dichloropropane	78-87-5	mg/Kg	NE	ND (0.00043)	ND (0.00044)	ND (0.00043)	ND (0.00044)	NA	NA	NA	NA
1,2,4-Trichlorobenzene	120-82-1	mg/Kg	NE	ND (0.00036)	ND (0.00037)	ND (0.00036)	ND (0.00037)	NA	NA	NA	NA
1,2,3-Trichlorobenzene	87-61-6	mg/Kg	NE	ND (0.00018)	ND (0.00019)	ND (0.00018)	ND (0.00019)	NA	NA	NA	NA
1,1-Dichloroethene	75-35-4	mg/Kg	100	ND (0.00023)	ND (0.00023)	ND (0.00023)	ND (0.00023)	NA	NA	NA	NA
1,1-Dichloroethane	75-34-3	mg/Kg	26	ND (0.00021)	ND (0.00021)	ND (0.00021)	ND (0.00021)	NA	NA	NA	NA
1,1,2-Trichloroethane	79-00-5	mg/Kg	NE	ND (0.00018)	ND (0.00018)	ND (0.00018)	ND (0.00018)	NA	NA	NA	NA
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	mg/Kg	NE	ND (0.00031)	ND (0.00031)	ND (0.00031)	ND (0.00031)	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	79-34-5	mg/Kg	NE	ND (0.00022)	ND (0.00022)	ND (0.00022)	ND (0.00022)	NA	NA	NA	NA
1,1,1-Trichloroethane	71-55-6	mg/Kg	100	ND (0.00024)	ND (0.00024)	ND (0.00024)	ND (0.00024)	NA	NA	NA	NA
Tentatively Identified Compound	N/A	mg/Kg		0	0	0	0	NA	NA	NA	NA
Semivolatile Organic Compounds (GC/MS)											
Pyrene	129-00-0	mg/Kg	100	1.2	2.4	2	1.5	NA	NA	NA	NA
Phenanthrene	85-01-8	mg/Kg	100	0.97	1.9	1.3	1.3	NA	NA	NA	NA
Naphthalene	91-20-3	mg/Kg	100	0.099 J	0.072 J	0.050 J	0.19 J	NA	NA	NA	NA
Indeno[1,2,3-cd]pyrene	193-39-5	mg/Kg	0.5	0.28	0.52	0.55	0.4	NA	NA	NA	NA
Fluorene	86-73-7	mg/Kg	100	0.092 J	0.170 J	0.110 J	0.120 J	NA	NA	NA	NA
Fluoranthene	206-44-0	mg/Kg	100	1.2	2.6	2.3	1.6	NA	NA	NA	NA
Dibenz(a,h)anthracene	53-70-3	mg/Kg	0.33	0.079	0.15	0.15	0.11	NA	NA	NA	NA
Chrysene	218-01-9	mg/Kg	3.9	0.57	1.3	1.2	0.73	NA	NA	NA	NA
Benzo[k]fluoranthene	207-08-9	mg/Kg	3.9	0.2	0.63	0.54	0.27	NA	NA	NA	NA
Benzo[g,h,i]perylene	191-24-2	mg/Kg	100	0.250 J	0.45	0.47	0.36	NA	NA	NA	NA
Benzo[b]fluoranthene	205-99-2	mg/Kg	1	0.63	1.5	1.7	0.83	NA	NA	NA	NA
Benzo[a]pyrene	50-32-8	mg/Kg	1	0.42	1	1	0.58	NA	NA	NA	NA
Benzo[a]anthracene	56-55-3	mg/Kg	1	0.55	1.2	1.1	0.71	NA	NA	NA	NA
Anthracene	120-12-7	mg/Kg	100	0.190 J	0.37	2.50 J	0.270 J	NA	NA	NA	NA
Acenaphthylene	208-96-8	mg/Kg	100	0.041 J	0.070 J	0.071 J	0.082 J	NA	NA	NA	NA
Acenaphthene	83-32-9	mg/Kg	100	0.075 J	0.120 J	0.074 J	0.098 J	NA	NA	NA	NA
Polychlorinated Biphenyls (PCBs) by Gas Chromatography											
Aroclor 1268	11100-14-4	mg/Kg	NE	ND (0.0099)	ND (0.0098)	ND (0.0098)	ND (0.0098)	NA	NA	NA	NA
Aroclor-1262	37324-23-5	mg/Kg	NE	ND (0.0099)	ND (0.0098)	ND (0.0098)	ND (0.0098)	NA	NA	NA	NA
Aroclor 1260	11096-82-5	mg/Kg	NE	ND (0.0099)	ND (0.0098)	ND (0.0098)	ND (0.0098)	NA	NA	NA	NA
Aroclor 1254	11097-69-1	mg/Kg	NE	ND (0.0099)	ND (0.0098)	ND (0.0098)	ND (0.0098)	NA	NA	NA	NA
Aroclor 1248	12672-29-6	mg/Kg	NE	ND (0.0096)	ND (0.0095)	ND (0.0095)	ND (0.0094)	NA	NA	NA	NA
Aroclor 1242	53469-21-9	mg/Kg	NE	ND (0.0096)	ND (0.0095)	ND (0.0095)	ND (0.0094)	NA	NA	NA	NA
Aroclor 1232	11141-16-5	mg/Kg	NE	ND (0.0096)	ND (0.0095)	ND (0.0095)	ND (0.0094)	NA	NA	NA	NA
Aroclor 1221	11104-28-2	mg/Kg	NE	ND (0.0096)	ND (0.0095)	ND (0.0095)	ND (0.0094)	NA	NA	NA	NA
Aroclor 1016	12674-11-2	mg/Kg	NE	ND (0.0096)	ND (0.0095)	ND (0.0095)	ND (0.0094)	NA	NA	NA	NA
Polychlorinated biphenyls, Total	1336-36-3	mg/Kg	1	ND (0.0099)	ND (0.0098)	ND (0.0098)	ND (0.0098)	NA	NA	NA	NA
Metals (ICP)											
Selenium	7782-49-2	ug/L	NE	ND (33.0)	ND (33.0)	ND (33.0)	ND (33.0)	NA	NA	NA	NA
Lead	7439-92-1	ug/L	NE	1,460	748	1,670	842	NA	NA	NA	NA
Chromium	7440-47-3	ug/L	NE	ND (6.3)	ND (6.3)	ND (6.3)	ND (6.3)	NA	NA	NA	NA
Cadmium	7440-43-9	ug/L	NE	4.6 J	3.9 J	5.6 J	5.4 J	NA	NA	NA	NA
Beryllium	7440-41-7	ug/L	NE	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	NA	NA	NA	NA
Barium	7440-39-3	ug/L	NE	835 J	778 J	819 J	787 J	NA	NA	NA	NA
Arsenic	7440-38-2	ug/L	NE	ND (13.3)	ND (13.3)	ND (13.3)	ND (13.3)	NA	NA	NA	NA
Silver	7440-22-4	ug/L	NE	5.5 J	ND (5.4)	ND (5.4)	ND (5.4)	NA	NA	NA	NA
Selenium	7782-49-2	mg/Kg	180	ND (2.5)	ND (2.5)	ND (2.4)	ND (2.5)	NA	NA	NA	NA
Lead	7439-92-1	mg/Kg	400	254	298	271	223	NA	NA	NA	NA
Chromium	7440-47-3	mg/Kg	NE	8.2	9.5	9.3	7.2	NA	NA	NA	NA
Cadmium	7440-43-9	mg/Kg	4.3	0.23 J	0.28 J	0.23 J	0.20 J	NA	NA	NA	NA
Barium	7440-39-3	mg/Kg	400	112	108	101	104	NA	NA	NA	NA
Arsenic	7440-38-2	mg/Kg	16	4.1	3.5	6.7	3.4	NA	NA	NA	NA
Silver	7440-22-4	mg/Kg	180	ND (0.20)	ND (0.20)	ND (0.19)	0.24 J	NA	NA	NA	NA
Gasoline Range Organics (GRO) (GC)											
Gasoline Range Organics	N/A	mg/Kg	NE	ND (2.4)	ND (2.4)	ND (4.7)	ND (2.6)	ND (2.5)	ND (2.8)	ND (2.5)	ND (2.6)
Diesel Range Organics (DRO) (GC)											
Diesel Range Organics [C10-C28]	N/A	mg/Kg	NE	160	150	350	120	130	150	140	170
Mercury (CVAA)											
Mercury	7439-97-6	mg/Kg	0.81	0.32	0.23	0.29	0.32	NA	NA	NA	NA
Mercury	7439-97-6	ug/L	NE	ND (0.12)	ND (0.12)	ND (0.12)	ND (0.12)	NA	NA	NA	NA
Waste Characteristics											
Burn Rate	N/A	mm/sec	NE	ND (2.20)	ND (2.20)	ND (2.20)	ND (2.20)	NA	NA	NA	NA
Cyanide, Reactive	N/A	mg/Kg	NE	ND (25.0)	ND (25.0)	ND (25.0)	ND (25.0)	NA	NA	NA	NA
Sulfide, Reactive	N/A	mg/Kg	NE	ND (20.0)	ND (20.0)	ND (20.0)	ND (20.0)	NA	NA	NA	NA
Corrosivity	N/A	SU	NE	8.3 HF	8.2 HF	8.3 HF	8.4 HF	NA	NA	NA	NA
pH	N/A	SU	NE	8.3 HF	8.2 HF	8.3 HF	8.4 HF	NA	NA	NA	NA
Percent Solids	N/A	%	NE	93.1	93.6	93.7	94.2	93.3	93.2	94.4	94.8
Percent Moisture	N/A	%	NE	6.9	6.4	6.3	5.8	6.7	6.8	5.6	5.2

Notes:
Exceeds Restricted Residential Use
ND: Indicates the analyte was analyzed for but not detected.
HF: Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
NE: Not established
NA: Not analyzed
N/A: Not applicable
mg/kg: milligrams per kilogram
ug/L: micrograms per liter
mm/sec: millimeter per second
SU: standard unit

APPENDIX A: BORING LOGS

Boring Number:	SB-1		Page 1 of 1
Location:	North east corner of property	Date Started:	9/17/2019
Site Address:	2910 W 15th St & 2925-2933 W 16th St	Date Completed:	9/17/2019
	Brooklyn, NY	Depth to Groundwater:	6.0 ft bgs
Project Number:	19314269	Field Technician:	B Toohey
Drill Rig Type:	7822 DT Track-mounted GeoProbe	Partner Engineering and Geology, D.P.C.	
Sampling Equipment:	5 foot Macro-Cores	362 Fifth Avenue, Suite 501	
Borehole Diameter:	2.25 inches	New York, New York 10001	

Depth	Sample	PID	USCS	Description	Notes
1		0.0	NA	Fill material consisting of crushed red brick, large gravel and wood debris. Some brown, medium to coarse sand. Dry	Boring overlain with asphalt. 1.0' Recovery No odors or staining.
2		0.0			
3		0.0			
4		0.0			
5		0.0	SW	Brown and black fine to medium sand. Moist.	
6	SB-1(5.5-6.)	0.0		Brown and black fine to medium sand. Moist.	2.5' Recovery No odors or staining. Collected soil sample SB-1(5.5-6.) at 0758.
7		0.0		Black fine to medium sand. Wet.	
8		0.0		Gray medium to coarse sand. Saturated.	
9		0.0			
10		0.0			
11		0.0			4.5' Recovery No odors or staining.
12		0.0			Collected soil sample SB-1(12-12.5) at 0810.
13	SB-1(12-12.5)	0.0		Gray medium to coarse sand. Saturated. Trace gravel at 14.5-15.0 feet bgs.	
14		0.0			
15		0.0			
16				Boring terminated at 15.0 feet bgs.	
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Boring Number:	SB-2		Page 1 of 1
Location:	Northern central area near Site boundary.	Date Started:	9/17/2019
Site Address:	2910 W 15th St & 2925-2933 W 16th St	Date Completed:	9/17/2019
	Brooklyn, NY	Depth to Groundwater:	6.5 ft bgs
Project Number:	19314269	Field Technician:	B Toohey
Drill Rig Type:	7822 DT Track-mounted GeoProbe	Partner Engineering and Geology, D.P.C.	
Sampling Equipment:	5 foot Macro-Cores	362 Fifth Avenue, Suite 501	
Borehole Diameter:	2.25 inches	New York, New York 10001	

Depth	Sample	PID	USCS	Description	Notes
1		0.0	NA	Fill material consisting of crushed red brick, large gravel and wood debris. Some brown, medium to coarse sand. Dry	Boring overlain with asphalt. 2.0' Recovery No odors or staining.
2		0.0			
3		0.0		Light gray fine to medium sand. Dry and lose.	
4		0.0			
5		0.0			
6		0.0		Light gray fine to medium sand. Dry and lose.	3.0' Recovery No odors or staining.
	SB-2(6-6.5)	0.0		Tan medium to coarse sand. Wet.	Collected soil sample SB-2(6-6.5) at 0830.
7		0.0			
8		0.0	SM	Light gray fine to medium sand. Saturated.	
9		0.0			
10		0.0			
11		0.0			4.5' Recovery No odors or staining.
12		0.0			Collected soil sample SB-2(12-12.5) at 0835.
	SB-2(12-12.5)	0.0		Gray medium to coarse sand. Saturated.	
13		0.0			
14		0.0			
15		0.0			
16				Boring terminated at 15.0 feet bgs.	
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Boring Number:	SB-3		Page 1 of 1
Location:	Northern central area near Site boundary.	Date Started:	9/17/2019
Site Address:	2910 W 15th St & 2925-2933 W 16th St	Date Completed:	9/17/2019
	Brooklyn, NY	Depth to Groundwater:	7.0 ft bgs
Project Number:	19314269	Field Technician:	B Toohey
Drill Rig Type:	7822 DT Track-mounted GeoProbe	Partner Engineering and Geology, D.P.C.	
Sampling Equipment:	5 foot Macro-Cores	362 Fifth Avenue, Suite 501	
Borehole Diameter:	2.25 inches	New York, New York 10001	

Depth	Sample	PID	USCS	Description	Notes
1		0.0 0.0	NA	Fill material consisting of crushed red brick, large gravel and wood debris. Some brown, medium to coarse sand. Dry	Boring overlain with asphalt. 2.0' Recovery No odors or staining.
2		0.0 0.0	SM	Light gray fine to medium sand. Dry and lose.	
3		0.0 0.0			
4		0.0 0.0			
5		0.0 0.0			
6		0.0 0.0		Light gray fine to medium sand. Moist and lose.	4.5' Recovery No odors or staining. Collected soil sample SB-3(6.5-7) at 0900.
7	SB-3(6.5-7)	0.0 0.0			
8		0.0 0.0		Dark gray medium to coarse sand. Saturated.	
9		0.0 0.0			
10		0.0 0.0			
11		0.0 0.0		Dark gray medium to coarse sand. Saturated.	4.5' Recovery No odors or staining.
12		0.0 0.0			Collected soil sample SB-3(12-12.5) at 0905
13	SB-3(12-12.5)	0.0 0.0			
14		0.0 0.0			
15		0.0			
16				Boring terminated at 15.0 feet bgs.	
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Boring Number:	SB-4		Page 1 of 1
Location:	North west corner of Site boundary.	Date Started:	9/17/2019
Site Address:	2910 W 15th St & 2925-2933 W 16th St	Date Completed:	9/17/2019
	Brooklyn, NY	Depth to Groundwater:	6.5 ft bgs
Project Number:	19314269	Field Technician:	B Toohey
Drill Rig Type:	7822 DT Track-mounted GeoProbe	Partner Engineering and Geology, D.P.C.	
Sampling Equipment:	5 foot Macro-Cores	362 Fifth Avenue, Suite 501	
Borehole Diameter:	2.25 inches	New York, New York 10001	

Depth	Sample	PID	USCS	Description	Notes
1		0.0	NA	Fill material consisting of crushed red brick, large gravel and wood debris. Trace brown, medium to coarse sand. Dry	Boring overlain with asphalt. 2.0' Recovery No odors or staining.
2		0.0	SM	Tan/gray, fine to medium sand. Lose and dry. Moist after 5.0' bgs.	
3		0.0			
4		0.0			
5		0.0			
6		0.0		Tan/gray, fine to medium sand. Lose and dry. Moist from 5.0-6.5' bgs and wet after 6.5' bgs.	4.5' Recovery No odors or staining.
7	SB-4(6-6.5)	0.0			Collected soil sample SB-4(6-6.5) at 0925.
8		0.0			
9		0.0		Gray, fine to medium sand wet	
10		0.0			
11		0.0		Gray, fine to medium sand wet	5.0' Recovery No odors or staining.
12	SB-4(11.5-12)	0.0			Collected soil sample SB-4(11.5-12) at 0935
13		0.0	Pt	Dark gray, fine silty organic layer, 3.0" thick.	
14		0.0	SM	Gray, fine to medium sand wet	
15		0.0			
16				Boring terminated at 15.0 feet bgs.	Following the soil logging and collection at SB-4, it was converted into temporary well point SB-4GW. Temporary well was installed to a terminal depth of 14.0' bgs with the top of screen set at 4.0' bgs.
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Boring Number:	SB-5				Page 1 of 1
Location:	North western portion of Site.			Date Started:	9/17/2019
Site Address:	2910 W 15th St & 2925-2933 W 16th St			Date Completed:	9/17/2019
	Brooklyn, NY			Depth to Groundwater:	6.0 ft bgs
Project Number:	19314269			Field Technician:	B Toohey
Drill Rig Type:	7822 DT Track-mounted GeoProbe			Partner Engineering and Geology, D.P.C.	
Sampling Equipment:	5 foot Macro-Cores			362 Fifth Avenue, Suite 501	
Borehole Diameter:	2.25 inches			New York, New York 10001	

Depth	Sample	PID	USCS	Description	Notes
		0.0			Boring overlain with asphalt.
1		0.0			1.5' Recovery
		1.5			No odors or staining.
2		2.0			No soil to sample in the fill material layer.
		2.4	NA	Fill material consisting of crushed red brick, large gravel and wood debris. Dry. Crushed concrete at 4.5' bgs.	
3		4.8			
		7.3			
4		1.3			
		1.0			
5		1.3		Light gray, fine to medium sand. Wet	
		2.8			4.0' Recovery
6	SB-5(5.5-6)	0.4			No odors or staining.
		0.2			Collected soil sample SB-5(5.5-6) at 0950.
7		0.0			
		0.0		Light gray, fine to medium sand. Wet	
8		0.0			
		0.0			
9		0.0			
		0.0			
10		0.0	SM		
		0.0			5.0' Recovery
11		0.0			No odors or staining.
		0.0			
12		0.0			Collected soil sample SB-5(12-12.5) at 1005
	SB-5(12-12.5)	0.0		Dark gray, medium to coarse sand. Saturated.	
13		0.0			
		0.0			
14		0.0			
		0.0			
15		0.0			
16				Boring terminated at 15.0 feet bgs.	
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Boring Number:	SB-6		Page 1 of 1
Location:	Western central side of Site.	Date Started:	9/17/2019
Site Address:	2910 W 15th St & 2925-2933 W 16th St	Date Completed:	9/17/2019
	Brooklyn, NY	Depth to Groundwater:	6.5 ft bgs
Project Number:	19314269	Field Technician:	B Toohey
Drill Rig Type:	7822 DT Track-mounted GeoProbe	Partner Engineering and Geology, D.P.C.	
Sampling Equipment:	5 foot Macro-Cores	362 Fifth Avenue, Suite 501	
Borehole Diameter:	2.25 inches	New York, New York 10001	

Depth	Sample	PID	USCS	Description	Notes
1		0.0	NA	Black fill material consisting of crushed red brick, large gravel and wood debris. Dry. Crushed concrete at 4.5-5.0' bgs.	Boring overlain with asphalt. 1.5' Recovery No odors or staining. No soil to sample in the fill material layer.
2		0.0			
3		0.0			
4		0.0			
5		0.0			
6		0.0	SM	Gray/tan medium to coarse sand. Wet at 6.5' bgs.	4.5' Recovery No odors or staining. Collected soil sample SB-6(6-6.5) at 1030.
7	SB-6(6-6.5)	0.0			
8		0.0			
9		0.0			
10		0.0			
11		0.0		Gray/tan medium to coarse sand. Saturated.	5.0' Recovery No odors or staining. Collected soil sample SB-6(12-12.5) at 1035.
12		0.0			
13	SB-6(12-12.5)	0.0			
14		0.0		Gray, medium to coarse sand. Saturated.	
15		0.0			
16				Boring terminated at 15.0 feet bgs.	Following the soil logging and collection at SB-6, it was converted into a temporary well point SB-6GW. Temporary well was installed to a terminal depth of 11.0' bgs with the top of screen set at 1.0' bgs.
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Boring Number:	SB-7				Page 1 of 1
Location:	Central portion of Site.			Date Started:	9/17/2019
Site Address:	2910 W 15th St & 2925-2933 W 16th St			Date Completed:	9/17/2019
	Brooklyn, NY			Depth to Groundwater:	6.0 ft bgs
Project Number:	19314269			Field Technician:	B Toohey
Drill Rig Type:	7822 DT Track-mounted GeoProbe			Partner Engineering and Geology, D.P.C.	
Sampling Equipment:	5 foot Macro-Cores			362 Fifth Avenue, Suite 501	
Borehole Diameter:	2.25 inches			New York, New York 10001	

Depth	Sample	PID	USCS	Description	Notes
		0.0			Boring overlain with asphalt.
1		0.0			2.0' Recovery
		0.0			No odors or staining.
2		0.0			No soil to sample in the fill material layer.
		0.0	NA	Fill material consisting of crushed red brick, large gravel and wood debris. Dry. Crushed concrete at 4.5' bgs.	
3		0.0			
		0.0			
4		0.0			
		0.0			
5		0.0		Gray, medium to coarse sand. Dry.	
		0.0			4.0' Recovery
6		0.0			No odors or staining.
	SB-7(6-6.5)	0.0			Collected soil sample SB-7(6-6.5) at 1100.
7		0.0			
		0.0		Gray, medium to coarse sand. Wet at 6.5' bgs.	
8		0.0			
		0.0			
9		0.0			
		0.0			
10		0.0	SM		
		0.0			5.0' Recovery
11		0.0			No odors or staining.
		0.0			
12		0.0			Collected soil sample SB-7(12-12.5) at 1105
	SB-7(12-12.5)	0.0		Gray, medium to coarse sand. Saturated.	
13		0.0			
		0.0			
14		0.0			
		0.0			
15		0.0			
16				Boring terminated at 15.0 feet bgs.	
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Boring Number:	SB-7			Page 1 of 1	
Location:	East central portion of Site.			Date Started:	9/17/2019
Site Address:	2910 W 15th St & 2925-2933 W 16th St			Date Completed:	9/17/2019
	Brooklyn, NY			Depth to Groundwater:	6.5 ft bgs
Project Number:	19314269			Field Technician:	B Toohey
Drill Rig Type:	7822 DT Track-mounted GeoProbe			Partner Engineering and Geology, D.P.C.	
Sampling Equipment:	5 foot Macro-Cores			362 Fifth Avenue, Suite 501	
Borehole Diameter:	2.25 inches			New York, New York 10001	

Depth	Sample	PID	USCS	Description	Notes
1		0.0	NA	Fill material consisting of crushed red brick, large gravel and wood debris. Some brown, medium to coarse sand. Dry	Boring overlain with asphalt. 2.0' Recovery No odors or staining.
2		0.0	SM	Gray fine to medium sand. Dry and lose.	
3		0.0			
4		0.0			
5		0.0			
6		0.0		Gray medium to coarse sand, moist. Wet at 6.5' bgs. Trace tan medium to coarse sand.	2.5' Recovery No odors or staining. Collected soil sample SB-8(6-6.5) at 1125.
7	SB-8(6-6.5)	0.0			
8		0.0			
9		0.0		Tan, medium to coarse sand. Wet	
10		0.0			
11		0.0		Tan and gray medium to coarse sand. Saturated.	5.0' Recovery No odors or staining. Collected soil sample SB-8(12-12.5) at 1130.
12		0.0			
13	SB-8(12-12.5)	0.0			
14		0.0			
15		0.0		Gray medium to coarse sand. Saturated.	
16				Boring terminated at 15.0 feet bgs.	
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Boring Number:	SB-9		Page 1 of 1
Location:	Eastern central side of Site.	Date Started:	9/17/2019
Site Address:	2910 W 15th St & 2925-2933 W 16th St	Date Completed:	9/17/2019
	Brooklyn, NY	Depth to Groundwater:	6.0 ft bgs
Project Number:	19314269	Field Technician:	B Toohey
Drill Rig Type:	7822 DT Track-mounted GeoProbe	Partner Engineering and Geology, D.P.C.	
Sampling Equipment:	5 foot Macro-Cores	362 Fifth Avenue, Suite 501	
Borehole Diameter:	2.25 inches	New York, New York 10001	

Depth	Sample	PID	USCS	Description	Notes
1		0.0	NA	Black fill material consisting of crushed red brick, large gravel and wood debris. Dry.	Boring overlain with asphalt. 2.5' Recovery No odors or staining. No soil to sample in the fill material layer.
2		0.0			
3		0.0			
4		0.0	SM	Gray, medium to fine sand. Moist.	
5		0.0			
6	SB-9(5.5-6)	0.0		Gray, medium to fine sand. Wet at 6.0' bgs	3.5' Recovery No odors or staining. Collected soil sample SB-9(5.5-6) at 1155.
7		0.0			
8		0.0			
9		0.0			
10		0.0			
11		0.0		Gray, medium to fine sand. Saturated	5.0' Recovery No odors or staining.
12		0.0			Collected soil sample SB-9(12-12.5) at 1200.
13	SB-9(12-12.5)	0.0			
14		0.0			
15		0.0			
16				Boring terminated at 15.0 feet bgs.	Following the soil logging and collection at SB-9, it was converted into a temporary well point SB-9GW. Temporary well was installed to a terminal depth of 13.0' bgs with the top of screen set at 3.0' bgs.
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Boring Number:	SB-10		Page 1 of 1
Location:	Central portion of the Site.	Date Started:	9/17/2019
Site Address:	2910 W 15th St & 2925-2933 W 16th St	Date Completed:	9/17/2019
	Brooklyn, NY	Depth to Groundwater:	6.0 ft bgs
Project Number:	19314269	Field Technician:	B Toohey
Drill Rig Type:	7822 DT Track-mounted GeoProbe	Partner Engineering and Geology, D.P.C.	
Sampling Equipment:	5 foot Macro-Cores	362 Fifth Avenue, Suite 501	
Borehole Diameter:	2.25 inches	New York, New York 10001	

Depth	Sample	PID	USCS	Description	Notes
1		0.0	NA	Black fill material consisting of crushed red brick, large gravel and wood debris. Dry.	Boring overlain with asphalt. 2.5' Recovery No odors or staining.
2		0.0			
3		0.0			
4		0.0	SM	Gray, medium to fine sand. Trace moisture.	
5		0.0			
6	SB-10(5.5-6)	0.0		Gray, medium to fine sand. Wet at 6.0' bgs	3.5' Recovery No odors or staining. Collected soil sample SB-10(5.5-6) at 1225.
7		0.0			
8		0.0			
9		0.0			
10		0.0		Tan/gray medium to coarse sand. Saturated.	
11		0.0			5.0' Recovery No odors or staining.
12		0.0			
	SB-10(12-12.5)	0.0		Tan/gray medium to coarse sand. Saturated.	Collected soil sample SB-10(12-12.5) at 1230.
13		0.0			
14		0.0			
15		0.0		Gray, medium to coarse sand. Saturated.	
16				Boring terminated at 15.0 feet bgs.	
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Boring Number:	SB-11			Page 1 of 1	
Location:	South eastern corner of the Site.		Date Started:	9/17/2019	
Site Address:	2910 W 15th St & 2925-2933 W 16th St		Date Completed:	9/17/2019	
	Brooklyn, NY		Depth to Groundwater:	5.5 ft bgs	
Project Number:	19314269		Field Technician:	B Toohey	
Drill Rig Type:	7822 DT Track-mounted GeoProbe		Partner Engineering and Geology, D.P.C.		
Sampling Equipment:	5 foot Macro-Cores		362 Fifth Avenue, Suite 501		
Borehole Diameter:	2.25 inches		New York, New York 10001		

Depth	Sample	PID	USCS	Description	Notes
1		0.0	NA	Black fill material consisting of crushed red brick, large gravel and wood debris. Dry.	Boring overlain with asphalt. No Recovery Trace odors during hand clearing once 5.0' was reached, no staining.
2		0.0			
3		0.0			
4		0.0			
5		0.0			
6	SB-11(5-5.5)	0.0	SM	Gray, medium to fine sand. Wet.	3.5' Recovery Petroleum odors at 5.0' bgs, no staining. Collected soil sample SB-11(5-5.5) at 1250.
7		0.0			
8		0.0			
9		0.0			
10		0.0			
11		0.0		Gray, medium to coarse sand. Saturated.	5.0' Recovery No odors or staining.
12		0.0			Collected soil sample SB-11(12-12.5) at 1300.
13	SB-11(12-12.5)	0.0			
14		0.0			
15		0.0			
16				Boring terminated at 15.0 feet bgs.	Following the soil logging and collection at SB-11, it was converted into a temporary well point SB-11GW. Temporary well was installed to a terminal depth of 12.0' bgs with the top of screen set at 2.0' bgs.
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Boring Number:	SB-12		Page 1 of 1
Location:	South east portion of the Site.	Date Started:	9/18/2019
Site Address:	2910 W 15th St & 2925-2933 W 16th St	Date Completed:	9/18/2019
	Brooklyn, NY	Depth to Groundwater:	6.5 ft bgs
Project Number:	19314269	Field Technician:	B Toohey
Drill Rig Type:	7822 DT Track-mounted GeoProbe	Partner Engineering and Geology, D.P.C.	
Sampling Equipment:	5 foot Macro-Cores	362 Fifth Avenue, Suite 501	
Borehole Diameter:	2.25 inches	New York, New York 10001	

Depth	Sample	PID	USCS	Description	Notes
1		0.0	NA	Black fill material consisting of crushed red brick, large gravel and wood debris. Dry.	Boring overlain with asphalt. 3.0' Recovery No odors or staining.
2		0.0		Gray, medium to fine sand. Trace moisture.	
3		0.0			
4		0.0			
5		0.0			
6		0.0		Gray, medium to fine sand. Wet at 6.5' bgs	4.0' Recovery No odors or staining.
	SB-12(6-6.5)	0.0			Collected soil sample SB-12(6-6.5) at 0755.
7		0.0			
8		0.0	SM		
9		0.0		Tan medium to coarse sand. Saturated.	
10		0.0			
11		0.0		Tan medium to coarse sand. Saturated.	5.0' Recovery No odors or staining.
12		0.0			Collected soil sample SB-12(12-12.5) at 0800.
	SB-12(12-12.5)	0.0			
13		0.0			
14		0.0		Tan/Gray, medium to coarse sand. Trace small cobbles. Saturated.	
15		0.0			
16				Boring terminated at 15.0 feet bgs.	
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Boring Number:	SB-13		Page 1 of 1
Location:	South central portion of the Site.	Date Started:	9/18/2019
Site Address:	2910 W 15th St & 2925-2933 W 16th St	Date Completed:	9/18/2019
	Brooklyn, NY	Depth to Groundwater:	6.5 ft bgs
Project Number:	19314269	Field Technician:	B Toohey
Drill Rig Type:	7822 DT Track-mounted GeoProbe	Partner Engineering and Geology, D.P.C.	
Sampling Equipment:	5 foot Macro-Cores	362 Fifth Avenue, Suite 501	
Borehole Diameter:	2.25 inches	New York, New York 10001	

Depth	Sample	PID	USCS	Description	Notes
1		0.0	NA	Black fill material consisting of crushed red brick, large gravel and wood debris. Dry.	Boring overlain with asphalt. 2.5' Recovery No odors or staining.
2		0.0		Light gray, medium to fine sand. Trace moisture.	
3		0.0			
4		0.0			
5		0.0			
6		0.0		Gray, medium to fine sand. Wet at 6.5' bgs	4.0' Recovery No odors or staining. Collected soil sample SB-13(6-6.5) at 0810.
7	SB-13(6-6.5)	0.0			
8		0.0	SM		
9		0.0			
10		0.0			
11		0.0		Gray, medium to fine sand. Saturated	5.0' Recovery No odors or staining. Collected soil sample SB-13(13.4-14) at 0818.
12		0.0			
13		0.0			
14	SB-13(13.5-14)	0.0			
15		0.0	ML	Dark gray, medium to fine silt, trace sand and soft. Saturated	
16			SW	Gray, medium to coarse sand. Saturated.	
17				Boring terminated at 15.0 feet bgs.	
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Boring Number:	SB-14		Page 1 of 1
Location:	South western portion of the Site.	Date Started:	9/18/2019
Site Address:	2910 W 15th St & 2925-2933 W 16th St	Date Completed:	9/18/2019
	Brooklyn, NY	Depth to Groundwater:	6.0 ft bgs
Project Number:	19314269	Field Technician:	B Toohey
Drill Rig Type:	7822 DT Track-mounted GeoProbe	Partner Engineering and Geology, D.P.C.	
Sampling Equipment:	5 foot Macro-Cores	362 Fifth Avenue, Suite 501	
Borehole Diameter:	2.25 inches	New York, New York 10001	

Depth	Sample	PID	USCS	Description	Notes
1		0.0 0.0	NA	Black fill material consisting of crushed red brick, large gravel and wood debris. Dry.	Boring overlain with asphalt. 2.5' Recovery No odors or staining.
2		0.0 0.0			
3		0.0 0.0		Light gray, medium to fine sand. Trace moisture.	
4		0.0 0.0			
5		0.0 0.0			
6	SB-14(5.5-6)	0.0 0.0			4.0' Recovery No odors or staining. Collected soil sample SB-14(5.5-6) at 0840.
7		0.0 0.0			
8		0.0 0.0	SM	Gray, medium to fine sand. Wet at 6.5' bgs	
9		0.0 0.0			
10		0.0 0.0			
11		0.0 0.0			5.0' Recovery No odors or staining.
12		0.0 0.0		Gray, medium to fine sand. Saturated	Collected soil sample SB-14(13.5-14) at 0845.
13		0.0 0.0			
14	SB-14(13.5-14)	0.0 0.0	ML	Dark gray, medium to fine silt, trace sand and soft. Saturated	
15		0.0	SM	Gray, medium to coarse sand. Saturated.	
16				Boring terminated at 15.0 feet bgs.	
17					
18					
19					
20					
21					
22					
23					
24					
25					

APPENDIX B: GEOPHYSICAL REPORT

DELTA Geophysics Inc.

GEOPHYSICAL INVESTIGATION REPORT

SITE LOCATION:

1517 Surf Avenue
Brooklyn, New York

PREPARED FOR:

Partner Engineering
611 Industrial Way W
Eatontown, New Jersey

PREPARED BY:

Brian Halvorsen
Delta Geophysics Inc.
738 Front Street
Catasauqua, PA 18032

October 3rd, 2019

Delta Geophysics, Inc. (Delta) is pleased to provide the results of the geophysical survey conducted at 1517 Surf Avenue, Brooklyn, New York.

1.0 INTRODUCTION

On September 16th, 2019, Delta Geophysics personnel performed a limited geophysical investigation at 1517 Surf Avenue, Brooklyn, New York. The subject property was located in a large parking lot. The area of interest was all accessible areas of the property near client proposed boring locations. Subsurface conditions were unknown at the time of survey.

2.0 SCOPE OF WORK

The survey was conducted to clear client proposed boring location around the property. A secondary objective was to locate and mark detectable underground utilities near proposed locations.

3.0 METHODOLOGY

Selection of survey equipment is dependent site conditions and project objectives. For this project the technician utilized the following equipment to survey the area of concern:

- Geophysical Survey Systems Inc. SIR-3000 cart-mounted Ground Penetrating Radar (GPR) unit with a 400 Mhz antenna.
- Radiodetection RD7000 precision utility locator.
- Fisher M-Scope TW-6 pipe and cable locator.

Ground penetrating radar (commonly called GPR) is a geophysical method that has been developed over the past thirty years for shallow, high-resolution, subsurface investigations of the earth. GPR uses high frequency pulsed electromagnetic waves (generally 10 MHz to 1,000 MHz) to acquire subsurface information. Energy is propagated downward into the ground and is reflected back to the surface from boundaries at which there are electrical property contrasts. GPR is a method that is commonly used for environmental, engineering, archeological, and other shallow investigations.

The GSSI SIR-3000 GPR can accept a wide variety of antennas which provide various depths of penetration and levels of resolution. The 400 MHz antenna can achieve depths of penetration up to about 20 feet, but this depth may be greatly reduced due to site-specific conditions. Signal penetration decreases with increased soil conductivity. Conductive materials attenuate or absorb the GPR signal. As depth increases the return signal becomes weaker. Penetration is the greatest in unsaturated sands and fine gravels. Clayey, highly saline or saturated soils, areas covered by steel reinforced concrete, foundry slag, of other highly conductive materials significantly reduces GPR depth of penetration.

The GPR was configured to transmit to a depth of approximately 10 feet below the subsurface, but actual signal penetration was limited to approximately 2-4 feet below ground surface (bgs). The limiting factor was signal attenuation from near surface soils.

The RD7000 precision utility locator uses radio emission to trace the location of metal bearing utilities. This radio emission can be active or passive. Active tracing requires the attachment of a

radio transmitter to the utility, passive tracing uses radio emissions that are present on the utility. Underground electrical utilities typically emit radio signals that this device can detect.

The TW-6 is designed to find pipes, cables and other metallic objects such as underground storage tanks. One surveyor can carry both the transmitter and receiver together, making it ideally suited for exploration type searches of ferrous metal masses. Metal detectors of this type operate by generating a magnetic field at the transmitter which causes metallic objects in the subsurface to generate a secondary magnetic field. The induced secondary field is detected by the receiver, which generates an audible tone equal to the strength of the secondary field.

4.0 SURVEY FINDINGS

All accessible areas throughout the property were examined during this investigation. Each location was examined with the RD7000 for potential subsurface utilities then surveyed with GPR and TW-6 for other potential anomalies. Based on the data gathered, all boring locations were either cleared or relocated.

Utility Survey

Delta performed a utility survey near proposed boring locations at the subject property. The following utilities were identified: electric and storm sewer. All utilities were marked onsite with appropriate colors. Unknown utilities were marked onsite in pink paint.

A site map (091619) is included with all located subsurface features.

5.0 SURVEY LIMITATIONS

GPR depth of penetration was limited to approximately 2-4 feet bgs. The limiting factor was due to conductive soils.

6.0 WARRANTIES AND DISCLAIMER

As with any geophysical method, it must be stressed that caution be used during any excavation or intrusive testing in proximity to any anomalies indicated in this report. In addition, the absence of detected signatures does not preclude the possibility that targets may exist. To the extent the client desires more definitive conclusions than are warranted by the currently available facts; it is specifically Delta's intent that the conclusions stated herein will be intended as guidance.

This report is based upon the application of scientific principles and professional judgment to certain facts with resultant subjective interpretations. Professional judgments expressed herein are based on the facts currently available within the limit or scope of work, budget and schedule. Delta represents that the services were performed in a manner consistent with currently accepted professional practices employed by geophysical/geological consultants under similar circumstances. No other representations to Client, express or implied, and no warranty or guarantee is included or intended in this agreement, or in any report, document, or otherwise.

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

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

MERMAID AVENUE

OFF-SITE BUILDINGS

OFF-SITE BUILDINGS

GUARD SHACK

WEST 16TH STREET

WEST 15TH STREET

OFF-SITE BUILDING

SURF AVENUE

TRUE

NOTES:

This site plan was produced from data positioned by differential GPS measurments collected in the field. Due to the errors normally present in DGPS data, this document is not intended or represented to be of survey precision. Caution should be used in all field measurments based on this site plan.

As with any geophysical method, it must be stressed that caution be used during any excavation or intrusive testing in proximity of any anomalies indicated in this document The absence of detected signatures does not preclude the possibility that targets exist. The geophysical data and results presented in this site plan are based upon the application of scientific principles and professional judgements to certain facts with resultant subjective interpretations. Professional judgements expressed herein are based on the facts currently available within the limits of the existing data, scope of work, budget, and schedule.

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

0 20 40 80 120

GRAPHIC SCALE IN FEET

LEGEND

- STORM DRAIN
- LIGHTPOLE
- SD — SD — STORM DRAIN
- E — E — ELECTRIC
- U — U — UNKNOWN UTILITY
- x — x — FENCE

DATE	10/03/19
SCALE	1'' = 40'
DWG NO.	091619
SHT NO.	1 OF 1
PROJECT.	D091619

GEOPHYSICAL INVESTIGATION
1537 SURF AVENUE, BROOKLYN, NEW YORK
FOR
PARTNER

DELTA Geophysics Inc.
738 Front Street, Catasauqua, PA 18032
Phone: (610) 231-73012

APPENDIX C: ISO-CONCENTRATION MAPS

Iso-Concentration Map

Brooklyn, New York

Standards	2,4-Dini	B(a)a	B(a)p	B(b)f	B(k)f	Chrysene	Hex	Indeno	Chlordane	Toxa	Total PCBs
ND Exceedance	ND(14)	ND(0.59)	ND(0.41)	ND(1.1)	ND(0.67)	ND(0.91)	ND(0.4)	ND(1.3)	ND(1.3)	ND(1.3)	ND(1.3)

Sample ID	Lead	Iron
SB-4GW	58.8	16,500

Sample ID	Lead	Iron	Barium	Chromium
SB-9GW	101	23,300	113	54.7

Sample ID	Lead	Iron	Barium
SB-6GW	131	9,960	730

Sample ID	Iron	Aldrin	Dieldrin
SB-9GW	731	0.034	0.17

SB-4GW
SB-6GW
SB-9GW
SB-11GW
50
100
700
1,000
9,000
23,000

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

SURF AVENUE PROJECT

2910 WEST 15TH STREET, AND
2925 THROUGH 2933 WEST 16TH STREET
BLOCK 7063, LOTS 12, 32, 33 & 38-41
BROOKLYN, NEW YORK

GROUNDWATER ISO-CONCENTRATION MAP

Legend

- Site Boundary
- 2019-09-18 GW Sample Location (4)
- Iron Iso-Concentration line
- Lead Iso-Concentration line
- Chromium Iso-Concentration line
- Dieldrin Iso-Concentration line
- Aldrin Iso-Concentration line
- Base Netural Iso-Concentration line

Notes:
-Iso-Concentrations are in micrograms per liter
-Base Netural exceedance:
2,4-Dini = 2,4-Dinitrophenol,
B(a)a= Benzo(a)anthracene,
B(a)p = Benzo(a)pyrene,
B(b)f =Benzo(b)fluoranthene,
B(k)f = Benzo(k)fluorathane,
Hex = Hexachlorobenzene,
Indeno = Indeno(1,2,3-cd)pyrene

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet
Projection: Lambert Conformal Conic
False Easting: 984,250.0000
False Northing: 0.0000
Central Meridian: -74.0000
Standard Parallel 1: 40.6667
Standard Parallel 2: 41.0333
Latitude Of Origin: 40.1667
Units: Foot US

0 20 40 80
Feet

PSG Engineering, DPC

611 Industrial Way West
Eatontown, NJ 07724
Certificate of Authorization No. 24GA27989800

Tel.: 732.380.1700
Fax.:732.380.1701
www.partneresi.com

Sources:	DRAWN BY	SCALE
NYS GIS Clearing House	BPT	1 in = 40 ft
Job No: 19314269 File Name: Iso-Concentration Map		DATE 11/1/2019

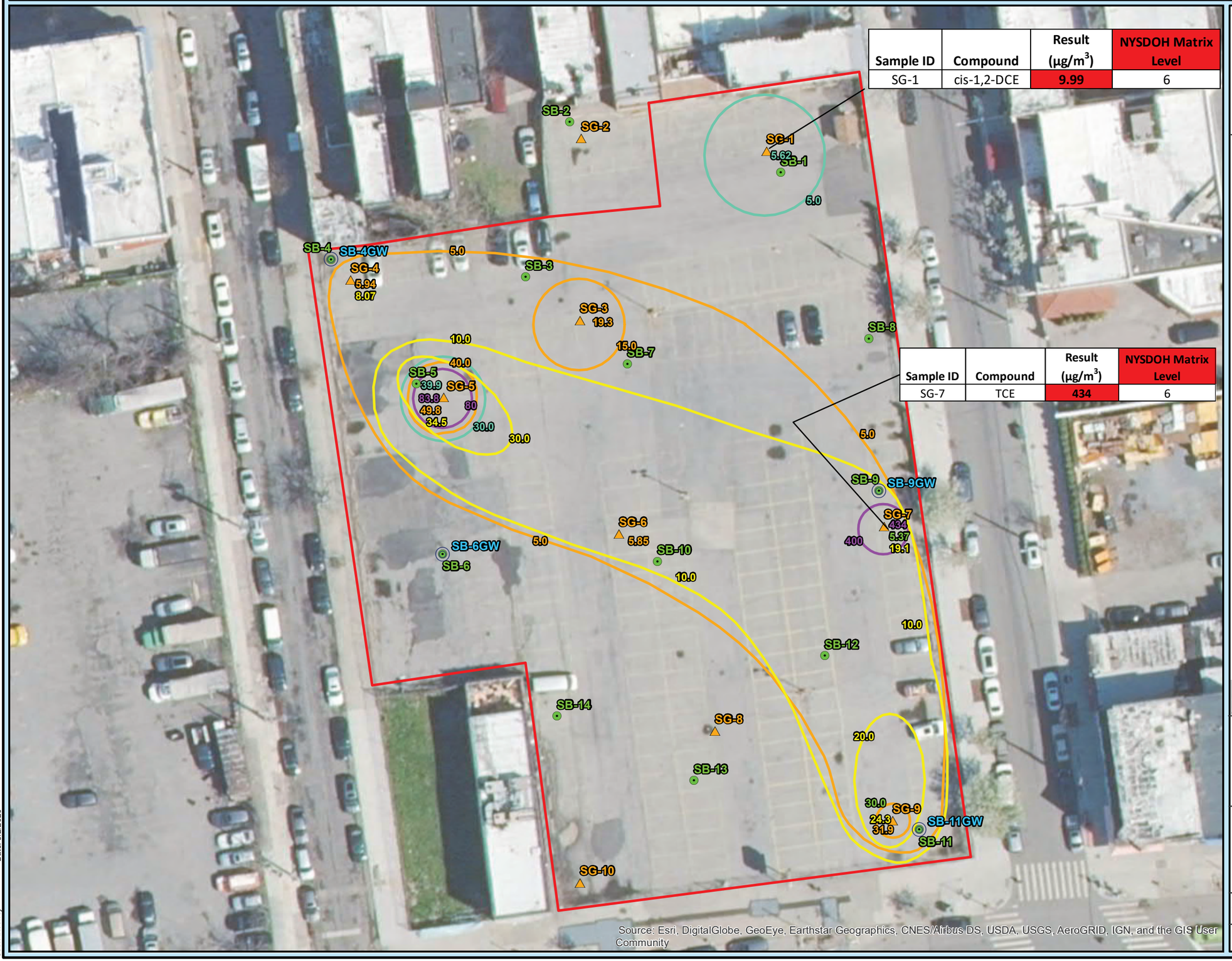
File: R:\Solutions\Jobs\LCOR\19314269-NY-ENI\Plan\GIS\Groundwater Iso-Concentration Map.mxd
User: bbohley
Date: 11/1/2019

Iso-Concentration Map

Brooklyn, New York

Sample ID	Compound	Result (µg/m³)	NYSDOH Matrix Level
SG-1	cis-1,2-DCE	9.99	6

Sample ID	Compound	Result (µg/m³)	NYSDOH Matrix Level
SG-7	TCE	434	6



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

LCOR

1517 SURF AVENUE
BROOKLYN, NEW YORK 11224

SOIL GAS ISO-CONCENTRATION MAP

Legend

- Site Boundary
- 2019-10-17 Soil Vapor Sample Location (10)
- 2019-09-18 GW Sample Location (4)
- 2019-09-17 Soil Sample Location (14)
- 1,3-Butadiene Iso-Concentration line
- Benzene Iso-Concentration line
- TCE Iso-Concentration Line
- Vinyl Chloride Iso-Concentration line

Notes:
-Iso-Concentrations are in micrograms per cubic meter;

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet
Projection: Lambert Conformal Conic
False Easting: 984,250.0000
False Northing: 0.0000
Central Meridian: -74.0000
Standard Parallel 1: 40.6667
Standard Parallel 2: 41.0333
Latitude Of Origin: 40.1667
Units: Foot US

0 20 40 80
Feet

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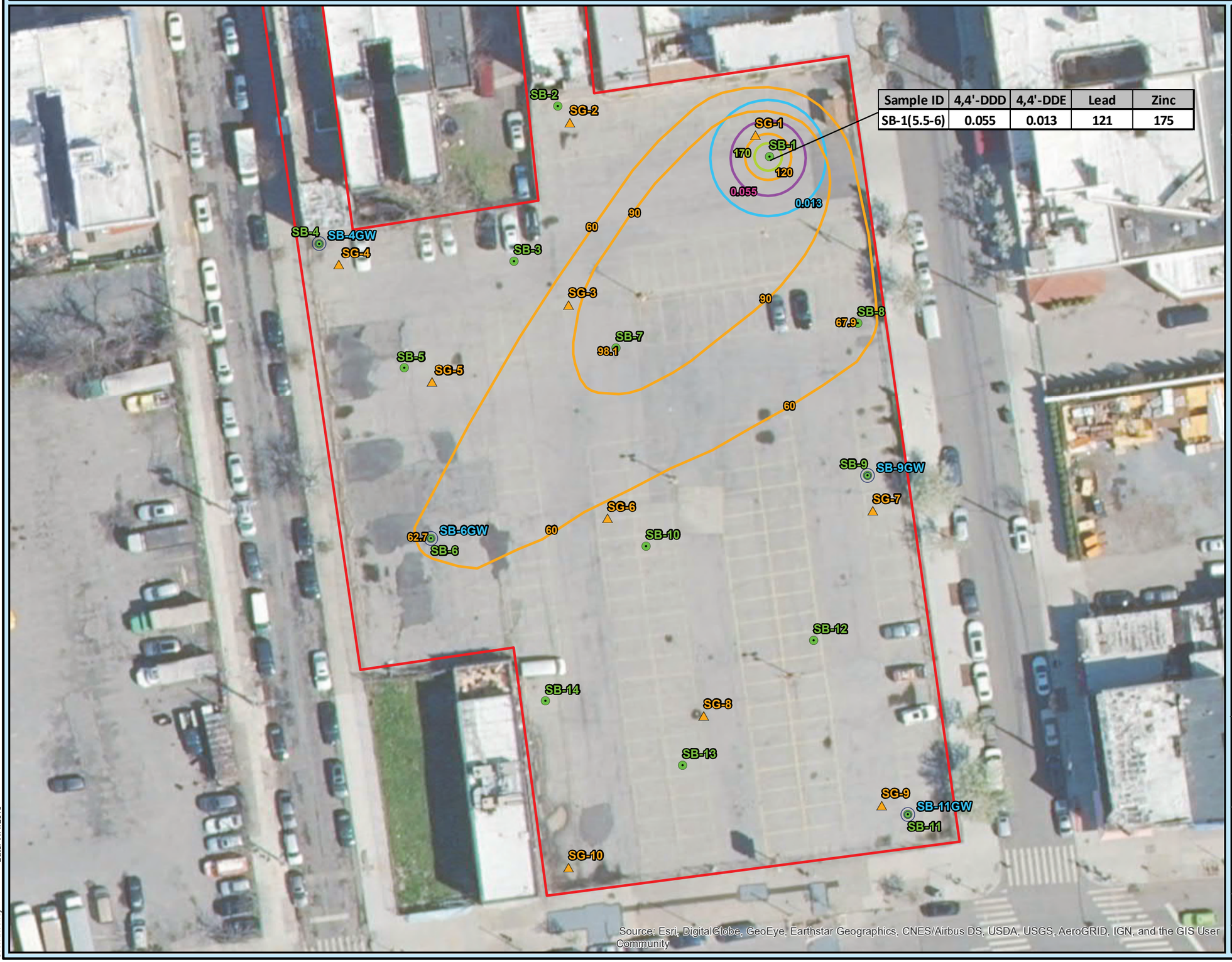
Sources: NYS GIS Clearing House	DRAWN BY BPT	SCALE 1 in = 40 ft
Job No: 19314269 File Name: Iso-Concentration Map		DATE 11/1/2019

File: \\pac.localroot\Solutions\Jobs\LCOR\19314269-NY-ENI\Plan\GIS\Soil Gas Iso-Concentration Map.mxd
User: bhoney
Date: 3/2/2020

Iso-Concentration Map

Brooklyn, New York



Sample ID	4,4'-DDD	4,4'-DDE	Lead	Zinc
SB-1(5.5-6)	0.055	0.013	121	175

SURF AVENUE PROJECT

2910 WEST 15TH STREET, AND
2925 THROUGH 2933 WEST 16TH STREET
BLOCK 7063, LOTS 12, 32, 33 & 38-41
BROOKLYN, NEW YORK

SOIL
ISO-CONCENTRATION MAP

Legend

- Site Boundary
- 2019-10-17 Soil Vapor Sample Location (10)
- 2019-09-18 GW Sample Location (4)
- 2019-09-17 Soil Sample Location (14)
- Lead Iso-Concentration line
- Zinc Iso-Concentration line
- 4,4'-DDD Iso-Concentration line
- 4,4'-DDE Iso-Concentration line

Notes:
-Iso-Concentrations are in milligrams per kilogram and are only shown if concentrations exceed Unrestricted Use Soil Standards
-Soil samples with exceedances were collected from the soil range of 5.5-6.5 feet bgs
-SB-6 concentration does not exceed the Unrestricted Soil Use Standard of 63 mg/kg for Lead, but is included on this figure, because it is close to the standard.

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet
Projection: Lambert Conformal Conic
False Easting: 984,250.0000
False Northing: 0.0000
Central Meridian: -74.0000
Standard Parallel 1: 40.6667
Standard Parallel 2: 41.0333
Latitude Of Origin: 40.1667
Units: Foot US

0 20 40 80
Feet

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Sources:	DRAWN BY	SCALE
NYS GIS Clearing House	BPT	1 in = 40 ft
Job No: 19314269 File Name: Iso-Concentration Map		DATE 11/1/2019

File: R:\Solutions\Jobs\LCOR\19314269-NY-ENPlan\GIS\Soil Iso-Concentration Map.mxd
User: bbolney
Date: 11/1/2019

Iso-Concentration Map

Brooklyn, New York

SURF AVENUE PROJECT

2910 WEST 15TH STREET, AND
2925 THROUGH 2933 WEST 16TH STREET
BLOCK 7063, LOTS 12, 32, 33 & 38-41
BROOKLYN, NEW YORK

WASTE CLASSIFICATION ISO-CONCENTRATION MAP

Legend

- Site Boundary
- 2019-10-17 Soil Vapor Sample Location (10)
- 2019-09-18 GW Sample Location (4)
- 2019-09-17 Soil Sample Location (14)
- Benzo(b)flouranthene Iso-Concentration line
- Benzo(a)anthracence Iso-Concentration line
- Indeno(1,2,3-cd)pyrene Iso-Concentration line

Notes:
-Iso-Concentrations are in milligrams per kilogram and are only shown if concentrations exceed the Restricted Residential Soil Cleanup Objectives
-Soil samples were composited from 0-4.0 feet bgs.

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet
Projection: Lambert Conformal Conic
False Easting: 984,250.0000
False Northing: 0.0000
Central Meridian: -74.0000
Standard Parallel 1: 40.6667
Standard Parallel 2: 41.0333
Latitude Of Origin: 40.1667
Units: Foot US

0 20 40 80
Feet

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Fax.:732.380.1701
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Sources: NYS GIS Clearing House	DRAWN BY BPT	SCALE 1 in = 40 ft
Job No: 19314269 File Name: Iso-Concentration Map		DATE 11/1/2019

File: R:\Solutions\Jobs\LCOR\19314269-NY-ENPlan\GIS\Waste Class Iso-Concentration Map.mxd
User: bbolney
Date: 11/1/2019

APPENDIX D: LABORATORY ANALYTICAL REPORTS